California Fish and Game Commission Preferred Alternative
for Implementation of the Marine Life Protection Act
in the Central California Coast Region
(Pigeon Point to Point Conception)
January 3, 2007

Description of individual MPA and MMA boundaries, regulations, and objectives

Explanation of Descriptive Parameters:
Proposed MPA or MMA: The proposed name and classification of the marine protected area or marine managed area, using the classification system established by the Marine Managed Areas Improvement Act.
Area (square statute miles): The approximate surface area of the proposed MPA or MMA measured using a geographical information system program.
Along-shore span (statute miles): The approximate straight line distance parallel to shore of the proposed MPA or MMA or, if not adjacent to shore, the straight line distance of the greatest dimension parallel or perpendicular to shore. This distance is not the length of the shoreline within the MPA, but rather an "as-the-fish-swims" measure.
Depth range (feet): The approximate range of depth within the proposed MPA or MMA, with 0 feet being equivalent to the shoreward boundary of mean high tide if applicable measured using a geographical information system program.
Primary habitat types: The types of benthic substrate and/or attached marine plant or macroalgal species which comprise the majority of the proposed MPA or MMA.
Proposed regulations: The specific fishing or other use regulations within the proposed MPA or MMA which are in addition to those of the general area.
Boundaries: Waypoints expressed in latitude and longitude defining the corners of the proposed MPA or MMA (including the intersection with the shoreline at mean high tide if applicable), with straight lines, unless otherwise specified, connecting the waypoints in the order listed to form the seaward boundaries.
Examples of species likely to benefit: A subset of the marine fish, invertebrate, plant, bird, and mammal species likely to directly or indirectly benefit from the proposed MPA or MMA. This includes marine fish, invertebrate, and plant species which are generally either sessile, sedentary, or have relatively small home ranges and for which take is prohibited in the proposed regulations, but also includes marine bird and mammal species which, although already fully protected through other regulations or statutes, may benefit further from protection of their primary prey or forage species.
Summary of Objectives: A brief summary of the objectives for the proposed MPA or MMA and how these objectives are related to the overall goals of the MLPA.
Detailed Objectives (with reference to regional goal and objective): a list of all the individual objectives proposed for the MPA or MMA, with reference to the applicable Regional Goal number and Regional Objective number.

Proposed MPA: Año Nuevo State Marine Reserve
Area (sq. mi.): 11.07
Along-shore span (mi): 8.4
Depth range (ft): 0-175

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom.

Proposed regulations: No take.

Boundaries: This area is bounded in the north by the mean high tide line and a distance of 200 feet seaward of mean low tide between the following two points (Figure 1):
37º 10.00' N. lat. 122º 21.90' W. long.; and
37º 08.70' N. lat. 122º 21.00' W. long.
The area then continues southward bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 1):
37º 08.70' N. lat. 122º 21.00' W. long.;
37º 04.70' N. lat. 122º 21.00' W. long.; and
37º 04.70' N. lat. 122º 16.20' W. long.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, sardine, mackerel, anchovy, California halibut, sanddabs, Dungeness crab, littleneck clams, squid, murres, shearwaters.

Summary of Objectives: Provide complete protection to shallow soft and hard substrates and associated species in an area characterized by low-relief shale and a mixture of giant kelp and bull kelp. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

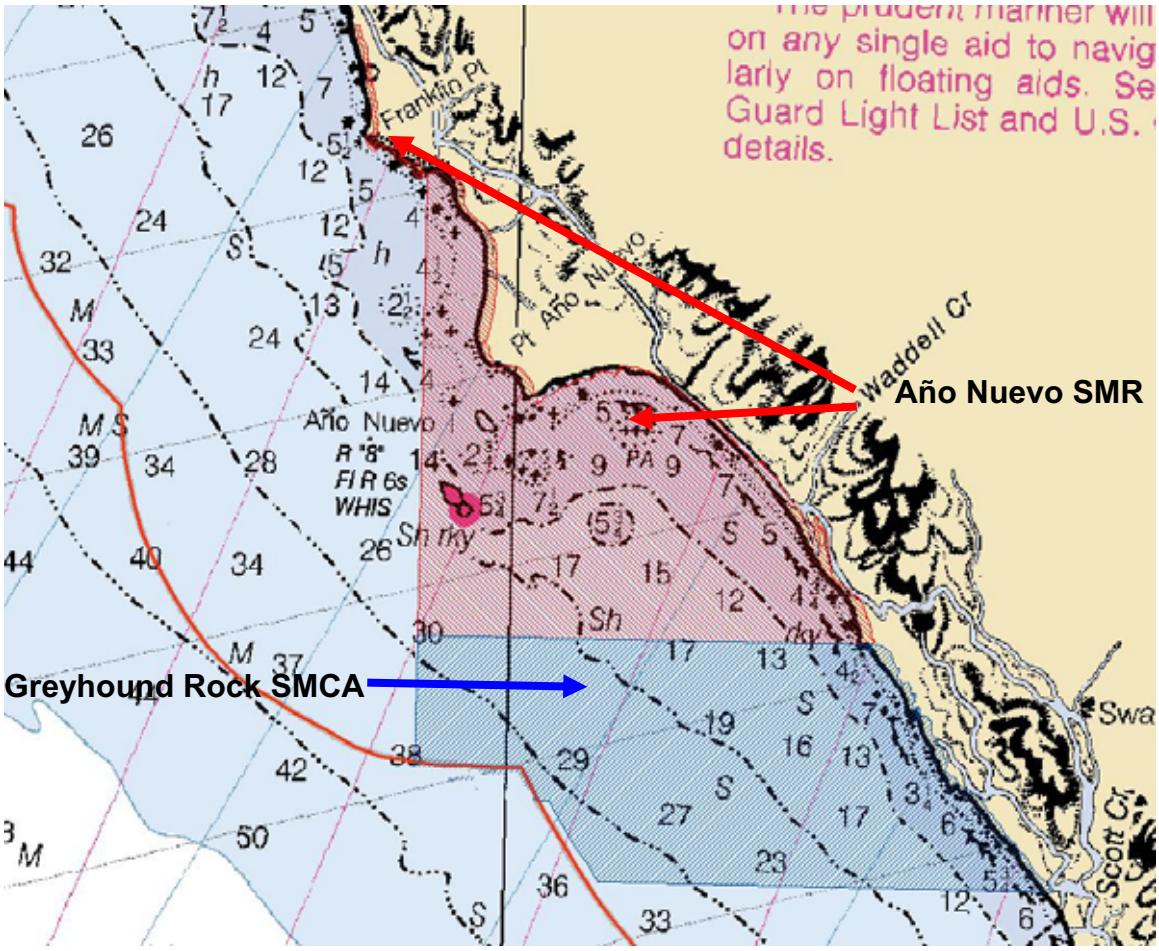
Detailed Objectives (with reference to regional goal and objective):

- Protect area of high species diversity characteristic of the central coast region north of Monterey Bay and maintain species diversity and abundance as demonstrated by monitoring appropriate indicator species, with focus on Nearshore Fishery Management Plan species. (Goal 1, Objective 1)
- Protect communities associated with diverse intertidal habitats including wave-cut rocky platforms, sand and gravel beaches, offshore island, shallow rocky reef, shallow soft bottom, and mixed giant/bull kelp beds, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural size and age structure and genetic diversity of populations of nearshore rockfish species and invertebrates including appropriate indicator species. (Goal 1, Objective 3)
- Protect natural trophic structure and food web including forage base (including crabs, squid and coastal pelagic finfish) for listed marine birds

and marine mammals as well as higher trophic level fish. (Goal 1, Objective 4)

- Protect range of ecosystem functions associated with lee of headland in productive upwelling zone. (Goal 1, Objective 5)
- Protect important forage area for nearby breeding colonies of listed marine birds and marine mammals, including sea otters. Reduce disturbance to breeding colonies of listed marine birds, in particular marbled murrelets, and marine mammal rookeries from activities associated with vessels fishing (lights, noise, etc). (Goal 2, Objective 1)
- Protect larval source and enhance reproductive capacity of invertebrate species such as Dungeness crab, limpets, mussels, turban snails, red abalone, black abalone, and finfish species including nearshore rockfishes and California halibut. (Goal 2, Objective 2)
- Site a marine protected area adjacent to a terrestrial state park with high number of annual visitors that has traditionally served as an important marine education site through visitor center and docent program. (Goal 3, Objective 1)
- Include sandy and gravel beaches, and shallow hard and soft bottom habitat in a state marine reserve. (Goal 4, Objective 2)

Figure 1. Año Nuevo State Marine Reserve and Greyhound Rock State Marine Conservation Area



Proposed MPA: Greyhound Rock State Marine Conservation Area
Area (sq. mi.): 11.81
Along-shore span (mi): 3.1
Depth range (ft): 0-216

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: Take of all living marine resources is prohibited except commercial and recreational hand harvest of giant kelp (*Macrocystis* sp.); commercial and recreational take of squid (*Loligo opalescens*) and salmon (*Oncorhynchus spp.*); and the recreational harvest of finfish by hook-and-line from shore.

Boundaries: This area is bounded by the mean high tide line, the state water boundary and straight lines connecting the following points in the order listed except where stated as following the state water boundary (Figure 1):
37º 04.70' N. lat. 122º 16.20' W. long.;
37º 04.70' N. lat. 122º 21.00' W. long.;
37º 03.55' N. lat. 122º 21.00' W. long.; thence southward along the state water line to
37º 02.57' N. lat. 122º 19.10' W. long.; and
37º 02.57' N. lat. 122º 14.00' W. long.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, sardine, mackerel, anchovy, California halibut, sanddabs, Dungeness crab, littleneck clams, squid, murres, shearwaters.

Summary of Objectives: Provide increased protection to shallow soft and hard substrates and associated species in the northern portion of the study region characterized by low-relief shale and a mixture of giant kelp and bull kelp. This area is intended to protect the subtidal fish and invertebrate and intertidal invertebrate communities while allowing for uses that have little on those communities to continue. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect area of high benthic species diversity characteristic of the central coast region north of Monterey Bay and maintain benthic species diversity and abundance as demonstrated by monitoring appropriate indicator species, with focus on Nearshore Fishery Management Plan species. (Goal 1, Objective 1)

- Protect natural size and age structure and genetic diversity of populations of nearshore rockfish species and invertebrates including appropriate indicator species. (Goal 1, Objective 3)
- Protect important forage area for nearby breeding colonies of listed marine birds by prohibiting the harvest of pelagic finfish other than salmon. (Goal 2, Objective 1)
- Protect larval source and enhance reproductive capacity of invertebrate species such as Dungeness crab, limpets, mussels, turban snails, red abalone, black abalone, and finfish species including nearshore rockfishes and California halibut. (Goal 2, Objective 2)

Proposed MPA: Natural Bridges State Marine Reserve
Area (sq. mi.): 0.58
Along-shore span (mi): 4.1
Depth range (ft): 0-21

Primary habitat types: sandy beach, rocky intertidal, surfgrass.

Proposed regulations: No take.

Boundaries: This area is bounded by the mean high tide line and a distance of 200 feet seaward of the mean low tide line between the following two points (Figure 2):
36° 57.90' N. lat. 122° 07.65' W. long.; and
36° 57.00' N. lat. 122° 03.50' W. long.

Examples of species likely to benefit: limpets, mussels, clams, snails, algae.

Rationale: Provide complete protection to a rocky and soft bottom intertidal area in close proximity to a research institution and provide an opportunity for comparative studies here and in an adjacent intertidal state marine park. This area would provide protection for intertidal species while allowing take of species outside the intertidal zone.

Detailed Objectives (with reference to regional goal and objective):
- Protect species associated with high-diversity intertidal habitat and intertidal regions north of Monterey Bay. (Goal 1, Objective 1)
- Include areas with sand and gravel beaches, rocky intertidal, wave-cut platforms, exposed rocky cliffs, and salt marsh, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural size and age structure and genetic diversity of populations of intertidal invertebrates, including owl limpets. (Goal 1, Objective 3)
- Protect natural trophic structure and food web of rocky intertidal communities, including mussel and surfgrass beds. (Goal 1, Objective 4)

- Protect larval source and enhance reproductive capacity of intertidal invertebrate species such as limpets, mussels, and turban snails. (Goal 2, Objective 2)
- Enhance educational/research use of accessible intertidal area by establishing a state marine reserve in a prime educational area, adjacent to two terrestrial state parks and the University of California, Santa Cruz. (Goal 3, Objective 1)
- Replicate intertidal habitat found at Año Nuevo State Marine Reserve and at a monitoring site, not within a marine protected area, at nearby Sand Hill Bluff. (Goal 3, Objective 2)
- Encourage continuation of research at a site historically monitored by high school students as part of the Long-term Monitoring Program and Experiential Training for Students (LiMPETS). (Goal 3, Objective 3)
- Provide the opportunity to study differences in relative abundance and size frequency of intertidal algal and invertebrate species within a state marine reserve compared with an adjacent state marine park with similar habitat. (Goal 3, Objective 3)
- Include, and replicate within marine protected areas, surfgrass and mussel beds found within Año Nuevo State Marine Reserve. (Goal 4, Objective 2)

Figure 2. Natural Bridges State Marine Reserve

Proposed MPA: Elkhorn Slough State Marine Reserve
Area (sq. mi.): 1.48
Along-shore span (mi): 4.4
Depth range (ft): 0-10

Primary habitat types: estuary, coastal marsh, tidal flats, shallow soft bottom.

Proposed regulations: No take.

Boundaries: This area includes the area below mean high tide within Elkhorn Slough and between longitude 121º 46.40' W. and latitude 36º 50.50' N (Figure 3).

Examples of species likely to benefit: leopard shark, surf perches, bat ray, starry flounder, crabs, gaper clams, ghost shrimp, mud shrimp, worms, eelgrass.

