

**Marine Life Protection Act Initiative
North Central Coast Project
Staff Summary of Area and Habitats in Draft Proposal 1 (EC)
February 1, 2008**

Overall Summary for Draft Proposal 1 (EC) (12/12/07 version)

Type of MPA ¹	# Proposed	Area (mi ²)	% of Study Region
State Marine Reserve (SMR) ²	15	96.28	12.62%
State Marine Park (SMP)	2	1.65	0.22%
State Marine Conservation Area (SMCA)	9	92.85	12.17%
All MPAs combined	26	190.78	25.00%

¹ Note: These are proposed marine protected area (MPA) designations, NOT levels of protection assigned by the MLPA Master Plan Science Advisory Team (SAT).

² Note: The SMR category groups together MPAs that are designated as SMR or SMRMA.

Summary of SMCAs by Protection Level for Draft Proposal 1 (EC) (12/12/07 version)

SMCA Protection Level	# Proposed	Area (mi ²)	% of Study Region
High Protection	3	31.82	4.17%
Moderate-High Protection	4	41.34	5.42%
Moderate Protection	1	14.19	1.86%
Low Protection	1	5.50	0.72%
All SMCAs combined	9	92.85	12.17%

Individual MPAs in Draft Proposal 1 (EC) (12/12/07 version)

MPA Name	Size (mi ²)	Along-shore span (mi) ^A	Depth range (ft)
Point Arena SMR	2.57	3.0	0-122
Point Arena SMCA	9.42	3.0	59-324
Saunders Reef inshore SMCA	5.50	3.7	0-167
Saunders Reef offshore SMCA	7.79	3.7	143-278
Del Mar Landing SMP	0.09	0.3	0-55
Sea Ranch to Salt Point SMR	37.15	9.5	0-298
Salt Point SMP	1.56	1.9	0-226
Russian River SMR	0.68	2.4	0-43
Bodega Head SMR	6.94	4.0	0-199
Bodega Head SMCA	10.13	4.5	111-266
Estero de Americano SMRMA	0.14	1.2	0-10
Estero De San Antonio SMRMA	0.08	0.7	0-10
Clam Island SMRMA	0.22	0.3	0-15
Tomales Bay South SMRMA	1.47	2.5	0-10
Point Reyes Headland SMR	5.56	3.7	0-139
Point Reyes Headland SMCA	10.42	3.7	57-217
Drakes - Limantour Estero SMR	3.96	7.2	0-10
Double Point SMR	4.01	4.1	0-92
Double Point SMCA	11.02	4.1	62-150
Duxbury Reef SMCA	14.19	3.8	0-146
Bolinas Lagoon SMR	1.74	2.3	0-10

Fitzgerald SMR	10.33	3.7	0-163
Devil's Slide SMCA	10.48	3.4	0-125
N Farallon Island SMR	17.66	NA	0-275
SE Farallon SMR	3.78	NA	0-188
SE Farallon SMCA	13.90	NA	129-382

^A Note: Alongshore span measured as direct line from one end of the MPA to the other.

Habitat Representation in Draft Proposal 1 (EC) (12/12/07 version)

