



CALIFORNIA MARINE LIFE PROTECTION ACT

MASTER PLAN FOR MARINE PROTECTED AREAS

APPENDIX F

South Coast: MPA Background and Priorities

August 24, 2016

Table of Contents

1. INTRODUCTION	1
2. DESCRIPTION OF REGION	2
2.1 UNIQUE REGIONAL FEATURES	2
3. CONSIDERATIONS FOR DESIGNING SOUTH COAST MPAS	4
3.1 REGIONAL GOALS AND OBJECTIVES	4
3.2 DESIGN CONSIDERATIONS	7
3.3 UNIQUE DESIGN CONSIDERATIONS	8
3.4 IMPLEMENTATION CONSIDERATIONS	9
4. SUMMARY OF REGIONAL MPAS	10
5. SCIENTIFIC INFORMATION	21
5.1 OVERVIEW OF REGIONAL MONITORING	21
5.2 REGIONAL MONITORING PLAN	22
5.3 REGIONAL MPA MONITORING PROGRAMS	23
<i>Baseline Monitoring</i>	23
<i>Long-Term Monitoring</i>	24
5.4 INFORMING ADAPTIVE MANAGEMENT	24
6. ENFORCEMENT PLAN	24
6.1 PERSONNEL AND EQUIPMENT	28
6.2 TRAINING	29
6.3 ADDITIONAL CDFW ENFORCEMENT RESOURCES	29
6.4 CONTINGENCIES AND EMERGENCY PLANNING	29
7. ADDITIONAL RESOURCES	30
8. LITERATURE CITED	31

List of Figures

FIGURE 1. ADOPTED MPAS IN THE SOUTH COAST REGION.	11
FIGURE 2. AREA (SQUARE MILES) IN SOUTH COAST REGION STATE WATERS OF EACH MPA DESIGNATION.	12
FIGURE 3. MLPP ADAPTIVE MANAGEMENT PROCESS.....	22
FIGURE 4. STATEWIDE MPA MONITORING FRAMEWORK, DISPLAYING THE TWO PRIMARY MONITORING ELEMENTS: 1) ASSESSING ECOSYSTEM CONDITION AND TRENDS, AND 2) EVALUATING MPA DESIGN AND MANAGEMENT DECISIONS.....	23

List of Tables

TABLE 1. SUMMARY STATISTICS FOR PROTECTED AREAS WITHIN STATE WATERS IN THE SOUTH COAST REGION.	12
TABLE 2. DESCRIPTIVE STATISTICS FOR INDIVIDUAL SOUTH COAST REGION MPAS.	13
TABLE 3. PERCENTAGE OF TOTAL KNOWN HABITAT REPRESENTATION IN SOUTH COAST REGION MPAS.	15
TABLE 4. HABITAT REPRESENTATION FOR INDIVIDUAL SOUTH COAST REGION MPAS.	16
TABLE 5. ENFORCEMENT CONSIDERATIONS.....	25
TABLE 6. PERSONNEL AND EQUIPMENT.....	28

1. Introduction

The Marine Life Protection Act (MLPA), passed by the California Legislature in 1999, required the state to redesign its previously existing system of 63 marine protected areas (MPAs), covering approximately 2.7% of state waters (less than 0.25% of which occurred in no-take MPAs), to increase its coherence and effectiveness at protecting the state's marine life, habitats, and ecosystems.¹ From 2004 to 2012, the California Resources Agency (now California Natural Resource Agency [CNRA]), California Department of Fish and Game (now California Department of Fish and Wildlife [CDFW]), and Resources Legacy Fund Foundation (now Resources Legacy Fund [RLF]), entered into a public-private partnership called the California Marine Life Protection Act Initiative (MLPA Initiative)² to implement the MLPA through science-based and stakeholder driven regional MPA planning processes (see Appendix A). By December 2012, the MPA planning processes for each of the four coastal regions were completed, resulting in a comprehensive, interconnected statewide network of 124 MPAs³ and 15 special closures, constituting approximately 16% of state waters (9.4% of which in no-take MPAs).⁴ Core to redesigning and siting California's MPAs, as well as to the ongoing management of the statewide MPA network, is the Marine Life Protection Program (MLPP), established pursuant to the MLPA.⁵

In recognition of the regional MPA planning processes and varying ecological, social, and economic conditions along California's approximately 1,100-mile coastline (Fox et al. 2013a), appended to the 2016 Master Plan are Regional MPA Background and Priorities documents (Appendices C-F). These four Regional MPA Background and Priorities documents have a standardized structure and correspond to each completed regional MPA network implemented through the MLPA Initiative from north to south, including the North Coast (Appendix C), North Central Coast (Appendix D), Central Coast (Appendix E), and South Coast (Appendix F). Regional MPA Background and Priorities documents include region-specific MPA design considerations and priorities moving forward; which together provide important context to base future informed statewide MPA management decisions upon. They are not meant to contain specific details for management protocols and methodologies; and instead are intended as living documents that are readily accessible for reference and adaptive management, and serve as a logical starting place for guiding regionally-based activities. Each Regional MPA Background and Priorities document includes unique regional features and considerations taken into account when designing the MPAs, regional goals and objectives, summaries of regional MPAs, and regional plans for scientific and enforcement considerations. For the purpose of keeping each Regional MPA Background and Priorities document concise and user friendly, many of these features are described in brief, and further in-depth information can be found through provided web links.

¹ California Fish and Game Code (FGC) §2853(a)

² MLPA Initiative. (2004). Memorandum of Understanding among the California Resources Agency, the California Department of Fish and Game, and the Resources Legacy Fund Foundation for the California Marine Life Protection Act Initiative.

Retrieved Apr 1, 2015 from <https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=30339>

³ MPAs are a subset of Marine Managed Areas (MMAs), however throughout this document the more common term "MPA" is used as an umbrella to refer to all types of protected areas. Total number of MPAs includes 111 new or redesigned MPAs and 13 MPAs previously established in 2003 at the northern Channel Islands that were retained without change. Total number of MPAs does not include previously existing San Francisco Bay MPAs

⁴ Options for a planning process in the fifth region, San Francisco Bay, have been developed for consideration at a future date. See Appendix A and CDFW's website for more information:

<http://www.wildlife.ca.gov/Conservation/Marine/MPAs/Network/San-Francisco-Bay>

⁵ FGC §2853(b)

2. Description of Region

2.1 UNIQUE REGIONAL FEATURES

The South Coast regional planning process to design and site MPAs occurred from 2008 to 2012, and was the third of four planning regions completed through the MLPA Initiative. Encompassing 2,351 square miles (6,789 square kilometers) of coastal waters, the region extends from the shoreline (mean high tide) to the boundary between state and federal waters, three nautical miles from shore.⁶ The South Coast region spans a straight-line distance of approximately 234 statute miles (377 kilometers) of the California mainland coastline (with about 1,046 miles [1,683 kilometers] of actual shoreline) from Point Conception in Santa Barbara County to the California/Mexico border. The region also includes state waters surrounding the Channel Islands and other prominent offshore islands. The region includes a broad array of habitats that range in depth. The maximum depth within this region is 3,938 feet (1,200 meters) off the northeast corner of San Clemente Island. A detailed description of the South Coast region is found in the MLPA Initiative Regional Profile of the South Coast region.⁷ Data sources can be found on CDFW's website,⁸ data viewer,⁹ and file transfer protocol (FTP) site.¹⁰ The following section is intended to summarize that description, including the key features and considerations used in the design and implementation of MPAs in the region.

The South Coast region is part of the California Current Large Marine Ecosystem, one of only four temperate upwelling systems in the world, considered globally important for biodiversity because of its high productivity and the large numbers of species it supports.¹¹ Some of the unique features of the region include:

- The intersection between two major biogeographic regions at Point Conception (cold, temperate Oregonian province from the north and the warm, temperate San Diegan province from the south), in the northern portion of the region
- A complex system of oceanographic currents, including a large gyre known as the Southern California Eddy, which circulates in a counter-clockwise direction
- More than 30% of the region shoreline is composed of sandy beaches
- Kelp forests dominated by giant kelp, found off rocky headlands including Point Conception, Point Dume, Palos Verdes, La Jolla, in waters surrounding the Channel Islands, and other locations
- The Channel Islands, which are made up of eight major islands as well as smaller rocks and islets; the northwestern islands are associated with cooler, nutrient-rich waters and the southeastern islands are associated with warmer waters

⁶ The boundary of state waters for the purposes of the 2016 Master Plan is from mean high tide to three nautical miles offshore of all intertidal rocks and mouths of embayments, including large open bays (excluding state waters in San Francisco Bay, which represent approximately 473 square miles). This method of measurement creates instances where the state water boundary is further offshore than three nautical miles (e.g., Monterey Bay and the area around the Channel Islands).