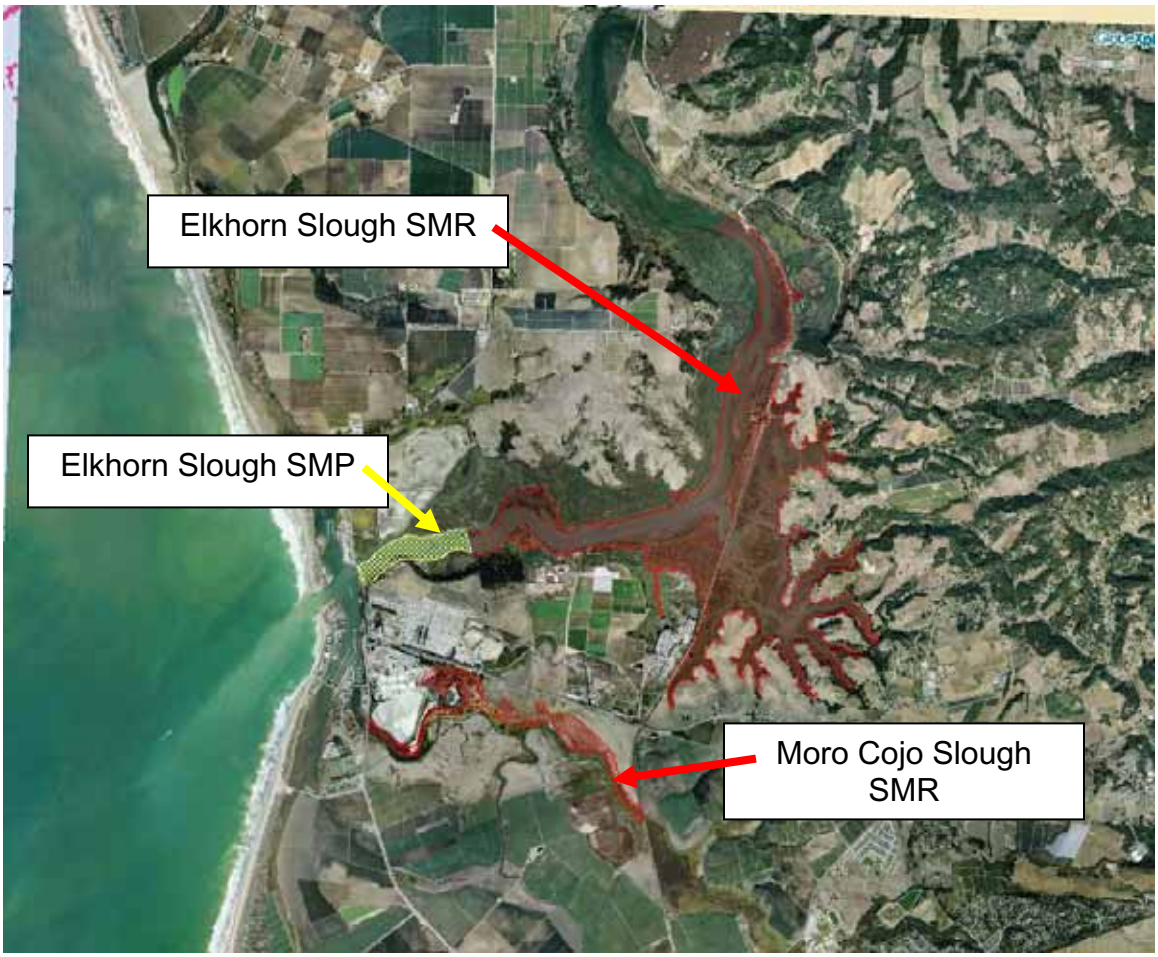
Summary of Objectives: Continue to provide complete protection for one of the few estuarine areas of the central coast and expand this protection to include the entire slough channel as opposed to one half of the channel as is presently included.

Detailed Objectives (with reference to regional goal and objective):

- Protect estuarine area with high bird diversity. (Goal 1, Objective 1)
- Protect communities associated with area with diversity of estuarine habitats, including open channels, mud flats, and eelgrass beds, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age, size structure, and genetic diversity of fish and invertebrate species characteristic of one of largest estuarine systems within the central coast, in particular elasmobranches, flatfishes, gaper clams, and fat innkeeper worms. (Goal 1, Objective 3)
- Protect natural structure and food web of estuarine system, including invertebrate forage base for sea otters and marine birds. (Goal 1, Objective 4)
- Help protect listed marine birds and southern sea otter by protecting feeding, roosting, and nesting habitat. (Goal 2, Objective 1)
- Enhance reproductive capacity of both invertebrate and fish species by prohibiting take in important nursery area. (Goal 2, Objective 2)
- Provide increased research and education opportunities by expanding an existing state marine reserve in an area adjacent to educational and interpretive facilities of the National Estuarine Research Reserve and Moss Landing Marine Laboratories. (Goal 3, Objective 1)
- Include and replicate representative estuarine habitat in central coast region within a state marine reserve. (Goal 3, Objective 2)

- Include estuarine habitat within a state marine reserve. (Goal 4, Objective 1)

Figure 3. Elkhorn Slough State Marine Reserve, Elkhorn Slough State Marine Park, and Morro Cojo Lagoon State Marine Reserve.



Proposed MPA: Elkhorn Slough State Marine Park
Area (sq. mi.): 0.09
Along-shore span (mi): 1.4
Depth range (ft): 0-10

Primary habitat types: estuary, coastal marsh, tidal flats, shallow soft bottom.

Proposed regulations: Take of all living marine resources is prohibited except the recreational take of finfish by hook-and-line, and the recreational take of clams in the area adjacent to the Department of Fish and Game Wildlife Area on the north shore of the slough.

Boundaries: This area includes the area below mean high tide within Elkhorn Slough between the Highway 1 Bridge and longitude 121º 46.40' W. (Figure 3).

Examples of species likely to benefit: crabs, ghost shrimp, mud shrimp, worms, eelgrass.

Summary of Objectives: Provide increased protection for one of the few estuarine areas of the central coast while allow for traditional uses of recreational fishing. The intent of the area is to allow small scale recreational fishing activities to continue, while limiting any future increases in use that do not presently occur. The area will also prohibit take of clams in an area used by sea otters for foraging, potentially providing more available prey for the otters.

Detailed Objectives (with reference to regional goal and objective):

- Protect estuarine area with high bird diversity. (Goal 1, Objective 1)
- Protect communities associated with area with diversity of estuarine habitats, including open channels, mud flats, and eelgrass beds, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age, size structure, and genetic diversity of some invertebrate species, such as fat innkeeper worms, characteristic of one of largest estuarine systems within the central coast. (Goal 1, Objective 3)
- Provide for traditional recreational consumptive and nonconsumptive uses while offering some protection due to the prohibition of commercial fishing. (Goal 2, Objective 3)

Proposed MPA: Moro Cojo Slough State Marine Reserve
Area (sq. mi.): 0.46
Along-shore span (mi): 5.0
Depth range (ft): 0-10

Primary habitat types: estuary, tidal flats, shallow soft bottom.

Proposed regulations: No take.

Boundaries: This area includes the area within Moro Cojo Slough below mean high tide and between the Highway 1 Bridge and the crossing of the Southern Pacific Railroad tracks (Figure 3).

Examples of species likely to benefit: surfperches, snails, eelgrass.

Summary of Objectives: Provide complete protection for one of the few estuarine areas of the central coast. A recent grant to the North Monterey County Recreation and Park District will create more than three miles of nature trails and interpretive stations within the slough; the additional protection provided by the reserve will help ensure this increased access does not lead to new take of living resources.

Detailed Objectives (with reference to regional goal and objective):

- Help protect listed marine birds by protecting feeding, roosting, and nesting habitat. (Goal 2, Objective 1)
- Include and replicate representative estuarine habitat in central coast region within a state marine reserve. (Goal 3, Objective 2)
- Include estuarine habitat within a state marine reserve. (Goal 4, Objective 1)

Proposed MPA: Soquel Canyon State Marine Conservation Area
Area (sq. mi.): 23.41
Along-shore span (mi): 7.2
Depth range (ft): 247-2113

Primary habitat types: shallow hard and soft bottom, deep hard and soft bottom, deep canyon.

Proposed regulations: Take of all living marine resources is prohibited except the commercial and recreational take of pelagic finfish.

Boundaries: This area is bounded by straight lines connecting the following points in the order listed (Figure 4):
36º 51.00' N. lat. 121º 56.00' W. long.;
36º 51.00' N. lat. 122º 03.80' W. long.;
36º 48.00' N. lat. 122º 02.88' W. long.;
36º 48.00' N. lat. 121º 56.00' W. long.; and
36º 51.00' N. lat. 121º 56.00' W. long.

Examples of species likely to benefit: shelf and slope rockfishes, lingcod, Dover sole, spot prawn, squid.

Summary of Objectives: Provide increased protection to shallow and deep complex submarine canyon habitat and the majority of associated benthic species. The Soquel Canyon area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

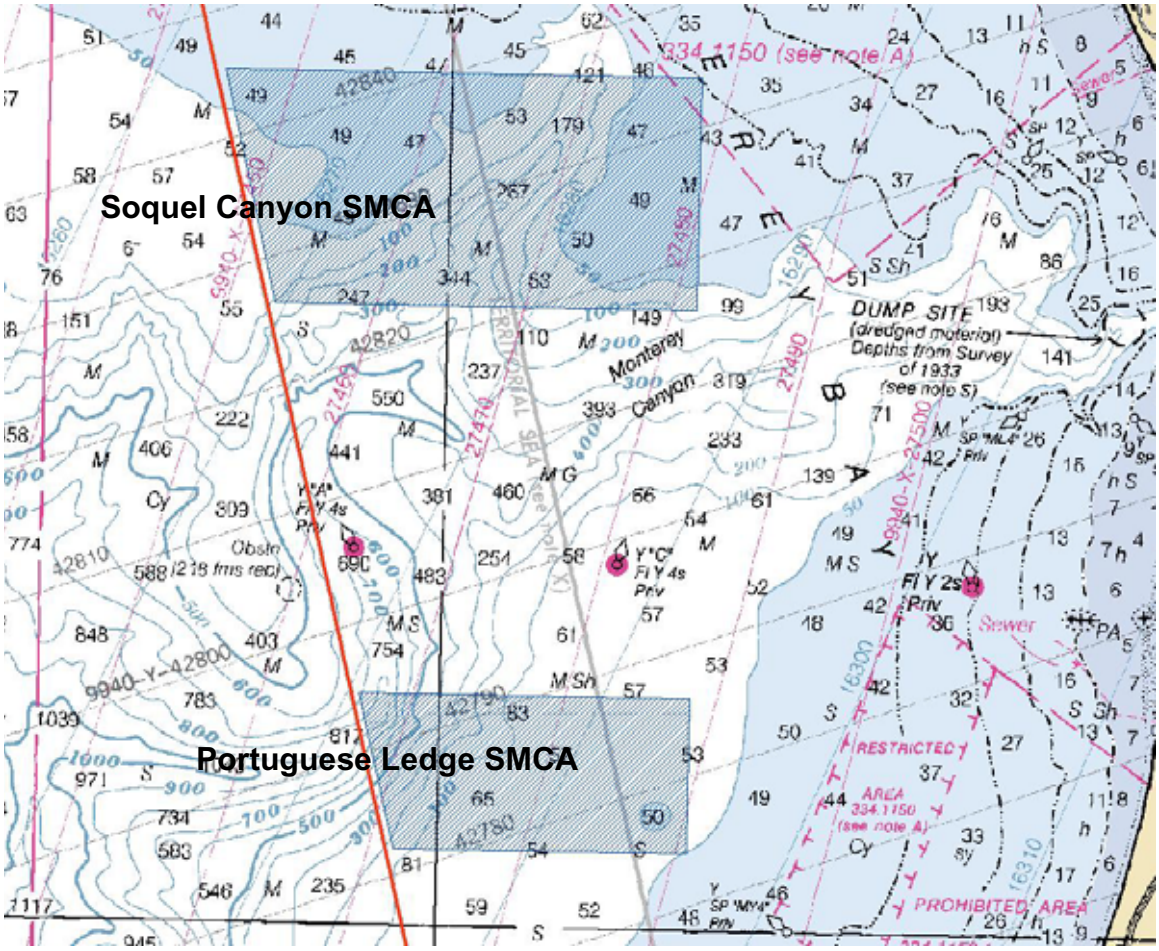
Detailed Objectives (with reference to regional goal and objective):

- Protect area with high species diversity associated with submarine canyon, including depth-stratified species assemblages with shelf and slope rockfishes. (Goal 1, Objective 1)
- Help protect communities associated with area of diverse habitat including shallow hard and soft bottom, deep hard and soft bottom, and submarine canyon, over a large depth range, and in close proximity to each other. (Goal 1, Objective 2)
- Help restore overfished groundfish species by maintaining large individuals of species such as bocaccio, canary, and yelloweye rockfishes

in an area that serves as a natural refuge for these species due to inaccessible vertical rock outcrops in a submarine canyon. (Goal 1, Objective 3)

- Protect overfished rockfishes, including bocaccio, canary, and yelloweye. (Goal 2, Objective 1)
- Enhance reproductive capacity of benthic and deepwater fish species by prohibiting fishing for these species and allowing only fisheries with limited bycatch of these species. (Goal 2, Objective 2)
- Protect rockfishes and other components of a deep benthic community, while allowing the harvest of pelagic finfish. (Goal 2, Objective 3)
- Enhance education and study opportunities by establishing a marine protected area near the Monterey Bay Aquarium Research Institute and Moss Landing Marine Laboratories where remotely operated vehicles, a future Monterey Accelerated Research System (MARS) cable, and other research methods have already generated baseline data. (Goal 3, Objective 1)
- Provide replicate deepwater hard bottom, soft bottom and submarine canyon habitats, in which fishing for benthic finfish species is prohibited, for Portuguese Ledge and Point Lobos State Marine Conservation Areas and Big Creek State Marine Reserve. (Goal 3, Objective 2)
- Include submarine canyon head habitat within a marine protected area. (Goal 4, Objective 1)
- Include and replicate deepwater hard and soft bottom and submarine canyon habitats across a wide range of depth. (Goal 4, Objective 2)
- Minimize negative socio-economic impacts to the pelagic finfish fisheries while protecting benthic finfishes within a marine protected area. (Goal 5, Objective 1)
- Minimize negative socio-economic impacts to rockfish fisheries by establishing a state marine conservation area in an area which encompasses part of the Rockfish Conservation Area, which is already closed to rockfish fishing. (Goal 5, Objective 1)
- Establish marine protected areas that meet Master Plan Framework scientific guidelines regarding preferred size (greater than 18 square miles). (Goal 5, Objective 3)

Figure 4. Soquel Canyon State Marine Conservation Area and Portuguese Ledge State Marine Conservation Area.



