

Marine Life Protection Act Initiative



Overview of Draft MPA Proposals for the MLPA North Central Coast Study Region

Presentation to the
California Fish and Game Commission and the MLPA Blue Ribbon Task Force

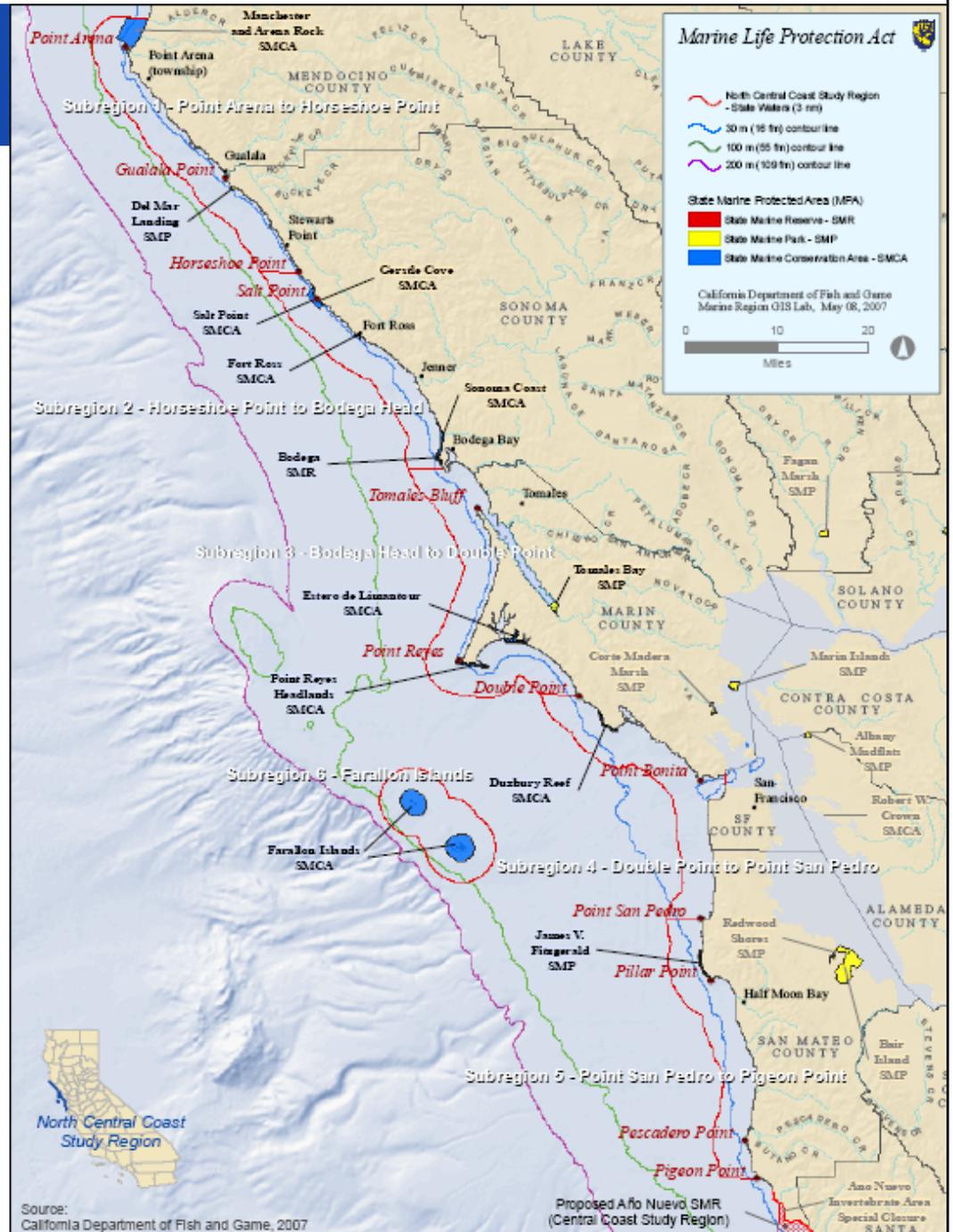
February 13, 2008 • Pacifica, CA

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Study Region

- North Central Coast
 - Alder Creek / Point Arena to Pigeon Point
 - Farallon Islands
 - Not including SF Bay
- Area: 763 square miles
- North-south extent: 146 miles
- Adjacent to central coast study region; adopted Año Nuevo State Marine Conservation Area is 2 miles south of Pigeon Point





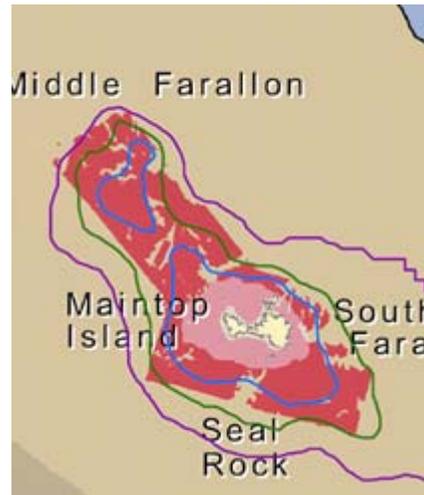
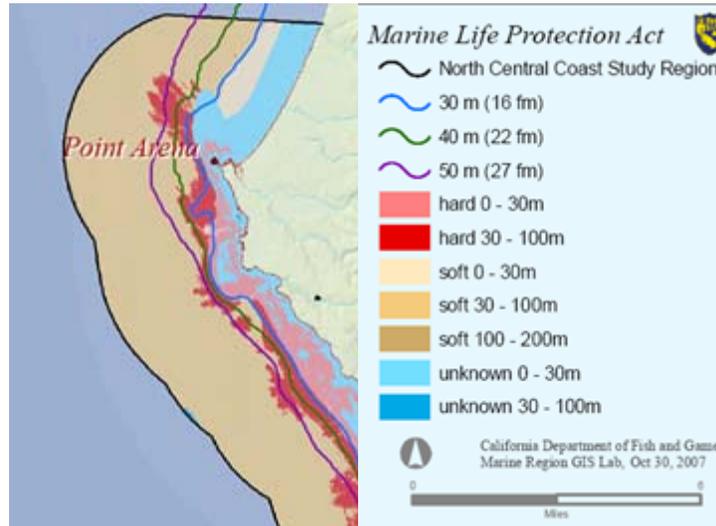
Existing MPAs

- 13 existing MPAs (10 state marine conservation areas, 2 state marine parks, 1 state marine reserve)
- 11 are smaller than 2 square miles in area
- Cover 3.51% of the study region (26.82 square miles),
- < 0.04% of area in marine reserves (0.29 square miles)
- Existing MPAs do not meet SAT habitat representation or size and spacing guidelines





Habitats of the North Central Coast



- Shallow (<100 meters) hard/soft habitats (little deep habitat)
- Estuarine habitats (Tomales Bay, large esteros, smaller estuaries)
- Bull Kelp (mapped only in northern portion of region)
- Farallon Islands
- Unique oceanographic features (upwelling, San Francisco Bay outlet, retention zones)

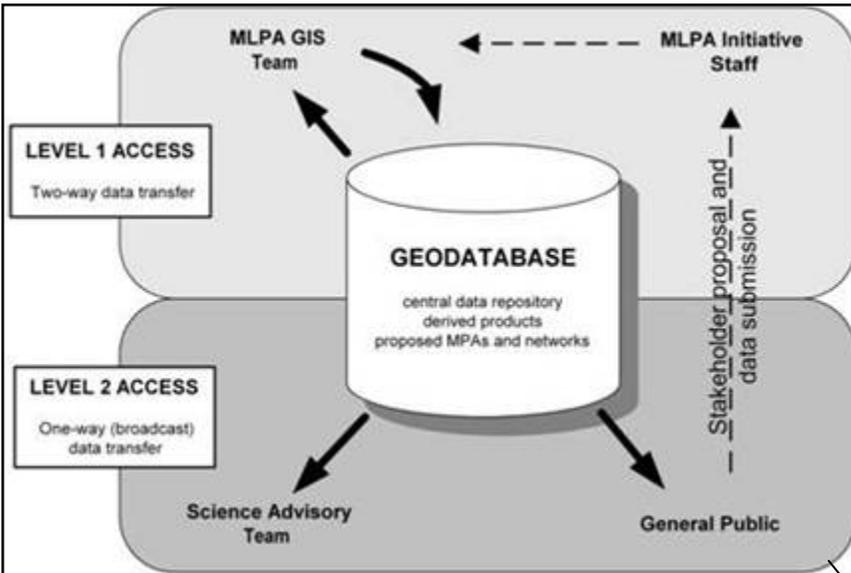


Information-rich Planning Process

MLPA requires use of the “best readily available science.....” [Fish and Game Code, Section 2855(a)]

