

**California MLPA South Coast Study Region**  
**MPA Options for Consideration and Review by BRTF: Description of San Diego MPA Options**  
*Created October 22, 2009; File revised Oct. 30, 2009*

Option	MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	LoP	Proposed Take Regulations	Other Proposed Regulations
Options 1, 2, and 3	Swami's SMCA	75622	South Mainland	North: 33 02.7' South: 33 00.5' East: MHTL West: State waters line	SMCA	high	The take of all living marine resources is prohibited except the recreational take of Pelagic finfish by Spearfishing.	Designation is not intended to impede beach nourishment borrowing and receiving activities. It is not the intent of this MPA to impede ongoing Clean Water Act mandated monitoring, maintenance and marine life sampling for pollutant effects associated with the San Elijo sewer outfall.
	Swami's SMCA (continued)	75622						
	Swami's SMCA (continued)	75622						
Options 1, 2, and 3	San Elijo Lagoon SMR	75623	South Mainland	Extent of estuary within state waters. Seaward or west boundary is at the west side of Highway 1 Bridge.	SMR	very high	Take of all living marine resources is prohibited.	Designation is not intended to impede protection, restoration, maintenance or management activities including estuary mouth opening, scientific research, dune restoration, deposition of sediment and related activities as needed. Boating, swimming, wading, and diving not related to the activities described above are prohibited. Other restrictions exist regarding allowed management activities.

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Options 1, 2, and 3	Swami's SMCA	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-2,O-3,O-4), G3: (O-1,O-2,O-3), G4: (O-1,O-2), G5: (O-3,O-4,O-5), G6: (O-3,O-4)	To protect habitat and species biodiversity. This SMCA protects and replicates the closest persistent kelp forest/surfgrass habitat and associated species south of the Palos Verdes SMR, to meet size and spacing guidelines. It adds connective resilience to the macro-algae ecosystem's food web function, while preserving a naturally bio-diverse biological interaction with the permanently open outlet of San Elijo Lagoon.	SMCA meant to be SMP if a MLPA-compatible moderate-high LOP State Park mission statement evolves for this area (current State Park mission statement includes activities not consistent with a moderate-high LOP). MPA boundaries off the full minute to avoid two popular State Beaches at Moonlight and Cardiff-Seaside with their extensive parking lots. This MPA incorporates two existing ocean SMCA's, fronting state beaches, at Encinitas and San Elijo and a large campground catering mostly to surfers, attracted by a dozen reef-shaped surf spots. There are multiple public access points and a dozen great surf spots, Native American submerged cultural sites, large parking lots serving beach-tourism based local economies including retail surf shops and manufacturing, restaurants and hotels, close to UCSD, Palomar and Mira Costa Colleges.
	Swami's SMCA (continued)			<p>The south boundary was sited to avoid, to the extent possible, the 1/4 mile buffer around the sewer outfall. MPA is SAT minimum ~9 square miles to minimize impacts to Oceanside harbor fishing efforts. This MPA completes habitat replication requirement for SD county in conjunction with South La Jolla Reef SMR. Swamis allows the array to meet spacing guidelines minimal distance for 8 out of 12 habitat types for spacing in the bioregion.</p> <p>MPA protects two reefs with persistent kelp forests and extensive surfgrass habitat, contiguous with the large sandy area fronting San Elijo Lagoon that was historically a consistent producer of halibut, sand bass, grunion, sharks, rays and all other sandy habitat species. The flat sandy-conglomerate deposit reefs in North San Diego county do not have the vertical relief or rock garden variety of the study areas finest at La Jolla, are less biodiverse and require larger areas to capture species for a lifecycle.</p>
	Swami's SMCA (continued)			<p>But their extensive kelp and surf grass beds are important for all larvae settlement, retention, protection and juvenile growth, and favored lobster habitat.</p> <p>It is not the intent of this MPA to impede beach nourishment borrowing and receiving activities. It is not the intent of this MPA to impede ongoing Clean Water Act mandated monitoring, maintenance and marine life sampling for pollutant effects associated with the San Elijo sewer outfall.</p>
Options 1, 2, and 3	San Elijo Lagoon SMR	G1: (O-2,O-3), G2: (O-1), G3: (O-3), G4: (O-1,O-2), G5: (O-3,O-5), G6: (O-3,O-4)	<p>Protects important nursery habitat, ecological processes and provides research opportunity. This designation achieves representation and protection of a healthy and permanently tidally influenced lagoon, and links adjacent or nearby marine habitats together as a protected ecological unit. Lagoon is an important resting, stopover and feeding site for an array of migratory birds and waterfowl.</p> <p>Protects important habitat types and ecological processes such as nutrient cycling, larval exchange, and food supply. Protects nursery habitats for marine species. Provides unique research opportunities for study into relationship of estuarine and marine ecosystems.</p>	<p>Currently no boat access is allowed. An outstanding array of management and stewardship infrastructure exists including CDFG, County of San Diego, San Elijo Lagoon Conservancy. Provides unique research opportunities for study into relationship of estuarine and marine ecosystems. Forthcoming guidance from department managers of adjacent ecological reserve is intended to be incorporated relative to allowed take.</p> <p>Designation is not intended to impede protection, restoration activity including sediment removal/deposition as needed, and maintenance management (including estuary mouth opening or re-opening).</p>