Proposed MPA: Portuguese Ledge State Marine Conservation Area
Area (sq. mi.): 10.90
Along-shore span (mi): 5.4
Depth range (ft): 302-4838

Primary habitat types: shallow hard and soft bottom, deep hard and soft bottom, deep submarine canyon.

Proposed regulations: Take of all living marine resources is prohibited except the commercial and recreational take of pelagic finfish.

Boundaries: This area is bounded by straight lines connecting the following points in the order listed (Figure 4):
36º 43.00' N. lat. 121º 56.00' W. long.;
36º 43.00' N. lat. 122º 01.30' W. long.;
36º 41.00' N. lat. 122º 00.80' W. long.;
36º 41.00' N. lat. 121º 56.00' W. long.; and
36º 43.00' N. lat. 121º 56.00' W. long.

Examples of species likely to benefit: shelf and slope rockfishes, lingcod, Dover sole, Dungeness crab, spot prawn, squid.

Summary of Objectives: Provide increased protection to deep submarine canyon, other deep hard and soft habitat, and all associated benthic species. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect area with high species diversity associated with submarine canyon, including depth-stratified species assemblages with shelf and slope rockfishes. (Goal 1, Objective 1)
- Help protect communities associated with area of diverse habitat including shallow hard and soft bottom, deep hard and soft bottom, and submarine canyon, over a large depth range, and in close proximity to each other. (Goal 1, Objective 2)
- Help restore overfished groundfish species by maintaining large individuals of species such as bocaccio, canary, and yelloweye rockfishes in an area that has been fished heavily for decades and has become less productive. (Goal 1, Objective 3)
- Protect overfished rockfishes, including bocaccio, canary, and yelloweye. (Goal 2, Objective 1)
- Enhance reproductive capacity of benthic and deepwater fish and invertebrate species by prohibiting fishing for these species and allowing fisheries with limited bycatch of these species. (Goal 2, Objective 2)
- Protect rockfishes and other components of a deep benthic community, while allowing the harvest of pelagic finfish. (Goal 2, Objective 3)
- Enhance education and study opportunities by establishing a marine protected area near the Monterey Bay Aquarium Research Institute and Moss Landing Marine Laboratories where remotely operated vehicles and other research methods have already generated baseline data. (Goal 3, Objective 1)
- Provide replicate deepwater hard bottom, soft bottom and submarine canyon habitats, in which fishing for benthic species is prohibited, for Soquel Canyon and Point Lobos State Marine Conservation Areas and Big Creek State Marine Reserve. (Goal 3, Objective 2)

- Include and replicate deepwater hard and soft bottom and submarine canyon habitats across a wide range of depth. (Goal 4, Objective 2)
- Minimize negative socio-economic impacts to the pelagic finfish fisheries while protecting benthic habitat within a marine protected area. (Goal 5, Objective 1)
- Minimize negative socio-economic impacts to rockfish fisheries by establishing a state marine conservation area in an area which encompasses the Rockfish Conservation Area, which is already closed to rockfish fishing. (Goal 5, Objective 1)
- Establish marine protected areas that meet Master Plan Framework scientific guidelines regarding preferred size (greater than 18 square miles). (Goal 5, Objective 3)

Proposed MPA: Edward F. Ricketts State Marine Conservation Area
Area (sq. mi.): 0.22
Along-shore span (mi): 1
Depth range (ft): 0-74

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: Take of all living marine resources is prohibited except the recreational take of finfish by hook-and-line and, north of 36° 36.83' N. Latitude, the commercial take of kelp by hand. Any individual licensed commercial kelp harvester may take no more than 12 tons of kelp from the portion of Administrative Kelp Bed 220 within the Edward F. Ricketts State Marine Conservation Area in any calendar month. Recreational fishing from the Monterey Breakwater may be limited to specific times and days of the week with special allowances for disabled anglers.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 5):
36º 36.50' N. lat. 121º 53.37' W. long.;
36º 37.25' N. lat. 121º 53.78' W. long.; and
36º 37.10' N. lat. 121º 54.09' W. long.

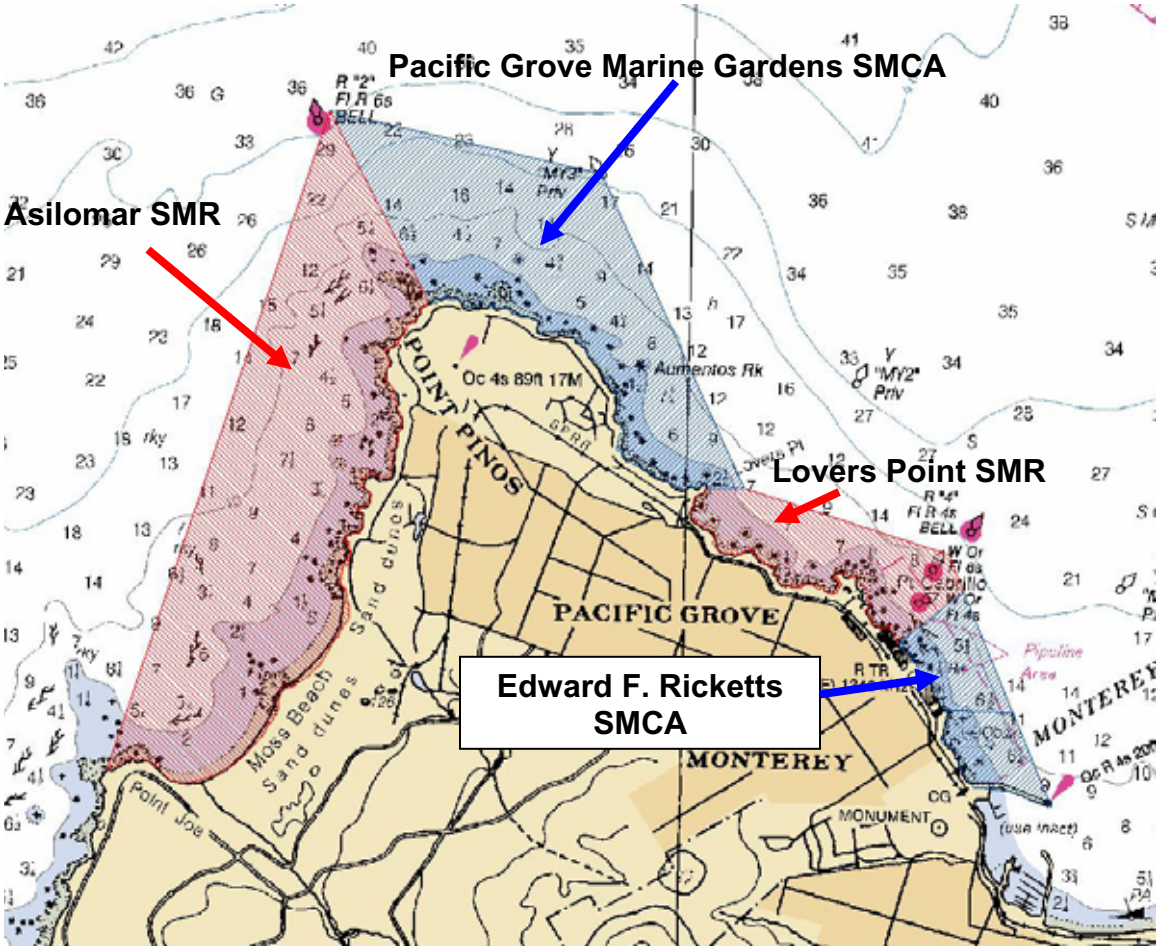
Examples of species likely to benefit: mussels, limpets, turban snails, sea stars.

Summary of Objectives: Provide increased protection to a heavily-used area with shallow hard and soft bottom habitats, including kelp beds, while allowing for some traditional consumptive uses. The primary purpose of this area is to provide for recreational opportunities (both consumptive and nonconsumptive) in an area that is minimally impacted by other consumptive activities.

Detailed Objectives (with reference to regional goal and objective):

- Protect invertebrates and the habitats on which they depend while allowing the harvest of finfish and kelp. (Goal 2, Objective 3)
- Enhance research and study opportunities by establishing a marine protected area which allows hook-and-line fishing and prohibits spearfishing close to Lovers Point State Marine Reserve and close to a state marine conservation area which allows spearfishing. (Goal 3, Objective 1)
- Promote opportunity for use of volunteer scuba divers in research and monitoring projects by establishing a state marine conservation area in a location heavily used by scuba divers where volunteer monitoring by REEF already takes place. (Goal 3, Objective 3)
- Minimize negative socio-economic impacts by establishing a state marine conservation area which allows recreational fishing and hand harvest of kelp by local aquaculturists, while affording protection to invertebrates and prohibiting all other commercial take. (Goal 5, Objective 1)

Figure 5. Edward F. Ricketts State Marine Conservation Area, Lovers Point State Marine Reserve, Pacific Grove Marine Gardens State Marine Conservation Area, and Asilomar State Marine Reserve.



Proposed MPA: Lovers Point State Marine Reserve
Area (sq. mi.): 0.30
Along-shore span (mi): 1.0
Depth range (ft): 0-88

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: No take.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 5):
36º 37.10' N. lat. 121º 54.09' W. long.;
36º 37.25' N. lat. 121º 53.78' W. long.;
36º 37.38' N. lat. 121º 53.85' W. long.;
36º 37.60' N. lat. 121º 54.75' W. long.; and
36º 37.60' N. lat. 121º 54.91' W. long.

Examples of species likely to benefit: nearshore rockfishes, lingcod, cabezon, kelp greenling, surfperches, California halibut, giant kelp, mussels, limpets, sea stars, southern sea otter, cormorants.

Summary of Objectives: Provide for increased protection through the expansion of an existing state marine reserve in shallow hard and soft bottom habitats in an area close to population centers and used by nonconsumptive divers. The primary goal of this MPA will be to provide for recreational nonconsumptive uses in an area minimally impacted by human take. Additionally this increases the area adjacent to an existing research institution which can facilitate research and monitoring within the MPA.

Detailed Objectives (with reference to regional goal and objective):

- Continue to provide protection to a rich diversity of invertebrates and fish species characteristic of shallow rocky and soft bottom habitat of southern Monterey Bay, while expanding protection to a small reef in slightly deeper water. (Goal 1, Objective1)
- Help protect southern sea otter and marine bird habitat. (Goal 2, Objective 1)
- Protect large individuals of resident nearshore fish species in known nursery area. (Goal 2, Objective 2)
- Enhance scientific research opportunities at site of traditional high research value by expanding protection in adjacent areas and extending the existing state marine reserve alongshore and into deeper water. (Goal 3, Objective 1)
- Enhance recreational non-consumptive diving experience at site of traditional high diving use by expanding protection in adjacent areas and

extending the existing state marine reserve alongshore and into deeper water. (Goal 3, Objective 1)
- Benefit from site's location adjacent to Stanford University's Hopkins Marine Station and its use by students for educational and monitoring purposes. (Goal 3, Objective 3)
- Minimize socio-economic impacts by limiting the state marine reserve to a maximum depth of approximately 60 feet (except for Hopkins Deep Reef) which will allow continued commercial and recreational fishing in deeper waters adjacent to the state marine reserve. (Goal 5, Objective 1)

Proposed MPA: Pacific Grove Marine Gardens State Marine Conservation Area
Area (sq. mi.): 0.93
Along-shore span (mi): 3.8
Depth range (ft): 0-172

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: Take of all living marine resources is prohibited except recreational take of finfish and the commercial take of kelp by hand. Any individual licensed commercial kelp harvester may take no more than 44 tons of kelp from the portion of Administrative Kelp Bed 220 within the Pacific Grove Marine Gardens State Marine Conservation Area in any calendar month.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 5):
36º 37.60' N. lat. 121º 54.91' W. long.;
36º 37.60' N. lat. 121º 54.75' W. long.;
36º 38.70' N. lat. 121º 55.40' W. long.;
36º 38.90' N. lat. 121º 56.60' W. long.; and
36º 38.22' N. lat. 121º 56.15' W. long.

Examples of species likely to benefit: invertebrates, including mussels, limpets, turban snails, sea stars, squid.

Summary of Objectives: Provide increased protection to a heavily-used area with shallow hard and soft bottom habitats, including kelp beds, while allowing for some traditional consumptive uses. The primary purpose of this area is to provide for recreational opportunities (both consumptive and nonconsumptive) in an area that is minimally impacted by other consumptive activities.

Detailed Objectives (with reference to regional goal and objective):
- Enhance non-consumptive recreational experience by prohibiting commercial finfishing and all invertebrate take in an area that includes traditional scuba diving sites accessed from the beach or boats. (Goal 3, Objective 1)

- Continue to protect, within a state marine conservation area, an area close to Monterey and adjacent to Pacific Grove that has long-standing and strong community support and high research, educational and recreational value, particularly with respect to tide pools. (Goal 3, Objective 1)
- Provide potential opportunity to study impacts of the hand harvest of kelp and spearfishing by establishing an expanded state marine reserve and a state marine conservation area (which also allows hand harvest of kelp and prohibits spearfishing) adjacent or near to this site. (Goal 3, Objective 2)
- Promote opportunity for use of volunteer scuba divers in research and monitoring projects by establishing a state marine conservation area in a location heavily used by scuba divers where volunteer monitoring by REEF already takes place. (Goal 3, Objective 3)
- Enhance recreational fishing within the state marine conservation area through a prohibition on commercial take and by providing for a natural size and age structure of resident finfish species in an adjacent state marine reserve. (Goal 3, Objective 4)
- Allow continued recreational fishing in traditional use area and hand harvest of kelp close to abalone aquaculture facilities. (Goal 5, Objective 1)

Proposed MPA: Asilomar State Marine Reserve
Area (sq. mi.): 1.51
Along-shore span (mi): 2.3
Depth range (ft): 0-172

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: No take

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 5):
36º 38.22’ N. lat. 121º 56.15’ W. long.;
36º 38.90’ N. lat. 121º 56.60’ W. long.; and
36° 36.60’ N. lat. 121° 57.50’ W. long.;

Examples of species likely to benefit: nearshore rockfishes, lingcod, cabezon, kelp greenling, surfperches, California halibut, giant kelp, mussels, limpets, sea stars, southern sea otter, cormorants.

Rationale: Provide for complete protection in shallow hard and soft bottom habitats in an area close to population centers and used by nonconsumptive divers. The primary goals of this MPA will be to provide for recreational nonconsumptive uses in an area minimally impacted by human take, and to

provide benefits to an adjacent fished area through spillover of adult fishes and increased potential for larval production.

