California Department of Fish and Game
Feasibility Evaluation of Round 2 Draft MPA Proposals and External MPA Proposals in the MLPA South Coast Study Region
July 31, 2009

Background: The Department of Fish and Game (Department) has reviewed the set of proposals for marine protected areas (MPAs) advanced by the MLPA South Coast Regional Stakeholder Group (SCRSG) for evaluation in Round 2 of the Marine Life Protection Act (MLPA) Initiative planning process for the MLPA South Coast Study Region (SCSR). Department review of these proposals has focused on feasibility aspects of individual MPAs, goals identified for individual MPAs, and on prospects of MPA proposals to meet the overall MLPA goals. This document provides the outcomes of that evaluation and recommendations for improving the feasibility of MPA proposals developed for the final round of in the SCSR.

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I. Executive Summary:

Department Guidance and Overview of Evaluation Components

This evaluation was completed by the Department of Fish and Game (Department) for the South Coast Regional Stakeholder Group (SCRSG) regarding Round 2 MPA proposals. The feasibility evaluation provides detailed feedback on how effectively the suite of internal draft MPA arrays and external proposals from Round 2 meet Department feasibility criteria. The feasibility criteria used for this evaluation were outlined in the document titled, *Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals* (CDFG, November 12, 2008). These criteria will be used by the Department to make recommendations to the California Fish and Game Commission (Commission) with respect to MPA proposals.

The Department expected the Round 2 proposals to improve, as compared to Round 1, with regards to the Department feasibility guidelines. While some improvement was noted, improvements are needed to contemplate a final proposal that would meet the Department's feasibility criteria and management needs. The evaluation provided for this iteration will serve to focus the SCRSG on the elements that need refinement in order to meet the Department's feasibility guidelines in the final round. MPAs that follow the Department feasibility guidelines will help ensure that MPAs are enforceable and easy for the public to understand. Detailed evaluations of individual MPAs and proposals are provided within this document. In addition, Department comments and guidance regarding several key issues that emerged within several proposals are provided below and should be considered during modification of MPA proposals in the final round of proposals. A summary of the feasibility evaluation findings is included in Table 1.

Frequently noted design elements that decrease MPA feasibility include:

- "Floating corners" in offshore waters (Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred);
- Boundaries that are based on distance offshore;
- Incorrect delineation of boundaries in inland waters (i.e. bays, estuaries, sloughs);
- MPAs that provide little protection ecologically due to the allowed take or include a long list of excepted species and gear types to the general regulation.

Other elements that were largely overlooked in the Round 2 proposals, but should be included in the final iteration include:

- Relevant goals and objectives;
- Explicit description of intended boundaries (e.g., "aligns with headland" or "parallels shoreline")
- Creation of MPAs with only scientific collecting allowed.

MPAs or Areas Not Included in Evaluation:

- Northern Channel Islands and Santa Barbara Island:

At its December 11, 2008 meeting, the Commission adopted a motion directing the SCRSG not to consider changes to the boundaries and regulations of the existing MPAs in the northern Channel Islands and Santa Barbara Island. Considering that changes to these MPAs will not be considered by the Commission, the MPAs at the northern Channel Islands and Santa Barbara Island were not individually evaluated

- Department of Defense Pending Military Closures:

Pending Military Closures proposed by the Department of Defense (DOD) were not included in this evaluation. Only areas with MPA designations were evaluated.

Table 1. Summary of the Round 2 Department of Fish and Game feasibility evaluation of draft MPA arrays and draft external proposals.

Array Name	Total # of MPAs[1]	# of New, Modified, or Retained MPAs[2]	Goals, Objectives and Rationale Included (%)	Regulations Meet Guidelines (%)	Boundaries Meet Guidelines (%)
Lapis 1	52	39	100%	66%	46%
Lapis 2	53	40	93%	68%	48%
Opal	54	41	39%	61%	39%
Topaz	64	51	100%	61%	37%
External A	45	32	100%	66%	34%
External B	48	35	100%	40%	20%

[1] Includes the 13 Northern Channel Island MPAs (does not include the military closures).
[2] Number used for calculating percentages.
[3] This proposal included all of the goals and regional objectives for almost every MPA proposed.

Diagonal Lines

A variety of proposals included MPAs that utilize diagonal lines. Diagonal lines should be used only in limited circumstances when their use will simplify both user needs and enforcement of the area. Many of the diagonal lines utilized in proposals did not meet feasibility guidelines. The guidelines for designing MPAs with diagonal lines are:

- The diagonal lines must follow the angle of the coastline;
- Both ends must be anchored at whole minute lines of latitude *and* longitude; and
- Must be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Boundary Descriptions

A clearly written description of boundaries should be included for each proposed MPA. This includes boundaries with intentional coordinates (e.g., “seaward corner placed at whole minute of latitude and longitude”), intentional landmarks (e.g., “western boundary extends to permanent buoy; southern boundary connects to the shore at Big Rock”).

While coordinates will be assigned for all boundaries, including these descriptions for each MPA will help facilitate the Department's review of proposals, enhance quality control of proposal maps, and will help ensure stakeholders' intentions are captured in regulatory documents.

Defining Boundaries in Inland Waters
Upon further review by enforcement, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate innermost boundaries in inland waters (bays, estuaries, sloughs, etc), to ease enforceability and public understanding of boundaries. The remaining boundaries in inland waters should be defined by "mean high tide" and should not include elevations or street names.

MPAs with Scientific Collections "allowed"
Scientific collecting may be allowed in any MPA as permitted by the managing agency. Under the state Marine Managed Areas Improvement Act (MMAIA; where marine protected area types are defined), State Marine Reserves, State Marine Parks and State Marine Conservation Areas may allow take for research with a permit by the managing agency. The Department of Fish and Game has the authority, and a process in place, to approve or deny scientific collection activities in marine waters. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities. If educational take is contemplated (see Bodega Head SMR in the North Central Coast Study Region for an example), stakeholders can suggest an MOU be developed with the land-based management or research entity.

Specific Comments
Specific comments on the feasibility of each MPA are provided by draft MPA proposal or external proposal in a separate section of this document. Comments regarding specific feasibility issues are provided, and select MPAs include recommendations when those recommendations are additional to the guidance provided above.

Goals, Objectives and Site-Specific Rationales in MPA Design
The Marine Life Protection Act (MLPA) states that "each marine protected area (MPA) shall have identified goals and objectives." A Department evaluation of these elements was conducted on Round 2 proposals for the South Coast Study Region. This Round 2 evaluation focuses on several broad issues that were identified within each of the proposed MPA arrays. Common concerns from Round 2 discussed in the evaluation include:

1. No goals and objectives are identified
2. MPA-specific rationales are not included
3. Codifies existing regulations or existing MPAs without providing justification under MLPA
4. Inappropriate use of goals and objectives in relation to science guidelines
5. Stated goals and objectives are too broad or overstate what MPA can accomplish (e.g., all goals and objectives are used for an MPA)

II. Goals and Objectives Evaluation Summary

Overview:

The Marine Life Protection Act (MLPA) states that "each marine protected area (MPA) shall have identified goals and objectives." Clearly stated goals and objectives are critical factors influencing placement, design, and regulations[1], and will also serve to shape appropriate monitoring mechanisms to measure MPA effectiveness and inform adaptive management. With this in mind, an evaluation of stated goals and objectives will be completed by the Department of Fish and Game (Department) for each round of MPA proposals put forth by the South Coast Regional Stakeholder Group (SCRSG) and groups external to the SCRSG as follows:

- Round 1: For "Round 1" MPA proposals, the goals and objectives evaluation focused on several broad issues that were identified within each of the SCRSG MPA proposals. The "Round 1" evaluation was not a detailed MPA-by-MPA evaluation, but was an initial evaluation that addressed overarching concerns seen across all proposals and was intended to help provide broad-scale guidance for future proposals.

- Round 2: More detailed evaluations have been completed and are provided to the SCRSG herein. The "Round 2" evaluation looks at individual MPAs within each proposal to determine the appropriateness of stated goals, and includes suggested options to remedy.

- Round 3: The Department will provide an evaluation of stated goals and objectives for final MPA proposals and will also provide specific recommendations to the BRTF and ultimately the Fish and Game Commission on reconciling inconsistencies between MPA design, site specific rationale, and stated goals and objectives.

Round 2 Evaluation Methods:

The basis for the Round 2 Goals and Objectives Evaluation is founded on guidelines that the SAT uses in its evaluations including: levels of protection (LOP), size and spacing and habitat replication and representation. Each of the MLPA goals has associated SAT-based and Department-based evaluation elements *(shown in the Table 1)*. For the purpose of the Round 2 evaluation, if a proposed MPA did not meet the guidelines for one or more of the listed evaluation elements for an individual goal, then reference to that goal was deemed inappropriate for the MPA (Tables 3 through 8). Exceptions were made for estuaries on size and spacing criteria, but not on LOP. In addition to this, estuaries were considered to meet the network goals when they contained habitats meeting the SAT's minimum size threshold for replication. Individual MPAs that were below minimum size individually but met size guidelines as part of a

[1] California Department of Fish and Game evaluation of the goals and objectives of MPA proposals in the North Central Coast Region. April 17, 2008.

cluster were evaluated together as a cluster. However, individual MPAs that met SAT guidelines were evaluated individually and not as part of the cluster.

Table 1. Evaluation elements relevant used to evaluate MPA goals within a proposed MPA.

MLPA Goal	Evaluation Elements
1. To protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems	• Levels of protection • Habitat representation • Modeling • Birds and mammals
2. To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.	• Levels of protection • MPA size and spacing • Modeling • Birds and mammals
3. To improve recreational, educational, and study opportunities provided by marine ecosystems that are subjected to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity.	• Habitat replication • (MPA and habitat size) • Recreational, educational & study opportunities
4. To protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic value.	• Levels of protection • Habitat representation and replication
5. To ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.	• Department of Fish and Game Feasibility Analysis • Department of Fish and Game Goals and Objectives Analysis • Department of Parks and Recreation feedback
6. To ensure that the state's MPAs are designed and managed, to the extent possible, as a network.	• Size and spacing • Modeling

Overarching Concerns and Department Guidance:
The Department observed common concerns that need to be addressed in three general categories: site-specific rationale, goals and objectives, and science guidelines. Options to remedy these concerns for Round 3 are provided in Table 2.

Site Specific Rationale:

Inappropriate language for site-specific rationale was found within each of the proposals. This includes site-specific rationales that are overly lengthy and complex without specific reference to the biological, ecological or conservation rationale for an MPA's design and placement. It also includes rationales that simply state

retention of an existing MPA or those that propose to codify existing regulations without providing site-specific rationale as to what that MPA would accomplish.

All MPAs need to include site specific rationale. Site-specific rationale must be a concise statement of what the MPA is designed to achieve and why it contributes to each identified goal (i.e., specific biological, ecological and/or conservation rationale for siting a MPA at this location). It should also include identification of biological reasoning or protection goals (i.e., what you want to protect). It is not appropriate to simply state that an existing MPA is retained or expanded without providing site specific rationale of what the MPA is designed to accomplish.

Goals and Objectives:

Goals were often assigned to MPAs with few or none of the evaluation elements supporting that the goal could be met. Goals assigned to MPAs must be mirrored in the overall design of the MPA and should be consistent with the site-specific rationale. All MPAs must have identified objectives that contribute to the goals of the MLPA, but objectives identified for the MPA should be selected only from the appropriate MLPA goals. Optimally, a narrowed set of primary goals and objectives should be identified so that they are reflective of MPA design and are measurable over time.

Science Guidelines:

Goals that require strong performance on SAT evaluation elements were often used inappropriately. For example, Goals 5 and 6 are not appropriate for an MPA that does not meet science guidelines for size and spacing. Goals 1, 2, 3, and 4 would not be appropriate for LOPs below moderate high. The following table identifies common problems found in Round 2 proposals and the potential solutions for improving the likelihood the MPA will meet the desired goal through Round 3 revisions.

Table 2. All Proposals: Common problems found within all MPA proposals evaluated in Round 2 and options to resolve the concerns for Round 3.