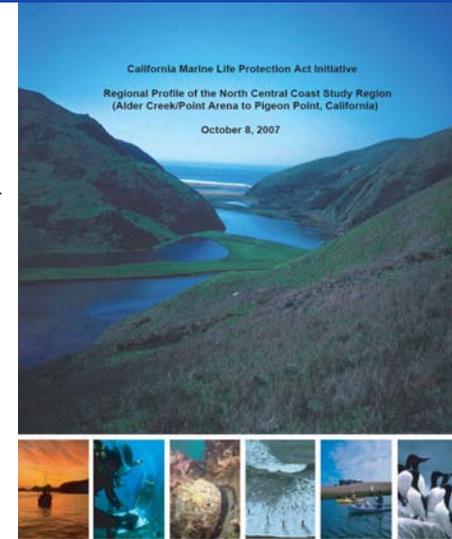
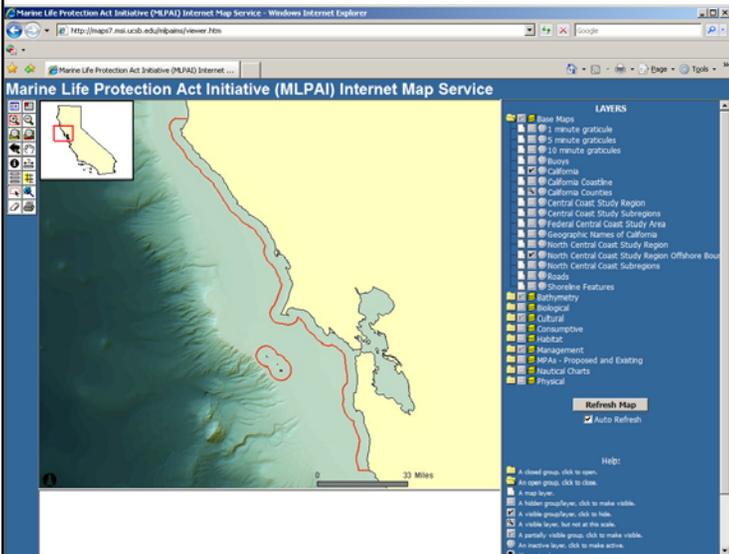
- Spatial data layers (features that can be mapped) – e.g., habitats, bird/mammal rookeries, fisheries data, access, public/private lands, etc.
- Contextual information and maps in regional profile
- Contract surveys
 - Commercial fisheries, areas of importance
 - Recreational fisheries, areas of importance
 - Non-consumptive use patterns
- Local knowledge and information as provided by stakeholders and public
- Scientific input from science team and other regional experts

Decision Support System



Marine Geodatabase

Internet Mapping
Service Site



Regional
Profile

MPA Decision Support Tool





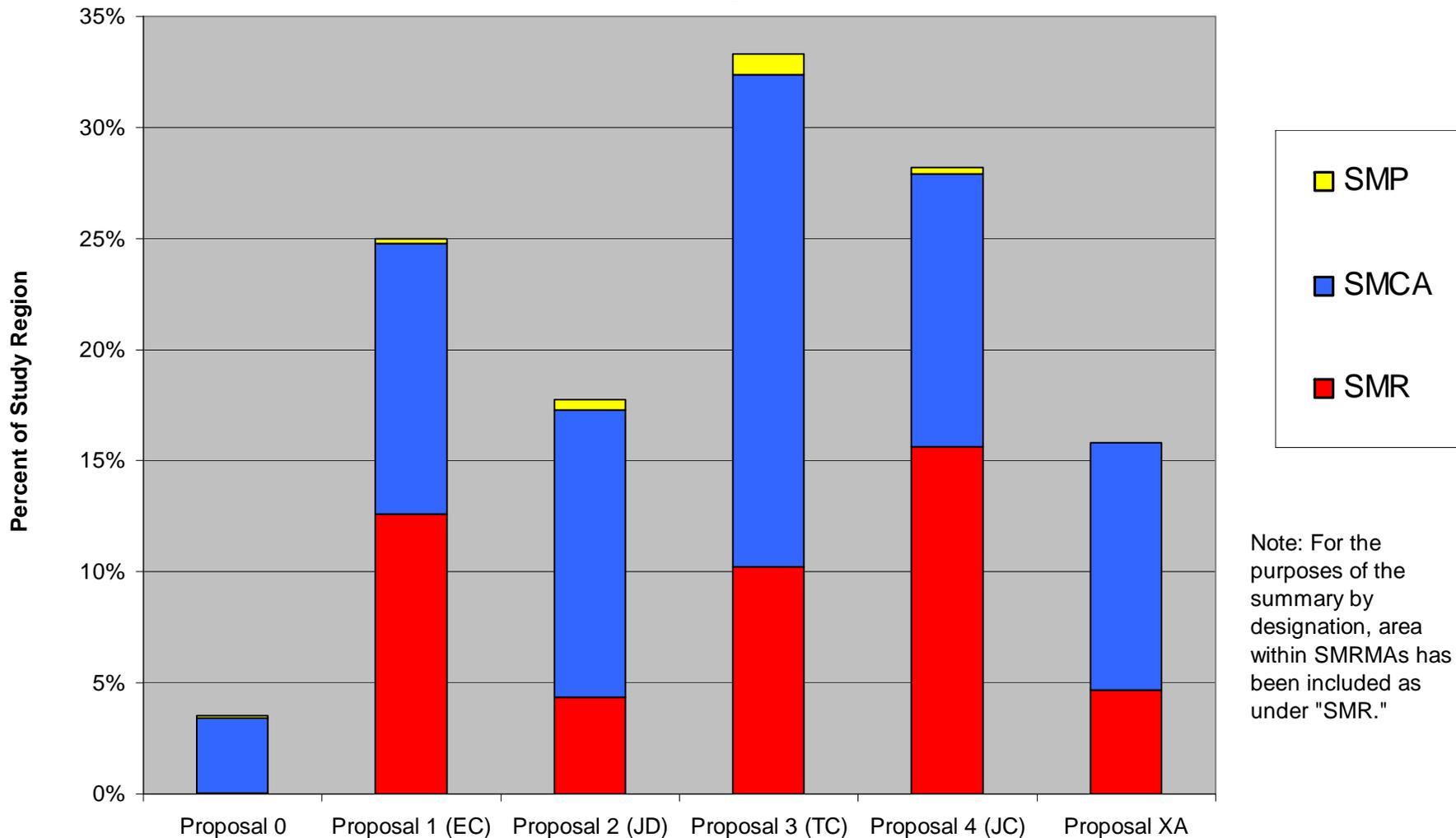
Draft MPA Proposals – Round 2

Draft MPA Proposals	Revised External Proposals
Proposal 1 (EC)	Draft External Proposal A (XA)
Proposal 2 (JD)	Proposal B (converged w/ Prop 2)
Proposal 3 (TC)	Proposal C (converged w/ Prop 4)
Proposal 4 (JC)	Proposal D (did not resubmit)

+ Proposal 0 (existing MPAs)