Detailed Objectives (with reference to regional goal and objective):

- Provide protection to a rich diversity of invertebrates and fish species characteristic of shallow rocky and soft bottom habitat near southern Monterey Bay. (Goal 1, Objective1)
- Help protect southern sea otter and marine bird habitat. (Goal 2, Objective 1)
- Protect large individuals of resident nearshore fish species adjacent to an area which experiences significant recreational fishing effort. (Goal 2, Objective 2)
- Enhance recreational non-consumptive diving experience at site of traditional diving use. (Goal 3, Objective 1)
- Benefit from site's location close to Stanford University's Hopkins Marine Station and its use by students for educational and monitoring purposes. (Goal 3, Objective 3)
- Minimize socio-economic impacts by limiting the state marine reserve to an area which is primarily less than 90 feet deep, which will allow continued commercial and recreational fishing in deeper waters adjacent to the state marine reserve. (Goal 5, Objective 1)

Proposed MPA: Carmel Pinnacles State Marine Reserve
Area (sq. mi.): 0.53
Along-shore span (mi): 1.0
Depth range (ft): 69-223

Primary habitat types: rocky pinnacles, kelp bed.

Proposed regulations: No take.

Boundaries: This area is bounded by the straight lines connecting the following points in the order listed (Figure 6):
36º 33.65' N. lat. 121º 57.60' W. long.;
36º 33.65' N. lat. 121º 58.50' W. long.;
36º 33.10' N. lat. 121º 58.50' W. long.;
36º 33.10' N. lat. 121º 57.60' W. long.; and
36º 33.65' N. lat. 121º 57.60' W. long.;

Examples of species likely to benefit: nearshore rockfishes, lingcod, cabezon, kelp greenling, surfperches, giant kelp, bull kelp, sponges, hydrocorals.

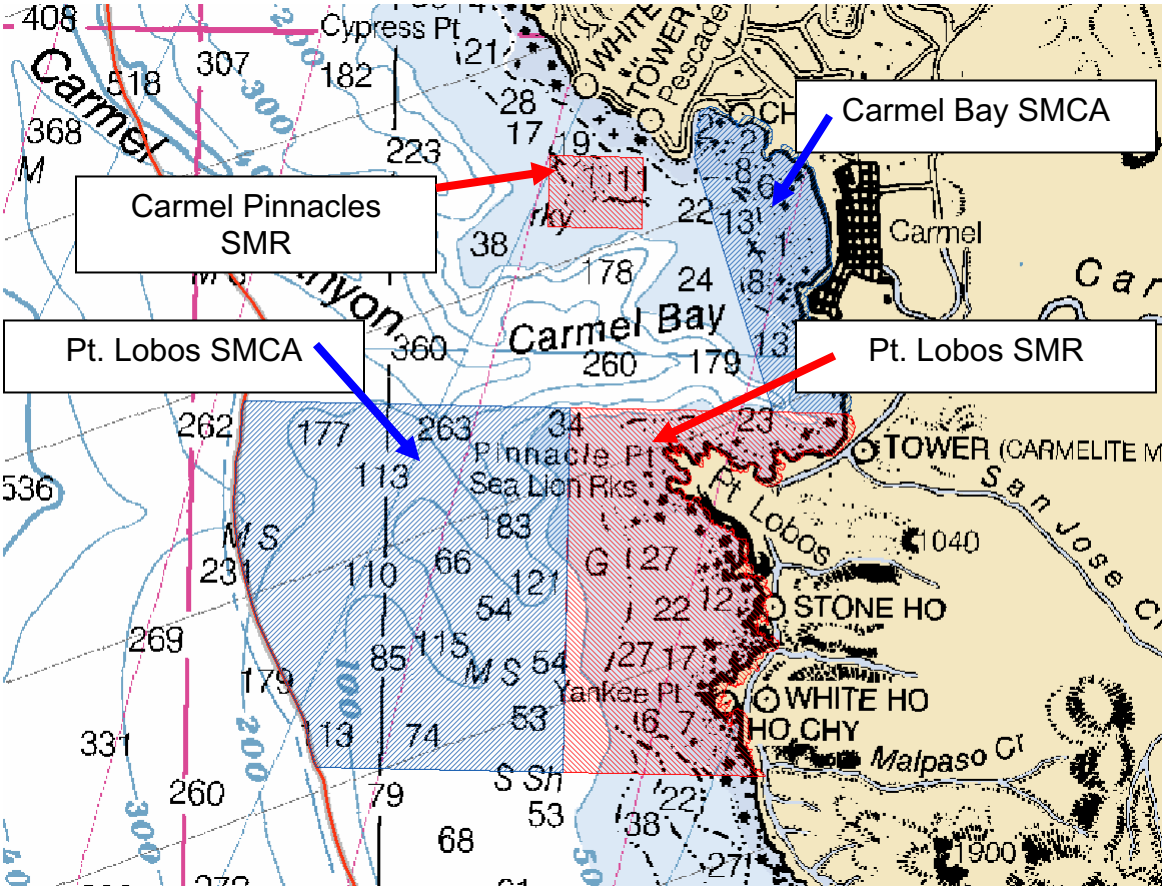
Summary of Objectives: Provide for complete protection in an area of complex hard bottom habitat, including kelp beds and pinnacles, is close to port and frequently used by nonconsumptive divers. The primary purpose of this area would be to protect a unique pinnacle area that is accessible to divers for

nonconsumptive uses while maintaining similar habitats nearby as open fishing areas.

Detailed Objectives (with reference to regional goal and objective):

- Protect communities associated with high-relief rocky reef habitat (including pinnacles), bull kelp and giant kelp forests, and hydrocorals, in close proximity to each other. (Goal 1, Objective 2)
- Enhance non-consumptive recreational scuba diving experience at a traditional dive site formerly open to fishing. (Goal 3, Objective 1)
- Replicate pinnacle habitat found within Point Lobos State Marine Reserve. (Goal 3, Objective 2)
- Include pinnacle habitat, with dense rockfish populations, sponges, and hydrocorals, within a state marine reserve. (Goal 4, Objective 1)

Figure 6. Carmel Pinnacles State Marine Conservation Area, Carmel Bay State Marine Conservation Area, Point Lobos State Marine Reserve, and Point Lobos State Marine Conservation Area.



Proposed MPA: Carmel Bay State Marine Conservation Area
Area (sq. mi.): 2.12
Along-shore span (mi): 3.5
Depth range (ft): 0-471

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, submarine canyon head, kelp bed.

Proposed regulations: Take of all living marine resources is prohibited except the recreational take of finfish and the commercial take of giant kelp (*Macrocystis pyrifera*) by hand. Any individual licensed commercial kelp harvester may take no more than 44 tons of kelp from the portion of Administrative Kelp Bed 219 within the Carmel Bay State Marine Conservation Area in any calendar month.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 6):
36º 33.65' N. lat. 121º 57.10' W. long.;
36º 31.70' N. lat. 121º 56.30' W. long.; and
36º 31.70' N. lat. 121º 55.55' W. long.

Examples of species likely to benefit: invertebrates, including squid.

Summary of Objectives: Continue to provide existing level of protection in an area of diverse shallow habitat characterized by traditional recreational uses.

Detailed Objectives (with reference to regional goal and objective):

- Allow continued recreational harvest of finfish and commercial harvest of kelp by hand in an area of historic recreational use value near Monterey harbor while protecting invertebrates. (Goal 2, Objective 3)
- Maintain an existing state marine conservation area located near the population center of Monterey Peninsula that is accessible for recreational opportunities, both consumptive and non-consumptive. (Goal 3, Objective 1)
- Maintain an existing state marine conservation area that includes a Moss Landing Marine Laboratories long-term monitoring site. (Goal 3, Objective 3)
- Allow for the comparison of a recreational fishing area adjacent to a no-take area (Goal 3, Objective 3)

Proposed MPA: Point Lobos State Marine Reserve
Area (sq. mi.): 5.36
Along-shore span (mi): 4.7
Depth range (ft): 0-408

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, pinnacles, kelp bed.

Proposed regulations: No take. Access restricted in some areas due to existing Point Lobos State Reserve (State Park Unit) regulations but these restrictions will not apply to areas outside the existing Pt. Lobos State Reserve (State Park Unit) boundaries.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 6):
36º 31.70' N. lat. 121º 55.55' W. long.;
36º 31.70' N. lat. 121º 58.25' W. long.;
36º 28.88' N. lat. 121º 58.25' W. long.; and
36º 28.88' N. lat. 121º 56.30' W. long.

Examples of species likely to benefit: nearshore rockfishes, lingcod, cabezon, kelp greenling, surfperches, giant kelp, bull kelp, squid, sponges, hydrocorals, cormorants, pelicans, southern sea otter, harbor seal.

Summary of Objectives: Provide for increased complete protection through the expansion of an existing state marine reserve in shallow hard and soft bottom habitats in an area close to population centers and used by nonconsumptive divers. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect area of high species diversity characteristic of the granitic shallow hard bottom habitat within the central coast, and maintain species diversity and abundance as demonstrated by monitoring indicator species. (Goal 1, Objective 1)
- Protect communities associated with a mosaic of sandy and rocky intertidal, kelp bed, shallow rocky reef, shallow sandy bottom, and submarine canyon head habitats in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of invertebrate and fish species associated with sandy and rocky intertidal, kelp bed, shallow rocky reef, shallow sandy bottom, and submarine canyon head habitat. (Goal 1, Objective 3)

- Protect natural trophic structure and food webs, including forage species such as squid and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals. (Goal 1, Objective 4)
- Protect ecosystem structure and functions associated with submarine canyon head, rocky reef, and kelp forest communities. (Goal 1, Objective 5)
- Help protect listed marine bird and marine mammal species by protecting forage base. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of invertebrates and nearshore finfish with limited movement patterns. (Goal 2, Objective 2)
- Enhance extensive educational and interpretive facilities, including visitor center and docent program, through expansion of an existing state marine reserve. (Goal 3, Objective 1)
- Enhance Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) monitoring program (which has existing replicate monitoring sites inside and outside the state marine reserve) through expansion of the existing state marine reserve. (Goal 3, Objective 2)
- Replicate pinnacles habitat found in Carmel Pinnacles State Marine Reserve. (Goal 3, Objective 2)
- Enhance existing local high school monitoring program through expansion of the state marine reserve. (Goal 3, Objective 3)
- Protect and enhance recreational diving experience by expanding protection of existing state marine reserve to better ensure protection of large fish. (Goal 3, Objective 4)
- Protect head of Carmel Submarine Canyon and pinnacle habitats within a state marine reserve. (Goal 4, Objective 1)
- Include rocky intertidal, kelp bed, shallow rocky reef, and shallow soft bottom habitats within a state marine reserve, and increase protection of pinnacle habitat. (Goal 4, Objective 2)
- Optimize positive socio-economic benefits by improving protection in area that has particularly high non-consumptive use patterns, including scuba diving and wildlife watching. (Goal 5, Objective 1)
- Establish a marine protected area complex (along with Point Lobos State Marine Conservation Area) that meets Master Plan Framework scientific guidelines for minimum shoreline extent and offshore extent. (Goal 5, Objective 3)

Proposed MPA: Point Lobos State Marine Conservation Area
Area (sq. mi.): 8.85
Along-shore span (mi): 3.2
Depth range (ft): 268-1858

Primary habitat types: shallow and deep hard bottom, shallow and deep soft bottom, shallow and deep submarine canyon.

Proposed regulations: Take of all living marine resources is prohibited except commercial and recreational take of salmon (*Oncorhynchus spp.*), albacore (*Thunnus alalunga*), and spot prawn (*Pandalus platyceros*).

Boundaries: This area is bounded by the state water line offshore and straight lines connecting the following points in the order listed unless otherwise stated (Figure 6):
36º 31.70' N. lat. 121º 58.25' W. long.;
36º 31.70' N. lat. 122º 01.30' W. long.; thence southward along the state water line to
36º 28.88' N. lat. 122º 00.55' W. long.;
36º 28.88' N. lat. 121º 58.25' W. long.; and
36º 31.70' N. lat. 121º 58.25' W. long.

Examples of species likely to benefit: shelf and slope rockfishes, lingcod, sponges, hydrocorals, cormorants, pelicans, southern sea otter, harbor seal.

Summary of Objectives: Provide for increased protection of benthic finfishes in a diverse area containing shallow and deep, and hard and soft habitats, while minimizing impact to rockfish fisheries, through the incorporation of part of the Rockfish Conservation Area into the MPA, and salmon and spot prawn fisheries. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect communities associated with area with shallow hard and soft bottom, deep hard and soft bottom, and shallow and deep submarine canyon habitats across a wide depth range and in close proximity to each other. (Goal 1, Objective 2)
- Help protect populations of overfished rockfish (including bocaccio, canary and yelloweye) and help protect forage species (including coastal pelagic finfish) for listed marine birds. (Goal 2, Objective 1)
- Enhance reproductive capacity of benthic fish species by prohibiting fishing for them in deep water. (Goal 2, Objective 2)
- Enhance reproductive capacity of benthic fish species by only allowing fishing for selected pelagic finfishes and spot prawn (by trap), where bycatch of benthic fishes is minimal. (Goal 2, Objective 2)

- Provide an opportunity for comparative studies in Soquel Canyon and Portuguese Ledge State Marine Conservation Areas which have similar habitats. (Goal 3, Objective 1)
- Minimize negative socio-economic impacts by allowing fishing for salmon, albacore and spot prawn, and by incorporating a portion of the Rockfish Conservation Area (closed to groundfish take) and Essential Fish Habitat trawl closure. (Goal 5, Objective 1)
- Establish a marine protected area complex (along with Point Lobos State Marine Reserve) that meets Master Plan Framework scientific guidelines for minimum shoreline extent and offshore extent. (Goal 5, Objective 3)

Proposed MPA: Point Sur State Marine Reserve
Area (sq. mi.): 9.72
Along-shore span (mi): 5.2
Depth range (ft): 0-178

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed, canyon head.

