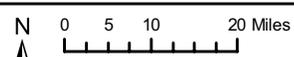


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California Marine Life Protection Act Initiative
South Coast Study Region: Round 2 Evaluation
Staff Summary of Area and Habitats in Opal Draft MPA Proposal
June 9, 2009

Summary of MPAs by Designation for Opal Draft MPA Proposal

Type of MPA ¹	# of MPAs	Area (mi ²)	% of Study Region
State Marine Reserve (SMR)	35	298.8	12.7%
State Marine Recreational Managed Area (SMRMA)	1	0.5	0.0%
State Marine Park (SMP)	3	1.4	0.1%
State Marine Conservation Area (SMCA)	15	61.4	2.6%
Undesignated	2	36.7	1.6%
All MPAs combined	56	398.8	17.0%

¹ Note: These are proposed marine protected area (MPA) designations, NOT levels of protection assigned by the MLPA Master Plan Science Advisory Team (SAT). SMRMA is not an MPA designation, but rather a marine managed area designation. The "Undesignated" are the pending military closures.

Summary of MPAs by Level of Protection for Opal Draft MPA Proposal

Level of Protection (LOP)	# Proposed	Area (mi ²)	% of Study Region
Very High ²	36	299.3	12.7%
High	3	43.4	1.8%
Moderate-High	2	2.6	0.1%
Moderate	0	0.0	0.0%
Low ³	13	16.8	0.7%
Not applicable ⁴	2	36.7	1.6%
Total	56	398.8	17.0%

² Note: The "Very High" category includes MPAs with SMR designation, as well as MPAs with a SMRMA designation.

³ Note: The "Low" category groups together MPAs that are assigned a moderate-low and lower level of protection.

⁴ Note: These are the pending military closures. These are not assigned a level of protection.

Individual MPAs in Opal Draft MPA Proposal

MPA Name	Size (mi ²)	Along-shore Span ⁶ (mi)	Depth Range ⁷ (ft)
Richardson Rock SMR ⁵	40.69	6.3	95 - 558
Judith Rock SMR ⁵	4.55	1.2	0 - 487
Harris Point SMR ⁵	25.35	5.4	0 - 557
South Point SMR ⁵	13.05	3.5	0 - 1071
Carrington Point SMR ⁵	12.76	4.0	0 - 211
Skunk Point SMR ⁵	1.39	2.2	0 - 83
Painted Cave SMCA ⁵	1.78	1.9	0 - 291
Gull Island SMR ⁵	19.91	4.8	0 - 2205
Scorpion SMR ⁵	9.62	2.6	0 - 769
Footprint SMR ⁵	7.05	4.7	171 - 1656
Anacapa Island SMCA ⁵	7.30	2.0	0 - 490
Anacapa Island SMR ⁵	11.54	3.1	0 - 709
Santa Barbara Island SMR ⁵	12.76	1.0	0 - 1655

*California Marine Life Protection Act Initiative, South Coast Study Region
Staff Summary of Area and Habitats in Opal Draft MPA Proposal
June 9, 2009*

MPA Name	Size (mi²)	Along-shore Span⁶ (mi)	Depth Range⁷ (ft)
Point Conception SMR	18.86	5.0	0 - 452
Coal Oil Point SMR	10.11	2.7	0 - 701
Devereux Lagoon SMR	0.10	N/A	N/A
Goleta Slough SMR	0.25	N/A	N/A
Point Mugu Estuary SMRMA	0.49	N/A	N/A
Lechuza SMR	5.22	1.4	0 - 1266
Point Dume SMCA	16.89	4.5	0 - 2023
Point Vicente SMR	15.76	4.7	0 - 2640
Point Fermin SMP	0.07	0.6	0 - 20
Bolsa Chica SMP	0.25	N/A	N/A
Upper Newport Bay SMP	1.10	N/A	N/A
Laguna North SMCA	1.50	4.0	0 - 105
Laguna SMR	12.00	2.9	0 - 1801
Laguna South SMCA	2.65	6.2	0 - 93
Agua Hedionda Lagoon SMR	0.04	N/A	N/A
Batiquitos Lagoon SMR	0.67	N/A	N/A
Encinitas SMCA	0.11	0.9	0 - 10
Del Mar SMR	13.25	3.7	0 - 1092
San Dieguito SMR	0.52	N/A	N/A
Penasquitos SMR	0.35	N/A	N/A
San Diego-Scripps SMCA	0.11	0.5	0 - 10
La Jolla SMR	0.77	1.1	0 - 214
Little Bird Rock SMR	0.45	1.2	0 - 29
Ocean Beach SMCA	1.51	0.4	0 - 242
Sunset Cliffs SMR	8.92	2.6	0 - 336
Cabrillo SMR	0.38	1.3	0 - 30
Sweetwater Marsh SMR	0.31	N/A	N/A
South San Diego Bay SMCA	1.09	N/A	N/A
Tijuana Reef SMCA	1.14	1.1	0 - 42
Tijuana River Mouth SMR	2.91	2.3	0 - 55
Tijuana River Estuary SMR	0.75	N/A	N/A
Arrow Point-Lion's Head SMCA	0.44	2.6	0 - 140
Catalina Harbor SMCA	0.32	0.7	0 - 186
Santa Catalina Marine Science Center SMR	1.31	2.2	0 - 691
Long Point SMCA	15.69	5.3	307 - 2735
Long Point SMR	2.68	2.7	0 - 950
Farnsworth Bank SMCA	10.83	9.2	125 - 2953
China Point SMR	6.55	6.5	0 - 705
Casino Point SMR	0.01	0.1	0 - 73
Lovers Cove SMCA	0.05	0.3	0 - 125
Begg Rock SMR	37.96	6.9	219 - 374
San Clemente Pending Military Closure 1	17.44	3.9	0 - 1682
San Clemente Pending Military Closure 2	19.24	5.4	0 - 3938

⁵ Note: State MPAs around the Northern Channel Islands are to be part of all proposals, as directed by the California Fish and Game Commission and are notated by the footnote. MPAs listed below the broken line are those being proposed.

*California Marine Life Protection Act Initiative, South Coast Study Region
Staff Summary of Area and Habitats in Opal Draft MPA Proposal
June 9, 2009*

⁶ Note: *Alongshore span measured as direct line from one end of the MPA to the other. Estuarine MPAs are not given an alongshore span.*

⁷ Note: *Comprehensive bathymetric data for all estuaries is not available. Though bathymetric data do exist in portions of some estuaries, depth ranges are not provided for estuarine MPAs for consistency in evaluations.*

