



Marine Life Protection Act Initiative



Overview of Existing MPAs in the MLPA South Coast Study Region

Evan Fox, Principal Planner • California MLPA Initiative

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Outline

- SCRSG consideration of existing marine protected areas (MPAs)
- Information available on existing MPAs
 - Basic statistics
 - Preliminary science advisory team evaluation using north central coast methods
- Overview of existing MPAs by bioregion
 - Basic statistics
 - Habitats
 - Regulations
 - California Department of Fish and Game feasibility analysis
 - State Parks considerations



Key Task of the SCRSG

Key objective of the stakeholder process:

- Create multiple, alternative MPA proposals that will go through an iterative process of development, evaluation and refinement
- Full proposals that strive to meet all guidelines



Key Task of the SCRSG

The charge of the SCRSG includes:

Evaluate existing state MPAs in relation to the goals of the MLPA and other guidance

Existing MPAs serve as a starting place for developing MPA proposals



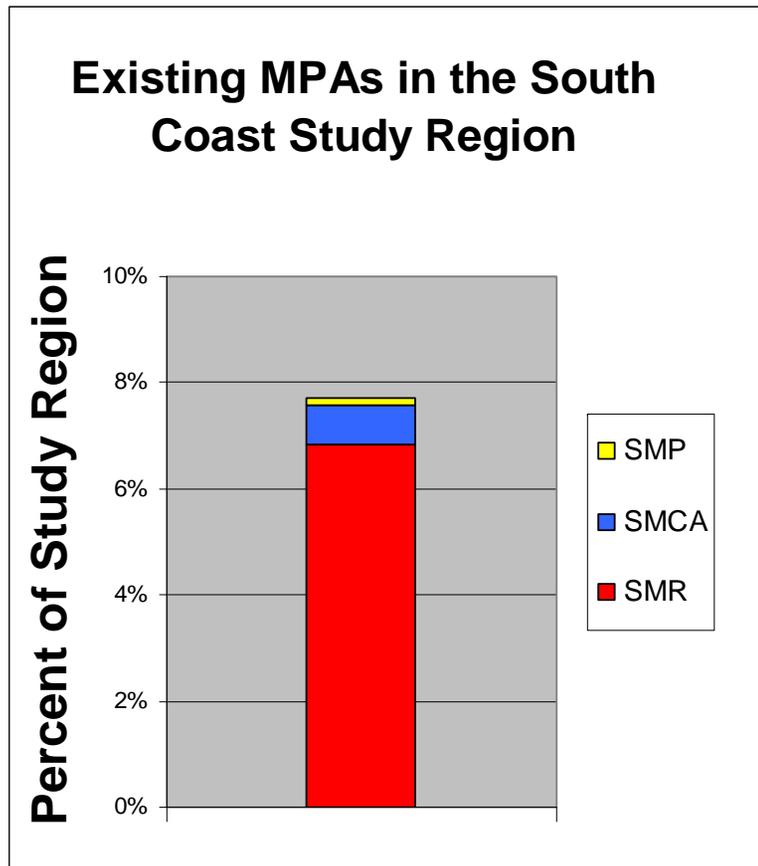
Options for Existing MPAs

For each existing MPA, the SCRSG may recommend to:

- **Retain** – Include MPA without modification
- **Eliminate** – Not include the MPA in a proposal
- **Modify** – Adjust MPA boundaries, designation and/or regulations

California Fish and Game Commission guidance is to include the 13 existing northern Channel Islands and Santa Barbara MPAs without modification [December 11, 2008]

Existing State Marine Protected Areas



- 182 square miles (7.7% of study region)
- Largest is Richardson Rock State Marine Reserve
- Smallest are Mia J Tegner and Lovers Cove state marine conservation areas
- Also 3 existing special closures



Basic Statistical Information

Overall Summary for Existing MPAs (Entire Study Region)

Type of MPA ^{1,2}	# of MPAs	Area (mi ²)	% of Study Region
State Marine Reserve (SMR)	15	157.1	6.7%
State Marine Park (SMP)	8	2.8	0.1%
State Marine Conservation Area (SMCA)	19	21.6	0.9%
All MPAs combined	42	181.5	7.7%

Individual MPAs in Existing MPAs (Entire Study Region)

MPA Name	Size (mi ²)	Along-shore span ⁴ (mi)	Depth range (ft)
Refugio SMCA	1.04	2.6	0-51
Goleta Slough SMP	0.34	1.9	0-10
Big Sycamore Canyon SMR	2.44	2.4	0-130
Abalone Cove SMP	0.10	0.8	0-10

Habitat Representation in Existing MPAs (Entire Study Region)

Habitat	Area ⁵ (mi ²) and percentage of mapped habitat in existing MPA designations in the study region ⁶			
	SMR	SMP	SMCA	Total MPAs
Intertidal				
Sandy or gravel beach *	11.61 (3%)	0.89 (< 1%)	13.22 (3%)	25.73 (7%)
Rocky intertidal & cliff *	33.18 (12%)	0.82 (< 1%)	15.31 (5%)	49.31 (18%)
Coastal marsh	0.00 (0%)	1.35 (43%)	0.00 (0%)	1.35 (43%)
Tidal flats*	0.00 (0%)	2.76 (10%)	0.00 (0%)	2.76 (10%)



