

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 approximately 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 Central Coast's regional component of the Surface Water Ambient Monitoring Program (SWAMP). CCAMP plays a key role in assessing Central Coast regional 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.



Water Facts

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378 miles of rugged coast
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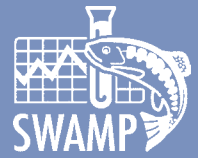
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2,360 miles of streams
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99 lakes over 25,000 acres
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Over 8,000 acres of wetlands
and estuaries
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.....
Nine areas of special
biological significance
.....





Central Coast Region

- 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 a number of monitoring and assessment activities since its inception in 1998:

- Established 195 permanent CCAMP sites and over 100,000 water quality measurements.
 - Monitor 33 of coastal creek outlets monthly on an ongoing basis for long-term trends.
 - Monitor at 30 sites in each watershed rotation area on a five-year annual rotation, monthly for conventional chemistry and annually (or biannually) for toxicity and bioassessment.
- Completed full rotation through all five of the region's watershed areas and five years of coastal confluence trend monitoring.
- Made assessment reports on nine hydrologic units available on www.ccamp.org.
- Identified 29 impaired waterbodies and over 80 new listings for the 303(d) list of impaired waters.
- Accomplished full integration of CCAMP with new agricultural industry and urban stormwater monitoring programs.
- Established a state-of-the-art, Web-based data browser and electronic data delivery system at www.ccamp.org.

Regional Water Quality Status and Trends

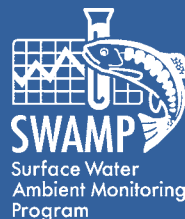
With regional data on a comprehensive suite of parameters, CCAMP staff can now characterize "bigger picture" regional issues in addition to waterbody specific problems. For example, staff has developed a tool to assess risk of biostimulation. This multi-parameter index includes measures of nutrient concentration, algal cover, water column chlorophyll, dissolved oxygen and pH. Nutrient enrichment problems are severe at the lower ends of several of our major agricultural watersheds. Water column and sediment toxicity is also widespread in some areas, associated with both agricultural and urban activities. CCAMP has shown widespread impairment of waterbody contact standards and has been responsive to emerging issues; for example, new monitoring will include E. coli 0157:H7 in response to serious food contamination issues in the Salinas Valley.

Collaborative Efforts

CCAMP works with other data providers, including volunteers, 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. This data is delivered electronically to the region in a SWAMP-compatible format. 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 near shore environment. CCAMP provides stream loading data to CCLEAN through its coastal confluence monitoring program.

CCAMP also works closely with internal Water Board programs. For example, in 2001, coastal confluence monitoring documented severe nitrate pollution at Franklin Creek in Santa Barbara County. Channelkeeper, a local water quality activist group, voiced strong concerns and documented greenhouse discharges as a probable source. Water Board staff conducted a public workshop to discuss issues and solutions, and all greenhouse operators responded, most offering specific time schedules and plans for ceasing discharge to surface waters. Four years later, CCAMP data at the Franklin Creek site shows statistically significant declines in nitrate concentrations, although more improvement is needed. Staff intends to continue monitoring throughout the region to document changes of this kind.



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