Habitat Representation in Opal Draft MPA Proposal

Habitat ⁸	SMR		SMRMA		SMP		SMCA		Undesignated		Total MPAs	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
Intertidal												
Sandy or gravel beach*	36.78	10%	0.63	<1%	0.00	0%	17.24	5%	6.04	2%	60.69	16%
Rocky shores*	50.38	18%	0.00	0%	0.54	<1%	17.07	6%	1.82	1%	69.81	25%
Hardened shores*	0.77	<1%	0.00	0%	0.96	<1%	4.59	2%	0.11	<1%	6.44	2%
Coastal marsh*	17.22	29%	3.13	5%	9.73	16%	0.40	1%	0.00	0%	30.47	51%
Coastal marsh	1.46	24%	0.26	4%	0.81	13%	0.02	<1%	0.00	0%	2.55	42%
Tidal flats*	2.92	10%	0.68	2%	3.14	11%	0.92	3%	0.00	0%	7.66	27%
Seagrass beds												
Surfgrass*	34.01	47%	0.00	0%	0.00	0%	6.43	9%	3.09	4%	43.53	60%
Eelgrass	0.22	5%	0.00	0%	0.00	0%	0.06	1%	0.00	0%	0.27	6%
Estuarine												
Estuary	2.97	7%	0.48	1%	1.35	3%	1.09	3%	0.00	0%	5.90	14%
Soft bottom												
0-30 meters	30.27	7%	0.00	0%	0.00	0%	5.74	1%	0.01	<1%	36.02	8%
0-30 meters proxy*. ⁹	42.80	12%	0.00	0%	0.00	0%	17.89	5%	1.30	<1%	61.99	17%
30-100 meters	104.60	16%	0.00	0%	0.00	0%	16.47	2%	0.96	<1%	122.03	18%
100-200 meters	34.53	22%	0.00	0%	0.00	0%	4.27	3%	0.00	0%	38.80	24%
>200 meters	23.34	10%	0.00	0%	0.00	0%	25.70	11%	0.00	0%	49.03	21%
Hard bottom												
0-30 meters	14.83	13%	0.00	0%	0.07	<1%	1.62	1%	1.79	2%	18.31	16%
0-30 meters proxy*. ⁹	35.68	19%	0.00	0%	0.00	0%	5.69	3%	7.02	4%	48.39	25%
30-100 meters	9.85	21%	0.00	0%	0.00	0%	0.62	1%	1.07	2%	11.55	24%
100-200 meters	0.78	20%	0.00	0%	0.00	0%	0.02	<1%	0.00	0%	0.80	20%
>200 meters	0.06	3%	0.00	0%	0.00	0%	0.79	37%	0.00	0%	0.85	40%
Unknown												
0-30 meters	7.05	5%	0.49	<1%	1.35	1%	3.71	2%	0.46	<1%	13.06	8%
30-100 meters	37.37	17%	0.00	0%	0.00	0%	1.72	1%	5.89	3%	44.97	21%
100-200 meters	27.73	25%	0.00	0%	0.00	0%	0.53	<1%	6.42	6%	34.68	31%
>200 meters	45.04	22%	0.00	0%	0.00	0%	0.24	<1%	20.08	10%	65.35	32%

Habitat ⁸	SMR		SMRMA		SMP		SMCA		Undesignated		Total MPAs	
	Area	%	Area	%	Area	%	Area	%	Area	%	Area	%
Kelp forest												
Maximum kelp*	55.73	17%	0.00	0%	0.00	0%	5.44	2%	8.43	3%	69.60	21%
Kelp persistence*	31.32	17%	0.00	0%	0.11	<1%	1.70	1%	7.02	4%	40.14	22%

⁸ Note: Habitats measured as an area (mi²) except for those with a * notation. Habitats with a * notation are expressed in linear units (mi).

⁹ Note: There is limited fine scale data for nearshore habitat, shallower than 10-20 meters depth, in the south coast study region. A proxy for this area was created using a line parallel to the coast and classifying the substrate as either hard or soft substrate depending on the dominant habitat type in that area based on available data.

California MLPA South Coast Study Region
Description of Marine Protected Areas (MPAs) in Opal Draft MPA Proposal
Document Edit Date June 18, 2009

MLPA Study Region: South Coast
Name of Array: Opal Round 2 Draft Proposal
Author: Opal Gem Group
Proposal Revision Date: May 21, 2009

Total number of MPAs/closures: 56
 Number of SMRs: 35
 Number of SMCAs: 15
 Number of SMPs: 3
 Number of SMRMAs: 1
 Number of Military Closures: 2

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Level of Protection	Proposed Take Regulations	Other Proposed Regulations
Point Conception SMR	7342	North Mainland	Boundaries: East boundary at 120° 23 (whole minute). West boundary located at Pt. Conception proper with a line running due south (easily identified landmark)	SMR	very high	All take is prohibited	None specified
Point Conception SMR (continued)							

California MLPA South Coast Study Region
Description of Marine Protected Areas (MPAs) in Opal Draft MPA Proposal
Document Edit Date June 18, 2009

MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Point Conception SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3,O-4), G3: (O-2,O-3), G4: (O-1,O-2), G5: (O-1,O-2,O-3,O-4,O-5), G6: (O-1,O-2,O-3,O-4)	Point Conception and its lee is an iconic, remote and wild area featuring spectacular above and below-water terrain. Extreme upwelling occurs here, along with a meeting of cold northern and warm southern currents defining the boundary between northern and southern California environments. Point Conception area habitats exhibit connectivity with the western Channel Islands. Potentially provides connectivity with Central Coast MPA. South facing coast provides relative calm, protected waters in close proximity to extreme rough water. Only place in study region with northern species assemblages (including rockfish complex). Rich and pristine intertidal area. A growing population of otters is present.	Area represents opportunity to address BRTF guidance to include preferred size MPA, but has been identified as minimal impact to shelf rockfish, is already off limits to halibut trawl, is occupied by sea otters and is extremely remote. CPFV fleet out of Santa Barbara targets St. Augustine Reef, now excluded from this MPA in round 2. Leaves significant similar habitat to the east out of MPA, where shark/skate, crab and CPFV effort is available.
Point Conception SMR (continued)		<p>Special cultural significance to Chumash, historic lighthouse and shipwrecks (Humble-SM1, SS Gosford). Persistent kelp and extensive hogback reef structures inside and beyond proposed boundary. Unique soft bottom kelp beds. Difficult access. Core PISCO monitoring sites help ensure biological evaluation/comparison. Highest seabird diversity in north mainland. Harbor seal haulouts. NOAA biogeographic assessment indicates highest finfish diversity in SB County. MARINE monitoring site at Gov't Point, PISCO site at Cojo. Renowned surf spots. Likely high abundance of pelagic species including sharks due to cold water upwelling.</p> <p>Impacts: Area around St. Augustine is fished (outside of proposed MPA). Private boaters using Gaviota Pier Launch use this area. Area is used by trap fishermen (lobster, crab)</p> <p>Value: High biodiversity. Good habitat. Area contains a ship wreck. Area useful for connectivity to North Channel Islands. Pristine remoteness. Chumash cultural area.</p>	

California MLPA South Coast Study Region
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Document Edit Date June 18, 2009

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Level of Protection	Proposed Take Regulations	Other Proposed Regulations
Coal Oil Point SMR	7280	North Mainland	Boundaries: Eastern boundary at Goleta Point with a line due south. Western boundary at 119 63.5', includes Devereux Slough mouth.	SMR	very high	All take is prohibited	Only as permitted by the California Department of Fish and Game collecting permit program on a case by case basis
Devereux Lagoon SMR	4282	North Mainland	See MarineMap	SMR	very high	All take is prohibited	Regulations would be designed to allow for research activities and permitting in conjunction with the University of California system.
Goleta Slough SMR	7282	North Mainland	See MarineMap	SMR	very high	All take is prohibited	Other Restrictions: boating, swimming, wading, and diving are prohibited. Other restrictions exist on accessible areas.
Point Mugu Estuary SMRMA	7283	North Mainland	Western boundary is 119 05.5.	SMRMA	very high	No take is allowed, except for waterfowl hunting.	None specified
Lechuza SMR	66862	North Mainland	The western boundary of this MPA is intended to be: 118 53.5. The eastern boundary, adjacent to the SMCA, is intended to be 118 52.	SMR	very high	All take is prohibited	None specified

California MLPA South Coast Study Region
Description of Marine Protected Areas (MPAs) in Opal Draft MPA Proposal
Document Edit Date June 18, 2009

MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Coal Oil Point SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3), G3: (O-1,O-2,O-3), G4: (O-1,O-2), G5: (O-1,O-2,O-3,O-4,O-5), G6: (O-1,O-2,O-3,O-4)	Wide variety of habitat including the preponderance of the unique oil seeps in the biogeographic region are covered in the MPA. UCSB campus provide multiple educational and research opportunities. Multiple species inhabit this area and entrances to estuary environments are covered by this MPA. This SMR has very high goal 3 value in that it would allow educational access to areas unimpacted by shore picking within a few minutes walk from the campus. Enforcement could be facilitated by docent groups much in the same way as the western snowy plover nesting area within this proposal has been.	<p>This MPA above all others has high educational value. Even though the economic impact of this area is high it's existence would allow for continued fisheries access to other more important areas such as Naples, Elwood, Santa Barbara 1 mile and Carpenteria. Connectivity to the Central Coast network is afforded by this location. There is a high level of consensus among fishing families as to the greater preservation value than fishing value here. This is despite the exceptionally high socio-economic costs involved. Of the many impacted fishers there is one local commercial lobster fisherman that is not in agreement in this regard. There is also a local kelp harvester that can not support any closure in this area.</p> <p>This area includes a kelp bed leased by Ben Beede (only leased bed in study region). Stops short of kayak launch, spearfishing and surf fishing, as well as the GSD monitoring sites area on east side. Also stops short of important artificial reef sites to the west.</p>
Devereux Lagoon SMR	None Specified	Protect estuary habitat and associated species.	None specified
Goleta Slough SMR	None Specified	<p>Includes (retains) existing MPA. Protects estuary habitat.</p> <p>Changes existing MPA from a State Marine Park to a State Marine Reserve.</p>	None specified
Point Mugu Estuary SMRMA	None Specified	Includes Point Mugu lagoon wetland habitat.	Consider military operations at Pt Mugu. Consider recreational fishing area in the lagoon. There is a restoration site within the lagoon.
Lechuza SMR	None Specified	This MPA is designed in conjunction with the adjacent SMCA. It captures additional persistent kelp habitat and shallow rocky bottom habitat.	<p>The western boundary of this MPA was designed to capture at least 1.14 linear miles of mapped persistent kelp, while minimizing socioeconomic impacts by extending the line further west. Lobster fishing will be affected by this MPA.</p> <p>Given the proximity of this MPA to actively used cultural resource areas, it provides a potential opportunity for co-management by Chumash government entities and/or non-governmental organizations through memoranda of understanding with DFG and/or State Parks that facilitate Chumash contributions to education, outreach and monitoring activities.</p>

California MLPA South Coast Study Region
Description of Marine Protected Areas (MPAs) in Opal Draft MPA Proposal
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MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Level of Protection	Proposed Take Regulations	Other Proposed Regulations
Point Dume SMCA	66855	North Mainland	West boundary is at 118 48. East boundary is at 118 52.	SMCA	high	Prohibits all commercial take except for Pacific bonito (by pelagic seine or spearfishing), coastal pelagic finfish (by pelagic seine), market squid (by pelagic seine) and swordfish (by harpoon). Prohibits all recreational take except for Pacific bonito (spearfishing), coastal pelagic finfish (by dip net), market squid (by dip net), and swordfish (by harpoon).	None specified
Point Vicente SMR	66883	South Mainland	Northern boundary is 33 45. Eastern boundary is 118 24. The northeast corner of the MPA is designed to go from point to point, along the latitude of 33 44.1.	SMR	very high	All take is prohibited	None specified
Point Fermin SMP	7290	South Mainland	See MarineMap	SMP	moderate low	Prohibits all recreational take except lobster; rockfish (family Scorpaenidae), greenling, lingcod, cabezon, yellowtail, mackerel, bluefin tuna, kelp bass, spotted sand bass, barred sand bass, sargo, croaker, queenfish, corbina, white seabass, opaleye, halfmoon, surfperch (family Embiotocidae), blacksmith, barracuda, California sheephead, bonito, California halibut, sole, turbot and sanddab. Finfish shall only be taken by hook and line or spear. Prohibits all commercial take.	None specified
Bolsa Chica SMP	7436	South Mainland	The boundaries of this MPA are the same as the existing MPA.	SMP	moderate low	Prohibits take of all living marine resources is prohibited except the recreational hook and line take of species other than marine aquatic plants from designated areas around outer Bolsa Bay.	Other Restrictions: Boating, swimming, wading, and diving are prohibited. Other restrictions exist regarding: time of entry, accessible areas and allowed management activities.
Upper Newport Bay SMP	67118	South Mainland	Same boundaries as existing MPA.	SMP	moderate low	Prohibits all recreational take except hook and line take of species other than kelp. Prohibits all commercial take.	Other Restrictions: Restrictions exist regarding: swimming areas, boat speed, shoreline access and access fees.

California MLPA South Coast Study Region
Description of Marine Protected Areas (MPAs) in Opal Draft MPA Proposal
Document Edit Date June 18, 2009

MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Point Dume SMCA	None Specified	This MPA is designed in conjunction with the adjacent SMR. It includes nearshore rocky and sandy habitats, as well as part of a submarine canyon. It captures deepwater, hard bottom habitats and still leaves some access points available. This MPA includes an area of interest to the Chumash. Potential coastal source areas for rockfish larvae that could be advected up-coast and offshore to islands.	This MPA will have impacts on urchin and lobster fishermen, but may have fewer impacts on the CPFV fleet. This MPA has an intended LOP of high. Given the proximity of this MPA to actively used cultural resource areas, it provides a potential opportunity for co-management by Chumash government entities and/or non-governmental organizations through memoranda of understanding with DFG and/or State Parks that facilitate Chumash contributions to education, outreach and monitoring activities. In addition, traditional methods of take that fit within the allowed uses of this SMCA would be acknowledged and permitted.
Point Vicente SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2), G3: (O-3), G4: (O-1,O-2), G5: (O-1,O-2,O-3,O-4,O-5), G6: (O-1,O-3)	This MPA is part of the backbone of SMRs, located between Point Dume in the north and Laguna Beach to the south. Captures rocky nearshore habitats as well as maximum kelp and some persistent kelp habitat. Also captures significant soft bottom habitat and deep abysmal slope. Northeast portion designed to capture nearshore habitats, but not extend offshore.	Avoids area to the north, which is heavily used by CPFV, lobster fishing, and spearfishing. Lobster can not be fished north of rocky point in Santa Monica bay, so the area available to fish is small. Avoids water quality issues from plume from wastewater outfall/superfund site at White's Point.
Point Fermin SMP	None Specified	Addresses goal 3, including providing educational opportunities associated with the nearby Cabrillo Aquarium.	This is an existing MPA, which currently has complicated regulations that do not meet DFG feasibility guidelines.
Bolsa Chica SMP	None Specified	Maintains existing MPA. Protects estuary habitat.	None specified
Upper Newport Bay SMP	None Specified	Protects estuary habitat. Maintains existing MPA.	None specified

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MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Level of Protection	Proposed Take Regulations	Other Proposed Regulations
Laguna North SMCA	7341	South Mainland	The offshore boundary approximates 1000 feet offshore. The eastern boundary is at 117 48.9, at a point called Blue Roof. The western boundary is anchored at 33 35, 117 52.	SMCA	moderate low	Take of all living marine resources is prohibited except: A) Recreational: 1) Spiny lobster 2) Finfish by hook and line or spearfishing gear only B) Commercial: Spiny Lobster, crab, sea urchin, and finfish only	None specified
Laguna SMR	7289	South Mainland	West boundary is referenced to a point called blue roof, at 117 48.9. East boundary is 117 46.5.	SMR	very high	All take is prohibited	None specified
Laguna South SMCA	67070	South Mainland	The offshore boundary approximates 1000 ft offshore. The western boundary is 117 46.5 The eastern boundary is at the Ocean Institute.	SMCA	moderate low	Take of all living marine resources is prohibited except: A) Recreational: 1) Spiny lobster 2) Finfish by hook and line or spearfishing gear only B) Commercial: Spiny Lobster, crab, sea urchin, and finfish only	None specified
Laguna South SMCA (continued)							
Agua Hedionda Lagoon SMR	66731	South Mainland	The boundaries for this MPA are the same as the existing MPA.	SMR	very high	All take is prohibited	Other Restrictions: Restrictions exist regarding: allowed management activities.