Habitat	Area ¹ (mi ²) and percentage of mapped habitat in proposed MPA designations in the study region ²			
	SMR ³	SMP	SMCA	Total MPAs
Intertidal				
Sandy / gravel beach	17.89 (15%)	0.44 (0%)	4.42 (4%)	22.76 (19%)
Rocky intertidal & cliff	49.24 (30%)	3.83 (2%)	11.65 (7%)	64.72 (39%)
Coastal marsh	35.48 (69%)	0.00 (0%)	0.00 (0%)	35.48 (69%)
Tidal flats	9.69 (53%)	0.00 (0%)	0.00 (0%)	9.69 (53%)
Seagrass beds: Surfgrass	18.63 (27%)	0.00 (0%)	7.21 (11%)	25.84 (38%)
Seagrass beds: Eelgrass	3.89 (64%)	0.00 (0%)	0.00 (0%)	3.89 (64%)
Estuary	7.76 (40%)	0.00 (0%)	0.00 (0%)	7.76 (40%)
Soft bottom				
0-30 meters	13.52 (9%)	0.01 (0%)	8.26 (6%)	21.79 (15%)
30-100 meters	57.69 (14%)	0.36 (0%)	63.18 (15%)	121.22 (29%)
100-200 meters ⁴	NA	NA	NA	NA
>200 meters ⁴	NA	NA	NA	NA
Hard bottom				
0-30 meters	6.66 (20%)	0.44 (1%)	4.62 (14%)	11.73 (34%)
30-100 meters	8.07 (16%)	0.53 (1%)	5.58 (11%)	14.18 (27%)
100-200 meters ⁴	NA	NA	NA	NA
>200 meters ⁴	NA	NA	NA	NA
Kelp forest				
Kelp 1989	0.69 (22%)	0.14 (4%)	0.62 (19%)	1.45 (45%)
Kelp 1999	0.29 (16%)	0.04 (3%)	0.23 (13%)	0.56 (32%)
Kelp 2002	0.64 (35%)	0.19 (10%)	0.01 (0%)	0.83 (45%)
Kelp 2003	0.23 (19%)	0.02 (2%)	0.19 (16%)	0.44 (37%)
Kelp 2004	0.25 (18%)	0.08 (6%)	0.16 (11%)	0.49 (35%)
Kelp 2005	0.08 (10%)	0.00 (0%)	0.23 (26%)	0.31 (35%)
Average kelp	0.36 (21%)	0.08 (5%)	0.24 (14%)	0.68 (40%)

¹ Note: Area expressed as m² except for Intertidal habitats and Surfgrass bed, which are expressed in mi.

² Note: These are proposed MPA designations, NOT levels of protection assigned by the SAT

³ Note: The SMR category groups together MPAs that are designated as SMR or SMRMA.

⁴ Note: The "NA" notation is due to the fact that these habitats are not found or are only found in small areas in this study region.

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Name of Draft MPA Proposal: Draft Proposal 1 (EC) (December 12, 2007 version)

Number and type of MPAs in initial MPA array: 9 SMR 4 SMRMA 2 SMP 9 SMCA 24 Total # MPAs

Narrative rationale: This draft proposal was developed in a collaborative process by a cross-interest workgroup of the NCC Regional Stakeholder Group at the December 11-12, 2007 NCCRSR meeting. This draft proposal aims to meet and address the guidance received from the MLPA Blue Ribbon Task Force, Master Plan Science Advisory Team, and California Department of Fish and Game. This draft proposal builds on initial options identified by the regional stakeholder work groups and draft external proposals and incorporates, to the extent possible, the many comments received from stakeholders and the general public.

Draft Proposal 1 (EC) (December 12, 2007 version).