⁷ CDFW. (2009). *Regional Profile of the South Coast Study Region: Point Conception to the California-Mexico Border*. Retrieved Apr 1, 2015 from http://www.dfg.ca.gov/marine/mpa/regionalprofile_sc.asp

⁸ Descriptions and summaries of California's MPAs are provided on the CDFW website: <https://www.wildlife.ca.gov/MPAs>

⁹ CDFW's marine and coastal data viewer MarineBIOS can be found on the CDFW website: <https://www.wildlife.ca.gov/MarineBIOS>

¹⁰ Additional data sources can be found on CDFW's FTP site: ftp://ftp.dfg.ca.gov/R7_MR/

¹¹ World Wildlife Fund. (2000). *The Global 200 Ecoregions: A User's Guide*. WWF. Washington D.C.

- Several large urban centers, including Los Angeles and San Diego, located adjacent to the region, whose populations utilize coastal resources for recreational activities and commercial industries, while presenting unique challenges for water quality

3. Considerations for Designing South Coast MPAs

The members of the MLPA South Coast Regional Stakeholder Group (SCRSG) committed and participated in activities that included developing “alternative proposals for marine protected areas within the South Coast planning region that meet the requirements [and goals] of the MLPA”.¹² The SCRSG agreed that regional goals, objectives, and design and implementation considerations were all crucial to develop of an effective system of MPAs that stakeholders support and that meets the MLPA goals. While the same general MPA planning process structure was used throughout the four coastal planning regions, specific details regarding alternative MPA proposal development varied and the iterative nature of the process allowed for adaptation based on lessons learned and unique characteristics of each region. Multiple rounds of MPA proposal development also provided stakeholder groups with evaluations of the extent to which their draft proposals would meet science and feasibility design guidelines, built trust among stakeholders, increased awareness of constituencies’ particular interests, allowed the stakeholder group to develop improved cross-interest proposals, accommodated decision support-tools that allowed stakeholders to collaboratively develop MPA designs, and increased and facilitated interactions between MLPA Initiative bodies and interested members of the public (see Appendix A for more information). This section provides specific overviews of the various design considerations used in the South Coast MPA planning process.

3.1 REGIONAL GOALS AND OBJECTIVES

Regional goals are broad statements of what MPAs ultimately aim to achieve, objectives are more specific and measurable statements of what MPAs may accomplish to attain a related goal (Pomeroy et al. 2004). Once set, regional goals and objectives influence crucial design decisions regarding MPA size, location, boundaries, and management measures, while also helping to inform monitoring, evaluation, and the adaptive management process. Recognizing this, the regional MPA planning process included the development and application of regionally specific goals and objectives that were developed and adopted by the SCRSG prior to the formal MPA design process with the intent they be used as guiding principles. Regional goals were largely taken directly from the six network goals of the MLPA itself while the more specific objectives were based on regional priorities and lessons learned from designing MPAs in the Central Coast, and North Central Coast planning regions. Regional goals and objectives were utilized by the SCRSG when identifying the intent for a particular MPA site. Included below are the regional goals and objectives of the South Coast planning region.

¹² MLPA Initiative. (2008). *Draft Charter of the MLPA South Coast Regional Stakeholder Group*. Retrieved Sept 21 from: http://www.dfg.ca.gov/marine/pdfs/charter_scrsg.pdf

Goal 1. To protect the natural diversity and abundance¹³ 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.¹⁴
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 individuals.¹⁵
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 protecting submerged sites).

¹³ *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 and CDFW [2005]. Final Market Squid Fishery Management Plan. Retrieved Aug 10, 2015 from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=33570&inline=true>).

¹⁴ 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., FGC, 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 (FGC, 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.

¹⁵ An increase in lifetime egg production will be an important quantitative measure of an improvement of reproduction.

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 SAT for this 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 socioeconomic impacts and optimize positive socioeconomic impacts for all users including coastal dependent entities, communities, and interests, to the extent possible, and if consistent with the MLPA 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.

3.2 DESIGN CONSIDERATIONS

The SCRSG recognized several issues that should be considered in the design and evaluation of MPAs. Like the MPA design considerations contemplated in the 2008 Master Plan,¹⁶ these considerations may apply to all MPAs and MPA proposals regardless of the specific regional goals and objectives of that MPA and may contribute to the site-level rationales for individual MPA design and siting. The SCRSG had the opportunity to describe, in more detail, justifications for MPA design and siting during its work sessions and under the "site-specific rationale" and "other design considerations" field in MarineMap (see Appendix A, Section 4.4). The design considerations below were intended to be incorporated with the goals and objectives and provided to the MLPA Blue Ribbon Task Force (BRTF) for adoption and then to the California Fish and Game Commission (Commission) as part of the suite of recommendations for the planning region. Design considerations with long-term monitoring components were used in developing monitoring plans and will be used to inform the adaptive management process.

Primary design considerations include the following:

- In evaluating the siting of MPAs, considerations shall include the needs and interests of all users.
- 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).
- Site MPAs to prevent fishing effort shifts that would result in serial depletion.
- When crafting MPA proposals, include considerations for designs found in state fishery management plans (FMPs) such as the Nearshore Fishery Management Plan (NFMP)¹⁷ and the Abalone Recovery and Management Plan.¹⁸

¹⁶ CDFW. (2008). *Draft Master Plan for Marine Protected Areas*. Retrieved Mar 5, 2015 from <https://www.wildlife.ca.gov/Conservation/Marine/MPAs/Master-Plan>

¹⁷ Design considerations from the NFMP:

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.

¹⁸ Design 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. 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.

- In developing MPA proposals, consider how existing state, local, and federal programs address the goals and objectives of the MLPA and the South Coast planning region as well as how these proposals may coordinate with other programs.
- 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.
- Site MPAs to facilitate use of volunteers to assist in monitoring and management.
- Site MPAs to take advantage of existing long-term monitoring studies.
- Design MPA boundaries that facilitate ease of public recognition and ease of enforcement.
- Consider existing public coastal access points when designing MPAs.
- MPA design should consider the benefits and drawbacks of siting MPAs near to or remote from public access.
- Consider the potential impacts of climate change, ocean acidification, community alteration, and distributional shifts in marine species when designing MPAs.
- Preserve the diversity of recreational, educational, commercial, and cultural uses.
- 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.
- 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.

3.3 UNIQUE DESIGN CONSIDERATIONS

Regional MPA design and implementation considerations are additional factors that may help address enforcement and socioeconomic considerations, and encourage public involvement, while meeting the goals and design guidelines of the MLPA.¹⁹ During the MLPA Initiative process, MPA design and implementation considerations were applied at the regional level. Each regional MPA planning process required the consideration of unique regional design and/or policy considerations (Fox et al. 2013a, b). For example, during the South Coast regional MPA planning process from 2008 to 2012, 16 memorandums specific to the South Coast were issued, including clarifying how existing MPAs at the northern Channel Islands and existing military closures were to be evaluated in the design and evaluation of MPA proposals, and informal guidance to MLPA Initiative staff from the California Office of the Attorney General regarding MPAs and the Marine Managed Areas Improvement Act. A complete historical record of all South Coast MPA design and implementation considerations can be found on CDFW's website.²⁰

¹⁹ CDFW. (2008). *Draft Master Plan for Marine Protected Areas. Appendix O, page O-6*. Retrieved Mar 4, 2015 from <https://www.wildlife.ca.gov/Conservation/Marine/MPAs/Master-Plan>

²⁰ MLPA Blue Ribbon Task Force transmits South Coast recommendations to the California Fish and Game Commission (Binder 3, Policy Context): http://www.dfg.ca.gov/marine/mpa/recommendations_sc.asp#binder3

3.4 IMPLEMENTATION CONSIDERATIONS

Once implemented, a regional MPA network component requires effective management, strong public outreach, and a sound monitoring plan. Implementation considerations serve an important role in providing recommendations to the Commission and to managing agencies to ensure the success of the newly established MPAs. Recommended implementation considerations were based on local knowledge and took into account the regional MPA network component. The MLPA SCRSG recommended that the following implementation and management activities, as appropriate, also be included in the regional MPA management plans required under the Master Plan for designated MPAs:

- Improve public outreach related to MPAs through the use of docents, improved signage, and production of an educational brochure for South Coast MPAs.
- When appropriate, phase the implementation of South Coast MPAs to ensure their effective management, monitoring, and enforcement.
- Ensure adequate funding for monitoring, management, outreach, and enforcement is available for implementing new MPAs.
- 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.
- Incorporate volunteer monitoring and/or cooperative research, where appropriate.

