

Key Outcomes Memorandum

Date: January 21, 2009

To: Members, MLPA South Coast Regional Stakeholder Group (SCRSG)

From: Scott McCreary and Rebecca Tuden, CONCUR, Inc.

Re: Key Outcomes Memorandum – January 13-14, 2009 SCRSG Meeting

cc: MLPA Initiative staff and contractors, California Department of Fish and Game staff, and California Department of Parks and Recreation staff (collectively known as the I-Team)

Executive Summary – Key Outcomes

On January 13 – 14, 2009, the Marine Life Protection Act (MLPA) South Coast Regional Stakeholder Group (SCRSG) participated in its third meeting in San Diego, CA. **Key outcomes** from the meeting are as follows:

- SCRSG members discussed and unanimously adopted regional goals and objectives for the MLPA South Coast Study Region. The SCRSG discussed the draft synthesis proposed by I-Team staff and suggested the goals and objectives be changed to include more specific language addressing water quality and clarification of the species likely to benefit from marine protected areas (MPAs). Additional text changes were also suggested. I-Team staff synthesized the comments and presented a revised proposal on Day 2. After more discussion and straw votes on two choices identified in the revised proposal for some objectives, the SCRSG voted to adopt the entire package of regional goals and objectives to forward to the BRTF for approval. The agreed upon package is included as an attachment to this document.
- I-Team staff provided an overview of the guidelines for developing draft MPA arrays and launched the SCRSG work groups that will be used to develop the initial round of draft proposals for MPA arrays. SCRSG primaries and alternates were assigned to one of three work groups, called “Lapis,” “Opal” and “Topaz.”
- MLPA Initiative Executive Director Ken Wiseman referred to a staff memo and map of the existing military use areas in the study region prepared for the MLPA Blue Ribbon Task Force (BRTF) discussing how such areas should be treated in the MPA planning process. SCRSG members are encouraged to comment directly to the BRTF on this topic and other policy issues.
- SCRSG members received informational briefings on topics involving the MLPA Master Plan Science Advisory Team (SAT) preliminary evaluation methods, water quality, marine birds and mammals, oceanography and an update on the Ecotrust Fisheries Uses and Values Project. SCRSG members raised thoughtful questions about these presentations and identified key questions.
- The California Department of Fish and Game (DFG) provided more detailed discussion explaining the feasibility guidelines for developing MPA designs, regulations and boundaries.

- I-Team staff provided an update on additional datasets being gathered for the regional profile including inclusion of substrate data and non-consumptive uses.

Key next steps are listed in Section III below.

I. Meeting Objectives, Participants and Materials

On January 13-14, 2009, the MLPA South Coast Regional Stakeholder Group (SCRSG) participated in a meeting in San Diego, CA. This Key Outcomes Memorandum summarizes the meeting's main results.

The primary objectives of the meeting were to:

- Review, discuss and adopt regional goals and objectives
- Continue joint fact-finding for next version of regional profile
- Receive informational briefings on key topics
- Receive presentations on south coast guidelines and evaluation methods for developing marine protected area (MPA) proposals
- Outline strategy for and initiate MPA proposal development process

60 SCRSG members (primary and alternates) participated in the meeting.

MLPA Blue Ribbon Task Force (BRTF) member Don Benninghoven (Chair) attended portions of the meeting.

MLPA Master Plan Science Advisory Team (SAT) members Larry Allen, Mark Carr, Dominic Gregorio, Dan Robinette, Susan Chivers, Paul Dayton, John Largier and Stephen Stohs attended portions of the meeting.

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

Meeting materials may be found on the MLPA website at http://www.dfg.ca.gov/mlpa/meeting_011309.asp

II. Key Outcomes

A. Welcome and Introductions & Updates

MLPA Initiative Executive Director Ken Wiseman acknowledged the current budget cuts and he confirmed that the MLPA Initiative is not at risk. The MLPA Initiative is expected to continue on schedule. He discussed the California Fish and Game Commission's decision to retain the existing MPAs in the northern Channel Islands and Santa Barbara Island without altering boundaries or regulations. He also noted that another key policy decision now under consideration by the BRTF is staff's recommendation to avoid placing MPAs in certain U.S. Department of Defense military operating areas because placement of MPAs in such areas may

be unlikely to contribute to the goals of the MLPA. A number of SCRSG members expressed strong concerns about the staff recommendation and noted the important habitats on San Nicolas and San Clemente islands. SCRSG members were encouraged to voice their concerns on policy issues directly to the BRTF.