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Options 1, 2, and 3	San Diego-Scripps Coastal SMCA	75624	South Mainland	North: 32 53' South: 32 52' East: MHTL West: 117 16.4' (Tenth of a minute line that anchors at Point La Jolla.)	SMCA	moderate low	The take of all living marine resources is prohibited except the recreational take of Coastal pelagic finfish by hook and line. Purpose is to allow the taking of bait fish by jigging in the Scripps Pier shadows where they congregate. They do not use dip nets, the only listed method for the target species in Marine Map.	Designation is not intended to impede pier maintenance or research activities, scientific collection by SIO/UCSD, the Southwest Fisheries Science Center and Birch Aquarium or laboratory tank ocean water intake and discharge activities by these entities.
	San Diego-Scripps Coastal SMCA (continued)	75624						
	San Diego-Scripps Coastal SMCA (continued)	75624						
	San Diego-Scripps Coastal SMCA (continued)	75624						

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Options 1, 2, and 3	San Diego-Scripps Coastal SMCA	G1: (O-2,O-3,O-4), G2: (O-3), G3: (O-1,O-2), G4: (O-1), G5: (O-4,O-5), G6: (O-3,O-4)	Protects most of the unique Scripps Canyon branch of La Jolla's submarine canyon system and associated species biodiversity, and the southern-most natural California mussel bed in the study region. Provides for Goal 3 opportunities.	San Diego-Scripps Coastal SMCA forms a cluster with the Matlahuayl SMR and extends from its northern and western borders, adding another 1.45 sq mi to the cluster for critical additional protection of complementary key food web habitats and biodiversity. Replaces the existing ASBS-designated San Diego-Scripps SMCA, expanded to include the 1972 UCSD 800 acre submerged lands lease, which encompasses most of the unique Scripps Canyon branch of La Jolla's submarine canyon system, fronting UCSD's terrestrial Scripps Coastal Reserve property. Birch Aquarium, Scripps Institution of Oceanography and UCSD have used Scripps Pier and Scripps Canyon for marine biology and oceanography research and teaching activities since 1957.
	San Diego-Scripps Coastal SMCA (continued)			Scripps Canyon is unique in the study area, a narrow, steep-walled, deep rock fissure approaching shore at a 90 degree angle, reaching a depth of 500 feet about twice the length of Scripps Pier offshore, interrupting and collecting the southward streaming Oceanside littoral cell's constant flow of sand, detritus and estuarine nutrients. The canyon is a reliable haven for a wide variety of deep water species in close proximity and trophic interaction with nearshore species assemblages. Detritus, mainly tangled kelp and surfgrass from north San Diego County, piles into a spacious, well-oxygenated mat on the canyon floor that provides both forage and shelter from predators for a host of small crustaceans - a rare circumstance that allows the mat to achieve one of the highest secondary production levels every recorded, with up to three million small crustaceans counted per cubic meter -
	San Diego-Scripps Coastal SMCA (continued)			forming a reliable and nutritious food web base for the highly productive La Jolla reef and Canyon ecosystem and fishery. This unique canyon has been an invaluable study opportunity and laboratory for research and teaching in Marine Biology, Ecology and Oceanography at UCSD/Scripps Institute of Oceanography, since 1957 and was designated a founding reserve in the UC Natural Reserve System (NRS) in 1965, and received ASBS designation in 1974. UCSD Regents purchased the available undeveloped watershed land upstream from Scripps Canyon for a reserve, and obtained an 800 acre underwater lease from the City of San Diego underwater park in 1971, that includes Scripps Canyon and extends north to the limits of the UC Reserve property line at the coast.
	San Diego-Scripps Coastal SMCA (continued)			Protection and ongoing long-term natural habitat restoration of the upland portion of the Scripps Coastal Reserve and its drainage into the shoreline mouth of Scripps Canyon, ensures control of non-point source surface run-off to bring water quality discharges up to ocean ASBS standards. There is current reserve monitoring and enforcement by SIO and Natural Reserve System (NRS) staff and docents, UCSD police, and La Jolla Lifeguards in conjunction with the DFG. Recommend DFG to consider MOU with Kumeyaay communities to create an educational and stewardship partnership MPA aimed at enhancing cultural, educational, and historical opportunities present at this site.

