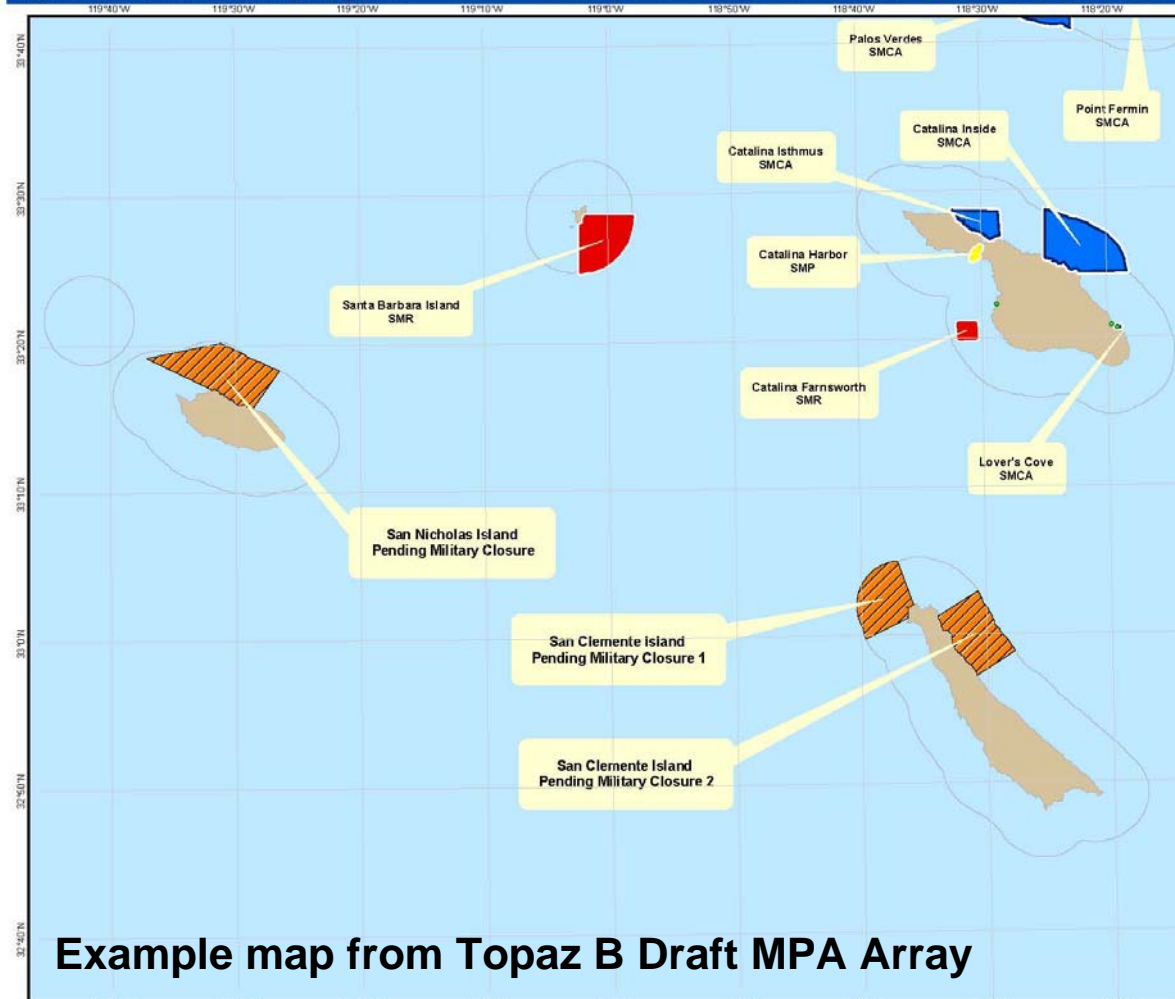


Pending Military Closures

MLPA South Coast Study Region:

Subregion 7 - Santa Catalina and Santa Barbara Islands



For more detailed maps please visit:
www.marinemap.org/marinemap

California Marine Life
Protection Act (MLPA) Initiative

**Pending military
closures are
included in:**

- Lapis A
- Opal A
- Topaz B
- External B

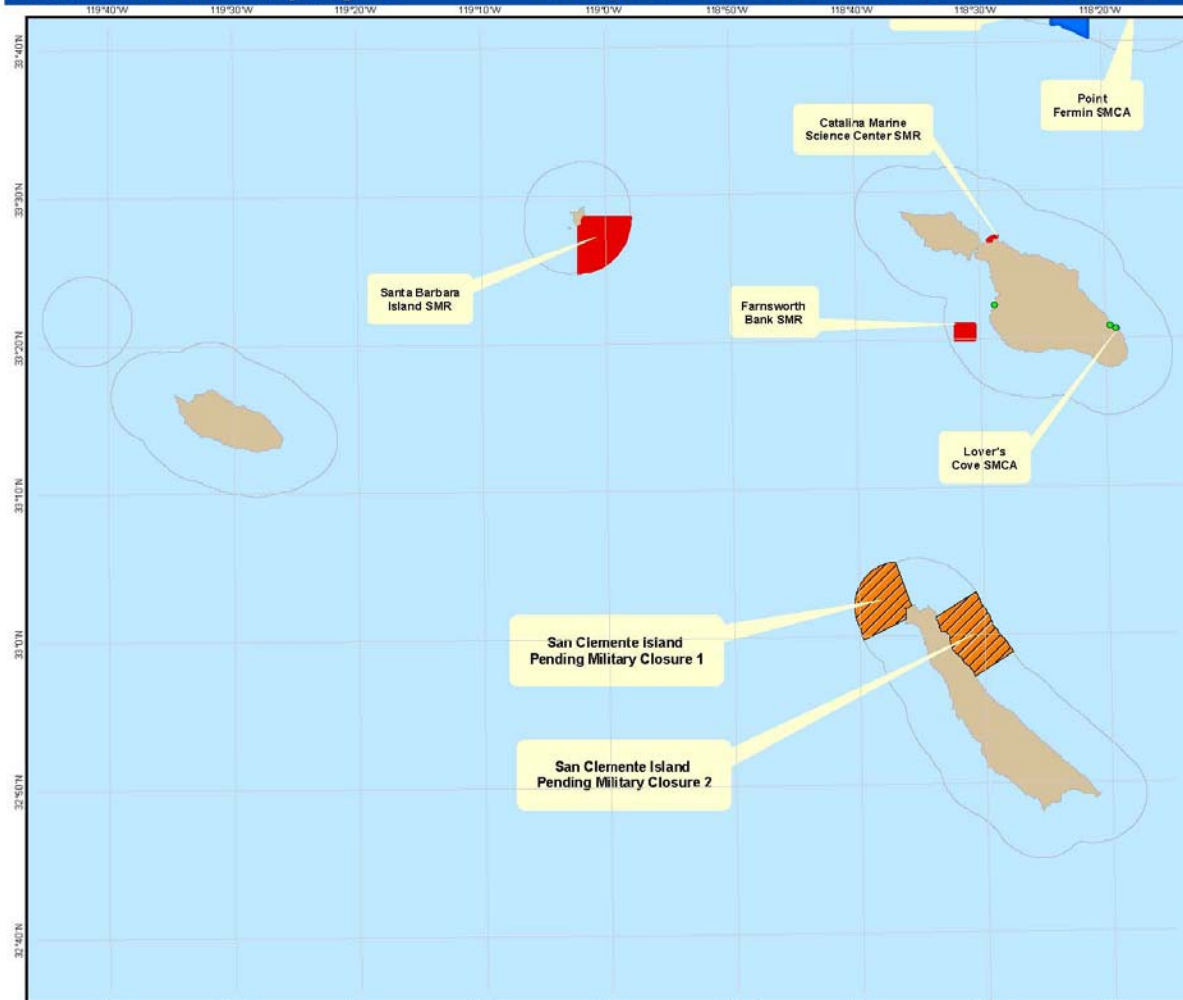
This map represents a draft marine protected area (MPA) array generated by a cross-interest work group within the MLPA South Coast Regional Stakeholder Group. This draft MPA array is under review; it is NOT a recommendation to the California Fish and Game Commission.