Proposed regulations: No take.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 7):
36º 18.40' N. lat. 121º 54.10' W. long.;
36º 18.40' N. lat. 121º 56.00' W. long.;
36º 15.00' N. lat. 121º 52.50' W. long.; and
36º 15.00' N. lat. 121º 50.25' W. long.;

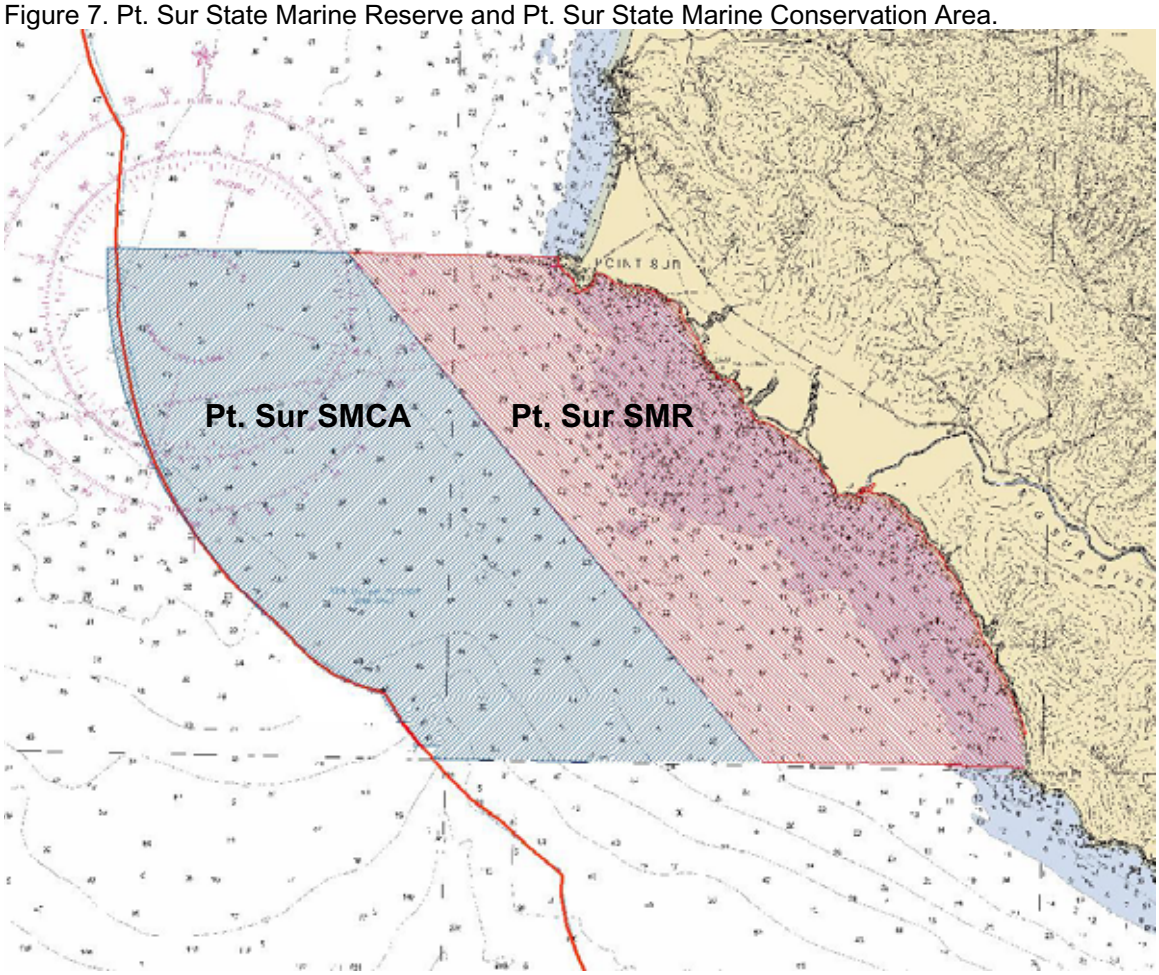
Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, giant kelp, bull kelp, squid, Dungeness crab, murres, guillemots, cormorants, petrels, auklets.

Summary of Objectives: Provide for complete protection of a diverse area containing shallow hard and soft habitats, kelp beds, and associated fish and invertebrate species while minimizing impact to shelf rockfish fisheries through the incorporation of part of the Rockfish Conservation Area into the MPA. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):
- Protect area of particularly high species diversity associated with upwelling cell in lee of headland, as well as area immediately north of a headland, and maintain species diversity and abundance as demonstrated by monitoring indicator species. (Goal 1, Objective 1, and 2)

- Protect natural age and size structure of invertebrate and fish species associated with sandy beach, rocky intertidal, kelp bed, shallow rocky reef, and shallow sandy bottom habitat. (Goal 1, Objective 3)
- Protect natural trophic structure and food webs, including forage species such as juvenile rockfish, squid, and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals. (Goal 1, Objective 4)
- Provide protection to an area that contains a persistent upwelling plume and generally southerly flow, well-suited to provide larval dispersal to other areas. (Goal 1, Objective 5)
- Help protect populations of overfished rockfish species including bocaccio, yelloweye, and canary. (Goal 2, Objective 1)
- Protect forage base for listed marine birds and marine mammals as well as overfished rockfish species. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of shelf species including rockfishes. (Goal 2, Objective 2)
- Establish a marine protected area near a terrestrial state park where an adjacent PISCO subtidal monitoring site exists. (Goal 3, Objective 1)
- Include submarine canyon head habitat found in the Soquel Canyon and Point Lobos State Marine Conservation Areas and Point Lobos State Marine Reserve. (Goal 3, Objective 2)
- Include submarine canyon head within a state marine reserve. (Goal 4, Objective 1)
- Include shallow hard and soft bottom, and shallow canyon habitat within a state marine reserve, including an area of broad continental shelf within a larger area of primarily narrow continental shelf. (Goal 4, Objective 2)
- Minimize negative socio-economic impacts by incorporating a portion of the Rockfish Conservation Area (closed to groundfish take), and considering existing squid fishing grounds. (Goal 5, Objective 1)
- Establish a marine protected area complex (along with Point Sur State Marine Conservation Area) that meets preferred Master Plan Framework scientific guidelines for size. (Goal 5, Objective 3)

Figure 7. Pt. Sur State Marine Reserve and Pt. Sur State Marine Conservation Area.



Proposed MPA: Point Sur State Marine Conservation Area
Area (sq. mi.): 9.96
Along-shore span (mi): 5.2
Depth range (ft): 134-424

Primary habitat types: shallow hard and soft bottom.

Proposed regulations: Take of all living marine resources is prohibited except commercial and recreational take of salmon (*Onchorhynchus spp.*) and albacore (*Thunnus alalunga*).

Boundaries: This area is bounded by the state water line offshore and straight lines connecting the following points in the order listed unless otherwise stated (Figure 7):
36º 18.40' N. lat. 121º 56.00' W. long.;
36º 18.40' N. lat. 121º 58.33' W. long.; thence southward along the state water line to
36º 15.00' N. lat. 121º 55.10' W. long.;
36º 15.00' N. lat. 121º 52.50' W. long.; and
36º 18.40' N. lat. 121º 56.00' W. long.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, giant kelp, squid, Dungeness crab, spot prawn, murres, cormorants, southern sea otter.

Summary of Objectives: Provide for increased protection of a diverse area containing shallow hard and soft habitats, kelp beds, and associated fish and invertebrate species while minimizing impact to shelf rockfish fisheries, through the incorporation of part of the Rockfish Conservation Area into the MPA, and to the salmon fishery. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region. In addition, unique habitats in federal waters are adjacent to this area and may be connected if appropriate in future processes.

Detailed Objectives (with reference to regional goal and objective):

- Protect area of high species diversity associated with shallow hard and soft bottom habitats where the continental shelf is relatively broad. (Goal 1, Objective 1 and 2)
- Protect natural age and size structure of invertebrate and fish species associated with shallow rocky reef and soft bottom habitat. (Goal 1, Objective 3)
- Protect natural trophic structure and food webs, including forage species such as juvenile rockfish, squid, and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals. (Goal 1, Objective 4)
- Provide protection to communities associated with an area that contains a persistent upwelling plume and generally southerly flow, well-suited to provide larval dispersal to other areas. (Goal 1, Objective 5)
- Help maintain populations of overfished rockfish species including bocaccio, yelloweye, and canary. (Goal 2, Objective 1)
- Protect forage base for listed marine birds and marine mammals as well as overfished rockfish species. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of benthic shelf species including rockfishes. (Goal 2, Objective 2)
- Minimize negative socio-economic impacts by incorporating a portion of the Rockfish Conservation Area (closed to groundfish take), and by allowing the harvest of salmon and albacore. (Goal 5, Objective 1)

- Establish a marine protected area complex (along with Point Sur State Marine Reserve) that meets preferred Master Plan Framework scientific guidelines for size. (Goal 5, Objective 3)

Proposed MPA: Big Creek State Marine Conservation Area
Area (sq. mi.): 8
Along-shore span (mi): 2.5
Depth range (ft): 0-1964

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, deep hard and soft bottom, shallow and deep submarine canyon, pinnacles, kelp bed.

Proposed regulations: Take of all living marine resources is prohibited except the commercial and recreational take of salmon (*Onchorhynchus spp.*), albacore (*Thunnus alalunga*), and the commercial take of spot prawn (*Pandalus platyceros*).

Boundaries: This area is bounded by the state water line offshore and straight lines connecting the following points in the order listed unless otherwise stated (Figure 8):
36° 07.20' N. lat. 121° 39.00' W. long.;
36° 07.20' N. lat. 121° 42.90' W. long.; thence southward along the three nautical mile offshore boundary to
36° 05.20' N. lat. 121° 41.24' W. long.;
36° 05.20' N. lat. 121° 38.00' W. long.; and
36° 07.20' N. lat. 121° 39.00' W. long.

Examples of species likely to benefit: nearshore, shelf, and slope rockfishes, lingcod, cabezon, kelp greenling, surfperches, squid, giant kelp, murres, cormorants, southern sea otter.

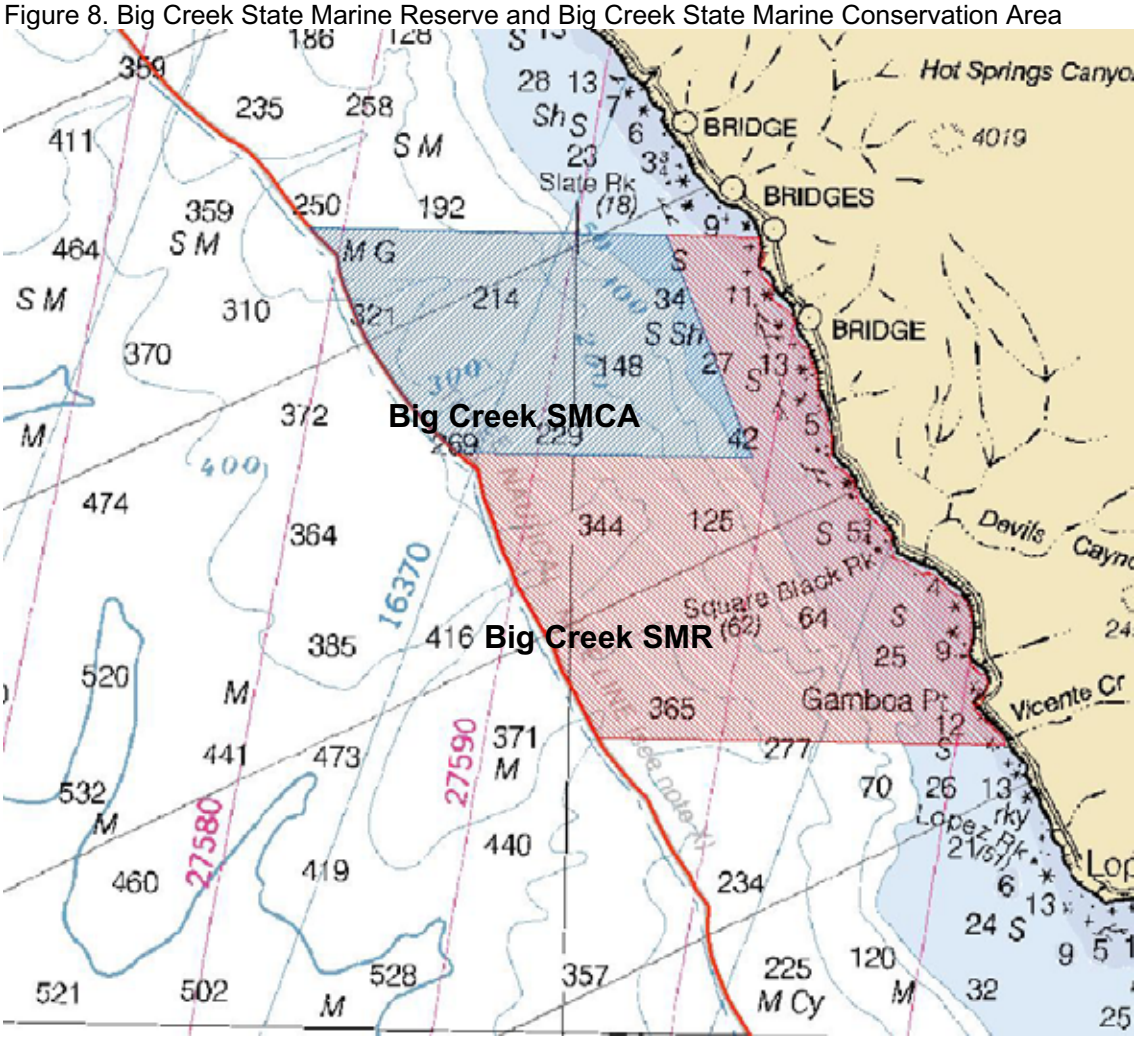
Summary of Objectives: Provide for increased protection of a diverse area containing shallow and deep, and hard and soft habitats, kelp beds, submarine canyons, and associated fish and invertebrate species while minimizing impact to shelf rockfish fisheries, through the incorporation of part of the Rockfish Conservation Area into the MPA, and to the spot prawn and salmon fisheries. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):
- Protect area of high species diversity associated with shallow and deep water habitats, including submarine canyon. (Goal 1, Objective 1)
- Protect communities associated with sandy beach, rocky intertidal, shallow hard and soft bottom, surfgrass and kelp beds, deep hard and soft

bottom, and shallow and deep submarine canyon habitat in close proximity to each other. (Goal 1, Objective 2)

- Protect natural age and size structure of fish and most invertebrate species associated with sandy and rocky intertidal, surfgrass and kelp beds, shallow and deep rocky reef, shallow and deep sandy bottom, and shallow and deep submarine canyon habitat. (Goal 1, Objective 3)
- Help maintain populations of overfished rockfish species including bocaccio, yelloweye, and canary. (Goal 2, Objective 1)
- Protect forage base for listed marine birds and marine mammals as well as overfished rockfish species. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of deepwater species including rockfishes. (Goal 2, Objective 2)
- Provide opportunities afforded by a nearby terrestrial reserve, managed by the University of California, to link classroom curricula. (Goal 3, Objective 3)
- Provide opportunities for collaborative research projects involving commercial fishermen, including a possible study on the impact of salmon fishing. (Goal 3, Objective 3)
- Minimize negative socio-economic impacts by incorporating a portion of the Rockfish Conservation Area (closed to groundfish take), and by allowing the harvest of spot prawn, salmon, and albacore. (Goal 5, Objective 1)

Figure 8. Big Creek State Marine Reserve and Big Creek State Marine Conservation Area



Proposed MPA: Big Creek State Marine Reserve
Area (sq. mi.): 14.47
Along-shore span (mi): 6.1
Depth range (ft): 0-2393

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, deep hard and soft bottom, shallow and deep submarine canyon, pinnacles, kelp bed.