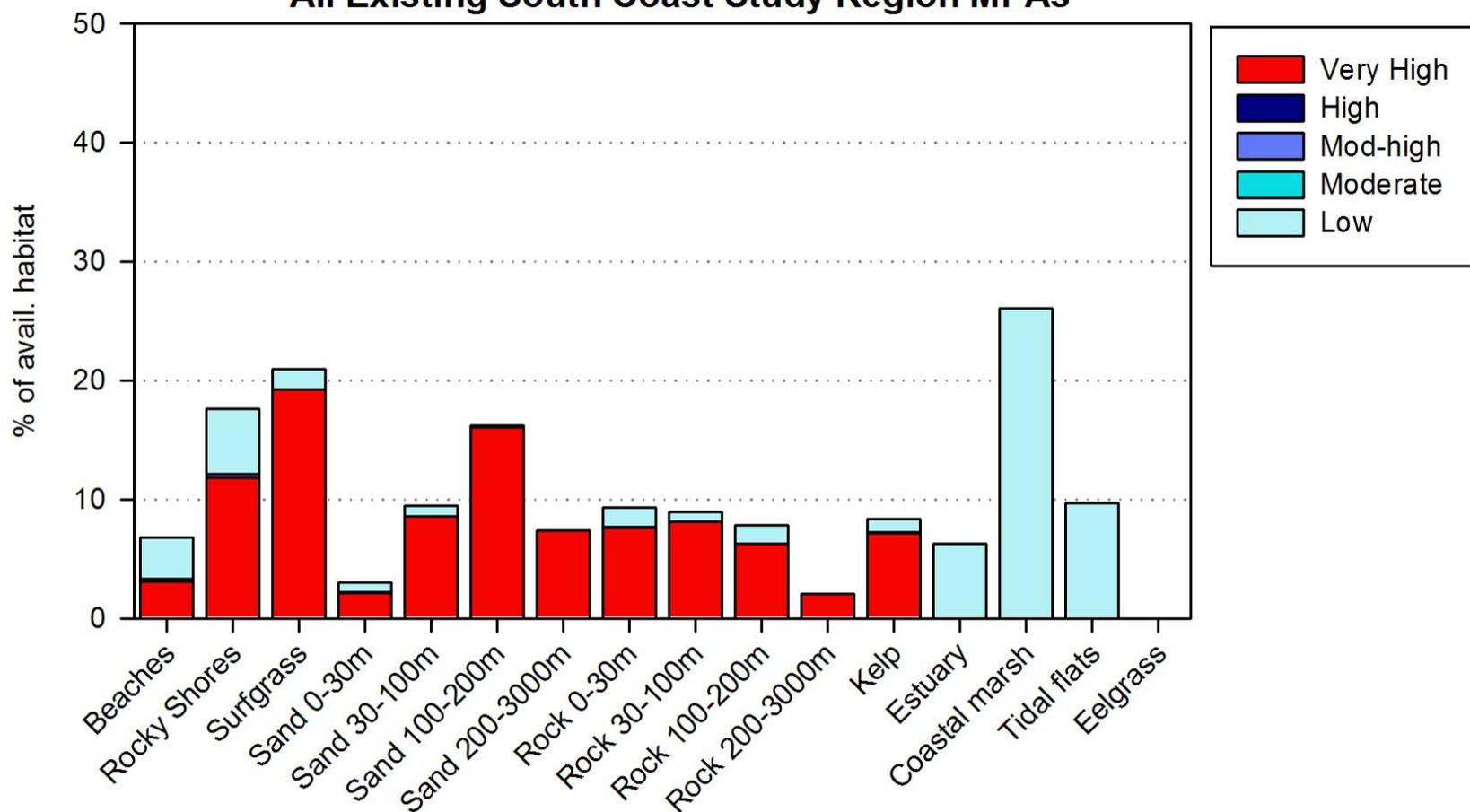
SAT Evaluation of Existing MPAs

- Existing MPAs will be evaluated (as Proposal 0) along with SCRSG and external MPA proposals
- Preliminary SAT evaluation (September 2008)
 - Used methods approved in the MLPA North Central Coast Study Region
 - Conducted for all MPAs, separately for MPAs within Channel Islands National Marine Sanctuary, and separately for MPAs outside Channel Islands National Marine Sanctuary
 - Included only habitat representation, habitat replication, size and spacing analyses