Area Analysis of Draft MPA Proposals

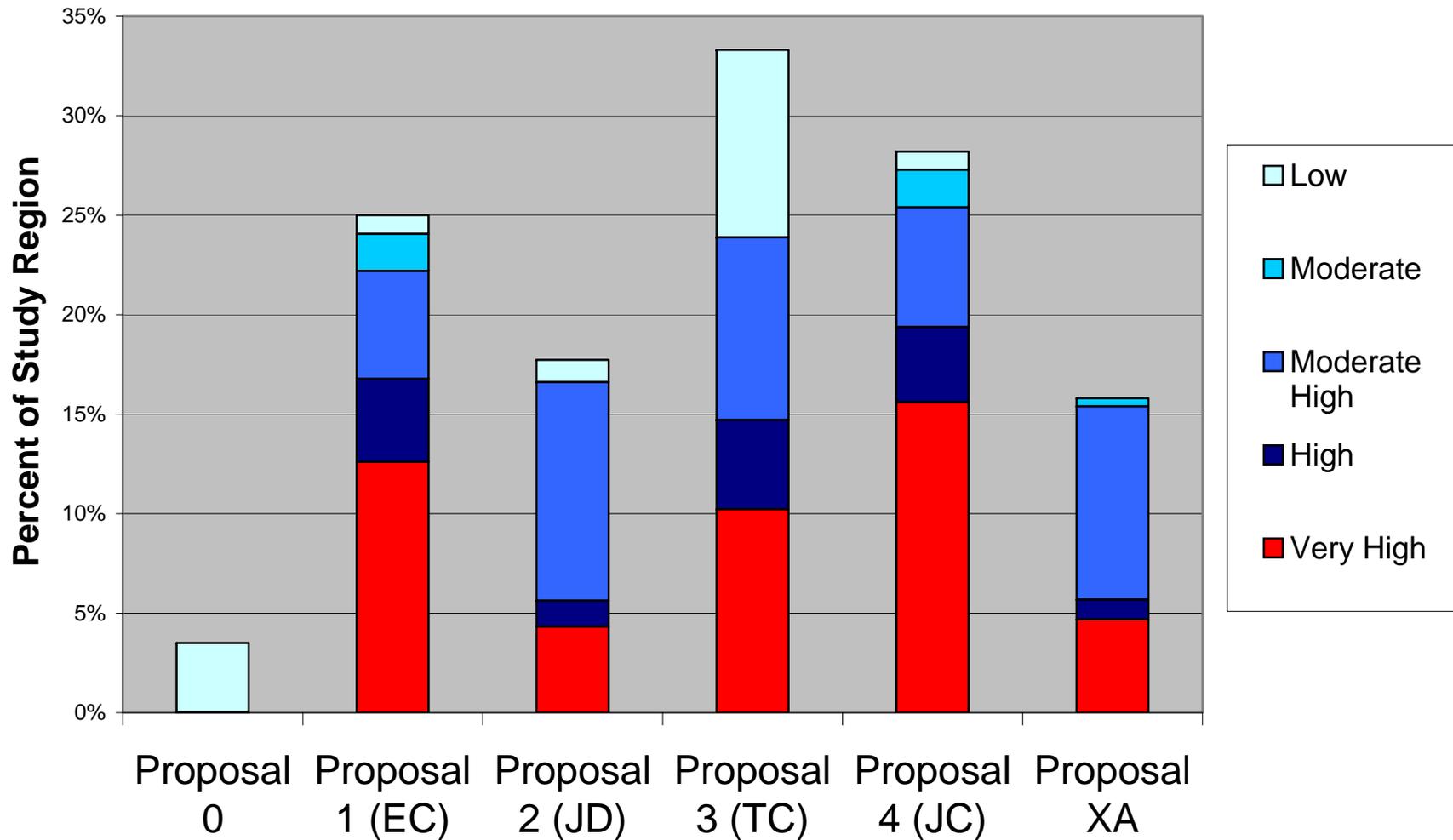
Draft MPA Proposals and Existing MPAs (Proposal 0) by Designation



Note: For the purposes of the summary by designation, area within SMRMAs has been included as under "SMR."

Area Analysis of Draft MPA Proposals

Draft MPA Proposals and Existing MPAs (Proposal 0) by SAT Level of Protection





Key Considerations

- Goals in the Marine Life Protection Act
- Master plan science guidelines and science team evaluations (MLPA goals 1, 2, 4, 6)
 - Habitat representation and replication
 - Size and spacing
 - Marine mammals and birds
- Recreational, educational and study opportunities (MLPA Goal 3)
- DFG feasibility analysis
- Existing MPAs and other regulations



Key Considerations

Tradeoffs among....

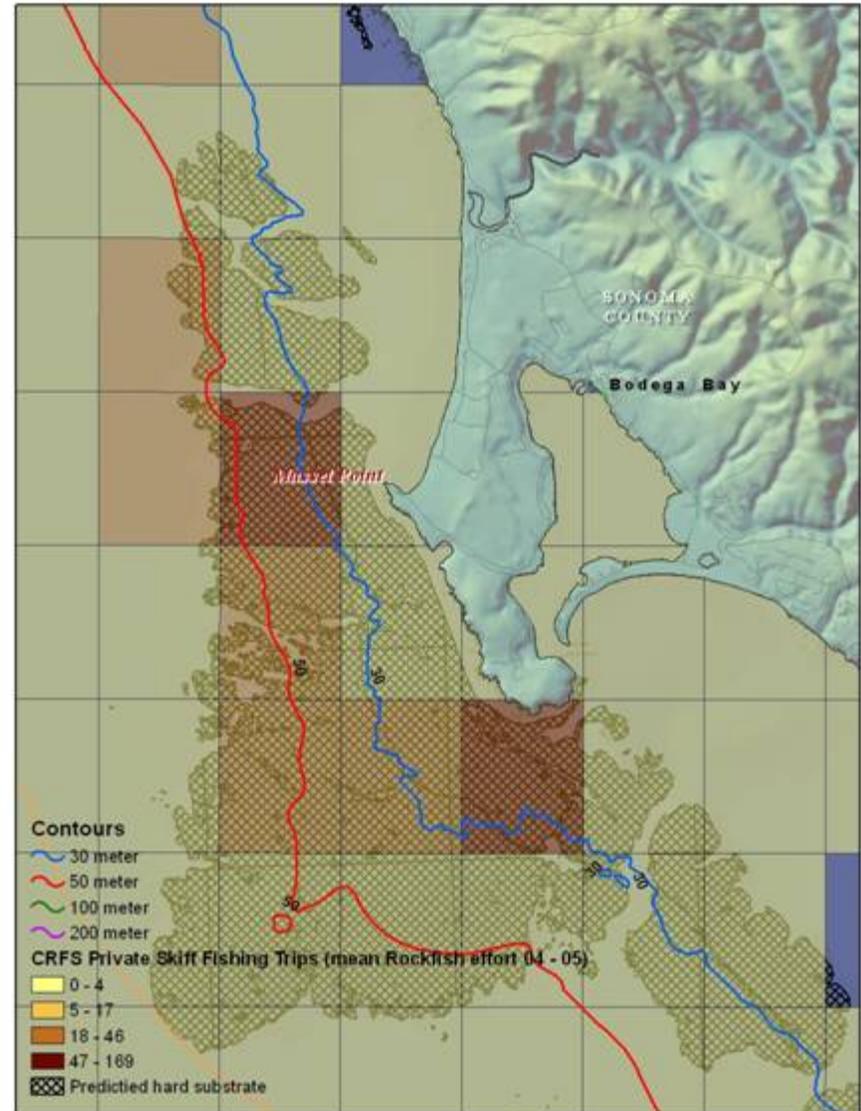
- Ecosystem protection, biodiversity value
- Potential socioeconomic impacts
 - Recreational fishing
 - Commercial fishing
- Weather and safety issues
- Access; public/private lands
- Existing uses (e.g., mariculture leases)
- Native American tribal uses
- And many more



Recreational Fishing Considerations

Example: Bodega Head

- Extensive rocky habitat extends offshore; relatively rare deep rock habitat
- Smaller boats rely on nearby fishing grounds
- Important salmon, crab, rockfish fisheries (recreational and commercial)
- Recreational and commercial fishing contribute to local economy