Evan Fox provided an update on progress on key SAT activities including progress made at the December 2008 SAT meeting on defining the level of protection for different activities, key and unique habitats in the study region and identification of the species likely to benefit. He also reiterated that the best process for the SCRSG to raise questions for SAT consideration is to voice them at SCRSG meetings.

Kelly Sayce described the outreach activities underway in the study region including a meeting with some members of the recreational fishing community in San Diego, the upcoming Tribal Forum with tribal governments, and the recently-scheduled staff tour for January 15, 2009. SCRSG members are encouraged to work with the I-Team's outreach staff to help inform the public of upcoming events or forums.

B. Goals & Objectives Discussion (Part I and II)

California Department of Fish and Game (DFG) staff gave a presentation reiterating the overall purpose and use of the goals and regional objectives and noted that site-specific rationales will be developed by SCRSG members and applied to individual MPAs.

The facilitation team summarized the status of SCRSG comments on the goals and objectives made during the last SCRSG meeting and the process used to incorporate those comments into the synthesis that had been distributed to the SCRSG on December 30, 2008. SCRSG members were invited to begin comment on the staff synthesis, encouraged to make specific recommendations on the proposed language and to build on interests expressed by fellow SCRSG members.

The SCRSG had a robust discussion on two major issues: how to address water quality and further defining the "species likely to benefit" text. Other SCRSG comments raised included the scope of other activities covered in Goal 2, Objective 5; clarifying the need for public support for enforcement in Goal 5, Objective 4; adding language on ocean acidification; specifying submerged sites and; including an objective in Goal 6 to promote biodiversity.

A number of SCRSG members supported a recommendation to include specific language in the Goal 1 objectives to reflect water quality impacts. Other SCRSG members, while acknowledging the importance of water quality concerns, noted that, because it was outside the authority of the MLPA and thus outside the scope of MPA planning to remedy water quality impacts, it was better left to other forums.

The SCRSG members also deliberated on the meaning of the text in the Goal 2 objectives regarding "species likely to benefit". Some SCRSG members expressed support for protecting the broadest number of species possible with MPAs and not limiting the language to only those identified by the SAT. It was also noted that, while respecting scientific expertise, there was still uncertainty in identifying specific benefits from MPAs and that it would be preferable not to limit

the potential list of species. Other SCRSG members wanted to more clearly define the species that would be targeted with MPA designation and felt more confident in relying on the SAT's recommendation. I-Team staff clarified that the SAT was no longer identifying species "most likely to benefit", but would be identifying a range of benefit expected.

The I-Team staff synthesized the SCRSG comments into a revised text and presented them to the SCRSG for review and discussion on January 14, 2009 (Day 2). The revised text had options for the SCRSG to consider on the two major topics: specific reference to water quality and clearer definition of "species likely to benefit" language. The revised text also incorporated many of the other suggestions made by SCRSG members. For any specific suggestions that had not been incorporated into the revised proposal, I-Team staff noted that they had discussed the issue with the individual SCRSG member that had made the specific recommendation and reached agreement with the individual prior to presenting text to the full SCRSG.

The SCRSG held a straw vote on text for two Goals: Goal 1, Objective 5 with support for including water quality into the objective; and Goal 2, Objectives 2 and 3, to include language that further clarified "species likely to benefit" by adding language that stated, "with emphasis on those species identified as more likely to benefit" from MPAs. The SCRSG then voted on the entire package of Goals, Objectives and Design and Implementation Considerations and unanimously adopted the document to forward to the BRTF for approval (see Attachment 1).

C. Informational Presentations on the Study Region

Update on Science Guidelines and Evaluation Methods

Dr. Mark Carr, co-chair of the SAT, gave a presentation describing the science guidelines and emerging south coast evaluation methods for assessing marine protected area (MPA) proposals. The presentation further described the bioregions in the MLPA South Coast Study Region and explained the SAT methodology for looking at ecosystem protection and diversity (representation and replication) and sustaining and restoring populations (size and spacing). His presentation explained the methodology used to identify levels of protection (LOPs) for different activities, and the key marine habitats and how their representation and replication in the MPA network is evaluated.

He noted that the SAT is still in the process of evaluating how to consider certain species and activities in the study region that were not present in the MLPA North Coast Study Region. In particular, the SAT is still considering how to evaluate representation for the unique habitats (oil seeps, hydrothermal vents, elk kelp beds and hydrocoral beds) in the study region and is also developing guidelines for soft bottom habitat. He noted that the SAT is also considering methods for evaluating cumulative impacts.

Oceanographic Features in the MLPA South Coast Study Region

Dr. John Largier gave a presentation describing the different oceanographic features in the study region including upwelling, winds, waves and currents that affect connectivity and habitat.

