

Key Outcomes Memorandum

Date: October 26, 2007

To: Members, MLPA North Central Coast Regional Stakeholder Group (NCCRSG)

From: Scott McCreary and Eric Poncelet, CONCUR, Inc.

Re: Key Outcomes Memorandum – October 16-17, 2007 NCCRSG Meeting

cc: MLPA Initiative Staff and California Department of Fish and Game MLPA Staff

Executive Summary – Key Outcomes

On October 16-17, 2007, the Marine Life Protection Act (MLPA) Initiative North Central Coast Regional Stakeholder Group (NCCRSG) participated in its fourth meeting, in Gualala, CA. **Key outcomes** from the meeting are as follows:

- The NCCRSG completed final adoption of “provisional north central coast regional goals and objectives,” taking into consideration guidance from the MLPA Master Plan Science Advisory Team (SAT).
- NCCRSG cross-interest work groups successfully completed work on six “draft options for marine protected area (MPA) arrays.” Each of the work groups completed two array options to move to the SAT for review.
- The NCCRSG received presentations on four “external” MPA proposals developed outside of the work group process.
- The NCCRSG received presentations on other key topics to inform work group development of draft options for MPA arrays, including:
 - Work group interim draft options for MPA arrays
 - Preliminary socioeconomic analyses (including commercial fishing and non-consumptive ocean uses)
 - SAT guidance on species likely to benefit from MPAs and answers to NCCRSG science questions
 - California Department of Fish and Game (DFG) feasibility comments on the draft options for MPA arrays
 - Revised regional profile
- The NCCRSG identified additional science and policy questions for I-Team staff and SAT consideration
- The NCCRSG received comments and suggestions from members of the public on a wide range of topics pertaining to MPA delineation and impacts on ecological protection, local communities, and a range of consumptive and nonconsumptive opportunities.
- The NCCRSG formed a subgroup to identify seabird/marine mammal disturbance areas.

Key **next steps** include (other next steps are listed in section III below):

- I-Team staff to “package” information and data from the draft array options and external proposals for SAT review.
- I-Team staff and NCCRSG members to plan for a November 28, 2007 work session in San Rafael, CA.

I. Meeting Participants and Materials

Twenty-two NCCRSG primary members and eighteen alternate members participated in the October 16-17, 2007 meeting.

California Secretary for Resources Mike Chrisman, and California Fish and Game Commissioner Mike Sutton attended the meeting as observers. MLPA Blue Ribbon Task Force (BRTF) members Don Benninghoven and Cathy Reheis-Boyd also attended.

MLPA Master Plan Science Advisory Team members participating in the meeting included: Sarah Allen, Caroline Hermans, Karina Nielsen, and Astrid Scholz.

MLPA Initiative and California Department of Fish and Game (DFG) staff—collectively known as the “I-Team”—staffed the meeting.

Meeting materials, including copies of the PowerPoint presentations, may be found on the MLPA website at: http://www.dfg.ca.gov/mlpa/meeting_101607.asp

II. Key Outcomes

A. NCCRSG adopted provisional north central coast regional goals and objectives

NCCRSG members unanimously adopted “provisional north central coast regional goals and objectives.” In taking this action, the NCCRSG incorporated feedback from the SAT on goal 4, objective 1. The revised goal 4, objective 1 now reads: “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.”

The adopted provisional regional goals and objectives are attached as Attachment 1. They will now be forwarded to the BRTF for approval.

B. NCCRSG work groups developed six “draft options for MPA arrays”

Three NCCRSG cross-interest work groups (named the emerald, jade, and turquoise groups) met in extended breakout sessions and continued the work begun in August and during their September work sessions. Each work group successfully developed two draft MPA array options (identified simply as “A” and “B”) to be forwarded to the SAT and BRTF for review and evaluation.

These work group deliberations were informed by several presentations and plenary discussions (see section II.C below).