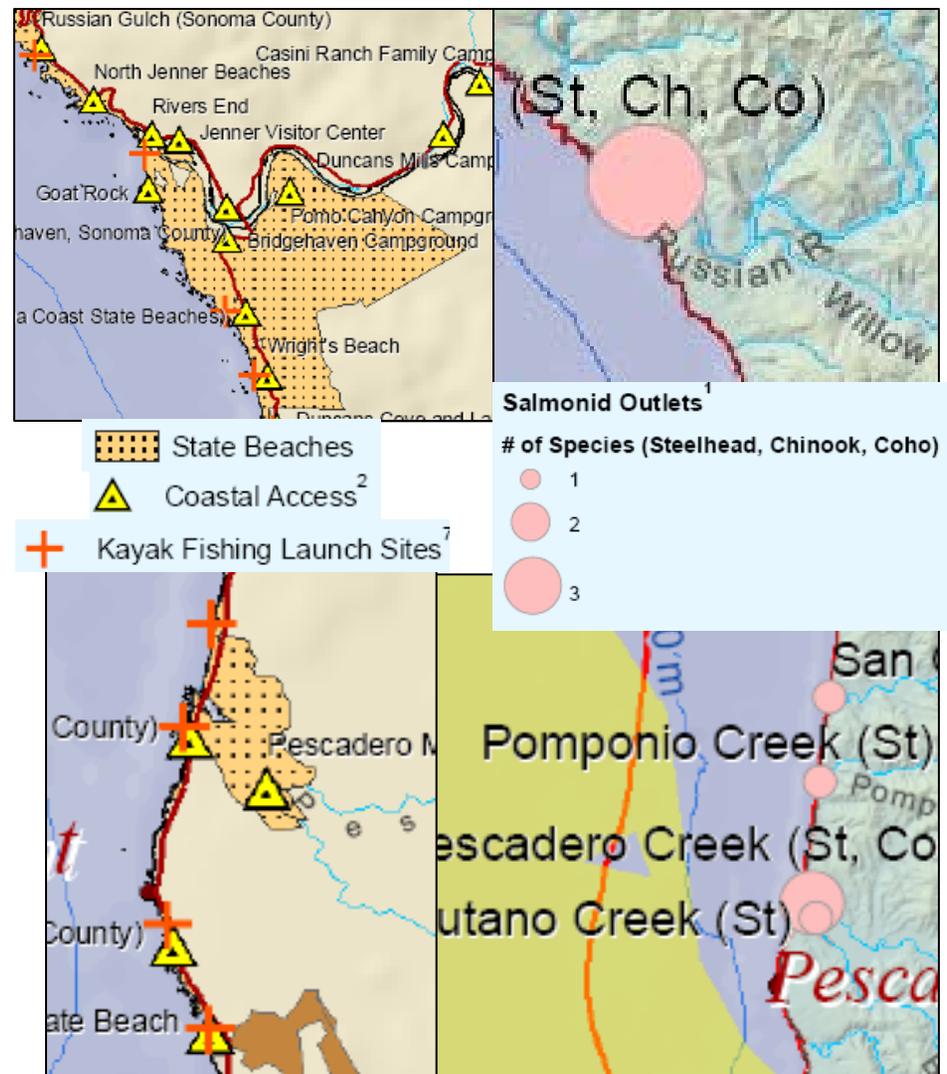




Recreational Fishing Considerations

Example: Russian River and Pescadero Estuaries

- Seabird and marine mammal colonies; estuarine habitats
- Salmon aggregations at the mouth of the Russian River Estuary; fishing opportunity during aggregation
- Catch and release steelhead fishery in Pescadero Creek Estuary





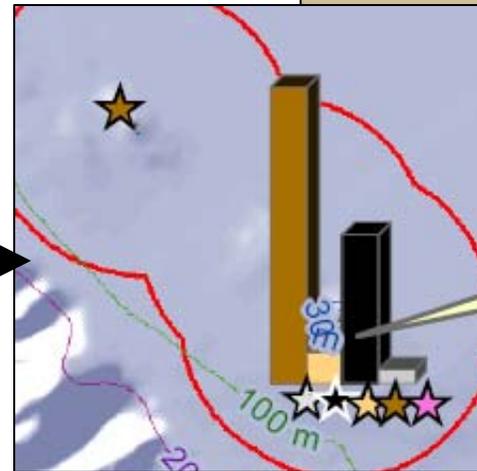
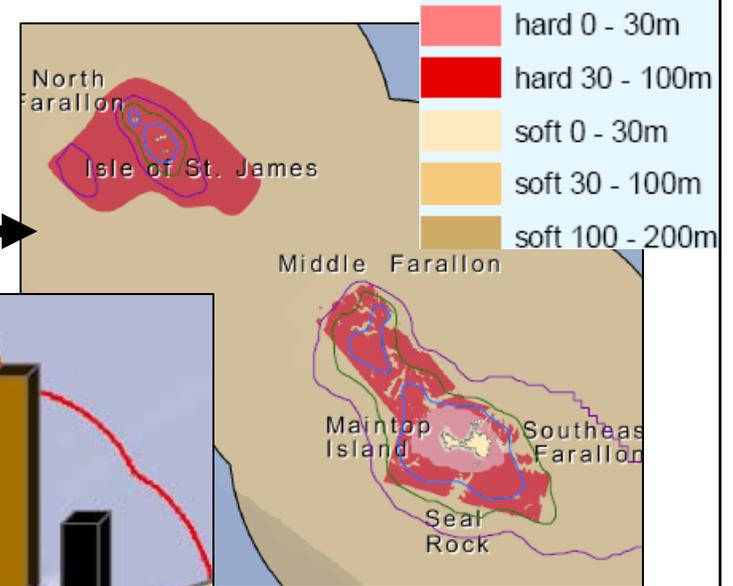
Fishing and Ecotourism Considerations

Example: Farallon Islands

Island and deep water habitats

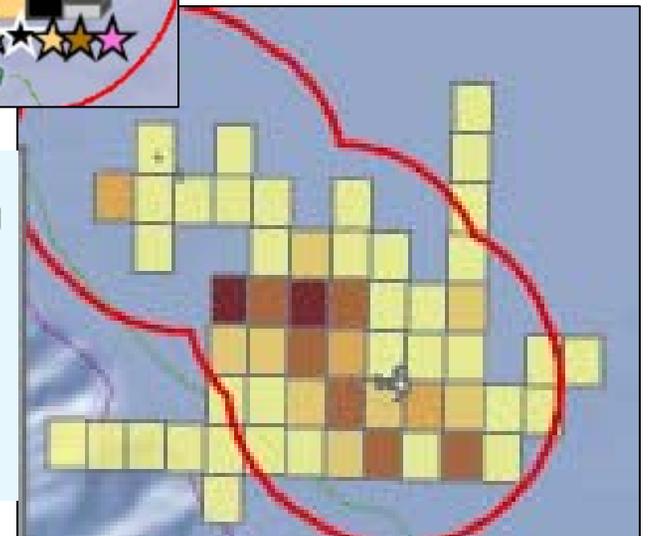
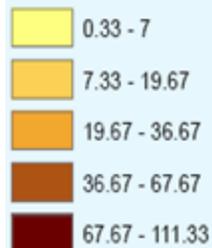
Globally significant marine mammal rookeries and seabird colonies ecotourism opportunities

Regionally important for recreational rockfish and many commercial fisheries (e.g., "party boat" rockfish landings)



Rockfish Landings '04 - '06

Mean Yearly Landings Sampled

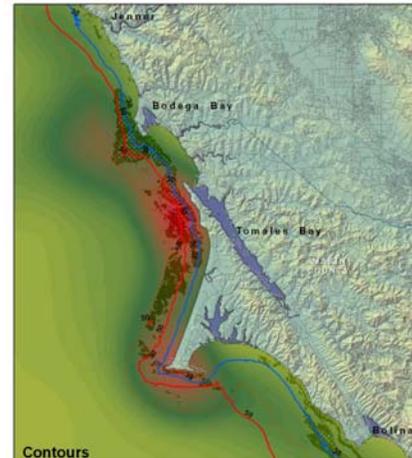




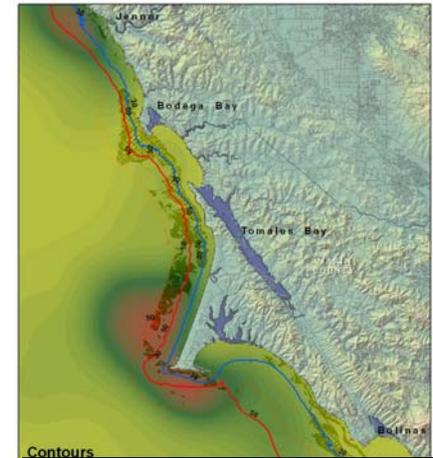
Commercial Fishing Considerations

Example: Point Reyes

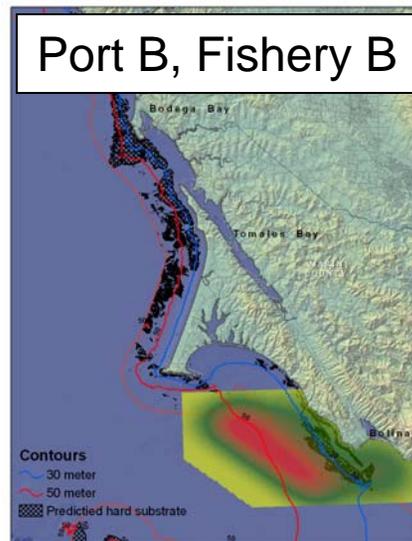
- Biologically rich area; seabird and marine mammal colonies
- Ports of Bodega and Bolinas both fish Point Reyes area; important to local economy
- Soft bottom habitats important for crab and California halibut
- Salmon trolling occurs along “tracks” offshore