The philosophy of participation from diverse stakeholder groups will continue throughout ongoing management of the MPAs. *The California Collaborative Approach: Marine Protected Area Partnership Plan* (the Partnership Plan)²¹ describes the importance of engaging with unique and regionally diverse stakeholders for MPA implementation by leveraging the human and financial resources of state and local partners, ensuring transparent communication between management agencies and partners, and engaging in partnerships. The collaborative approach outlined in the Partnership Plan emphasizes that broad support and active engagement with marine policy and science across all partner and stakeholder groups are essential to the success of the implementation of the statewide network of MPAs.²²

²¹ Ocean Protection Council. (2014). *The California Collaborative Approach: Marine Protected Areas Partnership Plan*. Retrieved Mar 4, 2015 from <http://www.opc.ca.gov/2014/05/draft-the-california-collaborative-approach-marine-protected-area-partnership-plan-open-for-public-comment/>

²² Ibid.

4. Summary of Regional MPAs

A network of 50 MPAs (including 13 previously established in 2003 at the northern Channel Islands that were retained without change) and two special closures covering approximately 355 square miles (919 square kilometers) of state waters, or about 15% of the South Coast region, went into effect in January 2012. The South Coast MPA network was the third of four coastal regions to successfully establish MPAs pursuant to the MLPA (see Appendix A, Section 6.3). This section provides an overview of the South Coast's MPAs, including summary statistics on the area within different types of MPAs in the region, the size and depth of each individual MPA, and habitat representation by MPA type and by individual MPA. Types of MPAs in the South Coast planning region include State Marine Reserves (SMRs), no-take State Marine Conservation Areas (SMCAs), SMCAs, and special closures. Throughout all tables and figures in this section, all statistics are from CDFW's Marine Region Geographic Information Systems (GIS) unit.²³ Statistics in this section were updated March 2016 and are subject to change as improvements in geographic data become available. Detailed profiles of each South Coast MPA can be found on the CDFW website, including designation type, size and location, key habitats protected, boundaries and regulations, rationale for why the MPA was chosen, species likely to benefit, and South Coast regional resources with additional information.²⁴

²³ CDFW's Marine Region Geographic Information Systems Unit: <https://www.wildlife.ca.gov/Conservation/Marine/GIS>

²⁴ Individual MPA overview sheets can be found on the CDFW website: <https://www.wildlife.ca.gov/Conservation/Marine/MPAs/Outreach-Materials#la-26716428-mpa-overview-sheets>

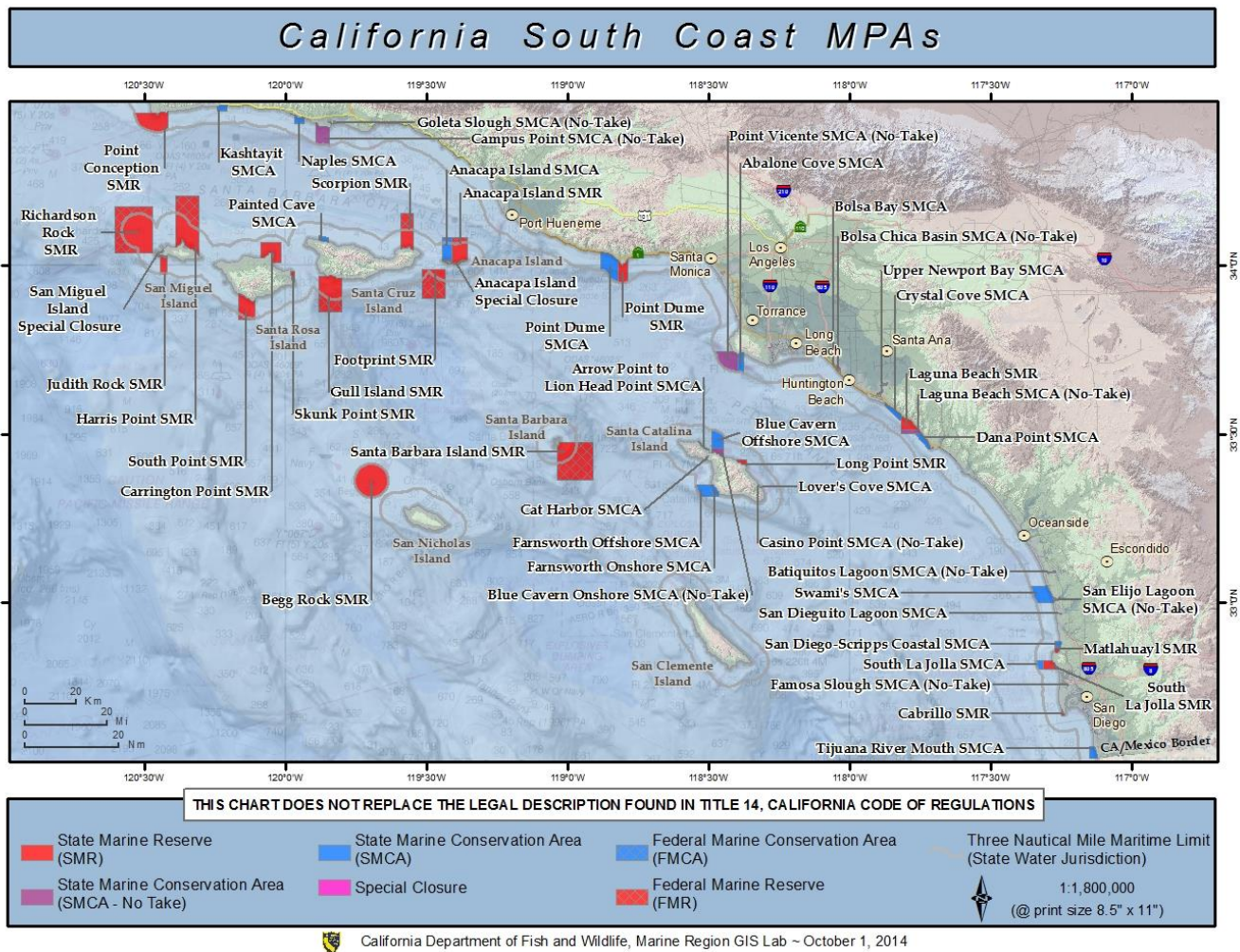


Figure 1. Adopted MPAs in the South Coast region.

Table 1. Summary statistics for protected areas within state waters in the South Coast region.

Protected Area Designation	Count	Area (square miles)	Area (percent)
SMR	19	241.84	10.29
SMCA (no-take)	10	33.22	1.41
SMCA	21	80.41	3.42
Special Closures	2	1.89	0.08
Total²⁵	50	355.46	15.12