MLPA Goal	Common Problems	Options to Remedy
Goal 1	• LOP below SAT evaluated moderate high • Habitat representation is below SAT guidelines	• Modify uses to reflect an LOP of at least moderate high • Modify design to incorporate minimum SAT habitat guidelines • Eliminate MPA • Remove goal and associated objectives
Goal 2	• Does not meet SAT size and spacing guidelines • LOP below SAT evaluated moderate high	• Modify design to meet SAT size and spacing guidelines • Modify uses to reflect an LOP of at least moderate high *(high preferred)* • Eliminate MPA • Remove goal and associated objectives
Goal 3	• LOP below SAT evaluated moderate high • The sole intent of the MPA is goal 3, but site specific rationale does not reference how recreational, educational and/or study opportunities would be improved by designation of an SMCA or SMP.	• Increase LOP • Provide concise site specific rationale of why retention this MPA meets Goal 3 • Eliminate MPA • Remove goal and associated objectives
Goal 4	• LOP below SAT evaluated moderate high • (natural heritage ref/ask Susan) • Habitat representation below SAT guideline	• Modify uses to achieve a higher LOP Eliminate MPA • Remove goal and associated objectives
Goal 5	• Does not meet agency guidelines for clarity, public understanding, and enforceability • Site specific rationale is too broad • Overstating goals and objectives	• Modify to meet agency (e.g. feasibility) guidelines • Narrow the focus of site specific rationale to a succinct biological and/or ecological statement of why this MPA is here • Narrow the scope of listed goals and objectives • Remove goal and associated objectives
Goal 6	• Amount of habitat included and/or MPA size and spacing do not meet SAT guidelines	• Redesign MPA to meet SAT guidelines • Eliminate MPA • Remove goal and associated objectives

Tables 3-8 below provide examples from each proposal that highlight some MPAs with appropriately-identified goals, and some MPAs that contained goals that were inappropriate for the proposed MPAs. The tables provide recommendations of various approaches to resolving the conflict between a desired goal and the MPA design.

Table 3. Lapis 1: Examples of MPAs that either listed appropriate goals or did not list the appropriate goals for a particular MPA. Not all MPAs in Lapis 1 are listed below.

	Does the MPA meet the goal listed?						Department of Fish and Game Evaluation	
MPA Example	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Problems**	**Options to Remedy[1]**
Point Conception/ Humqaq SMR	Yes	Yes	Yes	Yes	No	Yes	• The goals are acceptable although the site specific rationale is too broad.	• Narrow the focus of site specific rationale to a succinct biological and/or ecological statement of why this MPA is here
Carpinteria Estuary SMR	Yes	Yes	-	Yes	-	Yes	None	None
Lachusa SMCA	No	No	No	Yes	No	Yes	• Site specific rationale too broad; • G1, G2, G3- LOP below moderate high; • G3- Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high; • G5-Does not meet guidelines *(See DFG Feasibility Evaluation).*	• Narrow the focus of the rationale; • G1, G2, G3- Modify uses to reflect an LOP of at least moderate high; • G3- Provide more detailed site specific rationale calling out improvements; • G5-Modify to meet feasibility guidelines and narrow the focus of site specific rationale to a succinct biological and/or ecological statement of why this MPA is here.
SoLag Dana SMCA	No	No	No	-	-	-	• G1, G2 & G3- LOP below moderate high	• G2 & G3- Modify uses to reflect an LOP of at least moderate high
Tijuana River Mouth SMCA	Yes	-	Yes	No	-	No	• G6- Amount of estuary included is below SAT habitat guidelines and does not meet size and spacing	• G6-Remove, not appropriate

[1]Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Table 4. Lapis 2: Examples of MPAs that either listed appropriate goals or did not list the appropriate goals for a particular MPA. Not all MPAs in Lapis 2 are listed below.

	Does the MPA meet the goal listed?						Department of Fish and Game Evaluation	
MPA Example	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Problems**	**Options to Remedy[1]**
Coal Oil Point SMR	Yes	Yes	Yes	Yes	No	Yes	• The goals are acceptable although the site specific rationale is too broad.	• Narrow the focus of site specific rationale to a succinct biological and/or ecological statement of why this MPA is here.
Mugu Lagoon SMRMA	Yes	Yes	Yes	Yes	Yes	Yes	None	None
Bolsa Chica SMP	-	No	No	No	-	Yes	• G2, G3, G4- LOP below moderate high; • G3- Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high.	• G2, G3, G4- Modify uses to reflect an LOP of at least moderate high; • G3- Provide more detailed site specific rationale calling out improvements.
San Diego-Scripps SMCA	-	-	Yes	-	-	No	• G6- Does not meet size and spacing guidelines.	• G6- Remove or redesign MPA to meet minimum size guidelines
Arrow Point SMCA	-	No	No	Yes	-	No	• G2- LOP below moderate high; • G3- Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high. • G6-Does not meet minimum size guidelines.	• G2- remove or modify uses to reflect an LOP of at least mod high; • G3- Provide more detailed site specific rationale calling out improvements; • G6- Remove or redesign MPA to meet minimum size guidelines.

[1]Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Table 5. Opal: Examples of MPAs that either listed appropriate goals or did not list the appropriate goals for a particular MPA. Not all MPAs in Opal are listed below.

	Does the MPA meet the goal listed?						Department of Fish and Game Evaluation	
MPA Example	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Problems**	**Options to Remedy[1]**
Goleta Slough SMR	-	-	-	-	-	-	• Goals and Objectives were not listed	• Include Goals and Objectives within MPA proposal
Laguna North SMCA	No	No	No	Yes	No	Yes	• G1, G2, G3- LOP below moderate high; • G5- Does not meet DFG feasibility	• G1, G2, G3- Modify uses to reflect an LOP of at least moderate high; • G5- Modify to meet feasibility guidelines
Cabrillo SMR	Yes	No	Yes	Yes	No	No	• G2- does not meet minimum size guidelines; • G5 Overstated or unrealistic goals for the current MPA design; • G6- Does not meet minimum size or spacing	• G2- Modify design to meet minimum SAT size guidelines or remove goal; • G5- Remove or fix goals that don't apply or remove goal 5; • G6- Modify design to meet SAT size and spacing guidelines or remove goal 6
Long Point SMR	Yes	-	-	Yes	Yes	Yes	None	None
Lovers Cove SMCA	No	No	-	No	-	-	• G1- LOP below moderate high; • G2- does not meet minimum size guidelines; • G5- Does not meet DFG feasibility.	• G1- Modify uses to reflect an LOP of at least moderate high; • G2- Modify design to meet minimum SAT size guidelines or remove goal; • G5- Modify to meet feasibility guidelines.

[1]Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Table 6. Topaz: Examples of MPAs that either listed appropriate goals or did not list the appropriate goals for a particular MPA. Not all MPAs in Topaz are listed below.

	Does the MPA meet the goal listed?						Department of Fish and Game Evaluation	
MPA Example	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Problems**	**Options to Remedy[1]**
Refugio SMCA	-	No	Yes	-	No	No	• G2- LOP below moderate high; • G5- Overstated or unrealistic goals for the current MPA design,; • G6- Does not meet the SAT's minimum size or spacing guidelines	• G2-Modify uses to reflect an LOP of at least moderate high; • G5- Remove or fix goals that don't apply or remove goal 5 • G6- Modify design to meet SAT guidelines or remove goal.
Helo SMR	Yes	Yes	Yes	Yes	Yes	Yes	None	None
Point Fermin SMP	-	-	No	-	No		• G3- Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high; • G5- Does not meet DFG feasibility.	• G3- Provide more detailed site specific rationale calling out improvements; • G5- Modify to meet feasibility guidelines.
Del Mar SMR	Yes	Yes	-	Yes	-	-	The goals are acceptable although the site specific rationale could be slightly clarified	Include full sentences in sight specific rationale
South San Diego Bay SMCA	No	No	No	No	No	Yes	• G1, G2, G3, G4- LOP below moderate high; • G3- Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high; • G5- Does not meet DFG feasibility.	• G1, G2, G3, G4-Modify uses to reflect an LOP of at least moderate high; • G3- Provide more detailed site specific rationale calling out improvements; • G5- Modify to meet feasibility guidelines.

[1]Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Table 7. External A: Examples of MPAs that either listed appropriate goals or did not list the appropriate goals for a particular MPA. Not all MPAs in External A are listed below.

	Does the MPA meet the goal listed?						Department of Fish and Game Evaluation	
MPA Example	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Problems**	**Options to Remedy[1]**
Point Conception SMR	Yes	Yes	Yes	Yes	Yes	Yes	None	None
Malibu SMR	Yes	Yes	Yes	Yes	Yes	Yes	None	None
Upper Newport Bay SMCA	-	No	No	No	No	-	• G2, G3, G4- LOP below moderate high; • G5- Regulations do not meet DFG feasibility guidelines.	• G2, G3, G4-Modify uses to reflect an LOP of at least moderate high; • Modify regulations to meet feasibility guidelines.
Blue Cavern SMR	Yes	No	Yes	Yes	No	No	• G2, G6- Does not meet size and spacing guidelines; • G5- Does not meet DFG feasibility.	• G2, G6- Modify design to meet minimum SAT size guidelines or remove goal; • Modify uses to meet feasibility guidelines
Cat Harbor SMCA	-	-	No	-	-	No	• G3- Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high; • G6- Does not meet minimum size.	• G3- Provide more detailed site specific rationale calling out improvements; • G6- Modify size to meet SAT guidelines or remove goal

[1]Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Table 8. External B: Examples of MPAs that either listed appropriate goals or did not list the appropriate goals for a particular MPA. Not all MPAs in External B are listed below.

	Does the MPA meet the goal listed?						Department of Fish and Game Evaluation	
MPA Example	**Goal 1**	**Goal 2**	**Goal 3**	**Goal 4**	**Goal 5**	**Goal 6**	**Problems**	**Options to Remedy[1]**
Goleta Slough SMP	-	-	Yes	-	-	-	None	None
Big Sycamore SMR	Yes	-	-	Yes	Yes	Yes	None	None
Laguna SMR	Yes	Yes	-	Yes	No	Yes	• G5- Regulations do not meet DFG feasibility guidelines;	• G5- Modify to meet feasibility guidelines or remove goal.
San Diego-Scripps SMCA	No	No	No				• G1, G2, G3- LOP below moderate high; • Does not provide rationale for how they will meet Goal 3 with a LOP below moderate high.	• G1, G2, G3-Modify uses to reflect an LOP of at least moderate high; • G3- Provide more detailed site specific rationale calling out improvements;
Charles F Holder Catalina SMCA	No	No	No	No	No	No	• G1,G2, G3, G4- LOP below moderate high; • G5- Regulations do not meet DFG feasibility; • G6- MPA design is no different than current restrictions.	• G1, G2, G3, G4-Modify uses to reflect an LOP of at least moderate high; • G5- Modify to meet feasibility guidelines or remove goal; • G6- Remove goal

[1]Theses are the recommended suggestions to improve the likelihood the MPA will meet the goals of the Act. If the design and/or associated regulations of the MPA can not be altered, then the problem goal should be removed or the MPA should not be considered within the proposal.

Summary of Guidance for Round 3 Proposals:

As proposals are refined during Round 3, there are key elements that will help achieve success in relation to the Goals and Objectives evaluation.

- Focus first on your site-specific rationale to ensure the following:
    - That they provide a clear and concise statement that provides biological or ecological purpose for the MPA
    - That they briefly explain what the MPA is intended to accomplish
    - That they reflect desired goals and objectives
    - That they highlight key siting considerations such as proximity to educational or research institution, or natural heritage value.

- Ensure goals and objectives are appropriate for MPA design as follows:
    - Select appropriate goals based on the design of MPA using the evaluation criteria provided in this evaluation
    - Once appropriate goals are identified, then move to identify specific objectives under those goals that also reflect the site-specific rationale and overall design and intent of the MPA
    - Ensure that MPAs with an LOP below moderate-high have appropriate goals and clearly defined rationale to justify intent of the MPA as it relates to the MLPA

III. Prospects to Meet the Goals of the MLPA

The MLPA specifically calls for improving the existing array of MPAs in California. Table 2 below provides a summary of Round 2 MPA proposals with respect to qualities that may affect the prospects of MPA proposals to meet the goals of the MLPA. The Department will provide comments regarding the elimination or modification of existing MPAs that do not help meet the goals or requirements of the MLPA. This evaluation element will be provided in a separate CDFG memo which will be distributed to the SCRSG when it becomes available.

