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Albion Harbor Regional Alliance

Albion Harbor Regional Alliance
POB 122 Albion CA 95410
Sunday, March 21, 2010

Bald Head Harvester

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External MPA Array F

AHRA members outreach and integration began on the North Central Coast in 2008.

The Seaweed Abalone Urchin Kelp (SAUK) fisheries are representative of local cultural subsistence, recreational, and commercial access to natural resources that have been successful at initiating self-regulation and are sustainably managed in our region.

AHRA is unique in the entire MLPA process in that it is funded solely by it's own money. Board members represent almost every fishery in the Biogeographical Region that includes the North Coast Study Region.

External Array F accounts for effort shift from the North Central Coast MPA's. External Array F meets the MPF Habitat Replication Requirements and the North Coast SAT *recommendation of 'one replicate' per bioregion (2).*

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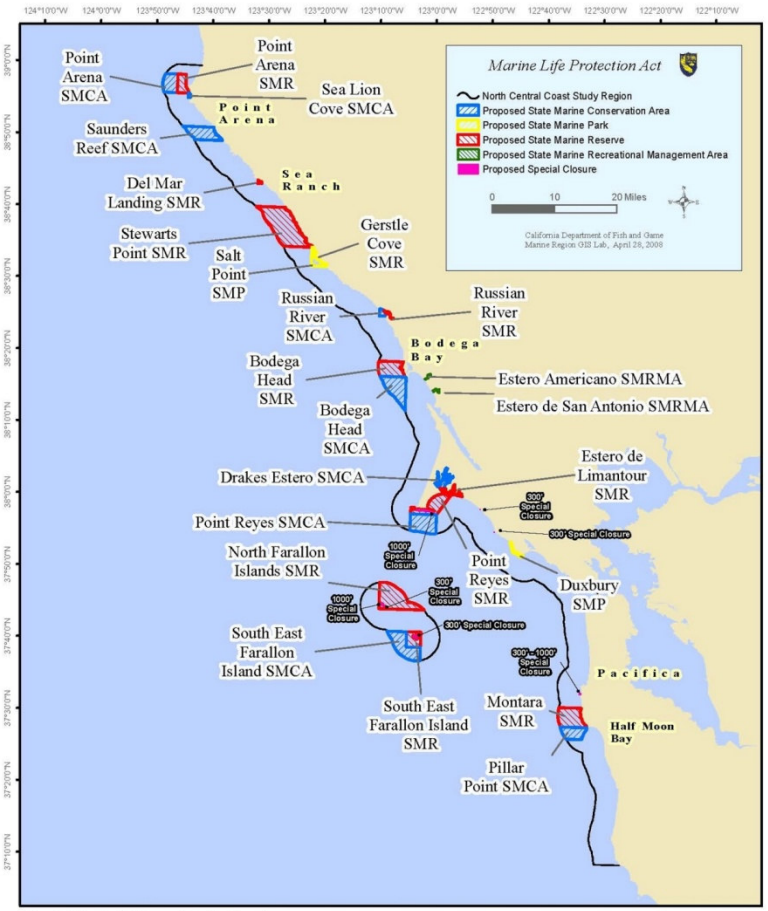
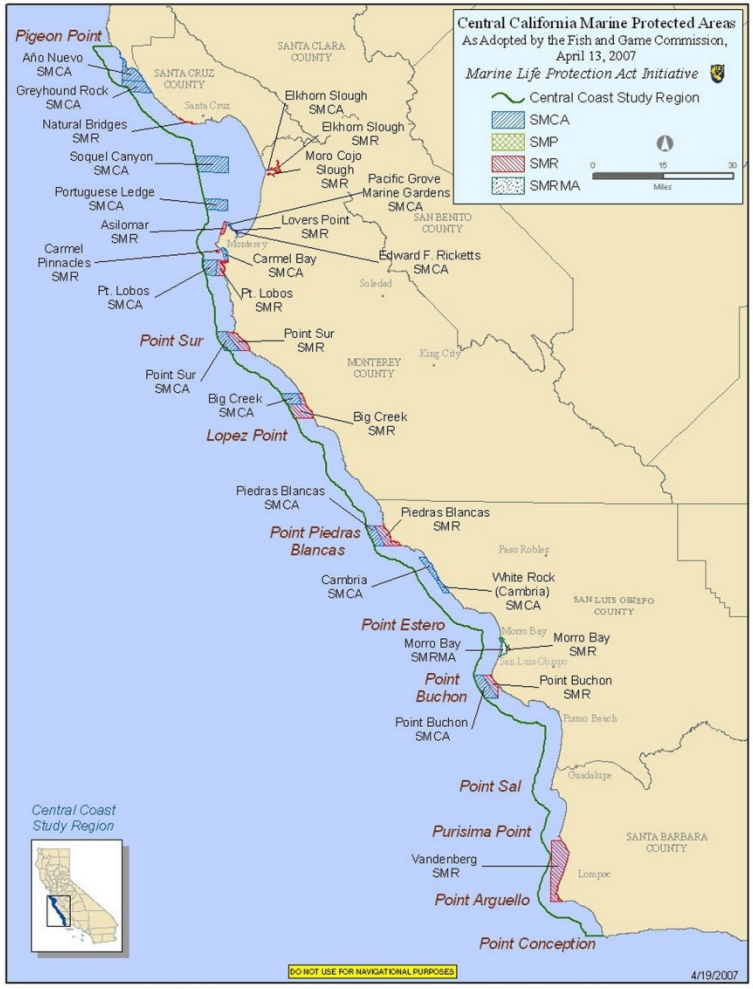
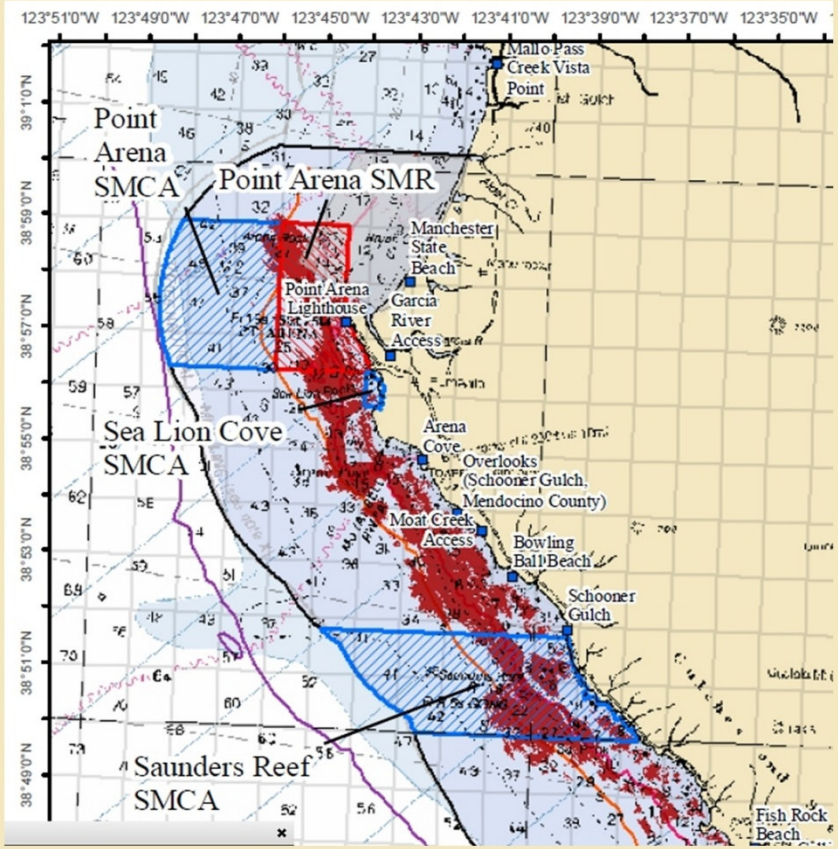


North Central Coast Study Region
Integrated Preferred Alternative



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



Fish & Game Commission has adopted four MPAs very near Point Arena Cove.