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Document Edit Date June 18, 2009

MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Laguna North SMCA	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3), G3: (O-1,O-2,O-3), G4: (O-1), G5: (O-1,O-2,O-3,O-5), G6: (O-1)	<p>This MPA is intended to protect intertidal invertebrates and leverage existing MPAs and enforcement by local communities.</p> <p>This is a heritage MPA, designed to preserve existing and popular intertidal protections in a format more acceptable to feasibility guidelines while avoiding unintended consequences to fisheries. Local agency marine enforcement officers and docent programs enhance public awareness and enforcement.</p>	<p>This MPA may not meet DFG feasibility guidance in order to protect intertidal invertebrates while avoiding socioeconomic impacts to other fisheries in the area. This MPA has an intentionally low SAT level of protection.</p> <p>This SMCA is very similar to Laguna South SMCA. It modifies the boundaries of existing MPAs. It already receives protection from the same law enforcement programs that Laguna South SMCA does, including by armed and commissioned officers, one of which is a member of the RSG. One important consideration is that these two SMCAs must be continuous along shore with the Laguna SMR in order provide easier enforcement by the local authorities. This has been requested by those authorities.</p>
Laguna SMR	None Specified	<p>This MPA is intended to be part of the "backbone" of SMRs in the network, meeting science guidelines, including minimum size guidelines, while minimizing socioeconomic impacts. It contributes toward replication for rocky intertidal and subtidal soft bottom habitats and extends to deeper waters. Rocky reef and kelp are captured, though these do not count as replicates in the SAT analysis.</p>	<p>This MPA avoids an outfall identified in the water quality guidance.</p> <p>Intended to avoid impacts to lobster fishery to the extent possible. Note that this areas is between Dana Point and Newport harbors. Existing Heisler Park SMR is incorporated in this shape.</p>
Laguna South SMCA	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3), G3: (O-1,O-2,O-3), G4: (O-1), G5: (O-1,O-2,O-3,O-5), G6: (O-1)	<p>This MPA is intended to protect intertidal invertebrates and leverage existing MPAs and enforcement by local communities.</p> <p>This is a heritage MPA, designed to preserve existing and popular intertidal protections in a format more acceptable to feasibility guidelines while avoiding unintended consequences to fisheries. Local agency marine enforcement officers and docent programs enhance public awareness and enforcement.</p>	<p>This MPA may not meet DFG feasibility guidance in order to protect intertidal invertebrates while avoiding socioeconomic impacts to other fisheries in the area. This MPA has an intentionally low SAT level of protection.</p> <p>This MPA is a modification of existing state marine protected areas in the Dana Point area. The boundaries have been modified to be easier to identify. Enforcement of this MPA is largely conducted by the Ocean Institute at Dana Point. Much of the MPA is bordered on the land side by a steep cliff over 100 feet high which limits access to either end. Enforcement is therefore easier because shore access can be closely monitored at natural choke points.</p>
Laguna South SMCA (continued)			<p>The Ocean Institute and the municipalities of Orange County already provide protection and law enforcement rangers in programs very similar to the one used at Cabrillo National Monument. Peer reviewed scientific papers have shown that the intertidal life is more abundant, diverse, and that invertebrates are larger under these types of programs. In addition, the intertidal areas at Dana Point are among the healthiest in southern California due to these existing enforcement programs. One important consideration is that these two SMCAs must be continuous along shore with the Laguna SMR in order provide easier enforcement by the local authorities. This has been requested by those authorities.</p>
Agua Hedionda Lagoon SMR	None Specified	Maintains existing MPA. Protects estuary habitat.	None specified

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Batiquitos Lagoon SMR	66735	South Mainland	Corrects lagoon boundary. Boundaries are from an existing MPA.	SMR	very high	All take is prohibited	None specified
Encinitas SMCA	67716	South Mainland	The boundaries are from the existing MPA in this area.	SMCA	moderate low	Take of all living marine resources is prohibited except: A) Recreational: 1) Spiny lobster 2) Finfish by hook and line or spearfishing gear only B) Commercial: Spiny Lobster, crab, sea urchin, and finfish only	None specified
Del Mar SMR	66725	South Mainland	Northern boundary is 32 59.2. Southern boundary is 32 56.	SMR	very high	All take is prohibited	None specified
San Dieguito SMR	66724	South Mainland	See MarineMap	SMR	very high	All take is prohibited	None specified
Penasquitos SMR	66727	South Mainland	See MarineMap	SMR	very high	All take is prohibited	None specified
San Diego-Scripps SMCA	66723	South Mainland	The boundaries are the same as the existing MPA.	SMCA	moderate low	Allowed Take: Prohibits all recreational take except finfish. Prohibits all commercial take except finfish.	Other Restrictions: Allowances for scientific collection.
La Jolla SMR	66722	South Mainland	The boundaries for this existing MPA remain unchanged. Has buoys marking boundaries. Well known MPA locally and well enforced currently.	SMR	very high	All take is prohibited	Restrictions exist regarding: boatlaunching areas and anchoring times.
Little Bird Rock SMR	66925	South Mainland	North boundary is: 32 49.7 South boundary is: 32 48.7 West boundary is: 117 17	SMR	very high	All take is prohibited	None specified
Ocean Beach SMCA	67378	South Mainland	Northern boundary is 32 45.050 - this boundary is indented to be north of the Ocean Beach Pier. Southern boundary is 32 44.7	SMCA	moderate high	Allows recreational pier fishing by hook and line and hoop net.	None specified

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Batiquitos Lagoon SMR	None Specified	Protect lagoon habitat. Increases the protection level of an existing MPA.	None specified
Encinitas SMCA	None Specified	Retains an existing MPA and protects nearshore and intertidal ecosystems.	Lobster take is already prohibited here.
Del Mar SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3,O-4), G3: (O-1,O-2,O-3), G4: (O-1,O-2), G5: (O-1,O-3,O-4,O-5), G6: (O-1,O-3,O-4)	Links lagoons and coastline. Includes a diversity of habitat, including deep water rocky habitat, soft bottom, and nursery habitat. Designed to protect rockfish, kelp bass, and halibut. There is an underwater headland offshore steeply rock that serves as an aggregating area for Boccaccio and cowcod. There is coastal kelp coverage here with many fish. Captures lagoon mouths to the north and south. The northern boundary of this MPA was extended to capture additional shallow rock habitat to meet the minimum SAT guidelines. Potential coastal source areas for rockfish larvae that could be advected up-coast and offshore to islands. Pinnacles may be a recruitment area for young rockfishes.	Designed to minimize recreational fishing impacts. Have consulted with a variety of groups including spot prawn fishers, urchin fishers, CPFV, bait harvesters, and shore anglers.
San Dieguito SMR	None Specified	Protect estuary habitat and link to proposed offshore MPA.	Incorporates an existing SMP.
Penasquitos SMR	None Specified	Protect lagoon adjacent to a proposed coastal SMR.	None specified
San Diego-Scripps SMCA	None Specified	Maintain protection and regulations of an existing MPA. Submarine canyon to the North.	This MPA was not extended into the adjacent canyon to avoid socioeconomic impacts. Lots of diving in the area.
La Jolla SMR	None Specified	Maintain regulations and protection of existing MPA.	The designation for this existing MPA is raised from an SMCA to an SMR. The boundaries are well recognized by locals in the area and only squid by hand nets are currently allowed. Raising the designation to an SMR should have little to no economic impact. Intent is to allow for current consumptive activities taking place adjacent to this existing MPA.
Little Bird Rock SMR	None Specified	This SMR is designed to protect nearshore habitat in the La Jolla kelp forest, which is widely recognized as some of the best kelp forest habitat in the region. It is intended to be based on recommendations by scientists from Scripps who regularly work and monitor the area. This MPA is designed to protect some nearshore habitats on the south side of the La Jolla peninsula, but minimize socioeconomic impacts.	None specified
Ocean Beach SMCA	None Specified	This MPA is designed in conjunction with the adjacent SMR to be part of the backbone of high protection MPAs. The regulations in this MPA allow for pier fishing, which occurs from the Ocean Beach pier included in this MPA.	This SMCA is design to act in concert with the Sunset Cliffs SMR. It allows for sports fishing from the Ocean Beach pier only. An SMCA was defined separate from the Sunset Cliffs SMR to earn a high level of protection from the SMR. All DFG regulations for sport fisheries from piers would apply, however, there no take is allowed from shore or from boat.