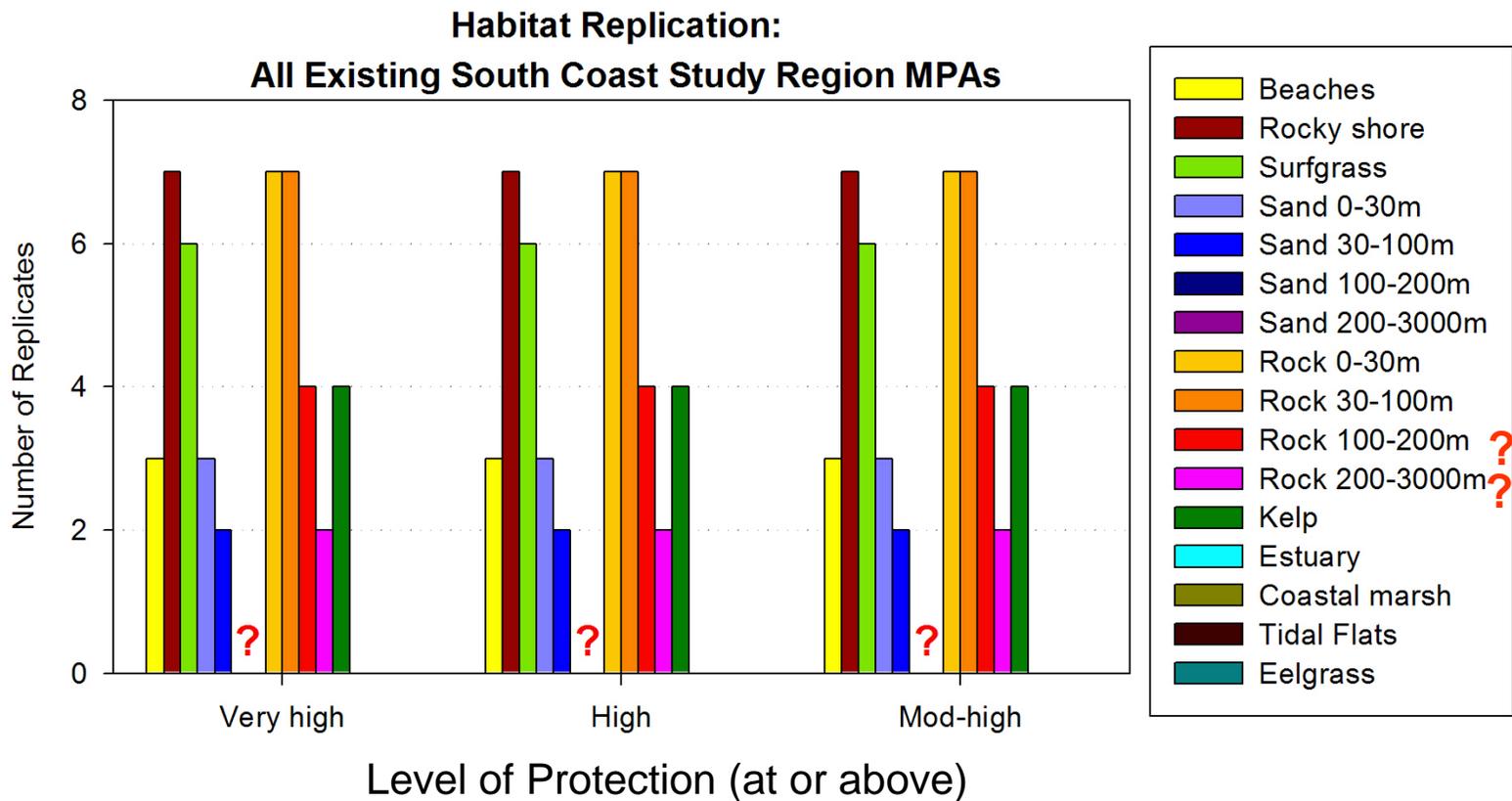
Preliminary Evaluation: Representation

Habitat Representation:
All Existing South Coast Study Region MPAs





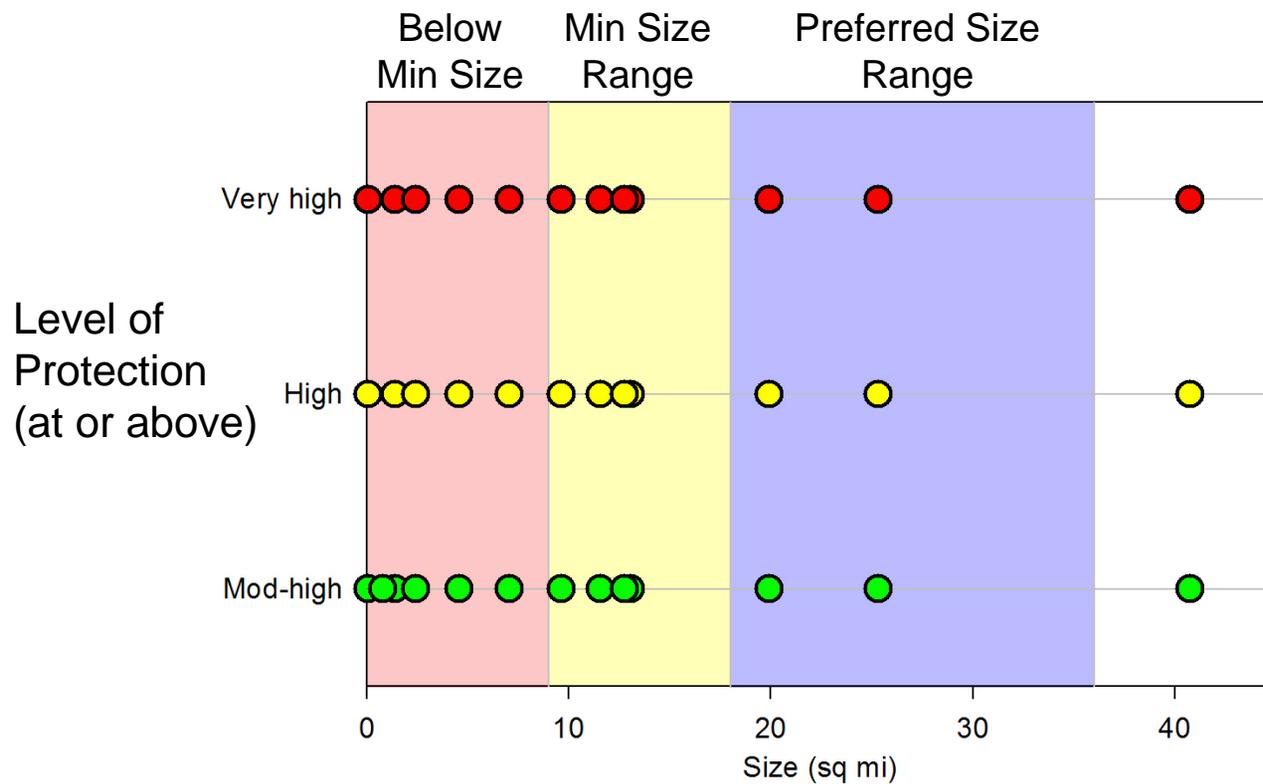
Preliminary Evaluation: Replication





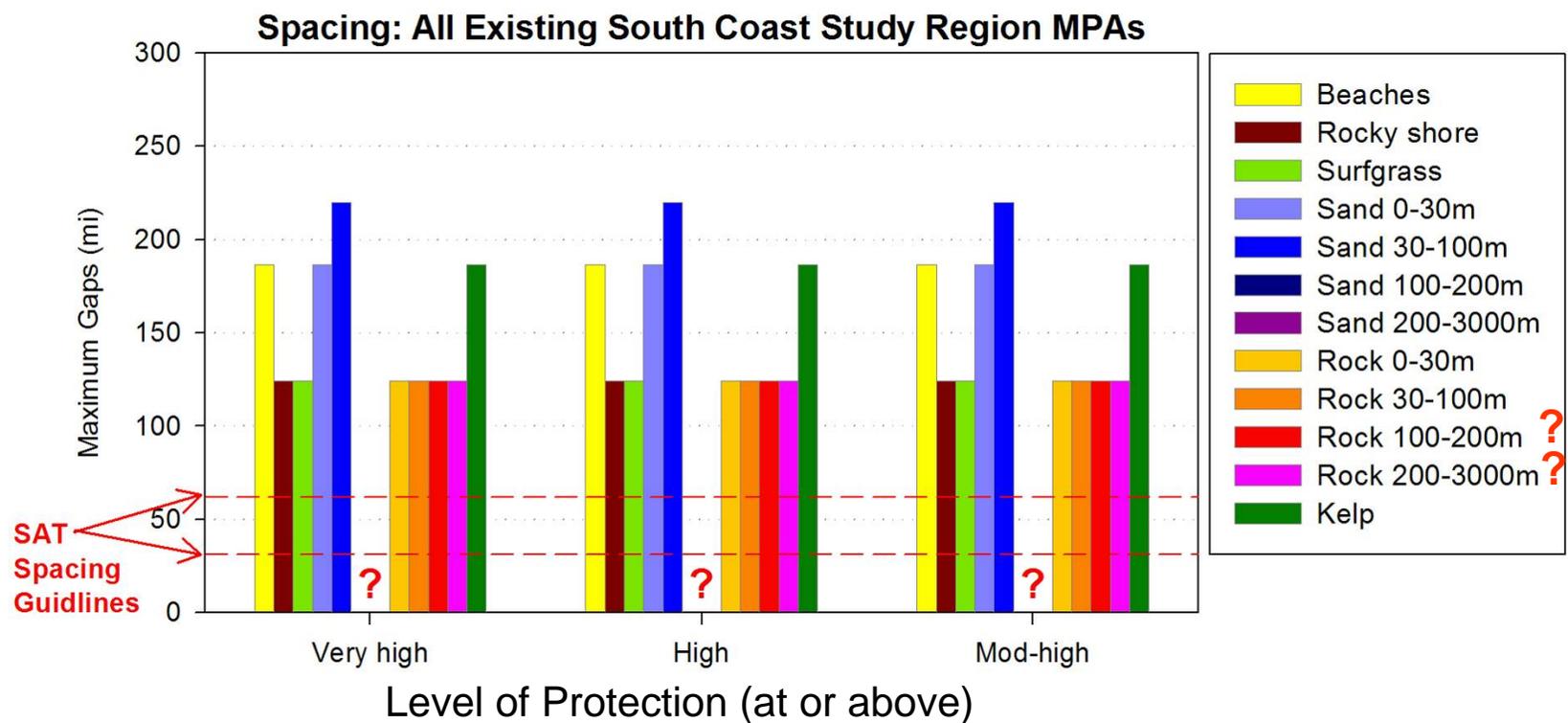
Preliminary Evaluation: Size

Size Analysis: All Existing South Coast Study Region MPAs