These fishing closures amount to over 20 square miles within a radius of about 7 miles from the Arena Cove Pier.

Saunders Reef SMCA 4.5 miles south of Arena Cove, Sea Lion Cove SMCA about 1.5 miles north and the Point Arena SMR and SMCA Cluster beginning about 2 miles north.

There are about 22 miles of coastline within the North Coast Region between Little River and 39° north latitude but including the area served by the harbor of Arena Cove, conservatively estimated to be from the community of Elk to the south end of Mendocino County at the Gualala River this adds up to a geographical piece of coast about 40 miles long, from Little River to Gualala.

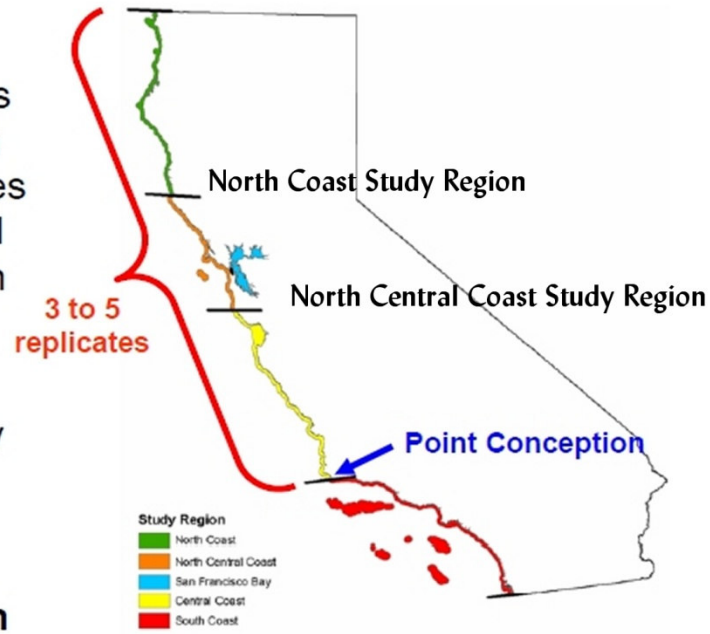
Beyond the MLPAi MPF requirements, the SAT also recommends that at least one replicate of each habitat type occurs in each of the 2 North Coast Bioregions - that includes habitat in the NCC and CC south to Point Conception.

Biogeographical regions (Goals 1, 2 and 4)

- The MLPA requires marine reserves in each **biogeographical region** of California
- Two biogeographical regions were identified:
  - California-Oregon border to Point Conception
  - Point Conception to U.S.-Mexico border

Habitat representation (Goals 1 and 4)
Habitat replication (Goals 1, 2, 3, 4 and 6)

- Science guidance in the Master Plan recommends **3 to 5 replicates** of each key habitat within reserves in each **biogeographical region** (Point Conception to California-Oregon border)
- For the south coast study region, scientists recommended at least **1 replicate** of each key habitat in each **bioregion**



90% Threshold NCC

Habitat	Area or Length of a Replicate
Rocky Intertidal	~0.5 linear miles
Shallow Rocky Reefs/Kelp Forests (0-30 m)	~1 linear miles
Deep Rocky Reefs (30-100 m)	~0.1 square miles
Sandy Beaches *	~1 linear miles
Soft-Bottom Habitat (0-30 m)	~1 linear miles
Soft-Bottom Habitat (30-100 m)	~10 square miles
Estuary	0.12 square miles (77 acres)

*Estimates for the north central coast study region

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Points Of Consideration By Our Communities In The Process & Development Of External Array F (Albion Harbor Regional Alliance)