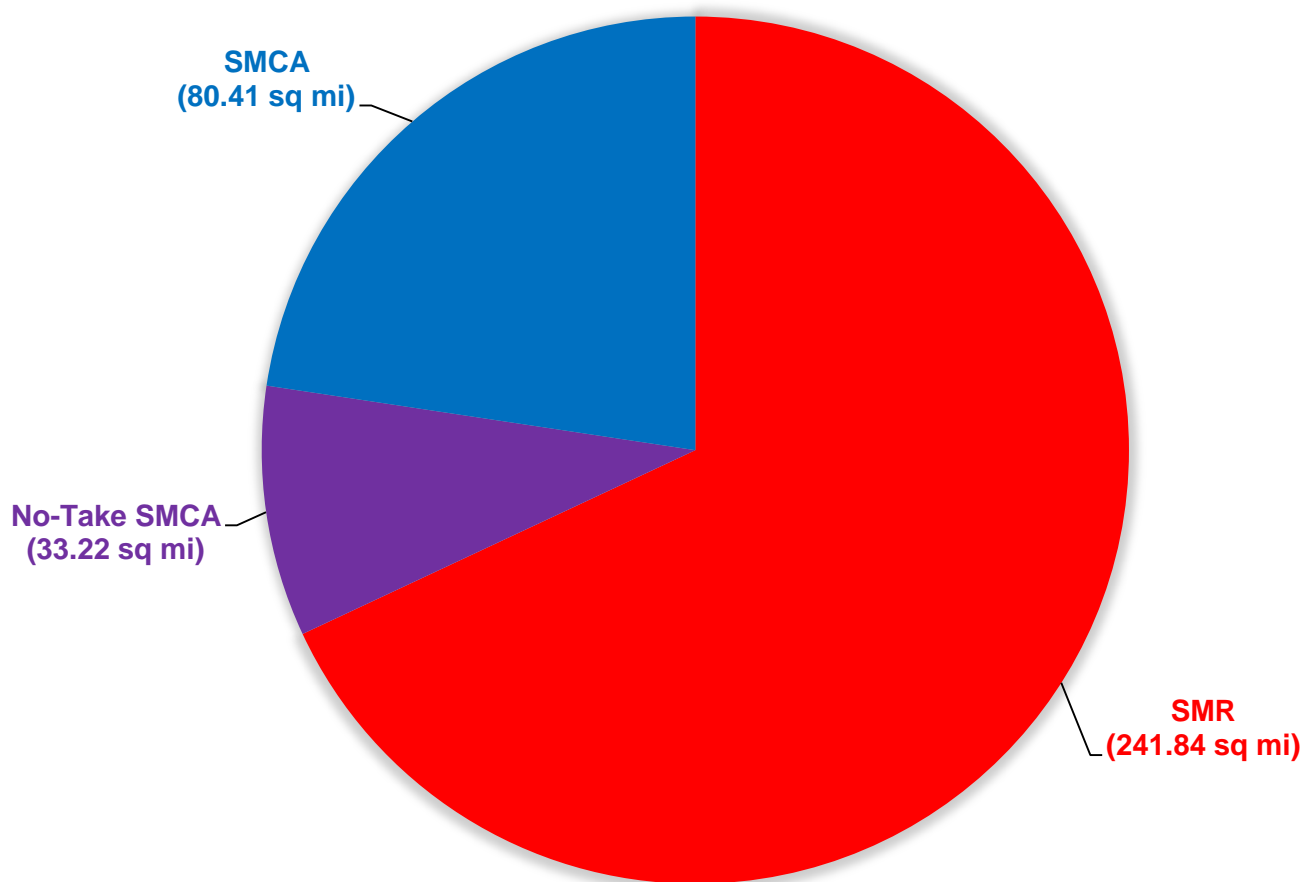


Figure 2. Area (square miles) in South Coast region state waters of each MPA designation.

²⁵ Totals include northern Channel Islands MPAs (effective since 2003), and do not include special closures

Table 2. Descriptive statistics for individual South Coast region MPAs.

MPA Name	Area (square miles)	Along-shore span (miles) ²⁶	Depth Range (feet)
Point Conception SMR	22.52	3.7	0-489
Kashtayit SMCA	2.02	1.9	0-160
Naples SMCA	2.60	1.9	0-162
Campus Point SMCA (no-take)	10.56	3.1	0-748
Goleta Slough SMCA (no-take)	0.16	N/A	0-10
Point Dume SMCA	15.92	4.0	0-2023
Point Dume SMR	7.53	2.9	0-1987
Point Vicente SMCA (no-take)	15.04	1.4	0-2640
Abalone Cove SMCA	4.79	1.5	0-2237
Bolsa Bay SMCA	0.07	N/A	N/A
Bolsa Chica Basin SMCA (no-take)	0.70	N/A	N/A
Upper Newport Bay SMCA	1.24	N/A	N/A
Crystal Cove SMCA	3.53	4.3	0-245
Laguna Beach SMR	6.72	4.4	0-1231
Laguna Beach SMCA (no-take)	3.09	1.2	0-1408
Dana Point SMCA	3.47	4.0	0-152
Batiquitos Lagoon SMCA (no-take)	0.51	N/A	N/A
Swami's SMCA	12.71	3.5	0-982
San Dieguito Lagoon SMCA	0.11	N/A	N/A
San Elijo Lagoon SMCA (no-take)	0.5	N/A	N/A
San Diego-Scripps Coastal SMCA	1.46	1.1	0-366
Matlahuayl SMR	1.04	1.7	0-331
South La Jolla SMR	5.04	2.3	0-180
South La Jolla SMCA	2.46	1.8	147-275
Famosa Slough SMCA	0.03	N/A	N/A
Cabrillo SMR	0.39	1.0	0-30
Tijuana River Mouth SMCA	3.02	2.2	0-55
Richardson Rock SMR	40.75	6.6	95-558
Harris Point SMR	25.40	7.0	0-557
Judith Rock SMR	4.56	1.4	0-487

²⁶ Alongshore span measured as direct line from one end of the MPA to the other

MPA Name	Area (square miles)	Along-shore span (miles)²⁶	Depth Range (feet)
Carrington Point SMR	12.78	4.8	0-211
Skunk Point SMR	1.47	2.5	0-83
South Point SMR	13.08	3.8	0-1071
Painted Cave SMCA	1.78	2.2	0-291
Gull Island SMR	19.93	3.2	0-2205
Scorpion SMR	9.64	3.4	0-769
Anacapa Island SMCA	7.30	2.2	0-490
Anacapa Island SMR	11.55	3.1	0-709
Footprint SMR	7.05	4.7	171-1656
Begg Rock SMR	37.96	6.9	219-374
Santa Barbara Island SMR	12.77	0.8	0-1655
Arrow Point to Lion Head Point SMCA	0.65	2.9	0-259
Blue Cavern Onshore SMCA	2.61	2.2	0-892
Blue Cavern Offshore SMCA	7.70	2.3	267-2616
Long Point SMR	1.67	2.3	0-749
Casino Point SMCA (no-take)	0.01	0.1	73
Lover's Cove SMCA	0.06	0.4	0-188
Farnsworth Onshore SMCA	2.59	2.2	0-291
Farnsworth Offshore SMCA	6.67	2.5	135-1909
Cat Harbor SMCA	0.26	0.4	0-186

Table 3. Percentage of total known habitat representation in South Coast region MPAs.

Habitat Type	Habitats in the South Coast Region MPAs (Percentage)			
	SMR	SMCA	SMCA (No-Take)	Total (all MPAs)
Intertidal				
Sandy or gravel beaches	5.7	6.4	1.4	13.2
Rocky intertidal and cliff	14.2	6.6	1.2	21.9
Coastal marsh	0	13.4	12.8	16.2
Tidal flats	0	19.5	1.6	21.1
Surfgrass beds (0-30m)	1.8	7.80	2.0	20.6
Eelgrass beds (0-30m)	1.2	0.1	3.9	5.2
Estuary (total area)	0	3.2	4.0	7.2
Soft bottom				
0-30 meters	4.5	3.4	0.5	8.4
30-100 meters	13.1	4.2	1.5	18.7
100-200 meters	18.9	4.6	2.4	25.9
>200 meters	2.5	7.9	6.0	16.4
Hard bottom				
0-30 meters	8.6	3.2	1.0	12.8
30-100 meters	18.6	2.5	0.1	21.2
100-200m	17.7	1.6	0	19.3
>200 meters	39.1	1.1	1.5	41.7
Kelp forest				
Average kelp ('89, '99, '02, '03-'08)	6.4	2.3	1.3	10.0
Submarine canyon				
0-30 meters	32.5	18.0	0.3	50.8
30-100 meters	7.8	1.8	0	9.6
100-200 meters	45.7	0	0	45.7
>200 meters	21.2	0.9	0	22.1

Table 4. Habitat representation for individual South Coast region MPAs.²⁷

Habitat Type		Point Conception SMR	Kashtayit SMCA	Naples SMCA	Campus Point SMCA (No-Take)	Goleta Slough SMCA (No-Take)	Point Dume SMCA	Point Dume SMR	Point Vicente SMCA (No- Take)	Abalone Cove SMCA	Bolsa Bay SMCA	Bolsa Chica Basin SMCA (No-Take)
Sandy or gravel Beaches	mi	2.73	1.38	1.55	3.02	0.14	4.09	2.77	1.35	1.43	0	0
Rocky intertidal and cliff	mi	3.13	1.43	1.38	1.37	0	0.44	1.54	0.21	0.86	0	0
Tidal flats	mi	0	0	0	0	0.56	0	0	0	0	0.99	0
Coastal marsh	mi	0	0	0	0	1.89	0	0	0	0	0.10	2.41
Surfgrass	mi	2.90	0.97	1.88	1.11	0	0.70	1.75	1.03	1.27	0	0
Eelgrass	mi ²	0	0	0	0.00	0	0	0	0	0	0	0.06
Estuary	mi ²	0	0.01	0	0.01	0.15	0	0	0	0	0.07	0.65
Hard 0 - 30m	mi ²	0.50	0.09	0.56	0.77	0	0.29	0.47	0.25	0.14	0	0
Hard 30 - 100m	mi ²	0.32	0	0	0.04	0	0	0	0	0.02	0	0
Hard 100 - 200m	mi ²	0.10	0	0	0	0	0	0.05	0	0	0	0
Hard 200 - 3000m	mi ²	0	0	0	0	0	0	0.84	0.03	0	0	0
Soft 0 - 30m	mi ²	2.16	1.35	1.54	0.89	0	2.02	0.59	0.40	0.51	0	0
Soft 30 - 100m	mi ²	15.79	0.16	0.38	7.08	0	5.95	1.07	1.07	1.17	0	0
Soft 100 - 200m	mi ²	3.26	0	0	1.42	0	1.38	0.63	1.04	0.56	0	0
Soft 200 - 3000m	mi ²	0	0	0	0.05	0	5.80	3.66	12.23	2.35	0	0
Average Kelp	mi ²	0.14	0	0.15	0.21	0	0.05	0.05	0.03	0.02	0	0
Submarine Canyon 0 - 30m	mi ²	0	0	0	0	0	0	0.01	0	0	0	0
Submarine Canyon 30 - 100m	mi ²	0	0	0	0	0	0	0.27	0	0	0	0
Submarine Canyon 100 - 200m	mi ²	0	0	0	0	0	0	0.24	0	0	0	0
Submarine Canyon 200 - 3000m	mi ²	0	0	0	0	0	0.19	1.39	0	0	0	0

