Surface Water Ambient Monitoring Program (SWAMP)

Management Agency Agreement Workshop
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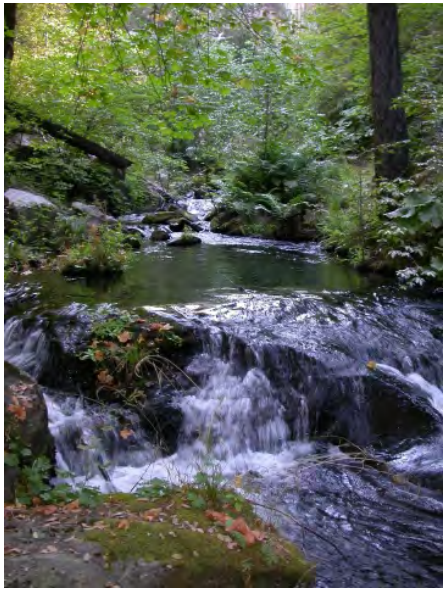
California Water Boards

SWAMP Surface Water Ambient Monitoring Program

SWAMP MISSION

To provide resource managers, decision makers, and the public with timely, high quality information to evaluate the condition of surface waters throughout California.



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SWAMP ASSESSMENT QUESTIONS

- **Status:** What is the overall quality of California's surface waters?
- **Trends:** What is the pace and direction of change in surface water quality over time?
- **Problem Identification:** Which water bodies have water quality problems and which areas are at risk?
- **Diagnostic:** What are the causes of water quality problems and where are the sources of those stressors?
- **Evaluation:** How effective are clean water projects and programs?

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CORE IMPLEMENTATION PRIORITIES

1. MONITORING, ASSESSMENT & REPORTING
2. INFRASTRUCTURE & TOOLS
3. COORDINATION

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1. MONITORING, ASSESSMENT & REPORTING

Statewide Programs

- Bioassessment Monitoring Program
- Stream Pollution Trends Monitoring Program
- Bioaccumulation Monitoring Program
- Freshwater Harmful Algal Blooms

Regional Programs

- Question-driven monitoring at the Regional scale

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Bioassessment Monitoring Program

- What is the **biological** condition of California's perennial "wadeable" (smaller) streams?
- Do different types of land use have an effect on biological condition?
- Perennial Streams Assessment (PSA)
- Reference Condition Monitoring Program (RCMP)

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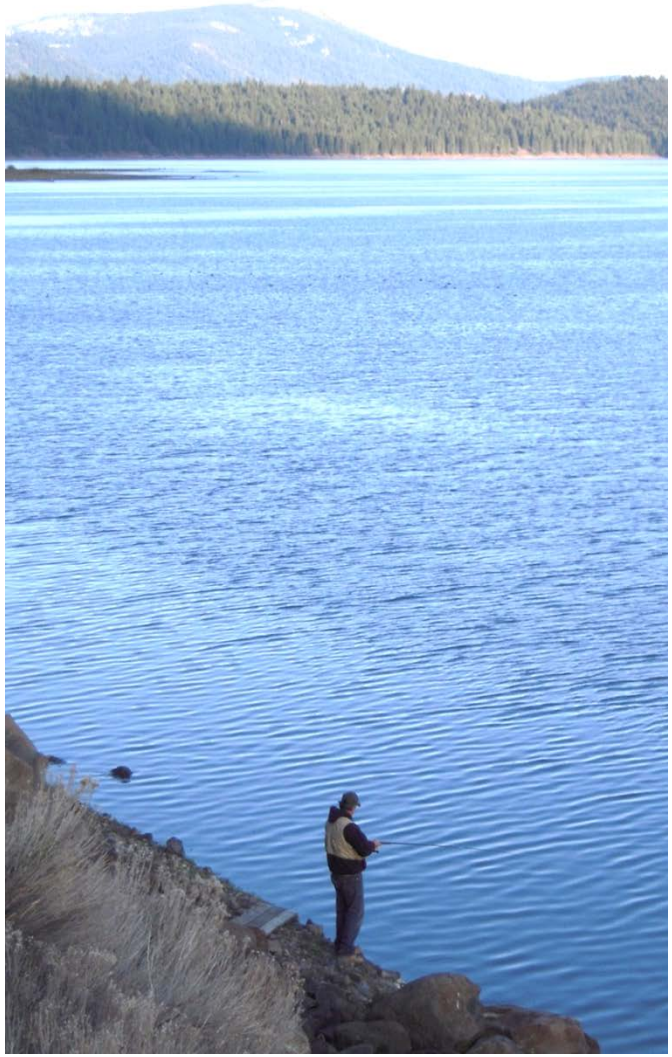
Stream Pollution Trends Monitoring Program (SPoT)