1) **Existing Regulations on the North Coast**
2) **Ten Mile Safety Zone around harbors and ports**
3) **Recently Implemented MPAs within the Biogeographical Region Includes those in the North Central and Central Coast Study Regions**
4) **Distinctly different geographical area and constituency is represented in each of the 4 *similar arrays.***
5) **Representation & Replication of habitats across the Biogepgraphical Region that would compliment the California State MPA network as a whole. *In the NCCSR, there is a lack of sandy beaches and soft bottom habitat, we feel this is represented and replicated in the northern bioregion.***

From the beginning at least 3-4 AHRA Board members attended every MOCA meeting.
AHRA has hosted several MOCA meetings serving up community atmosphere on the Albion River.
AHRA Board members brought constituents voices from the southern most region to bear on the MLPA Initiative process, the MOCA proposal, and the NCLI (Tri - County workgroup). We recognized early on that Ocean Food Gatherers use the entire North Coast and Local Stewardship and Sustainability are built into that assessment through conference with officials and input of LEK. We feel that overall, Social and Economic Impacts to our communities, are inferred by and mitigated in specific differences of the arrays depicted in the Habitat Representation and Replication Assessments by MLPAi Staff.

Ranking of proposals by average representation at or above moderate-high protection across all habitats:
ExD > ExE > ExC > [ExF & ExG] > ExB & ExH] > ExA

- **Most MPAs proposed in the northern bioregion do not replicate a large number of habitats. For example, proposed MPAs in the Pyramid Point vicinity replicate mostly beaches, rocky shores, and shallow sand habitats (soft 0-30m proxy).**

Similarly, proposed
MPAs in the Reading Rock vicinity replicate mostly beaches, shallow sand (soft 0-30m proxy, soft 30-100m), and in ExC, ExD and ExE, rock 30-100m.

- **Ranking of arrays for replication across all habitats at moderate-high protection:**
ExD > ExE > ExC > [ExB, ExF & ExG] > ExH > ExA

California Marine Life Protection Act Initiative
Summary of Key Points from SAT Evaluations of Round 1
North Coast External Proposed MPA Arrays (Revised March 15, 2010)

External Array F:

All arrays have substantial gaps in 0-30m rock as measured by the proxy line, possibly because this information was not available when arrays were designed.

Ranking of arrays based on average gap in excess of the guideline or minimum possible spacing:
ExD < ExE < ExC < [ExB, ExF, ExG & ExG] < ExA

All arrays have some MPAs that do not meet minimum size guidelines at very high protection

Ranking of arrays for median cluster size at moderate high protection:
ExD > ExE > ExB, ExF, ExG & ExH > ExC > ExA

03152010 SAT in Eureka Mark Carr Doc H2

WE FEEL IT IS THE SCIENCE THAT HAS THE BIGGEST GAPS!

Social and Economic Impacts
In Ballance With The >%10 Replication Minimum
To Protect %90 Threshold Of Biodiversity By Habitat Type

Comparison:
North Central Coast RSG proposals below and the North Coast at right.

Habitat Replication (Goals 1 and 4)
Replication of habitats within the biogeographic region (Point Conception to the Oregon border) within three to five SMRs is required by the MLPA. For this analysis, the SAT included both NCC MPAs of the NCCRSG proposals and recently implemented MPAs in the Central Coast to assess replication. Additionally, the SAT evaluated habitat replication within the NCCSR for within-habitat ecosystem representation and monitoring and evaluation opportunities.

In order to be counted in the replication analysis for a given habitat, the MPA must meet the minimum size guideline and the habitat within the MPA must meet the minimum amount to count for representation (further details on these methods are available in the SAT - Evaluation Methods document).

All habitats, with the exception of shallow sand, have at least 10% representation at or above the moderate-high LOP in all four proposals.