Example map from Topaz B Draft MPA Array

External Proposal A

MLPA South Coast Study Region:

Subregion 7 - Santa Catalina and Santa Barbara Islands



For more detailed maps please visit:
www.marinemap.org/marinemap

California Marine Life
 Protection Act (MLPA) Initiative

Round 1
 Draft External Proposal A

Legend

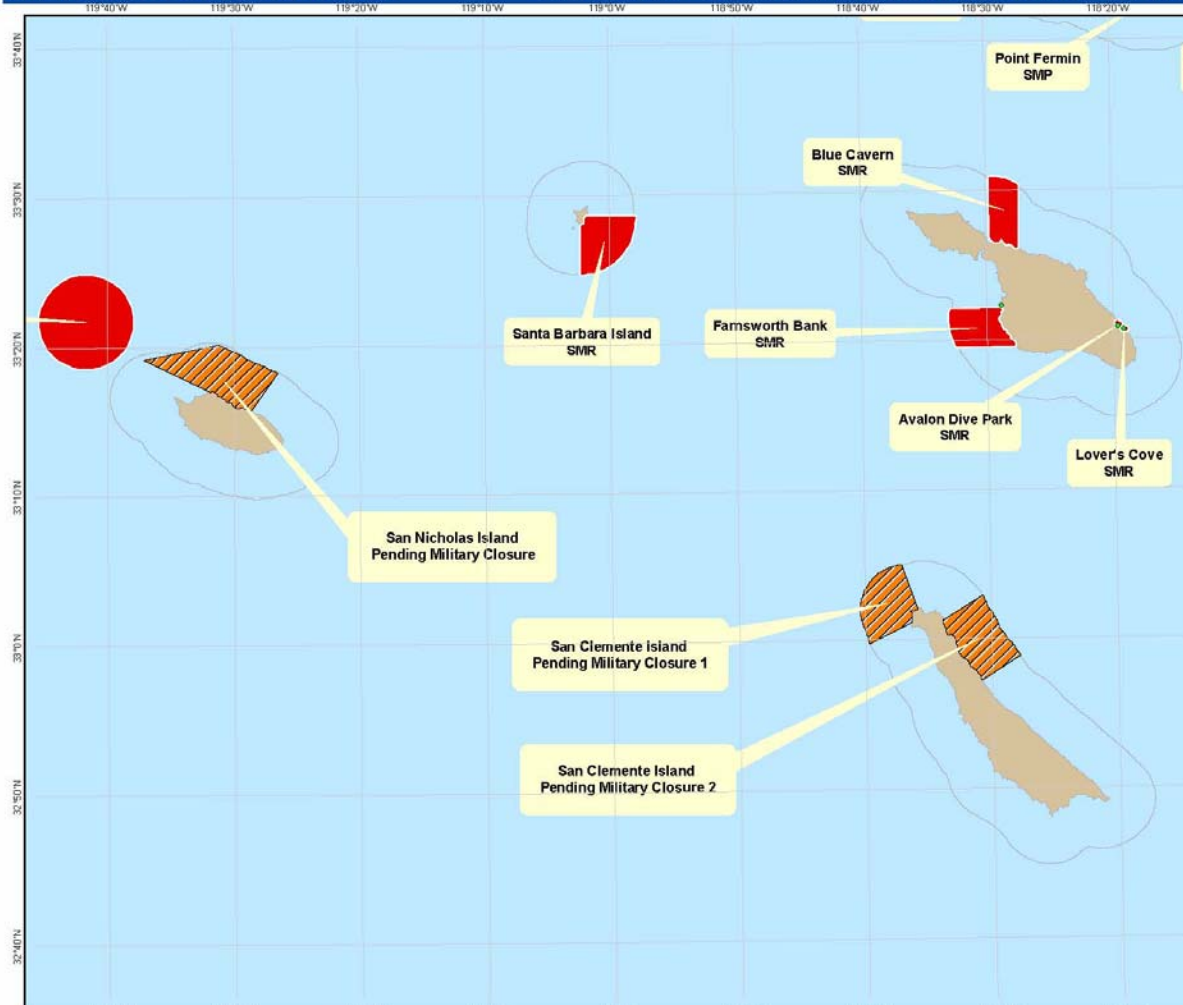
- Proposed State Marine Conservation Area (SMCA)
- Proposed State Marine Park (SMP)
- Proposed State Marine Reserve (SMR = No Take)
- Pending Military Closures
- South Coast Study Region Boundary
- Coastal Access

This map represents a marine protected area (MPA) proposal that has been submitted external from the MLPA South Coast Regional Stakeholder Group MPA planning process. This external proposal is under review; it is NOT a recommendation to the California Fish and Game Commission.

Lapis B Draft MPA Array

MLPA South Coast Study Region:

Subregion 7 - Santa Catalina and Santa Barbara Islands



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California Marine Life Protection Act (MLPA) Initiative