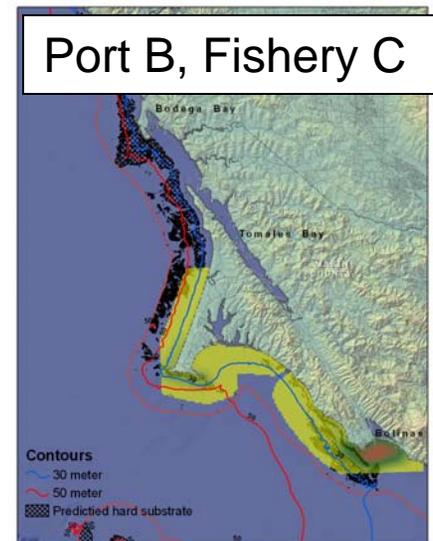
Port A, Fishery A



Port A, Fishery B



Port B, Fishery B



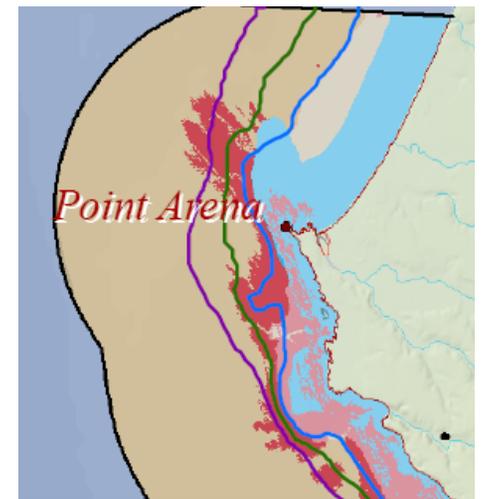
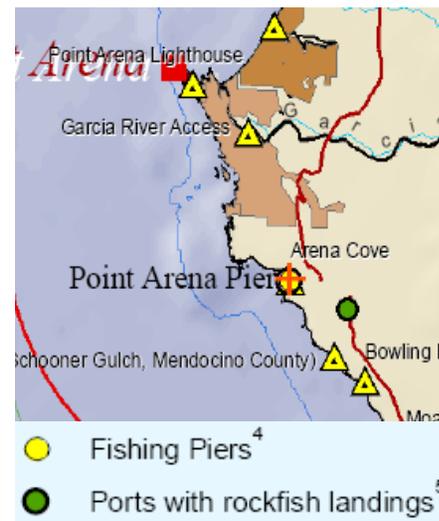
Port B, Fishery C



Commercial Fishing Considerations

Example: Point Arena

- Upwelling region with rocky reef, kelp, and rich nearshore resources
- Small port of Point Arena in area with significant weather and access limitations
- Rockfish, urchin, salmon, and crab fisheries impact local economy
- Near-shore rocky reefs and offshore sandy areas important for fisheries

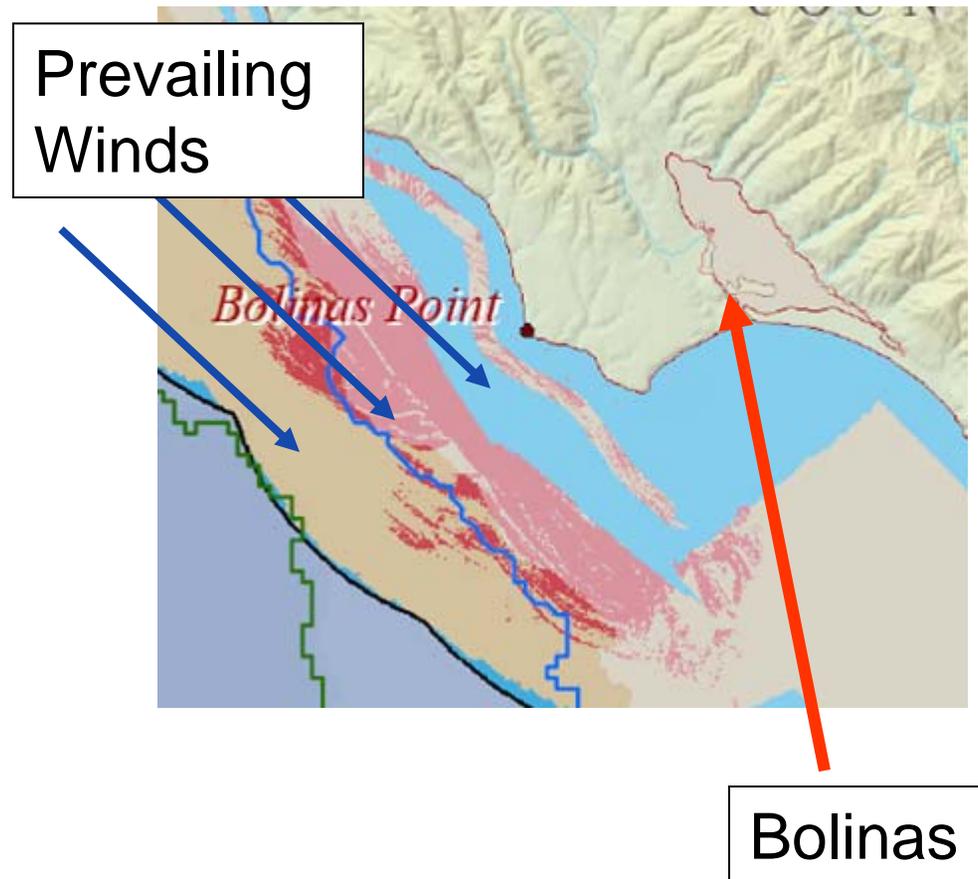




Safety and Weather Considerations

Example: Duxbury Reef

- Extensive rocky intertidal and rocky near-shore habitats
- Small Bolinas port dependent on nearby fishing resources – crab, halibut, salmon, etc.
- Small fleet with smaller vessels limits fishing options
- Duxbury Reef and Point Reyes located upwind (northwest) of port

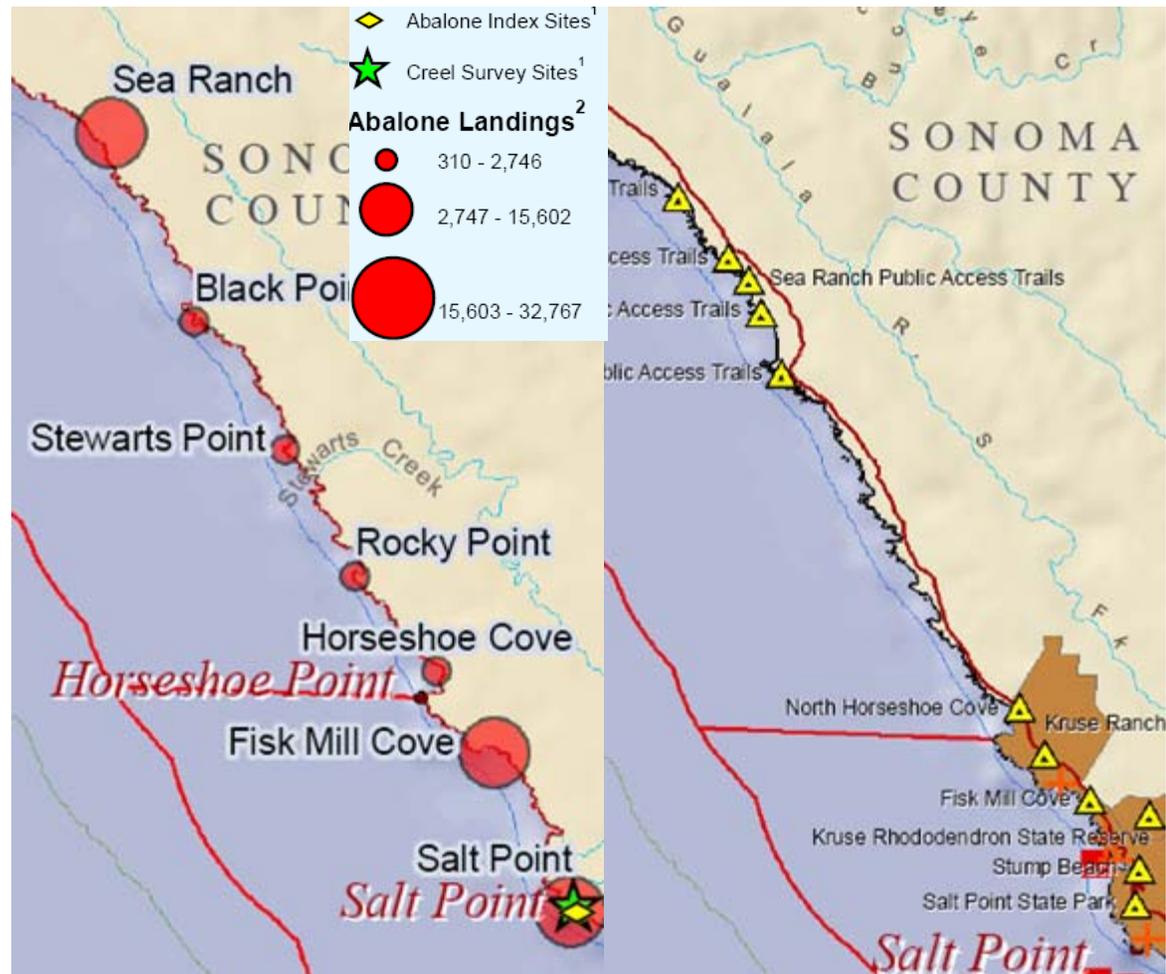




Access Considerations

Example: Sea Ranch to Salt Point

- Abundant kelp and rocky reef throughout subregion; access is limiting factor
- Economically important recreational abalone fishery
- Siting of MPAs that limit “take” adjacent to public versus private lands

