

California's Surface Water Ambient Monitoring Program SWAMP QAPP Advisor



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State Water Resources
Control Board



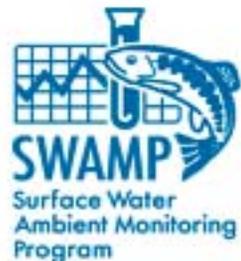
SWAMP: Required by AB 982

- Comprehensive (surface water)
- Coordinate all Board ambient water quality monitoring
- High quality data (Quality Assurance)
- Comparable data
- Accessible



Meet Clean Water Act Objectives

- What is the overall quality of California's surface water?
- To what extent surface water is changing over time?
- What are the problem areas and areas needing protection?
- What level of protection is needed?
- How effective are clean water projects and programs?



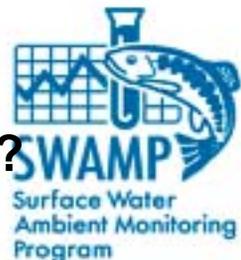
Elements of SWAMP

- Monitoring Program Strategy
- Monitoring Objectives
- Monitoring Design
- Core Indicators of Water Quality
- Quality Assurance
- Data Management
- Data Analysis/Assessment
- Reporting
- Programmatic Evaluation
- General Support and Infrastructure
- *Citizens Monitoring*



State & Regional Monitoring Components

- Vary in scale of questions, objectives and design
- State program:
 - Asks broad questions:
 - What % of state's waterbodies are healthy ?
 - Uses of program
 - Environmental Protection Indicators for California (EPIC)
 - 305b report
 - Legislative reports
- Regional programs' objectives and design are more specific
 - Are specific waterbodies meeting WQ standards?
 - 303d list
 - Are specific management/restoration efforts successful ?



Current Statewide Monitoring

- Perennial Stream Assessment (bioassessment/benthic macroinvertebrate for aquatic life use)
- Lakes and reservoirs monitoring (Bioaccumulation study for fishable beneficial use)
- Integrator sites (long-term monitoring)



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SWAMP Advisor

- QA has several components
 - Quality Assurance Project Plan (QAPP) is just one of them.
- QAPP is required for all data collection efforts conducted by SWAMP and SWAMP and State funded projects.
- QAPP document is the planning, implementation and assessment procedures for a particular project
- SWAMP Advisor is a tool for QA
- SWAMP Advisor helps users to develop QAPP in more efficient and consistent manner