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Options 1, 2, and 3	Matlahuayl SMR	75625	South Mainland	North: 32 52' South: MHTL East: MHTL West: 117 16.4 (Aligned with Point La Jolla)	SMR	very high	Take of all living marine resources is prohibited.	Maintain existing restrictions regarding: boat launching areas and anchoring times. Designation is not intended to impede pier maintenance or research activities, scientific collection by SIO/UCSD, the Southwest Fisheries Science Center and Birch Aquarium or laboratory tank ocean water intake and discharge activities by these entities.
	Matlahuayl SMR (continued)	75625						
Options 1, 2, and 3	Tijuana River Mouth SMCA	75628	South Mainland	Boundaries set north of Tijuana outfall. From shore a straight line due west to 32 34.0 N 117 9.0 W then a straight line from 32 34.0 N 117 9.0 W to 32 32.6 N 117 9.0 W then a straight line due east from 32 32.6 N 117 9.0 W to shore eastern boundary is mean high tide	SMCA	high	The take of all living marine resources is prohibited except: 1. The recreational take of Coastal pelagic finfish by Dip net. 2. The commercial take of Coastal pelagic finfish by Pelagic round haul nets.	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 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.
Option 1	South La Jolla Reefs SMCA	75626	South Mainland	North: 32 degrees 50' South: 32 degrees 48' East: 117 degrees 19' West: State Waters limit	SMCA	high	Take of all living marine resources is prohibited.	This SMCA is not intended to and will not regulate current or future military activities. DFG and U.S. Department of Defense should coordinate regulatory language similar to that for Vandenberg SMR

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Options 1, 2, and 3	Matlahuayl SMR	G1: (O-1,O-2,O-4,O-5), G2: (O-1,O-3), G3: (O-1), G4: (O-1), G5: (O-1,O-4,O-5), G6: (O-3,O-4)	Protects an unique sheltered cove and varied reef structure and associated species, kelp forest and contiguous sandy bottom interface at the head of the La Jolla Submarine Canyon's southern branch. Current home to many large tame specimens of a wide variety of species.	<p>This ASBS area is famous for leopard shark breeding, southern most squid spawning and once-great abalone habitat. Heavily fished outside the reserve, a slight expansion to existing corner landmark and tenth of a minute will provide some incremental additional resident species protection. Adjusts existing SMCA boundaries to meet DFG guidelines and simplify take regulations for this well established small La Jolla Cove ASBS Reserve. Does not meet DFG guidelines to extend to state waters line because further expansion west would be detrimental to fishing.</p> <p>La Jolla Cove is the number one recreational ocean fishing and non-consumptive tourist destination in the south coast study area, serving millions of divers, kayakers, surfers, swimmers and paddlers. Safe kayak launch and the</p>
	Matlahuayl SMR (continued)			<p>only drive-on-beach small boat launch in region. Extensive parking and shoreline observation opportunities with many amenities and good access points along the proposed SMR. UCSD and SIO overlook. La Jolla, from Matlahuayl, means place of caves in the Kumeyaay language. (Not la joya or the jewel in Spanish, as is commonly believed.) The sea caves included in this SMR and other ceremonial and submerged sites are vital to the cultural heritage of the Kumeyaay.</p> <p>Recommend DFG to consider MOU with State Parks and Kumeyaay communities to create an educational and stewardship partnership MPA aimed at enhancing cultural, educational, and historical opportunities present at this site.</p>
Options 1, 2, and 3	Tijuana River Mouth SMCA	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. 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.	<p>This MPA site is primarily delineated following Goal 3, Objectives 2 and 3 in the MLPA. This shape accommodates recreational fishing and concerns voiced by the City of Imperial Beach. This MPA was sited specifically to avoid existing pipelines, in an effort to meet water quality guidelines.</p> <p>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>
Option 1	South La Jolla Reefs SMCA	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3), G3: (O-1,O-2), G4: (O-1,O-2), G5: (O-1,O-4,O-5), G6: (O-3,O-4)	Allows MOU for current and future military uses in SMCA, in accordance with CA Attorney General guidance, while providing cluster effect with adjacent SMR to complete the minimum size MPA required to comply with SAT guidance. Protects rare 30-100 meter reef habitat and associated species diversity.	Take regulations are identical to SMR for DFG enforcement feasibility.

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Option 1	South La Jolla Reefs SMR	75627	South Mainland	North: 32 50' (Little Point) South: 32 48' East: MHTL West: 117 19'	SMR	very high	Take of all living marine resources is prohibited.	This SMR is not intended to and will not regulate current or future military activities. DFG and U.S. Department of Defense should coordinate regulatory language similar to that for Vandenberg SMR.
	South La Jolla Reefs SMR (continued)	75627						
	South La Jolla Reefs SMR (continued)	75627						
Option 2	South La Jolla SMCA	75634	South Mainland	North: 32 49.5 South: 32 48.0 East: 117 19.0 West: <u>State waters line</u>	SMCA	high	Take of all living marine resources is prohibited.	This SMCA does not allow for any fishing and only allows for the continuation of Department of Defense activities.
Option 2	South La Jolla SMR	75635	South Mainland	North: 32 49.5 South: 32 48.0 East: MHTL West: 117 19.0	SMR	very high	Take of all living marine resources is prohibited.	

