

# 2007 FRESHWATER BIOASSESSMENT WORKSHOPS

The standardization of ecological assessments for use in California water quality management began with the development of the California Stream Bioassessment Procedure (CSBP) in 1993. Since then, the procedure has been calibrated with U.S. EPA procedures used throughout the west and has become the standard for the State Water Resources Control Board's Surface Water Ambient Monitoring Program (SWAMP). These workshops have been offered throughout California by Jim Harrington\* using the instruction manual entitled "Measuring the Health of California Streams and Rivers" (Harrington & Born, 2000) and the latest bioassessment protocols approved by SWAMP.

**Part 1 - Sampling Design and Collections will be conducted on**  
**April 24-26 in San Diego**  
**May 2-4, 2007 in Sonoma**  
**May 15-17 in Nevada City**

This workshop begins with one day of classroom presentations and discussion on **Designing Rapid and Fully Integrated Freshwater Ecological Assessments**. The next two days are conducted in the field with demonstrations of **Physical/Habitat Assessments for Water Quality Projects** and **Sampling Biotic Communities in California Rivers and Streams**. This workshop will provide the participant with an understanding of bioassessment design and prepare them for implementing SWAMP compatible bioassessment protocols.

**Part 2 – Laboratory and Data Analysis will be conducted**  
**TBA in San Diego**  
**TBA in Sonoma**  
**TBA in Nevada City**

This workshop will provide the participants with an understanding of the laboratory procedures used in bioassessment and how the information can be in water resource management. Using the samples collected in Part 1, each participant will work on teams to perform **Family-Level Taxonomic Identification of Freshwater Invertebrates**. Throughout the laboratory exercise, there will be examples on how to **Insure Data Quality** and then based on this "real data" set, each participant will **Calculate and Interpret Biological Metrics**. Finally, there will be presentations and a discussion of **Current Topics on the Use of Freshwater Ecological Assessments in Water Quality Regulation**.

These two workshop parts are designed to be independent of each other. However, it is recommended to take both parts in the same year and if possible, in sequence. There will be a separate certificate of completion for each workshop. **The cost for each 3-day workshop is \$300.**

\* The instructor is a Staff Environmental Scientist for California Department of Fish and Game. He has been working on the development of bioassessment in California since 1993, is a member of several U.S. EPA workgroups on integrating biological assessment into water quality regulation and is a contributing author of the SETAC Pellston Workshop entitled "Ecological Assessment of our Aquatic Resources: Application, Implementation, and Interpretation" (ISBN 1-88-611-56-2).