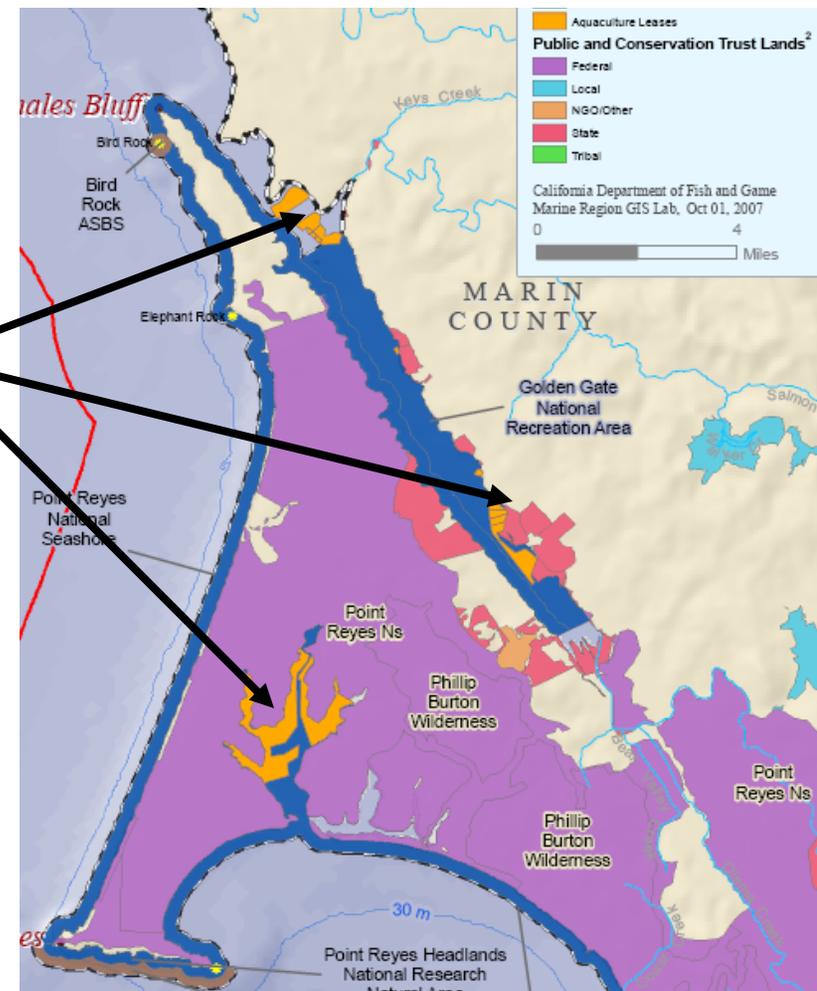




Existing Mariculture Lease Considerations

Example: Tomales/Drakes Bay

- Rich estuarine ecosystems with many habitats and high biodiversity value
- Existing mariculture operations
- SAT has assigned low level of protection to most mariculture activities
- Mariculture inconsistent with proposed designations of state marine reserve in specific locations (e.g., Drakes Estero)

