

**California MLPA North Coast Study Region**  
**Description of Marine Protected Areas (MPAs) in Array B**  
*Document Created February 4, 2010*

**Name of Array: North Coast External Proposed MPA Array B (ExB)**  
**Author: Mendocino Ocean Community Alliance (MOCA)**

**Total number of MPAs: 12**  
 Number of SMRs: 7  
 Number of SMCAs: 4  
 Number of SMPs: 0  
 Number of SMRMAs: 1  
 Number proposing tribal uses 10

Bioregions:  
 Northern: Oregon/California border to Mattole River  
 Southern: Mattole River to Alder Creek near Point Arena

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Level of Protection*	Propose Tribal Uses?	Proposed Take Regulations	Other Proposed Regulations
Pyramid Point SMR	73881	Northern Bioregion	MPA boundaries: North: 42 00.000 minutes (Oregon Border state waters boundary) West: State waters boundary South: 41 56.000 minutes East: Mean high tide line to beach not including any part of Smith River	SMR	Very high	Yes	Take of all living marine resources is prohibited.	Traditional Tribal subsistence and ceremonial uses shall be allowed.
Reading Rock SMR	73883	Northern Bioregion	MPA boundaries: North: 41 24.000 minutes to state water lboundary (Extension of inland MPA) then following state water boundary. West: Following state water line South: 41 21.400 minutes North East: 124 08.000 minutes (West boundary of Inland MPA)	SMR	Very high	No	Take of all living marine resources is prohibited.	None specified

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Pyramid Point SMR	N/A	<p>The Pyramid Point SMR is proposed by the Del Norte MPA Work Group and based on the following Goals: G1,G2,G3,G4,G5,G6.</p> <p>Protects a diversity of habitats from the Oregon Border to the Smith River, seaward to federal waters. Includes rocky shores, beaches, shallow reef, soft bottom, and kelp forest habitats, a large off-shore island (Prince Island), and several off-shore rocks important for sea bird colonies and waterfowl (Aleutian geese). The reserve will enhance protections for marine mammals and Chinook salmon, steelhead and coastal cutthroat trout, and Threatened southern Oregon/Northern California Coastal Coho stocks, and protect kelp forest, red tail surf perch, smelt, nearshore rockfish, red abalone, razor clams and Dungeness crab.</p>	<p>Provides clear and enforceable boundaries with abundant coastal road, highway and trail access and vantage points. Provides vessel access (Port of Brookings, OR) for study or enforcement. Reduces distance from Crescent City to fishing grounds and improves safety of Crescent City fishers. Reduces economic impacts to sport and commercial fisheries in California's highest poverty level area. This SMR is clustered with the Pyramid Point SMCA and designed to recognize Native American traditional tribal shore uses that have occurred for thousands of years. Traditional Native American uses of this area, including subsistence and ceremonial shore use, have occurred since time immemorial and those uses are considered de minimis.</p>
Reading Rock SMR	N/A	<p>Combined with the Reading Rock SMCA, this reserve protects diverse habitats including beaches, soft and hard bottom habitats. Note that anecdotal accounts indicate more rocky habitat present than is depicted in MarineMap. This will be assessed in the near future.</p> <p>Contributes to goals 1-6 of the MLPA.</p>	None specified

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Reading Rock SMCA	73882	Northern Bioregion	MPA boundaries: North: 41 24.000 minutes (Approximation of parking lot at end of road) West: 124 08.000 minutes (Approximation of 3nm state water boundary) South: 41 21.400 minutes (Approximation of Lagoon and Creek entrance) East: Mean high tide line	SMCA	Moderate high	Yes	The take of all living marine resources is prohibited except: 1. The recreational take of Dungeness crab by hoop net; Dungeness crab by diving; and Dungeness crab by trap. 2. The commercial take of Dungeness crab by trap.	Traditional Tribal subsistence and ceremonial uses shall be allowed.
Humboldt Bay SMRMA	73884	Northern Bioregion	MPA boundaries: These boundaries are all inside Humboldt Bay. North: 40 42.700 minutes West: Mean high tide line South: Mean high tide line East: 124 14.100 minutes (Wilderness area boundary)	SMRMA	Very high	No	Take of all living marine resources is prohibited.	Hunting shall be permitted.
Eel River SMCA	73885	Northern Bioregion	MPA boundaries: North: 40 39.000 minutes West: State waters boundary South: 40 36.000 minutes East: Mean high tide line to beach not including any part of the Eel River)	SMCA	Moderate high	Yes	The take of all living marine resources is prohibited except: 1. The recreational take of Dungeness crab by hoop net; Dungeness crab by diving; and Dungeness crab by trap. 2. The commercial take of Dungeness crab by trap.	Allows traditional tribal uses.