²⁷ Mile (mi) is a linear measurement of a statute mile equal to 5,280 feet, and square mile (mi²) is an area measurement of statute miles squared

Habitat Type		Upper Newport Bay SMCA	Crystal Cove SMCA	Laguna Beach SMR	Laguna Beach SMCA (No-Take)	Dana Point SMCA	Batiquitos Lagoon SMCA (No- Take)	Swami's SMCA	San Elijo Lagoon SMCA (No- Take)	San Dieguito Lagoon SMCA	San Diego- Scripps Coastal SMCA	Matlahuayl SMR
Sandy or gravel Beaches	mi	0	3.95	3.48	0.67	3.60	0	3.77	0	0	1.51	1.23
Rocky intertidal and cliff	mi	0	2.00	2.48	0.38	2.06	0	1.20	0	0	0.19	0.92
Tidal flats	mi	5.27	0	0	0	0	0	0	0	0	0	0
Coastal marsh	mi	7.88	0	0	0	0	0	0.17	3.46	0	0	0
Surfgrass	mi	0	2.81	2.18	0.00	2.16	0	1.97	0	0	0	0.40
Eelgrass	mi ²	0	0	0	0	0	0.27	0	0	0	0	0
Estuary	mi ²	1.20	0	0	0	0	0.47	0	0.43	0.11	0	0
Hard 0 - 30m	mi ²	0	0.14	0.24	0.02	0.49	0	0.75	0	0	0.02	0.15
Hard 30 - 100m	mi ²	0	0.05	0	0	0	0	0.02	0	0	0.06	0.01
Hard 100 - 200m	mi ²	0	0	0	0	0	0	0.04	0	0	0.01	0
Hard 200 - 3000m	mi ²	0	0	0	0	0	0	0.01	0	0	0	0
Soft 0 - 30m	mi ²	0	1.06	1.29	0.41	1.68	0	2.46	0	0	0.77	0.55
Soft 30 - 100m	mi ²	0	1.63	2.82	0.84	0.79	0	3.85	0	0	0.57	0.32
Soft 100 - 200m	mi ²	0	0	1.12	0.62	0	0	3.19	0	0	0.03	0.03
Soft 200 - 3000m	mi ²	0	0	0.67	1.07	0	0	2.33	0	0	0	0
Average Kelp	mi ²	0	0	0.01	0	0.08	0	0.11	0	0	0	0.01
Submarine Canyon 0 - 30m	mi ²	0	0	0	0	0	0	0	0	0	0.13	0.22
Submarine Canyon 30 - 100m	mi ²	0	0	0	0	0	0	0	0	0	0.06	0.01
Submarine Canyon 100 - 200m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Submarine Canyon 200 - 3000m	mi ²	0	0	0	0	0	0	0	0	0	0	0

Habitat Type		South La Jolla SMR	South La Jolla SMCA	Famosa Slough SMCA (No-Take)	Cabrillo SMR	Tijuana River Mouth SMCA	Richardson Rock SMR	San Miguel Island Special Closure	Harris Point SMR	Judith Rock SMR	Carrington Point SMR	Skunk Point SMR
Sandy or gravel Beaches	mi	2.33	0	0	0.90	2.37	0	0.98	1.88	0.22	0.78	1.77
Rocky intertidal and cliff	mi	1.45	0	0	0.97	0	0	4.84	6.77	1.47	4.91	0.71
Tidal flats	mi	0	0	0	0	0.02	0	0	0	0	0	0
Coastal marsh	mi	0	0	0	0	0.02	0	0	0	0	0	0
Surfgrass	mi	1.59	0	0	1.41	0	0	0	0.54	0	2.90	0.07
Eelgrass	mi ²	0	0	0	0	0	0	0	0	0	0	0.09
Estuary	mi ²	0	0	0.03	0	0.01	0	0	0	0	0	0
Hard 0 - 30m	mi ²	3.29	0	0	0.30	0.59	0	0.71	0.85	0.48	1.35	0.08
Hard 30 - 100m	mi ²	0.50	0.48	0	0	0	0.20	0	2.40	0.07	0.27	0
Hard 100 - 200m	mi ²	0	0	0	0	0	0.04	0	0.25	0	0	0
Hard 200 - 3000m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Soft 0 - 30m	mi ²	0.40	0	0	0.03	2.09	0	0.01	1.80	0.21	7.15	0.71
Soft 30 - 100m	mi ²	0.50	1.97	0	0	0	0.52	0	15.93	1.56	3.82	0
Soft 100 - 200m	mi ²	0	0	0	0	0	0.09	0	2.54	0	0	0
Soft 200 - 3000m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Average Kelp	mi ²	0.24	0	0	0.01	0.01	0	0.19	0.09	0.15	0.12	0.03
Submarine Canyon 0 - 30m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Submarine Canyon 30 - 100m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Submarine Canyon 100 - 200m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Submarine Canyon 200 - 3000m	mi ²	0	0	0	0	0	0	0	0	0	0	0

Habitat Type		South Point SMR	Painted Cave SMCA	Gull Island SMR	Scorpion SMR	Anacapa Island Special Closure	Anacapa Island SMR	Anacapa Island SMCA	Footprint SMR	Begg Rock SMR	Santa Barbara Island SMR	Arrow Point to Lion Head Point SMCA
Sandy or gravel Beaches	mi	1.39	0	1.96	0.65	3.36	0.89	0.14	0	0	0.15	1.23
Rocky intertidal and cliff	mi	2.87	2.23	1.67	3.44	15.85	5.69	2.99	0	0	0.82	2.25
Tidal flats	mi	0	0	0	0	0	0	0	0	0	0	0
Coastal marsh	mi	0	0	0	0	0	0	0	0	0	0	0
Surfgrass	mi	1.18	0	0.93	0	5.52	2.73	1.02	0	0	0.71	0.99
Eelgrass	mi ²	0	0	0	0.01	0	0	0	0	0	0	0
Estuary	mi ²	0	0	0	0	0	0	0	0	0	0	0
Hard 0 - 30m	mi ²	0.55	0.04	0.78	0.17	0.51	0.27	0.11	0	0	0.11	0.17
Hard 30 - 100m	mi ²	0.26	0	0.12	0.33	0	0.10	0.03	0.11	4.10	0.10	0
Hard 100 - 200m	mi ²	0.01	0	0.13	0.01	0	0	0	0.02	0.07	0.02	0
Hard 200 - 3000m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Soft 0 - 30m	mi ²	1.22	0.05	1.90	0.37	0.39	0.87	0.23	0	0	0.47	0.26
Soft 30 - 100m	mi ²	3.51	0.12	3.77	4.88	0.05	7.25	6.21	1.16	22.22	1.69	0.14
Soft 100 - 200m	mi ²	5.34	0	3.20	0.18	0	0.78	0.18	0.27	11.58	0.42	0
Soft 200 - 3000m	mi ²	0.05	0	1.43	0	0	0	0	0	0	0.02	0
Average Kelp	mi ²	0.27	0	0.13	0.01	0.04	0.01	0	0	0	0.01	0.01
Submarine Canyon 0 - 30m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Submarine Canyon 30 -100m	mi ²	0	0	0	0	0	0	0	0	0	0	0
Submarine Canyon 100 - 200m	mi ²	0	0	2.69	0	0	0	0	0	0	0	0
Submarine Canyon 200 - 3000m	mi ²	0	0	3.05	0	0	0	0	0	0	0	0

