



Collaboration of the Stormwater Monitoring Coalition (SMC) and Perennial Streams Assessment (PSA) Programs in Southern California

What is it?

The collaboration between the southern California Stormwater Monitoring Coalition (SMC) and the SWAMP Perennial Streams Assessment (PSA) program involves 14 regulated, regulatory and research entities located in southern California, including the Los Angeles, Santa Ana and San Diego Regional Water Boards. SMC participants are incorporating aquatic bioassessment tools developed by the PSA into their stream monitoring programs in order to better assess the effects of stormwater on the health of southern California's streams. The bioassessment tools being utilized use benthic macroinvertebrate assemblages specific to southern California stream ecosystems. Benthic macroinvertebrates are bottom-dwelling, aquatic animals (often insect larvae) that are large enough to be seen by the naked eye. (See related report on the statewide PSA program [link].)

While more than \$4.5 million is spent collectively each year for stream monitoring in the southern California area, efforts have been largely isolated, site-specific and focused on areas with the greatest problems. Regional cooperation allows for comprehensive assessments of the health of southern California streams by providing an avenue for large-scale evaluation of overall stream condition, identification of stressors, and monitoring of conditions over time. Bioassessment is a key component in answering these questions. Biological indicators are a great tool for assessing stream condition because living organisms respond to many different types of stressors, such as water pollution, habitat degradation, and stream flow alteration. In addition to biological measurements, SMC stream sites are also analyzed for chemical parameters, aquatic toxicity, and physical habitat condition.

Why is it important to the State?

Direct measures of biological condition such as those utilized by the PSA and SMC, are increasingly preferred as assessment endpoints because they are closely linked to aquatic life beneficial uses that are a focus of protection and management.

This collaboration is important to the State because it promotes a coordinated approach to regional water quality monitoring which is efficient and cost-effective, producing more data than each agency could collect on its own, and enables integration of data with key state water quality assessment programs. For example, data from SMC is incorporated into the PSA program, expanding the basis of the PSA, and allowing southern California stream condition to be compared with that of other regions. Further, all data collected through the SMC are SWAMP comparable (of known and documented quality) and will be accessible through the California Environmental Data Exchange Network (CEDEN) so that they are easily available to other agencies and the public.

Why is it important to me?

The addition of biological/bioassessment monitoring to southern California's stream monitoring efforts provides a direct measure of stream health that can be easily communicated to the public. This allows citizens to gain a greater understanding the condition of local water resources which generally leads to improved stewardship and better solutions for resolving water quality problems.

How will the data be used?

Data collected by this collaborative effort will be use in many ways:

- Stormwater agency managers will use the data to decide if management strategies need to be implemented to protect southern California's streams from the effects of stormwater.
- The data collected through the SMC coordinated regional monitoring program will be of sufficient quality to upload into CEDEN for use by public, private and government organizations and individuals.
- The State Board will incorporate SMC's data to into its PSA program to answer question on the status and trends of stream health and water quality across the State.
- Data from this collaboration can also be used by the State Board to identify impaired waters under the Clean Water Act, 303(d) and 305(b) Integrated Reporting requirement.
- An annual report will be produced by the Southern California Coastal Water Research Project (SCCWRP) who orchestrates this coordination.