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Sunset Cliffs SMR	66917	South Mainland	The northern boundary is supposed to be near or adjacent to the Ocean Beach pier, at 32 44.7. The southern boundary is approximately where Navy Base Point Loma begins at 32 42.5 and is the start of Navy property onshore.	SMR	very high	All take is prohibited	None specified
Cabrillo SMR	66721	South Mainland	North boundary is 32 40.6, west boundary is 117 15, south boundary is 32 39.7, and the east boundary is 117 14.3	SMR	very high	All take is prohibited	None specified
Sweetwater Marsh SMR	66715	South Mainland	Boundary follow the edge of the marsh habitat	SMR	very high	All take is prohibited	None specified
South San Diego Bay SMCA	66714	South Mainland	Boundary comes straight off of the jetty to a major line of lat/long.	SMCA	moderate low	Prohibits all recreational take except take of barred sand bass, spotted sand bass, and halibut by hook and line. No restrictions other than no fish can be retained. Recreational catch and release only. Prohibits all commercial take.	None specified

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Sunset Cliffs SMR	G1: (O-1,O-3,O-4,O-5), G2: (O-1,O-2,O-3,O-4), G3: (O-1,O-2,O-3), G4: (O-1,O-2), G5: (O-1,O-2,O-3,O-5), G6: (O-1,O-3,O-4)	This is part of the backbone of reserves in the network. It captures part of a large persistent kelp bed and associated species. The SMR is intended to be at least 9 square miles and a backbone SMR.	<p>The SMR is situated to avoid the Ocean Beach pier. The constraints of avoiding the Navy Base and the pier necessitated using tenths of minutes for the northern and southern boundaries.</p> <p>This mpa encompasses part of the largest kelp forest on earth. It's proximity to Mission Bay and Ocean Beach make it easily accessible to non-consumptive users and consumptive users who wish to benefit from increased fish populations on the boundaries. Also, fishing interests including CPFV, urchin, lobster, are more intense in the southern part of the kelp forest. The placement of this mpa minimizes impacts to those fisheries, which also seem to largely be based out of San Diego harbor, to the south.</p> <p>Because this mpa bisects a large continuous kelp forest with decades of monitoring data, it also provides opportunities for robust scientific evaluation of the success of marine protected areas in kelp forests. It may also be relatively easy to enforce given its location near a harbor.</p>
Cabrillo SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3), G3: (O-1,O-2,O-3), G4: (O-1), G5: (O-1,O-2,O-3,O-5), G6: (O-1)	<p>Cabrillo National Monument has administrative jurisdiction in this area and is committed to managing the area in a manner consistent with the goals and values of a national park. No take is allowed in national parks. There are long term monitoring studies as well as valuable coastal access for non-consumptive users at the park.</p> <p>In addition to the clearly stated goals, objectives, and design considerations in marine map, Cabrillo National Monument has maintained a very successful enforcement program in the area since 1996. Peer reviewed scientific studies in the area have shown that invertebrates are larger, more abundant at Cabrillo than any other point on the mainland and more diverse because of this enforcement program. An SMR brings state regulations in line with the more stringent federal regulations already in place. In addition, the National Park Service is pursuing funding for additional rangers and equipment for enforcement and scientific monitoring from the sea.</p>	<ul style="list-style-type: none"> -Cabrillo has a 20 year long term monitoring study. -part of the area is maintained as a human exclusion zone -The National Park Service will aid in enforcement -A State Marine Reserve is consistent with the federal laws governing National Park Management
Sweetwater Marsh SMR	None Specified	This MPA is intended to meet Goal 3 objectives as well as habitat representation and replication goals for estuary and saltmarsh habitats	Revised to follow the shoreline.
South San Diego Bay SMCA	None Specified	<p>This MPA is intended to meet goal 3 objectives and habitat representation and replication for estuary and saltmarsh habitat.</p> <p>Sea turtles, sea horses, and least terns exist in the area.</p> <p>This MPA is also intended to promote public access to the south bay's unique fishery.</p>	<p>Considerations in this MPA include high recreational use, including proximity to the Chula Vista marina. There is also a powerplant intake in the area.</p> <p>Eelgrass restoration has occurred in this area.</p> <p>Catch and release fishing is commonly practiced in this area.</p> <p>Although catch and release brings certain enforcement challenges, these are addressed here. Shore access is limited to the riprap wall on the northern boundary. The nearby parking lot provides a vantage point for easy enforcement. A San Diego Harbor Police station is located within the nearby Chula Vista marina.</p>

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Tijuana Reef SMCA	66713	South Mainland	Latitude: 32. 34' to 32. 35' Longitude: MHTL to 117.09'	SMCA	moderate high	Prohibits all recreational take except of coastal pelagic finfish by dip net, pier fishing (in compliance with required DFG codes and regulations) and spearfishing for pelagic finfish, Pacific bonito, and White seabass. Prohibits all commercial take except of coastal pelagic seine bait fishing with a permit from the California Department of Fish and Game.	The City of Imperial Beach would be allowed to continue their beach replenishment and maintenance program. They would be made aware of the damage of kelp removal in beach grooming procedures.
Tijuana Reef SMCA (continued)							

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MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Tijuana Reef SMCA	G1: (O-5), G2: (O-4), G3: (O-2,O-3), G5: (O-1), G6: (O-1,O-2,O-3)	<p>The specific objective of the Tijuana River Mouth Cluster is to allow some pier and other fishing in addition to the rationale for the SMR included as follows:</p> <p>Research and monitoring opportunities at the proposed MPA connected with Tijuana River Estuary, a National Estuarine Research Reserve site, creates the most intact contiguous estuarine / marine complex in the Southern California bioregion. It provides a model for understanding estuarine / ocean dynamics, informs future adaptive management in estuary and ocean interface throughout the bioregion and encourages collaboration with core agencies, institutions, and international organizations. It can be expanded to other estuarine and marine systems providing a nexus between estuarine and coastal waters. The research component of the MLPA promotes understanding of estuarine and marine ecosystems in the California Bight.</p> <p>This is a stop over point on the Pacific Coast Flyway as it goes into Mexico.</p>	<p>The basic goals and objectives from the Tijuana River Mouth SMR are included in the SMR/SMCA cluster.</p> <p>The region adjacent to the proposed MPA cluster is the Tijuana River Estuary and the City of Imperial Beach. The estuary is the most intact and important estuarine system left in the Southern California bioregion and is a National Wildlife Refuge a NOAA National Estuarine Research Reserve, a State Park and a Ramsar Wetland of International Importance.</p> <p>This MPA cluster site is primarily delineated following Goal 3 and Objectives 2 and 3, plus goal 2, objective 4 and goal 5, objective 1 in the MLPA. The additional Reef shape accommodates recreational fishing and concerns voiced by the City of Imperial Beach.</p> <p>Goal 1, Objective 5 and Goal 6, Objectives 1, 2, and 3 are supported using the research approach in Goal 3. Goal 6 and Objective 3 emphasize the importance of ecological connectivity within and between regional components of the statewide network.</p>
Tijuana Reef SMCA (continued)		<p>The endangered California Least Tern is emblematic of connections between coastal zone habitats and nearshore zone at this site. There is concern about the live bait fishery impact on the tern and brown pelican foraging area. The MPA would include a river mouth delta, soft sediment, largest south coast region offshore cobble reef 3 by 3 km, major Barred Sand Bass spawning area, persistent kelp bed, surfgrass, freshwater plume; five key habitats included in SMR. Fish, like California halibut, rely on the estuary as a nursery returning to the marine environment later in life. Monitoring longshore ocean currents, larval migration and retention centers for unique species and fish populations from Mexican waters have great importance to Baja California and California. Sharing data is enhanced by a collaborative effort between researchers and institutions in both nations.</p>	<p>There is expanded opportunity to do comparative research in a SMR and a SMCA. This MPA cluster emphasizes the relationship between estuarine and marine systems and gives opportunity to evaluate impacted and nonimpacted areas.</p> <p>The Coastal Zone Management Act (CZMA) at the federal level and the Marine Life Protection Act (MLPA) at the state level both have interests in protecting, managing and monitoring marine and estuarine ecosystems in the Southern California bioregion from the Mexican border to Point Conception, California. The Tijuana River National Estuarine Research Reserve (TRNERR) is a NOAA/ California State Parks site. Establishment of an adjacent MPA will enhance the MLPA and CZMA process affording opportunity to work and collaborate with other agencies, organizations and research institutions in this bioregion to share data, research methodologies.</p>

