# Chapter 3. Revisions to the Draft Environmental Impact Report

## 3.1. Introduction

Comments discussed in Chapter 2 of this FEIR have resulted in revisions to the DEIR. Revisions have also resulted from Commission-directed changes to the Proposed Project, and are discussed in this chapter. All DEIR revisions are shown below. Text to be deleted is shown in ~~strikeout~~, and text that has been inserted is shown in <u>underline</u>.

## 3.2. Changes to Project Description since Issuance of DEIR

Following issuance of the DEIR, the Commission, at its May 14, 2009 meeting, added a sub-option to the Proposed Project (i.e., the Integrated Preferred Alternative) to exclude the Sea Lion Cove SMCA in order to address public comments regarding the potential socio-economic impacts to the abalone fishery from proposed MPAs that prohibit abalone take. Therefore, the Proposed Project now includes two options regarding Sea Lion Cove: Option 1 includes Sea Lion Cove as originally proposed, and Option 2 removes Sea Lion Cove from the Proposed Project network.

At this same meeting, the Commission also approved a boundary correction to the southern boundary of the proposed Salt Point SMCA. The southern boundary was intended to align with the southern land-based boundary of Salt Point State Park; however, a mapping error resulted in an incorrect extension of the SMCA boundary beyond State Park lands by 0.5' latitude. A correction to the southern boundary has been made to the Salt Point SMCA in both the Proposed Project and Alternative 3, adjusting the boundary by one half minute (0.5') northward. This adjustment accurately captures the original stakeholder intent by aligning the southern boundary of the proposed MPA with existing State Park boundaries.

## 3.3. Summary of Environmental Effects

The revisions to the DEIR reflect minor changes to the boundaries of MPAs as described above. These revisions are minor in nature and do not represent substantial changes from what was originally proposed in the DEIR. Furthermore, regulatory changes regarding the optional exclusion of the Sea Lion Cove SCMA reduce the anticipated effects of the Proposed Project on recreational fishermen. New significant impacts have not come to light as the result of these changes, nor has a substantial increase the severity of anticipated environmental effects described in the DEIR been identified. Therefore, pursuant to Section 15088.5 of CEQA Guidelines and 40 C.F.R. 1502.9, the DEIR does not require recirculation prior to certification.

## 3.4. Revisions

### 3.4.1.1. Executive Summary

*The following paragraph has been added to the Executive Summary, page ES-19, following the Mitigation Subsection:*

**Environmentally Superior Alternative**

Because none of the alternatives considered would result in significant impacts, the identification of the environmentally superior alternative focuses on the relative degree of significant and less-than-significant impacts, as well as the relative degree of potential environmental benefit associated with each alternative. In the short term, Alternative 2 potentially would result in the least amount of fishing displacement, and less extensive potential impacts such as increased air pollutant emissions resulting from increased vessel transit, water quality impacts resulting from vessel abandonment, and increased demand for law enforcement. However, in the long term, Alternative 3 provides greater habitat representation, thereby providing a greater potential benefit to populations of marine species that depend on these habitat types for some part of their life history. This greater net benefit to biological resources ultimately would likely offset initial fishing displacement–related impacts, particularly as species presently designated in an overfished status begin to recover as a result of increased fishing restrictions. The combination of increased fish stocks due to fishery restrictions and the added benefit provided from new MPAs ultimately should result in healthier sustainable fishery populations, reducing the need for fishermen to transit beyond the periphery of the MPAs in search of available resources. Alternative 3 is therefore considered the environmentally superior alternative under CEQA.

### 3.4.2. Chapter 1—Introduction

*The following text has been added to the Introduction Chapter, page 1-6:*

While almost 75% of the marine seafloor in the study region is soft (sand or mud), there are also rocky reefs, pinnacles, and outcrops. These rocky areas support characteristic assemblages of fish and other species that vary with the type of rock and contribute significantly to biodiversity. Submarine canyons (~~drowned river~~ gorges that incise the continental shelf) are not present in the study region.

*The following text has been added to the Introduction Chapter, page 1-12:*

**Office of National Marine Sanctuaries Program**

Within NOAA is the Office of National Marine Sanctuaries ~~Program~~ (ONMS~~P~~). Sanctuaries have authority for establishing regulations under the National Marine Sanctuary Act. The primary purpose of the sanctuary program is resource protection (16 USC 1431[b]). The sanctuary conducts and facilitates resource management and

protection, coordinates and participates in oceanographic and marine biological research, and promotes education and public outreach. The ONMS~~P~~ is responsible for administrating four national marine sanctuaries offshore of California: Monterey Bay, the Gulf of the Farallones, the Channel Islands, and the Cordell Bank Sanctuaries. These sites were selected because they possess conservational, recreational, ecological, historical, research, educational, archaeological, cultural, or aesthetic qualities that give them special national, or sometimes international, significance. The Gulf of the Farallones National Marine Sanctuary and northern portion of the Monterey Bay National Marine Sanctuary are within the study region. The Cordell Bank National Marine Sanctuary lies in federal waters west of Point Reyes.

### 3.4.3. Chapter 2—Project Description

*The following text has been revised in Chapter 2, page 2-8:*

SMCAs potentially have the most variable levels of protection and conservation of the three MPA designations because they allow any combination of commercial and recreational fishing ~~(although this combination is more restrictive than the existing fishing regulations outside the SMCA)~~, as well as other extractive activities (e.g., kelp harvest).

[6] *Trolling* is ~~a style of fishing in which bait is trailed behind a boat and dragged in front of the fish to entice it to bite~~ defined as angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions (CCR Title 14, Section 27.80 (a)(3)).

*The following text has been revised in Chapter 2, page 2-12:*

**Table 2-3. Individual MPAs in Proposed Project**

| MPA Name [a] | Level of Protection [b] | Size (Square Miles) | Along-Shore Span (Miles) [c] | Depth Range (Feet) |
|---|---|---|---|---|
| Point Arena SMR | 1 | 4.38 | 3.0 | 0–173 |
| Point Arena SMCA | 2 | 6.73 | 3.0 | 153-324 |
| Sea Lion Cove SMCA (optional)[e] | 5 | 0.22 | 0.7 | 0-39 |
| Saunders Reef SMCA | 5 | 9.35 | 3.0 | 0-276 |
| Del Mar Landing SMR | 1 | 0.22 | 0.6 | 0-87 |
| Stewarts Point SMR | 1 | 25.22 | 7.0 | 0-294 |
| Salt Point SMCA[d] | 5 | 3.12 | 2.4 | 0-241 |
| Gerstle Cove SMR | 1 | 0.01 | 0.2 | 0-10 |
| Russian River SMR | 1 | 0.35 | 1.8 | 0-10 |
| Russian River SMCA | 4 | 0.86 | 1.0 | 0-57 |
| Bodega Head SMR | 1 | 9.30 | 2.5 | 0-266 |
| Bodega Head SMCA | 3 | 12.34 | 3.8 | 0-267 |
| Estero Americano SMRMA | 1 | 0.15 | 1.2 | 0-10 |
| Estero de San Antonio SMRMA | 1 | 0.09 | 1.0 | 0-10 |
| Point Reyes SMR | 1 | 9.38 | 7.5 | 0-132 |
| Point Reyes SMCA | 3 | 12.11 | 4.2 | 51-217 |
| Estero de Limantour SMR | 1 | 1.49 | 5.3 | 0-10 |
| Drakes Estero SMCA | 6 | 2.55 | 5.6 | 0-10 |
| Duxbury SMCA[d] | 4 | 0.66 | 3.0 | 0-10 |
| Montara SMR | 1 | 11.76 | 3.1 | 0-168 |
| Pillar Point SMCA | 3 | 6.66 | 1.9 | 0-174 |
| North Farallon Islands SMR | 1 | 18.09 | NA | 0-275 |
| Southeast Farallon Islands SMR | 1 | 5.34 | NA | 0-238 |
| Southeast Farallon Islands SMCA | 2 | 12.95 | NA | 130-382 |

[a] Listed north to south. Special Closures are not included in this table. See table 2-6 for a description of Special Closures associated with the Proposed Project.

[b] Level of protection as determined by the SAT: 1 indicates very high, 2 indicates high, 3 indicates moderate-high, 4 indicates moderate, 5 indicates moderate-low, and 6 indicates low.

[c] Along-shore span measured as direct line from one end of the MPA to the other.

[d] These areas, recommended by stakeholders to become SMPs, will be designated as SMCAs, and could subsequently be designated also as SMPs at the discretion of the State Park and Recreation Commission.

[e] The Fish and Game Commission is considering the option of excluding the Sea Lion Cove SMCA from the Proposed Project.

*The following text has been revised in Chapter 2, page 2-13:*

**Table 2-4. Allowed Take for Individual MPAs in Proposed Project**

| MPA Name [a] | Proposed Take Allowed |
|---|---|
| Point Arena SMR | Take of all living marine resources is prohibited. |
| Point Arena SMCA | Take of all living marine resources is prohibited EXCEPT the recreational take of salmon by trolling and the commercial take of salmon by with troll fishing gear. |
| Sea Lion Cove SMCA (optional)[f] | The recreational and commercial take of all marine invertebrates and marine aquatic plants is prohibited. Take of all other species is allowed. |
| Saunders Reef SMCA | Take of all living marine resources is prohibited EXCEPT:<br>1. The recreational take of salmon by trolling<br>2. The commercial take of salmon with troll fishing gear, and urchin. |
| Del Mar Landing SMR | Take of all living marine resources is prohibited. |
| Stewarts Point SMR | Take of all living marine resources is prohibited. |
| Salt Point SMCA[b] | Take of living marine resources is prohibited EXCEPT: the recreational take of abalone and finfish[c]. |
| Gerstle Cove SMR | Take of all living marine resources is prohibited. |
| Russian River SMRMA | Take of all living marine resources is prohibited except recreational hunting of waterfowl is allowed unless otherwise restricted by hunting regulations (sections 502, 550, 551, and 552). |
| Russian River SMCA | Take of all living marine resources is prohibited, EXCEPT:<br>1. The recreational take of Dungeness crab by trap and surf smelt by hand held dip nests or beach nets.<br>2. The commercial take of Dungeness crab by trap. |
| Bodega Head SMR | Take of all living marine resources is prohibited. |
| Bodega Head SMCA | Take of living marine resources is prohibited, EXCEPT:<br>1. The recreational take of pelagic finfish[d] by trolling, Dungeness crab by trap and market squid by hand held dip net.<br>2. The commercial take of pelagic finfish[d] with troll fishing gear or seine, Dungeness crab by trap, and market squid by hand-held dip net. |
| Estero Americano SMRMA | Take of all living marine resources is prohibited EXCEPT: the recreational hunting of waterfowl is allowed unless otherwise restricted by hunting regulations (sections 502, 550, 551, and 552). |
| Estero de San Antonio SMRMA | Take of all living marine resources is prohibited EXCEPT: the recreational hunting of waterfowl is allowed unless otherwise restricted by hunting regulations (sections 502, 550, 551, and 552). |
| Point Reyes SMR | Take of all living marine resources is prohibited. |
| Point Reyes SMCA | Take of all living marine resources is prohibited EXCEPT:<br>1. The recreational take of salmon by trolling, and Dungeness crab by trap.<br>2. The commercial take of salmon with trolling gear, and Dungeness crab by trap. |

| MPA Name [a] | Proposed Take Allowed |
|---|---|
| Estero de Limantour SMR | Take of all living marine resources is prohibited. |
| Drakes Estero SMCA | Take of all living marine resources is prohibited EXCEPT:<br>1. The recreational take of clams.<br>2. The commercial aquaculture of shellfish pursuant to a valid State Water Bottom Lease and permit. |
| Duxbury SMCA[b] | Take of all living marine resources is prohibited EXCEPT: the recreational take of finfish[c] from shore only, and the recreational take of abalone. |
| Montara or Fitzgerald SMR[e] | Take of all living marine resources is prohibited. |
| Pillar Point SMCA | Take of all living marine resources is prohibited EXCEPT:<br>1. The recreational take of pelagic finfish[c] by trolling, Dungeness crab by trap and squid by hand-held dip net.<br>2. The commercial take of pelagic finfish[c] with troll fishing gear or seine, Dungeness crab by trap and market squid by net. |
| North Farallon Islands SMR | Take of all living marine resources is prohibited. |
| Southeast Farallon Islands SMR | Take of all living marine resources is prohibited. |
| Southeast Farallon Islands SMCA | Take of all living marine resources is prohibited EXCEPT: the recreational take of salmon by trolling and the commercial take of salmon with troll fishing gear. |

[a] Listed north to south. Special Closures are not included in this table. See table 2-6 for a description of Special Closures associated with the Proposed Project.

[b] These areas, recommended by stakeholders to become SMPs, will be designated as SMCAs, and could subsequently be designated also as SMPs at the discretion of the State Park and Recreation Commission.

[c] Finfish are defined in subsection 632(a)(2) as: any species of bony fish or cartilaginous fish (sharks, skates and rays). Finfish do not include amphibians, invertebrates, plants or algae. The definition of finfish provided in Section 159 does not apply to this Section.

[d] Pelagic Finfish are defined as: northern anchovy (*Engraulis mordax*), barracudas (*Sphyraena spp.*), billfishes* (family Istiophoridae), dolphinfish (*Coryphaena hippurus*), Pacific herring (*Clupea pallasi*), jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), salmon (*Oncorhynchus spp.*), Pacific sardine (*Sardinops sagax*), blue shark (*Prionace glauca*), salmon shark (*Lamna ditropis*), shortfin mako shark (*Isurus oxyrinchus*), thresher sharks (*Alopias spp.*), swordfish (*Xiphias gladius*), tunas (family Scombridae), and yellowtail (*Seriola lalandi*). *Marlin is not allowed for commercial take.

[e] Two suboptions are provided for alternate names for the proposed SMR. All boundaries and regulations are the same.

[f] The Fish and Game Commission is considering the option of excluding the Sea Lion Cove SMCA from the Proposed Project.

*The following footnote to table 2-4 has been revised in Chapter 2, page 2-14:*

[a] Listed north to south. Special Closures are not included in this table. See table ~~2-6~~ 2-7 for a description of Special Closures associated with the Proposed Project.

*The following footnote to table 2-5 has been revised in Chapter 2, page 2-15:*

[a] Special Closures are not included in this table. See table ~~2-6~~ 2-7 for a description of Special Closures associated with the Proposed Project.