Habitat Type		Blue Cavern Onshore SMCA (No- Take)	Blue Cavern Offshore SMCA	Long Point SMR	Casino Point SMCA (No- Take)	Lover's Cove SMCA	Farnsworth Onshore SMCA	Farnsworth Offshore SMCA	Cat Harbor SMCA
Sandy or gravel Beaches	mi	1.00	0	0.97	0	0.21	1.78	0	1.07
Rocky intertidal and cliff	mi	1.33	0	0.95	0.00	0.06	1.00	0	0.42
Tidal flats	mi	0	0	0	0	0	0	0	0.55
Coastal marsh	mi	0	0	0	0	0	0	0	0
Surfgrass	mi	1.44	0	0.18	0	0	0.28	0	0
Eelgrass	mi ²	0	0	0	0	0	0	0	0
Estuary	mi ²	0	0	0	0	0	0	0	0
Hard 0 - 30m	mi ²	0.08	0	0.06	0.00	0.01	0.14	0	0.02
Hard 30 - 100m	mi ²	0.01	0	0.01	0	0	0.01	0.50	0
Hard 100 - 200m	mi ²	0	0	0	0	0	0	0.01	0
Hard 200 - 3000m	mi ²	0	0	0	0	0	0	0.02	0
Soft 0 - 30m	mi ²	0.30	0	0.17	0	0.01	0.57	0	0.05
Soft 30 - 100m	mi ²	0.79	0.08	0.72	0	0.03	1.83	3.25	0.04
Soft 100 - 200m	mi ²	0.79	0.29	0.55	0	0	0	1.67	0
Soft 200 - 3000m	mi ²	0.64	6.84	0.12	0	0	0	1.22	0
Average Kelp	mi ²	0.02	0	0.01	0	0	0.03	0	0
Submarine Canyon 0 - 30m	mi ²	0	0	0	0	0	0	0	0
Submarine Canyon 30 - 100m	mi ²	0	0	0	0	0	0	0	0
Submarine Canyon 100 - 200m	mi ²	0	0	0	0	0	0	0	0
Submarine Canyon 200 - 3000m	mi ²	0	0	0	0	0	0	0	0

5. Scientific Information

Adhering to the provisions of the MLPA requiring monitoring, research, and evaluation, the MLPP has defined a process around a 10-year management review cycle to facilitate adaptive management (Figure 3). Partners in the MLPP provide oversight on all aspects of MPA monitoring and the adaptive management process, including developing regional MPA monitoring plans, regional MPA baseline monitoring programs, and long-term MPA monitoring activities; and contribute to five-year baseline management review, interim assessment and evaluation, and management review at the statewide level.

5.1 OVERVIEW OF REGIONAL MONITORING

California's MPAs were designed to generally reflect the integration of science and science-based MPA design guidelines from the MLPA, the 2008 Master Plan, and SAT guidance (see Appendix A, Section 4). While science guidelines strongly influenced MPA design, the iterative nature of the highly participatory, stakeholder-driven process led to some tradeoffs between ecosystem protection and socioeconomic considerations; which varied by region (Fox et al. 2013a, Saarman et al. 2013, Gleason et al. 2013). The development of science guidelines and methodologies, and how well MPA proposals met science and feasibility design guidelines and evaluations also varied among regions (see Appendix A, Section 3.3 and Section 4.3).

Following MPA design and implementation, the first step in MPA monitoring is regional monitoring planning. The goal of regional monitoring planning is to produce objective scientific data to inform management decisions at a regional, and ultimately at a statewide, scale through the development and implementation of regional MPA monitoring plans and MPA baseline monitoring programs. Regional monitoring plans developed to date include actions for baseline monitoring and guidance for long-term monitoring needs. Long-term monitoring and research activities will be designed to provide management decision support within the context of the Statewide MPA Monitoring Program and statewide adaptive management review process (see 2016 Master Plan, Chapters 4.3 – 4.5). A tremendous amount of data, often including large and varied datasets, can be generated from such programs. Therefore, an intensive phase of data analysis and reporting follows the implementation of MPA monitoring programs, which necessitates working collaboratively among many partners including principal investigators. Following data collection, monitoring results are communicated to managers and decision-makers, such as through baseline monitoring reviews, interim evaluations and assessments, and formal 10-year management reviews. Findings from these reviews, especially the formal 10-year management review in which the Commission may adopt changes in management measures, will sync back into the monitoring planning phase of the adaptive MPA management cycle (see 2016 Master Plan, Chapter 4.5).

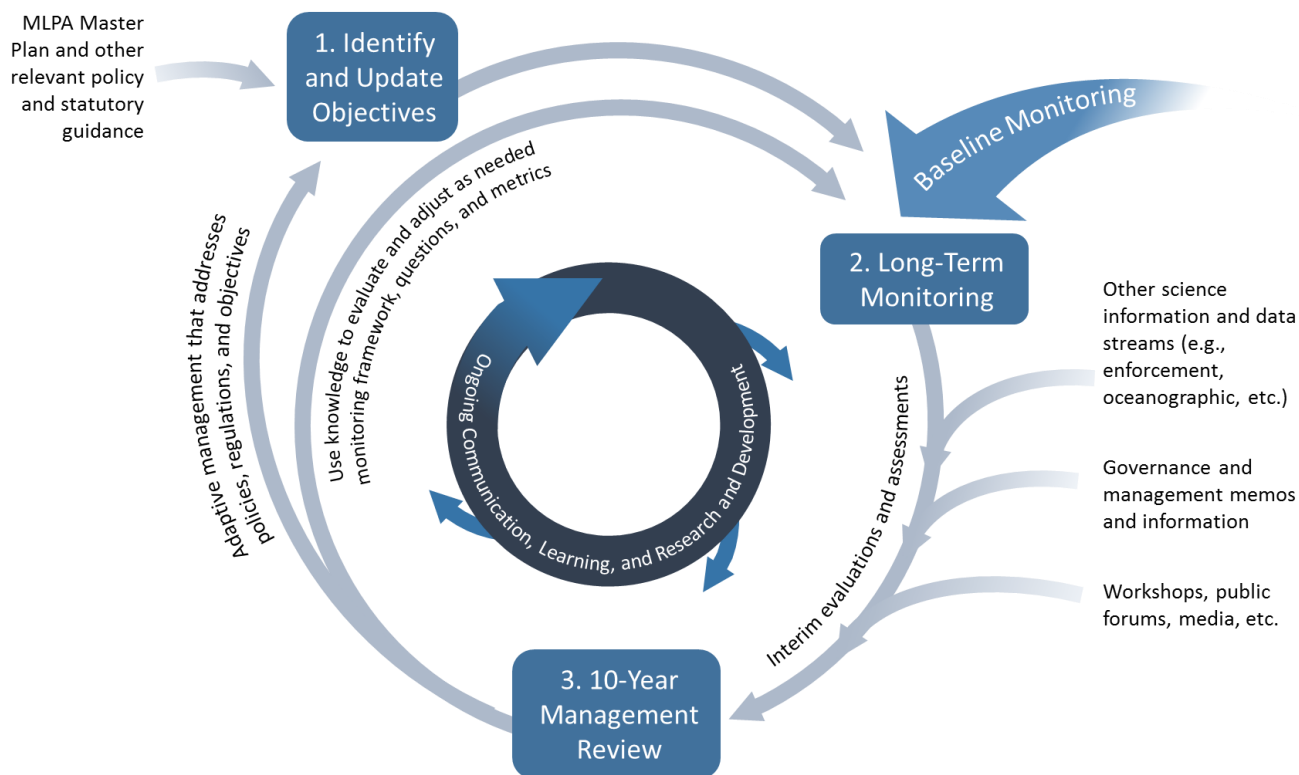


Figure 3. MLPP adaptive management process.

5.2 REGIONAL MONITORING PLAN

To develop regional MPA monitoring plans and update them over time, the MPA Monitoring Enterprise (now California Ocean Science Trust [OST]), in partnership with CDFW, created a framework for statewide MPA monitoring (see Figure 4). The statewide MPA monitoring framework to date serves as the primary basis for developing and updating regional MPA monitoring plans and guiding statewide monitoring. Overall, the goals of the statewide monitoring framework are to develop metrics that track trends in ecosystem condition and evaluate MPA design and governance to inform adaptive management. Consistent application of the statewide MPA monitoring framework will allow for regional and statewide approaches to monitoring.

Following a collaborative process with stakeholders and scientists, OST, again in partnership with CDFW, completed the South Coast MPA Monitoring Plan in 2011. The monitoring plan was adopted by the Commission in 2011.²⁸ As with the North Central and Central Coast MPA monitoring plans,^{29,30} the

²⁸ MPA Monitoring Enterprise, OST. (2011). *South Coast MPA Monitoring Plan*. Retrieved Apr 1, 2015 from http://oceanspaces.org/sites/default/files/regions/files/sc_mpa_monitoring_plan_full.pdf

²⁹ MPA Monitoring Enterprise, OST. (2010). *North Central Coast MPA Monitoring Plan*. Retrieved Apr 1, 2015 from http://oceanspaces.org/sites/default/files/regions/files/ncc_monitoring_plan_and_appendices.pdf

³⁰ MPA Monitoring Enterprise, OST. (2014). *Central Coast MPA Monitoring Plan*. Retrieved Apr 1, 2015 from http://oceanspaces.org/sites/default/files/regions/files/central_coast_monitoring_plan_final_october2014.pdf

South Coast MPA Monitoring Plan applies the statewide MPA monitoring framework, and may be updated to reflect baseline program results.

