

California Marine Life Protection Act Initiative
MLPA North Coast Study Region: Round 1 Evaluations
Staff Summary of Area and Habitats in External Proposed MPA Array D
Date Created: March 5, 2010

Table 1. Summary of MPAs by Designation for External Proposed MPA Array D

Type of MPA ^a	# of MPAs	Area (mi ²)	% of Study Region
State Marine Reserve (SMR)	7	93.16	9.1%
State Marine Recreational Managed Area (SMRMA)	1	1.20	0.1%
State Marine Park (SMP)	2	0.27	<0.1%
State Marine Conservation Area (SMCA)	8	84.09	8.2%
All MPAs combined	18	178.72	17.4%

^a 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.

Table 2. Summary of MPAs by Level of Protection for External Proposed MPA Array D

Level of Protection (LOP)	# Proposed	Area (mi ²)	% of Study Region
Very High ^b	8	94.36	9.2%
High	2	5.91	0.6%
Moderate-High	4	76.06	7.4%
Moderate	1	1.60	0.2%
Low ^c	3	0.79	0.1%
Total	18	178.72	17.4%

^b The “Very High” category includes MPAs with SMR designation, as well as SMRMA designations.

^c The “Low” category groups together MPAs that are assigned a moderate-low and low level of protection.

Table 3. Individual MPAs in External Proposed MPA Array D

MPA Name	Size ^d (mi ²)	Alongshore Span ^e (mi)	Depth Range ^f (ft)
Pyramid Point SMR ^g	20.99	4.7	0 - 124
False Klamath SMCA ^g	13.14	2.9	0 - 121
Reading Rock SMR ^g	18.64	6.3	90 - 253
Reading Rock SMCA ^g	9.52	3.0	0 - 101
Patrick's Point SMCA ^g	26.70	6.5	0 - 256
South Humboldt Bay SMCA ^g	1.60	N/A	Depth data not available
South Bay Estuary SMRMA ^g	1.20	N/A	Depth data not available
Gorda SMR ^g	22.73	5.8	0 - 1667
Big Flat SMCA ^g	26.71	6.9	0 - 1110
Usal SMR ^g	26.30	6.8	0 - 394
Ten Mile River Estuary SMR ^g	0.18	N/A	Depth data not available
MacKerricher SMCA ^g	0.72	3.0	0 - 38
Point Cabrillo Offshore SMCA	5.69	2.5	276 - 404
Point Cabrillo SMR ^g	4.21	2.5	0 - 306
Big River Estuary SMP ^g	0.22	N/A	Depth data not available
Van Damme SMCA ^g	0.02	0.2	0 - 11
Albion River Estuary SMP ^g	0.05	N/A	Depth data not available
Navarro River Estuary SMR ^g	0.09	N/A	Depth data not available

^d Statute mile is the unit of measurement used for this analysis.

^e Alongshore span measured as direct line from one end of the MPA to the other, roughly paralleling the coastline. An alongshore span is not calculated for estuarine MPAs

^f 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.

^g Tribal uses are proposed in this MPA. However, pending further policy guidance, these uses are not currently considered in assigning the level of protection for this MPA.

Table 4. Habitat Representation in External Proposed MPA Array D

Habitat ^h	SMR		SMRMA		SMP		SMCA		Total MPAs	
	Area	%	Area	%	Area	%	Area	%	Area	%
Intertidal										
Sandy or gravel beach*	8.28	5%	0.00	0%	1.05	1%	19.36	11%	28.70	16%
Rocky shores*	19.54	12%	0.00	0%	0.82	1%	8.35	5%	28.71	18%
Hardened shores*	0.00	0%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
Coastal marsh*	2.94	3%	1.29	1%	3.55	4%	1.63	2%	9.40	11%
Coastal marsh	0.06	2%	0.05	2%	0.04	1%	0.04	1%	0.19	5%
Tidal flats*	0.33	<1%	4.79	7%	0.28	<1%	1.08	2%	6.48	10%
Seagrass beds										
Humboldt Eelgrass	0.00	0%	0.08	1%	0.00	0%	0.33	5%	0.40	6%

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Habitat ^h	SMR		SMRMA		SMP		SMCA		Total MPAs	
	Area	%	Area	%	Area	%	Area	%	Area	%
Estuarine										
Estuary	0.28	1%	1.20	3%	0.27	1%	1.60	4%	3.34	8%
Hard bottom										
0-30 meters proxy ^{*,i}	6.40	12%	0.00	0%	0.00	0%	1.17	2%	7.58	14%
0-30 meters	4.29	10%	0.00	0%	0.00	0%	1.11	3%	5.40	13%
30-100 meters	2.48	5%	0.00	0%	0.00	0%	0.17	<1%	2.64	6%
100-200 meters	0.27	27%	0.00	0%	0.00	0%	0.06	6%	0.33	33%
>200 meters	0.05	52%	0.00	0%	0.00	0%	0.01	13%	0.06	65%
Soft bottom										
0-30 meters proxy ^{*,i}	14.00	9%	0.00	0%	0.00	0%	19.18	12%	33.18	21%
0-30 meters	22.20	9%	0.00	0%	0.00	0%	29.81	12%	52.01	21%
30-100 meters	47.30	11%	0.00	0%	0.00	0%	32.35	8%	79.65	19%
100-200 meters	7.09	11%	0.00	0%	0.00	0%	11.16	18%	18.26	29%
>200 meters	2.40	31%	0.00	0%	0.00	0%	0.59	8%	2.98	39%
Unknown										
0-30 meters proxy ^{*,i}	0.00	0%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
0-30 meters	6.74	4%	1.20	1%	0.25	<1%	8.81	5%	17.00	10%
30-100 meters	0.32	1%	0.00	0%	0.00	0%	0.02	<1%	0.34	1%
100-200 meters	0.00	0%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
>200 meters	0.02	10%	0.00	0%	0.00	0%	0.00	0%	0.02	10%
Other										
Offshore rocks*	12.84	9%	0.00	0%	0.00	0%	5.83	4%	18.67	13%
Linear kelp*	4.74	9%	0.00	0%	0.00	0%	1.97	4%	6.71	13%

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

ⁱ There is limited fine scale data for nearshore habitat, shallower than 10-20 meters depth, in the north 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 for the 0-30 meter depth zone in that area based on available fine-scale substrate data, shoreline type, kelp abundance, and expert knowledge.