Table 2. Summary of the Round 2 Department of Fish and Game evaluation of MPA qualities that may influence prospects of MPA proposals to meet the goals of the MLPA.

MPA Proposal	Total # of MPAs[1]	# of New, Modified, or Retained MPAs[2]	MPAs that Don't Meet All Feasibility Guidelines[3] (%)	MPAs Below Moderate-High LOP (%)	# of Existing MPAs Retained with Inadequate Improvement
Lapis 1	52	39	67%	26%	13
Lapis 2	53	40	60%	25%	16
Opal	54	41	88%	27%	13
Topaz	64	51	78%	31%	14
External A	45	32	69%	28%	12
External B	48	35	86%	37%	15

[1] Includes the 13 Northern Channel Island MPAs (does not include the military closures).
[2] Number used for calculating percentages.
[3] Meets feasibility guidelines including: boundaries, regulations and includes goals, regional objectives and site-specific rationales.

V. Individual Feasibility Evaluations of Draft MPA Arrays/External Proposals

California Department of Fish and Game
South Coast Study Region
Individual Feasibility Evaluation (Round 2): Lapis 1

Proposal Name: Lapis 1

This proposal met some of the feasibility guidelines outlined in the CDFG feasibility document[2]. However, a variety of feasibility concerns were identified and should be addressed. MPA-specific comments are detailed below, while overarching feedback and additional guidance are outlined in the executive summary regarding how to improve commonly-observed feasibility issues. A table is provided, following the individual MPA evaluation, that summarizes a variety of issues observed for each MPA (Table 1).

Evaluation of Individual MPAs:

1. MPA Name: Point Conception/Humqaq SMR
Boundaries: Appears to meet guidelines.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Appears to meet guidelines.
Other: MPA name should be simplified by choosing one or the other name, and not use both.

2. MPA Name: Coal Oil Point SMR
Appears to meet guidelines.

3. MPA Name: Goleta Slough SMR
Appears to meet guidelines.

4. MPA Name: Carpinteria Estuary SMR
Appears to meet guidelines.

5. MPA Name: Mugu Lagoon SMRMA
Boundaries: Written description in MarineMap meets guidelines. Shape supplied in MarineMap does not appear to capture the entire estuary.
Take Regulations: Appears to meet guidelines.
MPA Design: Appears to meet guidelines.

6. MPA Name: Lachusa SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: A long list of excepted species and gear types to the general regulation makes it difficult to enforce the regulation. Take regulations should also not change by depth or location within an MPA. Regulations restricting motorized watercraft from conducting consumptive activities, while allowing motorized watercraft to use the area for other uses creates a regulation that may be confusing for the public and decrease enforceability. And, As a

[2] Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, November 12, 2008).

definition for “surface gear” (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: Appears to meet guidelines.

7. MPA Name: Point Dume SMR
Boundaries: Boundaries appear to meet guidelines with the exception of the diagonal line utilized in the north-eastern corner. This diagonal line does not meet feasibility guidelines.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Appears to meet guidelines.

8. MPA Name: Malibu Creek Estuary SMR
Boundaries: Written description in MarineMap meets guidelines. Shape supplied in MarineMap does not appear to capture the entire estuary.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Appears to meet guidelines.

9. MPA Name: Palos Verdes SMR
Boundaries: North-eastern boundary creates a diagonal line that does not meet feasibility guidelines.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

10. MPA Name: Point Fermin SMP
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

11. MPA Name: Bolsa Chica SMP
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Appears to meet guidelines.

12. MPA Name: Upper Newport Bay SMP
Boundaries: The boundaries do not meet feasibility guidelines due to the use of streets and elevation in boundary regulations. The Department also prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

13. MPA Name: Newport Beach SMCA
Boundaries: Boundaries create a complex shape. The offshore diagonal line does not meet feasibility guidelines.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Newport Beach SMCA, Laguna Beach SMR, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, the SMCAs in the area all have different regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

14. MPA Name: Laguna Beach SMR
Boundaries: Boundaries create two hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Newport Beach SMCA, Laguna Beach SMR, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, the SMCAs in the area all have different regulations, adding to the complexity of the proposed regulations.

15. MPA Name: SoLag Dana SMCA
Boundaries: Boundaries create two hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Appears to meet guidelines.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Newport Beach SMCA, Laguna Beach SMR, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, the SMCAs in the area all have different regulations, adding to the complexity of the proposed regulations.
Other: MPA name should be improved.

16. MPA Name: Dana Point SMR
Boundaries: Boundaries create two hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Newport Beach SMCA, Laguna Beach SMR, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, the SMCAs in the area all have different regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

17. MPA Name: Doheny SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Newport Beach SMCA, Laguna Beach SMR, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, the SMCAs in the area all have different regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

18. MPA Name: Agua Hedionda Lagoon SMR
Boundaries: Boundaries are confusing and difficult to determine. Boundaries are not located at easily recognizable landmarks.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

19. MPA Name: Batiquitos Lagoon SMR
Boundaries: Boundaries do not meet feasibility guidelines as eastern boundary is not located at easily recognizable landmarks.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

20. MPA Name: Swami's-San Elijo SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Allows catch and release fishing and spearfishing within this outer coast MPA. MPAs with catch and release allowances add complexity to proposed regulations. Such regulations may decrease public understanding and increase the likelihood of unintentional infractions. Catch and release MPAs on the outer coast pose particular problems for enforcement and should be avoided.
MPA Design: Appears to meet guidelines.

21. MPA Name: San Elijo Lagoon SMR
Boundaries: Appear to meet guidelines
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines

22. MPA Name: San Dieguito Lagoon SMR
Boundaries: Appear to meet guidelines
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines

23. MPA Name: Penasquitos Lagoon SMR
Boundaries: The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding the boundaries for this MPA.
Recommendations to improve MPA: Consider using the bridge near the mouth of the lagoon to delineate the boundary.

24. MPA Name: San Diego-Scripps SMCA
Boundaries: Boundaries do not follow a due N/S E/W orientation, creates two hanging corners, are defined by irregularly shaped lines and distance offshore, and boundaries are not located at readily determined lines of latitude and longitude. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: The proposed regulation provides little protection ecologically due to the allowed take. And, scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

25. MPA Name: La Jolla SMR 1
Boundaries: A hanging corner is created in the north-western corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes

of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corner.
Other: MPA name should be improved.

26. MPA Name: La Jolla SMR 2
Boundaries: A hanging corner is created in the south-western corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.
Other: MPA name should be improved.

27. MPA Name: San Diego River SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations do not meet guidelines as take regulations should not change by depth or location within an MPA. Also, the proposed regulations would create varying regulations for the public fishing on the jetty, with fishing allowed on both sides of the jetty on the western portion, and fishing only allowed on the north side of the eastern portion of the jetty. This type of regulation does not meet feasibility guidelines.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines.

28. MPA Name: Famosa Slough SMR
Appears to meet guidelines.

29. MPA Name: Point Loma SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Take regulations not clearly stated. The legal definition of piers can include a variety of structures (including some breakwaters and jetties). Please specifically state if the regulation is intended to apply only to a specific location (such as the Ocean Beach Municipal Pier), or apply to all structures that would meet the “public pier” definition. Also, the proposed allowed take is stated as, “fishing from the pier”.
MPA Design: Appears to meet guidelines.

30. MPA Name: Ha Sil (South San Deigo Bay) SMP
Boundaries: Appears to meet guidelines.
Take Regulations: MPAs with catch and release allowances add complexity to proposed regulations. Such regulations may decrease public understanding and enforceability, increasing the likelihood of unintentional infractions.
MPA Design: Appears to meet guidelines.
Other: MPA name should be simplified.

31. MPA Name: Tijuana River Mouth SMCA
Appears to meet guidelines.

Other: Southern boundary in MarineMap should be cleaned up to reflect written description.

32. MPA Name: Tijuana Estuary SMR
Appears to meet guidelines.

33. MPA Name: Arrow Point SMCA
Boundaries: Boundaries create a hanging corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take. Also, the commercial take of sheephead by spear should be removed, as this gear type is not allowed for the commercial take of this species (FGC 8603).
MPA Design: See comments regarding boundaries for this MPA.

34. MPA Name: Blue Cavern SMCA
Boundaries: Boundaries do not meet feasibility guidelines as hanging corners were created in the south-western, and south-eastern corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations not clearly stated and regulations should not change by depth or location within an MPA. And, As a definition for “surface gear” (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: See comments regarding boundaries for this MPA.

35. MPA Name: Blue Cavern SMR
Boundaries: Boundaries do not meet feasibility guidelines as hanging corners were created in the north-western, and north-eastern corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

36. MPA Name: Farnsworth Bank SMR
Appears to meet guidelines.

37. MPA Name: Avalon Dive Park SMR
Boundaries: Shape does not appear to match the boundary description provided to overlap with the existing buoys.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

38. MPA Name: Lover's Cove SMR

Boundaries: Boundaries do not meet feasibility guidelines as they are not oriented in a due N/S E/W orientation, are not located at readily determined lines of latitude and longitude, or at easily recognizable landmarks, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

39. MPA Name: Begg Rock SMR
Appears to meet guidelines.

Table 1. California Department of Fish and Game Round 2 Feasibility Evaluation summary table of Lapis 1.

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
1	Point Conception/Humqaq SMR	X						Y	Y
2	Coal Oil Point SMR	X						Y	Y
3	Goleta Slough SMR	X						Y	Y
4	Carpinteria Estuary SMR	X						Y	Y
5	Mugu Lagoon SMRMA	X						Y	Y
6	Lachusa SMCA	X						Y	N
7	Point Dume SMR					X		Y	Y
8	Malibu Creek Estuary SMR	X						Y	Y
9	Palos Verdes SMR					X	X	Y	Y
10	Point Fermin SMP		X				X	Y	N
11	Bolsa Chica SMP	X						Y	N
12	Upper Newport Bay SMP						X	Y	N
13	Newport Beach SMCA			X		X		Y	N
14	Laguna Beach SMR			X	X			Y	Y
15	SoLag Dana SMCA			X	X		X	Y	Y
16	Dana Point SMR			X	X		X	Y	Y
17	Doheny SMCA		X	X			X	Y	N
18	Agua Hedionda Lagoon SMR				X		X	Y	Y
19	Batiquitos Lagoon SMR							Y	Y
20	Swami's-San Elijo SMCA	X						Y	N
21	San Elijo Lagoon SMR	X						Y	Y
22	San Dieguito Lagoon SMR	X						Y	Y

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
23	Penasquitos Lagoon SMR						X	Y	Y
24	San Diego-Scripps SMCA		X		X		X	Y	N
25	La Jolla SMR 1				X			Y	Y
26	La Jolla SMR 2				X			Y	Y
27	San Diego River SMCA						X	Y	N
28	Famosa Slough SMR	X						Y	Y
29	Point Loma SMCA	X						Y	N
30	Ha Sil (South San Deigo Bay) SMP	X						Y	N
31	Tijuana River Mouth SMCA	X						Y	Y
32	Tijuana Estuary SMR	X						Y	Y
33	Arrow Point SMCA				X			Y	N
34	Blue Cavern SMCA				X			Y	N
35	Blue Cavern SMR				X			Y	Y
36	Farnsworth Bank SMR	X						Y	Y
37	Avalon Dive Park SMR				X		X	Y	Y
38	Lover's Cove SMR		X		X		X	Y	Y
39	Begg Rock SMR	X						Y	Y

[1] Other includes, but is not limited to: boundaries that are not oriented due N/S E/W, are not placed at easily recognizable landmarks or at readily determined lines of latitude and longitude, are intertidal MPAs, contain irregularly shaped lines, or other design features that do not meet feasibility guidelines (such as L-shaped clusters or designs).

California Department of Fish and Game
South Coast Study Region
Individual Feasibility Evaluation (Round 2): Lapis 2

Proposal Name: Lapis 2

This proposal met some of the feasibility guidelines outlined in the CDFG feasibility document[3]. However, a variety of feasibility concerns were identified and should be addressed. MPA-specific comments are detailed below, while overarching feedback and additional guidance are outlined in the executive summary regarding how to improve commonly-observed feasibility issues. A table is provided, following the individual MPA evaluation, that summarizes a variety of issues observed for each MPA (Table 1).