- What is the status of stream contamination and is it getting better or worse?
- What effect do land use and management actions have on stream contamination?

Bioaccumulation Monitoring Program

- Bioaccumulation Oversight Group (BOG)
- Are the fish safe to eat? (“Fishable”)
- What is the status of contamination in sport fish from lakes, coastal waters, and large rivers?



Freshwater Harmful Algal Blooms (HABs)

- Freshwater HABs Monitoring and Assessment Strategy
- Remote sensing analysis
- Sampling and analysis standard operating procedures
- Trainings (2015 & 2016)
- Website to report blooms and display satellite images
- Regional cyanotoxin studies

Coordinated with the California CyanoHAB Network (CCHAB)

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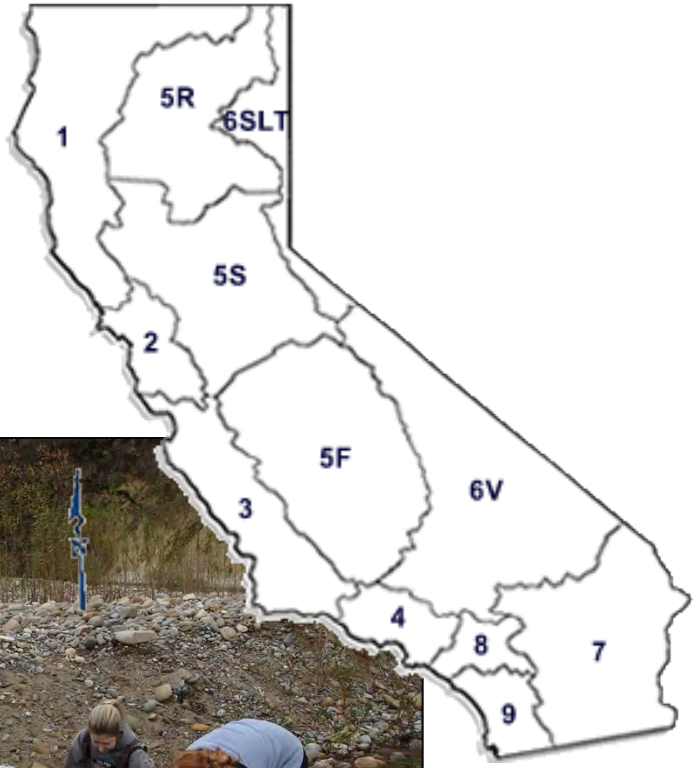
Regional SWAMP Monitoring Programs

Each of the nine Regional Water Boards manages their own monitoring program in support of Regional priorities.



Examples include:

- Freshwater swimming
- Emerging contaminants
- Regional intensification of statewide programs

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2. INFRASTRUCTURE & TOOLS

The SWAMP Information Management and Quality Assurance Center (SWAMP IQ) at the State Water Board supports SWAMP's endeavor to ensure scientifically defensible, comparable and useful data state-wide.

- Quality Assurance
- Information/Data Management
- Documentation, Resources, Tools
- Education & Training

COORDINATION

SWAMP leverages limited resources by creating **partnerships** and **coordinating** with other water quality monitoring efforts on a local, regional and statewide level.

SWAMP WEBSITE: http://www.waterboards.ca.gov/water_issues/programs/swamp/

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