MPA Name	Type	GIS ID#	General MPA Boundaries	Allowed or Disallowed Uses	SAT Assigned Level of Protection	Regional Goals/ Objectives/ Design Criteria this MPA Contributes Toward [Format: "G1O3" for Goal 1, Objective 3]	MPA Specific Objectives [Short narrative on the main intent of this MPA]	Comments, Questions or Important Information
Point Arena SMR	SMR	EC60	North boundary: 38° 59'N South boundary: 38° 56.4'N West boundary: 123° 45'W East boundary: 123° 44'W and then along shore at the mean high tide line to the southern boundary	No take	Very High	G101, G102, G103, G104, G105 G201, G202, G203, G204 G301, G302 G402 G501, G503 G6 Meets all design considerations	Protect diverse species and unique and complex habitats (pinnacles, wash rocks, caverns, clefts, honeycomb formation, undercut and vertical rock walls, cobbles, deep sand, kelp), fueled by persistent upwelling. Restoration potential for declining yelloweye, canary and china rockfish populations. (G2 O1, O2) Leaves open for fishing the harbor, the popular fishing and diving spots north and south of the harbor, most of Manchester Beach crab grounds, shore fishing on Manchester, extensive salmon fishing areas and cultural uses near the Garcia River mouth and Manchester Beach (Goal 3 Objective 1) Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3 O2) Iconic place.(G3 O3) Pt. Reyes cluster protects headlands and replicates, to an extent, clusters at Pt Arena and Bodega Head.	Rationale for floating corner: to allow shore-based fishing and cultural uses along Manchester Beach, preserve commercial crabbing opportunities west and southwest of Manchester without risking stray crab pots entering SMR. Garcia River left open to fishing.
Point Arena SMCA	SMCA	EC61	North boundary: 38° 59'N South boundary: 38° 56.40'N West boundary: state waters line East boundary: 123° 45'W	Salmon trolling only, commercial and recreational	Mod-High	G101, G102, G103, G104, G105, G201, G202, G203, G204, G301, G302 G402 G501, G503 Meets all design considerations	Extend protection to the state boundary to encompass deeper habitat and associated species in a regional center of high productivity (see above). G101, G102, G103, G201 and G202, and G402 • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Saunders Reef Inshore SMCA	SMCA	EC64	North boundary: 38° 52'N South boundary: 38° 49.5'N West boundary: Diagonal line going from 38°52'N and 123° 42'W to 38° 49.5'N and 123° 39'W East boundary: mean high tide line	Commercial urchin, abalone, shore-based finfish	Low-Mod	G102, G103 G201, G202, G203 G501, G502, G503 Meets all design considerations	Protect complex and highly productive kelp and rocky reef habitat (in younger, more complex rock than off Sea Ranch); one of largest stands of bull kelp on North Coast; and associated species, including nearshore rockfish. G102, G103 G201, G202, G203 G501	Rationale for diagonal line: it follows contour of reef, follows coastline and allows commercial salmon tuck to west of boundary, allows commercial urchin fishermen to continue to utilize entire reef, anchored at north and south by lat/long points. Although this SMCA is low protection, it serves an important function by protecting young complex rocky habitat at Saunders Reef, associated rockfish and large bull kelp beds. Allows shore-based fishing and abalone harvest to continue.
Saunders Reef Offshore SMCA	SMCA	EC63	North boundary: 38° 52'N South boundary: 38° 49.5'N West boundary: state waters line East boundary: Diagonal line going from 38°52'N and 123° 42'W to 38° 49.5'N and 123° 39'W	Salmon trolling only, commercial and recreational	High	G102, G501 Meets all design considerations	Extend protection to deeper water habitats and associated ecosystem, while still preserving commercial salmon trolling opportunities G103, G102, G501 Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3 O2) • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	Rationale for diagonal line: see above. Preserves salmon trolling opportunities.
Del Mar Landing SMP	SMP	EC76	See Section 632 (b)7 for boundaries	Take of all living marine resources is prohibited except the recreational take of finfish by hook and line or spear.	Low-Mod	G203, G302, G501	Control area for abalone studies, enhances consumptive recreation, community importance/stewardship	existing MPA
Sea Ranch to Salt Point SMR	SMR	EC65	North boundary: 38° 42'N South boundary: 38° 35'N West boundary: state waters line East boundary: mean high tide line	No take	Very High	G101, G102, G103, G104, G105 G202, G203 G303 G402 G501, G503 G6 Meets all design considerations	Protect in preferred size SMR complex rocky habitat, kelp and dependent species in an area that gets deeper faster than many parts of the region. (G1 O1, G1O5, G4 O1) Replicate, to some extent, for sedimentary rock and sand habitat at Bodega Head. G101, G102. G103. G104, G1O5, G202 Improves fish and abalone productivity in the SMR to benefit local rockfish fishing outside the MPA and to the adjacent SMP (G3 O2)	This SMR is in the preferred size range and extends to state line. Location preserves abalone diving opportunities in many areas to the north and south of SMR, including offshore at Salt Point State Park.