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Reading Rock SMCA	N/A	Combined with the Reading Rock SMR, this SMCA protects diverse habitats including beaches, soft and hard bottom habitats. Note that anecdotal accounts indicate more rocky habitat than is depicted in MarineMap. This will be assessed in the near future. Contributes to goals 1-6 of the MLPA.	None specified
Humboldt Bay SMRMA	N/A	The MPA contains a significant proportion of Humboldt Bay's eelgrass. The Humboldt Bay Harbor District has an ongoing eelgrass monitoring program in Humboldt Bay and would expand that program to include this MPA if adopted. Comparison of this MPA with other areas would allow for a meaningful comparison of areas where clamming is allowed verses restricted.	None specified
Eel River SMCA	N/A	This unique location attracts feed for numerous pinnipeds, porpoise, whales, birds, and fish like salmon. The combination of river mouth with a nearby canyon make this a food factory with lots of krill and small fish present for much of the year.	This SMCA is a little south of the river mouth to avoid most of the recreational salmon fishing which occurs here.

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Punta Gorda SMR	73879	Northern Bioregion	The Northern Boundary = 40 20'N (The Brothers Rock formation) The Southern Boundary = 40 15.7' (Gorda Rock)	SMR	Very high	Yes	Take of all living marine resources is prohibited.	All species protected. It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands.
Ten Mile SMR	73878	Southern Bioregion	Southern Boundary: 39.33.3 Northern boundary: 39.35.2 out to the 3-mile limit  (Moving the boundary north would eliminate the only feasible public access between Seaside Beach and Westport.)	SMR	Very high	Yes	Take of all living marine resources is prohibited.	It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands. Retrieval of recreational and commercial crab traps permitted. Removal of invasive species permitted.

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Punta Gorda SMR	N/A	Expansion of existing MPA. Protects special habitat for rare blue coral and other unique marine species. Protects Mattole River plume. Deep marine canyon habitat, spawning and aggregation for anadromous fish (coho, steelhead and Chinook), seabird foraging. Extensive habitat representation in deeper water, more vertical habitat (only misses 1 habitat type that is present in the region: kelp because soft bottom 200+m is not available in the entire study region), the only proposed MPA in this region to do so. It has a variety of diverse habitats including upwelling zones, submarine canyons, reef structures, and improves study opportunities provided by marine ecosystems that are subject to minimal human impacts.	<p>Captures off-shore marine canyons on both sides of the bio-regional split. Meets or exceeds sizing guidelines and spacing criterion.</p> <p>This is a preferred alternative to the proposed Big Flat or Usal areas which would be devastating to the local crab industry.</p> <p>The southern boundary was set to preserve important fishing grounds for the Pacific halibut fishing fleet from Shelter Cove, and lines up with an onshore rocky point that facilitates enforcement.</p> <p>Minimal negative impacts on live fishing, sea urchin, abalone, and seaweed harvesting and recreational kayaking. Moderate impacts to nearshore fishing originating from visitors to the Mattole Beach BLM campground.</p>
Ten Mile SMR	N/A	<p>This area contains one of the widest possible ranges of habitat representation. This MPA has great diversity in unique marine habitats including; exposed high energy rocky shoreline, sand and gravel beaches, offshore islets, surf grass, kelp beds, hard and soft substrates, while interfacing with the complex estuarine habitats consisting of eelgrass beds, marshlands and mudflat ecosystems. This SMR helps maintain biodiversity in fish, invertebrates, seabirds and marine mammals associated with the protection of the ecosystem. Protects a spawning aggregation area of steelhead, coho and Chinook salmon.(G1, G2,G3)</p> <p>The area includes pinniped haul-outs and critical nesting and breeding bird habitat, including the endangered snowy plovers.</p> <p>This area includes a portion of the Mackerricher State Park Ingelnook Fen-Ten Mile Dunes Natural Preserve.</p> <p>Beach access increases the feasibility of enforcement.</p>	<p>Socio-economic impact: significant negative impact to the sea urchin industry (estimated \$200,000 gross), moderate negative impact on live fishing and crabbing; potential negative impact on seaweed harvesting due to effort shift if other areas are closed to harvesting; minimal impact on abalone harvesting.</p> <p>Placing this reserve 41 miles N of the Pt. Arena SMR minimizes the cumulative effects of effort shift for all commercial, recreational, and subsistence fishing and seaweed harvesting, that would otherwise take place if an MPA was sited within the [preferred] 31-mile spacing guidelines (e.g., at Noyo Harbor).</p> <p>This MPA is adjacent to the mouth of the Ten Mile estuary (proposed SMR).</p> <p>Located at the North end of this MPA is an established marine monitoring site, that along with numerous coastal access points makes it easy for research, recreation and enforcement possible. (G5)</p> <p>This MPA is clustered with an adjacent Ten Mile SMR. (G1,G3, G3)</p>