Round 1
 Lapis B Draft MPA Array

Legend

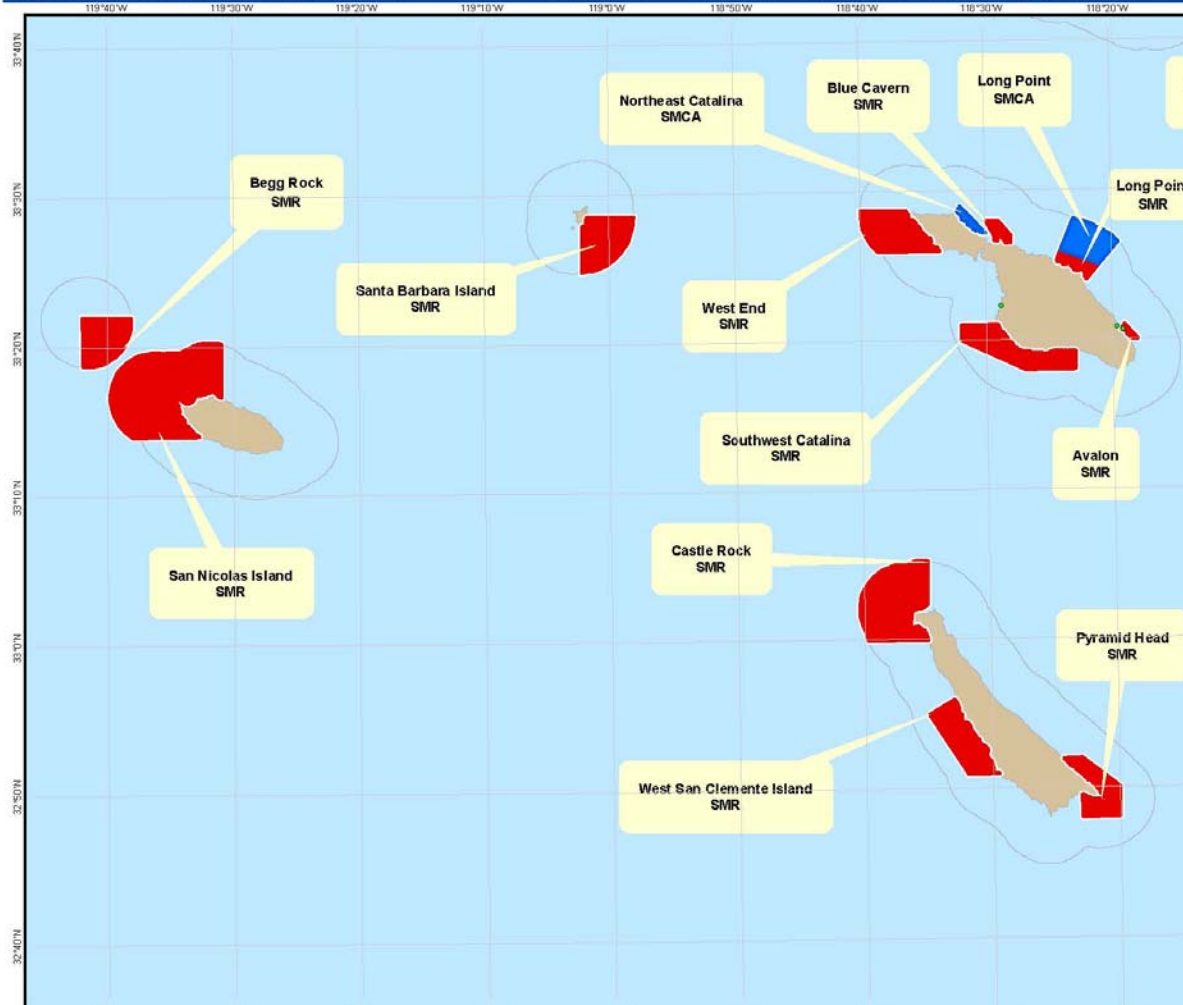
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Topaz A Draft MPA Array

MLPA South Coast Study Region:

Subregion 7 - Santa Catalina and Santa Barbara Islands



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www.marinemap.org/marinemap

California Marine Life
 Protection Act (MLPA) Initiative

Round 1
 Topaz A Draft MPA Array

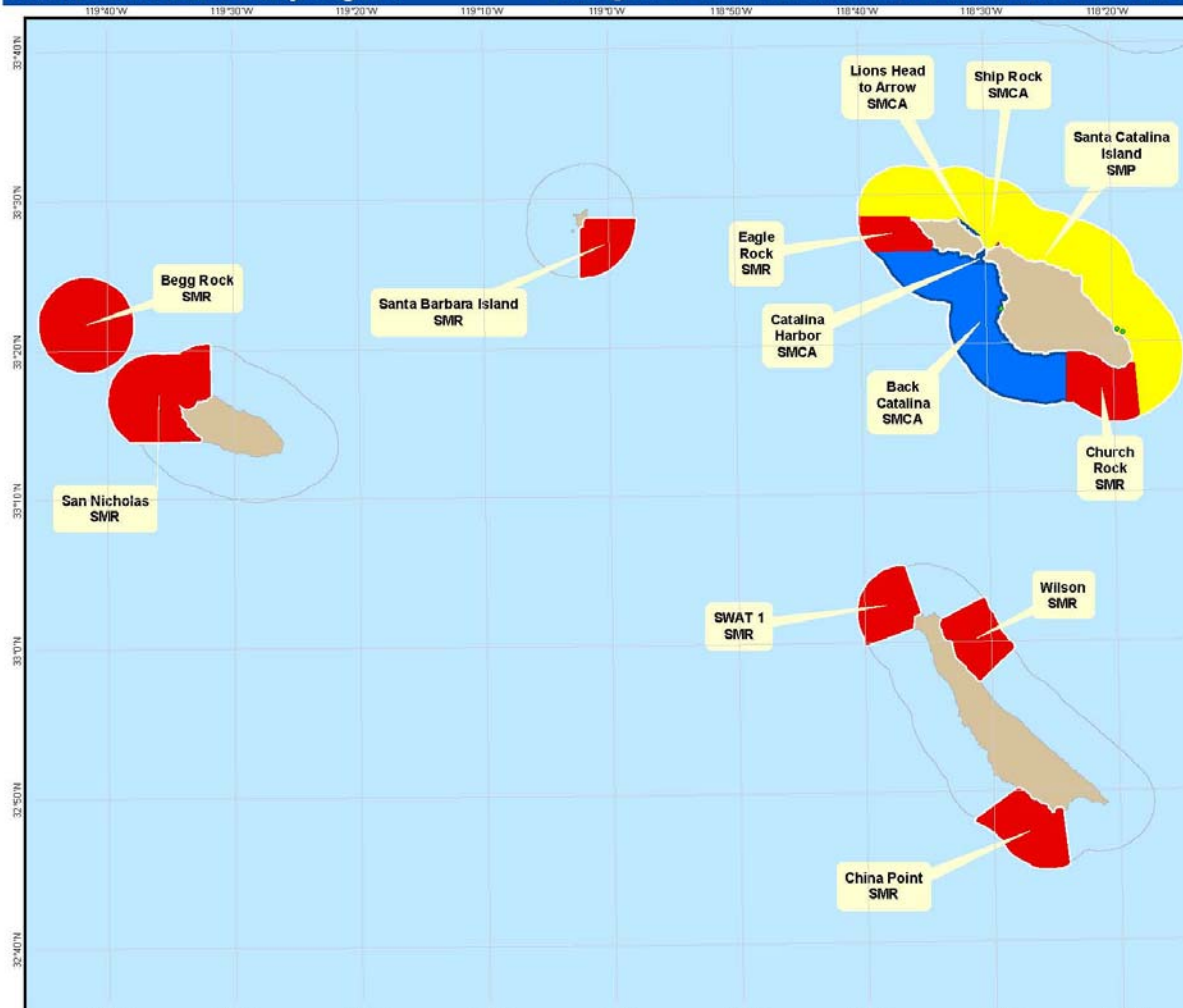
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Opal B Draft MPA Array

MLPA South Coast Study Region:

Subregion 7 - Santa Catalina and Santa Barbara Islands



For more detailed maps please visit:
www.marinemap.org/marinemap

California Marine Life Protection Act (MLPA) Initiative

Round 1
 Opal B Draft MPA Array

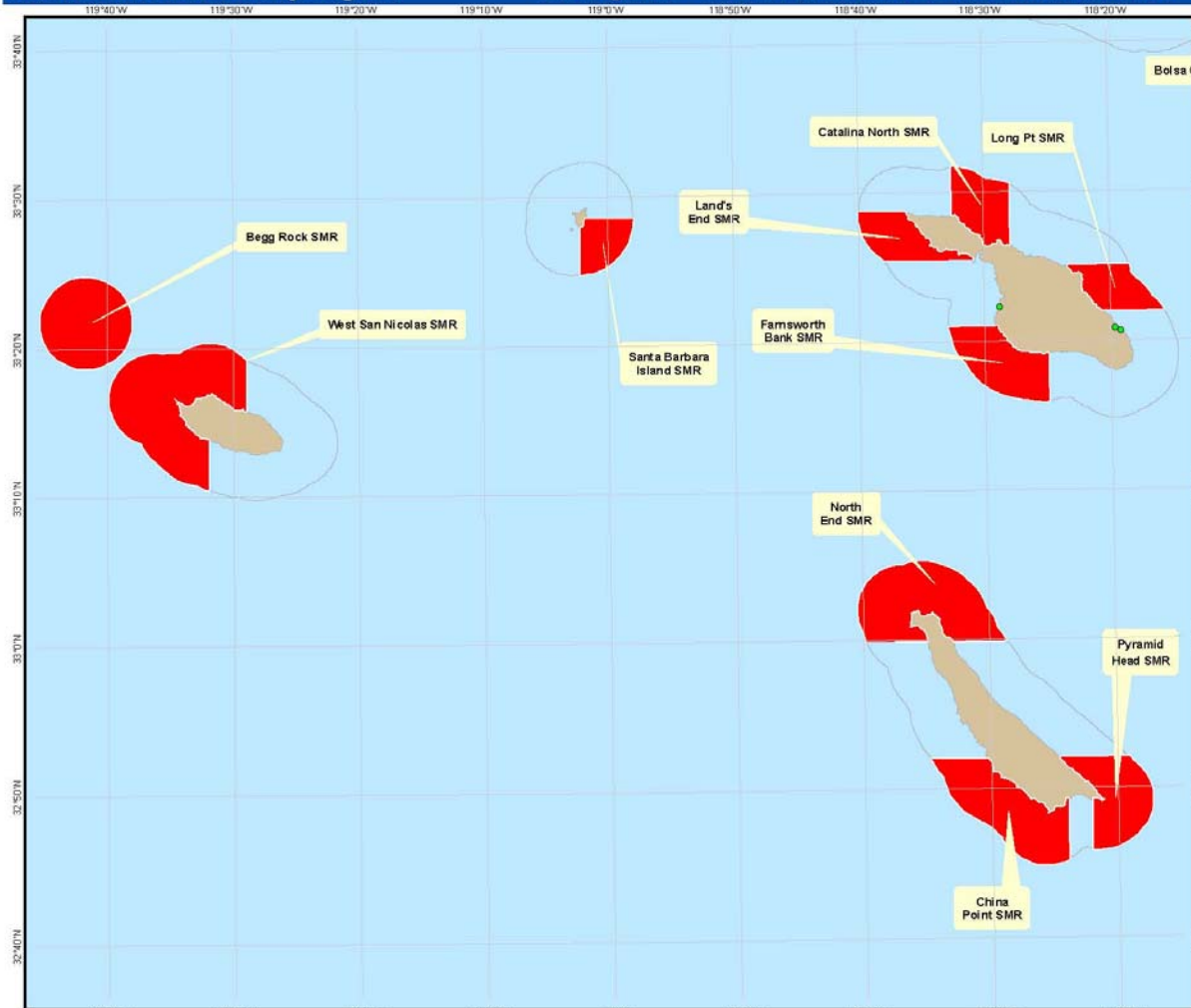
- Legend**
- Proposed State Marine Conservation Area (SMCA)
 - Proposed State Marine Park (SMP)
 - Proposed State Marine Reserve (SMR = No Take)
 - South Coast Study Region Boundary
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External Proposal C

MLPA South Coast Study Region:

Subregion 7 - Santa Catalina and Santa Barbara Islands



For more detailed maps please visit:
www.marinemap.org/marinemap

California Marine Life Protection Act (MLPA) Initiative

Round 1
 Draft External Proposal C

- Legend**
- Proposed State Marine Conservation Area (SMCA)
 - Proposed State Marine Park (SMP)
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This map represents a marine protected area (MPA) proposal that has been submitted external from the MLPA South Coast Regional Stakeholder Group I/PA planning process.
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Ecology of Military Islands

- **San Clemente and San Nicolas islands are the most isolated and remote islands in the Southern California Bight**
- **Less accessible to various interest groups**
 - Larger kelp bass, sheephead and lobsters
 - Abundant giant seabass
- **Less likely to be affected by mainland pollution**
- **Least impacted by invasive species**
 - E.g., *Sargassum filicinum*



Ecology of Military Islands

- **More rocky reef habitat and kelp beds**
 - Less pollution and sedimentation, and presence of large predators contribute to abundant kelp
- **Significantly deeper kelp habitat**
 - Due to water clarity
- **Unusually large stands of surfgrass**
- **Largest populations of purple hydrocoral**
 - Excluding Farnsworth Bank (Santa Catalina)
- **Critical and substantial marine mammal haulouts and bird roosting areas**



Ecological Features of San Clemente

- **Northern range extensions of Panamic species**
 - Panamic arrow crab (*Stenorhynchus debilis*)
 - Warty sea slug (*Pleurobranchus areolatus*)
 - Arbacia sea urchin (*Arbacia incisa*)
 - Guadalupe cardinalfish (*Apogon guadalupensis*)
 - Pink cardinalfish (*A. pacificus*)
 - Swallow damselfish (*Azurina hirundo*)
 - Purple brotula (*Oligopus diagrammus*)
- **Only rock-based morph of elk kelp (*Pelagophycus porra*) at the islands**
- **Remnant population of endangered white abalone (*Haliotis sorenseni*)**



Ecological Features of San Nicolas

- **Significantly deeper eelgrass habitat**
 - Due to water clarity
- **Largest remaining remnant populations of endangered black abalone**
- **Presence of large predators enhances ecosystem function**
 - Larger predatory fish (e.g. kelp bass, sheephead, giant seabass) and invertebrates (e.g., lobster)
 - Resident southern sea otter population