Marine Birds and Mammals in the MLPA South Coast Study Region

SAT members Dan Robinette and Susan Chivers provided a presentation on the marine birds and mammals in the study region. The marine mammals presentation provided an overview of

the life history characteristics of marine mammals and the types of anthropogenic disturbances likely to affect their health. Dr. Chivers described the location of many of the haul out sites and rookeries in the study region and noted that only MPAs with SAT-assigned “high” or “very high” levels of protection will be included in the marine birds and mammals evaluation. Dan Robinette described the diversity of bird species in the study region and the key foraging areas and “hot spots” for marine birds. In particular, he noted that bays and estuaries provide critical habitat for many of the marine bird species.

Water Quality in the MLPA South Coast Study Region

Dominic Gregorio, SAT member from the State Water Resources Control Board, gave a presentation describing water quality concerns and opportunities in the study region. He discussed the potential water quality impacts from power plants, public owned treatment works outfalls, and storm water runoff. He also identified the areas of special biological significance (ASBSs) in the study region as potential opportunities for MPA designation. He emphasized that the SAT is working on a guidance document for the SCRSG that will identify geographic areas in the study region where water quality concerns and opportunities exist.

Ecotrust Fisheries Use and Values Project

Charles Steinback of Ecotrust gave an update on the status of the Ecotrust Fisheries Use and Values Project for the study region. He reminded the SCRSG that at the last meeting he had provided an introduction on the information collection approach and methods. At this meeting, he provided a discussion of the current status of the data sets for each of the commercial fisheries. Ecotrust and fishing interests are currently verifying these maps with the commercial fishermen who provided the information with the goal to calculate the maximum potential adverse economic impact of different MPA proposals on the commercial fisheries; this data should be available at the January 29 work session. Ecotrust is also developing maps for each recreational user group (private boaters, kayak anglers, divers and pier/shore anglers) per county. It was noted that Ecotrust is aware of the confidentiality of this information and takes great steps to aggregate the data so that private, individual fishing areas are not disclosed.

D. Information on MPA Planning

I-Team staff provided an update on the status of the south coast regional profile and additional data sets being added to the MPA planning information. Based on contributions from the SCRSG Regional Profile Work Group, many changes were made to the regional profile incorporating local knowledge. The regional profile will also include an appendix which will incorporate much of the local knowledge provided by the SCRSG members and help to complete information for the sub regional summaries. Staff noted that additional information is still pending on tribal data, substrate data and efforts to incorporate the spatial information from the California Ocean Uses Atlas; this information is expected to be incorporated and the regional profile revised and distributed by March. A presentation on the coastal uses and information obtained from the scheduled tribal forum will be provided at the SCRSG meeting in March 2009.

E. Guidelines for Developing MPA Proposals

California Department of Fish and Game (DFG) staff provided further guidance on how MPAs should be designed so that they meet DFG's identified feasibility criteria. Issues discussed included preference for north/south and east/west boundaries with 90° corners, unless a diagonal boundary runs parallel with the geography of the coastline, boundaries that provide ease of land-based enforcement perspective, and use of uncomplicated "take" regulations.

I-Team staff provided an overview of the information used in the evaluation of Goal 3 of the MLPA. The information provided will not be used to rank different MPA arrays but rather to provide a description of what aspects are offered in the various proposals. Staff explained that the evaluation relies on existing data sources and, therefore, may provide a limited description.

Staff also gave a presentation on the process the SCRSG will follow to develop MPA proposals. In developing proposals, SCRSG members should consider the areas of interest, goals of the MLPA, approved regional goals and objectives, and BRTF and SAT guidance when siting possible MPAs. SCRSG members were encouraged to be collaborative and build upon the interests identified by their fellow members and also to consider the interests expressed in external proposals that will be submitted by members of the public. Staff defined what constitutes a full MPA proposal and explained that the overall process is iterative.

F. Geographic Areas of Interest and Initiation of Work Group Sessions

Each primary/alternate pair was asked to jointly identify three important geographic areas that they wanted the full SCRSG to know about and record them on a ½ sheet of paper that was provided during the meeting. Due to extensive public comment, there was insufficient time during the meeting to fully discuss these identified areas. I-Team staff collected the summary sheets and plan to include the geographic areas of interest discussion on the agenda for the January 29, 2009 work session.