Evaluation of Individual MPAs:

1. MPA Name: Point Conception/Humqaq SMR
Boundaries: Appears to meet guidelines.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Appears to meet guidelines.
Other: MPA name should be simplified by choosing one or the other name, and not use both.

2. MPA Name: Coal Oil Point SMR
Appears to meet guidelines.

3. MPA Name: Goleta Slough SMR
Appears to meet guidelines.

4. MPA Name: Carpinteria Estuary SMR
Appears to meet guidelines.

5. MPA Name: Mugu Lagoon SMRMA
Boundaries: Written description in MarineMap meets guidelines. Shape supplied in MarineMap does not match the written description as it does not appear to capture the entire estuary.
Take Regulations: Appears to meet guidelines.
MPA Design: Appears to meet guidelines.

6. MPA Name: Big Sycamore Canyon SMR
Boundaries: Appear to meet guidelines
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines

7. MPA Name: Malibu Creek Estuary SMR
Appears to meet guidelines.

[3] Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, November 12, 2008).

8. MPA Name: Malibu SMR
Appears to meet guidelines.

9. MPA Name: Point Vicente SMR
Appears to meet guidelines.

10. MPA Name: Abalone Cove SMCA
Boundaries: The landmark "Trump structure on the Trump golf course" used to delineate the eastern boundary is not considered a permanent landmark.
Take Regulations: The commercial take of bonito, white seabass, and pelagic finfish by spear should be removed, as this gear type is not allowed for the commercial take of this species (FGC 8603).
MPA Design: See comments regarding the boundaries for this MPA.
Recommendations to Improve MPA: Move eastern boundary to a permanent landmark, or use a readily determinable line of longitude.

11. MPA Name: Point Fermin SMP
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

12. MPA Name: Bolsa Chica SMP
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines.

13. MPA Name: Upper Newport Bay SMP
Boundaries: The boundaries do not meet feasibility guidelines due to the use of streets and elevation in boundary regulations. The Department also prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

14. MPA Name: Newport Beach SMCA 1
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily

determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines for multiple zoning with six MPAs proposed in the area; Newport Beach SMCA 1, Laguna Beach SMR, Newport Beach SMCA 2, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, only three of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Other: MPA name could be improved by providing a name that is more specific or descriptive to this MPA.

15. MPA Name: Laguna SMR
Boundaries: See comments regarding MPA Design for this MPA.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines for multiple zoning with six MPAs proposed in the area; Newport Beach SMCA 1, Laguna Beach SMR, Newport Beach SMCA 2, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, only three of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.

16. MPA Name: Newport Beach SMCA 2
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines for multiple zoning with six MPAs proposed in the area; Newport Beach SMCA 1, Laguna Beach SMR, Newport Beach SMCA 2, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, only three of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Other: MPA name could be improved by providing a name that is more specific or descriptive to this MPA.

17. MPA Name: SoLag Dana SMCA
Boundaries: Boundaries create two hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Appears to meet guidelines.

MPA Design: Does not meet feasibility guidelines for multiple zoning with six MPAs proposed in the area; Newport Beach SMCA 1, Laguna Beach SMR, Newport Beach SMCA 2, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, only three of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Other: MPA name could be improved by providing a name that is more specific or descriptive to this MPA.

18. MPA Name: Dana Point SMR
Boundaries: Boundaries create two hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines for multiple zoning with six MPAs proposed in the area; Newport Beach SMCA 1, Laguna Beach SMR, Newport Beach SMCA 2, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, only three of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

19. MPA Name: Doheny SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines for multiple zoning with six MPAs proposed in the area; Newport Beach SMCA 1, Laguna Beach SMR, Newport Beach SMCA 2, SoLag Dana SMCA, Dana Point SMR, and Doheny SMCA. Additionally, only three of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

20. MPA Name: Agua Hedionda Lagoon SMR
Boundaries: Boundaries are confusing and difficult to determine. Boundaries are not located at easily recognizable landmarks.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

21. MPA Name: Batiquitos Lagoon SMR
Boundaries: Boundaries do not meet feasibility guidelines as eastern boundary is not located at easily recognizable landmarks.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

22. MPA Name: San Elijo Lagoon SMR
Boundaries: Appear to meet guidelines
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines

23. MPA Name: Del Mar SMR
Boundaries: Creates a gap between Del Mar SMR and San Dieguito Lagoon SMR.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

24. MPA Name: San Dieguito Lagoon SMR
Boundaries: Creates a gap between Del Mar SMR and San Dieguito Lagoon SMR.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

25. MPA Name: Penasquitos Lagoon SMR
Appears to meet guidelines.

26. MPA Name: San Diego-Scripps SMCA
Boundaries: Boundaries do not follow a due N/S E/W orientation, creates two hanging corners, are defined by irregularly shaped lines and distance offshore, and boundaries are not located at readily determined lines of latitude and longitude. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

27. MPA Name: La Jolla SMR
Boundaries: A hanging corner is created in the north-western corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.

Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corner.

28. MPA Name: San Diego River SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations do not meet guidelines as take regulations should not change by depth or location within an MPA. Also, the proposed regulations would create varying regulations for the public fishing on the jetty, with fishing allowed on both sides of the jetty on the western portion, and fishing only allowed on the north side of the eastern portion of the jetty. This type of regulation does not meet feasibility guidelines.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines.

29. MPA Name: Famosa Slough SMR
Appears to meet guidelines.

30. MPA Name: Point Loma SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Take regulations not clearly stated. The legal definition of piers can include a variety of structures (including some breakwaters and jetties). Please specifically state if the regulation is intended to apply only to a specific location (such as the Ocean Beach Municipal Pier), or apply to all structures that would meet the “public pier” definition. Also, the proposed allowed take is stated as, “fishing from the pier”.
MPA Design: Appears to meet guidelines.

31. MPA Name: Ha Sil (South San Deigo Bay) SMP
Boundaries: Appears to meet guidelines.
Take Regulations: MPAs with catch and release allowances add complexity to proposed regulations. Such regulations may decrease public understanding and enforceability, increasing the likelihood of unintentional infractions.
MPA Design: Appears to meet guidelines.
Other: MPA name should be simplified.

32. MPA Name: Tijuana River Mouth SMCA
Appears to meet guidelines.
Other: Southern boundary in MarineMap should be cleaned up to reflect written description.

33. MPA Name: Tijuana Estuary SMR
Appears to meet guidelines.

34. MPA Name: Arrow Point SMCA
Boundaries: Boundaries create a hanging corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take. Also. the commercial take of sheephead by spear should be removed, as this gear type is not allowed for the commercial take of this species (FGC 8603).

MPA Design: See comments regarding boundaries for this MPA.

35. MPA Name: Blue Cavern SMCA
Boundaries: Boundaries do not meet feasibility guidelines as hanging corners were created in the south-western, and south-eastern corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations not clearly stated and regulations should not change by depth or location within an MPA. And, as a definition for "surface gear" (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: See comments regarding boundaries for this MPA.

36. MPA Name: Blue Cavern SMR
Boundaries: Boundaries do not meet feasibility guidelines as hanging corners were created in the north-western, and north-eastern corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

37. MPA Name: Farnsworth Bank SMR
Appears to meet guidelines.

38. MPA Name: Avalon Dive Park SMR
Boundaries: Shape does not appear to match the boundary description provided to overlap with the existing buoys.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

39. MPA Name: Lover's Cove SMR
Boundaries: Boundaries do not meet feasibility guidelines as they are not oriented in a due N/S E/W orientation, are not located at readily determined lines of latitude and longitude, or at easily recognizable landmarks, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

40. MPA Name: Begg Rock SMR

Appears to meet guidelines.

Table 1. California Department of Fish and Game Round 2 Feasibility Evaluation summary table of Lapis 2.

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
1	Point Conception/Humqaq SMR	X						Y	Y
2	Coal Oil Point SMR	X						Y	Y
3	Goleta Slough SMR	X						Y	Y
4	Carpinteria Estuary SMR	X						Y	Y
5	Mugu Lagoon SMRMA	X						Y	Y
6	Big Sycamore Canyon SMR	X						Y	Y
7	Malibu Creek Estuary SMR	X						Y	Y
8	Malibu SMR	X						Y	Y
9	Point Vicente SMR	X						Y	Y
10	Abalone Cove SMCA						X	Y	N
11	Point Fermin SMP		X		X		X	Y	N
12	Bolsa Chica SMP	X						Y	N
13	Upper Newport Bay SMP						X	Y	N
14	Newport Beach SMCA 1		X	X	X		X	Y	N
15	Laguna SMR			X				N	Y
16	Newport Beach SMCA 2		X	X	X		X	Y	N
17	SoLag Dana SMCA			X	X		X	Y	Y
18	Dana Point SMR			X				Y	Y
19	Doheny SMCA			X			X	Y	N
20	Agua Hedionda Lagoon SMR				X		X	Y	Y
21	Batiquitos Lagoon SMR						X	Y	Y
22	San Elijo Lagoon SMR	X						Y	Y
23	Del Mar SMR						X	Y	Y

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
24	San Dieguito Lagoon SMR						X	Y	Y
25	Penasquitos Lagoon SMR	X						Y	Y
26	San Diego-Scripps SMCA		X		X		X	Y	N
27	La Jolla SMR				X			N	Y
28	San Diego River SMCA						X	Y	N
29	Famosa Slough SMR	X						Y	Y
30	Point Loma SMCA	X						N	N
31	Ha Sil (South San Deigo Bay) SMP	X						Y	N
32	Tijuana River Mouth SMCA	X						Y	Y
33	Tijuana Estuary SMR	X						Y	Y
34	Arrow Point SMCA				X			Y	N
35	Blue Cavern SMCA				X			Y	N
36	Blue Cavern SMR				X			Y	Y
37	Farnsworth Bank SMR	X						Y	Y
38	Avalon Dive Park SMR						X	Y	Y
39	Lover's Cove SMR				X		X	Y	Y
40	Begg Rock SMR	X						Y	Y

[1] Other includes, but is not limited to: boundaries that are not oriented due N/S E/W, are not placed at easily recognizable landmarks or at readily determined lines of latitude and longitude, are intertidal MPAs, contain irregularly shaped lines, or other design features that do not meet feasibility guidelines (such as L-shaped clusters or designs).

Individual Feasibility Evaluations of Draft MPA Proposals/External Proposals

California Department of Fish and Game
South Coast Study Region
Individual Feasibility Evaluation (Round 2): Opal

Proposal Name: Opal

This proposal met some of the feasibility guidelines outlined in the CDFG feasibility document[4]. However, a variety of feasibility concerns were identified and should be addressed. MPA-specific comments are detailed below, while overarching feedback and additional guidance are outlined in the executive summary regarding how to improve commonly-observed feasibility issues. A table is provided, following the individual MPA evaluation, that summarizes a variety of issues observed for each MPA (Table 1).

Evaluation of Individual MPAs:

1. MPA Name: Point Conception SMR
Appears to meet guidelines.
Recommendations to improve MPA: Written description meets guidelines. Should use 120°28.300' to approximate Point Conception for this MPA.

2. MPA Name: Coal Oil Point SMR
Appears to meet guidelines.

3. MPA Name: Devereux Lagoon SMR
Appears to meet guidelines.

4. MPA Name: Goleta Slough SMR
Appears to meet guidelines.

5. MPA Name: Point Mugu Estuary SMRMA
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Appears to meet guidelines.
MPA Design: See comments regarding boundaries for this MPA.

6. MPA Name: Lechuza SMR
Appears to meet guidelines.

7. MPA Name: Point Dume SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Recreational take of swordfish by harpoon is not legal under Title 14 (§ 28.95). The commercial take of bonito by spear should also be removed, as this gear type is not allowed for the commercial take of this species (FGC 8603).
MPA Design: Appears to meet guidelines.

[4] Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, November 12, 2008).