Preliminary Evaluation: Spacing



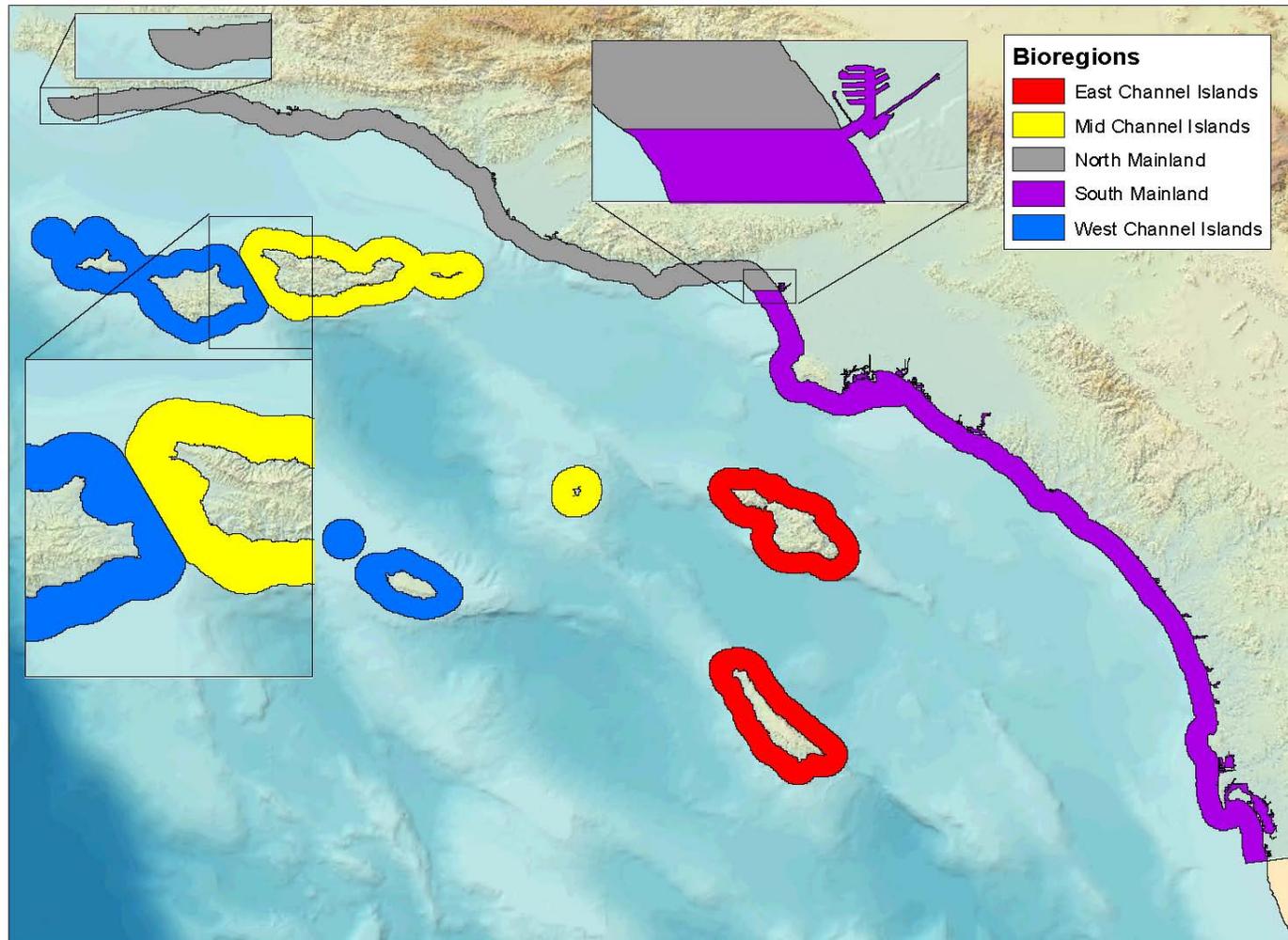


General Preliminary Conclusions

- MPAs within the Channel Islands National Marine Sanctuary (CINMS) are main contributors for habitat representation, replication, and MPA size
- MPAs outside of the CINMS are mostly small and represent fewer habitats
- Spacing guidelines mostly met for CINMS MPAs, but not for other MPAs