The SCRSG was organized into three multi-interest work groups that have been named "Lapis, Opal and Topaz." The criteria used by the I-Team to select work group distribution was to seek a balance between interests, geographic distribution and a comparable distribution of primary and alternate representatives. The three work groups participated in their first work group session at the meeting, during which each SCRSG member identified a few, key geographic areas of importance and identified the reason for its importance including: habitat representation or protection, consumptive use (recreational or commercial), non-consumptive use, or key educational, cultural or study opportunities. These key areas were recorded on a GIS map for further discussion at upcoming work sessions.

G. Questions and Clarifications

Throughout the meeting, SCRSG members posed a range of clarifying questions and provided comments regarding the process, science and policy aspects of the guidelines and informational presentations. I-Team staff responded to most of these questions during the meeting and will provide responses to the remaining policy and science questions that were not fully answered at the meeting. Key comments and questions from SCRSG members that were identified for further review and follow-up include the following:

What are important ecological features of San Clemente and San Nicolas islands and how do these relate to the bioregion?
How will U.S. Department of Defense restrictions affect the MLPA planning process?
How is “marine natural heritage” defined?
What are retention zones? Can you provide the SCRSG maps and/or location information for retention zones?
What method of identifying latitude and longitude are we using?
What recreational activities can be regulated by the California Fish and Game Commission and State Parks in designated MPAs? (e.g., jet skis)
Do the established MPAs on the north shore of San Miguel, Santa Rosa and Santa Cruz Islands network with mainland MPAs of Santa Barbara and Ventura counties and count towards the size and spacing criteria?
Can you identify which threats from water quality are most likely to cause harm to species identified as most likely to benefit from MPAs?
Can you provide more information on how to use special closures in the process and how this guidance was developed?
Describe the level of pollutants from first flush rain events to subsequent rain events.
How would California Coastal Monument legislation affect and be coordinated with the MLPA?
Clarify how the SAT will treat marine mammals at the Children's Pool in its assessment.

H. Public comment

Members of the public provided comment and asked clarifying questions during two separate public comment periods. Comments included: appreciation to the SCRSG members for their hard work and reminding them of the importance of their task, specific recommendations to modify the goals and objectives to identify select species of concern and to add water quality. There was also extensive public comment during both days of the meetings discussing Children’s Pool in La Jolla, comments on handling SAT-related decisions, and highlights about the importance of beach replenishment and its relationship to MPAs. There was also a collection of speakers from a local high school that provided a video documenting the potential importance of the Palos Verdes area.

I. Objectives for January 29, 2009 Work Session

The SCRSG will hold its first work session in Los Angeles on January 29, 2009. The main objective for the work session is to begin developing “draft MPA arrays” including:

- Start process of designing draft MPAs through consideration of areas of interest and sharing of information among SCRSG members in the work group context.

- Consider existing MPAs in the study region and how/whether they contribute to MLPA goals.
- Draw on available guidance, evaluations and information to identify possible geographies for MPAs: MPA boundaries, type, and potential allowed uses.
- Consider links to regional goals and objectives to identify specific sites.
- Begin building draft MPA arrays (target is one or two arrays per work group)
- Plan next steps and preparations for the February 10, 2009 work session.

III. Recap of Next Steps

A. Key next steps for SCRSG members

Begin using MarineMap to identify areas of geographic interest and potential MPAs.

B. Key next steps for I-Team staff

Transmit a copy of the adopted regional goals and objectives to the SCRSG and BRTF – see attachment.

Prepare responses to outstanding process, policy and science questions raised by SCRSG members.

Attachment 1: Regional Goals and Objectives and Implementation and Design Considerations - Adopted by the South Coast Regional Stakeholder Group (January 14, 2009)

California MLPA South Coast Project
Revised Draft Regional Goals and Objectives and Design and
Implementation Considerations as Adopted by the
MLPA South Coast Regional Stakeholder Group
Adopted January 14, 2009

Note that these goals, objectives, and design and implementation considerations will be presented to the MLPA Blue Ribbon Task Force at its February 26, 2009 meeting for consideration and possible adoption for the MLPA South Coast Study Region.

Introduction

The members of the MLPA South Coast Regional Stakeholder Group (SCRSG) 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 has stakeholder support and meets 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, classification (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 and implementation considerations.

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>.

Regional Goals and Objectives

The marine protected area (MPA) design process begins with setting regional goals and objectives that are consistent with the MLPA, then identifying site-specific rationales for individual MPAs. Once set, regional goals and objectives influence crucial decisions regarding MPA size, location and boundaries, as well as management measures and the focus of monitoring and evaluation programs.

Goal 1. To protect the natural diversity and abundance² 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 biodiversity, natural trophic structure and food webs in representative habitats.
5. Promote recovery of natural communities from disturbances, both natural and human induced, including water quality.