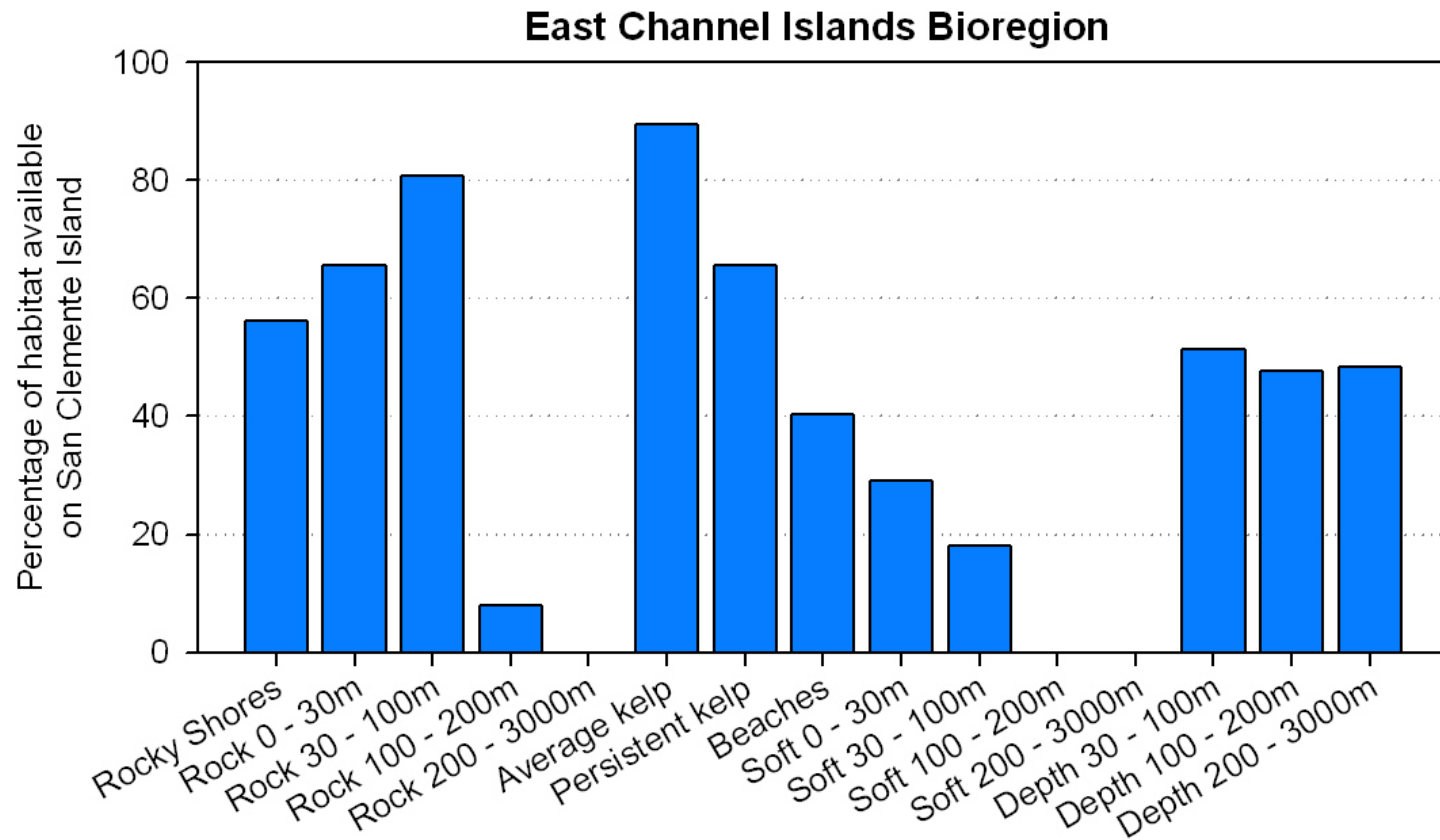


Ecological Features of Begg Rock

- **Emergent sheer pinnacle reef 10 miles west of San Nicolas**
- **Unique invertebrate assemblage, including:**
 - Purple hydrocoral
 - Shallow aggregations of *Metridium* and other anemones