GOALS for Replication of Habitat are to Protect;
1. The natural diversity and function of marine ecosystems.

4. Representative and unique marine life habitats.

External MPA Array F (Albion Harbor Regional Alliance)

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Habitat Replication by Bioregion

Rocky Habitats

Number of bioregions with at least 1 habitat replicate

a	Rocky Shores			Offshore Rocks			Kelp			Rock 0-30m Proxy			Rock 30-100m			Rock 100-3000m		
	VH	H	MH	VH	H	MH	VH	H	MH	VH	H	MH	VH	H	MH	VH	H	MH
P0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ExA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
ExB	1	1	2	1	1	2	0	0	1	1	1	1	1	1	2	1	1	1
ExC	0	2	2	0	2	2	0	1	1	0	1	1	0	2	2	0	1	1
ExD	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	1 (2)	1 (2)	1 (2)
ExE	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	1 (2)	1 (2)	1 (2)
ExF	1	1	2	1	1	2	0	0	1	1	1	1	1	1	2	1	1	1
ExG	1	1	2	1	1	2	0	0	1	1	1	1	1	1	2	1	1	1
ExH	1	1	2	1	1	2	0	0	1	1	1	1	1	1	2	1	1	1

Note: Parenthesis () indicate the number of bioregions with replicates if MPAs are split at the bioregion boundary.

- **Only ExD and ExE replicate rocky shores, offshore rocks, and 30-100m rock in both bioregions at very high protection**
- **None of the arrays replicate kelp or 0-30m rock in the northern bioregion**
- **Rock 100-3000m is only available in 1 location, right near the bioregion boundary**

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Results: Habitat Replication

Summary

- All habitats already replicated in at least 3-5 MPAs at or above mod-high protection elsewhere in the biogeographic region (north central coast or central coast)
- On average, ExD, ExC and ExE provide largest number of replicates of open coast habitats at or above mod-high protection
- None of the arrays replicate kelp, 0-30m rock, or 100-3000 soft bottom in both bioregions at or above mod-high
- All arrays except ExC replicate all estuarine habitats across all possible bioregions at very high protection
- Ranking of arrays for replication across all habitats at mod-high protection:

  ExD > ExE > ExC > [ExB, ExF & ExG] > ExH > ExA

Presentation March 16, 2010 • Eureka, CA
Dr. Karina Nielsen, MLPA Science Advisory Team

The abundance of each habitat type varies throughout the study region and thus affects how much habitat the proposals are able to include across the study region. For instance, there is more rocky shoreline and shallow rocky reef habitat in the northern part of the study region than the southern part of the study region. Some habitats, including rocky and sandy habitats deeper than 200 meters, are not present in the study region at all. Other habitats, including kelp, are not well mapped and thus geographic patterns of habitat availability are, in part, an artifact of limited data ... *NCC Study Region*

North Central Coast *and* North Coast Habitat Abundance, Availability, Replication Across Two of Three Study Regions

North Coast

Very High Protection & Mod-High Protection

- For most habitats, 3-5 replicates already exist elsewhere in the biogeographic region of the (north central and central coast regions)

Compared to evaluations of previous rounds of proposals, there are not marked differences among the MPA proposals in terms of replication.

Even at a very high LOP, there is similarity in numbers of replicates across proposals in various habitats. ***NCC Study Region***