Five SAT Bioregions





North Mainland Bioregion MPAs





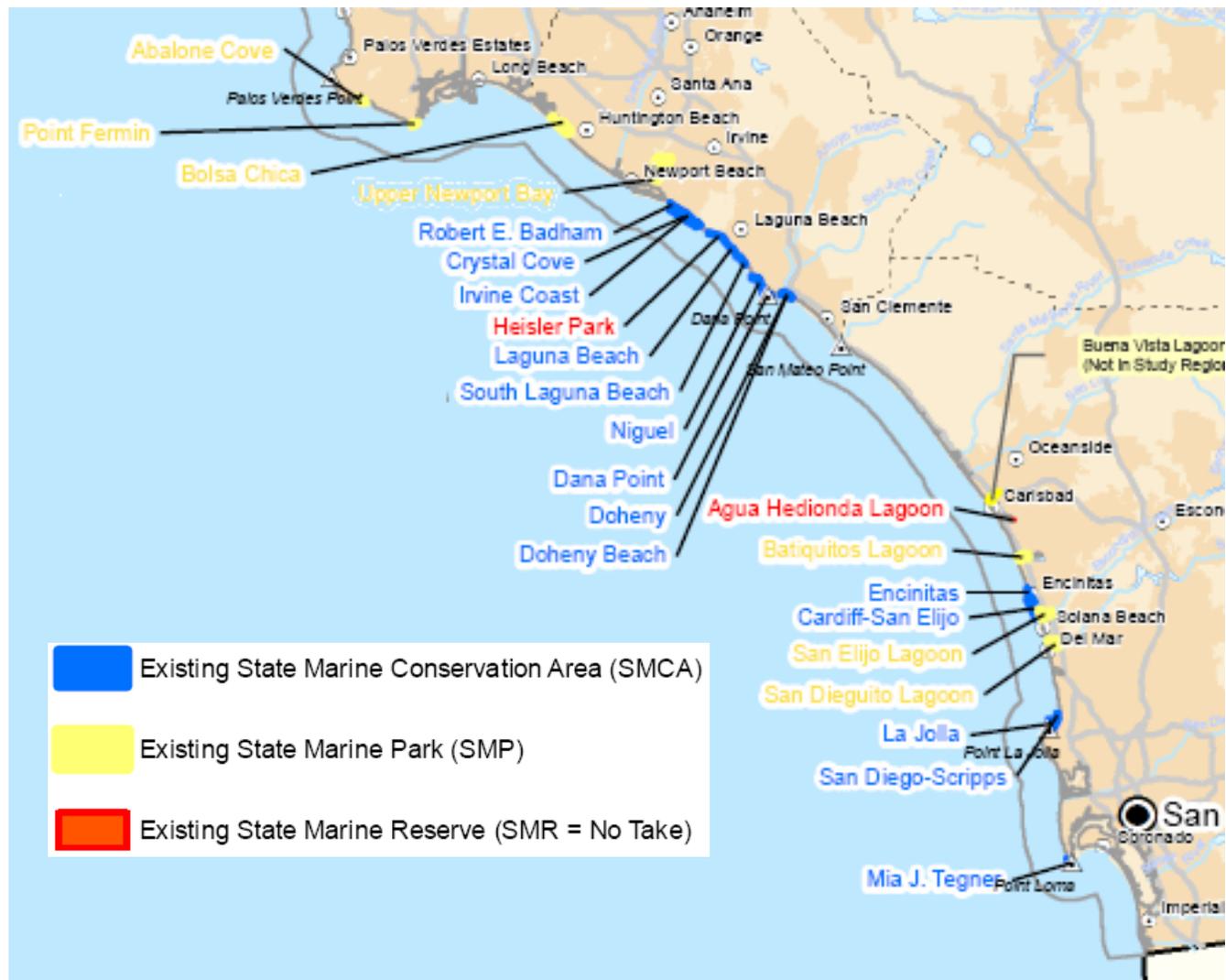
North Mainland Bioregion MPAs

- 3 existing MPAs (1 SMR, 1 SMCA, 1 SMP)
- Largest is Big Sycamore Canyon SMR (2.4 square miles)
- Habitats:
 - Mostly soft substrate/sandy beach
 - Some hard substrate/rocky intertidal/kelp at Refugio SMCA
 - Includes marsh/estuary habitat at Goleta Slough SMP
 - Few deeper habitats
- SMCA and SMP allow most forms of take (SMP prohibits all commercial take)

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



South Mainland Bioregion MPAs





South Mainland Bioregion MPAs

- 24 existing MPAs (2 SMR, 14 SMCA, 8 SMP)
- Largest Crystal Cove SMCA (1.5 square miles)
- Habitats:
 - Shallow hard substrate/rocky intertidal, as well as significant kelp coverage in Cardiff-San Elijo SMP
 - Smaller amounts of shallow hard substrate/rocky intertidal in Irvine Coast, Laguna Beach and La Jolla SMCAs
 - Significant marsh/estuary in Bolsa Chica, Upper Newport Bay, and San Elijo Lagoon SMPs (plus several other MPAs)
 - Most coastal MPAs have a mix of sandy and rocky habitats
 - Few deeper habitats

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



South Mainland Bioregion MPAs

- Regulations:
 - SMPs allow most forms of recreational take
 - Orange County SMCAs allow most recreational take and prohibit most commercial take except for lobster
 - Northern San Diego SMPs mostly allow recreational take of finfish
 - La Jolla SMCA prohibits most forms of take
- Buena Vista SMP is outside of the study region