C. NCCRSG received presentations on key topics to inform work group development of “draft options for MPA arrays”

Work group deliberations on draft options for MPA arrays were informed by a series of presentations. These included presentations on: work group interim draft options for MPA arrays, submitted “external” MPA proposals, preliminary analyses of socioeconomic data,

SAT feedback, DFG feasibility guidance, and the revised MLPA regional profile. Work group deliberations were also informed by public comment and plenary discussions looking across all of this information. Each of these key informational topics is described below.

1. Interim draft options for MPA arrays prepared by the work groups

Each work group presented its interim work on draft options for MPA arrays to the NCCRSG showing the results of their September 7 and 25 work sessions.

2. MPA proposals “external” to the work group process

The following “external” MPA proposals were presented to the NCCRSG. The external proposals were developed outside of the NCCRSG work group process. Each was co-developed by at least one NCCRSG member acting in concert with outside stakeholders.

- External Proposal A: Presented by Chuck Cappotto, on behalf of the Fisherman’s Marketing Association of Bodega Bay
- External Proposal B: Presented by Dan Wolford, Coastside Fishing Club, on behalf of a recreational fishing coalition
- External Proposal C: Presented by Christopher Chin, NCCRSG, on behalf of a conservation coalition
- External Proposal D: Presented by Santi Roberts, NCCRSG, on behalf of Oceana

3. Status report on preliminary socioeconomic analyses

NCCRSG members received presentations or status updates on three socioeconomic studies.

a. Commercial fishing grounds and socioeconomic data collection: draft report and maps

Astrid Scholz of Ecotrust presented a draft report on preliminary socioeconomic data from its analysis of commercial fishing. For confidentiality reasons, NCCRSG members were only provided access to data maps during the work group sessions.

NCCRSG members requested that Ecotrust generate and provide future maps that illustrate both “weighted importance” and “stated importance”.

b. Update on recreational fishing analysis

Astrid Scholz confirmed that socioeconomic results for recreational fishing would be available in draft form at the December 11-12, 2007 NCCRSG meeting.

c. Non-consumptive ocean uses for the north central coast study region

Mimi D’lorio of the National MPA Center presented a draft report on community mapping of non-consumptive ocean uses in the study region. The analysis focused on intensity of use for the following non-consumptive uses of the ocean: kayaking and canoeing, whale watching and wildlife viewing, diving and underwater photography, and tide pooling.

4. SAT guidance

I-Team members provided NCCRSG members with the following information from the SAT:

- List of species likely to benefit from MPAs in the north central coast study region
- Draft responses to science questions posed by the NCCRSG at the July and August NCCRSG meetings.

NCCRSG members asked follow-up questions, which are detailed in section II.D below.

5. Initial DFG feedback based on feasibility guidance for delineating MPAs

DFG staff presented preliminary feedback on the work group draft options for MPA arrays. DFG staff reiterated that while its feedback constituted guidance and not requirements, adhering to the guidance would greatly facilitate implementation and enforcement of eventual MPAs.

DFG staff provided the following key guidance:

- Avoid “floating corners” (e.g., additional offshore corners not at the outside edge of the MPA) unless they fall on simple latitude/longitude coordinates.
- When possible, use due north/south MPA boundaries. An exception would be to use recognizable structures, like buoys. Note: DFG can not ensure new buoys will be installed to address areas where they do not presently exist, but the NCCRSG can make a request if desired.
- When possible, avoid “L-shaped” MPAs.
- When possible, locate MPA boundaries on whole minutes of latitude or longitude, or whole tenths of minutes.
- Using “distance from shore” for the boundary of an MPA may work for protecting breeding colonies in intertidal or nearshore zones, but it is better to assign coordinates to a line that approximates that distance. It is more acceptable to use “distance from shore” around islands, especially if the distances are large (e.g., 1 or 2 miles).
- In general, circular shapes are not preferred, but circular MPA boundaries around islands (e.g., Farallons) may be acceptable.
- Avoid depth contours as boundaries, as they are difficult to enforce.

DFG staff will develop a memorandum to provide regulatory mechanisms to address seabird and marine mammal disturbance issues, and will transmit this to the NCCRSG by the end of October.