*Table 2-7 has been revised in Chapter 2, page 2-17:*

**Table 2-7. Special Closures in Proposed Project**

| Geography | Boundaries[a] | Species Intended to Protect | Seasonality |
|---|---|---|---|
| Point Reyes Headlands | 1,000 foot closure. | Common Murre, Pelagic Cormorant, Western Gull, Brandt's Cormorant, Pigeon Guillemot, Rhinoceros Auklet, Ashy Storm-Petrel, Black Oyster Catcher, Tufted Puffin, and Brown Pelican (roosting). >45,000 nesting seabirds. | Year Round |
| Point Resistance | 300 foot closure around point. | Common Murre ~~(breeding),~~Brandt's Cormorant, Western Gull, Pigeon Guillemot,and Brown Pelican (roosting). >7,000 nesting seabirds. | Year Round |
| Stormy Stack | 300 foot closure. | Common Murre, Brandt's Cormorant, Pelagic Cormorant, Pigeon Guillemot, Ashy Storm-Petrel, Western Gull, and Brown Pelicans (roosting). Second largest seabird breeding colony in the southern subregion with >16,000 nesting seabirds. Harbor Seal (haul-out and breeding); California Sea Lion (haul-out). | Year Round |
| Egg Rock (Devil's Slide) | 300 - 1,000 foot closure around island and no transit between rock and mainland. | Common Murre, Brandt's Cormorant, Pelagic Cormorant, Pigeon Guillemot, Western Gull, and Brown Pelican (roosting). Site of a significant USFWS seabird recovery project. > 1,300 nesting seabirds. | Year Round |
| North Farallon Islands | 1,000 foot closure around North Farallon Island; 300 foot closure around Isle of St. James. | Common Murre, Pigeon Guillemot, Pelagic Cormorant, Brandt's Cormorant, Western Gull, and Cassin's Auklet (> 72,000 nesting seabirds); Steller Sea Lion (haul-out). | Year Round |
| Southeast Farallon Islands | 300 foot closure around Southeast Farallon Island excluding Fisherman's Bay and East Landing. | Common Murre, Double-Crested Cormorant, Pelagic Cormorant, Western Gull, Brandt's Cormorant, Pigeon Guillemot, Cassin's Auklet, Rhinoceros Auklet, Leach's Storm-Petrel, Ashy Storm-Petrel, Black Oyster Catcher, and Tufted Puffin. > 180,000 seabirds. Steller Sea Lion (haul-out and rookery); California Sea Lion (haul-out); Northern Fur Seal (breeding); Northern Elephant Seal (breeding); ~~< 180,000 seabirds.~~ | Year Round (except seasonal closure between Fisherman's Bay and East Landing, including Shubrick, and from East Landing to southwest side of Saddle Rock from Dec. 1 to Sept 14.) |

[a] Reduction of bird disturbance events from boats was found by the SAT to be 68% at 300 feet, 70% at 500 feet, and 92% at 1,000 feet.

*Table 2-13 has been revised in Chapter 2, page 2-24:*

**Table 2-13. Special Closures in Alternative 1**

| Geography | Boundaries[a] | Species Intended to Protect | Seasonality |
|---|---|---|---|
| Point Reyes | 1000 foot closure. | Common Murre, Pelagic Cormorant, Western Gull, Brandt's Cormorant, Pigeon Guillemot, Rhinoceros Auklet, Ashy Storm-Petrel, Black Oyster-Catcher, Rhinorcerous Auklet, Tufted Puffin, ~~roosting~~ and Brown Pelican (>100 roosting pelicans)~~,~~. Largest and most diverse mainland seabird colony along the north central coast with >43,000 nesting seabirds. Elephant Seal rookery. | Year Round |
| Point Resistance | 500 foot closure. | Common Murre, Brandt's Cormorant, Pigeon Guillemots, Western Gull, and ~~Roosting~~ Brown Pelican (>100 roosting pelicans). >7,000 nesting seabirds. | Year Round |
| Stormy Stack | 300 foot closure. | Second largest breeding colony in north central coast (~ 16,000 breeding birds): Common Murres, Brandt's Cormorants, Pelagic Cormorant, Pigeon Guillemot, Western Gull, ~~and~~ Ashy Storm-Petrel~~.~~ and ~~Roosting~~ Brown Pelicans (>100 roosting pelicans). >16,000 nesting seabirds. Harbor Seals (700-1,000#) haul-out and breeding along beach; California Sea Lions haul-out on islets. | Year Round |
| Egg Rock (Devil's Slide) | 1,000 foot closure. | Common Murre, Brandt's Cormorant, Pigeon Guillemot, Pelagic Cormorants, Western Gull, ~~black oystercatcher,~~ and ~~roosting~~ Brown Pelicans (>100 roosting pelicans). >1,300 nesting seabirds. | Year Round |
| Bean Hollow | 300 foot closure. | Harbor Seal rookery and haul-out. | Seasonal (Feb-Aug) |
| North Farallon Islands | 1,000 foot closure around North Farallon Island; 300 foot closure around Isle of St. James. | Common Murre, Pigeon Guillemot, Pelagic Cormorant, Brandt's Cormorant, Western Gull, and Cassin's Auklet. ~~<~~ >72,000 nesting seabirds. ~~including Common Murre, Pigeon Guillemot, Pelagic Cormorant, Brandt's cormorant, Western Gull, ad Cassin's Auklet;~~ Steller Sea Lion haul-out. | Year Round |
| Southeast Farallon Islands | 300 foot closure around Southeast Farallon Island excluding Fisherman's Bay and East Landing. | Common Murre, Double-Crested Cormorant, Pelagic Cormorant, Western Gull, Brandt's Cormorant, Pigeon Guillemot, Cassin's Auklet, Rhinoceros Auklet, Leach's Storm-Petrel, Ashy Storm-Petrel, Black Oyster Catcher, and Tufted Puffin. > 180,000 seabirds. ~~<180,000 nesting seabirds including Common murre, pelagic cormorant, Brandt's cormorant, Double-crested cormorant, pigeon guillemot, western gull, tufted puffins, Cassin's auklets, rhinosceros aukley, and Ashy storm-petrels.~~ Steller Sea Lion haul-out and rookery; California Sea Lion haul-out; Northern Elephant Seal breeding. | Year Round |

[a] Reduction of bird disturbance events from boats was found by the SAT to be 68% at 300 feet, 70% at 500 feet, and 92% at 1,000 feet.

*Table 2-19 has been revised in Chapter 2, page 2-31:*

**Table 2-19. Special Closures in Alternative 2**

| Geography | Boundaries[a] | Species Intended to Protect | Seasonality |
|---|---|---|---|
| Point Resistance | 300 foot closure. | Common Murre, Brandt's Cormorant, Pigeon Guillemot, Western Gull, and Brown Pelican (roosting). >7,000 nesting seabirds. | Year Round |
| Stormy Stack | 300 foot closure. | Common Murre, Brandt's Cormorant, Pelagic Cormorant, Pigeon Guillemot, Ashy Storm-Petrel, Western Gull, and Brown Pelican (roosting). >16,000 nesting seabirds. Harbor Seal, California Sea Lion, | Year Round |
| Egg Rock (Devil's Slide) | 300 foot closure. | Common Murre, Brandt's Cormorant, Pelagic Cormorant, Pigeon Guillemot, Western Gull, and Brown Pelican (roosting). >1,300 nesting seabirds. | Year Round |
| ~~Stormy Stack~~ | ~~300 foot closure.~~ | ~~Harbor seal, California sea lion, Common murre, Brandt's cormorant, pelagic cormorant, pigeon guillemot, Ashy storm-petrel, brown pelican.~~ | ~~Year Round~~ |
| North Farallon Islands | 300 foot closure around North Farallon Island and Isle of St. James. | ~~Steller sea lion,~~ Common Murre, Pelagic Cormorant, Brandt's Cormorant, Pigeon Guillemot, Western Gull, and Cassin's Aucklet. >72,000 nesting seabirds. Steller Sea Lion. | Year Round |
| Southeast Farallon Islands | 300 foot closure around Southeast Farallon Island except in lee of island between and including Sugarloaf and East Landing. | ~~Steller sea lion, Northern fur seal, Northern elephant seal, California sea lion,~~ Common Murre, Pelagic Cormorant, Brandt's Cormorant, Double-Crested Cormorant, Pigeon Guillemot, Western Gull, Tufted Puffin, Cassin's Auklet, Rhinoceros Auklet, Ashy Storm Petrel, Leach's Storm Petrel, Black Oystercatcher, and Brown Pelican (roosting). >184,000 nesting seabirds. Steller Sea Lion, Northern Fur Seal, Northern Elephant Seal, California Sea Lion. | Year Round |

[a] Reduction of bird disturbance events from boats was found by the SAT to be 68% at 300 feet, 70% at 500 feet, and 92% at 1,000 feet.

*Table 2-25 has been revised in Chapter 2, page 2-38:*

**Table 2-25. Special Closures in Alternative 3**

| Geography | Boundaries[a] | Species Intended to Protect | Seasonality |
|---|---|---|---|
| Arched Rock | 300 foot closure. | Brandt's Cormorant, Pelagic Cormorant, Pigeon Guillemot, and Western Gull. ~480 nesting seabirds. | Year Round |
| Gull Rock | 300 foot closure. | Double Crested Cormorant, Brandt's Cormorant, Pelagic Cormorant, Pigeon Guillemot, Western Gull, Black Oystercatcher, Leach's Storm-Petrel, Brown Pelican (roosting). ~160 nesting seabirds. Harbor Seal. | Year Round |
| Pt. Reyes Headlands | 1,000 foot closure. | Common Murres, Pelagic Cormorants, Brandt's Cormorant, Pigeon Guillemot, Western Gull, Rhinoceros Auklet, Ashy Storm-Petrel, Black Oyster-Catcher, Tufted Puffin, and Brown Pelican (roosting). >43,000 nesting seabirds. Elephant Seal. | Year Round |
| Stormy Stack | 300 foot closure. | Common Murre, Brandt's Cormoant, Pelagic Cormorant, Pigeon Guilemot, Western Gull, Black Oyster-Catcher, and Brown Pelican (roosting). >16,000 nesting seabirds. | Year Round |
| Egg Rock (Devil's Slide) | 1,000 foot closure (from big rock in the middle) | Common Murre, Bradt's Cormorant, Pigeon Guillemot, Pelagic Cormorant, Western Gull, ~~black oystercatcher~~, and Brown Pelicans (roosting). >1,300 nesting seabirds. | Year Round |
| ~~Stormy Stack~~ | ~~300 foot closure.~~ | ~~Common murre and brown pelican.~~ | ~~Year Round~~ |
| North Farallon Islands | 1,000 foot. 300 foot closure around North Farallon Island and Isle of St. James. | ~~Steller sea lion, c~~Common Murre, Pelagic Cormorant, Brandt's Cormorant, Pigeon Guillemot, Western Gull, and Cassin's Aucklet. >72,000 nesting seabirds. Steller Sea Lion. | Year Round |
| Southeast Farallon Islands | 300 foot closure (except Fisherman's Bay and East Landing). | Common Murre, Pelagic Cormorant, Brandt's Cormorant, Double-Crested Cormorant, Pigeon Guillemot, Western Gull, Tufted Puffin, Cassin's Auklet, Rhinoceros Auklet, Ashy Storm Petrel, Leach's Storm Petrel, Black Oystercatcher, and Brown Pelican (roosting). >184,000 nesting seabirds. Steller Sea Lion, Northern Fur Seal, Northern Elephant Seal, California Sea Lion. | Year Round |

[a] Reduction of bird disturbance events from boats was found by the SAT to be 68% at 300 feet, 70% at 500 feet, and 92% at 1,000 feet.

### 3.4.4. Chapter 3—Environmental Analysis

*The following text has been revised in Chapter 3, page 3-3:*

~~There has been a federal moratorium on new OCS oil and gas leasing activities off the California coast since 1982 and a ban on issuing new state oil and gas leases in state tidelands since 1989. Although the federal moratorium and California state ban on issuing new offshore leases are both subject to change, it is considered unlikely that new leasing offshore of California will occur. The federal moratorium is based on annual Congressional appropriations bans on using federal funds to plan or support offshore leasing in California, Florida, and the eastern seaboard. The ban on leasing state tidelands for oil and gas exploration and production is based on several actions, including the previously mentioned 1989 decision of the SLC, which has jurisdiction over all state property.~~ In 2008, the 1982 federal moratorium on new OCS oil and gas leasing activities off the California coast expired. Although oil and gas leasing is currently proposed in the Minerals Management Services's Draft Proposed Program (2010-2015) for the Point Arena Basin, the proposal will be revisited after comments are received in September 2009. A ban on issuing new state oil and gas leases in state tidelands has been in effect since 1989 by the State Lands Commission, which has jurisdiction over all state property. The ban on new leases is also a result of the California Sanctuary Act of 1994 (PRC 6240 et seq.), which prohibits leasing of any state tidelands, with three exceptions. Because oil and gas exploration and production in state tidelands are currently prohibited, the Proposed Project would have no impact on mineral resources.

### 3.4.5. Chapter 4—Consumptive Uses and Socioeconomic Considerations

*The following text has been revised in Chapter 4, page 4-6:*

At least one commercial harvester of non-kelp, edible seaweed (*Postelsia palmaeformis*) exists in the north central coast study region. CDFG issues licenses for these activities (CDFG 2007a).

*The following text has been revised in Chapter 4, page 4-12:*

In January 2004, ~~California began an integrated recreational fishery sampling and assessment program called~~ the California Recreational Fisheries Survey (CRFS) was implemented statewide. The CRFS is a collaborative effort between CDFG and the Pacific States Marine Fisheries Commission with funding from state and federal sources. This program incorporates and updates the comprehensive sampling methodologies for California, of the former national Marine Recreational Fisheries Statistics Survey (MRFSS) and CDFG's Ocean Salmon Project (CDFG 2007a).

*The following text has been revised in Chapter 4, page 4-16:*

Year-round closures to specified commercial gear types include (CDFG 2007a):

- All waters within 3 nautical miles of shore are closed to use of trawl gear.

*The following text has been revised in Chapter 4, page 4-17:*

- Gill nets and trammel nets may not be used within 3 nautical miles of the mainland shore.

*The following text has been revised in Chapter 4, page 4-20:*

- ~~Affect~~ Effect of poor Asian economy on overseas fish sales.

*The following text has been revised in Chapter 4, page 4-23:*

As indicated by the data, anticipated maximum potential displacement of important commercial fisheries for the Proposed Project would vary from 30.1% (for both the deeper nearshore rockfish fishery in the Point Arena area and the urchin fishery in the San Francisco area) to 1.1% (for the Dungeness crab fishery in the Bolinas area). Displacement associated with Alternative 1 would vary between 0.1% (for the Dungeness crab fishery in the Bolinas area) and 32.0% (for the deeper nearshore rockfish fishery in the Point Arena area). Displacement associated with Alternative 2 would vary between 1.1% (for the Dungeness crab fishery in the Bolinas area) and 26.5% (for the deeper nearshore rockfish fishery in the Bolinas area). Displacement associated with Alternative 3 would vary between 7.3% (for the Dungeness crab fishery in the Bolinas area) and 33.9% (for the deeper nearshore rockfish fishery in the Point Arena area). When comparing median displacement values as averaged across all commercial fisheries and landing ports, the Proposed Project would potentially affect ~~16.4~~ 14.5% of the important fishing grounds in the north central coast study region, Alternative 1~~—16.2~~ 15.7%, Alternative 2~~—13.0~~ 12.7%, and Alternative 3~~—21.6~~ 21.7%.