Proposed regulations: No take.

Boundaries: This area is bounded by the state water line offshore and straight lines connecting the following points in the order listed unless otherwise stated (Figure 8):
36° 07.20’ N. lat. 121° 38.00’ W. long.;
36° 07.20’ N. lat. 121° 39.00’ W. long.;
36° 05.20’ N. lat. 121° 38.00’ W. long.

36° 05.20’ N. lat. 121° 41.25’ W. long.; thence southward along the three nautical mile offshore boundary to
36° 02.65’ N. lat. 121° 39.70’ W. long.; and
36° 02.65’ N. lat. 121° 35.13’ W. long.

Examples of species likely to benefit: nearshore, shelf, and slope rockfishes, lingcod, cabezon, kelp greenling, surfperches, spot prawn, squid, giant kelp, murres, cormorants, southern sea otter.

Summary of Objectives: Provide for increased complete protection, through expansion of an existing state marine reserve, of a diverse area containing shallow and deep, and hard and soft habitats, kelp beds, submarine canyons, and associated fish and invertebrate species while minimizing impact to shelf rockfish fisheries through the incorporation of part of the Rockfish Conservation Area into the MPA. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect area of high species diversity associated with shallow and deep water habitats, including submarine canyon. (Goal 1, Objective 1)
- Protect communities associated with sandy beach, rocky intertidal, shallow hard and soft bottom, surfgrass and kelp beds, deep hard and soft bottom, and shallow and deep submarine canyon habitat in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of invertebrate and fish species associated with sandy and rocky intertidal, surfgrass and kelp beds, shallow and deep rocky reef, shallow and deep sandy bottom, and shallow and deep submarine canyon habitat. (Goal 1, Objective 3)
- Protect natural trophic structure and food webs, including forage species such as juvenile rockfish, squid, and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals. (Goal 1, Objective 4)
- Protect full range of ecosystem functions in an area between upwelling zones. (Goal 1, Objective 5)
- Help maintain populations of overfished rockfish species including bocaccio, yelloweye, and canary. (Goal 2, Objective 1)
- Protect forage base for listed marine birds and marine mammals as well as overfished rockfish species. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of deepwater species including rockfishes. (Goal 2, Objective 2)
- Expand existing state marine reserve adjacent to a terrestrial reserve run by the University of California, which provides research and educational opportunities and existing baseline data inside and outside of the state marine reserve. (Goal 3, Objective 1)

- Provide opportunities afforded by an adjacent terrestrial reserve, managed by the University of California, to link classroom curricula. (Goal 3, Objective 3)
- Provide opportunities for collaborative research projects involving commercial fishermen, including a possible study on the impact of salmon fishing. (Goal 3, Objective 3)
- Replicate within a state marine reserve the shallow habitat found in Point Lobos and Point Sur State Marine Reserves. (Goal 4, Objective 2)
- Minimize negative socio-economic impacts by incorporating a portion of the Rockfish Conservation Area (closed to groundfish take). (Goal 5, Objective 1)
- Establish a state marine reserve that meets Master Plan Framework scientific guidelines for size. (Goal 5, Objective 3)

Proposed MPA: Piedras Blancas State Marine Reserve
Area (sq. mi.): 10.4
Along-shore span (mi): 6.4
Depth range (ft): 0-157

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: No take.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 9):
35º 42.85' N. lat. 121º 18.95' W. long.;
35º 42.85' N. lat. 121º 21.00' W. long.;
35º 39.15' N. lat. 121º 18.50' W. long.; and
35º 39.15' N. lat. 121º 14.45' W. long.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, spot prawn, squid, giant kelp, murres, cormorants, pelicans, guillemots, southern sea otter.

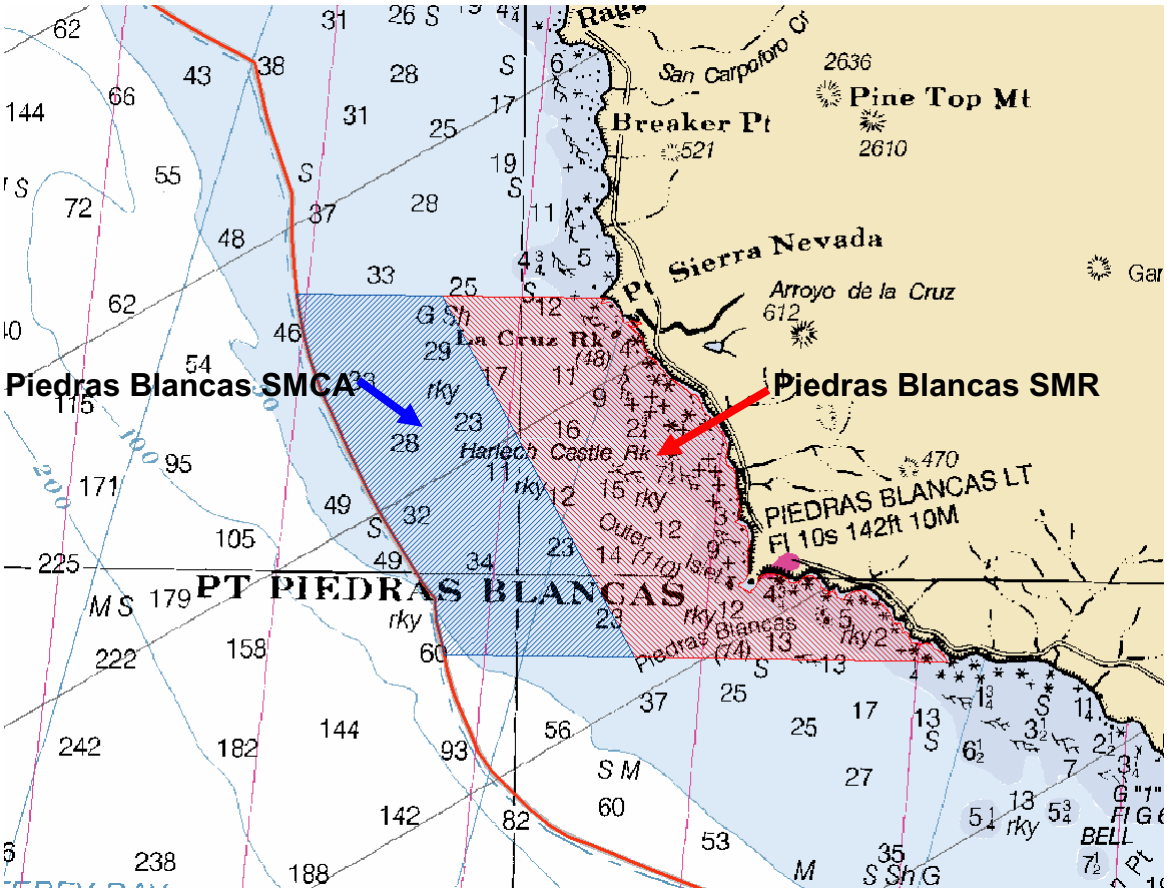
Summary of Objectives: Provide for complete protection of a diverse area containing shallow hard and soft habitats, kelp beds, pinnacles, and associated fish and invertebrate species in an area receiving increased public visitation due to marine mammal viewing opportunities. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):
- Protect area of particularly high species diversity including fish, invertebrates, kelp, marine birds, and marine mammals, including major

rookeries containing California sea lion, northern elephant seal, harbor seal, Stellar sea lion, and northern fur seal. (Goal 1, Objective 1)

- Protect communities associated with extensive and high value intertidal zone which will be subject to additional visitation due to conversion from private to public ownership of land. (Goal 1, Objective 1)
- Protect communities associated with a mosaic of habitat types, including sandy beach with diverse cobble size, rocky intertidal, surfgrass bed, kelp forest, pinnacles, and shallow hard and soft bottom, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of species associated with sandy beach, rocky intertidal, surfgrass bed, kelp forest, pinnacles, and shallow hard and soft bottom habitat. (Goal 1, Objective 3)
- Protect natural trophic structure and food webs, including forage species such as juvenile rockfish, squid, and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals. (Goal 1, Objective 4)
- Protect forage base for marine birds and marine mammals and eliminate disturbances associated with fishing activities. (Goal 1, Objective 5)
- Protect communities associated with an upwelling zone where larval dispersion to other areas is likely. (Goal 1, Objective 5)
- Help protect populations of overfished rockfish species including bocaccio, yelloweye, and canary. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of nearshore fish and invertebrate species. (Goal 2, Objective 2)
- Replicate within a state marine reserve the range of habitats found at Point Sur and Point Buchon State Marine Reserves in an area that includes a PISCO monitoring site. (Goal 3, Objective 2)
- Enhance classroom component of research and monitoring as related to the Friends of the Elephant Seal organization. (Goal 3, Objective 3)
- Include pinnacle habitat within a state marine reserve. (Goal 4, Objective 1)
- Include and replicate sandy beach, rocky intertidal, surfgrass bed, kelp forest, pinnacles, and shallow hard and soft bottom habitat. (Goal 4, Objective 2)
- Increase positive socio-economic benefits by protecting an area with exceptionally high natural heritage values, including education, wildlife viewing, and tourism. (Goal 5, Objective 1)
- Establish a marine protected area complex (along with Piedras Blancas State Marine Conservation Area) that meets Master Plan Framework scientific guidelines for preferred size. (Goal 5, Objective 3)

Figure 9. Piedras Blancas State Marine Reserve and Piedras Blancas State Marine Conservation Area



Proposed MPA: Piedras Blancas State Marine Conservation Area
Area (sq. mi.): 8.76
Along-shore span (mi): 4.9
Depth range (ft): 94-337

Primary habitat types: shallow hard and soft bottom.

Proposed regulations: Take of all living marine resources is prohibited except commercial and recreational take of salmon (*Onchorhynchus spp.*) and albacore (*Thunnus alalunga*).

Boundaries: This area is bounded by the state water line offshore and straight lines connecting the following points in the order listed unless otherwise stated (Figure 9):
35º 42.85' N. lat. 121º 21.00' W. long.;
35º 42.85' N. lat. 121º 22.85' W. long.; thence southward along the state water line to
35º 39.15' N. lat. 121º 20.90' W. long.;
35º 39.15' N. lat. 121º 18.50' W. long.; and
35º 42.85' N. lat. 121º 21.00' W. long.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, giant kelp, squid, Dungeness crab, murres, cormorants, southern sea otter.

Summary of Objectives: Provide for increased protection of a diverse area containing shallow hard and soft habitats, kelp beds, pinnacles, and associated fish and invertebrate species in an area receiving increased public visitation due to marine mammal viewing opportunities, while minimizing impact to the salmon fishery. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect benthic areas with high species diversity and maintain benthic species diversity and abundance, consistent with natural fluctuations, of populations in shallow hard and soft bottom. (Goal 1, Objective 1)
- Protect communities associated with area with shallow hard and soft bottom in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of invertebrate and fish species associated with shallow rocky reef and soft bottom habitat. (Goal 1, Objective 3)
- Protect offshore forage base for seabird and marine mammal populations. (Goal 1, Objective 5)
- Help maintain populations of overfished rockfish species including bocaccio, yelloweye, and canary. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of benthic shelf species including rockfishes. (Goal 2, Objective 2)
- Establish a marine protected area complex (along with Piedras Blancas State Marine Reserve) that meets Master Plan Framework scientific guidelines for preferred size. (Goal 5, Objective 3)

Proposed MPA: Cambria State Marine Park
Area (sq. mi.): 6.26
Along-shore span (mi): 5.8
Depth range (ft): 0-105

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: No commercial take. Recreational take is allowed.