6. Revised regional profile

I-Team staff provided NCCRSG members with a revised version of the MLPA Initiative *Regional Profile for the North Central Coast Study Region (Alder Creek/Point Arena to Pigeon Point, California)* dated October 8, 2007. The revised document reflects the incorporation of numerous comments from NCCRSG members and other members of the public over the past four months.

D. NCCRSG identified additional science and policy questions for staff/SAT consideration

1. Science questions

NCCRSG members raised several science questions, both in the plenary and work group settings, and requested that these be forwarded to the SAT for consideration. Questions discussed include the following:

- What impact would the delineation of a 100-foot nearshore “ribbon”, within which shore-based angling is permitted, have on the protection level of an MPA? (Note: I-Team staff noted that this question will be addressed through the SAT evaluation.)
- Is an MPA that protects rockfish around the Farallon Islands likely to increase the abundance of juvenile rockfish in the subregion?
- The NCCRSG would like the SAT to (re)consider and comment on potential additions to the list of species likely to benefit from MPAs. (Potential suggestions included white sharks, salmonids, and flat and northern abalone.) NCCRSG members agreed to prepare a list of possible additions, along with stated rationales, for consideration by I-Team staff and the SAT.
- Would the designation of a state marine reserve or other MPA around the mouth of a major estuary make a significant contribution to protecting anadromous fish that spawn upstream? Does the SAT have comments on what size, distance from the mouth, and setback is likely to be protective? Would a fairly tight boundary accomplish resource protection?
- What impact would the delineation of “vessel no-go zones” of varying widths have on the level of protection assigned to an MPA?

Per the protocol established at the August 22-23, 2007 NCCRSG meeting, these questions will be reviewed by I-Team staff and the SAT co-chairs to determine their appropriateness for SAT review. I-Team staff will report back on how each question was addressed at the next NCCRSG meeting.

2. Policy questions

NCCRSG members raised several policy issues for I-Team consideration, and potential consideration by DFG, legal counsel or the BRTF.

- What is the feasibility with regard to enforcement of delineating a 100-yard inshore SMCA “ribbon” that would allow only shore-based angling?
- How should the NCCRSG consider underwater telecom cables that run through the study region in the NCCRSG process? Would designation of an MPA preclude the future laying of cables in the area? Is the laying of cables consistent with the three MPA designations?
- How should the NCCRSG address potential wave energy projects in the NCCRSG process? Would designation of an MPA preclude developing wave energy projects in the area? Are wave energy projects consistent with the three MPA designations?

- What regulatory options exist to protect against disturbance of seabirds and marine mammals by vessels of all types?

Staff will prepare memoranda to address these issues. One of these memoranda will summarize existing DFG guidance on special closures.

3. Other questions

- Where is the sewer outfall from San Francisco in relation to the boundaries of the Gulf of the Farallones National Marine Sanctuary?

4. Formation of NCCRSG sub-group to address disturbance issues

Several NCCRSG members expressed interest in forming a sub-group to further explore the issue of disturbance to seabirds and marine mammals. Francesca Koe agreed to serve as NCCRSG point person in working with I-Team staff (Susan Ashcraft as lead) to organize these discussions. NCCRSG members also agreed to prepare a list of key seabird and marine mammal disturbance areas in the study region, building on the draft list developed by the National Marine Sanctuary Program.

E. Public comment

The meeting included designated public comment periods on both day 1 and day 2. More than eighty members of the public attended the meeting. Approximately thirty members of the public provided comments. Prior to the comments, I-Team staff reviewed the opportunities for public participation in the broader MLPA Initiative process.

Key comments included the following advice to NCCRSG members:

- The NCCRSG is doing important work that will have a significant impact on ocean resources, communities, and livelihoods in the northern part of the study region.
- The northern part of the study region is an important area for abalone diving and other recreational fishing activities. These are key sources of economic income for the area.
- NCCRSG members need to consider the effects of displaced fishing effort caused by siting of particular MPAs.
- NCCRSG members need to take safety issues into account when siting MPAs. Due to prevailing northerly winds, it is important to keep some areas just north of ports open to fishing and anchoring. The issue of displaced effort may also result in some users traveling to less safe areas.
- The NCCRSG should consider the location of existing public access points when siting MPAs, and should continue to allow recreational fishing near these access points. The Sea Ranch and Anchor Bay were two often-mentioned areas where access points exist.
- Alternatively, NCCRSG members were urged to consider the impacts on private property when siting MPAs. Placing “no take” reserves adjacent to private property was identified as an imposition on private property rights. Some commenters observed that private property can act as a *de facto* MPA in helping to protect wildlife and habitat.
- NCCRSG members should site MPAs, where possible, near low use areas.