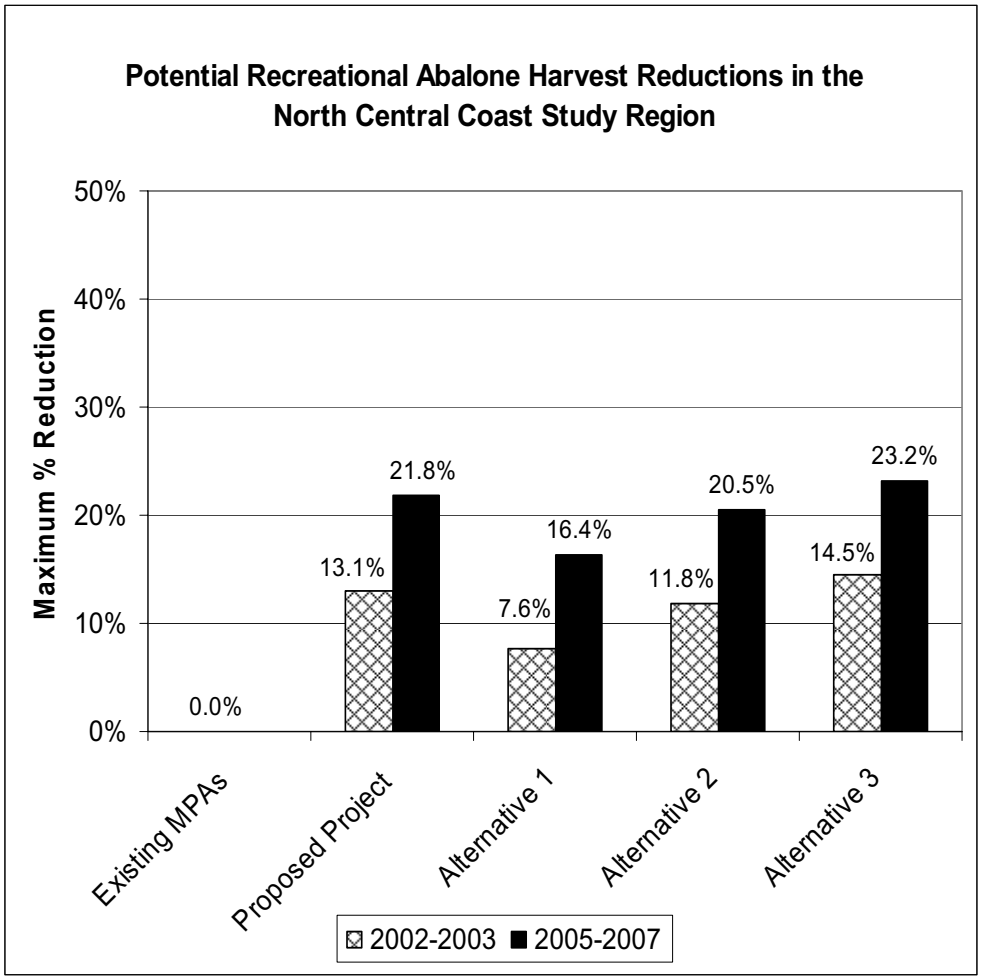
*The following text has been revised in Chapter 4, page 4-25:*

As indicated by the data, anticipated maximum potential displacement of important recreational fisheries for the Proposed Project would vary from 20.4% (CPFV: region 1 rockfish) to 0.3% (Pier/Shore: region 3 rockfish). Displacement associated with Alternative 1 would vary between 0.1% (Kayak Anglers: region 2 California halibut) and 24.9% (CPFV: region 1 rockfish). Displacement associated with Alternative 2 would vary between 2.1% (CPFV: region 1 California halibut) and 20.6% (Private Vessels: region 3 rockfish). Displacement associated with Alternative 3 would vary between 0.2% (Kayak Anglers: region 3 Dungeness crab) and 34.3% (Pier/Shore: region 3 striped bass). When comparing median displacement values as averaged across all recreational types and fisheries, the Proposed Project would potentially affect ~~24.7~~ 8.3% of the important

recreational fishing grounds in the north central coast study region, Alternative 1—~~31.5~~ 10.4%, Alternative 2—~~28.1~~ 9.6%, and Alternative 3—~~46.2~~ 14.4%.

*The following text and chart have been added in Chapter 4 following page 4-25:*

**Chart 4-4. Potential Recreational Abalone Harvest Reductions in the North Central Coast Study Region**




As indicated in Chart 4-4, potential recreational abalone harvest reductions resulting from Alternative 3 would be the highest, followed by the Proposed Project and Alternative 2 which would result in slightly less harvest reductions. Alternative 1 would result in the least potential reduction to recreational abalone harvest.

*The following text has been revised in Chapter 4, page 4-26:*

Given the above analysis, it is apparent that to varying degrees across all four alternatives displacement may occur to some level for both commercial and recreational fishing activities. Potential displacement associated with Alternative 1 would be similar

to the Proposed Project. Displacement resulting from Alternative 2 would be potentially slightly less than the Proposed Project and Alternative 1. Alternative 3 would result in the greatest amount of potential displacement to commercial and recreational fisheries from proposed MPAs, compared to the other alternatives.

Displacement can have several consequences as outlined in sections 4.3.1 and ~~4.3.2.~~ 4.3.3.

### 3.4.6. Chapter 6—Biological Resources

*The following text has been revised in Chapter 6, page 6-1:*

The north central coast study region includes a wide variety of ecosystems, communities, habitats and species that contribute to regional marine biodiversity, sustainable resource use, and natural heritage. Within the north central coast study region, the Monterey Bay National Marine Sanctuary (MBNMS) and the Gulf of the Farallones National Marine Sanctuary (GFNMS) are administrative federal marine managed areas. The MBNMS has a high biodiversity of migratory and resident species, with ~~26~~ 36 species of marine mammals, 94 species of seabirds, 345 species of fishes, 4 species of sea turtles, 31 phyla (thousands of species) of invertebrates and more than 450 species of marine algae. The GFNMS provides habitat for 36 species of marine mammals, 54 species of breeding birds, and 25 threatened or endangered species (CDFG 2007a).

Habitats found within the north central coast study region are described below, illustrated in Figures 6.1-1a to 6.1-1f, and quantified in Table 6-1. Biological resources within the north central coast study region have been identified using the best readily available science compiled from multiple sources. Unless otherwise cited, all habitat descriptions in this chapter are taken from the *Regional Profile for the North Central Coast Study Region* (CDFG 2007a).

*The following text has been revised in Chapter 6, pages 6-12 and 6-13:*

Drakes Estero is located in the Point Reyes National Seashore, just south of Point Reyes and adjacent to Estero de Limantour. The estuary covers approximately 2,270 acres during the highest tides, with the central estuary encompassing 1,300 acres. Drakes Estero is less than 6 feet deep in most places, though the central channel is 25 feet deep, and connects to Drakes Bay via a narrow, 21-foot deep inlet. The estuary is protected from wave action by sand spits at Drakes and Limantour beaches and receives freshwater from six perennial and four ephemeral streams that drain approximately 13.5 square miles of coastal scrub and grassland. The mudflats, sandflats, and eelgrass beds of the estuary support several native clam species and serve as important habitats for the larval and juvenile stages of lingcod, English sole, speckled sanddab, several species of nearshore rockfish, Dungeness crab, Pacific herring, and several shrimp species. Over 60 species of fish have been documented in the estero, including steelhead trout, and over 100 species of shore and water birds

have been observed in the winter, including special status birds such as Osprey, White Pelicans, Brown Pelicans, Peregrine Falcons, Black Brants, and Western Snowy Plovers ~~and Marbled Murrelets~~. Harbor seals inhabit the estuary year-round and use the estuary as a rookery. The estero is an important area for bird watching and kayaking, though some human activities (including recreation, cattle grazing, and oyster farming) have negative effects on the estuary , such as disturbances to water birds and seals and impairment of water quality. Only one company has a state water bottom lease for mariculture in the estuary. Drakes Estero is the only Federal Marine Coastal Wilderness on the U.S. west coast, south of Alaska, and is a Site of Regional Importance under the U.S. Shorebird Conservation Plan, in addition to being located within the Point Reyes National Seashore (CDFG 2007a).

***Estero de Limantour***

Estero de Limantour is an extensive salt water and brackish marsh system located to the east of Drakes Estero that is popular for ~~both~~ birdwatching, wildlife viewing, and kayaking. The estero is an existing SMR and a federal Marine Coastal Wilderness site. The estero covers nearly one square mile of area and is separated from the ocean by a Limantour spit. Harbor seal haul out and pupping sites occur on the spit and tidal sandbars. Muddy Hollow Creek is one of the key tributaries to the estero, though dams constructed in the 1950s and 1960s restrict the water and sediment that flows to the estuary. Some of these dams are failing and impairing fish passage. The estero, which was characterized as an impaired water body for pathogens in 2002, is dominated by pickleweed and inhabited by federally protected Coho salmon and Steelhead trout (CDFG 2007a).

*The following text has been revised in Chapter 6, page 6-26:*

The range of the California sea lion (*Zalophus californianus*) extends from the Pacific coast of Baja California to southern British Columbia. These animals breed primarily in the southern part of their range from the Gulf of California to San Miguel Island, but also at Año Nuevo and on the Farallon Islands. Commercial hunting in the 19th and early 20th centuries likely reduced California sea lion populations. In the late 1920s, only 1,000-1,500 California sea lions were counted on the shores of California. Since a general moratorium on hunting marine mammals was imposed with passage of the Marine Mammal Protection Act in 1972, the population has grown substantially to a current estimate of 237,000-244,000 animals. Between 1975 and 2001, the population grew at an average annual rate of 5.4% (CDFG 2007a).

California sea lions are opportunistic feeders on a variety of prey, especially seasonally abundant schooling species such as Pacific ~~hake~~ whiting, northern anchovy, Pacific sardine, spiny dogfish, and squid. They tend to feed in cool upwelling waters of the continental shelf. In a recent study at Año Nuevo Island, sea lions were found to feed on rockfishes, Pacific whiting, market squid, Pacific sardine, northern anchovy, spiny dogfish shark, and salmonids. California sea lions can be found in large numbers on and around Año Nuevo and the Farallon Islands where they have minor rookeries.

California sea lions have haul out sites along the Point Reyes Headlands, at Bodega Rock, Fish Rocks, Northwest Cape Rocks, and Seal Rocks on the outer San Francisco coast, as well as locations in San Francisco inside the bay. Sea lions prey on salmonids and other species causing economic loss to fishermen (CDFG 2007a).

*The following text has been revised in Chapter 6, page 6-27:*

The eastern distinct population segment of the ~~s~~Steller sea lion (*Eumatopias jubatus*), also known as the northern sea lion, extends from Cape Suckling Alaska to Central California, and is listed as threatened under the federal ESA (species is endangered in Alaska). The north central coast study region is near the southern extent of the Steller sea lion, and haulouts can be found at Fish Rocks, Northwest Cape Rocks, Bodega Rock, Point Reyes Headland, and on the Farallon Islands. Año Nuevo Island, just south of the north central coast study region, and the Farallon Islands are the two southernmost breeding colonies of the Steller sea lion and females and juveniles can be found in the Gulf of the Farallones year-round. Other breeding colonies can be found at ~~Point Reyes and at~~ Fort Ross. The diet of Steller sea lions is dominated by a variety of fish (especially demersal roundfish) and squid. In the waters around the Farallones, they feed mostly on rockfish, sardines, smelt, squid, octopus, and salmonid fish (CDFG 2007a).

Elephant seals (*Mirounga angustirostris*) haul out two times per year, during the breeding (December through March) season and during the molt (April through August). Most breeding sites are also molting haul out sites. Elephant seals are present year round at colonies because each sex and age class molts at different times of the year. Juvenile seals also haul out in high numbers at these traditional sites during the fall preceding the breeding season. The current breeding sites in this region include South Farallon Island (Southeast Farallon Island and West End) and Point Reyes Headland (the whole length and overflowing onto Drakes Beach and the Great Beach). Año Nuevo Island and Point Año Nuevo, south of the north central coast study region, are also breeding colonies. Bodega Rock is another haul out site for this species. This species does not occur in high numbers on the shelf waters of the Gulf of the Farallones. Instead, elephant seals feed off the continental shelf in deep waters and they also migrate to forage along the Kenai Peninsula in Alaska and to the north Pacific Gyre. Their diet is poorly understood but likely includes squid, hake, salmon, dogfish, and demersal fish, including hagfish (CDFG 2007a).

*The following text has been revised in Chapter 6, pages 6-27 and 6-28:*

The north central coast region has the highest concentration of harbor seals in the state, outside of the southern Channel Islands. The highest concentrations occur at Point Reyes and at several other locations ~~including~~ since Tomales Bay, Tomales Point, Drakes Estero-Estero de Limantour, Double Point and Bolinas Lagoon are all part of Point Reyes National Seashore. ~~Estuaries provide habitat for a large number of harbor seals, and Drakes Estero is the largest colony in the region and one of the largest in the state. Together these sites represent around 20% of the mainland population of harbor~~

~~seals during the breeding season.~~ These sites represent around 20% of the mainland population of harbor seals during the breeding and molt season. Harbor seals also use sites north of Point Reyes such as Bodega Rocks, Stewart Point, Russian River, Black Pointm Del Mar Point, area, Gualala River, and the Point Arena area. Harbor seals are also abundant in the southern portion of the north central coast study region and haul out at locations such as Fitzgerald State Marine Park. The seals are year round residents at most of the haul out sites depicted on the Figures 6.1-5a and 6.1-5b, but are seasonally abundant with the highest numbers of seals present during the breeding season (March-June) and the molt (June-July). Harbor seals eat a wide variety of pelagic and benthic prey, including small schooling fishes such as northern anchovy, many species of flatfishes, bivalves, and cephalopods. In the Russian River, harbor seals have been documented preying on lamprey. Diet studies of harbor seals in central California did not find evidence of predation on salmonids, though they are known to eat small salmonids in northern California (CDFG 2007a).

*The following text has been revised in Chapter 6, page 6-28:*

The northern fur seal (*Callorhinus ursinus*) was once abundant along the California coast, but populations rapidly decreased during the early 1800's. Prior to 1997, northern fur seals had not been known to breed within the north central coast study region for over 170 years. Today, relatively dense aggregations of these fur seals (1 seal per $km^2$) are found on the Farallon Islands, where they have two potential breeding harems and their numbers are growing. The colony on the Farallon Islands is only the second colony for this species south of Alaska. In August of 2006, 166 seals, including 80 pups, were counted in the Farallon Islands census (an increase from six individuals in previous years). Fur seals occur on the mainland in this region infrequently, and primarily during ENSO years (CDFG 2007a). Northern fur seals feed on deep scattering layer fish, such as lantern fish.