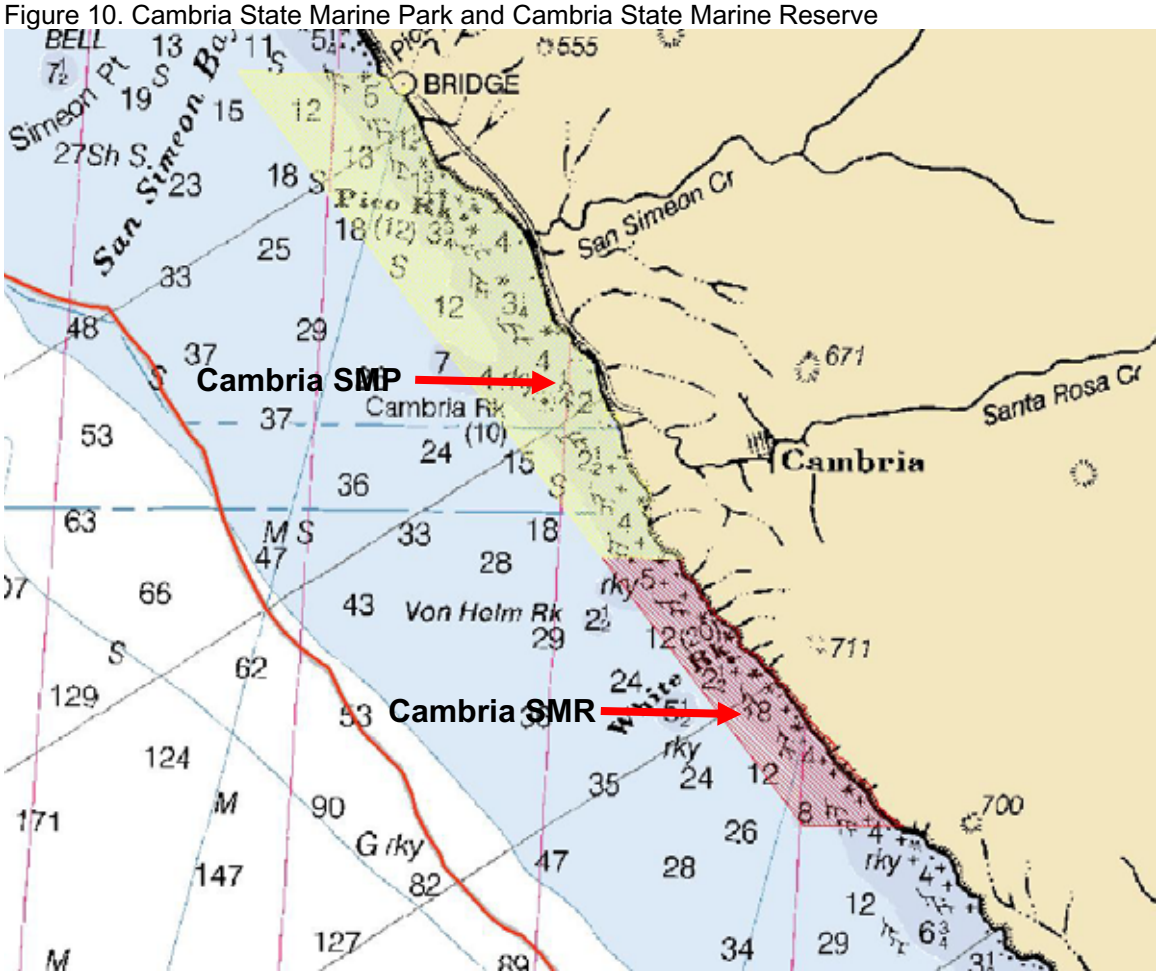
Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 10):
35° 37.10' N. lat. 121° 09.20' W. long.;
35° 37.10' N. lat. 121° 10.70' W. long.;
35° 32.85' N. lat. 121° 06.70' W. long.; and
35° 32.85' N. lat. 121° 05.85' W. long.

Examples of species likely to benefit: squid, giant kelp.

Objectives (with reference to regional goal and objective):

- Provide some protection to nearshore shelf rockfish species, cabezon, and kelp greenling through the prohibition of commercial fishing. (Goal 2, Objective 3)
- Enhance recreational fishing near a population center (Cambria) by prohibiting commercial take in an area traditionally accessed primarily by recreational users. (Goal 3, Objective 1)
- Replicate habitats found in adjacent Cambria State Marine Reserve to allow comparison of an area which allows recreational fishing only with an area in which all take is prohibited. (Goal 3, Objective 2)
- Provide research benefits from existing subtidal and intertidal monitoring sites in this area and in the adjacent Cambria State Marine Reserve. (Goal 3, Objective 2)
- Enhance recreational fishing experience prohibiting commercial fishing. (Goal 3, Objective 4)
- Increase positive socioeconomic impacts for recreational fishing by establishing a state marine park in an area of traditional recreational use. (Goal 5, Objective 1)

Figure 10. Cambria State Marine Park and Cambria State Marine Reserve



Proposed MPA: Cambria State Marine Reserve
Area (sq. mi.): 2.32
Along-shore span (mi): 3.5
Depth range (ft): 0-99

Primary habitat types: sandy beach, rocky intertidal, surfgrass, shallow hard and soft bottom, kelp bed.

Proposed regulations: Take of all living marine resources is prohibited.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 10):
35° 32.85’ N. lat. 121° 05.85’ W. long.;
35° 32.85’ N. lat. 121° 06.70’ W. long.;
35º 30.50’ N. lat. 121º 05.00’ W. long.; and
35º 30.50’ N. lat. 121º 03.40’ W. long.

Examples of species likely to benefit: nearshore rockfish, squid, mussels, turban snails, limpets

Summary of Objectives: Provide for a high level of protection of a diverse area containing shallow hard and soft habitats, kelp beds, pinnacles, and associated fish and invertebrate species adjacent to an existing land based preserve and research facility.

Detailed Objectives (with reference to regional goal and objective):

- Protect area of particularly high species diversity including fish, invertebrates, kelp, marine birds, and marine mammals, including major rookeries containing California sea lion, northern elephant seal, harbor seal, Stellar sea lion, and northern fur seal. (Goal 1, Objective 1)
- Protect communities associated with a mosaic of habitat types, including sandy beach with diverse cobble size, rocky intertidal, surfgrass bed, kelp forest, pinnacles, and shallow hard and soft bottom, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of species associated with sandy beach, rocky intertidal, surfgrass bed, kelp forest, pinnacles, and shallow hard and soft bottom habitat. (Goal 1, Objective 3)
- Protect natural trophic structure and food webs, including forage species such as juvenile rockfish, squid, and coastal pelagic finfish that serve as prey for other fish, marine birds, and marine mammals. (Goal 1, Objective 4)
- Protect larval sources and enhance reproductive capacity of nearshore fish and invertebrate species. (Goal 2, Objective 2)
- Provide protection to nearshore shelf rockfish species, cabezon, and kelp greenling through the prohibition of commercial and recreational fishing. (Goal 2, Objective 3)
- Replicate within a state marine reserve the range of shallow habitats found at Point Sur and Point Buchon State Marine Reserves. (Goal 3, Objective 2)
- Provide research benefits from existing subtidal and intertidal monitoring sites in this area and by comparison with adjacent state marine park. (Goal 3, Objective 2)
- Include and replicate sandy beach, rocky intertidal, surfgrass bed, kelp forest, pinnacles, and shallow hard and soft bottom habitat. (Goal 4, Objective 2)

Proposed MPA: Morro Bay State Marine Reserve
Area (sq. mi.): 0.3
Along-shore span (mi): 1.4
Depth range (ft): 0-10

Primary habitat types: coastal marsh, tidal flats, estuary.

Proposed regulations: No take

Boundaries: This area includes the area below mean high tide line within Morro Bay east of longitude 120º 50.340' W. (Figure 11):

Examples of species likely to benefit: surfperches, leopard shark, starry flounder, worms, pelicans, scoters.

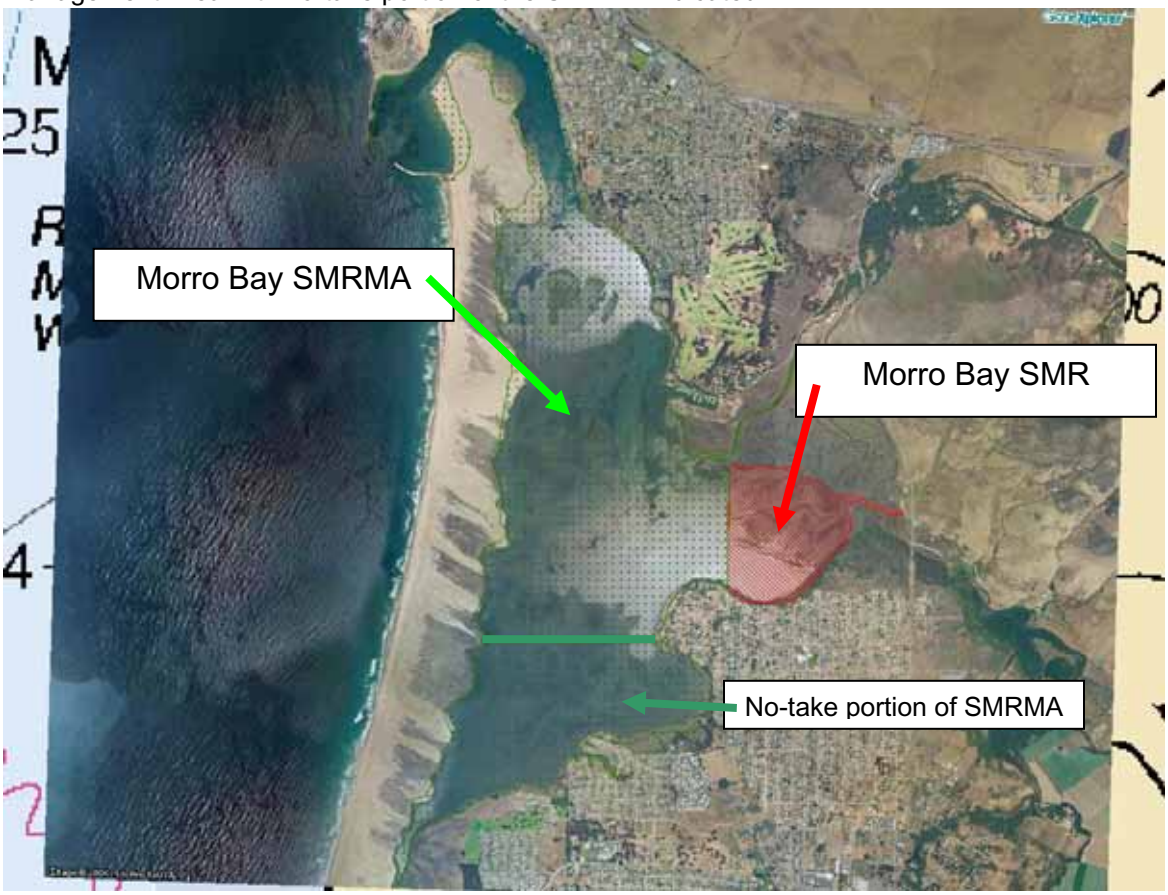
Summary of Objectives: Provide for complete protection in a portion of one of the few estuarine areas of the central coast. This area is within an existing State Park lease where current Park rules prohibit take of living resources.

Detailed Objectives (with reference to regional goal and objective):

- Protect estuarine area with high marine bird diversity. (Goal 1, Objective 1)
- Protect communities associated with area with diversity of estuarine habitats, including open channels and mud flats, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age, size structure, and genetic diversity of fish and invertebrate species, especially elasmobranches and flatfishes, characteristic of largest estuarine system within the central coast. (Goal 1, Objective 3)
- Protect natural structure and food web of estuarine system, including invertebrate forage base for marine birds. (Goal 1, Objective 4)
- Help protect listed marine birds and southern sea otter by protecting feeding area. (Goal 2, Objective 1)
- Enhance reproductive capacity of invertebrate and fish estuarine species by prohibiting take in important nursery area. (Goal 2, Objective 2)
- Provide educational and interpretive resources by establishing a state marine reserve adjacent to a museum, a terrestrial state park, and within the Morro Bay Estuarine Reserve. (Goal 3, Objective 1)
- Include and replicate representative central coast estuarine habitat within a state marine reserve. (Goal 3, Objective 2)
- Include estuarine habitat within a state marine reserve. (Goal 4, Objective 1)

- Minimize negative socio-economic impacts by establishing a state marine reserve in an area that is already closed to fishing, and where non-consumptive values such as wildlife viewing are likely to be enhanced. (Goal 5, Objective 1)

Figure 11. Morro Bay East State Marine Reserve and Morro Bay State Marine Recreational Management Area with no-take portion of the SMRMA indicated.



Proposed MPA: Morro Bay State Marine Recreational Management Area
Area (sq. mi.): 3.01
Along-shore span (mi): 9.4
Depth range (ft): 0-22

Primary habitat types: sandy beach, coastal marsh, tidal flats, eelgrass beds, estuary.

Proposed regulations: Take of all living marine resources is prohibited except recreational take of finfish, permitted aquaculture of oysters, and receiving of finfish for bait purposes north of latitude 35° 19.700' N. Recreational hunting of waterfowl is permitted unless otherwise restricted by hunting regulations.

Boundaries: This area includes the area below mean high tide within Morro Bay east of the Morro Bay entrance breakwater and west of longitude 120º 50.340' W. (Figure 11):

Examples of species likely to benefit: worms, pelicans, scoters, ghost shrimp, mud shrimp.

Summary of Objectives: Provide increased protection for one of the few estuarine areas of the central coast while allowing for the traditional use of waterfowl hunting.

Detailed Objectives (with reference to regional goal and objective):

- Protect estuarine area with high marine bird diversity. (Goal 1, Objective 1)
- Protect invertebrate communities associated with area with diversity of estuarine habitats, including open channels and mud flats, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age, size structure, and genetic diversity of invertebrate species characteristic of largest estuarine system within the central coast. (Goal 1, Objective 3)
- Protect natural structure and food web of estuarine system in a portion of the MMA, including invertebrate forage base for marine birds. (Goal 1, Objective 4)
- Help protect listed marine birds and southern sea otter by protecting feeding area. (Goal 2, Objective 1)
- Enhance reproductive capacity of invertebrate estuarine species by prohibiting take in important estuarine area. (Goal 2, Objective 2)
- Provide educational and interpretive resources by establishing a state marine recreational management area with full protection of marine invertebrate and algae species adjacent to a museum, a terrestrial state park, and within the Morro Bay Estuarine Reserve. (Goal 3, Objective 1)
- Include with estuarine habitat within a state marine recreational management area. (Goal 4, Objective 1)
- Minimize negative socio-economic impacts by establishing a state marine recreational management area with a no-take component in a location that has experienced relatively little fishing effort but has been a traditional waterfowl hunting area. (Goal 5, Objective 1)

Proposed MPA: Point Buchon State Marine Reserve
Area (sq. mi.): 6.66
Along-shore span (mi): 2.9
Depth range (ft): 0-208

Primary habitat types: sandy beach, rocky intertidal, shallow hard and soft bottom, pinnacles, kelp bed.

Proposed regulations: No take.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 12):
35º 15.25' N. lat. 120º 54.00' W. long.;
35º 15.25' N. lat. 120º 56.00' W. long.;
35º 11.00' N. lat. 120º 52.40' W. long.; and
35º 13.30' N. lat. 120º 52.40' W. long.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, California halibut, squid, shearwaters, pelicans, southern sea otter.