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Ten Mile Beach SMCA	73880	Southern Bioregion	39.33.3 northern boundary (first washrock north of the Ten Mile River mouth 39.32.7 southern boundary	SMCA	Moderate high	Yes	The take of all living marine resources is prohibited except: 1. The recreational take of Dungeness crab by trap. 2. The commercial take of Dungeness crab by trap.	No wave energy projects or oil exploration/leases. It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands.
Ten Mile Estuary SMR	73874	Southern Bioregion	Estuary extends from the mouth of Ten Mile River to an area upstream of approximately 1.7 miles.	SMR	Very high	Yes	Take of all living marine resources is prohibited.	No waterfowl hunting. It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands. Retrieval of recreational and commercial crab traps permitted. Removal of invasive species permitted.

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Ten Mile Beach SMCA	N/A	Adds protection for soft bottom habitat to the adjacent SMR proposed to the north. Connects the estuarine reserve to the offshore SMR while allowing for commercial and recreational crabbing. Serves as an enforcement "buffer" for the "Randy's Rock" Reserve - a kind of "warden's rumble strip" as vessels approach the SMR.	Extremely important crabbing area for the private recreational and commercial passenger fishing vessel fleet out of Fort Bragg; closing the area to crabbing would have a significant negative economic impact.
Ten Mile Estuary SMR	N/A	<p>Estuary protection (Goals 1-5) Estuaries not only support local fish and shellfish populations that are harvested commercially and recreationally, but these waters also serve as spawning and nursery grounds for populations that are harvested offshore. Estuaries rank along with tropical rainforests and coral reefs as the world's most productive ecosystems, more productive than both the rivers and the ocean that influence them from either side.</p> <p>Supports current DFG coho and steelhead salmon habitat conservation projects while protecting essential habitat for federal and state listed threatened anadromous fish including coho, Chinook and steelhead salmon. Habitat for osmoregulation and acclimation for critical life phases of anadromous fish; important transportation corridor for adult salmon spawners; rearing habitat for juvenile salmonids, rockfish, flatfish, surf perch, herring, tidewater gobies, gaper clams, crab and other species; habitat for smoltification of juvenile salmonids;</p>	The area is adjacent to the MacKerricher State Park Ingelnook Fen Ten Mile Dunes Natural Preserve.

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Ten Mile Estuary SMR (continued)								
Point Cabrillo SMCA	73877	Southern Bioregion	Southern boundary = 39° 21.209' Northern boundary = 39° 21.648' Western boundary = 123° 50'  From a visible landmark at the south Caspar Headlands, to include all of Frolic Cove, an important archaeological site. The existing Point Cabrillo SCMA bisects this cove, making it difficult to enforce.	SMCA	Moderate low	Yes	The take of all living marine resources is prohibited except: 1. The recreational take of red abalone by free-diving. 2. The commercial take of urchin by diving.	It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands.

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Ten Mile Estuary SMR (continued)		<p>migratory corridor for spawning lampreys.(G2)</p> <p>All species protected. Prime shorebird and waterfowl habitat; feeding area for pinnipeds; critical habitat and transportation corridor for river otters.</p> <p>This SMR protects larval source and enhance reproductive capacity of numerous invertebrate species such as dungeness crabs, clams, ghost shrimp, eel grass etc. (G1, G2, G4); and expands on long-term protections for complex estuarine habitats, including eelgrass beds, marshlands and mudflat ecosystems.(G1, G2)</p> <p>Almost the entire stretch of this array is close to population centers, with numerous coastal access points making it easy for research, long- term monitoring, recreation and enforcement. (G3, G5)</p>	
Point Cabrillo SMCA	N/A	<p>This area includes a cluster of emergent rocks that are locally known as a marine mammal haul-out and foraging area, especially for Stellar's Sea Lion, and seabirds including pelican and cormorant species.</p> <p>Allows for research opportunities to study the ecosystem relationships between abalone, sea urchins, and understory canopy and benthic layer turf algae. Side by side with an SMR, the biodiversity abundance and distribution can be compared with an adjacent conservation area (SMR) that allows harvest of both abalone and sea urchin. (G3)</p> <p>This study area will additionally provide a opportunity to study the relationship between understory canopy and benthic layer turf algae.</p> <p>This area contains underwater archaeological artifacts in Frolic Cove that are currently inadequately protected by the existing reserve boundaries.</p>	<p>Easy access for research. This has area is part of a larger area closed to sea commercial urchin harvest since 1992(?). Ongoing studies occur here. By reopening this area to recreational abalone harvest and commercial and recreational sea urchin harvest, biologists can learn about how the adjacent area (Pt. Cabrillo SMR) replenishes an adjacent fished area.</p> <p>For the SMCA, potential negative socio-economic impacts could be incurred on near-short live fishing and the coastal culture of our communities. If the SMCA is open to sea urchin harvesting, it will have a positive impact on that industry and the families and local businesses this industry supports.</p> <p>We are not drawing the line further north because of the importance of this area to local campgrounds, kayakers, and other recreational users. (G3, G5)</p> <p>The area has good shore-based access for educational and recreational users with a stairway leading down from the Pt. Cabrillo Light Station State Park</p> <p>Only allow the take of urchin and abalone for studies of adaptive management.</p>