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Salt Point SMP	SMP	EC83	North boundary: 38° 35'N South boundary: 38° 33.5'N West boundary: 123° 21'W East boundary: mean high tide line	All take prohibited except finfish and abalone	Low-Mod	G302, G501	Enhance recreational experience of park users due to proximity to Sea Ranch to Salt Point SMR and allowable consumptive recreational take of abalone and finfish. G302, G501	Salt Point SMP absorbs existing Gerstle Cove SMCA
Russian River SMR	SMR	EC77	North boundary: mean high water line South boundary: 38° 26.7'N West boundary: 123° 8.3'W East boundary: Hwy 1 bridge	No take	Very High	G105, G201, G301, G302, G303, G401, G402, G502 Considers all design criteria	Marine mammal protection, protect Chinook and Coho salmon and steelhead coming out of river, estuary.	This SMR offers very high protection, while still allowing shore-based fishing opportunities to the north and south at Arch Rock and Goat Rock and crabbing outside of the Russian River mouth.
Bodega Head SMR	SMR	EC69	North boundary: 38° 22'N, 123° 06'W to the Tanks (diagonal line from lat/long to prominent structure on land) South boundary: 38° 18'N West boundary: 123° 06'W East boundary: mean high water line	No take	Very High	G101, G102, G103, G104, G105 G202, G204 G301, G303 G402 G501, G503 G6 Meets all design considerations	Protect multiple rocky reefs of varying depths and high energy headlands. Protects heavily fished areas with high restoration potential. Replicates, to some extent, rocky habitat at Point Arena SMR and sedimentary rock and sand at Sea Ranch to Salt Point. G102, G105, G301, G303, G402, G503, G6 Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3O2)	Rationale for diagonal line from Tank: preserves shore-based fishing at Salmon Creek, where new parking lot is being built-- this line was the recommendation from DFG for addressing these recreational needs in an enforceable way. Southern boundary is due to safety concerns for local smaller boats and the angle of salmon fishermen's tack in the adjacent SMCA. Local crabbing opportunities in the Bay are preserved, Proximity to Bodega Marine Lab leverages research and monitoring resources and builds upon history of monitoring.
Bodega Head SMCA	SMCA	EC70	North boundary: 38° 22'N South boundary: 38° 18'N West boundary: state waters line East boundary: 123° 06'W	Salmon trolling only, commercial and recreational	High	G101, G102, G103, G104, G105 G202, G204 G301, G303 G402 G501, G503 G6 Meets all design considerations	Extend protection to include deeper water and varied habitat. G102, G105, G303, G402, G503, G6 Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3 O2) • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	
Estero de Americano SMRMA	SMRMA	EC84	North boundary: mean high tide water line South boundary: mean high tide water line West boundary: Mouth of the Estero East boundary: 122° 59.25'W	No take	Very High	G101, G102, G103, G104, G105 G201, G203, G204 G301, G303 G401, G402 G501, 502, G503 G6 Meets all design considerations	Goals: 1,2,4 Protect unique estuary habitat with Tidewater goby, migratory birds, rare nudibranch, sea cucumbers, and high biodiversity. The area is prime for ASBS, with little fishing pressure.	Encompass all the waters that have estuarine influence. The Gulf of the Farallones National Marine Sanctuary recommends establishing reserve here.

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Estero de San Antonio SMRMA	SMRMA	EC85	North boundary: mean high tide water line South boundary: mean high tide water line West boundary: 122° 58'W East boundary: Mouth of the Estero	No take	Very High	G101, G102, G103, G104, G105 G201, G203, G204 G301, G303 G401, G402 G501, 502, G503 G6 Meets all design considerations	Goals: 1,2,4 Protect unique estuarine habitat with Tidewater goby, migratory birds, rare nudibranch, sea cucumbers, and high biodiversity. The area is prime for ASBS, with little fishing pressure. The Gulf of the Farallones National Marine Sanctuary recommends establishing reserve here. This is the only somewhat undisturbed Mediterranean estuary left with salinity from 10-44ppt. Supports CA freshwater shrimp - Endangered species; Historical robust steelhead fishery; Downstream component severely impaired	Encompass all the waters that have estuarian influence. The Gulf of the Farallones National Marine Sanctuary recommends establishing reserve here.
Clam Island SMRMA	SMRMA	EC68	North boundary: 38° 13.25'N South boundary: 38° 13'N West boundary: mean high tide water line East boundary: mean high tide water line	No take	Very High	G101, G102, G103, G104, G105 G201, G203, G204 G301, G303 G401, G402 G501, 502, G503 Meets all design considerations	Protect clam beds, harbor seal colonies. G101, G104, G301, G303 G401, G402, G503	Duck hunting is not addressed in the MLPA process; it is addressed in separate hunting regulatory processes.
South Tomales Bay SMRMA	SMRMA	EC71	North boundary: mean high tide water line South boundary: mean high tide water line West boundary: 122° 51'W East boundary: mean high tide water line	No take	Very High	G101, G102, G103, G104, G105 G201, G203, G204 G301, G303 G401, G402 G501, 502, G503 G6 Meets all design considerations	Protect tidal flats, tidal marsh, eelgrass, tidewater goby, estuary, shark aggregations, and entry for Coho and Steelhead. Include representative estuarine habitat in north central coast region within a state marine reserve. (G 4, O1). Protect communities associated with diversity of estuarine habitats, including open channels, mud flats, salt and brackish marsh, and eelgrass beds. (G1, O1; G1, O2). Protect natural structure and food web of estuarine system, including invertebrate forage base for fish and marine birds. (G1, O4). Help protect listed coho salmon by protecting migration habitat. (G2, O1) G101, G104, G301, G303 G401, G402, G503	Duck hunting is not addressed in the MLPA process; it is addressed in separate hunting regulatory processes.