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.³
2. Sustain or increase reproduction by species likely to benefit from MPAs, with emphasis on those species identified as more likely to benefit from MPAs, and promote retention of large, mature individuals⁴.

² *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).

³ 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, 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

3. Sustain or increase reproduction by species likely to benefit from MPAs with emphasis on those species identified as more likely to benefit from MPAs through protection of breeding, spawning, foraging, rearing or nursery areas or other areas where species congregate.
4. Protect selected species and the habitats on which they depend while allowing some commercial and/or recreational harvest of migratory, highly mobile, or other species; and other activities.

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 improving catch rates, maintaining high scenic value, lowering congestion, increasing size or abundance of species, and protection of submerged sites).
2. Provide opportunities for scientifically valid studies, including studies on MPA effectiveness and other research that benefits from areas with minimal or restricted human disturbance.
3. Provide opportunities for collaborative scientific monitoring and research projects that evaluate MPAs that promote adaptive management and link with fisheries management, seabird and mammals information needs, classroom science curricula, cooperative fisheries research and volunteer efforts, and identifies 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 key and unique habitats identified by the MLPA Master Plan Science Advisory Team for this study region.
2. Include and replicate to the extent possible [practicable], representatives of all marine habitats identified in the MLPA or the *California Marine Life Protection Act Master Plan for Marine Protected Areas* across a range of depths.

Goal 5. To ensure that south coast 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 including coastal dependent entities, communities and interests, to

⁴ An increase in lifetime egg production will be an important quantitative measure of an improvement of reproduction.

the extent possible, and if consistent with the Marine Life Protection Act and its goals and guidelines.

2. Provide opportunities for interested parties to help develop objectives, a long-term monitoring plan that includes standardized biological and socioeconomic monitoring protocols, a long-term education and outreach plan, and a strategy for MPA evaluation.
3. Effectively use scientific guidelines in the *California Marine Life Protection Act Master Plan for Marine Protected Areas*.
4. Ensure public understanding of, compliance with, and stakeholder support for MPA boundaries and regulations.
5. Include simple, clear, and focused site-specific objectives/rationales for each MPA and ensure that site-level rationales for each MPA are linked to one or more regional objectives.

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

1. Provide opportunities to promote a process that informs adaptive management and 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. Provide opportunities to coordinate with future MLPA regional stakeholder groups in other regions to ensure that the statewide MPA network meets the goals of the MLPA.
3. Ensure ecological connectivity within and between regional components of the statewide network.
4. Provide for protection and connectivity of habitat for those species that utilize different habitats over their lifetime.

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 Marine Life Protection Act Master Plan for Marine Protected Areas*, these considerations may apply to all MPAs and MPA proposals regardless of the specific regional goals and objectives for that MPA and may contribute to the site-level rationales for individual MPA design and placement.

The design considerations will be incorporated with the goals and objectives and 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. 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. When designing or modifying MPAs, consider leveraging relevant portions of existing management activities and area-based restrictions, including state and federal fishery management areas and regulations (such as rockfish conservation areas and trawl fishery closures, or other restricted access zones).
3. Site MPAs to prevent fishing effort shifts that would result in serial depletion.
4. When crafting MPA proposals, include considerations for design found in state fishery management plans such as the Nearshore Fishery Management Plan⁵ and the Abalone Recovery and Management Plan.⁶

⁵Design considerations from the 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.

⁶Design considerations from the 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. In developing MPA proposals, consider how existing state, local and federal programs address the goals and objectives of the MLPA and the south coast study region as well as how these proposals may coordinate with other programs.
6. Site MPAs adjacent to terrestrial federal, state, county, or city parks, marine laboratories, or other "eyes on the water" to facilitate management, enforcement, monitoring, education and outreach.
7. Site MPAs to facilitate use of volunteers to assist in monitoring and management.
8. Site MPAs to take advantage of existing long-term monitoring studies.
9. 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, ocean acidification, community alteration, and distributional shifts in marine species when designing MPAs.
13. Preserve the diversity of recreational, educational, commercial, and cultural uses.
14. 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. 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.

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 California State Legislature or other sources.

Implementation considerations will be incorporated with the regional goals and objectives and design considerations and 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.

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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.

The MLPA South Coast Regional Stakeholder Group recommends the following implementation and management activities, as appropriate, also be included in the regional MPA management plans required under the *California Marine Life Protection Act Master Plan for Marine Protected Areas* (section 4.0) for designated MPAs.

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, outreach and enforcement is available for implementing new MPAs.
4. Develop coordinated regional management and enforcement plans in coordination with state, local, and federal entities, 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.