8. MPA Name: Point Vicente SMR
Boundaries: MPA does not meet guidelines for feasibility. Two hanging corners were created on the eastern side of the MPA, and the design of the MPA creates an L-shaped MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: L-shaped MPAs do not meet feasibility guidelines as they create complex shapes that decrease public understanding and enforceability.
Recommendations to improve the MPA: Consider removing the portion of the shape east of the 118°20.000' line.

9. MPA Name: Point Fermin SMP
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species and gear types to the general regulation makes it difficult to enforce the regulation.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

10. MPA Name: Bolsa Chica SMP
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Appears to meet guidelines.

11. MPA Name: Upper Newport Bay SMP
Boundaries: The boundaries do not meet feasibility guidelines due to the use of streets and elevation in boundary regulations. The Department also prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

12. MPA Name: Laguna North SMCA
Boundaries: The offshore diagonal line does not meet feasibility guidelines:
"Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment."
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.

MPA Design: Does not meet feasibility guidelines regarding multiple zoning with three contiguous MPAs proposed in the area; Laguna North SMCA, Laguna SMR, and Laguna South SMCA. Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

13. MPA Name: Laguna SMR
Boundaries: Appears to meet guidelines.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with three contiguous MPAs proposed in the area; Laguna North SMCA, Laguna SMR, and Laguna South SMCA.
Recommendations to improve MPA: Could consider removing the small wedge located in the south-eastern corner of the proposed MPA.

14. MPA Name: Laguna South SMCA
Boundaries: The offshore diagonal line does not meet feasibility guidelines.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with three contiguous MPAs proposed in the area; Laguna North SMCA, Laguna SMR, and Laguna South SMCA. Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

15. MPA Name: Agua Hedionda Lagoon SMR
Boundaries: Boundaries are confusing and difficult to determine. Boundaries are not located at easily recognizable landmarks.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

16. MPA Name: Batiquitos Lagoon SMR
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

17. MPA Name: Encinitas SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily

determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

18. MPA Name: Del Mar SMR
Boundaries: Appears to meet guidelines as provided in the written description. Northern boundary in MarineMap should be adjusted to reflect the written description.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Appears to meet guidelines.

19. MPA Name: San Dieguito SMR
Boundaries: Appear to meet guidelines
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines

20. MPA Name: Penasquitos SMR
Appears to meet guidelines.

21. MPA Name: San Diego-Scripps SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

22. MPA Name: La Jolla SMR
Boundaries: A series of buoys mark the current MPA boundaries. However, boundaries do not meet guidelines (see additional enforcement concerns for this MPA).
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries.
Additional Enforcement Concerns: Enforcement would prefer any MPA in this area be redesigned to conform to feasibility guidelines regarding boundaries and not utilize the current

set of buoys to delineate the boundaries, due to enforceability concerns regarding the movement of these buoys.

23. MPA Name: Little Bird Rock SMR
Boundaries: Boundaries do not meet guidelines, as hanging corners are created offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

24. MPA Name: Ocean Beach SMCA
Boundaries: This MPA does not meet feasibility guidelines. The northern boundary is not located at readily determined lines of latitude, or at easily recognizable permanent landmarks.
Take Regulations: Take regulations not clearly stated. The legal definition of piers can include a variety of structures (including some breakwaters and jetties). Please specifically state if the regulation is intended to apply only to a specific location (such as the Ocean Beach Municipal Pier), or apply to all structures that would meet the "public pier" definition.
MPA Design: See comments regarding MPA boundaries for this MPA.

25. MPA Name: Sunset Cliffs SMR
Appears to meet guidelines.
Recommendations to improve MPA: Northern boundary could be improved by moving it to 32° 44.800' which approximates a rocky/ sandy beach interface.

26. MPA Name: Cabrillo SMR
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corners and the intertidal nature of the design.
Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

27. MPA Name: Sweetwater Marsh SMR
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

28. MPA Name: South San Diego Bay SMCA
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: MPAs with catch and release allowances add complexity to proposed regulations. Such regulations may decrease public understanding and enforceability, increasing the likelihood of unintentional infractions.
MPA Design: See comments regarding boundaries for this MPA.

29. MPA Name: Tijuana Reef SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Take regulations not clearly stated. The legal definition of piers can include a variety of structures (including some breakwaters and jetties). Please specifically state if the regulation is intended to apply only to a specific location (such as the Imperial Beach Municipal Pier), or apply to all structures that would meet the "public pier" definition. Also, the proposed allowed take is stated as, "pier fishing". Regulations should include gear types allowed from the pier.
MPA Design: Appears to meet guidelines.

30. MPA Name: Tijuana River Mouth SMR
Appears to meet guidelines.

31. MPA Name: Tijuana River Estuary SMR
Appears to meet guidelines.

32. MPA Name: Arrow Point-Lion's Head SMCA
Boundaries: Boundaries do not meet guidelines. The offshore boundary is an unanchored diagonal line that is not sufficiently offshore to accommodate nearshore users. Also, the boundary location of northern boundary creates a small wedge that would decrease enforceability and public understanding of the area.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: A long list of excepted species and gear types to the general regulation makes it difficult to enforce the regulation.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

33. MPA Name: Catalina Harbor SMCA
Boundaries: Appears to meet guidelines as shown in MarineMap. However, boundary description does not match shape. Boundary proposed in description would not meet guidelines as it would not touch Lobster Point.
Take Regulations: By allowing all take with the exception of one species, this MPA acts as a fishery management measure rather than as ecosystem or habitat protection. Proposals that create fishery management regulations should be proposed to the Fish and Game Commission as a part of their regular fishery management regulatory process. If a proposed MPA is wished to be retained, ecosystem protections should be expanded to better align with the Act.
MPA Design: See comments regarding boundaries for this MPA.

34. MPA Name: Santa Catalina Marine Science Center SMR
Boundaries: The western boundary is an unanchored diagonal line that is not sufficiently offshore to accommodate nearshore users. Also, the location of the southern portion of the western boundary creates a small wedge in nearshore waters that would decrease enforceability and public understanding of the area. Per CDFG Feasibility Guidelines:
"Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment."
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corners.

35. MPA Name: Long Point SMCA
Boundaries: Boundaries do not meet feasibility guidelines. MPA cluster design creates multiple hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred. Also, the shape in MarineMap does not match the written description of the boundaries (see south-western and western boundary).
Take Regulations: The commercial take of bonito by spear should be removed, as this gear type is not allowed for the commercial take of this species (FGC 8603).
MPA Design: See comments regarding the boundaries for this MPA.

36. MPA Name: Long Point SMR
Boundaries: Boundaries do not meet feasibility guidelines. MPA cluster design creates multiple hanging corners. Hanging corners were created in the south-western, north-western and north-eastern corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred. Also, the shape in MarineMap does not match the written description of the boundaries (see northern and western boundary).
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding the boundaries for this MPA.

37. MPA Name: Farnsworth Bank SMCA
Boundaries: Boundaries do not meet feasibility guidelines as MPA cluster design creates multiple hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: The commercial take of bonito by spear should be removed, as this gear type is not allowed for the commercial take of this species (FGC 8603).
MPA Design: MPA cluster creates an L-shaped design. Designs such as this are specifically called out in the Department of Fish and Game's Feasibility guidance as not meeting feasibility guidelines for simple designs, as these types of shapes create unnecessarily complex regulations.

38. MPA Name: China Point SMR
Boundaries: Boundaries do not meet feasibility guidelines. MPA cluster design creates multiple hanging corners. Hanging corners were created in the south-western, north-western and south-eastern corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles

extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: MPA cluster creates an L-shaped design. Designs such as this are specifically called out in the Department of Fish and Game's Feasibility guidance as not meeting feasibility guidelines for simple designs, as these types of shapes create unnecessarily complex regulations.

39. MPA Name: Casino Point SMR
Boundaries: Boundaries create multiple hanging corners and create small gaps between the land and the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

40. MPA Name: Lovers Cove SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, and create hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take. Also, allowed gear types are not specified.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Recommendations to improve MPA: If an MPA is desired in this area, could consider using the design concepts shown in, something similar to, External A from round 2.

41. MPA Name: Begg Rock SMR
Appears to meet guidelines.

Table 1. California Department of Fish and Game Round 2 Feasibility Evaluation summary table of Opal.

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
1	Point Conception SMR	X						Y	Y
2	Coal Oil Point SMR	X						Y	Y
3	Devereux Lagoon SMR	X						N	Y
4	Goleta Slough SMR	X						N	Y
5	Point Mugu Estuary SMRMA						X	N	Y
6	Lechuza SMR	X						N	Y
7	Point Dume SMCA	X						N	N
8	Point Vicente SMR				X		X	Y	Y
9	Point Fermin SMP		X		X		X	N	N
10	Bolsa Chica SMP	X						N	N
11	Upper Newport Bay SMP						X	N	N
12	Laguna North SMCA			X		X		Y	N
13	Laguna SMR			X				N	Y
14	Laguna South SMCA			X		X		Y	N
15	Agua Hedionda Lagoon SMR						X	N	Y
16	Batiquitos Lagoon SMR						X	N	Y
17	Encinitas SMCA		X		X		X	N	N
18	Del Mar SMR	X						Y	Y
19	San Dieguito SMR	X						N	Y
20	Penasquitos SMR	X						N	Y
21	San Diego-Scripps SMCA		X		X		X	N	N
22	La Jolla SMR				X		X	N	Y
23	Little Bird Rock SMR				X			N	Y

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
24	Ocean Beach SMCA						X	N	N
25	Sunset Cliffs SMR	X						Y	Y
26	Cabrillo SMR				X			Y	Y
27	Sweetwater Marsh SMR						X	N	Y
28	South San Diego Bay SMCA						X	N	N
29	Tijuana Reef SMCA	X						Y	N
30	Tijuana River Mouth SMR	X						Y	Y
31	Tijuana River Estuary SMR	X						N	Y
32	Arrow Point-Lion's Head SMCA					X	X	Y	N
33	Catalina Harbor SMCA	X						N	N
34	Santa Catalina Marine Science Center SMR				X		X	Y	Y
35	Long Point SMCA				X			N	N
36	Long Point SMR				X			Y	Y
37	Farnsworth Bank SMCA				X			N	N
38	China Point SMR				X			N	Y
39	Casino Point SMR							Y	Y
40	Lovers Cove SMCA				X		X	Y	N
41	Begg Rock SMR	X						N	Y

[1] Other includes, but is not limited to: boundaries that are not oriented due N/S E/W, are not placed at easily recognizable landmarks or at readily determined lines of latitude and longitude, are intertidal MPAs, contain irregularly shaped lines, or other design features that do not meet feasibility guidelines (such as L-shaped clusters or designs).

California Department of Fish and Game
South Coast Study Region
Individual Feasibility Evaluation (Round 2): Topaz

Proposal Name: Topaz

This proposal met some of the feasibility guidelines outlined in the CDFG feasibility document[5]. However, a variety of feasibility concerns were identified and should be addressed. MPA-specific comments are detailed below, while overarching feedback and additional guidance are outlined in the executive summary regarding how to improve commonly-observed feasibility issues. A table is provided, following the individual MPA evaluation, that summarizes a variety of issues observed for each MPA (Table 1).

Evaluation of Individual MPAs:

1. MPA Name: Point Conception SMR
Appears to meet guidelines.

2. MPA Name: Refugio SMCA
Boundaries: Boundaries appear to meet feasibility guidelines although boundaries create hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

3. MPA Name: Naples SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Allows catch and release fishing and spearfishing within this outer coast MPA. MPAs with catch and release allowances add complexity to proposed regulations. Such regulations may decrease public understanding and increase the likelihood of unintentional infractions. Catch and release MPAs on the outer coast pose particular problems for enforcement and should be avoided.
MPA Design: Appears to meet guidelines.

4. MPA Name: Helo SMR
Appears to meet guidelines.

5. MPA Name: Devereux Lagoon SMR
Appears to meet guidelines.

6. MPA Name: Goleta Slough SMR
Appears to meet guidelines.

[5] Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, November 12, 2008).

7. MPA Name: Carpinteria Salt Marsh SMR
Appears to meet guidelines.

8. MPA Name: Ventura River Mouth SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
MPA Design: Appears to meet guidelines.

9. MPA Name: Santa Clara Rivermouth SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
MPA Design: Appears to meet guidelines.