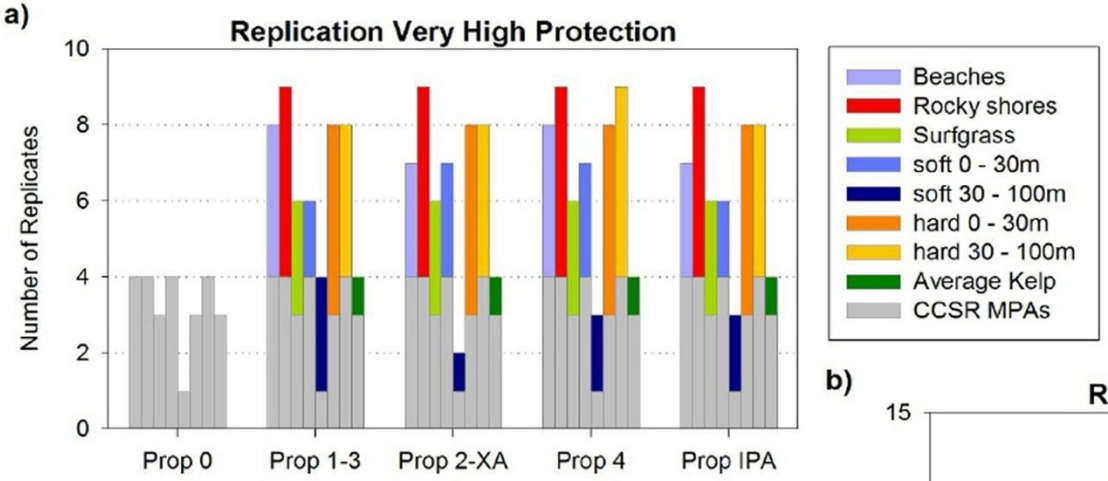
North Coast

- Nearshore rocky habitats are less abundant in the northern bioregion
- >100 meter depth habitats are rare across the region, occurring mostly in canyons in the southern bioregion
- Soft bottom habitats are especially abundant in the northern bioregion

Note: some substrate mapping and 0-30 meter (m) proxy line were not available when external MPA arrays were developed

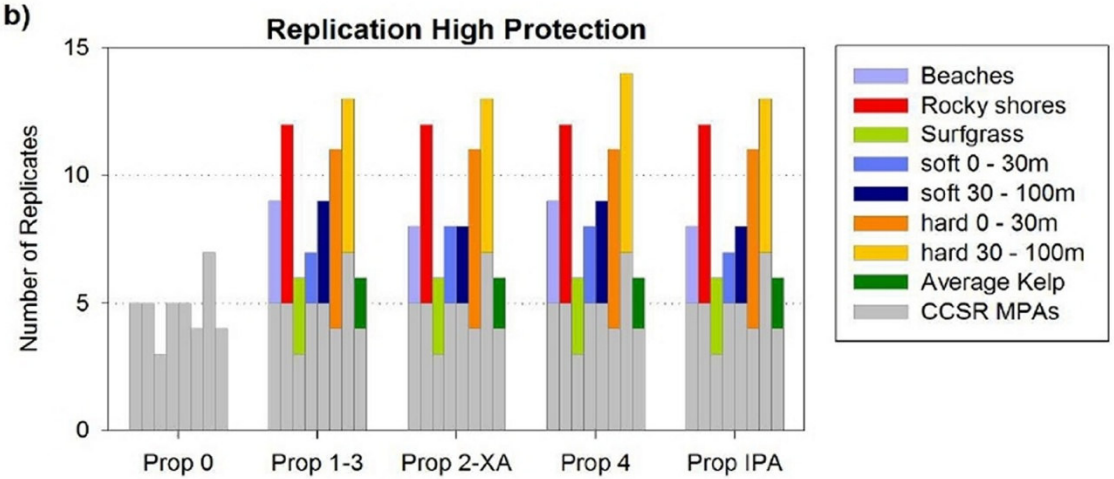
Figure 5: Habitat Replication for North Central Coast Habitats

a)