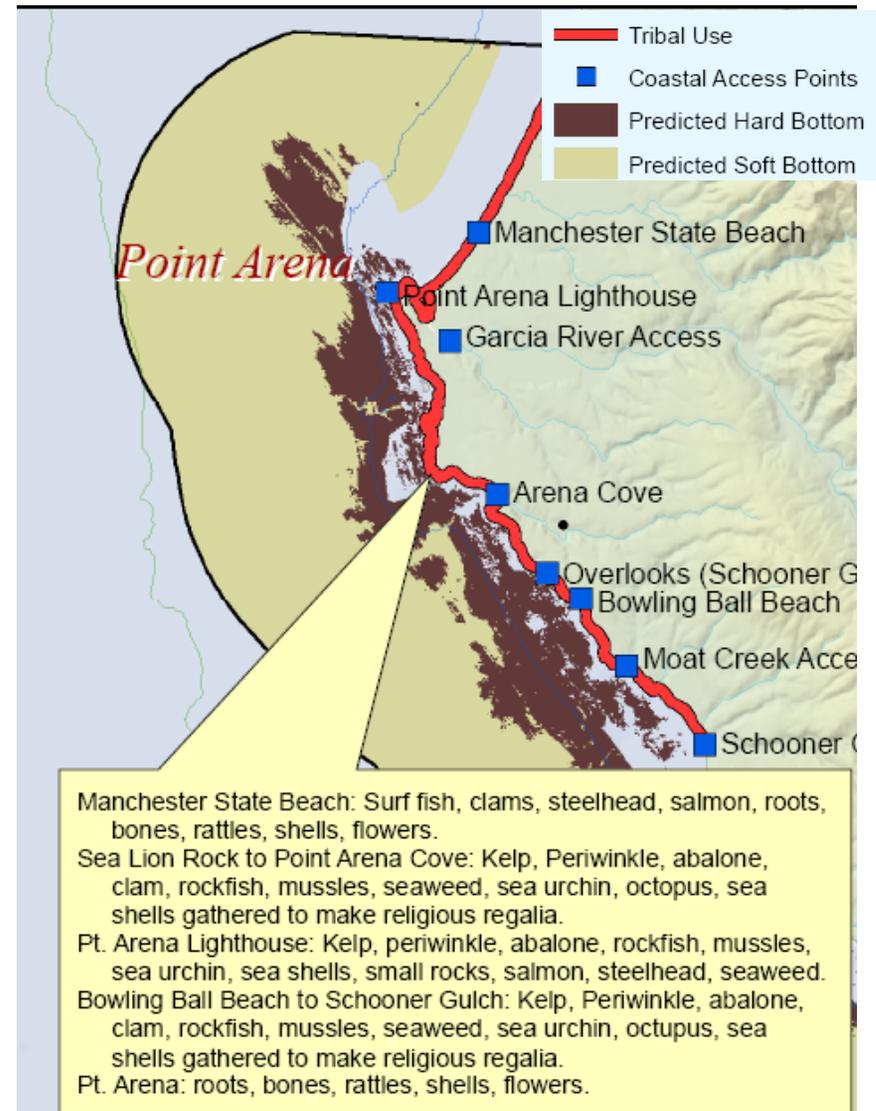




Native American Use Considerations

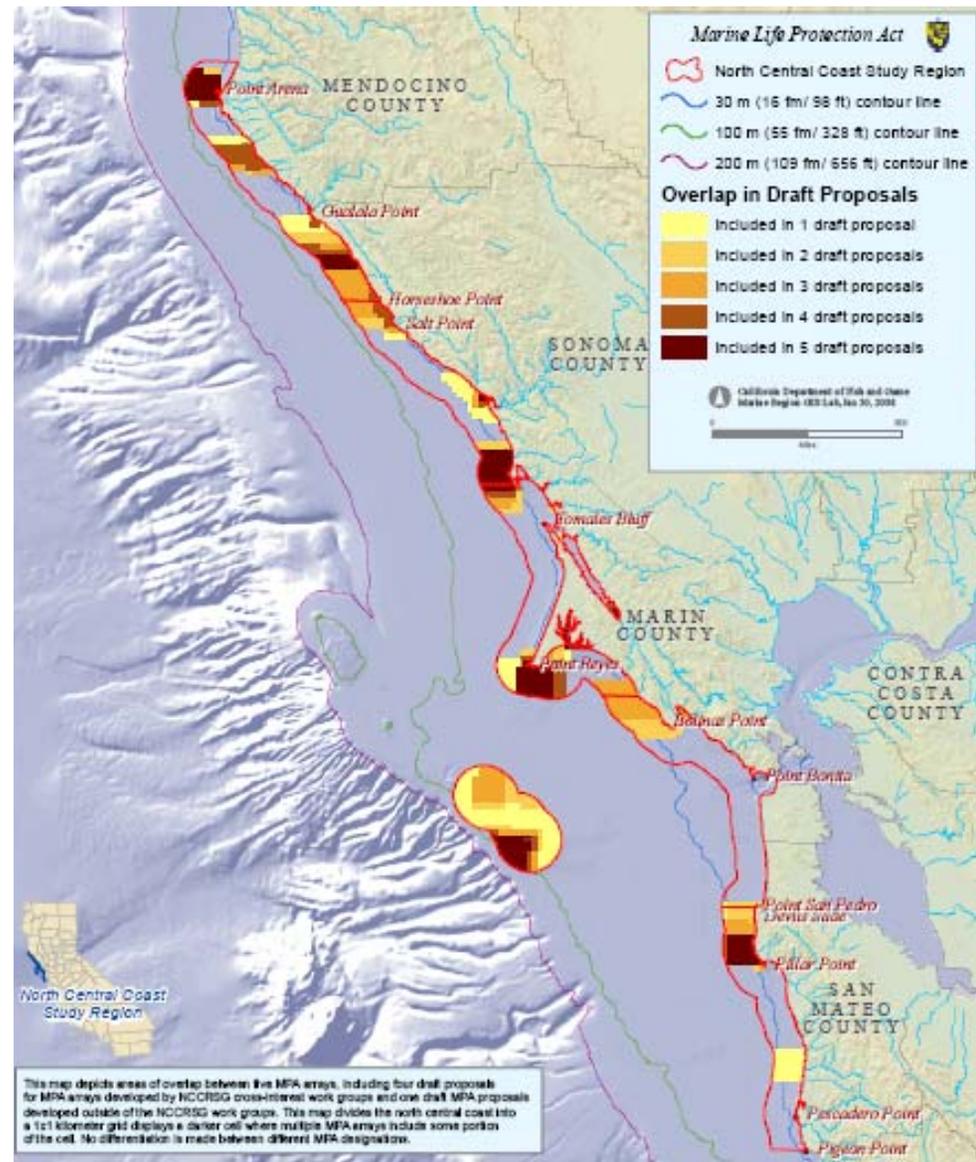
Example: Point Arena

- MLPA Initiative has collected some limited information on areas of importance to tribal groups for traditional small scale gathering of marine resources
- Some areas of importance to tribes overlap with areas proposed by stakeholders for MPAs



Overlap Among Draft Proposals

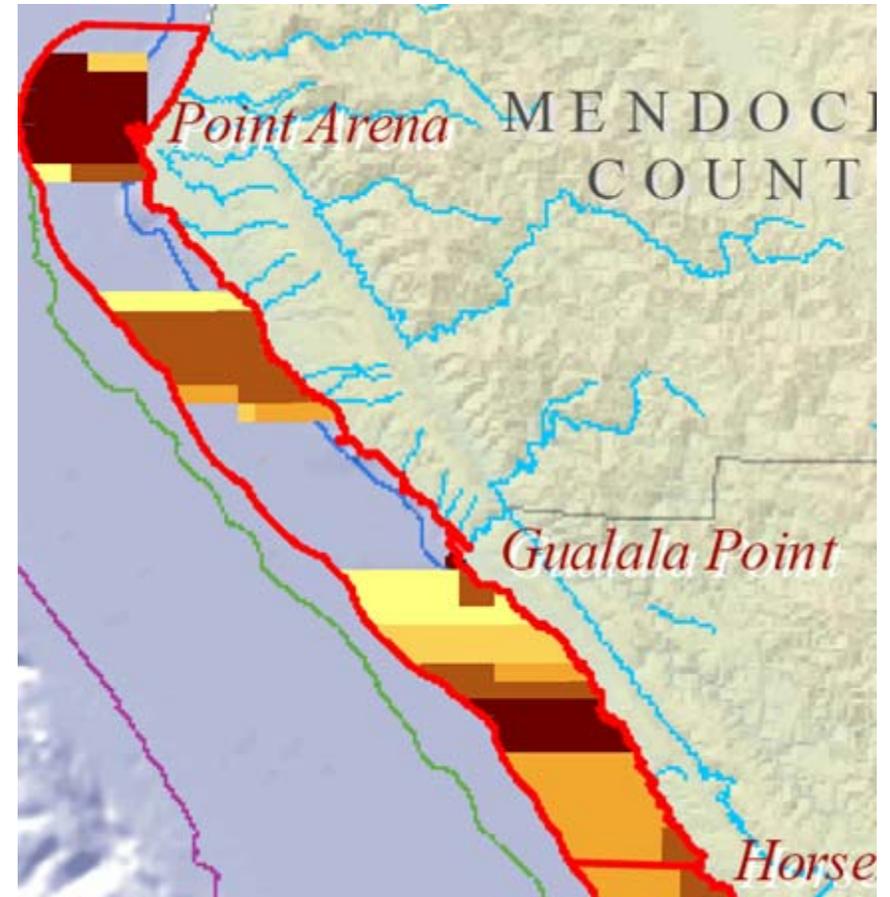
- Despite all the various considerations and tradeoffs, significant geographic overlap among proposals
- Geographic overlap among all draft MPA proposals (n=5)
- Region divided into 1x1 kilometer grid, map shows number of proposals that include an MPA in each grid





Subregion 1: Point Arena - Horseshoe Point

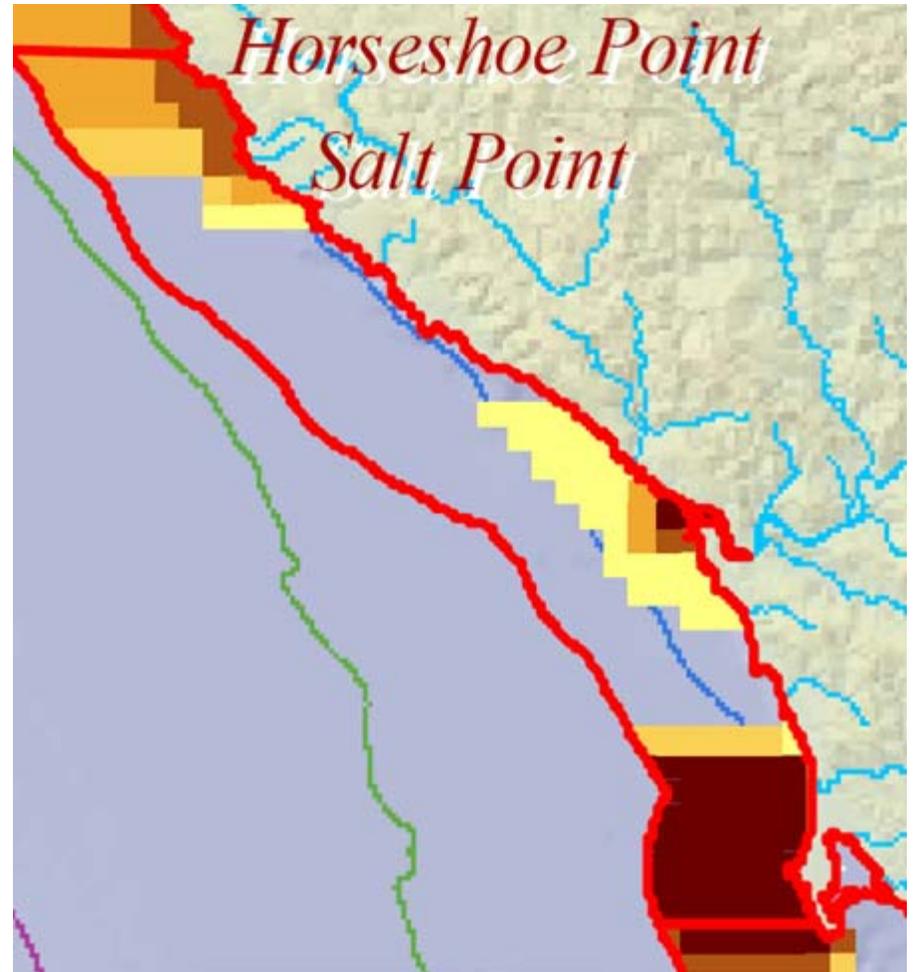
- Upwelling, nutrient-rich waters; rocky reefs & kelp
- Point Arena – large persistent upwelling feature
- Saunders Reef (economic and ecological importance) – especially urchin and abalone fishery
- Proposals vary in siting MPAs adjacent to public or private land (Sea Ranch to Salt Point area)