10. MPA Name: Magu/ Muwu Lagoon SMRMA
Boundaries: Appears to meet guidelines.
Take Regulations: Scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
MPA Design: Appears to meet guidelines.
Other: Name should be simplified.

11. MPA Name: Deer Creek SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Appears to meet guidelines.
MPA Design: Four MPAs are proposed for this area (Deer Creek SMCA, Sequit SMCA, Point Dume SMCA, Point Dume SMR), all with different regulations. This does not meet the Department's guidelines regarding multiple zoning.
Recommendations to improve MPA: Consider simplifying the proposed protections for these areas.

12. MPA Name: Sequit SMCA
Boundaries: See comments regarding MPA design for this MPA.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Four MPAs are proposed for this area (Deer Creek SMCA, Sequit SMCA, Point Dume SMCA, Point Dume SMR), all with different regulations. This does not meet the Department's guidelines for multiple zoning.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Recommendations to improve MPA: Consider simplifying the proposed protections for these areas.

13. MPA Name: Point Dume SMCA
Boundaries: Boundaries provided in the written description appear to meet guidelines. However, the written description does not match the shape provided in MarineMap (see eastern boundary).
Take Regulations: Appears to meet guidelines.
MPA Design: Four MPAs are proposed for this area (Deer Creek SMCA, Sequit SMCA, Point Dume SMCA, Point Dume SMR), all with different regulations. This does not meet the Department's guidelines regarding multiple zoning.
Recommendations to improve MPA: Consider simplifying the proposed protections for these areas.

14. MPA Name: Point Dume SMR
Boundaries: Boundaries provided in the written description appear to meet guidelines. However, the written description does not match the shape provided in MarineMap (see the western and eastern boundaries).
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Four MPAs are proposed for this area (Deer Creek SMCA, Sequit SMCA, Point Dume SMCA, Point Dume SMR), all with different regulations. This does not meet the Department's guidelines regarding multiple zoning.
Recommendations to improve MPA: Consider simplifying the proposed protections for these areas.

15. MPA Name: Palos Verdes SMR
Appears to meet guidelines.

16. MPA Name: Point Fermin SMP
Boundaries: Boundaries are improved from the existing MPA. However, boundaries should be located at readily determined lines of latitude and longitude and hanging corners should be at 90° angles extending due N/S and E/W. Also, per CDFG Feasibility Guidelines, whole minutes are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Recommendations to improve MPA: If an MPA is desired in this area, could consider moving the western boundary to Point Fermin to ease enforceability and public understanding.

17. MPA Name: Bolsa Chica SMP
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Appears to meet guidelines.

18. MPA Name: Upper Newport Bay SMP
Boundaries: Boundaries do not meet feasibility guidelines as southern boundary is not located at easily recognizable landmarks.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding the boundaries for this MPA.

19. MPA Name: Crystal Cove SMCA
Boundaries: The offshore diagonal line does not meet feasibility guidelines.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.

MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Three Arch Bay SMCA, Dana Point SMCA, and Doheny Beach SMCA. Additionally, only two of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

20. MPA Name: Laguna SMR
Boundaries: A hanging corner is created in the south-eastern corner of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines for multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Three Arch Bay SMCA, Dana Point SMCA, and Doheny Beach SMCA.

21. MPA Name: Three Arch Bay SMCA
Boundaries: Boundaries do not meet feasibility guidelines as two unanchored diagonal lines were utilized to delineate the offshore boundaries.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Three Arch Bay SMCA, Dana Point SMCA, and Doheny Beach SMCA. Additionally, only two of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

22. MPA Name: Dana Point SMCA
Boundaries: Appears to meet guidelines. This MPA utilizes an easily recognizable landmark for the northern boundary, a buoy to delineate the offshore boundary, and an easily recognizable landmark for the south-eastern boundary.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Three Arch Bay SMCA, Dana Point SMCA, and Doheny Beach SMCA. Additionally, only two of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

23. MPA Name: Doheny Beach SMCA
Boundaries: Boundaries create a hanging corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Appears to meet guidelines.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Three Arch Bay SMCA, Dana Point SMCA, and Doheny Beach SMCA. Additionally, only two of the four SMCAs in the area have identical take regulations, adding to the complexity of the proposed regulations.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

24. MPA Name: Agua Hedionda Lagoon SMR
Boundaries: Southern portion of the boundary appears to be at an easily recognizable landmark. However, the northern portion of the boundary could be improved by moving it to an easily recognizable landmark (see recommendations below).
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.
Recommendations to improve MPA: Could move northern portion of the boundary to a number of locations, some suggestions are: 33° 08.528N 117°19.289W or 33° 08597'N 117°19.405'W. However, there are a variety of landmarks that could be utilized on the northern and southern banks of this lagoon that would meet guidelines.

25. MPA Name: Batiquitos Lagoon SMR
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

26. MPA Name: Swamis SMCA
Boundaries: Boundaries do not meet feasibility guidelines as they create a wedge shape in the northern portion of the MPA which would decrease public understanding and enforceability of the regulation. Also, shape in MarineMap does not match the written description.
Take Regulations: Appears to meet guidelines.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

27. MPA Name: San Elijo Lagoon SMR
Boundaries: Appears to meet guidelines.
Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.

MPA Design: Appears to meet guidelines.

28. MPA Name: Del Mar SMR
Boundaries: Boundaries do not meet feasibility guidelines. Boundaries are not at easily recognizable landmarks, or at readily determinable lines of latitude and longitude. The southern boundary is also not oriented in a due east/west fashion. No written boundary description provided.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

29. MPA Name: San Dieguito Lagoon SMR
Boundaries: Appears to meet guidelines.
Take Regulations: Appears to meet guidelines.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines.

30. MPA Name: Los Penasquitos Marsh SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
MPA Design: Appears to meet guidelines.

31. MPA Name: La Jolla North SMR
Boundaries: Boundaries do not meet feasibility guidelines as the western boundary is an unanchored diagonal line, and the pier is split in half by the proposed MPA.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding the boundaries for this MPA.
Other: Three of the proposed MPAs in this area have very similar names (La Jolla North SMR, La Jolla South SMR and La Jolla South SMCA), which could cause confusion.

32. MPA Name: La Jolla South SMR
Boundaries: Boundaries create hanging corners offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Creates a complex cluster that does not meet feasibility guidelines.
Also, Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Other: Three of the proposed MPAs in this area have very similar names (La Jolla North SMR, La Jolla South SMR and La Jolla South SMCA), which could cause confusion.

33. MPA Name: La Jolla South SMCA
Boundaries: Boundaries creates a hanging corner offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.

Take Regulations: Appears to meet guidelines.
MPA Design: Creates a complex cluster that does not meet feasibility guidelines.
Also, Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Other: Three of the proposed MPAs in this area have very similar names (La Jolla North SMR, La Jolla South SMR and La Jolla South SMCA), which could cause confusion.

34. MPA Name: Kendal Frost SMCA
Boundaries: Eastern and western boundaries are not at easily recognizable landmarks.
Take Regulations: Scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
MPA Design: See comments regarding MPA boundaries for this MPA.

35. MPA Name: Ocean Beach SMCA
Boundaries: The shape provided in MarineMap does not match the written description (see the northern boundary). The southern boundary is not located at an easily recognizable landmark or at an easily determinable line of latitude.
Take Regulations: Take regulations not clearly stated. The legal definition of piers can include a variety of structures (including some breakwaters and jetties). Please specifically state if the regulation is intended to apply only to a specific location (such as the Ocean Beach Municipal Pier), or apply to all structures that would meet the "public pier" definition. Also, the proposed allowed take is stated as, "fishing from the pier". Regulations should include gear types allowed from the pier.
MPA Design: See comments regarding the boundaries for this MPA.
Other: If pier fishing is only intended to be allowed from the Ocean Beach Municipal Pier, then boundaries would not meet feasibility guidelines, as this would "split" the jetty and only allow fishing on one side. This would decrease enforceability and public understanding of the regulation.

36. MPA Name: Ocean Beach SMR
Boundaries: The northern boundary is not located at an easily recognizable landmark or at an easily determinable line of latitude. The southern boundary meets guidelines as described in the written description. However, the boundary should be cleaned up in MarineMap to reflect the written description.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding the boundaries for this MPA.

37. MPA Name: San Diego River/Famosa Slough SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: The proposed regulations would create varying regulations for the public fishing on the jetty, with fishing allowed on both sides of the jetty on the western portion, and fishing only allowed on the north side of the eastern portion of the jetty. This type of regulation does not meet feasibility guidelines.
Also, scientific collecting may be permitted in any MPA. SMCAs that only allow scientific collection are not appropriate, as it implies that no other SMCA's allow such activities.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines.
Other: MPA name should be simplified.

38. MPA Name: Cabrillo SMR
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corners and the intertidal nature of the design.
Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

39. MPA Name: South San Diego Bay SMCA
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are not clearly stated. Take allowances state that recreational take of spotted sand bass and Pacific bonito by hook and line is allowed. However, the design considerations state that the MPA is proposed as a catch and release area. Please see the Department memo on catch and release regulations for more information on proposing catch and release areas (CDFG Memo. *Law Enforcement Division's Guidance on Catch and Release Fishing in MPAs*. January 7, 2009).
MPA Design: See comments regarding boundaries for this MPA.

40. MPA Name: Imperial Beach SMCA
Boundaries: Does not meet guidelines as boundaries create a wedge shape near the shoreline which decreases public understanding and enforceability.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

41. MPA Name: Tijuana Estuary SMR
Appears to meet guidelines.

42. MPA Name: Emerald Bay SMCA
Boundaries: Offshore boundary creates an unanchored diagonal line.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing special closure in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the unanchored diagonal line and the intertidal nature of the design.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

43. MPA Name: Catalina Isthmus SMCA
Boundaries: Boundaries create hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Appears to meet guidelines.
MPA Design: See comments regarding boundaries for this MPA.

44. MPA Name: Blue Cavern SMR
Boundaries: Boundaries create hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

45. MPA Name: Cat Harbor SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: By allowing all take with the exception of one species, this MPA acts as a fishery management measure rather than as ecosystem or habitat protection. Proposals that create fishery management regulations should be proposed to the Fish and Game Commission as a part of their regular fishery management regulatory process. If a proposed MPA is wished to be retained, ecosystem protections should be expanded to better align with the Act.
MPA Design: Appears to meet guidelines.

46. MPA Name: Long Point SMR
Boundaries: Appears to meet guidelines. However, shape in MarineMap needs to be cleaned up and the written description should be more specific with regards to the exact location of the proposed boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Appears to meet guidelines.

47. MPA Name: Farnsworth SMCA
Boundaries: As shown in MarineMap, this MPA does not meet feasibility guidelines (see south eastern corner). No boundary descriptions were provided (though there was a reference to the use of whole minutes in the design considerations). If whole minutes were intended, then this shape would meet guidelines.
Take Regulations: Appears to meet guidelines.
MPA Design: See comments regarding MPA boundaries above.

48. MPA Name: Casino Point SMR
Boundaries: See comments regarding MPA design for this MPA.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

49. MPA Name: Lover's Cove SMCA
Boundaries: Boundaries create a hanging corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corners and the intertidal nature of the design. Also, allowed gear types are not specified.
Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

50. MPA Name: Silver Canyon SMR
Boundaries: Boundaries do not meet feasibility guidelines as a hanging corner is created in the south-west corner and a wedge shape is created in the nearshore waters. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

51. MPA Name: Begg Rock SMR
Appears to meet guidelines.

Table 1. California Department of Fish and Game Round 2 Feasibility Evaluation summary table of Topaz.