*The following text has been added in Chapter 6 on page 6-38:*

Beginning September 2, 2008, the north central management area north of Point Arena was closed to boat-based anglers fishing for rockfish, cabezon, greenlings, and other groundfish. Their take is currently prohibited to allow stocks to rebuild.

**Abalone Recovery and Management Plan**

The Abalone Recovery and Management Plan (ARMP) was adopted by the Commission in December 2005. The ARMP provides a cohesive framework for the recovery of depleted abalone populations in southern California, and for the management of the northern California fishery and future fisheries. All of California's abalone species are included in this plan: red abalone, *Haliotis rufescens*; green abalone, *H. fulgens*; pink abalone, *H. corrugata*; white abalone, *H. sorenseni*; pinto abalone, *H. kamtschatkana* (including *H.k. assimilis*); black abalone, *H. cracherodii*; and flat abalone, *H. walallensis*. A recovery and management plan for these species is

needed to manage abalone fisheries and prevent further population declines throughout California, and to ensure that current and future populations will be sustainable.

The ARMP includes: a) an explanation of the current scientific knowledge of the biology, habitat requirements, and threats to abalone; b) a summary of recovery goals, including alternative conservation and management goals and activities; c) alternatives for allocating harvest between recreational and commercial abalone harvesters; d) an estimate of time and costs required for meeting interim and long-term recovery goals for each species; d) an estimate of the time necessary to meet interim recovery goals, and a description of triggers for review and amendment of strategies; and e) a description of objective, measurable criteria by which to determine whether the goals and objectives of the recovery strategy are being met.

*The following text has been revised in Chapter 6, pages 6-41 and 6-42:*

***Alternative 1: Less than Significant***

Alternative 1 would result in a slightly larger area of MPAs than the Proposed Project, (21.6 % of the region vs. 20.1%) and have nearly the same coverage by SMRs (11.4% vs. 11.2%). ~~This alternative has the least potential of the MPA network component packages considered to result in displacement of fishing activities.~~ Any potential displacement effects on biological resources associated with Alternative 1 would be similar to those described for the Proposed Project. Therefore, impacts on biological resources from Alternative 1 would be less than significant.

*Mitigation* – No mitigation is required because impacts are not significant.

***Alternative 2: Less than Significant***

Alternative 2 would result in a smaller area of MPAs than the Proposed Project, (18.0% vs. 20.1% of the region) and have less coverage by SMRs (8.9% vs. 11.2%). This alternative has slightly less ~~a smaller~~ potential to result in the displacement of fishing activities than the Proposed Project. Therefore, displacement-related impacts resulting from Alternative 2 would be less than significant.

*The following text has been separated into individual paragraphs in Chapter 6, page 6-42:*

The proposed project would protect 20% of all habitat types except beach (12%), soft bottom (0-30m) (6%), and hard substrate 50m (9%).

Alternative 1 would result in the protection, to some degree, of at least 20% of all habitat types except for beach (15%), soft bottom (30-100m) (11%), and hard substrate<50m (15%) (Charts 6-1 and 6-2).

Alternative 2 protects, to some degree, at least 20% of all habitats types in the north central coast study region except beach (12%), soft bottom (0-30m) (8%), and hard substrate <50m (9%) and kelp beds (15%). (Charts 6-1 and 6-2).

*The following text has been revised in Chapter 6, pages 6-45 and 6-46:*

***Alternative 1: Beneficial Impact***

Benefits to biological resources resulting from Alternative 1 would be ~~close~~ similar to but ~~less~~ slightly greater than those of the Proposed Project as there would be ~~less~~ more habitat preserved to benefit certain populations of marine species that depend on these habitat types for some part of their life history and to prevent further degradation of marine habitats that are vital to marine ecosystems of the north central coast study region.

*Mitigation:* No mitigation is required.

***Alternative 2: Beneficial Impact***

Benefits to biological resources resulting from Alternative 2 would be somewhat ~~greater~~ less than those of the Proposed Project, as there would be slightly ~~more~~ less habitat preserved to benefit populations of marine species that depend on these habitat types for some part of their life history and to prevent further degradation of marine habitats that are vital to marine ecosystems of the north central coast study region.

*Mitigation:* No mitigation is required.

***Alternative 3: Beneficial Impact***

Benefits to biological resources resulting from Alternative 3 would be greater than those of the Proposed Project, as there would be ~~slightly~~ more habitat preserved to benefit populations of marine species that depend on these habitat types for some part of their life history and to prevent further degradation of marine habitats that are vital to marine ecosystems of the north central coast study region.

*Mitigation:* No mitigation is required.

### 3.4.7. Chapter 7—Social Resources

*The following text has been revised in Chapter 7, page 7-11:*

The commercial fishing industry is currently well regulated (Hankin and Warner 2001), and even a conservative economic analysis of the proposed MPA regulations does not support a finding of significant adverse impact to the fishing industry (Scholz et. al. 2008; Wilen and Abbott 2006) such as would cause economic failure and the decay and loss of maritime properties.

### *Proposed Project: No Impact*

The potential for substantial loss of fishing industry businesses, even on a localized level, leading to substantial decay or loss of maritime-related historic resources is speculative, and is not supported by economic analysis completed to date (Scholz et. al. 2008; Wilen and Abbott 2006). Therefore, the Proposed Project would not result in an impact to maritime-related historical resources.

*Mitigation*—No mitigation is required because there would be no impact.

### *Alternative 1: No Impact*

Potential effects associated with Alternative 1 would be similar to those described above for the Proposed Project~~.~~ as ~~While~~ this alternative also would result in displacement of fishing effort within the north central coast study region~~, this effect would be less than that of the Proposed Project; therefore, the~~ The potential for losses of maritime-related historic resources would be ~~less than~~ the same as that of the Proposed Project. As such, Alternative 1 would not result in an impact to maritime-related historical resources.

*The following text has been revised in Chapter 7, page 7-12:*

### *Alternative 2: No Impact*

Potential effects associated with Alternative 2 would be similar to those described above for the Proposed Project.~~;~~ While this alternative also would result in displacement of fishing effort within the north central coast study region, this effect would be less than that of the Proposed Project; therefore, the potential for losses of maritime-related historic resources would be less than that of the Proposed Project. ~~however, this alternative potentially results in a slightly greater displacement of fishing effort. As mentioned above, the potential for substantial loss of businesses within the fishing industry, even on a localized level, is speculative, and not supported by economic analysis completed to date (Wilen and Abbott 2006).~~ As such, Alternative 2 would not result in an impact to maritime-related historical resources.

### *Alternative 3: No Impact*

Potential effects associated with Alternative 3 would be similar to those described above for the Proposed Project; however, this alternative potentially results in a slightly greater displacement of fishing effort. As mentioned above, the potential for substantial loss of businesses within the fishing industry, even on a localized level, is speculative, and not supported by economic analysis completed to date (Scholz et. al. 2008; Wilen and Abbott 2006). As such, Alternative 3 would not result in an impact to maritime-related historical resources.

*The following text has been revised in Chapter 7, page 7-20:*

Furthermore, the potential for substantial loss of businesses within the fishing industry, even on a localized level, is not supported by economic analysis completed to date (Scholz et. al. ~~2005~~ 2008).

*The following text has been revised in Chapter 7, page 7-21:*

***Alternative 1: Less than Significant***

Potential effects associated with Alternative 1 would be ~~similar to~~ the same as those described above for the Proposed Project~~. While~~ as this alternative ~~also~~ would result in comparable displacement of fishing effort within the north central coast study region~~, the effect would be less than expected for the Proposed Project~~; therefore, potential urban decay impacts associated with Alternative 1 would be less than significant.

*The following text has been revised in Chapter 7, page 7-21:*

As mentioned above, the potential for economic decay resulting from substantial business losses within the fishing industry, even on a localized level, is speculative, and not supported by economic analysis completed to date (Scholz et. al. ~~2005~~ 2008).

*The following text has been revised in Chapter 7, pages 7-26 and 7-27:*

The NPS has several park lands located along the California coast including Redwood National and State Parks, Point Reyes National Seashore, and Golden Gate National Recreation Area. Some key park lands in the north central coast study region are listed in Table 7-9.

**Table 7-9. National Parks Adjacent to the Study Region**

| Name of National Park | County |
|---|---|
| Golden Gate National Recreation Area (including Presidio of San Francisco and Muir Woods National Monument) | Marin, San Francisco, San Mateo |
| Point Reyes National Seashore | Marin |
| ~~Presidio of San Francisco~~ | ~~San Francisco~~ |
| Fort Point National Historic Site* | San Francisco |
| ~~Muir Woods National Monument~~ | ~~Marin~~ |

Source: CDFG 2007a.

* encompassed within the Golden Gate National Recreation Area.

Within the Golden Gate National Recreation Area, which encompasses 75,000 acres, the Law Enforcement Division is responsible for patrolling roughly 35 miles of

coastline spanning from Stinson Beach ~~Point Reyes~~ in Marin County down into San Mateo County. The staff of the Law Enforcement Division includes approximately 24 Law Enforcement Park Rangers, with approximately 10 to 12 Rangers patrolling within the jurisdictional area of the park at any given time. NPS collaborates regularly with the CDFG, the Coast Guard, and the County Sheriff's Department to achieve their enforcement goals. While NPS does not have available resources for marine-based patrols, it does assist the Coast Guard and Sheriff's Department in their efforts in this area. The enforcement budget for NPS is dependent on federal funding, and is not projected in increase in the near future.

The Point Reyes National Seashore is the other National Park within the north central coast study area. The park encompasses 70,000 areas, with jurisdiction reaching ¼ mile offshore. There are a total of 11 rangers, with 4–8 Law Enforcement rangers on duty at any given moment. Furthermore, the park possesses 3 response boats, an 18 ft Boston Whaler, a 25 ft Boston Whaler, and a 29 ft Safe Boat. Law enforcement rangers utilize these boats to assist the Coast Guard in rescue operations, vessel safety inspections, and to enforce CDFG regulations.

*The following text has been revised in Chapter 7, page 7-32:*

***Alternative 1: Less than Significant***

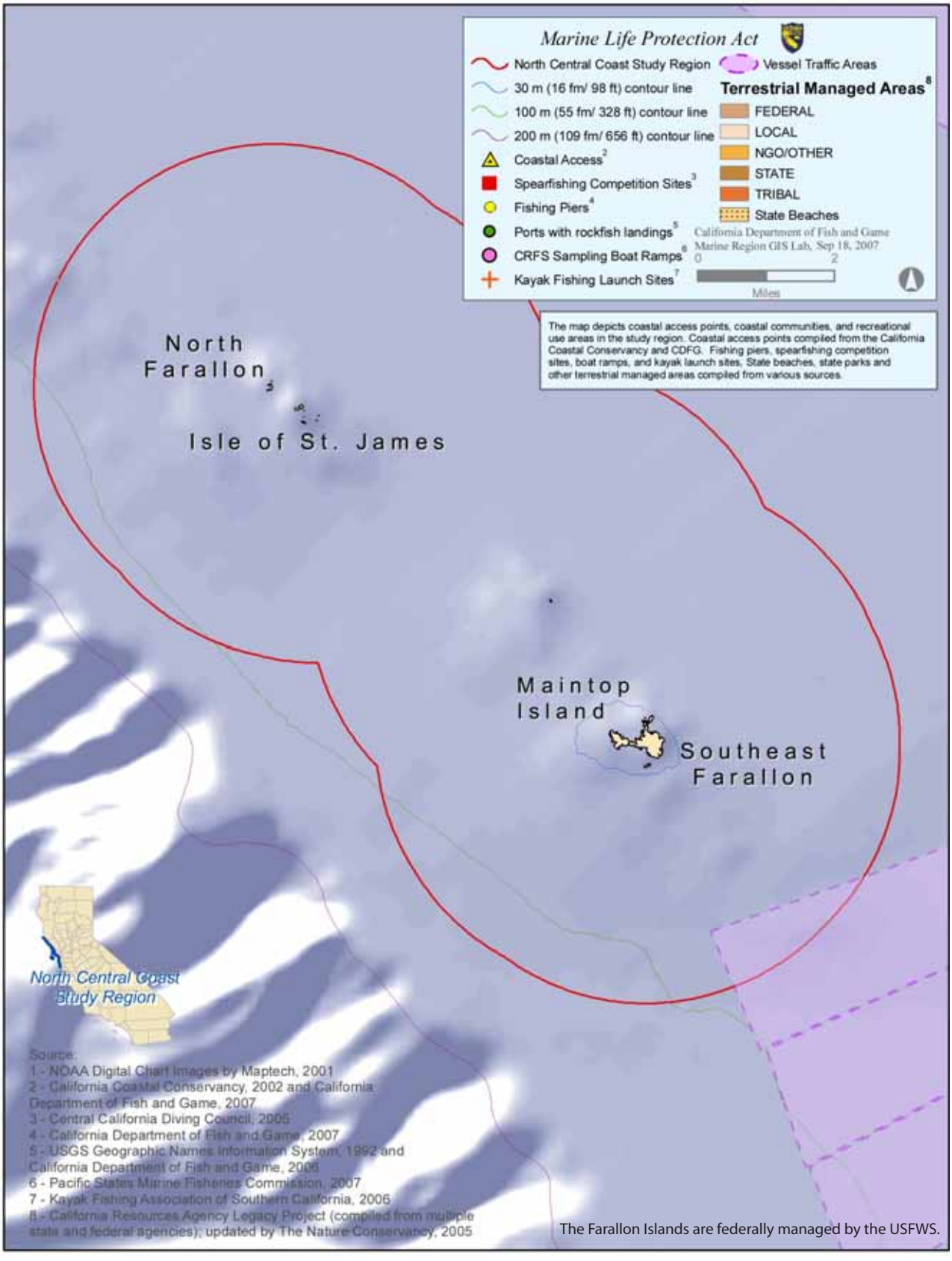
Potential effects associated with Alternative 1 would be similar to those described above for the Proposed Project. ~~Due to the reduced MPA network component area provided in Alternative 1, demand for additional law enforcement would be less than that of the Proposed Project.~~ Impacts to enforcement services associated with Alternative 1 would be less than significant.

***Alternative 2: Less than Significant***

Potential effects associated with Alternative 2 would be similar to those described above for the Proposed Project. ~~Due to a slightly larger MPA area, demand for additional law enforcement could be comparably greater than that of the Proposed Project. However, impacts~~ Impacts to enforcement services associated with Alternative 2 would be less than significant with implementation of the mandated MLPA enforcement plan.