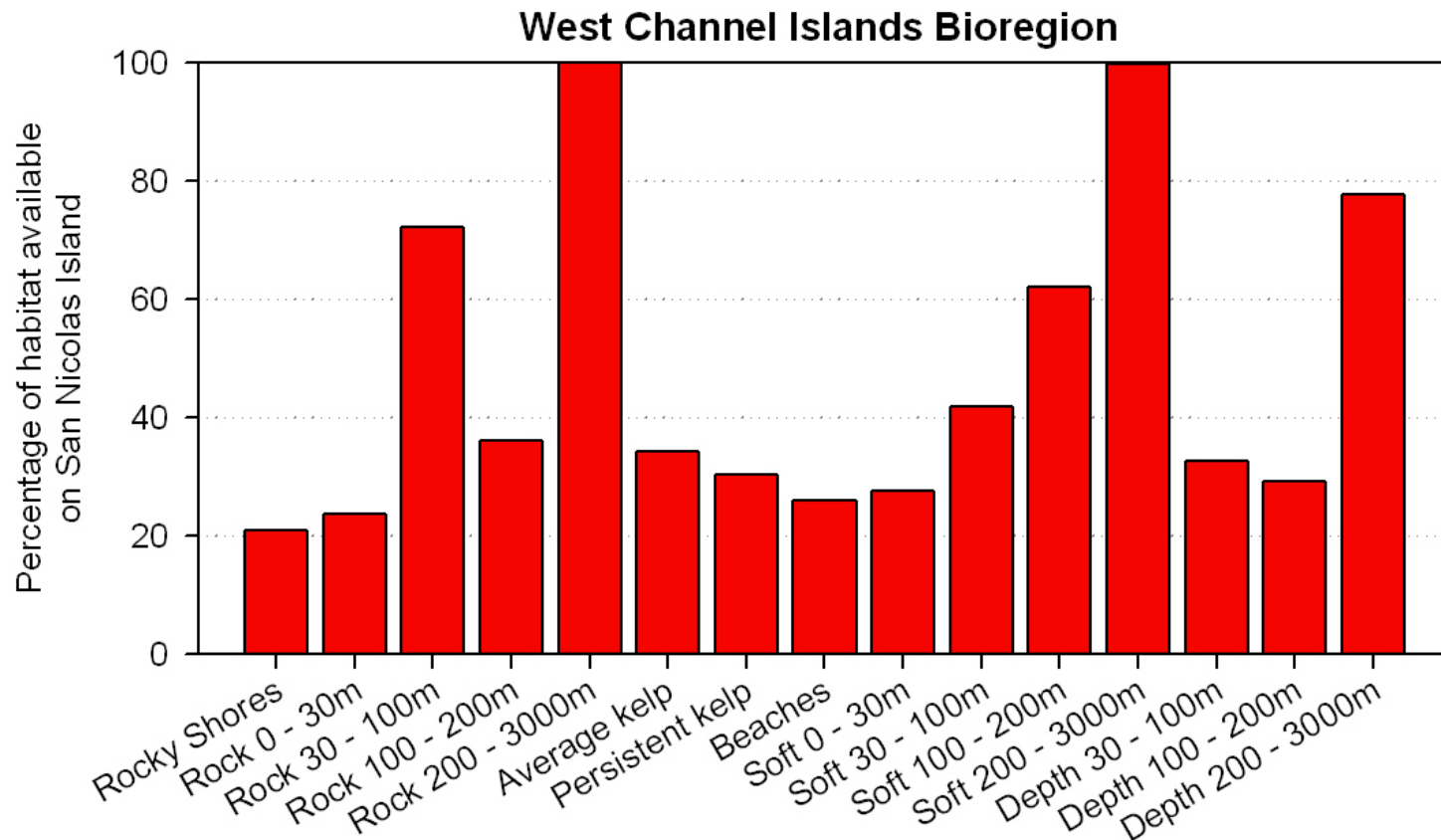


Habitats at San Clemente Island





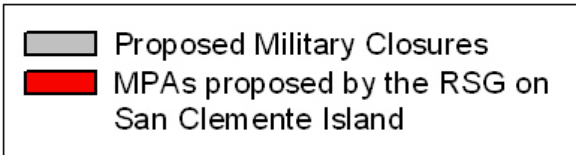
Habitats at San Nicolas Island





Evaluation of MPAs at San Clemente

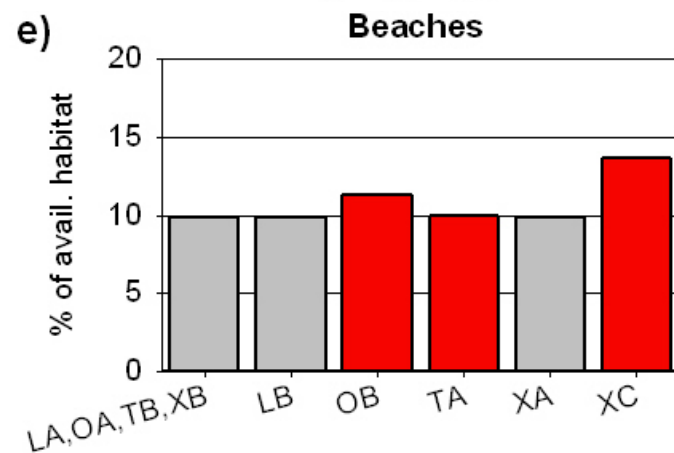
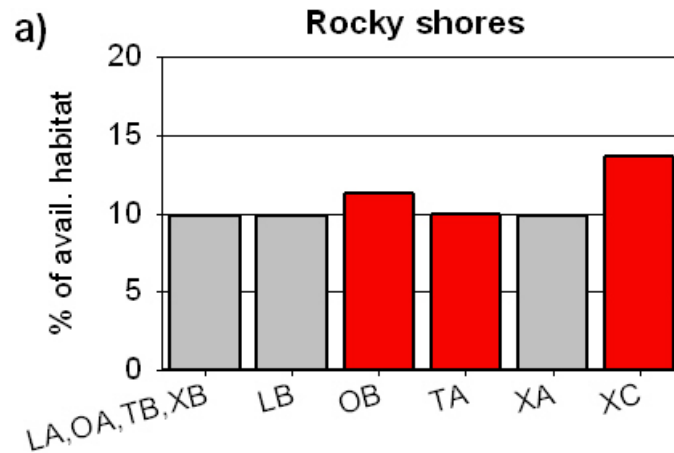
East Channel Islands Bioregion



Draft MPA Arrays and Draft External MPA Proposals

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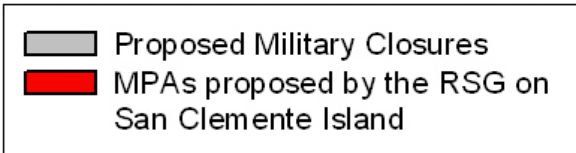
*Includes pending military closures





Evaluation of MPAs at San Clemente

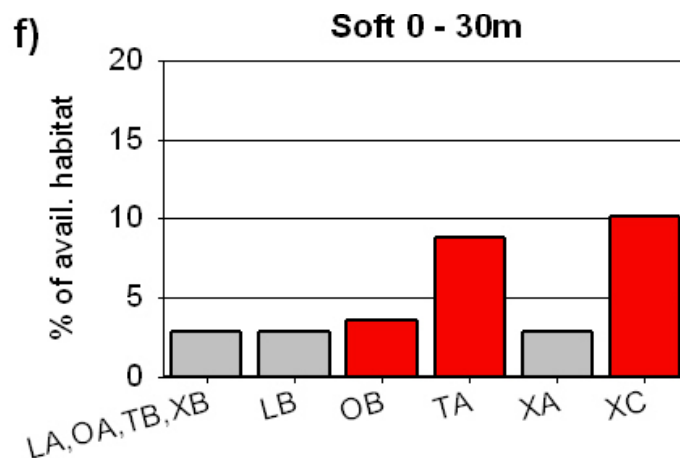
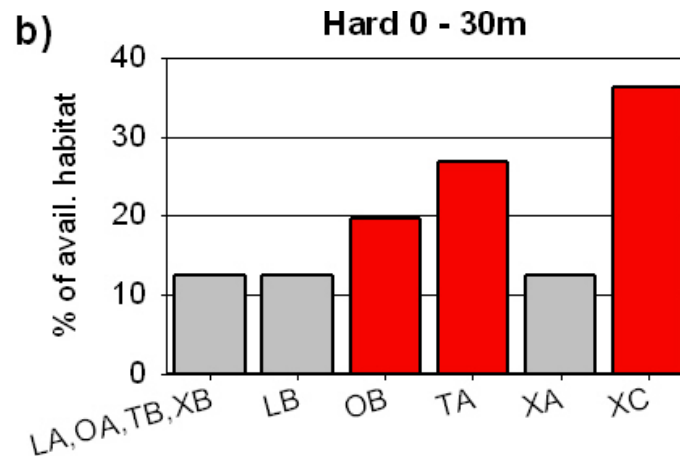
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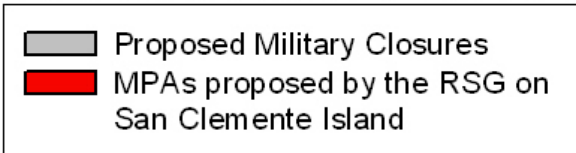
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Evaluation of MPAs at San Clemente