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Tijuana Reef SMCA (continued)							
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MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Tijuana Reef SMCA (continued)		<p>This is the farthest point from San Diego harbor as it meets the southern US-Mexico boundary. It is the start of the Southern Coastal bioregion which extends to Point Conception.</p> <p>NOAA has established a vigorous research and monitoring program within the TRNERR, including long-term water quality, nutrient, and weather data collection. Recently, this effort has been expanded to other estuarine systems within the Bight to include long-term monitoring at Los Penasquitos Lagoon and a short-term, collaborative study (led by Southern California Coastal Water Research Project, SCCWRP) examining eutrophication in many southern California estuaries. Monitoring has also been occurring offshore in the area, including beach processes work by the Coastal Data Information Program, CDIP and nearshore monitoring conducted by Scripps Institution of Oceanography, SIO as part of the Southern California Coastal Ocean Observing System, SCCOOS effort.</p>	<p>Ultimately this will promote understanding of estuarine and marine ecosystems, successful restoration, monitoring, education of the public and decision makers, adaptive management, better enforcement, increased ecological integrity and enhanced biological productivity. There is an opportunity for enhanced interagency cooperation and management which is certainly needed in times of economic cut backs. Enforcement opportunities will be expanded to include the US Fish and Wildlife Service, NOAA, State of California Department of Parks and Recreation and with the designation of an MPA, ultimately the California Department of Fish and Game.</p> <p>Water quality is an ongoing issue at the estuary and the City of Imperial Beach. It is constantly addressed by both nations as they search for solutions. The International Boundary and Water Commission, EPA, cities of Imperial Beach on the US side of the Border, and Tijuana and Tecate in Mexico are all on the Management Authority at the TRNERR.</p>
Tijuana Reef SMCA (continued)		<p>This is already affording more precise details of the estuarine / marine system dynamic. Such a program would provide an excellent template to begin more detailed examination of the nexus between estuarine and coastal waters.</p> <p>The goals will be included as part of this cluster or a combination of the two delineations including the Tijuana River Mouth SMR and the Reef SMCA.</p> <p>This is a stop over point on the Pacific Coast Flyway as it goes into Mexico.</p>	<p>A concerted effort to work seamlessly across the border with agencies in the US including the Regional Water Quality Control Board is leading to success. There is now an operating international wastewater treatment plant online in the US. Two new plants in Tijuana have been added and a third plant will soon be completed. Dry-weather conditions in the system have dramatically improved, especially with the restoration of a hydrologic regime with little or no flow during dry months. This has been beneficial to the City of Imperial Beach and the TRNERR.</p> <p>The deposition of sediment will be permitted in the near shore zone adjacent to the TRNERR for any research, restoration, beach or dune nourishment projects including opening the mouth of the Tijuana River if it is blocked. This will be done in accordance with agency permitting.</p>
Tijuana Reef SMCA (continued)			<p>The City of Imperial Beach will be permitted to proceed with their beach nourishment program in accordance with agency permitting.</p> <p>The sandy beach within the boundary of the Tijuana Estuary provides critical nesting and foraging habitat for the endangered California Least Tern. This area has become increasingly important for protection and enhancement of this species population. Agencies, like the US Fish and Wildlife Service, responsible for protection of this species have become increasingly concerned about outside impacts that may create decreased population recruitment. It is imperative to be aware of potential impacts the bait fishing industry may have on this critical California Least Tern offshore foraging area. This will require research, monitoring and understanding impacts as a factor dictating the conditions of the permit.</p>

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Tijuana River Mouth SMR	66712	South Mainland	Latitude: 32. 32' to 32. 34' Longitude: MHTL to 117.09'	SMR	very high	All take is prohibited	None specified
Tijuana River Mouth SMR (continued)							
Tijuana River Mouth SMR (continued)							

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MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Tijuana River Mouth SMR	G1: (O-5), G3: (O-2,O-3), G6: (O-1,O-2,O-3)	Research and monitoring opportunities at the proposed MPA connected with Tijuana River Estuary, a National Estuarine Research Reserve site, creates the most intact contiguous estuarine / marine complex in the Southern California bioregion. It provides a model for understanding estuarine / ocean dynamics, informs future adaptive management in estuary and ocean interface throughout the bioregion and encourages collaboration with core agencies, institutions, and international organizations. It can be expanded to other estuarine and marine systems providing a nexus between estuarine and coastal waters. The research component of the MLPA enables better understanding of estuarine and marine ecosystems in the California Bight. The endangered California Least Tern is emblematic of connections between coastal zone habitats and nearshore zone at this site. There is concern about the live bait fishery impact on the tern and brown pelican foraging area.	<p>The region adjacent to the proposed MPA is the Tijuana River Estuary. It is the most intact and important estuarine system left in the Southern California bioregion and is a National Wildlife Refuge a NOAA National Estuarine Research Reserve, a State Park and a Ramsar Wetland of International Importance.</p> <p>This MPA site is primarily delineated following Goal 3 and Objectives 2 and 3 in the MLPA. The compromise in shape and size accommodates concerns voiced by commercial plus recreational commercial fishermen, shore fishermen, the City of Imperial Beach and military restrictions.</p> <p>Goal 1, Objective 5 and Goal 6, Objectives 1, 2, and 3 are supported using the research approach in Goal 3. Goal 6 and Objective 3 emphasize the importance of ecological connectivity within and between regional components of the statewide network. The research done in this MPA puts particular attention on the relationship between estuarine and marine systems.</p>
Tijuana River Mouth SMR (continued)		<p>The MPA would include a river mouth delta, soft sediment, largest south coast region offshore cobble reef 3 by 3 km, major Barred Sand Bass spawning area, persistent kelp bed, surfgrass, freshwater plume; five key habitats included in SMR. Fish, like California halibut, rely on the estuary as a nursery returning to the marine environment later in life. Monitoring longshore ocean currents, larval migration and retention centers for unique species and fish populations from Mexican waters have great importance to Baja California and California. Sharing data is enhanced by a collaborative effort between researchers and institutions in both nations. This is the farthest point from San Diego harbor as it meets the southern US-Mexico boundary. It is the start of the Southern Coastal bioregion which extends to Point Conception.</p> <p>NOAA has established a vigorous research and monitoring program within the TRNERR, including long-term water quality, nutrient, and weather data collection.</p>	<p>The Coastal Zone Management Act (CZMA) at the federal level and the Marine Life Protection Act (MLPA) at the state level both have interests in protecting, managing and monitoring marine and estuarine ecosystems in the Southern California bioregion from the Mexican border to Point Conception, California. The Tijuana River National Estuarine Research Reserve (TRNERR) is a NOAA/ State Parks site. Establishment of an adjacent MPA will enhance the MLPA and CZMA process affording opportunity to work and collaborate with other agencies, organizations and research institutions in this bioregion to share data, research methodologies. Ultimately this will promote understanding of estuarine and marine ecosystems, successful restoration, monitoring, education of the public and decision makers, adaptive management, better enforcement, increased ecological integrity and enhanced biological productivity.</p>
Tijuana River Mouth SMR (continued)		<p>Recently, this effort has been expanded to other estuarine systems within the Bight, including long-term monitoring at Los Peñasquitos Lagoon and a short-term, collaborative study (led by Southern California Coastal Water Research Project, SCCWRP) examining eutrophication in many southern California estuaries.</p>	<p>There is an opportunity for enhanced interagency cooperation and management which is certainly needed in times of economic cut backs. Enforcement opportunities will be expanded to include the US Fish and Wildlife Service, NOAA, State of California Department of Parks and Recreation and with the designation of an MPA, ultimately the California Department of Fish and Game.</p>

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Tijuana River Mouth SMR (continued)							
Tijuana River Mouth SMR (continued)							
Tijuana River Estuary SMR	7291	South Mainland	See MarineMap	SMR	very high	All take is prohibited	None specified
Arrow Point-Lion's Head SMCA	67056	East Channel Islands	Boundaries: Landmark (Arrow Point) to Landmark (Lionshead).	SMCA	moderate low	Prohibits all recreational take except of kelp bass, barred sand bass, sheephead, spotted sand bass, pelagic finfish, pacific bonito, white seabass, and halibut by hook and line, and shorefishing using hook and line. Prohibits all commercial take except of swordfish by harpoon.	None specified

