



Marine Water Quality

IMPORTANCE

Coastal marine habitats which provide spawning grounds, nursery habitat, shelter and food for a variety of wildlife, are adjacent to the most developed areas in the nation. More than one-half of the nation's population lives in the coastal area. The quality and timing of fresh water flows into coastal areas has also been impacted by coastal and inshore urbanization and industrialization. Solid waste production, urban non-point runoff, loss of open space, declines in ambient water and sediment quality, increased waste water treatment, irrigation, and potable water and non-renewable energy consumption all plague our nations coasts.

Cabrillo National Monument which protects and manages a portion of the marine intertidal along the western shoreline of Point Loma peninsula is situated in close proximity to major industrial, military, and urban centers. These activities and locations provide sources for a variety of contaminants that can enter the marine environment which can have sub-lethal to lethal effects on marine biota. Additionally, the proximity of the Bolm Waste Water Treatment Plant to the intertidal resources managed by the park presents the possibility for significant introduction of nitrates, phosphates, other nutrients, and bacteria into the marine waters off Point Loma.

OBJECTIVES

- Determine whether contaminants present in the marine waters in sufficient concentrations to impact intertidal biota and designated uses of these waters.
- Determine the status and trends in marine water quality surrounding the park.



Rocky intertidal habitat can be negatively affected by degraded marine water quality.



Cabrillo National Monument, in the city of San Diego, protects and manages a portion of marine intertidal habitat.

MONITORING EFFORTS

- Numerous agencies collect water quality data surrounding Point Loma and along the cost of San Diego. These data are available to the public and will be acquired and analyzed by the park as part of the monitoring program.
- Monitoring parameters will include the NPS core marine water quality variables. Additional parameters to be monitored will be selected from a suite of marine water quality variables identified by other national monitoring programs.
- Sample analysis will be based on generally accepted field methodologies.
- Preliminary data collection will be initiated to develop estimates of natural variation and to validate estimates in variation derived from regionally collected data.
- The status and trends of 303d listed water bodies within a 10-mile radius of the park will monitored by accessing data collected by the stakeholders specifically charged with stewardship of these waters.

MANAGEMENT IMPLICATIONS

Regular and rigorous monitoring of the quality of marine waters along Point Loma will provide park managers with information on overall marine ecosystem health. Data can be used to formulate resource protection policy and direct management actions to insure the intertidal resources are protected from possible impairment.

For more information:

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