National Marine Sanctuaries in California

Cordell Bank NMS
Northern and Central California Sanctuaries

- Cordell Bank
- Gulf of the Farallones
- Monterey Bay
Cordell Bank National Marine Sanctuary
Public Input in the Review Process

1. Sanctuary Advisory Council
2. Public Scoping Meetings
3. Conservation Science Working Group
4. Informational Workshops
5. Public Comment Meetings
Hard Bottom
Hard Bottom
Cordell Bank proper, measuring 26 square miles, is five percent of total Sanctuary area (529 square miles).
STRATEGY CS-3: Characterize the soft bottom habitats and epifaunal* communities of CBNMS.
*epifauna are animals that live in contact with the sea bottom either moving freely over the substrate or attached to it.

STRATEGY CS-4: Characterize soft bottom infaunal* community of CBNMS.
*infauna are animals that live within or burrow through substrate.
Sidescan Sonar Fish

-Klein 3000 system
Camera-Sled

Video-camera

Altimeter
Deployment

- Towed behind vessel
- Altitude controlled by ship winch
- Video-image, altitude, and depth received in real-time

Camera-Sled enables continuous visual observations over large linear extents
Soft Bottom
Soft Bottom – Continental Shelf
Primary and Secondary Substrate Types

- mud, mud
- mud, sand
- sand, mud
- sand, sand

Cordell Bank National Marine Sanctuary

Gulf of the Farallones National Marine Sanctuary

Kilometers
Cousin It
Dungeness Crab
Box Crabs
Species Distribution

- Hake
- Box-crab
Research Partners

- United States Geological Survey
- Monterey Bay National Marine Sanctuary
- National Marine Fisheries Service-Santa Cruz Laboratory
- California Academy of Sciences
- Washington State University
CBNMS - Management Plan Priority Issues

- **Education And Outreach**
  1. Community Outreach
  2. Outreach Tools
  3. Classroom Education
  4. Audience Assessment

- **Ecosystem Protection: Impacts from Fishing Activities**
  1. Monitor and Track Activities
  2. Evaluate Impacts
  3. Address Impacts
  4. Krill Harvesting

- **Partnerships with Community Groups**
  1. Research Community Partnerships
  2. Sanctuary Advisory Council
  3. Media Communications
  4. Fiscal Partnerships

- **Conservation Science**
  1. Oceanography
  2. Habitat Characterization
  3. Characterize Benthic Communities
  4. Specimen Collection
  5. Pelagic Monitoring
  6. Rocky Habitat Monitoring
  7. Data Management

- **Administration**
  1. Operations
  2. Enforcement
  3. Interagency Coordination
  4. Emergency Response
  5. Regulations and Permitting
  6. New and Emerging Issues
  7. Evaluation and Planning