

Water Body-Oriented Monitoring and Assessment
Programs, Products, and Progress
May 25, 2012

This is a brief overview of water body-oriented monitoring and assessment activities in which the San Diego Water Board has participated since the September 2010 Board meeting.

I. San Diego Region Monitoring and Assessment

The San Diego Water Board uses funding from the Surface Water Ambient Monitoring Program (SWAMP) (see section III below) to conduct, coordinate, and improve monitoring and assessment of San Diego Region waters.

A. Coordination and Improvement of Monitoring and Assessment

The San Diego Water Board has initiated three projects to better coordinate and improve monitoring and assessment of San Diego Region waters. SWAMP funding has been used to contract with the Southern California Coastal Water Research Project and Dr. Brock Bernstein to help guide the first two of these efforts through the initial steps of the ten-step process for implementation of a water body-oriented approach to monitoring and assessment.

1. San Diego River Watershed

The first project, which started in December 2010, is focused on monitoring and assessment in the San Diego River watershed. A workgroup, which includes representatives of regulated entities, water supply agencies, fish and wildlife and land management agencies, NGOs, San Diego Water Board member Strawn, San Diego Water Board staff, and others, has met several times, most recently in March 2012. Smaller workgroups focused on specific tasks have met since then. A report from this project is in preparation.

2. Enclosed Coastal Waters

The second project, which started earlier this year, is focused on monitoring and assessment in coastal estuaries, lagoons, bays, and harbors. A number of individuals from a variety of organizations attended the first two workgroup meetings in February and May 2012. The workgroup is expected to meet periodically throughout 2012 and develop a plan for coordinating monitoring of enclosed coastal waters in the San Diego Region.

3. South Orange County Beaches

The third project, which is just getting started, is focused on monitoring and assessment of beach water quality in south Orange County. San Diego Water Board staff is convening a workgroup to address concerns expressed by members of the San Diego Water Board at the April 11, 2012 Board meeting.

The goal of this project is to develop a protective, reasonable, equitable, and coordinated beach water quality monitoring program for south Orange County. The first meeting of the workgroup is planned for June 2012.

B. Post Fire Recovery Study

After the extensive wildfires in the San Diego Region and elsewhere in southern California in 2003 and 2007, the San Diego Water Board used SWAMP funding to contract for a study of the effects of wildfires on streams in coastal watersheds. This study was related to the basic question “Are habitats and ecosystems healthy?” In December 2011, investigators released a report on the results of the study. A management summary is available at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/swamp/docs/updates/012412/PostfireManagementSummary_Final.pdf

II. Southern California Regional Monitoring and Assessment

The San Diego Water Board supports and participates in two collaborative regional monitoring and assessment programs in southern California, both of which have recently released reports. Both of these programs are exemplary in many respects, but since they address questions at a regional scale (e.g., “What are the conditions in coastal estuaries in southern California?”), the information they produce does not necessarily enable questions to be answered at smaller scales that would be more useful for the San Diego Water Board (e.g., “What are the conditions in Batiquitos Lagoon?”). One of the goals of staff is to extend the exemplary features of these regional scale monitoring and assessment programs to smaller scales.

A. Southern California Bight Regional Monitoring

The Southern California Bight Regional Monitoring Program (Bight Program), which was initiated in 1994 and which is coordinated by the Southern California Coastal Water Research Project (SCCWRP), evaluates conditions in coastal waters from Pt. Conception to the Mexican border, primarily with regard to the basic question “Are habitats and ecosystems healthy?” Starting in February 2011, the Bight Program has released reports on the results from its most recent monitoring (Bight '08), which started in 2008 and concluded in 2010. Completed assessment reports are available at:

<http://www.sccwrp.org/Documents/BightDocuments/Bight08Documents/Bight08AssessmentReports.aspx>.

Additional Bight '08 information is available at:

<http://www.sccwrp.org/ResearchAreas/RelatedProjects.aspx?id=c3909ef0-6de5-48e1-999e-015f19eb7139>

B. Regional Stream Bioassessment

The Regional Bioassessment Program of the Stormwater Monitoring Coalition (SMC), which was initiated in 2009 and which is coordinated by SCCWRP, evaluates conditions in perennial streams in coastal watersheds from Ventura County to the Mexican border with regard to the basic question “Are habitats and ecosystems healthy?” In February 2011, SMC released a report on the results from the first year (2009) of the initial five-

year monitoring period. A fact sheet is available at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/swamp/docs/updates/012412/SMC2009SummaryFactSheet-Final.pdf.

III. Statewide Monitoring and Assessment

The Surface Water Ambient Monitoring Program (SWAMP) of the State and Regional Water Boards conducts, coordinates, and provides tools for monitoring and assessment of waters throughout California. The San Diego Water Board participates in planning and implementation of statewide SWAMP monitoring and assessment activities.

A. Contaminants in Coastal Fish

SWAMP bioaccumulation monitoring evaluates conditions primarily with regard to the basic question "Are fish safe to eat?" In May 2011 SWAMP released a report on the results from the first year (2009) of a two-year survey of bioaccumulation of several toxic substances in fish targeted by recreational and subsistence fisheries in coastal waters of California. In May 2012, SWAMP released a report on the results from entire two-year (2009 / 2010) survey. Fact sheets are available at:

http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/coast_study/coastal2009factsheet.pdf

and

http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/coast_study/bog2012may/coast2012factsheet.pdf.

B. Toxicity

In September 2011, the State Water Board released two summaries of the results of SWAMP toxicity monitoring.

1. Toxicity in Water in Streams, Lakes, and Coastal Waters; see:
http://www.waterboards.ca.gov/about_us/performance_report_1011/ecosystems/docs/toxicity_outcome_measure.pdf
2. Toxicity in Sediment in Streams; see:
http://www.waterboards.ca.gov/about_us/performance_report_1011/ecosystems/docs/spot_outcome_measure.pdf

C. Perennial Streams Assessment

In October 2011, SWAMP released a report on assessment of the ecological condition of wadeable perennial streams in California. A management memo is available at:

http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/mgmt_memo3condition.pdf.

A management memo on the extent of perennial and non-perennial streams in California was also released in October 2011; see:

http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/mgmt_memo2extent.pdf.