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
1	Point Conception SMR	X						Y	Y
2	Refugio SMCA				X		X	Y	N
3	Naples SMCA	X						Y	N
4	Helo SMR	X						Y	Y
5	Devereux Lagoon SMR	X						Y	Y
6	Goleta Slough SMR	X						Y	Y
7	Carpinteria Salt Marsh SMR	X						Y	Y
8	Ventura River Mouth SMCA	X						Y	N
9	Santa Clara Rivermouth SMCA	X						Y	N
10	Magu/ Muwu Lagoon SMRMA	X						Y	N
11	Deer Creek SMCA			X			X	Y	Y
12	Sequit SMCA			X				Y	N
13	Point Dume SMCA			X				Y	Y
14	Point Dume SMR			X				Y	Y
15	Palos Verdes SMR	X						Y	Y
16	Point Fermin SMP				X		X	Y	N
17	Bolsa Chica SMP	X						Y	N
18	Upper Newport Bay SMP							Y	N
19	Crystal Cove SMCA							Y	N
20	Laguna SMR							Y	Y
21	Three Arch Bay SMCA							Y	N

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
22	Dana Point SMCA							Y	N
23	Doheny Beach SMCA							Y	Y
24	Agua Hedionda Lagoon SMR						X	Y	Y
25	Batiquitos Lagoon SMR						X	Y	Y
26	Swamis SMCA						X	Y	Y
27	San Elijo Lagoon SMR	X						Y	Y
28	Del Mar SMR						X	Y	Y
29	San Dieguito Lagoon SMR	X						Y	Y
30	Los Penasquitos Marsh SMCA	X						Y	N
31	La Jolla North SMR					X	X	Y	Y
32	La Jolla South SMR				X		X	Y	Y
33	La Jolla South SMCA				X		X	Y	Y
34	Kendal Frost SMCA						X	Y	N
35	Ocean Beach SMCA						X	Y	N
36	Ocean Beach SMR						X	Y	Y
37	San Diego River/ Famosa Slough SMCA	X						Y	N
38	Cabrillo SMR				X			Y	Y
39	South San Diego Bay SMCA						X	Y	N
40	Imperial Beach SMCA						X	Y	N
41	Tijuana Estuary SMR	X						Y	Y
42	Emerald Bay SMCA					X		Y	N

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
43	Catalina Isthmus SMCA				X			Y	Y
44	Blue Cavern SMR				X			Y	Y
45	Cat Harbor SMCA	X						Y	N
46	Long Point SMR	X						Y	Y
47	Farnsworth SMCA				X		X	Y	Y
48	Casino Point SMR							Y	Y
49	Lover's Cove SMCA							Y	N
50	Silver Canyon SMR				X		X	Y	Y
51	Begg Rock SMR	X						Y	Y

[1] Other includes, but is not limited to: boundaries that are not oriented due N/S E/W, are not placed at easily recognizable landmarks or at readily determined lines of latitude and longitude, are intertidal MPAs, contain irregularly shaped lines, or other design features that do not meet feasibility guidelines (such as L-shaped clusters or designs).

California Department of Fish and Game
South Coast Study Region
Individual Feasibility Evaluation (Round 2): External Proposal A

Proposal Name: External A

This proposal met some of the feasibility guidelines outlined in the CDFG feasibility document[6]. However, a variety of feasibility concerns were identified and should be addressed. MPA-specific comments are detailed below, while overarching feedback and additional guidance are outlined in the executive summary regarding how to improve commonly-observed feasibility issues. A table is provided, following the individual MPA evaluation, that summarizes a variety of issues observed for each MPA (Table 1).

Evaluation of Individual MPAs:

1. MPA Name: Point Conception SMR
Appears to meet guidelines.

2. MPA Name: Campus Point SMR
Appears to meet guidelines.

3. MPA Name: Goleta Slough SMR
Boundaries: Other than boundaries that can be defined by mean high tide, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc), to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding the boundaries for this MPA.

4. MPA Name: Big Sycamore Canyon SMR
Appears to meet guidelines.
Recommendations to Improve MPA: Can improve western boundary by approximating Point Mugu using 119° 03.700' or 119° 03.650'

5. MPA Name: Deer Creek SMCA
Appears to meet guidelines.

6. MPA Name: Malibu SMR
Appears to meet guidelines.

7. MPA Name: Point Vicente SMR
Appears to meet guidelines.

8. MPA Name: Portuguese Bend SMCA
Appears to meet guidelines.

[6] Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, November 12, 2008).

9. MPA Name: Point Fermin SMP
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

10. MPA Name: Bolsa Chica SMP
Boundaries: Other than boundaries that can be defined by mean high tide, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc), to ease enforceability and public understanding of boundaries.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: See comments regarding the boundaries for this MPA.

11. MPA Name: Upper Newport Bay SMCA
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding MPA boundaries for this MPA.

12. MPA Name: Crystal Cove SMCA
Boundaries: The south-western boundary is an unanchored diagonal line that is not sufficiently offshore to accommodate nearshore users.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Also, does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Laguna Coast SMCA, Dana Point SMCA and Doheny Beach SMCA.

13. MPA Name: Laguna SMR
Boundaries: Appears to meet guidelines.

Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Laguna Coast SMCA, Dana Point SMCA and Doheny Beach SMCA.

14. MPA Name: Laguna Coast SMCA
Boundaries: MPA utilizes a diagonal line that does not meet feasibility guidelines. The north-western corner is not anchored at whole minutes of latitude and longitude and creates a hanging corner. The offshore boundary is not sufficiently offshore to accommodate nearshore users.
- Diagonal lines may be used if they follow the angle of the coastline, and both ends are anchored at whole minute lines of latitude *and* longitude. Diagonal boundaries should also be placed sufficiently offshore to accommodate nearshore users that are less likely to utilize navigational equipment.

Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Also, does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Laguna Coast SMCA, Dana Point SMCA and Doheny Beach SMCA.
Recommendations to Improve MPA: Consider using readily determined lines of latitude and longitude, oriented due N/S E/W, to delineate boundaries.

15. MPA Name: Dana Point SMCA
Boundaries: Appears to meet guidelines. This MPA utilizes an easily recognizable landmark for the northern boundary, a buoy to delineate the offshore boundary, and an easily recognizable landmark for the south-eastern boundary.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Also, does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Laguna Coast SMCA, Dana Point SMCA and Doheny Beach SMCA.

16. MPA Name: Doheny Beach SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.
Also, does not meet feasibility guidelines regarding multiple zoning with five MPAs proposed in the area; Crystal Cove SMCA, Laguna SMR, Laguna Coast SMCA, Dana Point SMCA and Doheny Beach SMCA.

17. MPA Name: Batiquitos Lagoon SMR
Boundaries: Other than boundaries that can be defined by mean high tide, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc), to ease enforceability and public understanding of boundaries. Also, boundaries should not be defined using a landmark such as a fence as it is not considered permanent. Appropriate landmarks near the fence include any of the bridges, or the mouth of the lagoon.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding MPA boundaries for this MPA.

18. MPA Name: San Elijo Lagoon SMR
Boundaries: Other than boundaries that can be defined by mean high tide, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc), to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding MPA boundaries for this MPA.

19. MPA Name: Del Mar SMR
Appears to meet guidelines.

20. MPA Name: San Dieguito Lagoon SMR
Boundaries: Other than boundaries that can be defined by mean high tide, the Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc), to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding MPA boundaries for this MPA.

21. MPA Name: La Jolla SMR
Boundaries: A series of buoys mark the current MPA boundaries. However, boundaries do not meet guidelines (see additional enforcement concerns for this MPA).
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries.
Additional Enforcement Concerns: Enforcement would prefer any MPA in this area be redesigned to conform to feasibility guidelines regarding boundaries and not utilize the current set of buoys to delineate the boundaries, due to enforceability concerns regarding the movement of these buoys.

22. MPA Name: Ocean Beach SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Hanging corners were created in the south-eastern corner of the MPA and

half-way along the eastern boundary where it meets Sunset Cliffs SMR. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: As a definition for "surface gear" (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: MPA cluster creates an L-shaped design. Designs such as this are specifically called out in the Department of Fish and Game's Feasibility guidance as not meeting feasibility guidelines for simple designs, as these types of shapes create unnecessarily complex regulations.

23. MPA Name: Sunset Cliffs SMR
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Hanging corners were created in the south-western and north-western corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: MPA cluster creates an L-shaped design. Designs such as this are specifically called out in the Department of Fish and Game's Feasibility guidance as not meeting feasibility guidelines for simple designs, as these types of shapes create unnecessarily complex regulations.

24. MPA Name: Cabrillo SMR
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corners and the intertidal nature of the design. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

25. MPA Name: Oneonta Slough SMR
Appears to meet guidelines.

26. MPA Name: Bird Rock SMCA
Boundaries: Boundaries do not meet feasibility guidelines as there is a hanging corner created in the south-western corner of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Appears to meet guidelines.
MPA Design: See comments regarding boundaries for this MPA.

27. MPA Name: Blue Cavern SMR
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create a hanging corner in the north-western corner of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corner.

28. MPA Name: Cat Harbor SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: By allowing all take with the exception of one species, this MPA acts as a fishery management measure rather than as ecosystem or habitat protection. Proposals that create fishery management regulations should be proposed to the Fish and Game Commission as a part of their regular fishery management regulatory process. If a proposed MPA is wished to be retained, ecosystem protections should be expanded to better align with the Act.
MPA Design: Appears to meet guidelines.

29. MPA Name: Farnsworth Bank SMCA
Boundaries: Though not included in previous evaluations, boundaries following the existing Farnsworth Bank MPA do not meet feasibility guidelines as hanging corners are created in the south-eastern and north-eastern corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: By allowing all take with the exception of one species, this MPA acts as a fishery management measure rather than as ecosystem or habitat protection. Proposals that create fishery management regulations should be proposed to the Fish and Game Commission as a part of their regular fishery management regulatory process. If a proposed MPA is wished to be retained, ecosystem protections should be expanded to better align with the Act.
MPA Design: See comments regarding boundaries for this MPA.

30. MPA Name: Casino Point SMR
Boundaries: See comments regarding MPA design for this MPA.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

31. MPA Name: Lover's Cove SMCA
Boundaries: Boundaries create a hanging corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take. Also, allowed gear types are not specified.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing MPA in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the hanging corners and the intertidal nature of the design.

Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

32. MPA Name: Begg Rock SMR
Appears to meet guidelines.

Table 1. California Department of Fish and Game Round 2 Feasibility Evaluation summary table of External A.

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
1	Point Conception SMR	X						Y	Y
2	Campus Point SMR	X						Y	Y
3	Goleta Slough SMR						X	Y	Y
4	Big Sycamore Canyon SMR	X						Y	Y
5	Deer Creek SMCA	X						Y	Y
6	Malibu SMR	X						Y	Y
7	Point Vicente SMR	X						Y	Y
8	Portuguese Bend SMCA	X						Y	Y
9	Point Fermin SMP		X		X		X	Y	N
10	Bolsa Chica SMP						X	Y	N
11	Upper Newport Bay SMCA						X	Y	N
12	Crystal Cove SMCA			X		X	X	Y	N
13	Laguna SMR			X				Y	Y
14	Laguna Coast SMCA			X		X	X	Y	N
15	Dana Point SMCA			X			X	Y	N
16	Doheny Beach SMCA			X			X	Y	N
17	Batiquitos Lagoon SMR						X	Y	Y
18	San Elijo Lagoon SMR						X	Y	Y
19	Del Mar SMR	X						Y	Y
20	San Dieguito Lagoon SMR						X	Y	Y
21	La Jolla SMR				X	X	X	Y	Y
22	Ocean Beach SMCA				X		X	Y	N
23	Sunset Cliffs SMR				X		X	Y	Y

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
24	Cabrillo SMR				X			Y	Y
25	Oneonta Slough SMR	X						Y	Y
26	Bird Rock SMCA				X			Y	Y
27	Blue Cavern SMR				X			Y	Y
28	Cat Harbor SMCA	X						Y	N
29	Farnsworth Bank SMCA				X			Y	N
30	Casino Point SMR						X	Y	Y
31	Lover's Cove SMCA				X		X	Y	N
32	Begg Rock SMR	X						Y	Y

[1] Other includes, but is not limited to: boundaries that are not oriented due N/S E/W, are not placed at easily recognizable landmarks or at readily determined lines of latitude and longitude, are intertidal MPAs, contain irregularly shaped lines, or other design features that do not meet feasibility guidelines (such as L-shaped clusters or designs).

California Department of Fish and Game
South Coast Study Region
Individual Feasibility Evaluation (Round 2): External Proposal B

Proposal Name: External B

This proposal met some of the feasibility guidelines outlined in the CDFG feasibility document[7]. However, a variety of feasibility concerns were identified and should be addressed. MPA-specific comments are detailed below, while overarching feedback and additional guidance are outlined in the executive summary regarding how to improve commonly-observed feasibility issues. A table is provided, following the individual MPA evaluation, that summarizes a variety of issues observed for each MPA (Table 1).