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Point Reyes SMR	SMR	EC02	North boundary: 38° 1'N South boundary: 37° 59'N West boundary: 123° 2'W East boundary: 122° 58'W	No take	Very High	G101, G102, G103, G104, G105 G201, G202, G203, G204 G301, G302 G402 G503, G6 Meets all design considerations	Protect diverse fish, seabird and marine mammal species associated with diverse habitats including exposed high energy rocky shoreline, sand and gravel beaches, offshore islets, surf grass, soft and hard substrates and associated species in an area characterized by both fractured granite and a mixture of eroded bedrock, rocky shelf, and soft bottom. (G4, O2) Include areas with diverse habitat types within one MPA cluster. (G1, O2). Protect a high diversity of species (G1, O1, G2, O1 and O2). Protect natural trophic and natural ecosystem structure and function without human induced changes. (G1, O4 and O5) Iconic place. G101, G102, G105, G301, G402, G503	
Point Reyes SMCA	SMCA	EC03	North boundary: 37° 59'N South boundary: state waters line West boundary: 123° 02'W East boundary: 122° 58'W	Salmon trolling and crab pots, sport and commercial	Mod-High	G101, G102, G103, G104, G201, G202, G203, G204 G301, G302 G402 G503 G6 Meets all design considerations	SMCA extends protection offshore to the state boundary for diverse fish, seabird, and marine mammal species in deeper hard and soft bottom. G101, G102, G301 G402, G503, G6 • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	
Drakes - Limantour Estero SMR	SMR	EC81	North boundary: mean high water line South boundary: 38° 02'N West boundary: mean high water line East boundary: mean high water line	No take (Oyster farming can continue until the lease expires in 2012)	Very High	G101, G103, G104, G105 G201, G202, G203 G301, G303 G401, G402 G503 Meets all design considerations	Protect eelgrass, significant fish and invertebrate nursery ground, foraging area for leopard shark and bat ray, harbor seal haulout and pupping site, habitat for eelgrass-dependent black brandt. G101, G104, G203, G301, G303, G401, G402	It is our recommendation that when oyster cultivation expires after 2012, the lease not be renewed.
Double Point SMR	SMR	EC73	Northern boundary is 37° 58' N. Eastern boundary is shore at mean high tide line Southern boundary is 37° 55.3' N. Western Boundary is the diagonal from 37° 58'N / 122° 49'W to 37° 55.3'N / 122° 46'W	No take	Very High	G101, G102, G103, G104, G105 G201, G203 G301, G302, G303 G402 G501, G502. G503 G6 Meets all design considerations	High protection for rocky reef, rock and sand mosaic habitat, bull kelp stands, and associated fish, invertebrates (including red and black abalone), and seal colonies. Help protect habitat for seabirds (ashy storm petrel, common murre, brown pelican). Adjacent to iconic Pt. Reyes Nat. Seashore. Replicates, to an extent, diverse intertidal and subtidal granitic rock and sand habitats at Fitzgerald reef. G101, G102, G103, G104, G105, G201, G203, G301, G302, G303, G402 Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3 O2)	The reason for a diagonal is that it follows the coast line, allowing higher protection for the rocky reef, kelp, and other inshore habitats while allowing uninterrupted salmon trolling offshore. It is also anchored in lat/long.