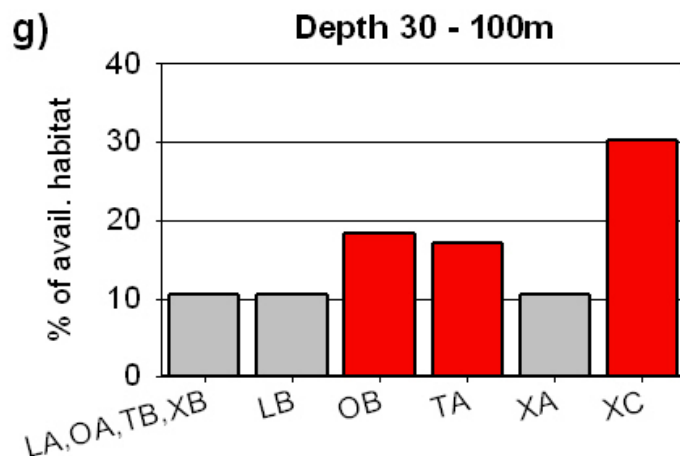
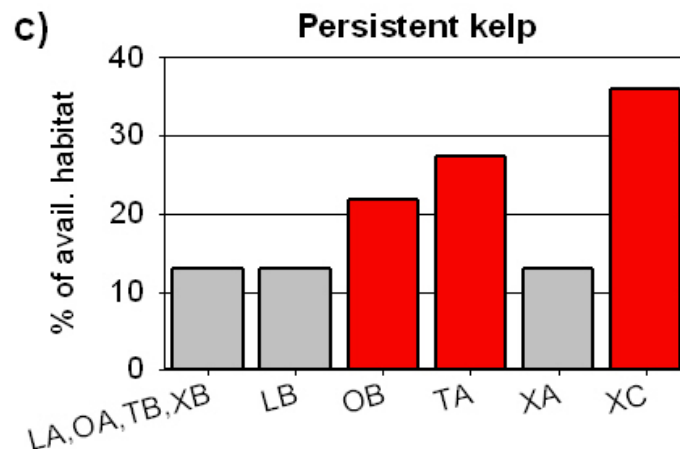
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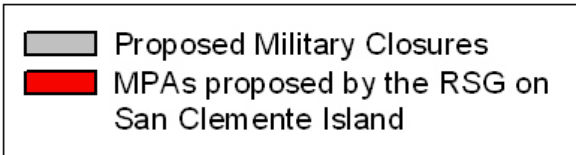
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Evaluation of MPAs at San Clemente

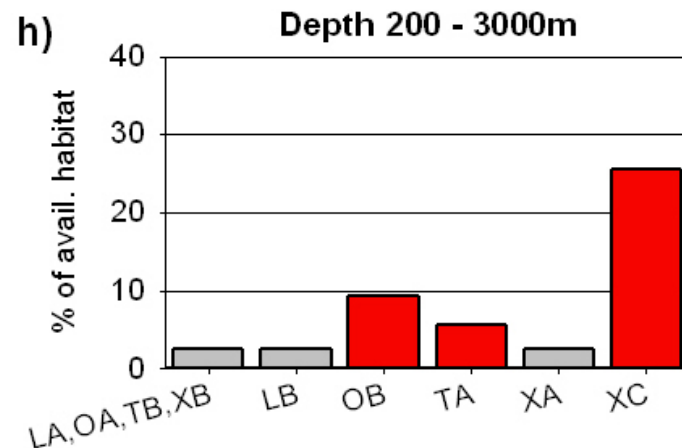
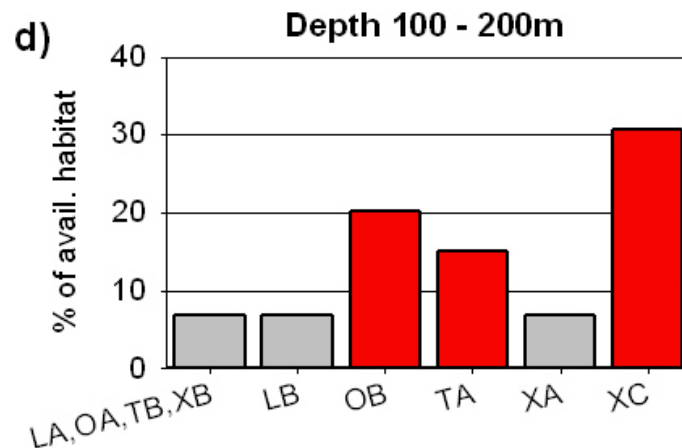
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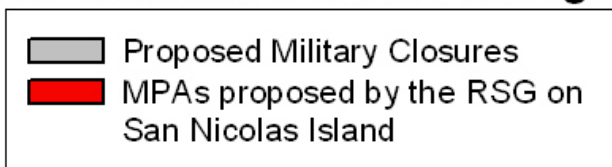
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Evaluation of MPAs at San Nicolas



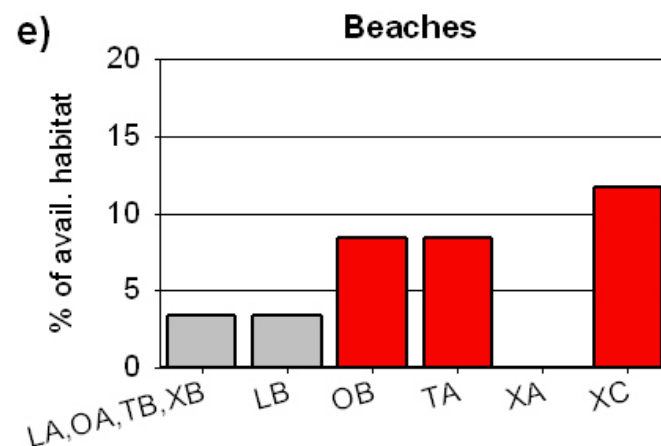
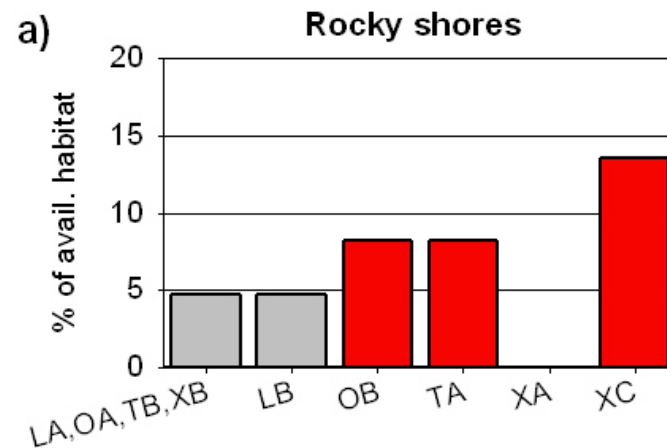
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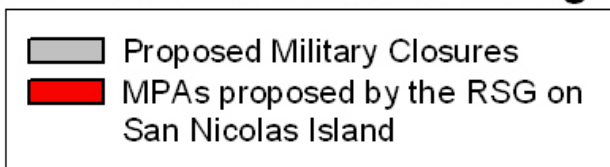
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Evaluation of MPAs at San Nicolas



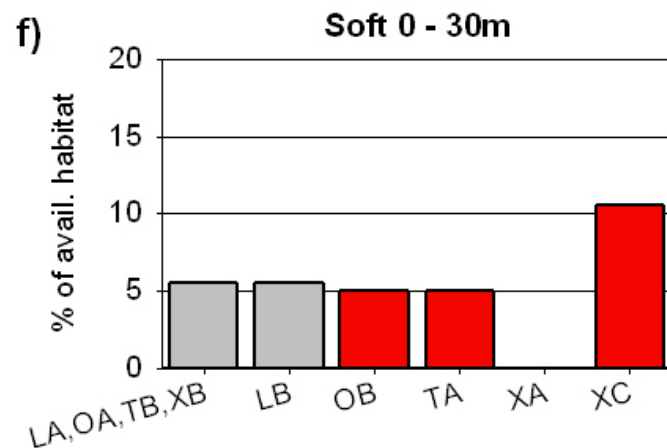
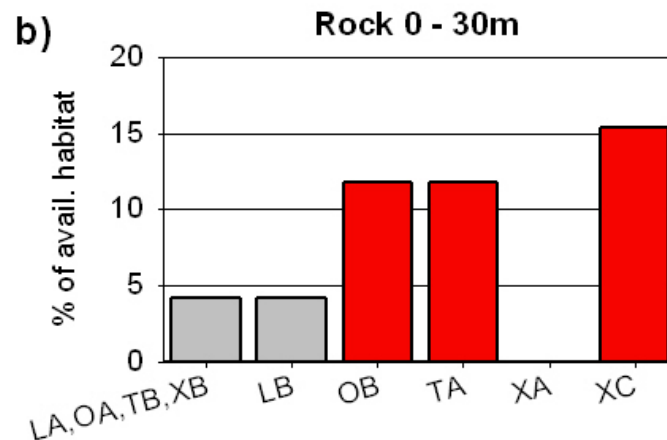
West Channel Islands Bioregion