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MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Tijuana River Mouth SMR (continued)		Monitoring has also been occurring offshore in the area, including beach processes work by the Coastal Data Information Program, CDIP and nearshore monitoring conducted by Scripps Institution of Oceanography, SIO as part of the Southern California Coastal Ocean Observing System, SCCOOS effort. This is already affording more precise details of the estuarine / marine system dynamic. Such a program would provide an excellent template to begin more detailed examination of the nexus between estuarine and coastal waters. This is a stop over point on the Pacific Coast Flyway going into Mexico.	Water quality is an ongoing issue. It is constantly addressed by both nations as they search for solutions. The International Boundary and Water Commission, EPA, cities of Tijuana and Tecate, Mexico are on the Management Authority at the TRNERR. A concerted effort to work seamlessly across the border with agencies in the US including the Regional Water Quality Control Board is leading to success. There is now an operating international wastewater treatment plant on line. Two new plants in Tijuana have been added and a third plant will soon be completed. Dry-weather conditions in the system have dramatically improved, especially with the restoration of a hydrologic regime with little or no flow during dry months. The sandy beach within the boundary of the Tijuana Estuary provides critical nesting and foraging habitat for the endangered California Least Tern.
Tijuana River Mouth SMR (continued)			This area has become increasingly important for protection and enhancement of this species population. Agencies, like the US Fish and Wildlife Service, responsible for protection of this species have become concerned about outside impacts that may create decreased population recruitment. It is imperative to be aware of potential impacts including the bait fishing industry on this critical California Least Tern offshore foraging area as well as the beach. This will require research and monitoring to understand these impacts. The deposition of sediment will be permitted in the near shore zone adjacent to the TRNERR for any research, restoration, beach or dune nourishment projects including opening the mouth of the Tijuana River if it is blocked. This will be done in accordance with agency permitting. The City of Imperial Beach will be permitted to proceed with their beach nourishment program in accordance with agency permitting.
Tijuana River Estuary SMR	None Specified	The main purpose of this MPA is to protect estuarine habitats and associated species in the Tijuana River Estuary.	This MPA would be designed adjacent to an MPA at the mouth of the estuary, where leopard sharks aggregate.
Arrow Point-Lion's Head SMCA	G1: (O-4,O-5), G2: (O-1), G3: (O-1), G5: (O-1,O-2,O-4)	Protect invertebrate populations in a heavily impacted area. Protect and help prevent further decline of the lobster population on the front side of Catalina. Close proximity to the Wrigley Institute (within small boating boundaries-set by the university). Great opportunity for MPA research and education. Help promote recovery of the California Abalone Fishery- specifically green abalone. Allow safe refuge for California Spiny Lobster. Will be used for research and education: compare SMR at WMSC to open area Isthmus reef and Bird Rock, and SMCA that protects inverts however allow fishing only.	None specified

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MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Level of Protection	Proposed Take Regulations	Other Proposed Regulations
Catalina Harbor SMCA	67194	East Channel Islands	Southern boundary is 33 25.3	SMCA	low	Allows all recreational and commercial take, EXCEPT prohibits commercial purse seine for squid.	None specified
Santa Catalina Marine Science Center SMR	67055	East Channel Islands	Eastern Boundary - A line from the island at 118 27.0' due north to 33 27.0'/118 27.0' Northern Boundary - From 33 27.0'/118 27.0' head due west along the 33 27.0' line to 33 27.0'/118 29.0' "Western" Boundary - From 33 27.0'/118 29.0' make a direct line, south west, to landmark.	SMR	very high	All take is prohibited	No Anchorage in SMR to protect scientific instruments and benthic substrate
Long Point SMCA	67163	East Channel Islands	Western Boundary - A line running due north from Little Gibraltar to the state water boundary. Extends from the western boundary of the Long Point SMR. Southern Boundary - A Line running due east from Long Point to the state water boundary. It lines up with the southern line at Long Point SMR	SMCA	high	Prohibits all recreational take except spearfishing for Pacific bonito and dip net for market squid and coastal pelagic finfish. Prohibits all commercial take except of Pacific bonito (by pelagic seine or spearfishing) and pelagic seine for market squid and coastal pelagic finfish.	None specified
Long Point SMR	67054	East Channel Islands	Western boundary - Little Gibraltar Point due north to 33 25.5' Northern Boundary - At 33 25.5' to 118 21.5' Eastern Boundary - 118.21.5' to a line running due south to Long Point Southern Boundary - A line running due north from Long Point to 33 25.5	SMR	very high	All take is prohibited	None specified

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Catalina Harbor SMCA	None Specified	<p>Includes important habitats, including eelgrass beds, salt marsh, and mud flats. largest salt marsh on channel islands. Protects squid by prohibiting purse seining.</p> <p>Protect squid nests in areas that could have possible gear interaction Commercial squid replenishment area. First step to encourage water quality improvement prior to potential ASBS designation in the future Education Outreach opportunities for the Little Red School House (Two Harbors) and WMSC.</p>	A lot of purse seining occurs here. Enhancement projects in this area.
Santa Catalina Marine Science Center SMR	G1: (O-2,O-4), G3: (O-2,O-3), G4: (O-1), G5: (O-4)	Research and Education. Protect key species including surf grass (Phylospadix)and eel grass (Zostera marina). Protect species likely to benefit, including: calico bass, sheephead, barred sand bass, and ocean white fish. Provide benefits to federally listed special status species, including two species of cormorants, brown pelicans, California sea lion, harbor seal, black oyster catcher, garibaldi, green abalone.	None specified
Long Point SMCA	None Specified	Includes nearshore habitats near long point.	None specified
Long Point SMR	G1: (O-4), G2: (O-1), G4: (O-1), G5: (O-1), G6: (O-3)	Italian Gardens and Goat Harbor are both ASBS reference sites for their pristine waters. Giant Seabass aggregating area. Meets size guidelines for MPA size. Protect Kelp forest habitat and species likely to benefit, including calico bass and California sheephead. Protect key habitats and species, including white abalone habitat, Pelagophycus and black sea bass habitat.	None specified

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Farnsworth Bank SMCA	67046	East Channel Islands	Boundaries - L shaped MPA; MPA starts off shore of China Point SMR Northern Boundary - A line at 33 21.0 from 118 29.5 to 118 32.0 Western Boundary - A line starting at 33 21.0/118 32.0 south to the state water boundary Southern Boundary - A line starting at 33 18.0/118 24.0' due west to state water boundary. Eastern Boundary - 33 18.0/118 24.0' due north to 33 18.5/118 24.0' From 33 18.5/ 118 24.0' due west, following the China Point SMR southern boundary, to 118 29.5' From 33 18.5/118 29.5' due north, along the western boundary of the China Point SMR, to 33 21.0/118 29.5'	SMCA	high	Prohibits all recreational take except spearfishing for Pacific bonito and dip net for coastal pelagic finfish. Prohibits all commercial take except of Pacific bonito (by pelagic seine or spearfishing) and pelagic seine for coastal pelagic finfish.	None specified
China Point SMR	67050	East Channel Islands	Northern Boundary - 33 21.0' due west to 118. 29.5' Western Boundary - 118 29.5' to 33 18.5' Southern Boundary - 33 18.5' to 118 24.0' Eastern Boundary - 118 24.0' due north to landfall	SMR	very high	All take is prohibited	None specified
Casino Point SMR	7243	East Channel Islands	MPA drawn on existing buoys that currently demarcate an informal MPA	SMR	very high	All take is prohibited	None specified
Lovers Cove SMCA	5521	East Channel Islands	MPA modified to use straight lines to enhance enforcement.	SMCA	low	Prohibits all recreational take. Prohibits all commercial take except for kelp and finfish.	None specified
Begg Rock SMR	7272	West Channel Islands	Includes all state waters surrounding Begg Rock.	SMR	very high	All take is prohibited	None specified
San Clemente Pending Military Closure 1	67071	East Channel Islands	See MarineMap	Undesignated	N/A	None Specified	None specified
San Clemente Pending Military Closure 2	67072	East Channel Islands	See MarineMap	Undesignated	N/A	None Specified	None specified
Richardson Rock SMR	7244	West Channel Islands	None	SMR	very high	All take is prohibited	None
Judith Rock SMR	7255	West Channel Islands	None	SMR	very high	All take is prohibited	None
Harris Point SMR	7245	West Channel Islands	None	SMR	very high	All take is prohibited	None