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Double Point SMCA	SMCA	EC72	North boundary is 37° 58' N. lat. West boundary is state waters line South boundary is 37° 55.3' N. East Boundary is the diagonal from 37° 58'N, 122° 49'W to 37° 55.3'N, 122° 46'W	Crab pots and salmon trolling, recreational and commercial	Mod-High	G101, G102, G103, G104, G105 G201, G203 G302 G402 G501, G502. G503 G6 Meets all design considerations	Extend protection of rocky reef fish to state water boundary. G101, G103, G104, G203, G302 Improves fish productivity in the SMCA to benefit local rockfish fishing outside the MPA (G3 O2) • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2, O4)	Provides protection for benthic hard bottom species while leaving significant areas open for crab and salmon trolling, recreational and commercial
Duxbury Reef SMCA	SMCA	EC74	North boundary is 37° 55.3'N; Western boundary is state waters line; South boundary 37° 53'N; East boundary is 122° 42'W, boundary of existing Duxbury SMCA, continuing along shore at mean high tide line. (The small irregular extension east and north past 37° 53.6' N. lat. 122° 42' W. long to 122° 41.9' W and north to shore allows the SMCA to retain the existing Duxbury Reef SMCA boundary for protection of mussel beds at Duxbury Reef.)	Allowed: salmon trolling, commercial and recreational; Dungeness crab pots, commercial and recreational, halibut commercial by boat, recreational finfish fishing from shore. All other take prohibited, including collection of live or dead invertebrates and algae from shore.	Moderate	G101, G102, G103, G104, G201, G203 G301, G302, G402 G501, G502. G503 G6 Meets all design considerations	Protect rocky reef and help restore dependent species including rockfish in heavily impacted rock and sand habitat, while allowing fishing for salmon and sandy bottom species. Includes portion of one of largest shale reefs in state and diverse intertidal habitats fueled by upwelling in area that may be a rockfish nursery. Replicates, to an extent, diverse intertidal and subtidal rock and sand habitats at Fitzgerald reef. G101, G102, G103, G104, G201, G203, G301, G302, G402 Improves fish productivity in the SMCA to benefit local rockfish fishing outside the MPA (G3 O2) • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	Leaves open for fishing most of the popular Duxbury Reef, much of surrounding rock and rock-sand finger area, and 11 Fathom Bank. Incorporates and raises protection level for existing intertidal Duxbury SMCA; takes advantage of long monitoring history -- two PISCO sites at Bolinas Point, educational use of Duxbury Reef, 27-year study by Dr. Gordon Chan (algae and invertebrates), 1996 flora & fauna inventories by Gulf of the Farallones Nat. Marine Sanct. Allows salmon, crab and artisanal halibut fishing important to Bolinas Harbor
Bolinas Lagoon SMR	SMR	EC80	North boundary: mean high tide line South boundary: mouth of Bolinas Lagoon 37° 54.5'N West boundary: mean high tide line East boundary: mean high tide line	No take	Very High	G101, G103, G104, G105 G201, G202, G203 G301, G303 G401, G402 G503 Meets all design considerations	Protects estuarine habitats, tidal flats, and open channels. G101, G104, G203, G301, G303, G401, G402	

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Fitzgerald SMR	SMR	EC79	North boundary: 37° 32.75'N South boundary: 37° 29.75'N West boundary: 122° 34'W East boundary: mean high tideline	No take	Very High	G101, G102, G103, G104, G105 G201, G202, G203, G204 G301, G302, G303, G304 G402 G501, G502, G503 G6 Meets all design considerations	High protection for one of most biodiverse regions in state. Protect a portion of the offshore reefs in support of the Nearshore FMP. Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3 O2) Include a mix of sand, rock, bull kelp, and surf grass habitat including seabird and marine mammal sites (near Point San Pedro) in an MPA within SAT preferred size range. Includes habitat supporting 25% of CA nudibranchs, 77% of shelled gastropods found in central CA, 22% of CA macroalgae, 37% of west coast of North America chitons. G101, G102, G103, G104, G105, G201, G202, G203, G301, G303, G402, G503	The justification for not going all the way to the state water boundary on the west is that space was allowed between the offshore trawling area and the MPA.
Devils Slide SMCA	SMCA	EC78	North boundary: 37° 36'N South boundary: 37° 32.75'N West boundary: 122° 34'W East boundary: mean high tide line except 122° 31'W at the northern boundary	salmon trolling, wetfish (including squid), crab - all are comemrcial and recreational	Mod-High	G101, G102, G103, G104, G105 G201, G202, G203, G204 G301, G302, G303, G304 G402 G501, G502, G503 G6 Meets all design considerations	High protection for a biodiverse area with a mix of sand and rock. G101, G102, G103, G104, G105, G201, G202, G203, G301, G303, G402, G503 • Protect near shore species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	The justification for not going all the way to the state water boundary on the west is that space was allowed between the offshore trawling area and the MPA.
N. Farallon SMR	SMR	EC120	North boundary: state waters line South boundary: 37° 45.75'N West boundary: 123° 07'W East boundary: state waters line	No take	Very High	G101, G102, G103, G104, G105 G201, G202, G203, G204 G301, G302, G303 G401, G402 G501, G502, G503 Meets all design considerations	Include a portion of the unique tidal, subtidal, benthic and pelagic habitat of the Farallones (G4 O1) Help protect concentrations of prey and foraging predators—fish and breeding colonies of seabirds and marine mammals—at highly productive and unique mix of habitats. Further objectives of the reserve is to protect natural diversity and the structure (G1, O1) and function of this unique marine ecosystem (G1, O5), to help assure the continued recovery of ground fish (G2, O1), to enhance the reproductive success of seabirds and marine mammals using the islands (G2, O3), and to increase the supply of large adults and larval fish which can disperse to adjacent areas for fisheries harvest outside the MPA (G3 O2) Globally important heritage site. G101, G102, G103, G104, G105 G201, G203, G204, G401	