*Figure 7.4-1f has been revised in Chapter 7, following page 7-34, to include the following footnote (revised figure on next page):*

The Farallon Islands are federally managed by the USFWS.




Source: CDFG, 2007a

00447.08 (10/08)

ICF Jones & Stokes
an ICF International Company

**Figure 7.4-1f**
**Coastal Access and Recreational Use**
**Subregion 6: Farallon Islands**

Table 7-12 in Chapter 7, page 7-38, has been replaced with the table below:

**~~Table 7-12. Abalone Report Card Landing Sites and Associated Average Annual Landings~~**

| ~~Ref #~~ | ~~Report Card Site~~ | ~~Annual Average for 2002–2006~~ |
|---|---|---|
| ~~1~~ | ~~Point Arena Lighthouse*~~ | ~~8,317~~ |
| ~~2~~ | ~~Arena Cove~~ | ~~10,528~~ |
| ~~3~~ | ~~Moat Creek~~ | ~~6,801~~ |
| ~~4~~ | ~~Schooner Gulch~~ | ~~613~~ |
| ~~5~~ | ~~Saunders Landing~~ | ~~1,212~~ |
| ~~6~~ | ~~Anchor Bay~~ | ~~5,443~~ |
| ~~7~~ | ~~Robinson Pt~~ | ~~986~~ |
| ~~8~~ | ~~Gualala Point~~ | ~~1,047~~ |
| ~~9~~ | ~~Sea Ranch~~ | ~~12,610~~ |
| ~~10~~ | ~~Black Point~~ | ~~227~~ |
| ~~11~~ | ~~Stewarts Point~~ | ~~1,974~~ |
| ~~12~~ | ~~Rocky Point~~ | ~~459~~ |
| ~~13~~ | ~~Horseshoe Cove~~ | ~~1,823~~ |
| ~~14~~ | ~~Fisk Mill Cove~~ | ~~7,784~~ |
| ~~15~~ | ~~Salt Point~~ | ~~10,512~~ |
| ~~16~~ | ~~Ocean Cove~~ | ~~6,191~~ |
| ~~17~~ | ~~Stillwater Cove~~ | ~~3,858~~ |
| ~~18~~ | ~~Timber Cove~~ | ~~8,660~~ |
| ~~19~~ | ~~Fort Ross and Reef Camp~~ | ~~37,386~~ |
| ~~20~~ | ~~Jenner~~ | ~~2,350~~ |
| ~~21~~ | ~~Salmon Creek~~ | ~~1,032~~ |
| ~~22~~ | ~~Bodega Head~~ | ~~1,282~~ |
| ~~23~~ | ~~Tomales Point~~ | ~~2,515~~ |
| ~~24~~ | ~~Point Reyes~~ | ~~616~~ |
| | ~~**Total**~~ | ~~134,186~~ |

~~Source: CDFG 2008b.~~

~~* The Point Arena Lighthouse report card landing site includes data from Stornetta Ranch which opened to public access in 2004. As a result of recent increase of effort at this site, averages from 2002–2003 and 2005-2006 are reported, however data from 2004 is excluded because the area opened part way through the abalone season.~~

**Table 7-12. Abalone Report Card Landing Sites and Associated 2002–2007 Reported Landings**

| | | Estimated Annual Landings (number of abalone) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Ref #** | **Report Card Site** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **Annual Average** |
| 1 | Point Arena Lighthouse | 1,673 | 1,574 | 4,223 | 15,602 | 18,511 | 7,558 | 8,317* |
| 2 | Arena Cove | 12,628 | 11,917 | 10,946 | 7,364 | 9,786 | 8,885 | 10,528 |
| 3 | Moat Creek | 6,153 | 7,716 | 7,522 | 5,520 | 7,094 | 12,180 | 6,801 |
| 4 | Schooner Gulch | 587 | 730 | 559 | 803 | 388 | 462 | 613 |
| 5 | Saunders Landing | 912 | 1,137 | 1,769 | 1,338 | 906 | 1,431 | 1,212 |
| 6 | Anchor Bay | 5,446 | 6,470 | 5,593 | 4,759 | 4,945 | 4,964 | 5,443 |
| 7 | Robinson Pt | 789 | 1,311 | 1,164 | 605 | 1,061 | 894 | 986 |
| 8 | Gualala Point | 1,181 | 1,311 | 970 | 817 | 958 | 1,163 | 1,047 |
| 9 | Sea Ranch | 14,466 | 13,710 | 13,115 | 10,941 | 10,822 | 13,462 | 12,610 |
| 10 | Black Point | 360 | 293 | 171 | 310 | 0 | 432 | 227 |
| 11 | Stewarts Point | 2,418 | 2,458 | 2,077 | 1,155 | 1,760 | 1,401 | 1,974 |
| 12 | Rocky Point | 376 | 561 | 285 | 760 | 311 | 283 | 459 |
| 13 | Horseshoe Cove | 2,418 | 2,011 | 1,860 | 1,479 | 1,346 | 2,236 | 1,823 |
| 14 | Fisk Mill Cove | 7,043 | 7,369 | 8,127 | 8,125 | 8,259 | 10,525 | 7,784 |
| 15 | Salt Point | 11,763 | 11,738 | 11,414 | 8,533 | 9,113 | 12,538 | 10,512 |
| 16 | Ocean Cove | 5,777 | 6,664 | 5,855 | 5,280 | 7,378 | 5,337 | 6,191 |
| 17 | Stillwater Cove | 3,643 | 4,325 | 2,956 | 4,872 | 3,495 | 4,920 | 3,858 |
| 18 | Timber Cove | 8,713 | 9,221 | 7,990 | 8,209 | 9,165 | 8,930 | 8,660 |
| 19 | Fort Ross & Reef Camp | 36,546 | 37,429 | 37,186 | 32,767 | 43,002 | 62,286 | 37,386 |
| 20 | Jenner | 1,882 | 2,344 | 2,580 | 2,746 | 2,201 | 3,876 | 2,350 |
| 21 | Salmon Creek | 60 | 10 | 1,803 | 803 | 2,485 | 2,132 | 1,032 |
| 22 | Bodega Head | 1,099 | 1,524 | 1,016 | 1,633 | 1,139 | 850 | 1,282 |
| 23 | Tomales Point | 2,873 | 3,719 | 2,191 | 2,211 | 1,579 | 2,102 | 2,515 |
| 24 | Point Reyes | 622 | 968 | 639 | 465 | 388 | 134 | 616 |
| | **NCCSR total** | **129,428** | **136,510** | **132,011** | **127,097** | **145,885** | **168,981** | **134,186** |

*The Point Arena Lighthouse report card landing site includes data from Stornetta Ranch which opened to public access in 2004. Due to the recent increase of effort at this site, averages from 2002-2003 and 2005-2007 are reported below in Table 5 to reflect differential catch before and after the public gained access to Stornetta Ranch; data from 2004 are excluded because the area opened part way through the abalone season.

*The following text has been revised in Chapter 7, page 7-48:*

These proposed MPA's are in a dense area of abalone catch, with Fisk Mill Cove and Fort Ross & Reef Camp ~~just~~ to the north and south, respectively. Though it would require a slight shift in recreation within the MPA, many recreation areas are located on either side.

*The following text has been revised in Chapter 7, page 7-51:*

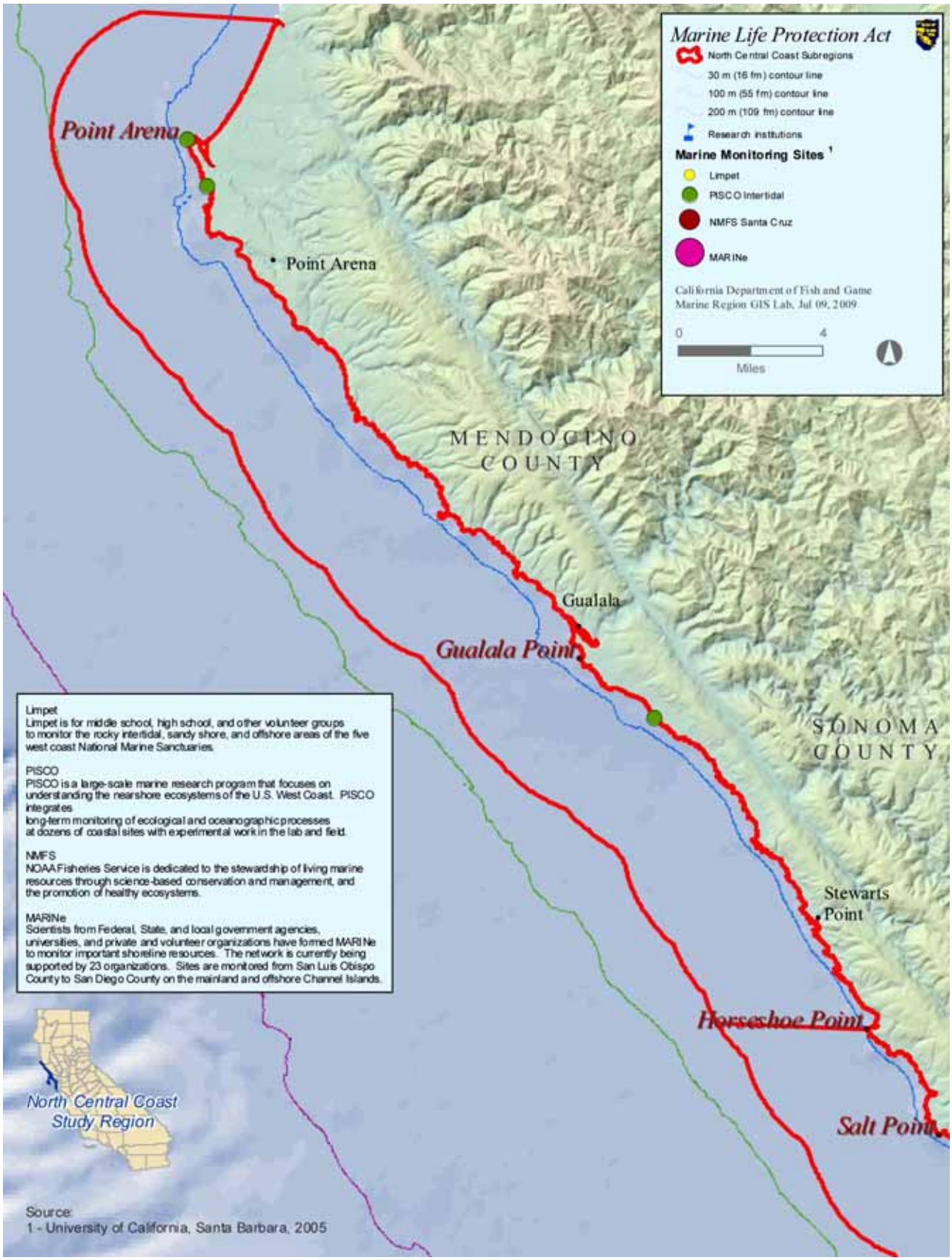
***Alternative 1: Less than Significant Impact***

Potential effects associated with Alternative 1 would be the similar to those described above for the Proposed Project, though Alternative 1 would result in slightly ~~fewer~~ more no-take areas or areas with restricted recreational fishing. Therefore, Alternative 1 would result in a less than significant impact.

***Alternative 2: Less than Significant Impact***

Potential effects associated with Alternative 2 would be the ~~comparable~~ similar to those described above for the Proposed Project; though Alternative 2 would result in slightly ~~more~~ fewer no-take areas or areas with restricted recreational fishing. Therefore, Alternative 2 would result in a less than significant impact.

*Figure 7.5-1a thru 1f have been revised in Chapter 7, following page 7-52, to include the locations of the LIMPETS program (revised figures on next page):*




Source: CDFG 2009.

Graphics ... 00447.08 (7-09)

ICF Jones & Stokes
an ICF International Company

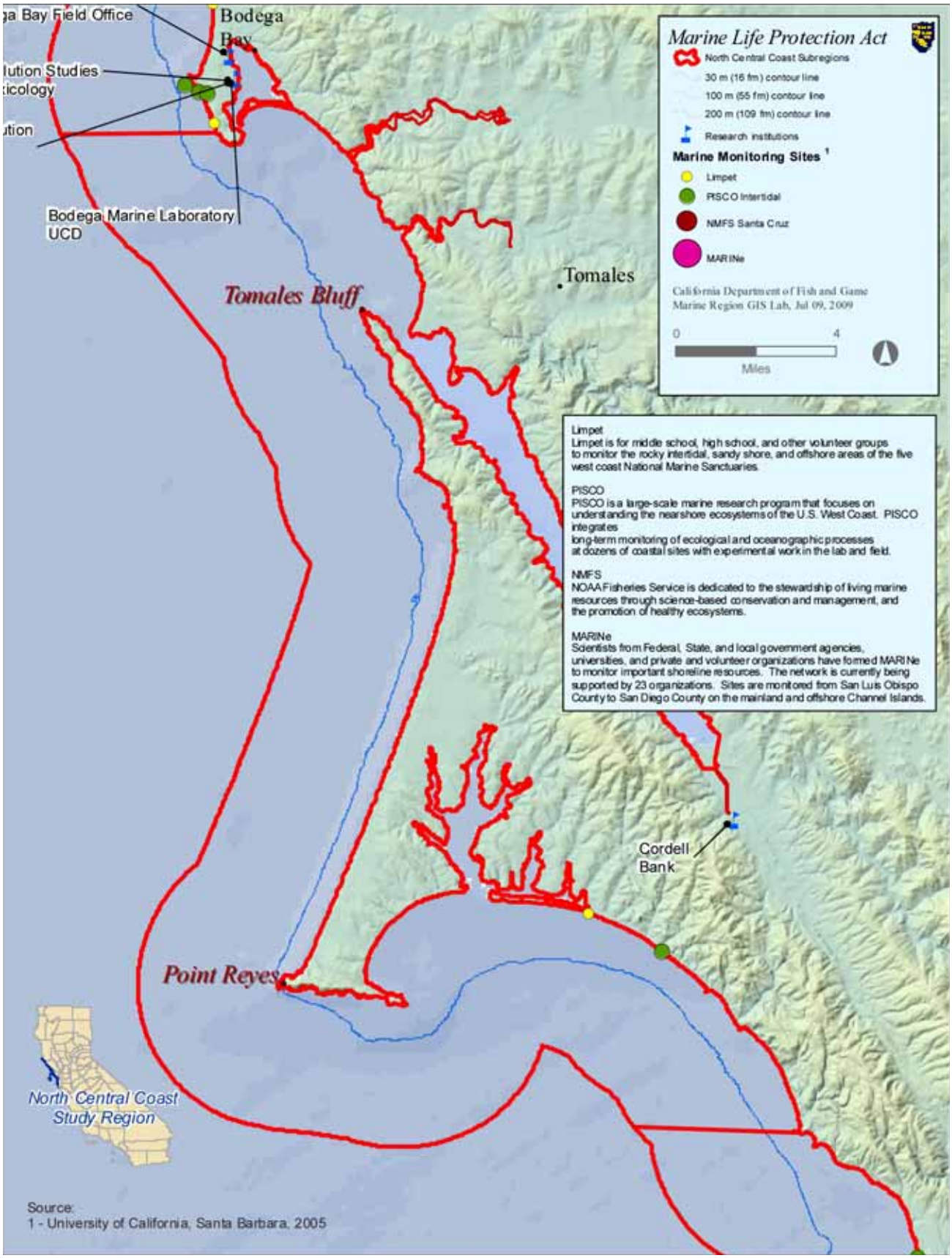
**Figure 7.5-1a**
**Research, Education and Monitoring**
**Subregion 1: Point Arena to Horseshoe Point**


Source: CDFG 2009.

