



Central Coast

Regional Water Quality Control Board

Overview

The Central Coast Region includes all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties and small portions of several other counties. Prime agricultural lands dominate the bottomlands of many watersheds, and upper watersheds are in rugged national forest lands. The area ranges climatically from the extremely wet Santa Cruz Mountains to the very arid Carrizo Plain. Important marine resources have been afforded protection through two National Marine Sanctuary programs and the Morro Bay National Estuary Program. The region's population has increased considerably in recent years to over 1.4 million.



Vision and Goals for Monitoring

The long-term vision for the Central Coast Region is "healthy functioning watersheds." The Region has three associated measurable goals. By the year 2025:

- 80 percent of aquatic habitat will be healthy, and the remaining 20 percent will exhibit positive trends in key parameters.
- 80 percent of lands within any watershed will be managed to maintain proper watershed functions, and the remaining 20 percent will exhibit positive trends in key watershed parameters.
- 80 percent of groundwater will be clean, and the remaining 20 percent will exhibit positive trends in key parameters.

The Central Coast Ambient Monitoring Program (CCAMP) is the



Water Facts

.....
378 miles of rugged coast

.....
2,360 miles of streams

.....
99 lakes over 25,000 acres

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Over 8,000 acres of wetlands and estuaries

.....
Nine Areas of Special Biological Significance



Central Coast Region

Central Coast Regional Water Quality Control Board's (Central Coast Water Board) component of the Surface Water Ambient Monitoring Program (SWAMP). CCAMP plays a key role in assessing Central Coast region's goals and has a number of program objectives:

- Assess watershed condition on a five-year rotational basis, using multiple indicators of health.
- Assess long-term water quality trends at the lower ends of coastal creeks.
- Conduct periodic assessments of harbors, estuaries, lakes and nearshore waters using multiple indicators of health.
- Support investigations of other water quality problems, including emerging contaminants, sea otter health, pathogenic disease, toxic algal blooms and others.
- Provide water quality information to users in accessible form to support decision-making (www.ccamp.org).
- Collaborate with other monitoring programs to promote effective and efficient monitoring.

Program Activity

CCAMP has accomplished much since its inception in 1998:

- Established almost 200 permanent CCAMP sites and recorded over hundreds of thousands of water quality measurements.
- Established long term trend monitoring (since 2001) and loading at 33 coastal creek outlets.
- Completed three rounds of 5-year rotational monitoring at watershed sites which included monthly monitoring for conventional chemistry and annually monitoring for toxicity, organic chemicals and bioassessment.
- Deployed data loggers to continuously record water temperature, dissolved oxygen and pH in salmonid-bearing streams.
- Worked with State Board and local agencies to screen for and respond to harmful algal blooms.
- Provided data to support the Integrated Report assessments (required by Federal Clean Water Act sections 303(d) and 305(b)) since 2002.
- Developed flow and dilution models for coastal confluence discharges to the ocean.
- Collaborated with researchers on published articles related to sea otter health, algal blooms, toxicity and environmental fate of currently applied organic chemicals.
- Integrated CCAMP with agricultural regulatory program and urban stormwater monitoring programs.
- Established a web-based data browser at www.ccamp.org that evaluate data in the context of relevant water quality criteria and calculates indices of health.



Central Coast Region

Regional Water Quality Status and Trends

There are a number of high quality waters in the Region, particularly in Los Padres forest lands, as well as the north coast of Santa Cruz and San Luis Obispo counties. This condition is supported by multiple line of evidence including biological data and long term trend data for conventional parameters. In other locations, many water bodies are in fair condition, with fecal pathogen indicators and sedimentation being common issues. However, the lower ends of the Salinas and Santa Maria valleys, and to a lesser extent the Pajaro watershed and some smaller water bodies in Santa Barbara area are heavily impacted by pollutants, primarily by urban and irrigated agricultural activities. Nitrate contamination is of serious concern in surface and groundwater in these areas, and pyrethroids and neonicotinoid pesticides are causing toxicity at many locations.

The CCAMP study design is setup to detect trends and there are many locations in the Region where trends are evident. For example, improving water quality trends in multiple parameters are evident downstream of several treatment plants that have upgraded the quality of their effluent. This is true for Santa Ynez River, Chorro Creek, and San Simeon Creek. Reduced loading of nitrate is evident in the Tembladero Slough system, though concentrations have simultaneously increased. This may be attributable to drought, but may also reflect reduced irrigation runoff in this area of intensive agricultural activity.

Collaborative Efforts

CCAMP works with other data providers, (from volunteer groups, to permitted dischargers), to make most efficient use of the multiple monitoring activities. The Cooperative Monitoring Program for Agriculture is integrated with the CCAMP approach, and collects data at 50+ long-term trend sites in agricultural areas. The City of Salinas stormwater program is similarly integrated, both with CCAMP and with the agricultural program. CCAMP also collaborates with the Central Coast Long- Term Environmental Assessment program (CCLEAN), a discharger-funded monitoring program assessing loading of pollutants from stream, river and effluent discharges and associated impacts to the nearshore environment. These programs, and others, deliver data to the California Environmental Data Exchange Network (CEDEN) via the Moss Landing Regional Data Center.



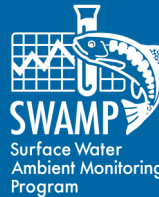
Central Coast Region

CCAMP has partnered with other agencies such as the California Department of Pesticide Regulation and the United States Geological Survey to develop studies that focus on our highest priority areas and to increase the monitoring parameters collected.

Central Coast Water Board programs utilize CCAMP data in assessments for the Integrated Report, Total maximum Daily Load (TMDL) development and compliance, and in the development of Report Cards and Nonpoint Source Program success stories. CCAMP data also supports enforce-

ment actions, regulatory permit and monitoring program development and assessment, Basin Planning, and other purposes.

**For More Information On SWAMP on the Central Coast Region,
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Central Coast Ambient Monitoring Program

Central Coast Regional

Water Quality Control Board

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Water Board: <http://www.waterboards.ca.gov/centralcoast/>

CCAMP Data Navigator: <http://www.ccamp.org>