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Option 1	South La Jolla Reefs 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)	To protect habitats and species biodiversity. An essential backbone SMR, this La Jolla rocky reef complex is the largest and most biodiverse in the study region with the most vertical relief and variety of reef structure, from cobbles to boulders to fissures, cliffs, persistent kelp forest canopy, caves and corresponding species biodiversity. Protects the most important consolidated rocky reef replicate in the Southern coastal bio-region, extending from rocky shore to intertidal to 30m hard proxy, to rarest 30-100m reef to the state limit.	At 1.2 sq mi, the SAT-designated, rare 30 to 100 meter key rocky habitat, nearest to next replicate at Palos Verdes, included in this South La Jolla minimum sized SMR, is more abundant than in all the other study area coastal MPAs combined, and this SMR still leaves an equal amount of this rarest reef in north La Jolla open for commercial and recreational harvest. North boundary fixed at Little Point (32 50') to capture important persistent kelp replicate. South boundary set just north of Crystal Pier at Garnet Ave to allow pier fishing and make a recognizable MPA transition point on land. All SAT-listed key offshore habitats embrace this reef, making it a unique microcosm of the entire study region, including a deep sub-marine canyon with two shoreline branches, one hard and one soft bottomed.
	South La Jolla Reefs SMR (continued)			This productive rocky reef habitat SMR, isolated by spacious, mostly sandy terrain to the south and contiguous rocky reef to the north, allows contrasting edge fishing harvest environments for long term scientific evaluation and study, while leaving the most important kayak, shore, CPFV and commercial fishing area in La Jolla open. The prime fishing area off of La Jolla Cove is bounded on the north by a deep canyon and soft bottom which functions as a funnel for big-game pelagics, forage fish and a wide variety of sandy habitat and primary and secondary forage species to spill into the fishing zone, guaranteeing abundance for the traditional best La Jolla fishing grounds, while conserving the precious breeding and rearing habitats to the north and south necessary for sustainability.
	South La Jolla Reefs SMR (continued)			Consistent upwelling canyon nutrients from the north and three steady big river outflows to the south feed a biodiverse and highly productive food web. The La Jolla marine ecosystem is unmatched for beauty, clarity, water quality and biologic diversity, with a thriving local onshore economy historically focused on matchless coastal recreation and tourism. La Jolla is currently a non-consumptive tourist and recreational fishing mecca dependent on its vibrant nearshore marine ecosystem. Scripps Institute of Oceanography and UCSD overlook much of the SMR and can both monitor, study and help enforce the simple regulations.
Option 2	South La Jolla SMCA	G1: (O-3,O-5), G2: (O-1,O-3,O-4), G3: (O-2,O-3), G5: (O-1,O-2), G6: (O-1)	This SMR/SMCA cluster was specifically designed in part to: address socio-economic impacts and allow existing military activities to continue.	None specified
Option 2	South La Jolla 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), G6: (O-1,O-2)	This small SMR has been designed to provide protection for a portion of the most diverse and extensive representation of marine life and habitats within the entire South Coast study region. This biological hotspot includes dense kelp forest, rocky and sandy intertidal areas, rocky reefs, and the scarce hard 30 -100 meter habitat. It includes some of the oldest, long-term and well studied temperate marine systems with current research and education being conducted by UCSD, SCRIPPS, SIO, La Jolla Ecological Reserve, SDSU, and CRANE.	None specified

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Options 3 and 4	Ocean Beach Pier SMCA	75632	South Mainland	The area bounded by the following points: Originating at the MHHW line where it is adjacent to the intersection of Cape May Avenue and Spray street in San Diego California at 34° 45.1' N. Southward along the MHHW line to a point directly off the end of Narraganset Street. Thence generally Northwestward to a point at: 34° 45.1 N and 117° 15' W. Thence easterly along said latitude to the point of origination. These bounds are semantic in nature as the regulation change is across its diagonal bound is inconsequential. Fishing within this shape is restricted to fishing from the pier. This boundary cannot reasonably be accessed from the pier. Northeast boundary follows jetty to its terminus, then continues along the line of latitude.	SMCA	moderate high	The take of all living marine resources is prohibited except the recreational take of Pier fishing (any target) by Hook and line; Pier fishing (any target) by Hoop net; and Pier fishing (any target) by Dip net.	
Options 3 and 4	Sunset Cliffs SMR	75633	South Mainland	MPA boundaries: Western: 3nm offshore (117 17.000 W) Eastern: Mean high tide line Northern: 32 45.100 N / MHT (lines up w/small rock jetty) Southern: 32 42.800 N / MHT (fence line along southern end of Sunset Cliffs Park)	SMR	very high	Take of all living marine resources is prohibited.	A contiguous SMCA allows all otherwise legal sportfishing from the existing (2009) recreational fishing pier within it (Ocean Beach Pier). Whereas the external boundaries of the MPA cluster explicitly meet feasibility guidelines, the boundary between them does not. Taken together though feasibility needs are met, as the regulation across the entire cluster is the same (No fishing from anywhere except the pier, as it exists in 2009). The boundary between
	Sunset Cliffs SMR (continued)	75633						them only serves to recognize that this shape on its own is large enough to provide a Very High level of protection to the organisms classed as "likely to benefit" that are within its boundaries.  DoD may perform training exercises for national defense in this area such as acoustic monitoring, those activities should be allowed to continue.