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

SE. Farallon SMR	SMR	EC122	North boundary: 37° 42.5'N South boundary: 37° 41'N West boundary: 123° 02'W East boundary: 122° 59.5'N	No take	Very High	G1O1, G1O2, G1O3, G1O4, G1O5, G2O2, G2O3, G2O4, G3O1, G3O2, G3O3, G4O1, G4O2, G5O2, G5O3, G6O1, G6O2 Considers all design criteria	Purpose of SMR is to allow natural ecosystem function in a key portion of the subregion. (G1, O5) Include a portion of the unique tidal, subtidal, benthic and pelagic habitat of the Farallones (G 4, O1) Further objectives of the reserve is to protect natural diversity and the structure (G1, O1) and function of this unique marine ecosystem, to increase rockfish larval production (G2, O1, O2), to help assure the continued recovery of ground fish (G2, O1), to enhance the reproductive success of seabirds and marine mammals using the islands (G2, O3), and to increase the supply of large adults and larval fish which can disperse to adjacent areas for fisheries harvest outside the MPA (G3 O2)	The Emerald group agreed that an SMR at S.E. Farallon Island does not necessarily negate the future implementation of a commercial abalone fishery there if the Fish and Game Commission determines that a fishery is appropriate under the guidelines of the abalone recovery and management plan. This reserve is expected to be re-evaluated under the "cornerstone" idea that SMRs are intended to include adaptive management and may not necessarily be permanent as they are now expressed in these proposals
SE. Farallon SMCA	SMCA	EC82	North boundary: 37° 42.5'N South boundary: state waters line West boundary: state waters line East boundary: 122° 59.5'N The SE. Farallon SMR is in the Northeast quadrant of the SMCA	Salmon trolling, commercial and recreational	High	G1O1, G1O2, G1O3, G1O4, G1O5, G2O2, G2O3, G2O4, G3O1, G3O2, G3O3, G4O1, G4O2, G5O2, G5O3, G6O1, G6O2 Considers all design criteria	Protect benthic habitat and forage base for fish, birds and mammals at islands, while allowing salmon trolling G101, G102, G105, G203, G204 G302, G401, G501 Improves fish productivity in the SMR to benefit local rockfish fishing outside the MPA (G3 O2) • Protect near shore reef species and the habitats on which they depend while allowing the commercial and/or recreational harvest of migratory, highly mobile, or other species where appropriate through the use of a state marine conservation area. (G2O4)	(see comments in SE Farallon SMR)

* "Wetfish" refers to sardines, mackerels, anchovy, and market squid.

Justification for floating corners at Farallon SMRs: The SMRs are designed to provide full protection of the near shore habitat around two of the island sets - North and Southeast. Other shallow rocky habitat around Middle Island, just south of North Island and at Fanny Shoal will remain open to fishing. This separation of open and closed areas was carefully crafted and places the closed areas around the islands with colonies and haul outs. The floating corners are at intersections of whole or half minutes of latitude and longitude.

Justification for three mpa zones at Duxbury-Double Point SMR/SMCA cluster: One important goal is to protect the near shore rocky reef fish species likely to benefit from MPAs in a significant portion of Duxbury Reef. It is generally recognized that the rockfish fishery at Duxbury has been severely depleted. If we can recover the populations in the northern section it should benefit the southern sections which will remain open to fishing for rockfish.

