

## Water Quality Assessment Training along Sausal Creek

If you walked by the tot lot in Dimond Park on March 19 or 20, you may have noticed a large group of serious-looking people who seemed to be playing in the creek. They had nets and measuring devices, bags of sample containers, and clipboards with papers on them. In fact, Sausal Creek was the site of a training sponsored by the California State Water Resources Board. Eighteen participants--contractors for Bay Area stormwater programs and state employees--reviewed how to conduct bioassessment monitoring of the creek according to Surface Water Ambient Monitoring Program (SWAMP) protocols. I participated as an observer for Friends of Sausal Creek to learn what the protocols are and how the data are collected and analyzed.



SWAMP is one of the programs that monitors the health of California's precious water resources. In the spring and the fall, the state sends out crews to assess the health of California watersheds by using a specific set of measurements and sampling techniques, and it also requires "SWAMP-comparable" data collection by many regulated agencies and grant recipients.

The SWAMP protocols assess the physical, chemical, and biological integrity of our creeks. The SWAMP combined bioassessment/algae protocol takes time

to perform as it considers 150 meters of a creek, divided into 11 evenly spaced transects spaced 15 meters apart. Before starting on the transect work, water chemistry samples are taken; then, at each transect, bioassessment samples are taken of macroinvertebrates (for example, insect larvae) and algae. The physical habitat is also measured: creek velocity, type of substrate under the creek, habitat complexity in the creek, and in some versions of the protocol, surrounding vegetation and land use of the creek banks.

Standardization is very important so that the same factors are measured, regardless of the geographical area or quality of the creek. To ensure good data, the scientists are carefully trained on the correct way to perform the protocol. The resulting data are entered into a statewide database that can be used to assess clean-up efforts, make management decisions, and even establish statewide policy on an incredibly valuable natural resource--our surface water.

This training was a particularly good example of well-trained scientists monitoring a precious resource and making the results available to policy makers and to the public. You can get more information about the SWAMP program at [http://www.waterboards.ca.gov/water\\_issues/programs/swamp/](http://www.waterboards.ca.gov/water_issues/programs/swamp/).

Friends of Sausal Creek is also involved in monitoring the health of the creek using bioassessment to examine the numbers and biodiversity of the invertebrate community in the creek. Check out <http://www.sausalcreek.org/volunteer/teams.html#insect> for our most recent activities, and don't miss the monitoring team's presentation at the May 16 member meeting ([http://www.sausalcreek.org/pdf/FOSC\\_Member\\_Meeting\\_Flyer.pdf](http://www.sausalcreek.org/pdf/FOSC_Member_Meeting_Flyer.pdf)).

--Kathleen Harris