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



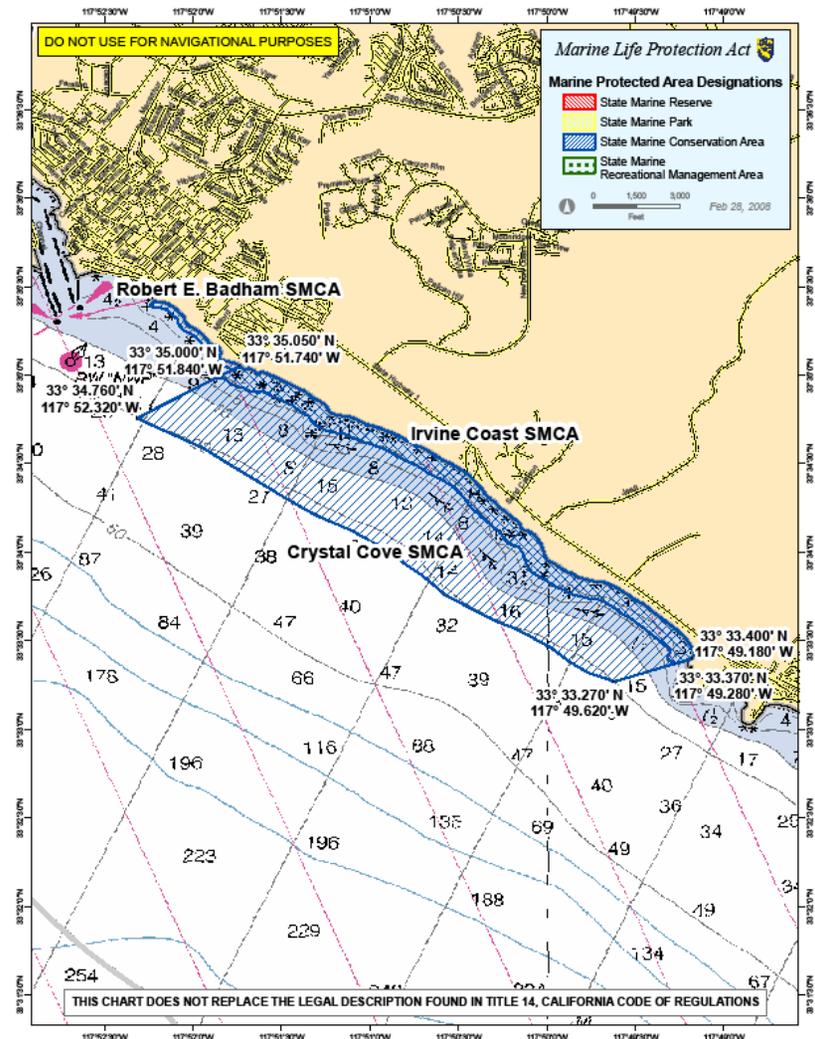
Mainland Bioregions MPAs: Feasibility

DFG Evaluation of Feasibility

- Lagoon MPAs generally:
 - Boundaries generally better than outer coast
 - Some use inappropriate boundaries (e.g.: tidal height)
 - Most reasonable uses are allowed
 - Overlap with other designations in some cases
 - o e.g.: ecological reserves
 - o Watch for differing boundaries and regulations
- Outer Coast MPAs, generally:
 - Mostly intertidal MPAs
 - Multiple feasibility concerns (example in next slide)

Feasibility of Existing MPAs: Example

- Example:
 - Orange County Coast
- Feasibility Concerns:
 - Intertidal MPAs
 - Multiple zoning
 - Overlapping boundaries
 - Complex/liberal regulations
 - Use of depth contours and distance offshore