- Siting of MPAs needs to take into account existing fishery regulations.
- Any implementation of MPAs on the north central coast needs to be adequately enforced. Adequate funds need to be made available to support this enforcement.
- The NCCRSG should consider protection of harbor seal rookeries in The Sea Ranch area, including exploration of a possible seasonal closure.
- The NCCRSG should consider key ecosystem relationships in its deliberations. Examples include the relationship between urchins and kelp, and the potential relationship between sea otters and other forms of marine life (if otters were to return to the area).
- The public appreciates receiving as much information on the MLPA Initiative process as possible, and in a timely manner.

The I-Team noted that NCCRSG members, in their work groups, had actively considered and discussed this advice as they worked to complete their draft options for MPA arrays. I-Team members also noted the intent to convene at least one public workshop in the northern part of the study region later in the process when the NCCRSG progresses further with its work.

F. Overview of NCCRSG process timeline

I-Team staff presented an overview of the NCCRSG process timeline through spring 2008. The purpose of this presentation was to help situate current NCCRSG efforts within the broader north central coast process. Key milestones include:

- December 11-12, 2007 NCCRSG meeting: NCCRSG to continue its work on MPA arrays to develop draft MPA proposals. This will be followed by another round of SAT and BRTF review, as well as California Fish and Game Commission initial review.
- February 6-7, 2008: NCCRSG to develop final suite of MPA proposals. This will be followed by SAT analysis, BRTF action, and forwarding of recommendations to the California Fish and Game Commission

A document outlining the timeline is attached as Attachment 2.

G. Upcoming NCCRSG meetings

1. November 28, 2007 work session

I-Team staff scheduled an NCCRSG work session for November 28, 2007. A major goal of this work session is to begin addressing SAT and BRTF feedback on the current round of draft options for MPA arrays.

2. Next NCCRSG meeting is scheduled for December 11-12, 2007 in Pacifica, CA

Key objectives for the December 11-12, 2007 NCCRSG meeting are to:

- Receive SAT and BRTF feedback on the “draft options for MPA arrays” and “external” proposals presented and developed at the October 16-17, 2007 NCCRSG meeting.
- Receive informational presentations on socioeconomic data (including preliminary analyses of recreational fishing data), tribal interests, and water quality issues.

- Develop next iteration of MPA arrays for SAT and BRTF review and evaluation.

III. Recap of Next Steps

A. Key next steps for NCCRSO members

1. NCCRSO members to prepare a list of potential additions to the “species likely to benefit from MPAs” list for consideration by the SAT. Santi Roberts to serve as point-person.
2. Interested NCCRSO members to form a subgroup to further discuss key issues involving disturbance of seabirds and marine mammals. Francesca Koe to serve as NCCRSO point-person as they coordinate with I-Team staff (Susan Ashcraft as lead). NCCRSO members to prepare a draft list of key disturbance zones in the study region, building on the draft list developed by the National Marine Sanctuary Program.
3. NCCRSO members to participate in a work session on Wednesday, November 28, 2007 in San Rafael, CA.

B. Key next steps for I-Team staff

1. Package the work group draft options for MPA arrays and external proposals for review and evaluation by the SAT.
2. Forward the NCCRSO’s adopted “provisional north central coast regional goals and objectives” to the BRTF for review and approval.
3. Prepare memoranda to address:
 - Policy questions raised by NCCRSO (from section II.D.2 above)
 - Additional guidance on special closures
4. Review science questions and forward, as appropriate, to the SAT for consideration.
5. Work with NCCRSO subgroup to support further discussions on addressing disturbance of seabirds and marine mammals.
6. Prepare for and convene an NCCRSO work session on November 28, 2007 in San Rafael, CA.