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Options 3 and 4	Ocean Beach Pier SMCA	G3: (O-1,O-2,O-3), G5: (O-1,O-3,O-4,O-5), G6: (O-1,O-2)	This MPA allows recreational all otherwise legal recreational fishing from Ocean Beach Pier within it. Its primary purpose is to provide regulatory feasibility to the Sunset Cliffs SMR with which it shares topology, while allowing the existing historical and legally supported recreational fishing that occurs there to continue.	None specified
Options 3 and 4	Sunset Cliffs SMR	G1: (O-1,O-2,O-3,O-4), G2: (O-2,O-4), G3: (O-1,O-2,O-3), G4: (O-1,O-2), G5: (O-2,O-3,O-4,O-5), G6: (O-2,O-3,O-4)	This MPA is complimentary to the Del Mar MPA and includes habitats not captured there, such as persistent kelp.  This SMR/SMCA cluster located on the northern end of Point Loma was designed to meet SAT size and spacing and habitat replications guidelines by capturing unique substrate and floral habitats, including rocky intertidal, deep water, persistent kelp, elk kelp, and surfgrass. Overlapping the northern third of one of California's largest persistent kelp beds, this SMR/SMCA cluster will have a net positive affect from spill-over into the adjacent kelp bed. It is located in close proximity to Scripps Institution of Oceanography and NMFS Southwest Fisheries Science Center, and avoids conflicts with Mission Bay and San Diego Bay harbor entrances.	A contiguous SMCA (Ocean Beach Pier SMCA) allows all otherwise legal sportfishing from the existing (2009) recreational fishing pier within it (Ocean Beach Pier). Whereas the external boundaries of the MPA cluster explicitly meet feasibility guidelines, the boundary between them does not. Taken together though feasibility needs are met, as the regulation across the entire cluster is the same (No fishing from anywhere except the pier, as it exists in 2009). The boundary between them only serves to recognize that this shape on its own is large enough to provide a Very High level of protection to the organisms classed as "likely to benefit" that are within its boundaries.  Point Loma is a very important area for San Diego and Mission Bay based ocean users. This closure negatively impacts harvesters of lobster, private boat anglers, and passenger fishing vessels.
	Sunset Cliffs SMR (continued)		The Pt Loma kelp bed is one of the largest off the California coastline. Protection afforded marine resources in the SMR will benefit marine populations in the surrounding large kelp beds, provide a protective buffer between the activities in Mission Bay and San Diego Harbor, and afford research opportunities in close proximity to Scripps Institution of Oceanography.  Key rationale for designation: a) Backbone SMR, b) Meets DFG feasibility criteria, c) Meets all six goals of the MLPA, d) Socioeconomic achieves protection of important species and habitats while limiting socioeconomic impacts on recreational and commercial fishing by leaving La Jolla area available for their fishing opportunity, e) Southern boundary avoids conflict with Dept of Defense research and development activities.	Sunset Cliffs State Marine Reserve (SMR) / Ocean Beach Municipal Pier State Marine Conservation Area (SMCA) Cluster  Key considerations Miles of Coverage: 2.6 miles shoreline, cluster is 9,689 square miles. Contains the following habitats/features: Depth range: 3' - 3,336', Shallow water habitat (<30 m), Mid-depth habitat (30-100 m), Deep water habitat (>100m), Hard bottom (<30m, 30-100m), Soft bottom (<30m, 30-100m, 100-200m, 200-300m), Extensive persistent kelp beds throughout the SMR, Surfgrass, Elk kelp, Rocky intertidal, Deep water rocky habitat. Species likely to benefit include lobster, sheephead, shallow water rockfish,  Goals/Objectives Achieved Under goals 1, 2 and 6, this creative SMR/SMCA meets the design guidelines developed by the Science Advisory Team (SAT) while minimizing negative