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Point Cabrillo SMR	73876	Southern Bioregion	Southern boundary = 39 20.606' Northern boundary = 39 21.209' Western boundary = 123 50'	SMR	Very high	Yes	Take of all living marine resources is prohibited.	It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands.
Navarro River Estuary SMR	73875	Southern Bioregion	Mouth of the Navarro River to 3.450 miles inland in estuary waters seasonally affected by the tidal influence.	SMR	Very high	Yes	Take of all living marine resources is prohibited.	It is not the intention of the array proponents to prohibit traditional native tribal access, harvest, or uses, or to interfere with their sovereignty on their ancestral lands. Retrieval of recreational and commercial crab traps permitted. Removal of invasive species permitted. Vessels permitted.

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Point Cabrillo SMR	N/A	<p>This area is currently an SMCA that allows for commercial fin-fishing and seaweed harvest. The proposed SMR contains high-quality invertebrate habitat (G1, G2) and has been closed to commercial and recreational take of invertebrates since 1975, and the area was also closed to recreational take of finfish while allowing commercial take of finfish.</p> <p>This SMR would replace the existing Pt. Cabrillo SMCA and make the boundaries more feasible. Local biologists say this area is large enough to conduct studies on sea urchins and abalone. Along with the adjacent SMCA to the north, this cluster will provide side by side study opportunity of a no-take zone and an area of sustainable harvests of abalone and urchins. (G3)</p>	<p>Increases feasibility using easily distinguishable landmarks. Adjacent to a state park for recreational non-extractive activities such as scuba diving. Very accessible for research. Maintains a long time series of data from previous studies. We have proposed to local tribal councils that they adopt these regulations for their members, but pending government-to-government consultations, any regulations affecting tribal members must be passed by both the California Fish &amp; Game Commission and the tribal councils concurrently, similar to the creation of a State Marine Park. This is a perfect area for study that could allow for the development of adaptive management, and collaborative research with the local fishing community, biologists and the tribes.</p> <p>Because the commercial nearshore fleet has been voluntarily not fishing in this area, and seaweed harvesters have not been gathering here, we do not anticipate a negative socio-economic impact on the commercial near-shore fishing or sea urchin industries, but we have a concern for seaweed harvesters if other areas are closed to them.</p>
Navarro River Estuary SMR	N/A	<p>Estuary protection (Goals 1.2.3.4 &amp; 6) Protects communities associated with areas of diverse estuarine habitats including open channels, mud flats, eel grass beds, etc. Anadromous fish refugia: habitat for osmoregulation and acclimation for critical life phases of anadromous fish; important transportation corridor for adult salmon spawners; provides rearing habitat for juvenile salmonids, rockfish, flatfish, and tidewater gobies and habitat for smoltification of juvenile salmonids; migratory corridor for spawning lampreys.</p> <p>All species protected. Prime shorebird and waterfowl habitat; feeding area for pinnipeds; critical habitat and transportation corridor for river otters.</p> <p>Although not required in the scientific guidelines, adoption of this SMR will enhance the ecological productivity of the surrounding marine ecosystem.</p>	<p>Recreational kayaking and canoeing destination. Close proximity to Navarro Beach Campground [part of the Navarro River Redwoods SP] and shorebird and mammal viewing.</p> <p>Easily accessible to the public; no negative socio-economic impact on fishing, sea urchin or seaweed harvesting industries or related businesses.</p>

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