Attachments Referenced

1. Adopted Provisional North Central Coast Regional Goals and Objectives (October 16, 2007)
2. NCCRSO process timeline (updated October 22, 2007)

California MLPA North Central Coast Regional Stakeholder Group
Provisional North Central Coast Regional Goals and Objectives
Adopted by NCCRSG, October 16, 2007

(The text below reflects revisions made at the NCCRSG's October 16, 2007 meeting.)

Introduction

The members of the North Central Coast Regional Stakeholder Group (NCCRSG) 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)¹. The regional goals are largely taken directly from the Marine Life Protection Act (MLPA) itself. Regional objectives are more specific measurable statements of what MPAs may accomplish to attain a related goal (Pomeroy et al. 2004). The NCCRSG 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 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. Design considerations are cross cutting (they apply to all MPAs) and are not necessarily measurable. MPA alternatives developed by the NCCRSG should include analysis of how the proposal addresses both regional goals and 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.

Provisional Regional Objectives

Goal 1. To protect the natural diversity and abundance³ 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. [Propose moving to a design guideline as this is about efficiency of design not adaptive management]
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 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 individuals⁵.
3. Sustain or increase reproduction by species most likely to benefit from MPAs through protection of breeding, foraging, rearing or nursery areas.

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

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

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. 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.*
3. 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.
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 north central California waters, for their intrinsic value.

1. Include within MPAs the following habitat types: estuaries, ~~and the intertidal and zone~~ at subtidal waters around the Farallon Islands, and subtidal waters (including the water column and benthic habitats) around the Farallon Islands; [are the deep water benthic and water column habitats unique as well and worthy of inclusion?]
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 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, 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 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.

3. To the extent possible, effectively use scientific guidelines in the *California MLPA Master Plan for Marine Protected Areas*.

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. 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.
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.

Provisional Regional Design and Implementation Considerations

Design Considerations

The NCCRSG recognizes 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 *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 provisional 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.

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 Plan⁶ and the draft Abalone Recovery and Management Plan.⁷
5. In developing MPA proposals, consider how existing state and federal programs address the goals and objectives of the MLPA and the north central coast region as well as how these proposals may coordinate with other programs.

⁶Design 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.

⁷Design 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.

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.

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 north central coast MPAs.
2. When appropriate, phase the implementation of north 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.
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.

California Marine Life Protection Act Initiative
Future Meetings Schedule
Revised October 22, 2007

Please check the MLPA website (www.dfg.ca.gov/mlpa) for the most current information, including meeting agendas and materials.

2007

November 13	SAT (Pacifica) Initial analysis of MPA arrays and proposals
November 19-20	BRTF (San Rafael) Initial review of MPA arrays and proposals
November 28	NCCRSG work group sessions (San Rafael) Begin revising initial MPA arrays
December 11-12	NCCRSG (Pacifica) Refine 1st draft MPA arrays; presentation of draft proposals

2008

January 8	SAT (San Francisco International Airport) Analysis of draft MPA proposals
January 23-24	BRTF (TBD) Review of draft MPA proposals
January ?	Workshops (Half Moon Bay, Bodega Bay, Gualala) Public input on draft MPA proposals
January ?	FGC (TBD) Initial feedback on draft MPA proposals
February 6-7	NCCRSG (San Rafael) Revise draft MPA proposals; develop preferred alternative
March 6	SAT (San Francisco International Airport) Analyze MPA proposal(s)
March 26-27	BRTF (San Rafael) Act on recommended proposal(s) and preferred alternative
May 14-15 (if needed)	NCCRSG (TBD) Comment on and propose refinements to BRTF recommended proposals and preferred alternative
June / July (if needed)	BRTF (TBD) Comment on and propose refinements to FGC preferred alternative

BRTF = MLPA Blue Ribbon Task Force
SAT = MLPA Master Plan Science Advisory Team
NCCRSG = MLPA North Central Coast Regional Stakeholder Group
FGC = California Fish and Game Commission