SWAMP Monitoring Strategy

Central Coast Regional Water Board

The Central Coast Regional Water Board has been monitoring the Region's five watershed areas on a rotating basis for ten years, beginning before the initiation of the SWAMP program. The Central Coast Ambient Monitoring Program (CCAMP) has monitored approximately 30 watershed sites once a month during each rotation year for conventional chemistry and flow. In addition, we monitor 33 of our coastal stream confluences on a continuous monthly basis for detection of trends. We also sample for water and sediment toxicity (twice per year), bioassessment (twice), and on occasionally bioaccumulation.

Data from our basic monitoring program is used for many purposes, including development of Hydrologic Unit assessment reports, enforcement actions, NPDES permit requirements, watershed planning, grants prioritization, evaluation of Basin Plan objectives, and other Water Board staff activities. It also is heavily used by the public, consultants, and other agencies through our web site. CCAMP Hydrologic Unit assessment reports address several basic questions about beneficial use support. These ask whether there is evidence that 1) it is unsafe to swim, 3) it is unsafe to eat the fish, 3) it is unsafe to drink the water, 4) aquatic life uses are not supported, 5) agricultural uses are not supported, and 6) non-contact uses are not supported. The report also makes recommendations for priority action by Water Board staff and others. These reports and other related <u>publications</u> are available online. CCAMP has conducted an assessment study of all Central Coast harbors, in collaboration with the U.S. EPA assessment of the Morro Bay National Estuary. In this study, harbors were evaluated using a

probabilistic approach for sediment chemistry, sediment toxicity, benthic invertebrate assemblages, water column chemistry and fish and mussel chemistry. This data is summarized in a report on our website.

CCAMP has invested heavily in development of data management and assessment tools. We have made our data available to the public through web site maps and graphs since 2000. We process all of our data electronically, and have developed a web-based batch upload tool that not only moves our own data into SWAMP, but also is being used by the Central Coast Cooperative Monitoring Program for Agriculture and by grants programs to deliver data to us in SWAMP comparable format. This upload tool has been adapted for use by volunteer monitoring groups statewide. We recently developed code that scans our data and data from other monitoring programs in the Region for water quality exceedances and creates "Lines of Evidence" for submittal into the State's new Water Quality Assessment Database. We have generated over 11,000 Lines of Evidence from this combined data set for integrated water quality assessment and 303(d) listing/delisting support.

CCAMP has leveraged the program considerably by coordinating design of new monitoring efforts with our own program approach. For example, an additional network of 50 long term trend sites are monitored through the Cooperative Monitoring Program for Agriculture, the agriculture industry's monitoring program to comply with their discharge requirements. This adds considerably to our overall ability to detect change and to understand agricultural impacts in our Region. Our single Phase 1 stormwater permit has a similarly structured monitoring program. Our major Monterey Bay area dischargers coordinated with CCAMP in implementing the Central Coast Long-Term Environmental Assessment Network (CCLEAN). Also, we spent considerable time and resources coordinating data from other monitoring efforts in our Region, including volunteer groups, local agencies, and others.

CCAMP's second 5-year watershed rotation will be completed in December 2009. We are planning a break in watershed monitoring during 2010, but will maintain our ongoing trend monitoring of coastal confluence sites. We are doing this for several reasons. First, we anticipate reduced funding from both



our private endowment and from SWAMP because of current budget constraints. The next watershed area we need to assess is the Pajaro and North Coast Watershed Area, which is by far our most complex and expensive to monitor, and we want to have sufficient resources to monitor it comprehensively. Second, we plan to spend staff energy on developing a comprehensive assessment of our Region that includes an evaluation of water quality change between the first two rotations. We may adjust our third rotational monitoring strategy based on the outcome of this analysis. Finally, we intend to develop a new online format for assessment reporting, which will require some contracted web assistance.