Graphics ... 00447.08 (7-09)

ICF Jones & Stokes
an ICF International Company

**Figure 7.5-1b**
**Research, Education and Monitoring**
**Subregion 2: Horseshoe Point to Bodega Head**

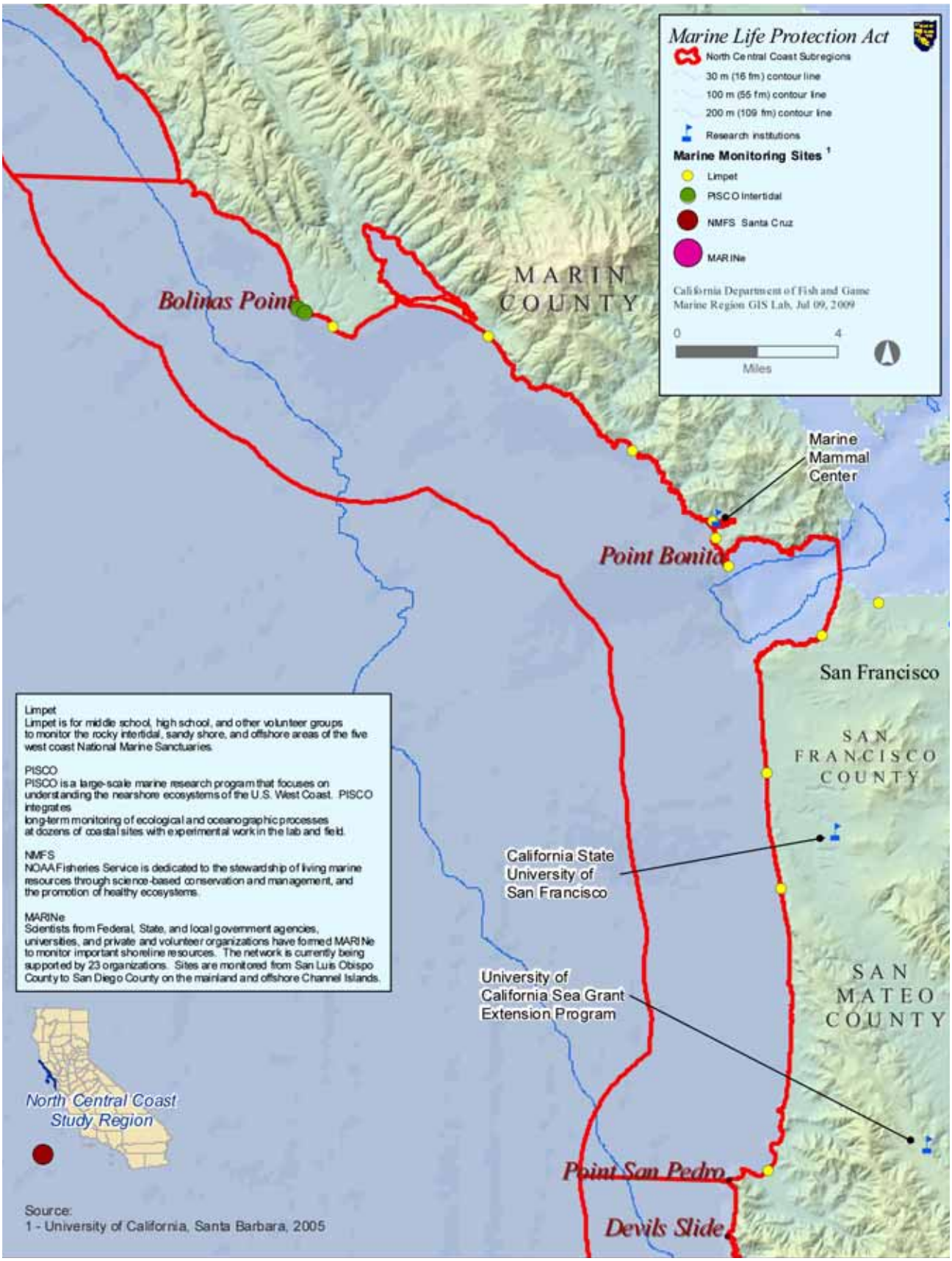



Source: CDFG 2009.

Graphics ... 00447.08 (7-09)

ICF Jones & Stokes
an ICF International Company

**Figure 7.5-1c**
**Research, Education and Monitoring**
**Subregion 3: Bodega Head to Double Point**

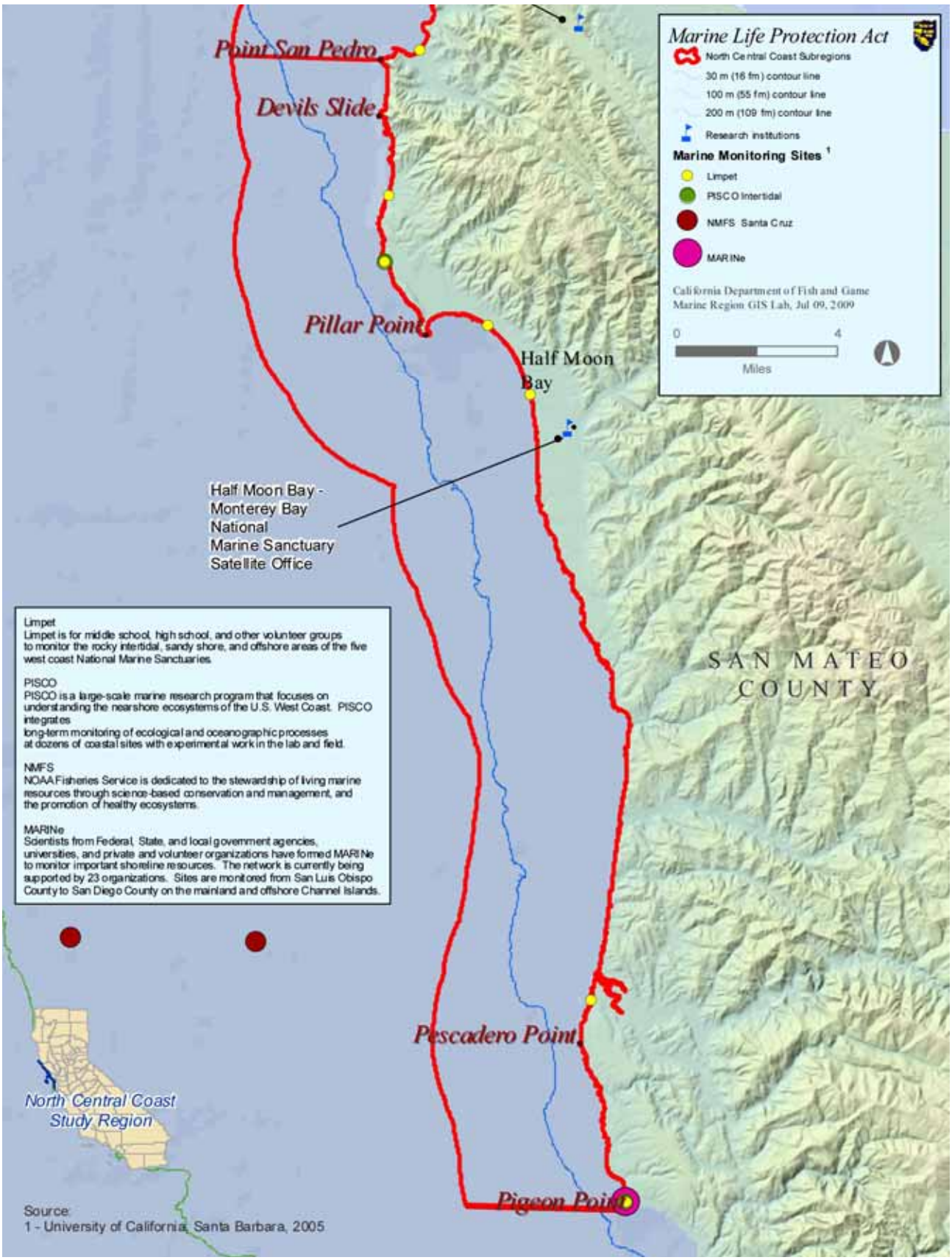



Source: CDFG 2009.

Graphics ... 00447.08 (7-09)

ICF Jones & Stokes
an ICF International Company

**Figure 7.5-1d**
**Research, Education and Monitoring**
**Subregion 4: Double Point to Point San Pedro**

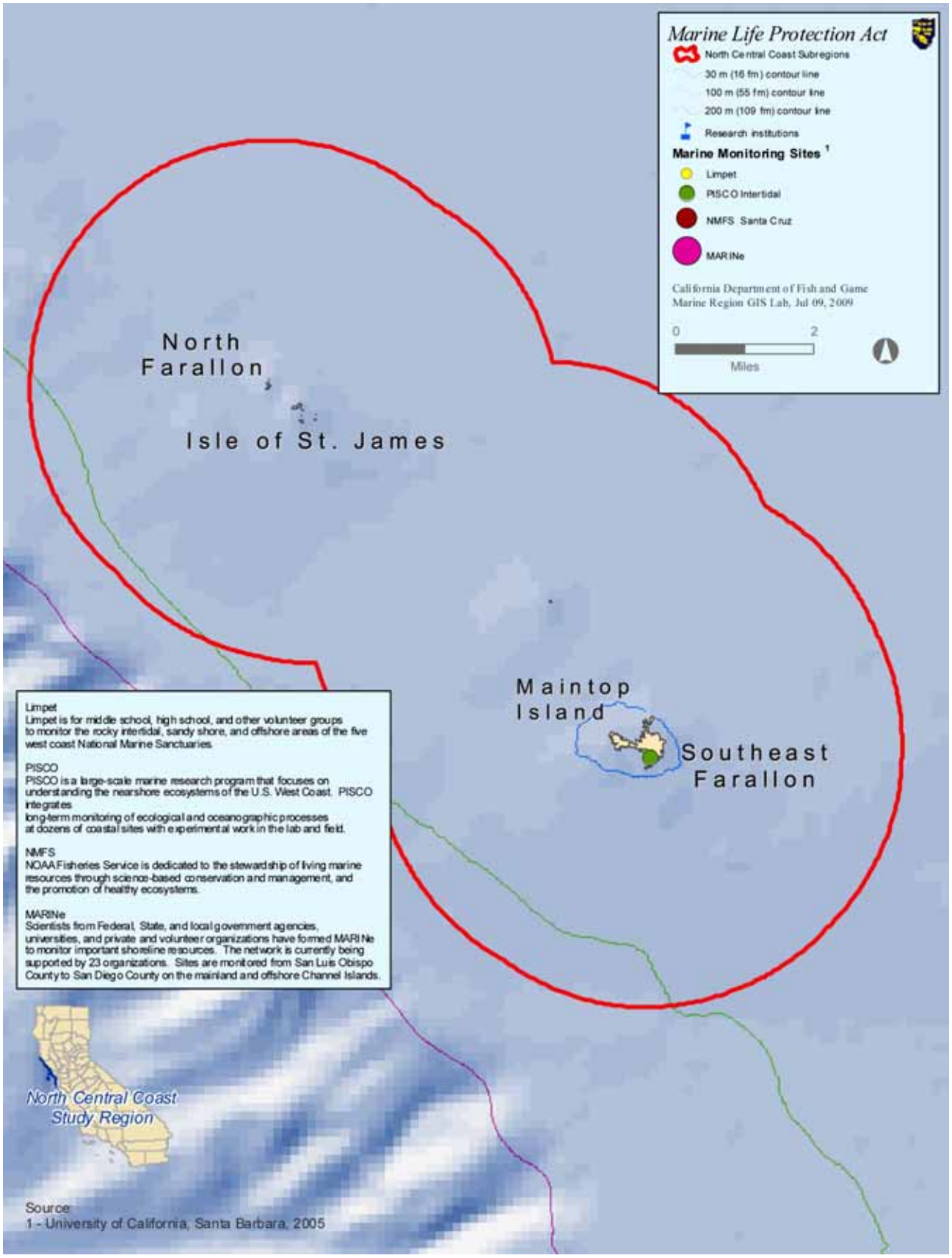



Source: CDFG 2009.

Graphics ... 00447.08 (7-09)

ICF Jones & Stokes
an ICF International Company

**Figure 7.5-1e**
**Research, Education and Monitoring**
**Subregion 5: Point San Pedro to Pigeon Point**




Source: CDFG 2009.

Graphics ... 00447.08 (7-09)

ICF Jones & Stokes
an ICF International Company

**Figure 7.5-1f**
**Research, Education and Monitoring**
**Subregion 6: Farallon Islands**

### 3.4.8. Appendix C Scoping Report

*The following text has been revised in the Scoping Transcript for Thursday, July 19, 2008, page 13:*

6 both sport and commercial facilities in Subregion 1.
7 Three of the four proposals -- ~~1,~~ 1-3, 4, and IPA -- ~~and IPA's~~

20 pressure in the zone of coastline adjacent to Point
21 Arena ~~per~~Pier.

*The following text has been revised in the Scoping Transcript for Thursday, July 19, 2008, page 14:*

18 and regulations that will be used after an MPA is
19 enacted -- for example, from the CDFG definition of an~~d~~

*The following scoping comment letter pages from Allen Jacobs has been reordered correctly:*

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:49PM P1

Cover Page

July 7, 2008

831-649-2894

Faxing 12 pages (excluding this page) from
Allan Jacobs re: MLPA CEQA Scoping Comments
Also e-mailing to - MLPA Comments@dfg.ca.gov

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:50PM P2

**MLPA CEQA Scoping Comments**
**July 7, 2008**

I am unsure of just how much detail you want or require for meaningful input about the Environmental Impact of the MLPA protected areas (MPAs). So as a member of the public and long time coastal resident, I am setting my concerns down in writing as well as having made an oral presentation. I do so with the hope and expectation that these serious issues will be addressed in an environmental impact study and that I will have access to interim as well as final reports. Please consider this a formal request to be kept informed of the progress of the EIR and related documents.