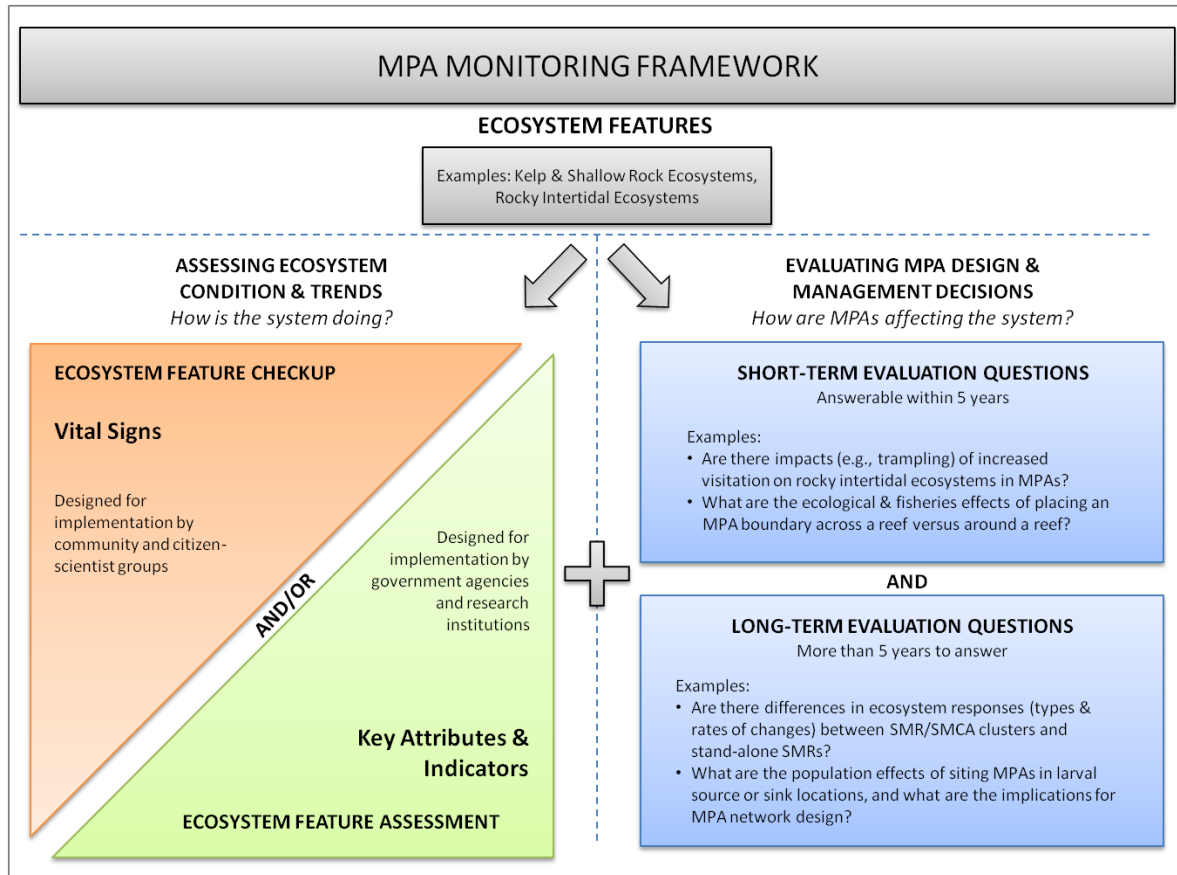


Figure 4. Statewide MPA monitoring framework, displaying the two primary monitoring elements: 1) assessing ecosystem condition and trends, and 2) evaluating MPA design and management decisions.³¹

5.3 REGIONAL MPA MONITORING PROGRAMS

Informed by the MLPA goals and objectives, the MLPP developed and implemented a program of baseline monitoring. After the baseline monitoring period concludes for each region, long-term monitoring will begin and continue into the future (see 2016 Master Plan, Chapter 4.3).

Baseline Monitoring

The South Coast MPA Baseline Program, a collaboration between OST, CDFW, Ocean Protection Council (OPC), and California Sea Grant, launched in 2011 to assess baseline ecological and socioeconomic conditions of the South Coast regional MPA network. The baseline program includes 10 projects to monitor a broad suite of habitats including rocky shores, sandy beaches, shallow subtidal, subtidal rocky reefs, and deep water habitats. Additional projects include assessing seabird and lobster populations, patterns of human uses, and an integrative project to facilitate collaboration and data comparability among the other baseline program projects. All baseline monitoring data can be

³¹ MPA Monitoring Enterprise, OST. (2010). *North Central Coast MPA Monitoring Plan*. Retrieved Sept 21, 2015 from http://oceanspaces.org/sites/default/files/regions/files/ncc_monitoring_plan_and_appendices.pdf

accessed on the OceanSpaces website.³² The South Coast region is the third of four regional MPA baseline programs. A State of the Region report similar to that produced for the Central Coast region³³ and North Central Coast region³⁴ which includes a summary of the South Coast MPA Baseline Program and other related monitoring activities during the first five years of MPA implementation in the region, is expected in 2017.³⁵ The State of the Region report can inform potential management recommendations from the first five years of MPA implementation in the region.³⁶

Long-Term Monitoring

After the baseline monitoring period concludes for the South Coast region, long-term monitoring based on regional and statewide objectives, will begin and continue into the future (Figure 3; also see 2016 Master Plan, Chapter 4.3). Long-term monitoring will seek to understand conditions and trends of marine populations, habitats, and ecosystems across regions towards a statewide scale. For more information on South Coast MPA monitoring, please visit the South Coast page of the OceanSpaces website.³⁷

5.4 INFORMING ADAPTIVE MANAGEMENT

MPA monitoring results, as well as additional information potentially collected from other scientific data, governance and management review, workshops, and public forums could be used to inform interim evaluation and assessment activities. These activities may take place at the regional scale and serve to inform the public about the state of the network and build understanding support for the MPAs. These assessments and evaluation can also feed into the formal 10-year management review (see 2016 Master Plan, Chapter 4.5).

6. Enforcement Plan

In order to facilitate enforcement, the CDFW proposes using a multi-tiered effort that targets high-risk areas (i.e., areas prone to infractions) with higher levels of enforcement while maintaining sufficient enforcement in all MPAs. In certain areas, CDFW will rely upon formal and informal partnerships to increase the number of “eyes-on-the-water,” person-hours of enforcement, and visibility of enforcement personnel. In some cases, formal memoranda of understanding will be developed to allow fund transfer between partner agencies. Table 5 lists MPA-specific enforcement considerations for each MPA in the South Coast region.

³² OceanSpaces. Retrieved Apr 1, 2015 from <http://oceanspaces.org/>

³³ OST and CDFW. (2013). *State of the California Central Coast: Results from Baseline Monitoring of Marine Protected Areas 2007-2012*. California, USA. Retrieved Apr 1, 2015 from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=133101&inline>

³⁴ OST and CDFW. (2015). *State of the California North Central Coast: A Summary of the Marine Protected Area Monitoring Program 2010-2015*. California, USA. Retrieved Dec 21, 2015 from <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=133100&inline>

³⁵ OPC. (2015). *Marine Protected Area (MPA) Statewide Leadership Team Work Plan FY 15/16 – 17/18*. <http://www.opc.ca.gov/2015/08/8122/>

³⁶ Ibid.

³⁷ OceanSpaces. *South Coast*. Retrieved Apr 1, 2015 from <http://oceanspaces.org/monitoring/regions/south-coast/long-term>

Table 5. Enforcement considerations.

