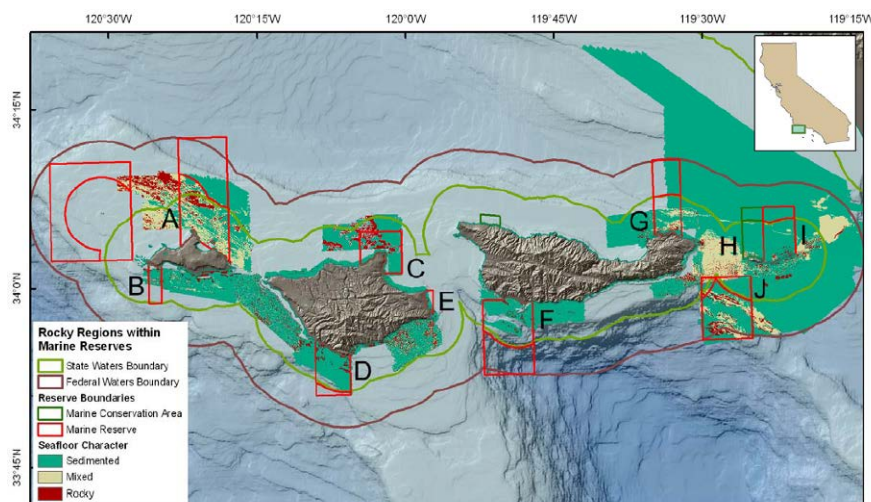


# Channel Islands National Marine Sanctuary

## Habitat Characterization



CINMS Habitat Map. Map Credit: Guy Cochrane USGS.

### Management Issue

Limited baseline information on habitat extent and distribution reduces the ability of Channel Islands National Marine Sanctuary (CINMS or Sanctuary) to understand resources and recognize or respond to existing and emerging pressures and threats to Sanctuary resources.

### Description

Large portions of the Sanctuary are not characterized with regard to habitat type; only 30% of the Sanctuary is even mapped. Reliable habitat maps require state-of-the-art surveys using multi-beam, side-scan, and sub-bottom profiling; LIDAR or other technologies for depths less than 6 meters; habitat classification analysis; and habitat verification using ROVs, AUVs, and submersibles. Knowing the different habitat types, and their coverage and distribution, is crucial for effective resource management, for meeting the National Marine Sanctuary Act requirement to characterize sanctuaries, and for identifying the CINMS research and monitoring needs. In addition, as revealed in a survey of methodologies undertaken to validate the CINMS condition report, there are no decision support tools at hand to consistently translate scientific habitat characterization into overall assessments of habitat condition for managers.

### Questions and Information Needs

- 1) What are the habitat types and their distributions in the Sanctuary?
- 2) Where is rocky reef habitat, soft bottom habitat, kelp, and eelgrass?
- 3) How is habitat changing over time?
- 4) How is habitat changing inside versus outside reserves?

### Scientific Approach and Actions

- Surveys using multi-beam, side-scan, and sub-bottom profiling
- Surveys using LIDAR or other technologies for depths less than 6 meters
- Analysis for habitat classification
- Verification of habitat using ROVs, AUVs, and submersibles
- Analysis of animal/habitat associations

*Current as of 11/28/12*

*For More Information -- <http://www.sanctuaries.noaa.gov/science/assessment>*

## Key Partners and Information Sources

US Geologic Survey, UC Santa Barbara, California Department of Fish and Game, Marine Applied Research and Exploration, Channel Islands National Park, Northwest Fisheries Science Center-NMFS

## Management Support Products

- Maps of habitat types
- Reports on distribution of habitat and changes over time

## Planned Use of Products and Actions

- Better management of sensitive habitat areas
- Informed selection of research and monitoring sites
- Informed response to vessel groundings and other emergencies

## Program References

### CINMS Management Plan

- Management Plan Conservation Science Action Plan CS.3

### CINMS Condition Report

- What is the abundance and distribution of major habitat types and how is it changing?
- What is the condition of biologically-structured habitats and how is it changing?
- What are the levels of human activities that may influence habitat quality and how are they changing?

### ONMS Performance Measures

- Number of sites in which habitat, based on long-term monitoring data, is being maintained or improve
- Percentage of the Sanctuary System that is adequately characterized.



*Golden Gorgonian coral on typical rocky reef habitat in the Sanctuary.  
Photo credit: CINMS*

*Current as of 11/28/12*

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