Evaluation of Individual MPAs:

1. MPA Name: Devereux Lagoon SMR
Appears to meet guidelines.

2. MPA Name: Goleta Slough SMP
Boundaries: Appears to meet guidelines.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Appears to meet guidelines.
Recommendations to improve MPA: This MPA may be better suited as an SMR (as proposed in all other round 2 proposals) based on additional local enforcement input, and considerations such as restrictions on fishing due to anadromous species and homeland security restrictions in the area.

3. MPA Name: Goleta SMCA
Boundaries: Boundaries create hanging corners. Eastern boundary not at a readily determined line of longitude. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Appears to meet guidelines.
MPA Design: See comments regarding boundaries for this MPA.

4. MPA Name: Goleta SMR
Boundaries: Boundaries create hanging corners. Eastern boundary not at a readily determined line of longitude. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

[7] Feasibility Criteria and Evaluation Components for Marine Protected Area Proposals (CDFG, November 12, 2008).

5. MPA Name: Mugu Lagoon SMRMA
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Appears to meet guidelines.
MPA Design: See comments regarding boundaries for this MPA.

6. MPA Name: Big Sycamore SMR
Appears to meet guidelines.

7. MPA Name: Big Sycamore SMP
Boundaries: Appears to meet guidelines.
Take Regulations: Appears to meet guidelines.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

8. MPA Name: Palos Verdes SMCA
Boundaries: See comments regarding MPA Design for this MPA.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation. And, as a definition for “surface gear” (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: Adjacent MPAs with the same activities should be designated as one MPA, and, L-shaped MPAs do not meet feasibility guidelines as they create complex shapes that decrease public understanding and enforceability.

9. MPA Name: Portuguese Bend SMCA
Boundaries: See comments regarding MPA Design for this MPA.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Adjacent MPAs with the same activities should be designated as one MPA, and, L-shaped MPAs do not meet feasibility guidelines as they create complex shapes that decrease public understanding and enforceability.

10. MPA Name: Point Fermin SMP
Boundaries: Southern boundary creates a wedge shape in the nearshore waters. Eastern boundary is an irregularly shaped line not oriented in a due north-south east-west fashion. Boundaries create hanging corners. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

11. MPA Name: Bolsa Chica SMP
Boundaries: Appears to meet guidelines.

Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Appears to meet guidelines.

12. MPA Name: Upper Newport Bay SMP
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

13. MPA Name: Laguna Coast SMCA
Boundaries: See comments regarding MPA Design for this MPA.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: L-shaped MPAs do not meet feasibility guidelines as they create complex shapes that decrease public understanding and enforceability.

14. MPA Name: Laguna SMR
Boundaries: See comments regarding MPA Design for this MPA.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: L-shaped MPAs do not meet feasibility guidelines as they create complex shapes that decrease public understanding and enforceability.

15. MPA Name: Agua Hedionda Lagoon SMR
Boundaries: Boundaries are confusing and difficult to determine. Boundaries are not located at easily recognizable landmarks.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

16. MPA Name: Batiquitos Lagoon SMP
Boundaries: Eastern boundary is not at an easily recognizable landmark.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

17. MPA Name: San Elijo Lagoon SMP
Boundaries: Eastern boundary is not at an easily recognizable landmark.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: See comments regarding boundaries for this MPA.

18. MPA Name: Del Mar SMCA
Boundaries: Boundaries do not meet feasibility guidelines as they create hanging corners offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation. And, as a definition for "surface gear" (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: See comments regarding boundaries for this MPA.

19. MPA Name: Del Mar SMR
Boundaries: Boundaries do not meet feasibility guidelines as they create hanging corners offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

20. MPA Name: San Dieguito Lagoon SMR
Boundaries: Appear to meet guidelines
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
Other Regulations: Department managers of the adjacent Ecological Reserve may have further input on current allowed activities. Guidance is forthcoming.
MPA Design: Appears to meet guidelines

21. MPA Name: San Diego-Scripps SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: Intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

22. MPA Name: La Jolla SMCA
Boundaries: A series of buoys mark the current MPA boundaries. However, boundaries do not meet guidelines (see additional enforcement concerns for this MPA).
Take Regulations: Regulations do not meet guidelines as take regulations should not change by depth or location within an MPA.
MPA Design: See comments regarding boundaries.
Additional Enforcement Concerns: Enforcement would prefer any MPA in this area be redesigned to conform to feasibility guidelines regarding boundaries and not utilize the current

set of buoys to delineate the boundaries, due to enforceability concerns regarding the movement of these buoys.

23. MPA Name: Ocean Beach SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Hanging corners were created in the south-eastern corner of the MPA and half-way along the eastern boundary where it meets Sunset Cliffs SMR. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: As a definition for "surface gear" (or its equivalent) does not exist in the Fish and Game Code or in Title 14, the Department recommends it not be utilized in MPA proposals.
MPA Design: MPA cluster creates an L-shaped design. Designs such as this are specifically called out in the Department of Fish and Game's Feasibility guidance as not meeting feasibility guidelines for simple designs, as these types of shapes create unnecessarily complex regulations.

24. MPA Name: Sunset Cliffs SMR
Boundaries: Boundaries do not meet feasibility guidelines as boundaries create multiple hanging corners. Hanging corners were created in the south-western and north-western corners of the MPA. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: MPA cluster creates an L-shaped design. Designs such as this are specifically called out in the Department of Fish and Game's Feasibility guidance as not meeting feasibility guidelines for simple designs, as these types of shapes create unnecessarily complex regulations.

25. MPA Name: Mia J Tegner SMCA
Boundaries: Boundaries do not meet feasibility guidelines as boundaries do not follow a due N/S E/W orientation, are defined by irregularly shaped lines, are not located at readily determined lines of latitude and longitude, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: See comments regarding boundaries for this MPA.

26. MPA Name: Sweetwater Marsh SMR
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.
MPA Design: See comments regarding boundaries for this MPA.

27. MPA Name: South San Diego Bay SMP
Boundaries: The boundaries do not meet feasibility guidelines. The Department prefers the use of easily recognizable permanent landmarks (such as bridges, etc) to delineate boundaries in inland waters (bays, estuaries, sloughs, etc) to ease enforceability and public understanding of boundaries.

Take Regulations: MPAs with catch and release allowances add complexity to proposed regulations. Such regulations may decrease public understanding and enforceability, increasing the likelihood of unintentional infractions.
MPA Design: See comments regarding boundaries for this MPA.

28. MPA Name: Charles F Holder Catalina SMCA
Boundaries: See comments regarding MPA design for this MPA.
Take Regulations: MPAs that propose seasons, gear, or size limits that conflict with existing fishery regulations outside of MPAs do not meet DFG guidelines for enforceability (CDFG Memo. Department of Fish and Game guidance on bag limits and size limits in MPAs. February 10, 2009). If changes to fishery regulations are desired, they should be brought to the Fish and Game Commission separately for consideration in the regular rulemaking process.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the area; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA.

29. MPA Name: Arrow Pt to Lionhead SMCA
Boundaries: Offshore boundary creates an unanchored diagonal line.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take.
MPA Design: The boundaries for this proposed MPA are improved compared to the existing special closure in the area. However, these boundaries do not fully meet the guidelines for MPA design with regards to the unanchored diagonal line and the intertidal nature of the design.
Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the area; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA.
Also, intertidal MPAs that do not extend into deeper waters do not meet feasibility guidelines and are not recommended. In addition, these areas do not follow the scientific guideline which recommends extending MPAs from shallow to deep habitats. If intertidal protection is desired, it should be located in areas where offshore habitats are also protected.

30. MPA Name: Bird Rock SMCA
Boundaries: Boundaries create a hanging corner in the south western corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the area; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA.

31. MPA Name: Catalina Marine Science Center SMR
Boundaries: Boundaries create a hanging corner in the north western corner. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Take regulations are simple, as no take of living marine resources is allowed in a SMR.

MPA Design: Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the area; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA.

32. MPA Name: Farnsworth ptA SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the area; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA. Adjacent MPAs with the same activities should be designated as one MPA.
Other: MPA name should be improved.

33. MPA Name: Farnsworth ptB SMCA
Boundaries: Appears to meet guidelines.
Take Regulations: A long list of excepted species to the general regulation makes it difficult to enforce the regulation.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the area; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA. Adjacent MPAs with the same activities should be designated as one MPA.
Other: MPA name should be improved.

34. MPA Name: Lover's Cove SMCA
Boundaries: Boundaries do not meet feasibility guidelines as they are not oriented in a due N/S E/W orientation, are not located at readily determined lines of latitude and longitude, or at easily recognizable landmarks, create hanging corners, and are defined by distance offshore. Per CDFG Feasibility Guidelines, hanging corners must be at 90° angles extending due N/S and E/W. Whole minutes of latitude and longitude are preferred, half minutes are less desirable, and 1/10 minutes are least preferred.
Take Regulations: Regulations are simple. However, the proposed regulation provides little protection ecologically due to the allowed take. Also, allowed gear types are not specified.
MPA Design: Does not meet feasibility guidelines regarding multiple zoning with seven contiguous MPAs proposed in the are; Charles F Holder Catalina SMCA, Arrow Pt to Lionhead SMCA, Bird Rock SMCA, Catalina Marine Science Center SMR, Farnsworth ptA SMCA, Farnsworth ptB SMCA, and Lover's Cove SMCA.

35. MPA Name: Begg Rock SMR
Appears to meet guidelines.

Table 1. California Department of Fish and Game Round 2 Feasibility Evaluation summary table of External B.

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
1	Devereux Lagoon SMR	X						Y	Y
2	Goleta Slough SMP	X						Y	N
3	Goleta SMCA				X			Y	Y
4	Goleta SMR				X			Y	Y
5	Mugu Lagoon SMRMA						X	Y	Y
6	Big Sycamore SMR	X						Y	Y
7	Big Sycamore SMP	X					X	Y	Y
8	Palos Verdes SMCA						X	Y	N
9	Portuguese Bend SMCA						X	Y	N
10	Point Fermin SMP				X		X	Y	N
11	Bolsa Chica SMP	X						Y	N
12	Upper Newport Bay SMP							Y	N
13	Laguna Coast SMCA						X	Y	N
14	Laguna SMR						X	Y	Y
15	Agua Hedionda Lagoon SMR				X		X	Y	Y
16	Batiquitos Lagoon SMP						X	Y	N
17	San Elijo Lagoon SMP						X	Y	N
18	Del Mar SMCA				X			Y	N
19	Del Mar SMR				X			Y	Y
20	San Dieguito Lagoon SMR	X						Y	Y
21	San Diego-Scripps SMCA		X		X		X	Y	N
22	La Jolla SMCA				X	X	X	Y	N
23	Ocean Beach SMCA				X		X	Y	N

MPA #	MPA Name	Boundaries Meet Guidelines	Frequently observed boundary types that do not meet feasibility guidelines					Goals, Objectives & Rationale Included	Regulations Meet Guidelines
			Use of Distance or Depth	Multiple Zoning	Hanging Corners	Unanchored Diagonal Lines	Other[1]		
24	Sunset Cliffs SMR				X		X	Y	Y
25	Mia J Tegner SMCA		X		X		X	Y	N
26	Sweetwater Marsh SMR						X	Y	Y
27	South San Diego Bay SMP						X	Y	N
28	Charles F Holder Catalina SMCA			X				Y	N
29	Arrow Pt to Lionhead SMCA			X		X		Y	N
30	Bird Rock SMCA			X	X			Y	N
31	Catalina Marine Science Center SMR			X	X			Y	Y
32	Farnsworth ptA SMCA			X			X	Y	N
33	Farnsworth ptB SMCA			X			X	Y	N
34	Lover's Cove SMCA		X	X			X	Y	N
35	Begg Rock SMR	X						Y	Y

[1] Other includes, but is not limited to: boundaries that are not oriented due N/S E/W, are not placed at easily recognizable landmarks or at readily determined lines of latitude and longitude, are intertidal MPAs, contain irregularly shaped lines, or other design features that do not meet feasibility guidelines (such as L-shaped clusters or designs).