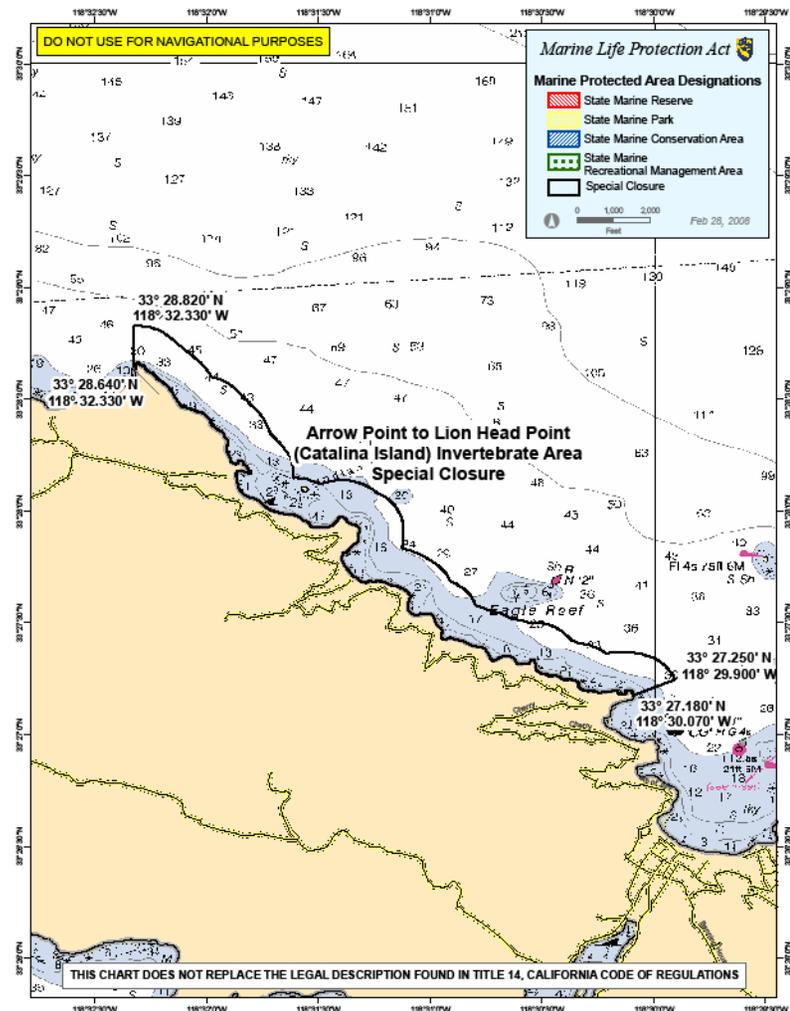




Feasibility of Existing MPAs: Specifics

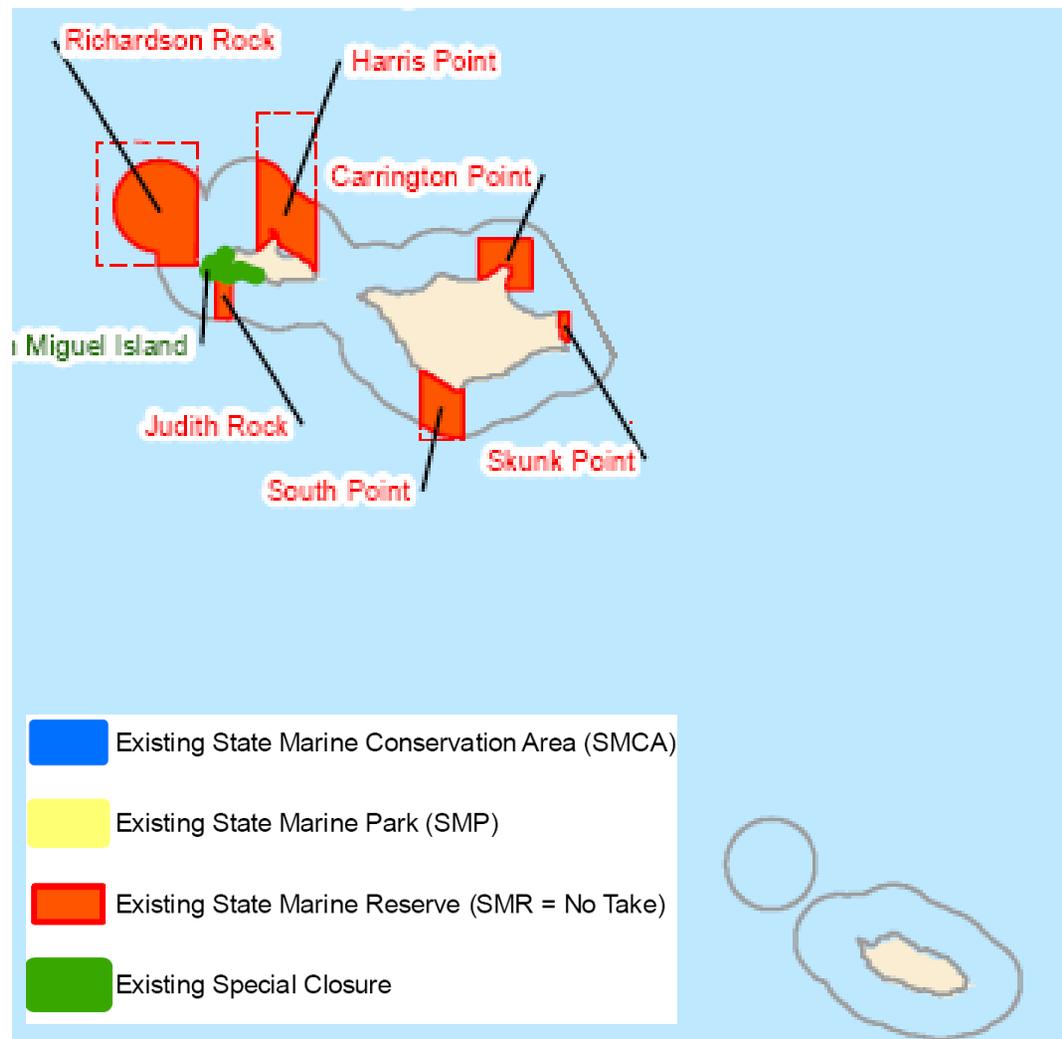
Specific Feasibility Issues:

- Existing Special Closures (2 Northern CI, 1 Catalina Island)
 - Should consider redesign to meet guidelines
- Buena Vista Lagoon SMCA
 - Currently freshwater
 - Should be omitted
- Overlapping designations
 - Ecological reserves, etc.
 - Shown in MarineMap





West Channel Islands Bioregion MPAs





West Channel Islands Bioregion MPAs

- 6 existing MPAs (6 SMR, 0 SMCA, 0 SMP)
 - California Fish and Game Commission guidance is to retain all 6 MPAs without change
- Largest is Richardson Rock SMR (40.8 square miles)
- One special closure (on San Miguel Island)
- Habitats:
 - Captures significant rocky intertidal/shallow rock/kelp
 - Includes mapped surfgrass
 - Significant deeper sandy soft substrate, some deeper hard habitat
- No take allowed in any of these MPAs

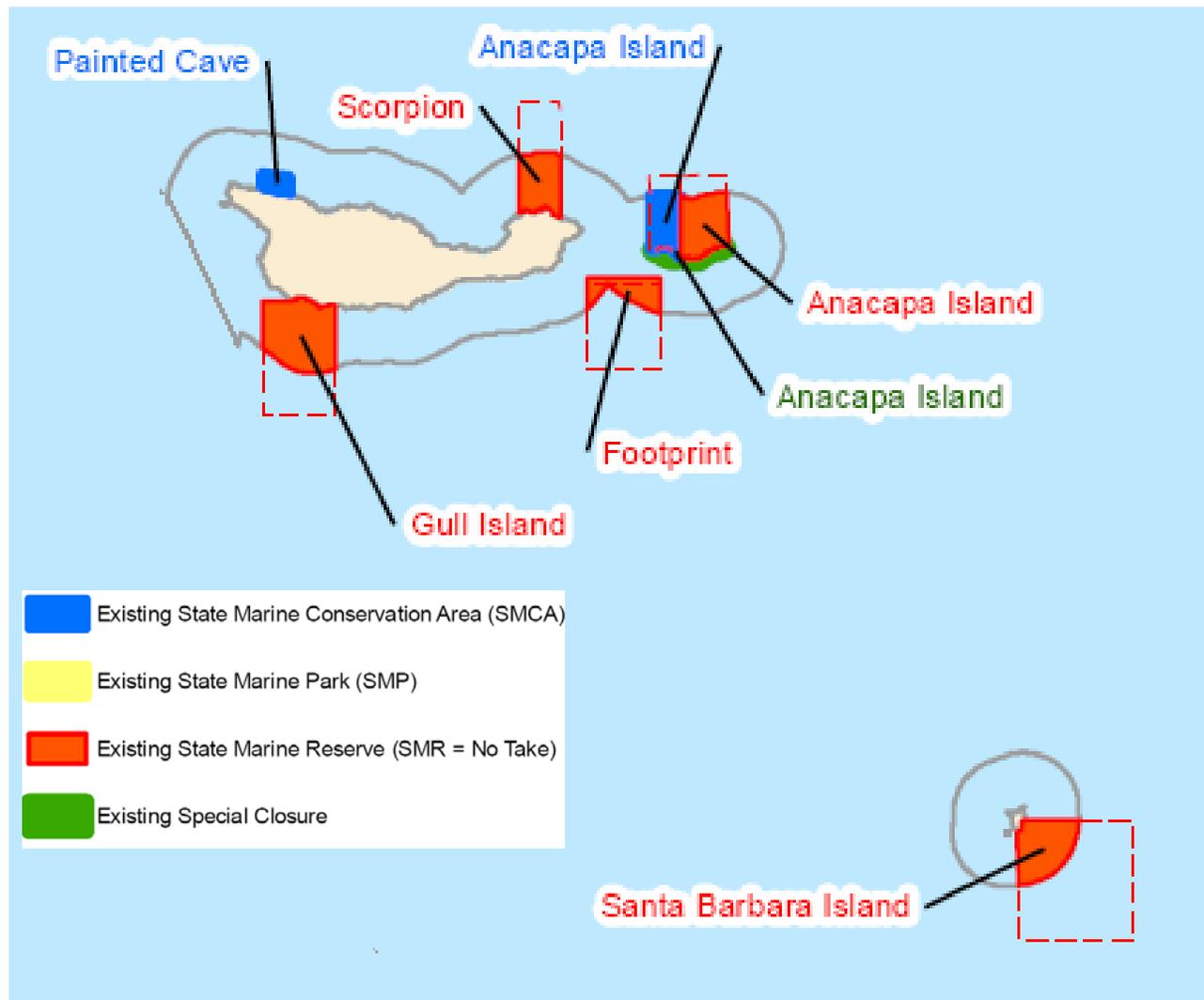


West Channel Islands Bioregion MPAs

- No CDFG feasibility analysis due to California Fish and Game Commission guidance to retain MPAs within the Channel Islands National Marine Sanctuary with no changes to existing boundaries or regulations