MPA Name	Primary Enforcement Method	Special Considerations
Point Conception SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	<ul style="list-style-type: none"> • Limited Access and Limited Military Closures
Kashtayit SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Naples SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff patrol • Ocean/Vessel Patrol 	<ul style="list-style-type: none"> • Limited Access
Campus Point SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Goleta Slough SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Kayak Patrol 	None
Point Dume SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
Point Dume SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
Point Vicente SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol 	None
Abalone Cove SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol 	None
Bolsa Bay SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Kayak Patrol 	None
Bolsa Chica Basin SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Kayak Patrol 	None
Upper Newport Bay SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff patrol • Kayak Patrol 	None
Crystal Cove SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None
Laguna Beach SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None
Laguna Beach SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None
Dana Point SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None
Batiquitos Lagoon SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None
Swami's SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None

MPA Name	Primary Enforcement Method	Special Considerations
San Elijo Lagoon SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None
San Dieguito Lagoon SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Kayak Patrol 	None
San Diego-Scripps Coastal SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Matlahuayl SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
South La Jolla SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
South La Jolla SMCA	<ul style="list-style-type: none"> • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Famosa Slough SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Kayak Patrol 	None
Cabrillo SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Tijuana River Mouth SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol 	None
Richardson Rock SMR	<ul style="list-style-type: none"> • Ocean/Vessel Patrol 	None
San Miguel Island Special Closure	<ul style="list-style-type: none"> • Ocean/Vessel Patrol 	<ul style="list-style-type: none"> • Seasonal Closures
Harris Point SMR	<ul style="list-style-type: none"> • Ocean/Vessel Patrol 	None
Judith Rock SMR	<ul style="list-style-type: none"> • Ocean/Vessel Patrol 	None
Carrington Point SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
Skunk Point SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
South Point SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
Painted Cave SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Gull Island SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
Scorpion SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Anacapa Island Special Closure	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	<ul style="list-style-type: none"> • Seasonal Closures

MPA Name	Primary Enforcement Method	Special Considerations
Anacapa Island SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Anacapa Island SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Footprint SMR	<ul style="list-style-type: none"> • Small Skiff Patrol • Ocean/Vessel Patrol • Patrol 	None
Begg Rock SMR	<ul style="list-style-type: none"> • Ocean/Vessel Patrol • Patrol 	<ul style="list-style-type: none"> • Subject to military closures
Santa Barbara Island SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Ocean/Vessel Patrol 	None
Arrow Point to Lion Head SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Blue Cavern Onshore SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Blue Cavern Offshore SMCA	<ul style="list-style-type: none"> • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Long Point SMR	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Casino Point SMCA (no-take)	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Lover's Cove SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol • Kayak Patrol 	None
Farnsworth Onshore SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Farnsworth Offshore SMCA	<ul style="list-style-type: none"> • Small Skiff Patrol • Ocean/Vessel Patrol 	None
Cat Harbor SMCA	<ul style="list-style-type: none"> • Shoreline Patrol • Small Skiff Patrol • Kayak Patrol 	None

6.1 PERSONNEL AND EQUIPMENT

CDFW has 34 enforcement staff located within the South Coast region, covering the area between Point Conception and the Mexican border. The seven lieutenants and 27 wardens have a primary emphasis of at-sea and shore-based marine patrol within this area, and there are additional inland wardens that work non-marine issues along the same area of the South Coast. These wardens may respond to inland hunting, fishing, pollution, habitat loss, and other related enforcement issues. This group of marine emphasis and land-based wardens can be diverted from normal regulatory activities to respond to MPA activity. However, such diversions may cause delays in service or coverage and increased costs for overtime shifts. Current MPA enforcement is accomplished using existing personnel resources, and positions cannot be redirected to concentrate on MPA enforcement due to duties and responsibilities currently facing enforcement. Therefore, current staff may not be able to adequately handle the added responsibilities of enforcement of these MPAs without assistance.

Table 6. Personnel and equipment.

Point Conception to Footprint MPAs		Point Dume to Tijuana River Mouth MPAs		Totals
Land-Based	Patrol Boat	Land-Based	Patrol Boat	
2 Lieutenants	1 Lieutenant	2 Lieutenants	2 Lieutenants	7 Lieutenants
6 Wardens	4 Wardens	10 Wardens	7 Wardens	27 Wardens
3 Patrol Skiffs	N/A	7 Patrol Skiffs	N/A	10 Patrol Skiffs
N/A	1 Patrol Boat	N/A	2 Patrol Boats	3 Patrol Boats
Individual MPAs		Individual MPAs		
Point Conception SMR Kashtayit SMCA Naples SMCA Campus Point SMCA (no-take) Goleta Slough SMCA (no-take) Richardson Rock SMR San Miguel Island Special Closure Harris Point SMR Judith Rock SMR Carrington Point SMR Skunk Point SMR South Point SMR Painted Cave SMR Gull Island SMR Scorpion SMR Anacapa Island Special Closure Anacapa Island SMR Anacapa Island SMCA Footprint SMR		Point Dume SMCA Point Dume SMR Point Vicente SMCA (no-take) Abalone Cove SMCA Bolsa Bay SMCA Bolsa Chica Basin SMCA (no-take) Upper Newport Bay SMCA Crystal Cove SMCA Laguna Beach SMR Laguna Beach SMCA (no-take) Dana Point SMCA Batiquitos Lagoon SMCA (no-take) Begg Rock SMR Santa Barbara Island SMR Arrow Point to Lion Head SMCA Blue Cavern Onshore SMCA (no-take) Blue Cavern Offshore SMCA Long Point SMR Casino Point SMCA (no-take) Lover's Cove SMCA Farnsworth Onshore SMCA Farnsworth Offshore SMCA Cat Harbor SMCA Swami's SMCA San Elijo Lagoon SMCA (no-take) San Dieguito Lagoon SMCA San Diego-Scripps Coastal SMCA Matlahuayl SMCA South La Jolla SMR South La Jolla SMCA Famosa Slough SMCA (no-take) Cabrillo SMR Tijuana River Mouth SMCA		

MPAs are patrolled by many techniques including large patrol boats, small patrol skiffs, aircraft, and foot patrols by wardens along the coast. Each MPA has special needs requiring specialized patrol efforts. For example, areas closer to ports will require less effort to access, but due to their proximity to population centers, these areas are likely to have a higher use than remote areas. Conversely, remote areas may have fewer users, but require a more significant travel for enforcement officers to access. New and emerging technology options such as remote surveillance, Vessel Management Systems, and other technologies may provide options for increased efficiency of enforcement efforts.

6.2 TRAINING

Wardens working within the South Coast region of California will receive training as necessary on the MPA regulations and the MPAs in their patrol districts. This training will include but is not limited to area boundaries and area specific regulations.

6.3 ADDITIONAL CDFW ENFORCEMENT RESOURCES

CDFW has three large patrol boats in the 54 to 65 foot class stationed at major ports along the southern region coastline. Each large patrol boat is staffed by one lieutenant and two wardens. CDFW also has a fleet of single and twin engine fixed wing aircraft that work in conjunction with both marine and land based wardens to help identify and investigate violations.

6.4 CONTINGENCIES AND EMERGENCY PLANNING

Details on contingencies for natural disasters and/or unforeseen changes in local conditions will be added if necessary.

7. Additional Resources

Please refer to the following documents for additional historical information pertaining to the South Coast Regional MPA Background and Priorities document.

1. Regional Profile of the South Coast Study Region³⁸
2. South Coast Project Adopted Regional Goals and Objectives and Design and Implementation Considerations for the MLPA South Coast Study Region³⁹
3. BRTF Recommendations for the South Coast Study Region⁴⁰
4. Marine Life Protection Act, South Coast Study Region, Final Environmental Impact Report⁴¹
5. Marine Life Protection Act, South Coast Study Region, Draft Environmental Impact Report⁴²
6. Complete South Coast Regulatory and Environmental Review Process Documents^{43,44}

³⁸ MLPA Initiative. (2009). *Regional Profile of the South Coast Study Region (Point Conception to the California-Mexico Border)*. Retrieved Apr 1, 2015 from http://www.dfg.ca.gov/marine/mpa/regionalprofile_sc.asp

³⁹ MLPA Initiative. (2009). *South Coast Project Adopted Regional Goals and Objectives and Design and Implementation Considerations for the MLPA South Coast Study Region*. Retrieved Jul 29, 2015 from http://www.dfg.ca.gov/marine/pdfs/binders_sc/b1n.pdf

⁴⁰ MLPA Initiative. (2009). *BRTF Recommendations for the South Coast Study Region*. <http://www.dfg.ca.gov/marine/mpa/southcoastipa.asp>

⁴¹ MLPA Initiative. (2010). *South Coast Marine Protected Areas Project Final Environmental Impact Review*. Retrieved Jul 29, 2015 from http://www.dfg.ca.gov/marine/pdfs/finalimpact_sc/feir.pdf

⁴² MLPA Initiative. (2010). *South Coast Marine Protected Areas Project Draft Environmental Impact Review*. Retrieved Jul 29, 2015 from http://www.dfg.ca.gov/marine/mpa/impact_sc.asp

⁴³ CDFW (2010). *Regulatory and Environmental Review Process Documents*. Retrieved Aug 10, 2015 from: http://www.dfg.ca.gov/marine/mpa/regulatorydocs_sc.asp

⁴⁴ California Fish and Game Commission (2010). *Marine Protected Areas (South Coast)*. Retrieved Aug 10, 2015 from <http://www.fgc.ca.gov/regulations/2010/#632sc>

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