I am including the following documents:

1. An introduction that very briefly outlines my main points. (two pages)
2. A written copy of my prepared statement that I presented orally at the Scoping meeting at Gualala on Thursday, June 19. It should be virtually identical to what was recorded at the meeting. (two pages)
3. A far more detailed version of the same concerns that includes some pertinent data. (seven pages)

Thank you for this opportunity to participate,

Allan Jacobs

Allan Jacobs
P.O. Box 33
Point Arena, CA 95468

(707) 882-2455
gbcottage@mcn.org

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:50PM P3

**MLPA CEQA Scoping Comments**
**Introduction and Brief Version**
**July 7, 2008**

I have been a resident of the Point Arena area for the last 38 years. During that time I have been a High School Science and Math Teacher, Commercial Fisherman, and an avid Sport Fisherman. My experience and concerns therefore are most closely oriented to the Point Arena area or Subregion 1 of the North Central Coast Region. The points that I am making are most specifically referring to this area, but they are generally applicable to the impact of the MLPA along the whole coast. The affects of the MLPA are more pronounced as you look north and they are especially severe near the port of Arena Cove because of the proposed MPAs (especially in Proposal 4 and the IPA Proposal) immediately to the north **and** to the south of the port. Although the EIR/CEQA process doesn't consider socioeconomics, it is important to note that the area nearest the Port of Arena Cove including the Arena Cove Pier, which is run by the City of Point Arena, will suffer significant economic losses as a result of the negative environmental impacts.

In a general sense, I would like to see consideration of humans as a biological species. We have occupied a legitimate ecological niche in our coastal waters for at least 10,000 years. We have been a part of the ecosystem as fishermen, hunters and gatherers. The sudden removal of humans from these large MPA areas will no doubt have unforeseen negative environmental impacts. It would seem a wiser approach to minimize these effects by starting with minimum sized MPAs with greater spacing, than seeking mitigation now or later for the eventual problems. As an effective mitigation measure, perhaps the EIR could call for a reduction of the size and spacing of the proposed MPAs, especially those near harbors, that the CDFG says "...fall short of scientific and Blue Ribbon Task Force guidance for level of protection and are not necessary to meet scientific guidance on size, spacing, and habitat representation..."

Here are four other very specific problems that will have negative affects on our environment as a direct result of the proposed MPAs:

**1. Problem:** The formation of urchin barrens. An urchin barren is the marine equivalent of an over-grazed pasture.
**Cause:** The main cause is the removal of the sea urchin's last remaining major predator in this area, Human Urchin Divers.
**Suggested Mitigation:** Until the cause and effect of urchin diving can be more clearly understood, allow commercial urchin harvesting to continue within all but one of the smaller, and closely monitored MPAs with good sea urchin habitat.

**2 Problem:** The predictable results of over harvesting of the most popular species and then serial depletion of other species in the spaces between MPAs.
**Cause:** The shifting of fishermen from the traditional, highly productive, heritage sites within the proposed MPAs to other less productive places between MPAs, depletion of the more popular species, and eventual targeting other species that were not heavily fished before.

2

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:51PM P4

**Suggested Mitigation:** Remove excess MPAs that are deemed unnecessary by the CDFG to the overall program; especially those nearest to ports; for example: the Saunders Reef SMCA and the Sea Lion Cove SMCA, or adopt Proposal 2XA.

3. **Problem:** There will be an increase of pollution due to the locations of MPAs.
**Cause**: Currently, the commercial and sport fishermen operating out of Arena Cove use small boats and fish near the port. The unique placement of the MPAs very near the port of Arena Cove will reduce or end medium distance fishing trips. Boating traffic will be more concentrated closer to port, increasing pollution nearby, and due to the need for more longer trips by some larger vessels, there will also be an increase in pollution overall.
**Suggested Mitigation:** Remove excess MPAs that are deemed unnecessary by the CDFG to the overall program; especially those nearest to ports; for example: the Saunders Reef SMCA and the Sea Lion Cove SMCA, or adopt Proposal 2XA.

**4. Problem:** Public rights of access and recreational use of public commons would be further reduced without due process.
**Cause:** Wording in the definition of MPAs will allow an unspecified "managing agency" to restrict even activities "such as walking, swimming, boating and diving".
**Suggested Mitigation:** Change the wording of the CDFG definitions to allow all nonconsumptive uses within any MPA and to control pollution and disturbance of wildlife by the application of laws and regulations already existing outside the MLPA.

Allan Jacobs

Allan Jacobs
P.O. Box 33
Point Arena, CA 95468

(707) 882-2455
gbcottage@mcn.org

3

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:51PM P5

**Environmental Impact Scoping Meeting**
**Public Comment**
**By Allan Jacobs**
**June 19, 2008**

Humans as a biological species occupy a legitimate ecological niche in our coastal waters. For at least 10,000 years we have been a part of the ecosystem as fishermen, hunters and gatherers. The restrictive MPAs proposed for the Point Arena area would deprive us of much of this important traditional cultural heritage. This is clearly not the right thing to do. Taking humans out of an ecosystem that we have long been a part of is, by itself, a change that has a negative affect on the environment.

There are four other very specific problems that will have negative affects on our environment as a direct result of the proposed MPAs:

The first environmental problem has to do with a law of nature that says: If you remove a predator from an ecosystem there will soon follow a population explosion of their prey, resulting in a population depletion or even extinction of the prey species' food supply, followed closely by great fluctuations in the populations of codependent species, replacement of desirable species by undesirable species, and even the extinctions of some species. In this specific case the predator species being removed by MPAs are Human Urchin Divers, the prey is Red Sea Urchins and the preys' food supply includes Kelp. The predictable end result is called an urchin barren. An urchin barren is the marine equivalent of an over-grazed pasture. It consists of waves of sea urchins eating everything as they slowly move across the rocky bottom. Abalone cannot compete and become rare or disappear altogether and the urchins will not let kelp establish itself, thus greatly reducing the diversity and value of the ecosystem. I have been told by professional divers that the perfect example of this exists in the current Point Cabrillo State Marine Conservation Area where no harvest of invertebrates has been allowed for years.

The second specific environmental problem would be caused by the shifting of fishermen from the traditional, heritage sites within the proposed MPAs to other places. What must be seriously considered in the EIR, are the predictable results of over harvesting of the most popular species and serial depletion of other species in the spaces between MPAs. You need to especially consider the Subregion 1 area because the far greater proportion of closed habitat here will have an even greater impact. For example, what is being proposed in the IPA Proposal for Subregion 1, will close 36.4 % of the Abalone habitat, 27.9 % of the Sea Urchin habitat, and 36.2 % of the Rockfish habitat. At Arena Cove, the size and spacing of MPAs makes matters even worse. It is the only port with both sport and commercial facilities in Subregion 1. Three of the four Proposals, 1-3, 4, and IPA, place large restrictive MPAs both to the immediate North and to the immediate South leaving a portion of the coast of only about 6.5 miles in length still open to fishing. This close spacing will cause fishermen to choose between concentrating their efforts near the Port or risking longer trips. There will be no medium length trips. This is a part of the world where the ocean conditions change rapidly and

4

severely so most small boats will invariably choose to stay between the proposed MPAs. This will create much greater fishing pressure in the zone of coastline adjacent to the Point Arena Pier.

The third environmental problem is an increase of pollution due to the locations of MPAs. Currently, the commercial fishermen operating out of Arena Cove use small boats and fish near the port. The proposed MPAs will force the boats to motor further when the fishing grounds near port can't support them. Longer trips mean more fuel and also require larger boats for safety; so after the enacting of MPAs you will see larger boats **and** longer trips thus multiplying the fuel consumption and the related rate of pollution even more. Bigger boats also require greater catch levels to make them economically viable so there will be more trips. More and longer trips also mean an increased chance of accident. Boat accidents - even small ones - are messy polluting affairs - with the spilled fuel, oil and debris.

The fourth environmental problem is one of public rights of access and use. I have been concerned from the beginning of the MLPA process about hidden rules and regulations that will be used after an MPA is enacted. For example from the CDFG definition of SMR "While, to the extent feasible, the area shall be open to the public for managed enjoyment and study, the area shall be maintained to the extent practicable in an undisturbed and unpolluted state. Therefore, access and use (such as walking swimming, boating and diving) may be restricted to protect marine resources." My interpretation of this is: if someone (from the unspecified "managing agency") decides unilaterally that boat traffic through the Point Arena SMR endangers some wildlife or pollutes they can force us to detour MANY MILES around it. Whenever I have brought this point up, they (MLPA staff and Proponents of SMRs) have assured me: "Oh no, that's not what we mean – we would never do that." But in spite of the memos from Fish and Game and others saying boats will never be restricted, I still see the restrictions, as quoted above and others like it, still listed on the CDFG MLPA web site under definitions. Most concerning is the lack of definition of pollution and a lack of identification of the "managing agency". I fear it might be something like a University Professor who decides that boat engines are too loud.

Assuming that we must have MPAs according to the Marine Life Protection Act, then the best way to minimize the severity of all of the problems that I have outlined, would be to approve the least restrictive array of MPAs in Subregion 1. Of the existing proposals, Proposal 2XA is the best option in this regard.. It proposes fewer and smaller MPAs with better spacing. It fulfills all CDFG requirements and satisfies the goals and objectives of the MLPA. It is the only proposal that leaves the area immediately to the south of the port of Arena Cove completely open to fishermen.

5

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:52PM P6

**MLPA CEQA Scoping Comments**
**Detailed Version July 7, 2008**

Humans as a biological species occupy a legitimate ecological niche in our coastal waters. For at least 10,000 years we have been a part of the ecosystem as fishermen, hunters and gatherers. For example there is ample evidence of the use of the Point Arena headlands (Stornetta/BLM public access area) by indigenous native people in the form of "Indian Middens". There can be no doubt that this was an important traditional and cultural site since prehistoric times. The local Pomo tribal members used this area for gathering traditional sea food up until the early 1970's when the County access site reverted to private ownership and they were denied further land-based access. This access was restored about four years ago when the BLM took over control. The restrictive MPAs proposed for the Point Arena area north of Arena Cove would again deprive them of this important traditional cultural heritage. This is clearly not the right thing to do. The Department of fish and game has the statistics to show Indigenous People's harvest of abalone if you want to see it because they issue special licenses to local Native Americans. It should be a simple matter to cross reference the Abalone take from the Point Arena Abalone Report Card site with those special Native American Licenses. Of course times have changed in the past two centuries. The human population is now more numerous and includes a multitude of ethnic groups, all of whom brought their own marine customs and heritages. Taking humans out of an ecosystem that we have long been a part of is, by itself, a change that is a negative affect on the environment.

Here are four other very specific problems that will have negative affects on our environment as a direct result of the proposed MPAs:

**1. Problem:** The lack of urchin divers will cause the formation of urchin barrens.
**Cause:** This problem has to do with a law of nature that says: If you remove a predator from an ecosystem there will soon follow a population explosion of their prey, resulting in a population depletion or even extinction of the prey species' food supply, followed closely by great fluctuations in the populations of codependent species, replacement of desirable species by undesirable species, and even the extinctions of some species. In this specific case the predator species being removed by MPAs are Human Urchin Divers, their prey is Red Sea Urchins and the preys' food supply includes Kelp. The predictable end result is called an urchin barren. An urchin barren is the marine equivalent of an over-grazed pasture. It consists of waves of sea urchins eating everything as they slowly move across the rocky bottom. Abalone cannot compete and become rare or disappear altogether. The urchins cut kelp off at the base, not allowing the kelp to establish itself as a kelp forest. Without the kelp forest the whole kelp bed ecosystem, with all of the many interdependent organisms disappears. The formation of an urchin barren greatly reduces the diversity and value of the coastal ecosystem. I have been told by professional divers that the perfect example of an urchin barren exists in the current Point Cabrillo State Marine Conservation Area where no harvest of invertebrates has been allowed for years. The threat of the development of an urchin barren is very real any where on the north coast where Commercial Sea Urchin Divers would be prevented from working.
**Suggested Mitigation:** Until the cause and effect of urchin diving can be more clearly understood, allow commercial urchin harvesting to continue within all but **one** of the

6

smaller, closely monitored MPAs with good sea urchin habitat. Once a controlled study has been completed in this single experimental MPA, changes might be warranted. There are existing CDFG regulations and economic pressures that control the commercial divers, who in turn have kept the sea urchin population in balance. The introduction or reintroduction of a predator (for example Sea Otter) would not be an acceptable solution, as it would do more damage than it would prevent. There should be research data readily available on this topic. At one time the urchin problem was so bad in Southern California that the CDFG consented to the use of poison. I heard one official claim that there are many extra large fish in the Arena Rock area of the Point Arena SMR that hold the sea urchins in check. Do not be deceived by this unscientific claim. I think he might have gotten this idea from a National Geographic article about MPAs in New Zealand. The EIR needs to show the true and complete facts surrounding the threat of urchin barrens, not data from a magazine article about an ecosystem in New Zealand. If you want to include anecdotal evidence, at least get it from actual divers or biologists familiar with the north coast of California.

**2. Problem:** The over harvesting of the most popular species and then serial depletion of other species in the spaces between MPAs.
**Cause:** There will be a shifting of fishermen from the traditional, highly productive, heritage sites within the proposed MPAs to other less productive places between MPAs. The increased fishing pressure will have a definite negative environmental effect on the more popular target species. One side effect of this is that as the most popular species become fewer, the fishermen will target other species in their stead. These newly targeted species then become depleted. This will be repeated with a new target – hence the term "serial depletion". You need to especially consider the Subregion 1 area because the far greater proportion of closed habitat here will have an even greater impact on the adjacent areas. For example, what is being proposed in the IPA Proposal for Subregion 1, will close 36.4 % of the Abalone habitat, 27.9 % of the Sea Urchin habitat, and 36.2 % of the Rockfish habitat. At Arena Cove, the size and spacing of MPAs makes matters even worse. It is the only port with both sport and commercial facilities in Subregion 1. Three of the four Proposals, 1-3, 4, and IPA, place large restrictive MPAs both to the immediate North and to the immediate South leaving only a portion of the coast of about 6.5 miles in length still open to fishing. In addition the current CDFG regulations further restrict Abalone fishermen to a depth they can only reach by holding their breath. In the case of rock fish we are limited to a legal fishing depth of less than 120 feet. For the area in front of the port of Arena Cove, the rockfish depth restriction/MPA combination has been called the "Box Effect". This "Box Effect" in conjunction with the IPA Proposal reduces the accessible Rock Fish habitat adjacent to Arena Cove to less than 7 square miles. This close spacing will cause fishermen to choose between concentrating their efforts near the Port or risking longer trips. This is a part of the world where the ocean conditions change rapidly and severely so most small boats will invariably choose to stay between the proposed MPAs. This will create much greater fishing pressure in the zone of coastline adjacent to the Point Arena Pier. There will be no medium length trips. The MLPA Initiative team, their data contractor, Ecotrust, and the CDFG have not studied this problem. This is a problem that will have the most serious affect on the local

7

environment around Arena Cove but it also will affect other areas along the coast and must therefore be a topic for the EIR.