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	Sunset Cliffs SMR (continued)		Extending south beyond southern boundary of Sunset Cliffs Park overlaps military operations occurring in Categories A, B, C, and D. The SAT assessed category A (mine neutralization) and B (Research & Development) activities as potentially incompatible with the goals of the MLPA, f) SMR overlaps high value seabird foraging area, g) High value marine mammal foraging area (sea lions, coastal bottlenose dolphins, harbor seals), h)Allows recreational fishing from the Ocean Beach Municipal pier by all allowable methods of recreational take. This pier is particularly important to the community of subsistence fishermen who regularly fish from this pier, i) Protects very unique habitats including, persistent kelp, rocky intertidal, deep water rocky habitat, and surfgrass, j) SMR/SMCA does not overlap entrance to San Diego Harbor or Mission Bay, k) Creates unique research opportunity in close proximity to	<p>impacts to recreational, commercial and subsistence fishing communities. The Sunset Cliffs SMR and Ocean Beach Municipal Pier SMCA cluster forms the southernmost anchor to a comprehensive network of SMRs extending up the coastline to Pt Conception. This SMR/SMCA cluster will protect the natural biodiversity and rich abundance found in one of California's largest persistent kelp beds (objective 1).</p> <p>Preserving the structure, function, and integrity (objective 2) of this rich <i>Macrocystis pyrifera</i> kelp bed extending offshore to 3nm from the Ocean Beach Municipal pier in the north to the southern boundary of Sunset Cliffs Park to the south, this SMR/SMCA cluster will protect marine ecosystems from the rocky intertidal to deep water rocky habitat. Invertebrates, lobster, sheephead, white seabass, red urchins, crabs, sea cucumbers, and shallow</p>
	Sunset Cliffs SMR (continued)		Scripps Institution of Oceanography and NMFS Southwest Fisheries Science Center, l) Protects important grunion spawning ground, m)The north and south boundaries are placed at easily recognized landmarks.	<p>water rockfish will all benefit from the protection offered by a SMR designation. Not least of which, this SMR/SMCA cluster affords a very high level of protection to the very marine ecosystem sustaining the fish, invertebrate, marine mammal and shorebirds living in this area "the persistent, extensive giant kelp bed.</p> <p>Because the proposed SMR overlaps the northern one third of the Pt Loma kelp forest, restrictions on all extractions in the SMR will spill over to the surrounding kelp forest south along Pt Loma. This SMR will help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that have been depleted (objective 6).</p> <p>In consideration of goals 3 and 4 to improve recreational, educational, and study opportunities, manage these uses in a manner consistent with protecting biodiversity (goal 3), and protect unique marine life habitats in California waters</p>
	Sunset Cliffs SMR (continued)			<p>for their intrinsic value (objective 4), this SMR/SMCA cluster ensures that the rich intertidal to deep rocky habitats and delicate giant kelp ecosystem are preserved for posterity. Within close proximity to research organizations, this SMR/SMCA continues to afford scientific research opportunities literally in the backyard of Scripps Institution of Oceanography and NMFS Southwest Fisheries Science Center.</p> <p>In consideration of goal 5 requiring that California's MPAs have clearly defined objectives, effective management measures, adequate enforcement, and are based on sound scientific guidelines, this SMR/SMCA cluster a high level of protection to an extensive, persistent giant kelp bed while affording subsistence fishermen with the ability to retain access to the Ocean Beach pier for subsistence fishing. Boundaries for the SMR are clearly identified by well-known, visual landmarks, which facilitate effective management and enforcement of the SMR. SMCA overlapping the pier supports pier fishing only. Once again, this boundary is readily identified and managed since fishing in this area would only be conducted from the pier.</p>

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Option 4	San Dieguito Lagoon SMR	75629	South Mainland	All waters below the mean high tide line extending east from the San Dieguito River mouth to the Camino Real Bridge.	SMR	very high	Take of all living marine resources is prohibited.	Boating, swimming, wading, and diving are prohibited. Other management activities currently allowed will continue.  This SMR is not intended to restrict restoration and/or associated dredging activity. Dredging is required as part of the ongoing restoration managed by Southern California Edison as a mitigation project. Local volunteer programs assist in monitoring and oversight.
Option 4	Del Mar SMR	75630	South Mainland	MPA boundaries: North: 32 degrees 58.600 minutes (San Deguito Lagoon mouth West: State waters boundary South: 32 degrees 55.5 minutes (base of cliff at south end of beach parking lot) East: Mean high tide line	SMR	very high	Take of all living marine resources is prohibited.	Beach replenishment and dredging, and lagoon restoration are important activities that should be allowed to continue. It is our intent to ensure that the City of Del Mar is able to continue beach replenishment and dredging activities in the same locations and periodicity that they have been for years.
	Del Mar SMR (continued)	75630						Restoration projects such as the North park restoration project should be allowed to continue with appropriate permitting.