The lower zone, the Duxbury Reef SMCA allows take of fish that are important to the regional commercial and recreational fisheries, and especially important to the small commercial port at Bolinas. To help save that port, the Duxbury Reef SMCA will allow halibut fishing for commercial only. The allowed uses makes the Duxbury Reef SMCA a moderate protection level which will not count in SAT size and spacing evaluations. However imperfect, it is better protection of the reef rockfish than continued open fishing, thus we feel that the Duxbury Reef SMCA serves an important purpose.

The halibut fishery declines in economic importance moving north along the shore which allows a full SMR at the important habitat at Double Point, including varied bottom habitat, kelp, breeding seabirds, harbors seals, and Brown pelican roosting area. The offshore Double Point SMCA offers moderate-high protection allowing salmon trolling and crab pots, which have very high socioeconomic importance to the region. The Double Point SMR/SMCA cluster adds more of the retention area, kelp, and habitats needed to complete the proposal's network.

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Another goal of these 3 zones is to protect shoreline resources and uses. The Duxbury Reef SMCA replaces the existing MPA, but improves the clarity of the rules. In the proposed rules, on shore fin fishing is allowed with no take of invertebrates and algae from shore, of which protection of the mussel beds is highest priority. These rules have community acceptance and are respected by the community. Duxbury Reef is an important educational site and long term research site thus it is important to continue to protect that area. There is an existing county park and enforcement is done by DFG wardens as there is no on-site ranger presence as there is at Fitzgerald. The eastern boundary of the new SMCA has an irregular jog around the rocks at the point which continues the existing SMCA protection. Then the eastern boundary extends down a longitude line to a lat line to protect more of the reef. The SE floating corner is over a reef and not on a trolling lane (although salmon trolling is allowed in the SMCA anyway). That SE floating corner is at a whole minute lat long intersection.

The north boundary of the Duxbury Reef SMCA is at 37° 55.3'N which is near the northern end of the existing SMCA. The reason for using a tenth of latitude is that the halibut fishery south of the line is important to the port, and north of that line, the Point Reyes National Seashore wilderness area begins. It is a more remote area where an SMR is acceptable to our shore angling RSG representative and our local RSG members.

There is broad stakeholder agreement on the three zone solution judging from the fact that the proposed three zone solution appears in three of the four arrays created in the December RSG meetings.

Consideration of Marine Bird and Mammal Protection: Within this MPA array, certain areas may warrant increased protection of marine birds and/or marine mammals though the use of "no disturbance" zones or special closures. If special closures are proposed, please include all of the information requested below (with the exception of the GIS ID). Note that the MLPA staff suggests sparing use of this designation.

Area	GIS ID	Bound-aries	Focus Species	Seasonality (Year round or what season)	Comments, Questions or Important Information

California MLPA North Central Coast Project
Draft Proposal 1 (EC) - December 12, 2007 version

Consideration of Existing State MPAs in Draft Proposal 1 (EC) (December 12, 2007 version).

Please indicate how each existing North Central Coast MPA is considered within the draft proposal.

Existing MPA	Included Without Changes (retained)	Included with Boundary or Regulation Change	Not Included (eliminated)
Manchester and Arena Rock SMCA		Replaced by Pt. Arena/Arena Rock MPA complex (with SMR and SMCA)	Eliminated
Del Mar Landing SMP	Included (See Section 632 (b)7 for boundaries)		
Salt Point SMCA			Replaced by Sea Ranch to Salt Point SMR and Salt Point SMP
Gerstle Cove SMCA		Replaced by Salt Point SMP	
Fort Ross SMCA			Eliminated
Tomaes Bay SMP		Replaced by South Tomaes Bay SMR	
Point Reyes SMCA		Modified boundaries	
Estero de Limantour SMCA		Replaced by SMR	
Duxbury Reef SMCA		Replaced by Duxbury SMCA	
Sonoma Coast SMCA		Modified by Bodega MPAs	
Bodega SMR		Replaced by Bodega Head SMR	
Fitzgerald SMP		Modified by Fitzgerald concepts.	
Farallon Islands SMCA		Modified by Farallon Islands concepts.	