

First Results from Stream Monitoring through the Stormwater Monitoring Coalition (Lilian Busse)

The Stormwater Monitoring Coalition (SMC) is a coalition of stormwater management agencies from Ventura to San Diego, and Regional Water Boards (Los Angeles, Santa Ana, and San Diego). In 2007, the SMC designed a five-year program for comprehensive stream monitoring for southern California's coastal stream and rivers that integrated many elements of individual stormwater monitoring programs, individual regional water board monitoring programs, and other existing water quality monitoring programs. This monitoring program, known as "SMC study", is designed to be collaborative, so that each individual agency can both assess conditions in their own jurisdiction, and contribute to assessment of conditions throughout southern California as a whole. The SMC study is based on a probabilistic design which will produce an unbiased assessment of the health of streams and rivers in southern California. Important components of the SMC study include the use of consistent field and laboratory methods, setting performance-based quality assurance guidelines, and use of an information management system to enable sharing of data.

In the San Diego region, the Surface Water Ambient Monitoring Program (SWAMP) of the San Diego Water Board and the San Diego, Riverside, and Orange County municipal stormwater copermittees fund the SMC study. Sampling for the SMC study started in 2009 with over 120 sites that were sampled and analyzed for biological communities, chemical parameters, aquatic toxicity, and physical habitat. Results from the first year of sampling are summarized in a technical report, and in a 4-page fact sheet. First results based on biological indicators show that only 2% of urban stream miles, and 35% of agricultural stream miles were similar to Reference (minimally disturbed) streams. Relative risk analysis showed that three of the four highest risk stressors were related to physical habitat. Also, phosphorus was shown to be the second highest among the four highest risk stressors. Yearly sampling for the SMC study is continuing until 2013, when the first five years of sampling will be completed.

The workplan, the technical report and the fact sheet for the 2009 SMC data can be found here:

<http://sccwrp.org/ResearchAreas/RegionalMonitoring/WatershedRegionalMonitoring/RegionalWatershedAssessments/RegionalWatershedMonitoring.aspx>