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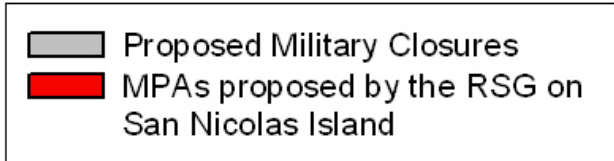
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Evaluation of MPAs at San Nicolas

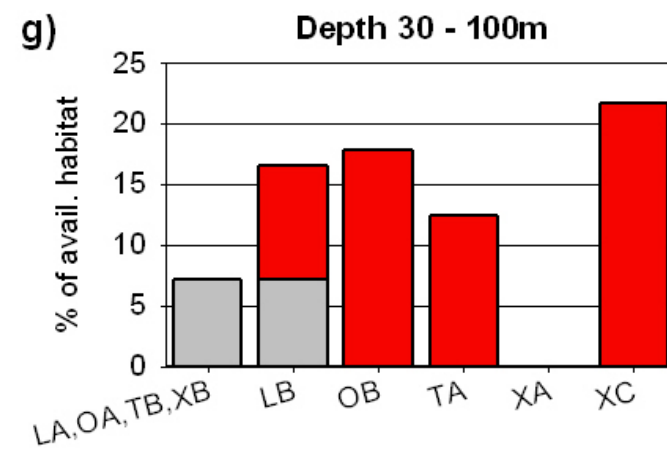
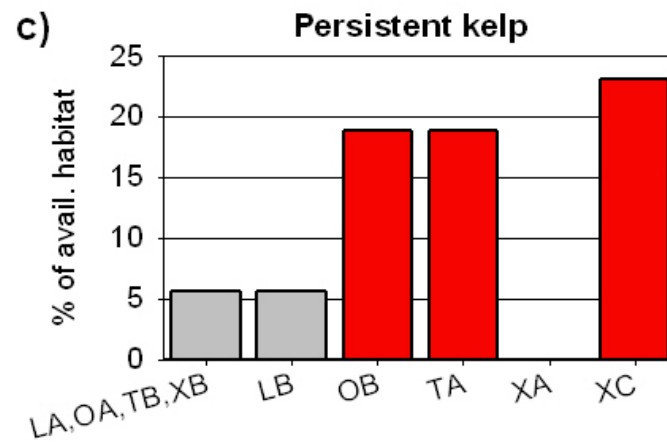
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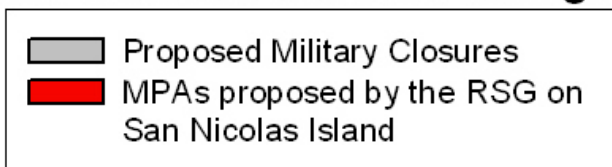
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Evaluation of MPAs at San Nicolas



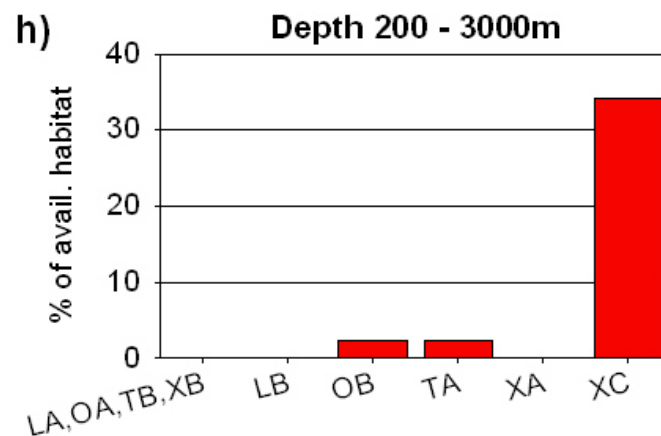
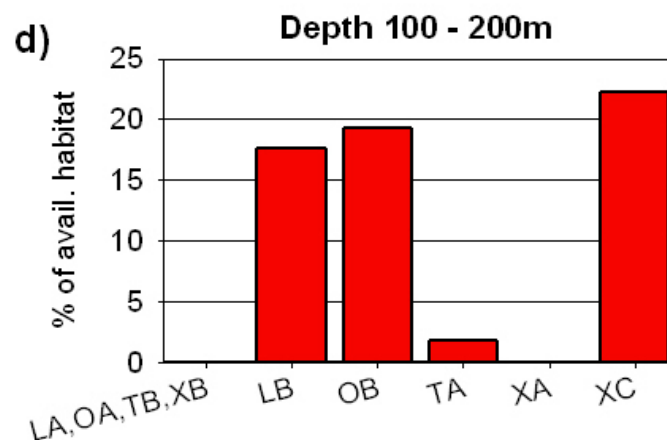
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San Nicolas Island Pending Military Closure 1

- Located in West Channel Islands Bioregion
- Includes:
 - Some kelp (*Macrocystis pyrifera*)
 - Low relief habitats
 - Abundant purple urchins
 - One subtidal monitoring site and one biodiversity monitoring site
- Does not include:
 - Large persistent kelp beds (to the northwest)
 - Resident breeding southern sea otter (*Enhydra lutris nereis*) population (to the northwest)



San Clemente Island Pending Military Closure 1

- Located in East Channel Islands Bioregion
- Includes:
 - Castle Rock and 9-Fathom Bank
 - Submerged rocky pinnacles
 - Abundant giant kelp (*Macrocystis pyrifera*), deeper than other areas due to water clarity
 - Large populations of purple coral (*Stylaster*)
 - Rare rock morph of elk kelp (*Pelagophycus porra*)
- Does not include:
 - Moon (or Seal) Rock (to the east), which supports a marine mammal haulout and seabird colony
 - sandy beach habitat at West Cove (to the south)



San Clemente Island Pending Military Closure 2

- Includes:
 - Narrow rocky shore with intermittent surfgrass beds and a few patches of eelgrass
 - Narrow band of kelp parallel to the shoreline
 - Seafloor drops rapidly to deeper sand
- Does not include:
 - Extensive eelgrass beds between White Rock and Purse Seine Rock (to the south)
 - Deep water corals (*Stylaster*), which are abundant on the west side of San Clemente and Santa Catalina islands