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Option	MPA Name	Regional Goals/ Objectives	Site Specific Rationale	Other Considerations
Option 4	San Dieguito Lagoon SMR	G1: (O-4), G2: (O-1,O-3), G3: (O-2,O-3), G4: (O-1,O-2), G5: (O-2,O-3,O-4,O-5)	Recently restored/mitigated wetland protection. Monitoring plans and local enforcement are provided by the mitigation by Southern California Edison. San Dieguito Lagoon provides breeding, foraging and resting areas for aquatic and terrestrial animals, and provides a vital link between the Multiple Species Habitat Conservation Plan and the nearshore protections provided by the Del Mar SMR.	This was originally an SMP but the managing board decided to disallow fishing in this area as part of the MLPA and has asked this recently mitigated lagoon be given the designation of a SMR.  This SMR is not intended to restrict restoration and/or associated dredging activity. Dredging is required as part of the ongoing restoration managed by Southern California Edison as a mitigation project. Local volunteer programs assist in monitoring and oversight.
Option 4	Del Mar SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-2,O-3), G3: (O-2,O-3), G4: (O-1,O-2), G5: (O-2,O-3,O-4,O-5), G6: (O-1,O-3,O-4)	This valuable SMR provides a hydrological link between two important estuaries, San Dieguito and Los Peñasquitos and is designed to protect key unique habitats including deepwater rock structures, pinnacles, and underwater headland. Located within only 12 miles of the Sunset Cliffs SMR, the Del Mar SMR supports habitats not located in the southern Sunset Cliffs SMR, and provides larval connectivity between the two SMRs. Adjacent to the submerged La Jolla deepwater canyon, the Del Mar SMR contains nutrient rich, upwelling waters critical to the marine ecosystem.	Concern about allowing sand replenishment in the northern part of the SMR. As in the north, strategy is to create as an SMR and state intent to allow replenishment. Alternative to Del Mar is Swamis, where habitats are close together, but has high impacts on Oceanside harbor.  MPA is out of normal vessel traffic lanes between Oceanside and Mission Bay. An MPA in this area will reduce the impact of poaching, pollution and inadvertent habitat destruction by transiting commercial and recreational vessels. Area is well marked by estuary mouths. Area provides a link between two important lagoons, one of which is presently being developed as a mitigation project. Area is substantially sheltered from the effects of winter storms by the presence offshore of Catalina and San Clemente islands. This SMR is adjacent to the existing Torrey Pines State Park. Entire SMR is visible from a single point on land for enforcement.
	Del Mar SMR (continued)		Key rationale for designation: a) Backbone SMR Site, b) Area abuts two important estuaries and ties together many habitats from shallow to deep, c) Compared to other regions in study area, this is one of the only areas that incorporate the true oceanic 100 fathom curve with rock structures and pinnacles open to water flow from the open ocean. d) The SAT indicated that hard 30-100m substrate is rare within the south coast study region and difficult to capture within MPA proposals. Del Mar SMR is one location where this 30-100m habitat can be captured. Work Group 2 has attempted to include 30-100m habitat within the Del Mar SMR but falls short of meeting replication threshold guidelines by 0.01 square miles. Upon review of the substrate data in this location, it appears that hard 30-100m substrate is likely present in an area of unmapped habitat,	Rocky inter-tidal, shallow rocky reef, and kelp habitats are not captured in this MPA. Due to extreme economic impact on the port of Oceanside these habitats could not be captured here by moving the northern boundary. Instead another MPA fifteen miles away in Point Loma was created specifically to capture the rocky reef and kelp habitat in this area.  Key considerations Miles of Coverage: 3.032 miles of shoreline, 14.45 square miles. Contains the following habitats/features: Depth range: 3â€™ to 3,336â€™, Southern end of hard bottom 30-100m and 100-3000m, Shallow water habitat (<30 m), Mid-depth habitat (30-100 m), Deep water habitat (>100m), Hard bottom (<30m, 30-100m, 100-3000m), Soft bottom (30-100m, 100-200m, 200-300m), Surfgrass, Beaches, Maximum kelp (by lifeguard station, pers.comm.), Deep water pinnacles

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	Del Mar SMR (continued)	75630						
	Del Mar SMR (continued)	75630						
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	Del Mar SMR (continued)		<p>e) It is an underwater headland, allowing large pelagic species, including swordfish, striped marlin, thresher sharks, white sharks, mako sharks, easy access to inshore feeding and spawning grounds. This is also true for benthic fauna, f) The Del Mar SMR falls slightly short of having enough 0-30m rock proxy to have a replicate. However, for all intended purposes this requirement is functionally met, as indicated by looking at the "predicted substrate" data layer within Marinemap, as there is a data gap in an area of predominant rocky bottom, g) The area provides Rockfish (Sebastes) spawning grounds, adult resting and feeding areas as well as larval settling area and juvenile feeding grounds. This MPA is complimentary to the Sunset Cliffs SMR/SMCA and captures habitats not included there including, deep 100-2000 meter rock, h) Incorporates very large grunion spawning ground,</p>	<p>Compliance with SAT Guidelines  Meets SAT size guidelines. Meets SAT guidelines for habitat replication for: Soft 30m proxy, Soft 30 to 100m, Soft 100 to 200m, Soft 200 - 3000m, Hard 30m proxy, Hard 30 to 100m, Hard 100 to 3000m, Surfgrass, Beaches. Meets SAT guidelines for Spacing: Exceeds spacing guidelines to Sunset Cliffs SMR is within 12 miles of the Del Mar SMR</p> <p>Goals/Objectives Achieved  MLPA goals 1, 2, 3 and 6 are uniquely supported with a SMR off Del Mar extending from 3nm offshore to the inland waters of the Del Mar lagoon. Protecting the natural diversity and abundance of marine life and ecosystems (objective 1). The Del Mar SMR creates recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and will manage the waters in a manner consistent with protecting and sustaining biodiversity (objective 2 and 3).</p>
	Del Mar SMR (continued)		<p>i) High value seabird foraging area, j) Marine mammal foraging area (sea lions, coastal bottlenose dolphins, harbor seals), k) Squid spawning area, l) Adjacent to submerged deepwater canyon, m) Submerged archaeological sites, n) Offshore connectivity to the San Dieguito lagoon</p>	<p>The Del Mar SMR overlaps the coastal lagoon, which connects to the San Dieguito River Park and Coast-to-Crest Trail. Starting from the ocean between Del Mar and Solana Beach, the trail stretches 55 miles to Volcan Mountain near Julian.</p> <p>In consideration to goal 6, which outlines a requirement to ensure that the state's MPAs are designed and managed as a network, the Del Mar is only 12 miles from the Sunset Cliffs SMR/Ocean Beach pier SMCA cluster. In addition, and quite significantly, the Del Mar SMR occurs adjacent to and within the boundaries of the City's Multiple Species Conservation Program (MSCP). The MSCP is a comprehensive, long-term habitat conservation planning program that covers approximately 900 square miles (582,243 acres) in southwestern San Diego County pursuant to the federal and California Endangered Species Acts and the California Natural Community Conservation Planning Act.</p>
	Del Mar SMR (continued)			<p>It has been developed cooperatively by participating jurisdictions/special districts in partnership with federal/state wildlife agencies, property owners, and representatives of the development industry and environmental groups. As with the MSCP, the SMR is designed on an ecosystem level, preserving habitat for multiple species rather than focusing efforts on one species at a time. Linking these two ecosystems in an integrated network of marine and terrestrial habitats and populations is an enormous contribution to the ongoing clearly-articulated and managed local, regional and State conservation efforts (objective 5).</p>