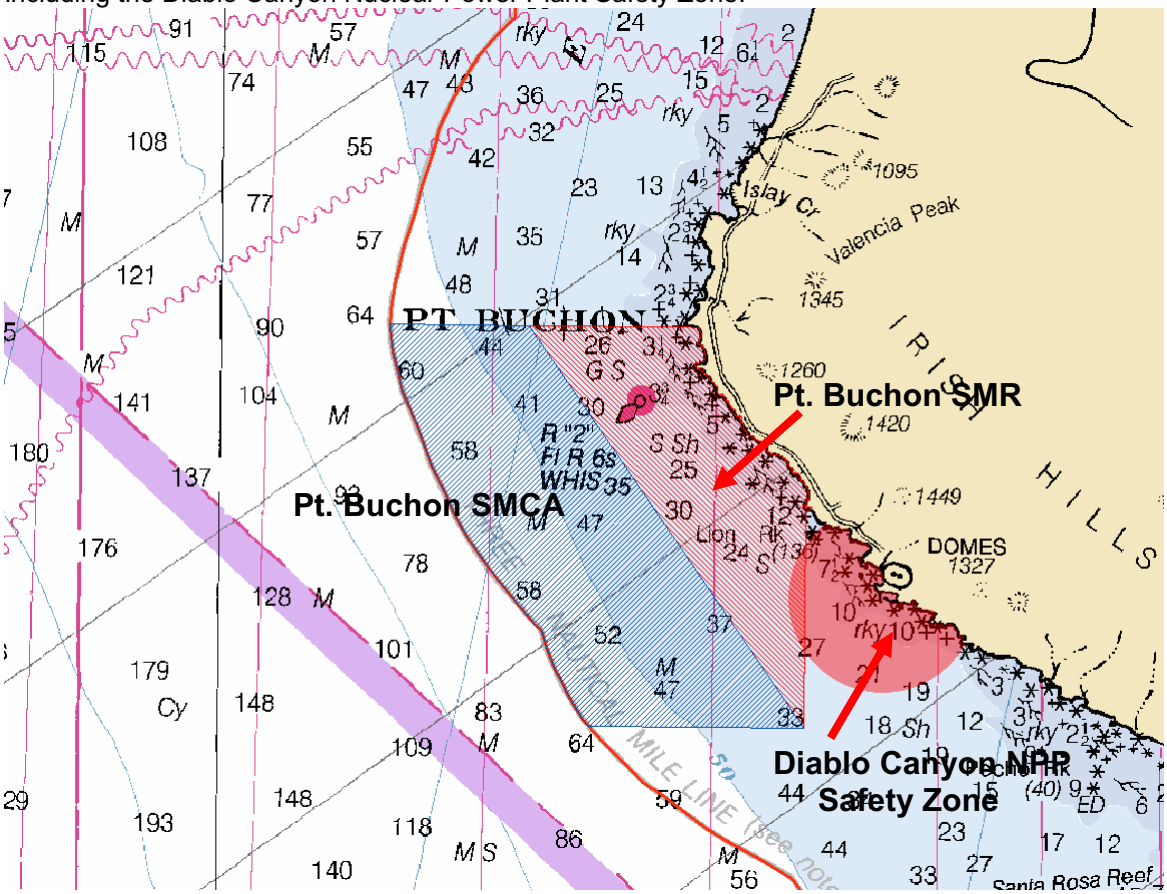
Summary of Objectives: Provide for complete protection of a diverse area containing shallow hard and soft habitats, kelp beds, pinnacles, and associated fish and invertebrate species, while benefiting from additional protection due to an adjacent national security closure. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect area of particularly high species diversity including fish, invertebrates, kelp, marine birds, and marine mammals. (Goal 1, Objective 1)
- Protect communities associated with diverse habitats, including sandy beach, rocky intertidal, kelp forest, and shallow hard and soft bottom habitat, in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of species associated with sandy beach, rocky intertidal, kelp forest, and shallow hard and soft bottom habitat. (Goal 1, Objective 3)
- Protect natural trophic structure and food webs in area representative of shallow hard and soft bottom habitats south of Morro Bay. (Goal 1, Objective 4)
- Protect full range of ecosystem functions in an area between two upwelling zones. (Goal 1, Objective 5)
- Help protect populations of nearshore rockfish in an area that has traditionally received relatively high fishing effort. (Goal 2, Objective 1).

- Protect larval sources and enhance reproductive capacity of nearshore fish and invertebrate species. (Goal 2, Objective 2)
- Establish a state marine reserve which encompasses an existing Cooperative Research and Assessment of Nearshore Ecosystems (CRANE) monitoring site, and which includes baseline data collected for power plant impact monitoring. (Goal 3, Objective 1)
- Establish a state marine reserve adjacent to a newly expanded terrestrial state park which has high visitor rates, interpretive facilities, docent presence, and parking. (Goal 3, Objective 1)
- Replicate within a state marine reserve the range of habitats found at fished sites south of Diablo Canyon Nuclear Power Plant. (Goal 3, Objective 2)
- Include pinnacle habitat within a state marine reserve. (Goal 4, Objective 1)
- Include and replicate sandy beach, rocky intertidal, kelp forest, pinnacles, and shallow hard and soft bottom habitat. (Goal 4, Objective 2)
- Establish a marine protected area complex (along with Point Buchon State Marine Conservation Area) that meets Master Plan Framework scientific guidelines for size. (Goal 5, Objective 3)

Figure 12. Pt. Buchon State Marine Reserve and Pt. Buchon State Marine Conservation Area including the Diablo Canyon Nuclear Power Plant Safety Zone.



Proposed MPA: Point Buchon State Marine Conservation Area
Area (sq. mi.): 11.55
Along-shore span (mi): 5.9
Depth range (ft): 191-377

Primary habitat types: shallow hard and soft bottom, deep hard and soft bottom.

Proposed regulations: Take of all living marine resources is prohibited except commercial and recreational take of salmon (*Onchorhynchus spp.*) and albacore (*Thunnus alalunga*).

Boundaries: This area is bounded by the state water line offshore and straight lines connecting the following points in the order listed unless otherwise stated (Figure 12):
35º 15.25' N. lat. 120º 56.00' W. long.;
35º 15.25' N. lat. 120º 57.80' W. long.; thence southward along the state water line to
35º 11.00' N. lat. 120º 55.20' W. long.;
35º 11.00' N. lat. 120º 52.40' W. long.; and
35º 15.25' N. lat. 120º 56.00' W. long.;

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, California halibut, squid, shearwaters, pelicans.

Summary of Objectives: Provide for increased protection of a diverse area containing shallow hard and soft habitats, kelp beds, pinnacles, and associated fish and invertebrate species, while minimizing impact to the salmon fishery. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect larval sources and enhance reproductive capacity of benthic fishes, invertebrates. (Goal 2, Objective 2)
- Provide additional protection for benthic species and typical forage species (squid and pelagic finfish) while allowing fishing for salmon and albacore. (Goal 2, Objective 3)
- Replicate with a state marine conservation area the range of habitats found at fished sites south of Diablo Canyon Nuclear Power Plant. (Goal 3, Objective 2)
- Minimize negative socio-economic impacts by incorporating a portion of the Rockfish Conservation Area (closed to groundfish take), and by allowing the harvest of salmon and albacore. (Goal 5, Objective 1)

- Establish a marine protected area complex (along with Point Buchon State Marine Reserve) that meets Master Plan Framework scientific guidelines for size. (Goal 5, Objective 3)

Proposed MPA: Vandenberg State Marine Reserve
Area (sq. mi.): 32.84
Along-shore span (mi): 14.3
Depth range (ft): 0-127

Primary habitat types: sandy beach, rocky intertidal, shallow hard and soft bottom, kelp bed.

Proposed regulations: No take.

Boundaries: This area is bounded by the mean high tide line and straight lines connecting the following points in the order listed (Figure 13):
34º 44.65' N. lat. 120º 37.75' W. long.;
34º 44.65' N. lat. 120º 40.00' W. long.;
34º 33.25' N. lat. 120º 40.00' W. long.; and
34º 33.25' N. lat. 120º 37.25' W. long.

(A) Within the Vandenberg State Marine Reserve, no take of living marine resources is permitted except take incidental to the mission critical operations of the Vandenberg Air Force Base and approved commercial space launch operations approved by the Base Commander.

(B) Public Entry. Public entry into the Vandenberg State Marine Reserve may be restricted at the discretion of the department to protect wildlife, aquatic life, or habitat or by the Commander of Vandenberg Air Force Base to protect base operations.

(C) The Department shall enter into a Memorandum of Understanding (MOU) with the Commander of Vandenberg Air Force Base for the management and administration of the Vandenberg State Marine Reserve. The MOU shall include all uses necessary and compatible with the Vandenberg Air Force Base's national defense mission and details on cooperative enforcement and monitoring.

Examples of species likely to benefit: nearshore and shelf rockfishes, lingcod, cabezon, kelp greenling, surfperches, California halibut, Dungeness crab, rock crab, squid, shearwaters, pelicans, southern sea otter.

Summary of Objectives: Provide for complete protection of a diverse area containing shallow hard and soft habitats, kelp beds, and associated fish and invertebrate, while benefiting from protection provided by an existing state marine reserve and restrictions on vessel traffic, including fishing vessels, due to the presence of Vandenberg Air Force Base. This area is important to the formation of an ecologically sound MPA network component, by linking these habitats to similar habitats in other parts of the region.

Detailed Objectives (with reference to regional goal and objective):

- Protect area with high marine bird, marine mammal, fish, and invertebrate species diversity and abundance. (Goal 1, Objective 1)
- Protect communities associated with area with unique oceanographic conditions in transition zone near a biogeographical regional boundary, including sandy beach, rocky intertidal, kelp forest, and hard and soft bottom habitat, and in close proximity to each other. (Goal 1, Objective 2)
- Protect natural age and size structure of Nearshore Fishery Management Plan species which occur within the central coast. (Goal 1: Objective 3)
- Protect trophic structure and food web in area representative of shallow habitats south of Morro Bay. (Goal 1, Objectives 4)
- Protect ecosystem structure and functions in representative shallow habitat in southern end of central coast. (Goal 1, Objective 5)
- Increase ecological benefits to an area containing a mosaic of shallow hard and soft bottom habitats through the expansion of an existing state marine reserve. (Goal 1, Objective 5)
- Help protect marine bird and marine mammal species of concern by protecting forage base adjacent to colonies and rookeries. (Goal 2, Objective 1)
- Protect larval sources and enhance reproductive capacity of benthic fishes, invertebrates, and coastal pelagic finfish. (Goal 2, Objective 2)
- Establish a state marine reserve which encompasses an existing PISCO monitoring site, a Multi-Agency Intertidal Network (MARINe) monitoring site, and a Point Reyes Bird Observatory (PRBO) study site. (Goal 3, Objective 1)
- Replicate with a state marine reserve the same range of habitats found at fished sites at Point Sal. (Goal 3, Objective 2)
- Include and replicate within a state marine reserve sandy beach, rocky intertidal, and shallow hard and soft bottom habitats. (Goal 4, Objective 2)
- Establish a state marine reserve that meets preferred Master Plan Framework scientific guidelines for size. (Goal 5, Objective 3)

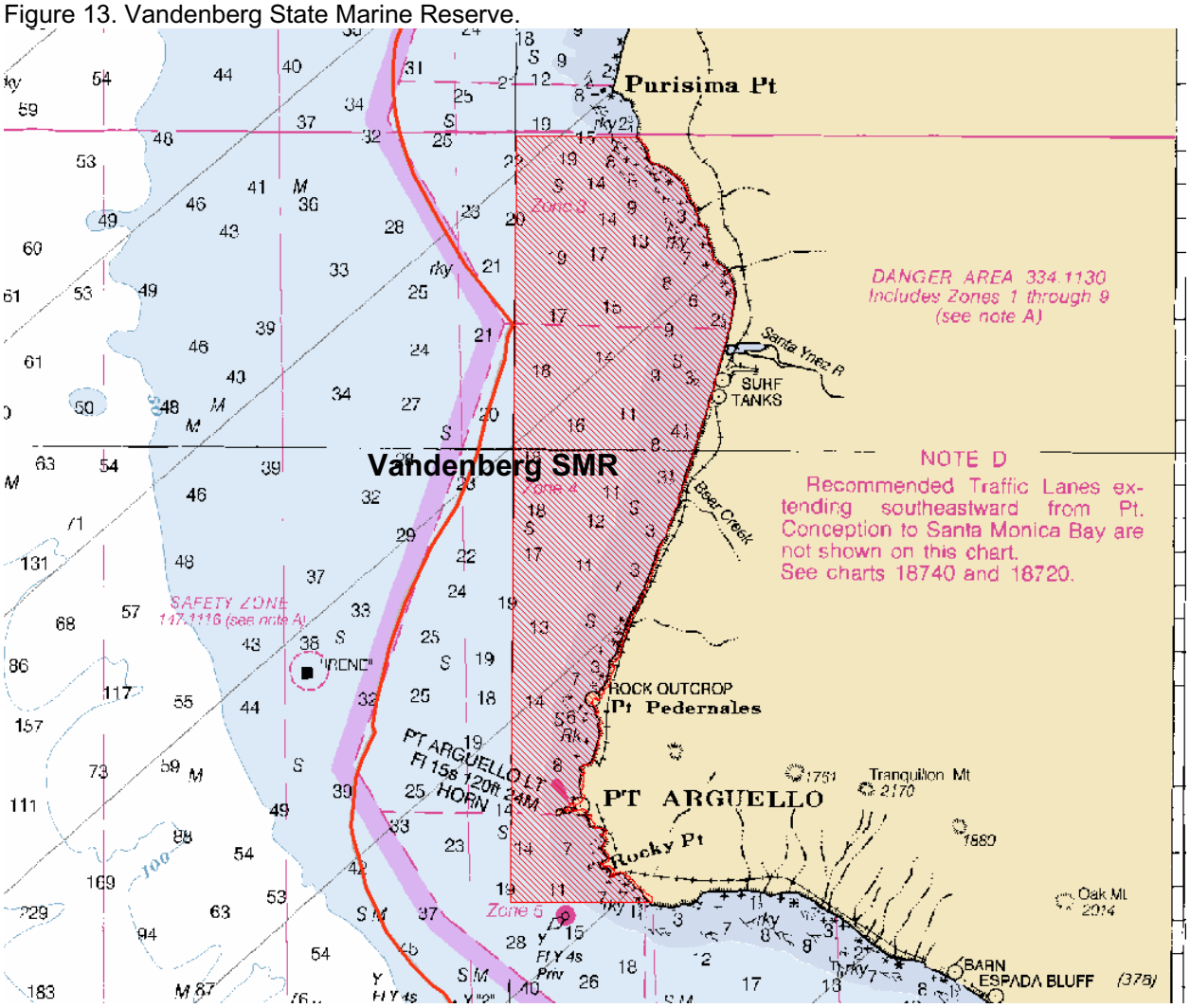



Figure 13. Vandenberg State Marine Reserve.