Mid Channel Islands Bioregion MPAs





Mid Channel Islands Bioregion MPAs

- 7 existing MPAs (5 SMR, 2 SMCA, 0 SMP)
 - California Fish and Game Commission guidance is to retain all 7 MPAs without change
- Largest is Gull Island SMR (19.9 square miles)
- One special closure (on Anacapa Island)
- Habitats:
 - Captures significant rocky intertidal/shallow rock/kelp
 - Includes mapped surfgrass
 - Significant deep sandy soft substrate and deep hard habitat
- Mostly no take SMRs, SMCAs allow take of lobster and pelagic finfish (prohibit most commercial take)

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

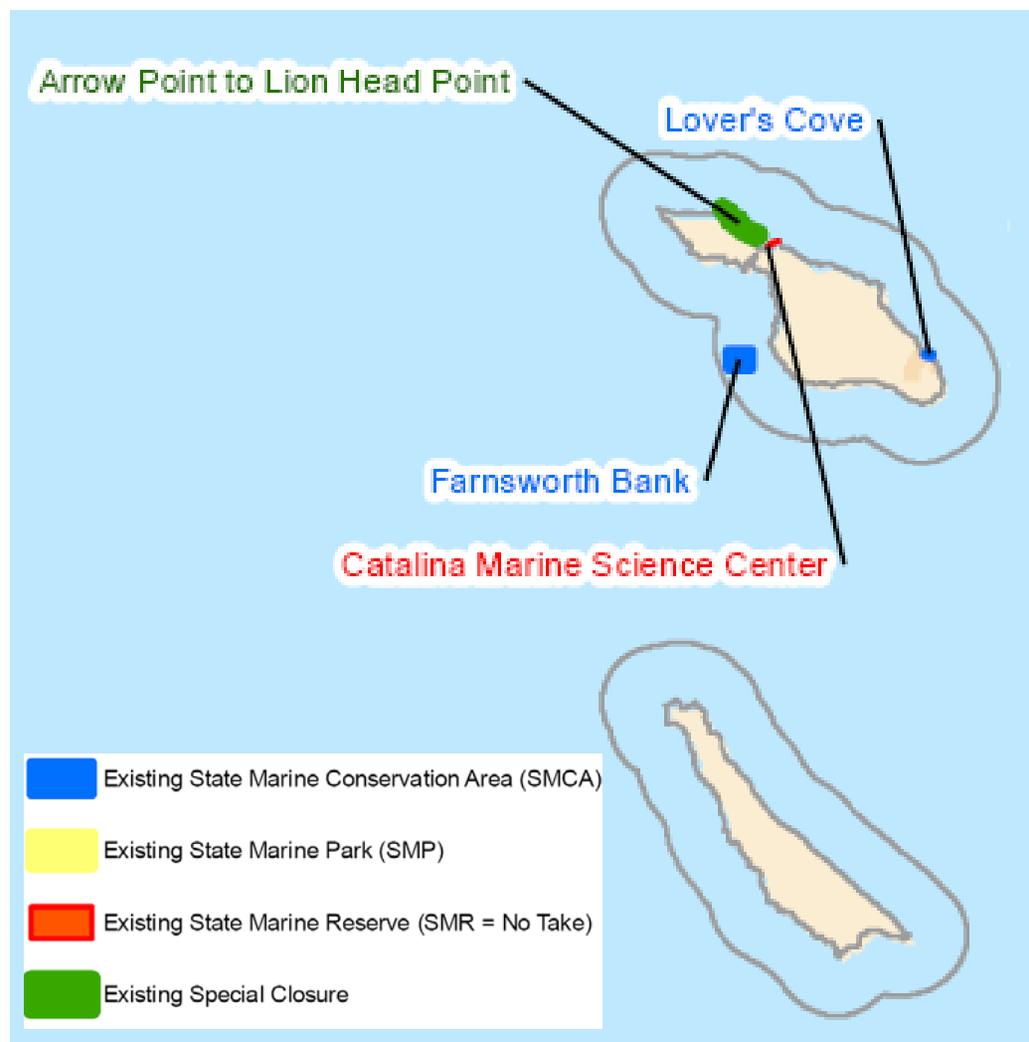


Mid Channel Islands Bioregion MPAs

- No CDFG feasibility analysis due to California Fish and Game Commission guidance to retain MPAs within the Channel Islands National Marine Sanctuary with no changes to existing boundaries and regulations



East Channel Islands Bioregion MPAs





East Channel Islands Bioregion MPAs

- 3 existing MPAs (1 SMR, 2 SMCA, 0 SMP)
- Largest is Farnsworth Bank SMCA (1.7 sq mi)
- One special closure (Arrow Head to Lion Point)
- Habitats:
 - Includes rocky intertidal/shallow rock
 - Some deeper habitats included at Farnsworth Bank SMCA
- Farnsworth Bank SMCA prohibits take of purple coral, Lovers Cove SMCA prohibits mostly recreational take
- Special closure prohibits recreational take of invertebrates



East Channel Islands Bioregion MPAs

CDFG Feasibility

- General: MPAs generally small but with simple take regulations
- Farnsworth Bank SMCA
 - meets boundary guidelines (+)
 - but defines take regulations by depth (-)
- Special closure (Arrow Head to Lion Point)
 - Regulates take only
 - Should be re-designated as MPA or eliminated



Next Steps

- Create draft MPA arrays, considering:
 - Available data
 - Guidance (science advisory team, blue ribbon task force, California Department of Fish and Game, State Parks, MLPA staff)
 - Areas of importance
 - Input from fellow SCRSG members
 - Information on existing MPAs