The problem of displacement of catch is most easily shown for Abalone because the data from abalone report cards is so complete and was made available to the public by the CDFG. It follows as a logical conclusion though, that Sea Urchin and Rock Fish catch displacement will also occur for the same reasons and in approximately the same locations especially within Subregion 1 near Arena Cove. Consider the following data table from the California Department of Fish and Game:

**Table 1. Abalone report card landing sites and associated 2002-2006 reported landings.**

| | | Estimated Annual Landings (number of abalone) | | | | | |
|---|---|---|---|---|---|---|---|
| Ref # | Report Card Site | 2002 | 2003 | 2004 | 2005 | 2006 | Annual Average |
| 1 | [redacted] | 1,673 | 1,574 | 4,223 | 15,602 | 18,511 | [redacted]* |
| 2 | Arena Cove | 12,628 | 11,917 | 10,946 | 7,364 | 9,786 | 10,528 |
| 3 | Moat Creek | 6,153 | 7,716 | 7,522 | 5,520 | 7,094 | 6,801 |
| 4 | Schooner Gulch | 587 | 730 | 559 | 803 | 388 | 613 |
| 5 | Saunders Landing | 912 | 1,137 | 1,769 | 1,338 | 906 | 1,212 |
| 6 | Anchor Bay | 5,446 | 6,470 | 5,593 | 4,759 | 4,945 | 5,443 |
| 7 | Robinson Pt | 789 | 1,311 | 1,164 | 605 | 1,061 | 986 |
| 8 | Gualala Point | 1,181 | 1,311 | 970 | 817 | 958 | 1,047 |
| 9 | Sea Ranch | 14,466 | 13,710 | 13,115 | 10,941 | 10,822 | 12,610 |
| 10 | Black Point | 360 | 293 | 171 | 310 | 0 | 227 |
| 11 | Stewarts Point | 2,418 | 2,458 | 2,077 | 1,155 | 1,760 | 1,974 |
| 12 | Rocky Point | 376 | 561 | 285 | 760 | 311 | 459 |
| 13 | Horseshoe Cove | 2,418 | 2,011 | 1,860 | 1,479 | 1,346 | 1,823 |
| 14 | Fisk Mill Cove | 7,043 | 7,369 | 8,127 | 8,125 | 8,259 | 7,784 |
| 15 | Salt Point | 11,763 | 11,738 | 11,414 | 8,533 | 9,113 | 10,512 |
| 16 | Ocean Cove | 5,777 | 6,664 | 5,855 | 5,280 | 7,378 | 6,191 |
| 17 | Stillwater Cove | 3,643 | 4,325 | 2,956 | 4,872 | 3,495 | 3,858 |
| 18 | Timber Cove | 8,713 | 9,221 | 7,990 | 8,209 | 9,165 | 8,660 |
| 19 | Fort Ross & Reef Camp | 36,546 | 37,429 | 37,186 | 32,767 | 43,002 | 37,386 |
| 20 | Jenner | 1,882 | 2,344 | 2,580 | 2,746 | 2,201 | 2,350 |
| 21 | Salmon Creek | 60 | 10 | 1,803 | 803 | 2,485 | 1,032 |
| 22 | Bodega Head | 1,099 | 1,524 | 1,016 | 1,633 | 1,139 | 1,282 |
| 23 | Tomales Point | 2,873 | 3,719 | 2,191 | 2,211 | 1,579 | 2,515 |
| 24 | Point Reyes | 622 | 968 | 639 | 465 | 388 | 616 |
| | **NCCSR total** | **129,428** | **136,510** | **132,011** | **127,097** | **145,885** | **134,186** |

*The Point Arena Lighthouse report card landing site includes data from Stornetta Ranch which opened to public access in 2004. Due to the recent increase of effort at this site, averages from 2002-2003 and 2005-2006 are reported below in Table 5 **to reflect differential catch before and after the public gained access to Stornetta Ranch**; data from 2004 are excluded because the area opened part way through the abalone season.

First look at line 1. Notice that for the years '02 and '03 the average take is1,624 the year '04 was the year that most of the Point Arena Lighthouse area (the BLM/Stornetta) became open to the general public. In the following two years, '05 and '06 the average became 17,057, a difference of 15,433. This seems like a large increase in over all take from the state waters, but it isn't. Looking at the bottom line you will see

8

the total take for the North Central Coast has not changed significantly. The bottom line variations you do see are most likely due to weather and tides. It should be obvious that there are a finite number of fishermen – they just went to different areas. For example look at line two, Arena Cove, a public access only about 2 miles south of the BLM access, in the same time that the Point Arena catch increased by 15,433, the Arena Cove catch decreased by 3698. This is not a coincidence. Look at line 9, The Sea Ranch, about 20 miles south. Their catch decreased by 3207 in the same time frame.

If you reduce the Point Arena take to zero with the Point Arena SMR and the Sea Lion Cove SMCA and add to that the closure at Saunders Reef SMCA and the Stewarts Point SMR, the combined catch shift will cause a reversal of this trend. Unfortunately for Arena Cove and Sea Ranch and other Subregion 1 areas, this reversal will not just go back to what it was before the opening of the BLM/Stornetta access. There will be an additional catch displacement of 5087 abalones, just from the Point Arena, Saunders Reef, and Stewarts Point "Report Card Sites". If we use mathematics to calculate the increased abalone take at The Sea Ranch and Arena Cove areas due to displacement by the IPA Proposal, here's what to expect. Using the same proportion as they decreased with the opening of the BLM/Stornetta access opener, the predicted increase from their '05-'06 average will be an increase of 5229 abalones at Arena Cove and 4367 abalones at The Sea Ranch. Assuming three abalones per person there will be 1743 more people at Arena Cove and 1456 at The Sea Ranch locations. Will there be room for them? I don't think so. Will there be enough resource for them? Who knows? Will there be a negative environmental impact? Absolutely! How much will the overall effect be? That's a good question that needs answering. I have shown a reasonable estimate here for abalones. One can logically expect a similar effect for any other species.

You can check my calculations yourself. You may use different approaches to do your own mathematical analyses, but the results will be similar because the logic is correct. There are some who will claim that the spillover effect, large mature organisms migrating out of MPAs, will compensate for the displacement of fishermen, but in the case of abalone and sea urchins this will not be true. The adults of these species will not migrate far enough along the coast to matter. With rockfish there is no data that I am aware of that shows that the spillover will be large enough to make up for displacement. **Suggested Mitigation:** Remove excess MPAs that are deemed unnecessary by the CDFG to the overall program; especially those nearest to ports and traditional public access points. Here is what the Department said about the Saunders Reef SMCAs on page 3 of the April 18, 2008 Memorandum from John Ugoretz: "The Department recommends removing the following MPAs because they fall short of scientific and Blue Ribbon Task Force guidance for level of protection and are not necessary to meet scientific guidance on size, spacing, and habitat representation:" The first on this list are Proposals' 1-3 and 4 Saunders Reef SMCAs. The IPA version of the Saunders Reef SMCA is virtually identical to that of Proposal 4, so the CDFG evaluation would also apply to it. So remove the Saunders Reef SMCA and also remove the Sea Lion Cove SMCA which does not meet the criteria either but was left off the CDFG list. Or just adopt the 2XA proposal for Subregion1, which basically has already reduced the number of unnecessary MPAs. Additionally, the State Government should fund increases in parking lot sizes and amenities and access trails, since the MLPA is a state mandate and many access points are State Parks and/or adjacent to State Highway 1.

9

3. **Problem:** There will be an increase of pollution from boats due to the locations of MPAs. There also will be an increase of pollution and environmental damage on the land near the remaining areas of public access due to the increased parking and foot traffic in some areas.
**Cause:** The root cause here is the same as in problem 2 above, namely the displacement of users to fewer areas. I will provide further details in two separate areas: A. Boat access related and B. Land access related.
**A. Boat access related:** Currently, the fishermen operating out of Arena Cove use small boats and fish near the port. It is the ideal sustainable fishery of small boats, short trips, and commercially taken local products sold to local consumers as well as to world wide markets. The proposed MPAs will force the commercial fleet (and the larger sport boats) to motor further when the fishing grounds near port can't support them, because of the reduced size of the fishing grounds and greater fishing pressure. The unique placement of the MPAs very near the Port of Arena Cove will cause a reduction or end of medium distance fishing trips. Longer trips mean more fuel consumption. Longer trips also require larger boats for safety; so after the enacting of MPAs you will see larger boats **and** longer trips thus multiplying the fuel consumption and related rate of pollution even more. So boating traffic will be more concentrated closer to port, increasing pollution there, and at the same time there will be an increase in pollution overall, due to the need for more extended trips by larger vessels. Bigger boats also require greater catch levels to make them economically viable. More trips and longer trips also mean an increased chance of accident. Boat accidents - even small ones - are messy affairs - with all the fuel, oil, metals, plastics, and other debris. And don't forget the fuel burned by helicopters and rescue boats and the recovery of wrecked vessels. The severity and quantity of these effects will vary due to the locations of MPAs relative to the ports and which fishery is being considered, but all ports will be affected in these ways. In fact longer and more frequent trips by bigger boats also will cause more disturbances of marine birds and marine mammals.
**B. Land access related:** This part of the problem was a special concern of The Sea Ranch residents who attended the Scoping Meeting in Gualala as they have several Government mandated Public Access Sites along the length of their privately owned development. The problem is most obvious on days of very low tides during abalone season. Even under current situations the parking lots are inadequate in capacity and too few, so fishermen often just pull off the road, creating a traffic hazard and damaging roadside flora and fauna. Because the MPAs reduce the number of sites open to the public, even more people will be concentrated into the fewer permitted access points increasing the damage there.

**Suggested Mitigation:** Remove excess MPAs that are deemed unnecessary by the CDFG to the overall program; especially those nearest to ports and traditional public access points; for example: the Saunders Reef SMCA, and the Sea Lion Cove SMCA. (As explained in more detail in the mitigation statement for Problem 2 above.) Or adopt the 2XA proposal for Subregion1. In addition, State Government funded increases in parking and access trails seems appropriate since the MLPA is a state mandate and many access points are state parks and/or adjacent to State Highway 1

10

**4. Problem:** Public rights of access and recreational use of public commons would be further reduced without due process. I remember seeing the word "recreation" in a list of topics covered by CEQA on the large screen during the Scoping Meeting. This problem would definitely come under that heading.
**Cause:** I have been worried from the beginning of the MLPA process about hidden rules and regulations that will be used after an MPA is enacted. This is one aspect of MPAs that has been largely ignored. Wording in the definition of MPAs will allow an unspecified "managing agency" to restrict even activities "such as walking swimming, boating and diving". Here's one example from the CDFG definition of an SMR:

> "**Restrictions [36710(a) PRC]:** it is unlawful to injure, damage, take or possess any living, geological or cultural marine resource, except under a permit or specific authorization from the managing agency for research, restoration or monitoring purposes. While, to the extent feasible, the area shall be open to the public for managed enjoyment and study, the area shall be maintained to the extent practicable in an undisturbed and unpolluted state. Therefore, access and use (such as walking swimming, boating and diving) may be restricted to protect marine resources."

An example of the application of this rule could be: if someone (from the unspecified "managing agency") decides unilaterally that boat traffic through the Point Arena SMR endangers some wildlife or causes some form of pollution, they could force boaters to detour MANY MILES around the SMR. Whenever I have brought this point up, they (MLPA staff and Proponents of SMRs) have assured me: "Oh no, that's not what we mean – we would never do that." But in spite of the memos from Fish and Game and others saying boats will never be restricted, I see the restrictions, as quoted above and others like it, still listed on the CDFG MLPA web site under definitions. Most concerning is the lack of a definition of pollution and a lack of identification of the "managing agency". I fear it might be something like a University Professor who decides that boat engines are too loud, so by edict he can prevent the nonconsumptive uses that have been enjoyed for generations.

If, indeed An EIR is supposed to look into recreational concerns, this seems to me to be a perfect place to analyze the affects of MPAs. During the many meetings I attended there was a belief expressed by some that ANY disturbance is too much. Some one must make an unbiased determination of the facts and put it before the pubic in clear terms. An EIR seems the appropriate vehicle for this determination of how the MPAs and special closures affect nonconsumptive recreational users like surfers, beachcombers, nonconsumptive divers, birdwatchers, boaters and recreational watercraft users of all types, etc.
**Suggested Mitigation:** Change the wording of the CDFG definitions to allow all nonconsumptive uses within any MPA and to control pollution and disturbance of wildlife by the application of laws and regulations already existing outside the MLPA.

//

FROM : THE LOFT FAX NO. : 707 884 4424 Jul. 07 2008 05:57PM P12

**Conclusion:** Our coastal area is now supposed to be shared by all U.S. citizens equally. The MLPA, as it is currently being applied to the area called Subregion 1, is not being applied in a uniform, equal fashion. The MLPA Proposals have been given preferential treatment in favor of the interest of the "Academic Elite" (researchers associated with university and government science programs), large organized Preservationist Organizations working with professional lobbyists, and specialized user groups like nonconsumptive divers. This is being done at the great expense of the interests of the majority of the residents of local communities whose cultural heritage, economics and individual life styles are dependent upon a sustainable, modest consumptive use of our marine resources. Recent efforts by a myriad of government agencies has managed marine wildlife resources responsibly and reported many successes. The further reductions and limitations in publicly available marine resources, as imposed by the MLPA proposals in Subregion 1, are clearly excessive and unnecessary, to the point of creating more environmental problems than they solve, as I have outlined above.

Assuming that we must have MPAs according to the Marine Life Protection Act, then the best way to minimize the severity of all of the problems that I have outlined, would be to approve the least restrictive array of MPAs, especially in Subregion 1. Of the existing proposals, Proposal 2XA is the best option in this regard. It is the only proposal that is officially backed by local communities (with official endorsements from the County of Mendocino, the Cities of Fort Bragg and Point Arena, The Sea Ranch Association, and the Farm Bureaus of Mendocino and Sonoma Counties). 2XA proposes fewer and smaller MPAs with better spacing. It fulfills all CDFG requirements and satisfies the goals and objectives of the MLPA. It is the only proposal that leaves the area to the south of the port of Arena Cove completely open to fishermen. Thus proposal 2XA not only has lowest environmental impact, it also, because of its local backing, would have the additional advantage of having increased local stewardship of marine resources and more local support for enforcement.

Allan Jacobs

Allan Jacobs
P.O. Box 33
Point Arena, CA 95468

(707) 882-2455
gbcottage@mcn.org

12