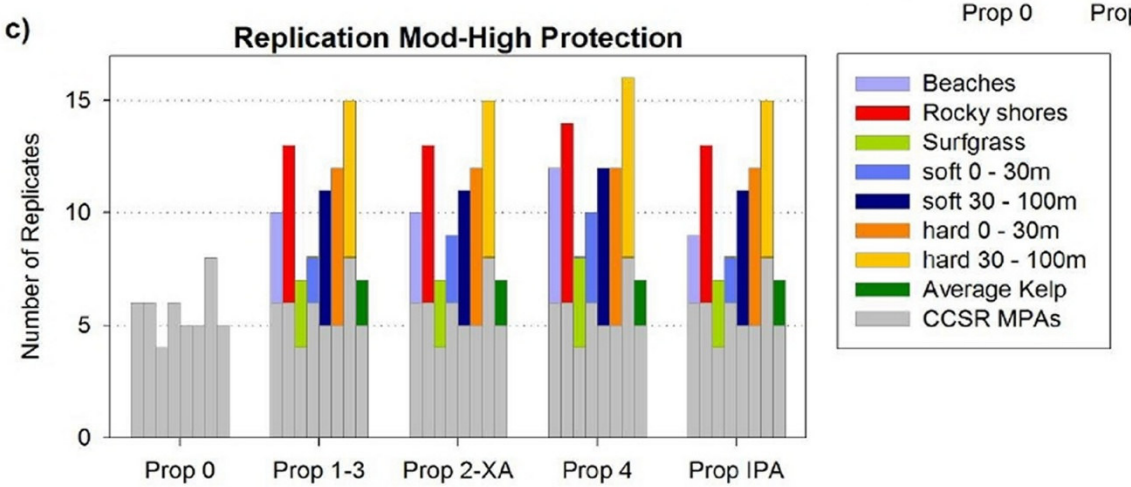


All habitats, with the exception of shallow sand, have at least 10% representation at or above the moderate-high LOP in all four proposals

b)



c)



Guidelines for Replication

3-5 replicates of habitat per biogeographic region (i.e., from Point Conception to the California-Oregon border)

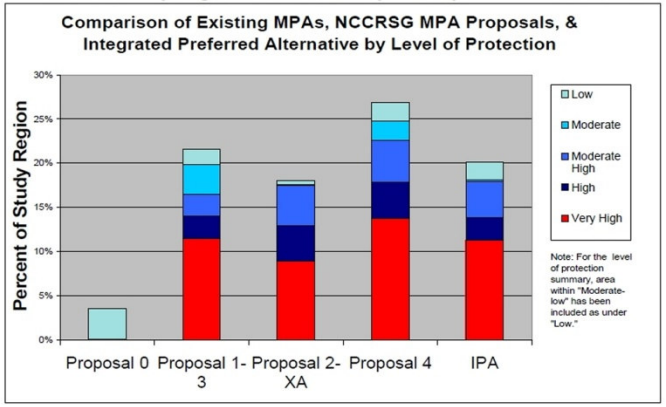
SAT recommends at least 1 replicate of each habitat in each of the two north coast bioregions, if possible

MPA or cluster must meet the minimum size guidelines (9 square miles).

Habitat must meet the threshold identified to encompass 90% of biodiversity in that habitat type

Estuarine MPAs do not have to meet size guidelines but must contain at least 0.12 square miles of estuarine habitat

2: Percent of Study Region Area within Proposals by Level of Protection



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External MPA Array F

In conclusion: The AHRA External Array Proposal F emphasizes the effort of the northern 3 counties of Mendocino, Humboldt, and Del Norte to to come as close to one array as possible. The many similarities are indicative of agreement.

AHRA has contributed several thousand hours assembling representative input from North Coast residents and businesses. This intimate involvement with the resource dependent communities of the North Coast (including timberlands, rivers and streams, open coast resources), helped to shape a broad statement of conservation of the marine resources that is reflected in our communities' four similar but different arrays labeled (B, F, G, and H).

First hand knowledge of Visitor User Groups and related specifics provide a vast database of knowledge wovwen into the LEK input. Families and extended family, friends, friends of friends are all part of the 'visiting' user group stats.

These four arrays (bfgh) were proposed by legitimately seperate entities recognized by the MLPAi.

AHRA recognizes and protests the disregard of CTTC by the MLPAi.