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Farnsworth Bank SMCA	None Specified	This MPA protects offshore habitats, including the Farnsworth Bank. Protect key and unique habitats, including an under water pinnacle at Farnsworth Banks. Protect key and unique species, including purple coral.	None specified
China Point SMR	None Specified	This MPA is designed to protect nearshore habitats near China Point. Protect kelp forest habitat and species likely to benefit, including calico bass and California sheephead. Protect seasonal squid egg nests in shallow inshore waters. Is a seabass feeding area. Recover opportunity for an intact trophic cascade location.	None specified
Casino Point SMR	G3: (O-1,O-2,O-3)	Include locally enforced protected area. Designed to meet Goal 3 of MLPA. Protect habitat and fish for divers. MPA/SMR Education Outreach- Goal 3	None specified
Lovers Cove SMCA	G1: (O-5), G2: (O-2), G3: (O-1,O-2,O-3), G5: (O-1,O-2,O-4)	Maintains existing MPA protection with more enforceable boundaries. MPA/SMR Education Outreach- Goal 3.	None specified
Begg Rock SMR	None Specified	Protect subtidal habitats around Begg Rock.	Consider military uses in this area.
San Clemente Pending Military Closure 1	None Specified	This is an APPROXIMATE polygon representing the Federal closure on San Clemente Island called SWAT-1	None specified
San Clemente Pending Military Closure 2	None Specified	This is an APPROXIMATE polygon representing the Federal Closure located on the east side of San Clemente Island called SWAT-2.	None specified
Richardson Rock SMR	None Specified	None	None
Judith Rock SMR	None Specified	None	None
Harris Point SMR	None Specified	None	None

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South Point SMR	7254	West Channel Islands	None	SMR	very high	All take is prohibited	None
Carrington Point SMR	7246	West Channel Islands	None	SMR	very high	All take is prohibited	None
Skunk Point SMR	7256	West Channel Islands	None	SMR	very high	All take is prohibited	None
Painted Cave SMCA	7251	Mid Channel Islands	None	SMCA	moderate low	Prohibits all recreational take except of lobster (by hoop net or diving) and spearfishing for pelagic finfish. Prohibits all commercial take except of lobster (by trap)	None
Gull Island SMR	7252	Mid Channel Islands	None	SMR	very high	All take is prohibited	None
Scorpion SMR	7253	Mid Channel Islands	None	SMR	very high	All take is prohibited	None
Footprint SMR	7247	Mid Channel Islands	None	SMR	very high	All take is prohibited	None
Anacapa Island SMCA	7249	Mid Channel Islands	None	SMCA	moderate low	Prohibits all recreational take except of lobster (by hoop net or diving) and spearfishing for pelagic finfish. Prohibits all commercial take except of lobster (by trap)	None
Anacapa Island SMR	7248	Mid Channel Islands	None	SMR	very high	All take is prohibited	None
Santa Barbara Island SMR	7250	Mid Channel Islands	None	SMR	very high	All take is prohibited	None

SMCA = state marine conservation area SMP = state marine park SMR = state marine reserve SMRMA = state marine recreational management area

Bioregions:

1. North Mainland (Point Conception to Marina Del Rey)
2. South Mainland (Marina del Rey to the U.S.-Mexico border)
3. West Channel Islands (San Miguel, Santa Rosa and San Nicolas islands)

4. Mid-Channel Islands (Santa Cruz, Anacapa and Santa Barbara islands)
5. East Channel Islands (Santa Catalina and San Clemente islands)

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South Point SMR	None Specified	None	None
Carrington Point SMR	None Specified	None	None
Skunk Point SMR	None Specified	None	None
Painted Cave SMCA	None Specified	None	None
Gull Island SMR	None Specified	None	None
Scorpion SMR	None Specified	None	None
Footprint SMR	None Specified	None	None
Anacapa Island SMCA	None Specified	None	None
Anacapa Island SMR	None Specified	None	None
Santa Barbara Island SMR	None Specified	None	None

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Existing MPA Name	Retain (no changes to boundaries or regulations)	Modify (included with boundary or regulation change)	Remove (not included)
Refugio SMCA			Remove
Goleta Slough SMP		Modify regulations. Replace with Goleta Slough SMR	
Big Sycamore Canyon SMR			Remove
Abalone Cove SMP		Modify boundaries and regulations. Replace with Point Vicente SMR.	
Point Fermin SMP	Retain		
Bolsa Chica SMP	Retain		
Upper Newport Bay SMP	Retain		
Robert E Badham SMCA		Modify boundaries and regulations. Replace with Laguna North SMCA.	
Crystal Cove SMCA		Modify boundaries and regulations. Replace with Laguna North SMCA.	
Irvine Coast SMCA		Modify boundaries and regulations. Replace with Laguna North SMCA.	
Heisler Park SMR		Modify boundaries. Replace with Laguna SMR.	
Laguna Beach SMCA		Modify boundaries. Replace with Laguna SMR and Laguna South SMCA.	
South Laguna Beach SMCA		Modify boundaries. Replace with and Laguna South SMCA.	
Niguel SMCA		Modify boundaries. Replace with and Laguna South SMCA.	
Dana Point SMCA		Modify boundaries. Replace with and Laguna South SMCA.	
Doheny SMCA			Remove
Doheny Beach SMCA			Remove
Buena Vista Lagoon SMP			Remove (per Department of Fish and Game guidance)
Agua Hedionda Lagoon SMR	Retain		
Batiquitos Lagoon SMP		Modify boundaries and regulations. Replace with Batiquitos Lagoon SMR.	
Encinitas SMCA		Modify regulations.	
Cardiff-San Elijo SMCA			Remove
San Elijo Lagoon SMP			Remove
San Dieguito Lagoon SMP		Modify boundaries and regulations. Replace with San Dieguito Lagoon SMR.	
San Diego-Scripps SMCA	Retain		
La Jolla SMCA		Modify regulations. Replace with La Jolla SMR.	
Mia J Tegner SMCA		Modify boundaries and regulations. Replace with Cabrillo SMR.	

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Catalina Marine Science Center SMR		Modify boundaries. Replace with Santa Catalina Marine Science Center SMR.	
Farnsworth Bank SMCA		Modify boundaries and regulations.	
Lover's Cove SMCA		Modify boundaries.	
Richardson Rock SMR	Retain (per Fish and Game Commission Guidance)		
Judith Rock SMR	Retain (per Fish and Game Commission Guidance)		
Harris Point SMR	Retain (per Fish and Game Commission Guidance)		
South Point SMR	Retain (per Fish and Game Commission Guidance)		
Carrington Point SMR	Retain (per Fish and Game Commission Guidance)		
Skunk Point SMR	Retain (per Fish and Game Commission Guidance)		
Painted Cave SMCA	Retain (per Fish and Game Commission Guidance)		
Gull Island SMR	Retain (per Fish and Game Commission Guidance)		
Scorpion SMR	Retain (per Fish and Game Commission Guidance)		
Footprint SMR	Retain (per Fish and Game Commission Guidance)		
Anacapa Island SMCA	Retain (per Fish and Game Commission Guidance)		
Anacapa Island SMR	Retain (per Fish and Game Commission Guidance)		
Santa Barbara Island SMR	Retain (per Fish and Game Commission Guidance)		
Arrow Point to Lion Head Point Special Closure		Modify boundaries and regulations. Replace with Arrow Point-Lion's Head SMCA.	

SMCA = state marine conservation area SMP = state marine park SMR = state marine reserve