SWAMP
Surface Water
Ambient Monitoring
Program

ASSESSMENT

What is it?

In order to provide information necessary for resource management decisions, data need to be collected through carefully designed monitoring, and those data need to be translated into policy-relevant information through data assessment. Assessment may take the form of comparing measured chemical concentrations against standards set to protect the beneficial uses of waterways. It may also incorporate statistical analyses to evaluate average conditions across the landscape at a point in time, or to describe trends in condition over time. Assessment can incorporate other types of data, such as land use or management activity information, to determine causes of environmental impacts. To be of greatest value for decision making, monitoring must be designed to address clearly articulated assessment questions, and the resulting data must be of known quality and easily accessible.

Why is it important?

Adequate and accurate monitoring and assessment are the cornerstones to preserving, enhancing and restoring water quality. Without evaluation or assessment, data are simply numbers from a laboratory test or field inventory. Water quality assessments turn monitoring data into policy-relevant information to protect and enhance the State's water resources. Assessments are used in the preparation of the Clean Water Act Section (CWA) §) 305(b) reports on the status of water quality in California, and §303(d) listings of impaired waters throughout the State.

Assessments help us to know many things about our State's water including: how healthy our rivers and streams are, how quickly the health of our water bodies are changing and whether they are getting better or worse. They can also inform us on whether fish caught at popular fishing spots are safe to eat and what has caused water quality problems at a particular waterbody.

How will this information be used?

SWAMP assessments are contained in interpretive reports, web-based information products, fact sheets, CWA §303(d) impaired water body listings, and the bi-annual CWA §305(b) report on the status of water quality in California. SWAMP assessment efforts are geared toward:

- Providing context for specific water resource issues.
- Developing and evaluating water quality indicators, such as chemical measurements, biological and ecological metrics, toxicity endpoints, and field observations that adequately and repeatedly characterize environmental conditions.
- Setting assessment thresholds (values against which to compare measurement data) to determine whether water quality is sufficient to support its designated beneficial uses.
- Developing assessment tools to compare measurements (statistically or otherwise) with assessment thresholds in order to evaluate resource condition.
- Establishing a statewide assessment framework that describes the types of data needed from all partners to adequately answer the State's priority assessment questions.