Subregion 2: Horseshoe Point - Bodega Head

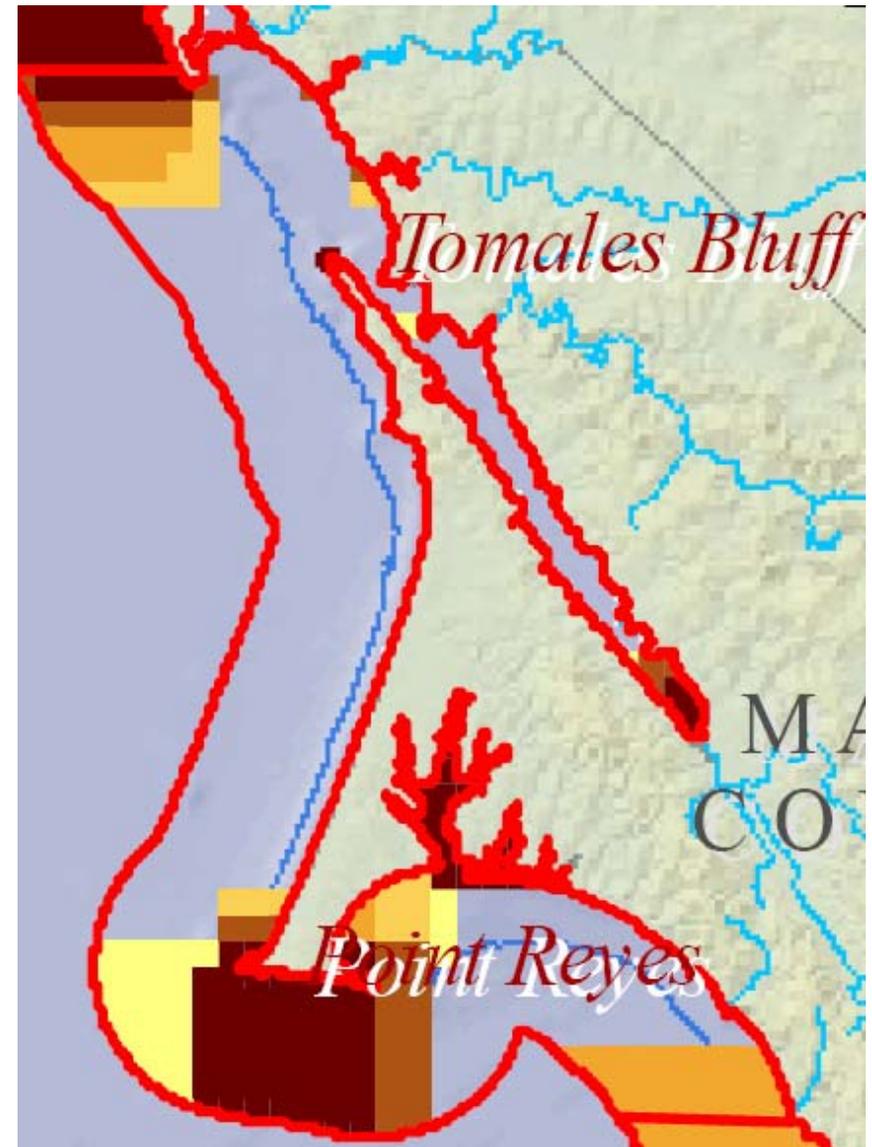
- Nearshore rocky reefs, kelp; offshore sandy habitat
- Numerous bird and mammal colonies
- Russian River, important estuary for salmon
- Salt Point, area of high recreational use
- Port of Bodega Bay, recreational and commercial fisheries





Subregion 3: Bodega Head - Double Point

- Ecologically important estuaries (Tomales, Drakes, Estero Americano, etc.)
- Point Reyes peninsula and Tomales Point with high densities of marine mammals, seabirds
- Tomales Bay and Point Reyes economically important for fisheries
- Aquaculture leases in Drakes Estero and Tomales Bay





Subregion 4: Double Point - Point San Pedro

- Duxbury Reef (economic and ecological importance)
- Bolinas Lagoon and small port at Bolinas
- San Francisco Bay outflow – unique habitat in region
- Bird colonies, mammal haul out and rookeries
- Commercial and recreational vessels from San Francisco ports





Subregion 5: Point San Pedro - Pigeon Point

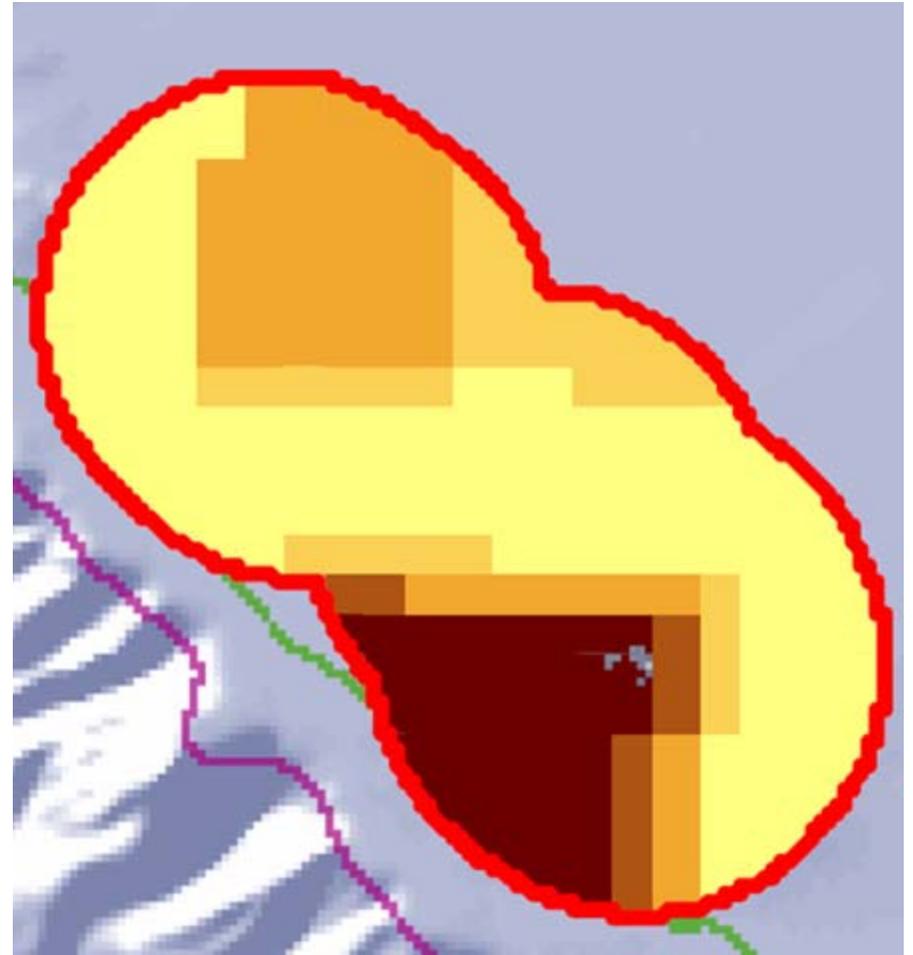
- Shallow and broad sandy shelf; rocky habitat more limited
- Pescadero Marsh and lagoon
- Seabird and migratory waterfowl areas (Pescadero, Devils Slide)
- Port of Half Moon Bay – important recreational and commercial fisheries





Subregion 6: Farallon Islands

- Rocky islands, highly productive; shallow and deep rocky habitats
- Globally important habitat for seabirds, marine mammals, great white sharks
- Economically important fishing (commercial & recreational)
- Ecotourism (whale watching, bird watching, etc.)
- Anchoring/safety concerns





Summary

- Regional stakeholder group – has done an excellent job of considering goals, guidelines, and tradeoffs, and taking public comments into account
- High degree of geographic overlap among draft proposals - similar geographies have been identified by different multi-interest workgroups
- Draft proposals still differ in proposed boundaries and allowed uses – more work to refine and converge proposals
- MLPA Blue Ribbon Task Force guidance will help aid regional stakeholder group's progress