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	Del Mar SMR (continued)							
Option 4	La Jolla SMR	75631	South Mainland	Mean high tide line and straight lines connecting the following points in order: 32 degrees 51.86' N/117 degrees 15.28' W 32 degrees 51.86' N/117 degrees 16.25' W 32 degrees 51.22' N/117 degrees 16.17' W 32 degrees 51.07' N/117 degrees 16.40' W	SMR	very high	Take of all living marine resources is prohibited.	Boats may be launched and retrieved only in designated areas and may be anchored within the MPA only during daylight hours.
	La Jolla SMR (continued)	75631						
	La Jolla SMR (continued)	75631						

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	Del Mar SMR (continued)			<p>In consideration of goal 4 calling for the protection of unique marine life habitats in California waters for their intrinsic value, the Del Mar SMR is one of the only areas in the study region that incorporates the true oceanic 100 fathom curve with rock structures, pinnacles, and underwater headlands open to water flow from the open ocean. This unique and rich habitat adjacent to the La Jolla submarine canyon supports pelagic species, including swordfish, striped marlin, thresher sharks, white sharks, and mako sharks.</p> <p>As indicated above, work Group 2 contends that the missing 0.01 square miles of 30-100m hard substrate is likely present in an area of unmapped habitat within the Del Mar SMR. Work Group 2 has asked that staff raise this issue with the SAT evaluation habitat evaluation team, requesting credit for the rare habitat.</p>
Option 4	La Jolla SMR	G1: (O-1,O-2,O-3,O-4,O-5), G2: (O-1,O-3), G3: (O-1,O-2,O-3), G4: (O-1,O-2)	The La Jolla Cove SMR was designed to attribute a higher level of protection to a well-known, historic underwater ecological SMCA that has served as an icon of marine conservation in the community for decades. The SMR would include unique marine ecosystems, including La Jolla Canyon, upwelling, kelp forests, State-listed species, rocky shores and sandy beaches. Protected animals include Giant Seabass and leopard shark congregations. Close proximity to UCSD and Scripps Institute of Oceanography provides for ongoing education and monitoring opportunities. Buoys marking boundaries of the SMR are maintained by the City of San Diego lifeguard department via Weston Co.	<p>The La Jolla SMR would afford a very high level of protection to calico bass, sand bass, baracuda, bonita, yellowtail, shallow water rockfish, halibut, urchin, lobster, crab and coastal pelagic species such as squid, sardines, mackerel, anchovies, and occasionally highly migratory species of tuna. The SMR is fed by nutrient-rich upwelling waters from the deep submarine canyon.</p> <p>Although this SMR does not meet minimum size guidelines, and therefore does not contribute to habitat replication, it does preserve - quite significantly and effectively - unique habitats and species while avoiding devastating socio-economic impacts. Preservation of this SMR in concert with the Del Mar/San Dieguito Lagoon to the north and Sunset Cliffs SMR to the south contributes to a unique network of protection to representative rocky shores, soft and hard bottom habitats, kelp forest, and deep submarine canyon.</p>
	La Jolla SMR (continued)			Buoys mark the current boundaries of the underwater reserve. Several sculptures, signs, plaques, and local published literature contain the boundaries of this reserve. Concern has been raised by enforcement about the buoys marking the boundary. Conversations with lifeguard personnel revealed that buoy maintenance was delegated to the city parks agency for a short while recently, which failed to maintain the buoy system. Since that time the lifeguard department has resumed that responsibility and signed a contract for \$60,000 per year with a vendor to maintain the buoys. Additionally the style of buoys was changed to a system that withstands displacement. Two sets of buoys are maintained and they are rotated/repared on a regular schedule to provide reliable boundary markers. Please see external document for pictures of some new artwork depicting the reserve.
	La Jolla SMR (continued)			This SMR would protect a well-known, historic conservation area while minimizing severe, socio-economic impacts on thousands of marine stakeholders. Waters extending off the west and southwestern portions of the La Jolla peninsula are used extensively by commercial and recreational boaters, coastal pelagic finfish, lobster, groundfish and urchin fishermen, pelagic squid, sea kayaks, and divers. Containing readily assessable kayak boat launch sites, La Jolla offshore waters serve as one of the premier sites in the Southern California Bight for both consumptive and non-consumptive kayakers of all ages and experience.