



# Maximizing the Effectiveness of Water Quality Data Collection and Dissemination

Recommendations of the  
California Water Quality Monitoring Council

December 1, 2008



# Everyone Needs Data

- 💧 212,000 miles of rivers & streams
- 💧 1.6 million acres lakes
- 💧 1,340 miles of coastline
- 💧 >600,000 acres bays, harbors, estuaries
- 💧 15 million acre-feet of groundwater extracted per year



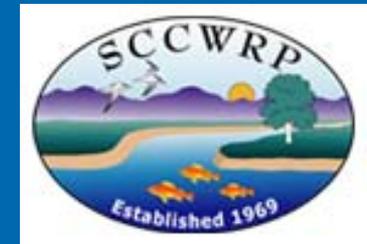
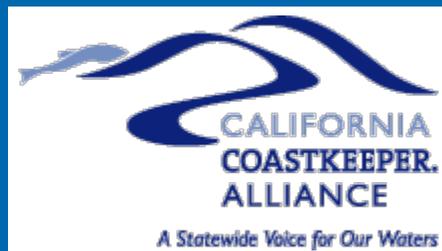
# The Water Quality Information Problem



- Regional Board Boundaries
- 2006 303(d) listed bays, estuaries, lakes, and wetlands
- 2006 303(d) listed rivers and shorelines
- Non-303(d) listed California rivers and shorelines
- Non-303(d) listed California lakes

Data Source: 2006 California 303(d) List of Water Quality Limited Segments  
Map created November 2007, Division of Water Quality, SWRCB

# Monitoring Council Members





# The Monitoring Council's Solution

Don't get mired in technical details!

Focus first on streamlined data access

- 💧 Theme-based web portals
- 💧 Single global point of entry

Issue-specific workgroups

Overarching Monitoring Council guidance



# CALIFORNIA WATER QUALITY MONITORING COUNCIL

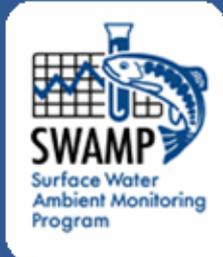
- Home**
- Safe to Drink
- Safe to Swim
- Safe to Eat Fish
- Ecologic Health
- Stressors & Processes

## My Water Quality - hosted by the Surface Water Ambient Monitoring Program (SWAMP) |

**GOVERNOR SCHWARZENEGGER** 

[Visit his Website](#)

- Cal/EPA
  - The Resources Agency
  - About the California Water Quality Monitoring Council
  - State & Regional Water Boards
  - Web Portal Partners
  - Monitoring Programs, Data Sources & Reports
  - Water Quality Standards, Plans and Policies
  - Regulatory Activities
  - Enforcement Actions
  - Research
- 
- About SWAMP
  - SWAMP Tools



## Welcome to My Water Quality

This web portal, supported by a wide variety of public and private organizations, presents California water quality monitoring data and assessment information from a variety of perspectives that may be viewed across space and time.



### [IS OUR WATER SAFE TO DRINK?](#)

Safe drinking water depends on a variety of chemical and biological factors regulated by a number of local, state, and federal agencies. [More >>](#)



### [IS IT SAFE TO SWIM IN OUR WATERS?](#)

Swimming safety of our waters is linked to the levels of pathogens that have the potential to cause disease. [More >>](#)



### [IS IT SAFE TO EAT FISH AND SHELLFISH FROM OUR WATERS?](#)

Aquatic organisms are able to accumulate certain pollutants from the water in which they live, sometimes reaching levels that could harm consumers. [More>>](#)



### [ARE OUR AQUATIC ECOSYSTEMS HEALTHY?](#)

The health of fish and other aquatic organisms and communities depends on the chemical, physical, and biological quality of the waters in which they live. [More>>](#)



### [WHAT STRESSORS AND PROCESSES AFFECT OUR WATER QUALITY?](#)

Beneficial uses of our waters are affected by emerging contaminants, invasive species, trash, global warming, acidification, pollutant loads, and flow. [More>>](#)



# CALIFORNIA WATER QUALITY MONITORING COUNCIL

- Home
- Safe to Drink
- Safe to Swim
- Safe to Eat Fish
- Ecologic Health
- Stressors & Processes

## My Beach Today | Recent Conditions | Trends | Closures & Postings | Impaired Beaches | Improvements |

GOVERNOR  
**SCHWARZENEGGER**



Visit his Website

Home → Safe To Swim



### Is It Safe to Swim In Our Waters?

- State & Regional Water Boards

#### SAFE TO SWIM LINKS

- Pollution Sources & Health Risks
- Laws, Regulations & Standards
- Regulatory Activities
- Enforcement Actions
- Research
- Monitoring Programs, Data Sources & Reports
- Browse by Geography
  - Local
  - County
  - State
  - National



Beach water quality monitoring and strong pollution prevention measures are critical for protecting beach goers from waterborne diseases. Monitoring is performed by county health agencies, publicly owned sewage treatment plants, other dischargers, environmental groups and numerous citizen-monitoring groups.

#### View Monitoring and Assessment Information

- Click on a county or;
- Select from this pop-up menu:

Select County

#### QUESTIONS ANSWERED

- [Can I swim at my beach, lake, or stream today?](#)
- [How clean was my beach, lake, or stream during the past week or month?](#)
- [What are the long-term trends at my beach, lake, or stream?](#)
- [Which beaches, lakes, and streams are currently closed by county health agencies?](#)
- [Which beaches, lakes, and streams are listed by the State as impaired?](#)
- [Are the problems getting better?](#)

# Theme-Specific Workgroups

Issue-experts represent key stakeholders

**Monitoring Council**

**Develop web portal**

**Develop  
monitoring &  
assessment methods  
& data management  
procedures**

**Achieve  
Standardization**

**Coordinate  
monitoring  
programs**



# Role of the Monitoring Council

- Establish policies and guidelines
- Clearinghouse for standards, guidelines, and collaboration
- Complementary standardization approaches
  - Voluntary adoption
  - Permit requirements / grant agreements / contracts
  - Legislative solutions



# Data Management

- 💧 Regional data centers
  - 💧 Distributed, but federated system
- 💧 Linked through data exchange networks to
- 💧 Centralized web portal access points

# Opportunities for Action



**ARE OUR AQUATIC ECOSYSTEMS HEALTHY?**

💧 Wetlands



**IS IT SAFE TO SWIM IN OUR WATERS?**

💧 Coastal beaches, bays & estuaries



**IS IT SAFE TO EAT FISH AND SHELLFISH?**

💧 Sportfish



**IS OUR WATER SAFE TO DRINK?**

💧 Groundwater



# To Agency Secretaries

- 💧 Endorse Monitoring Council's vision
- 💧 Empower Monitoring Council to guide
- 💧 Direct the boards, departments, and offices to support and participate
- 💧 Seek sufficient resources for sustainability



# Next Steps

## Continued Monitoring Council efforts

- 💧 Work with identified workgroups
- 💧 Conduct outreach to other monitoring entities
  - 💧 Agencies
  - 💧 Non-government organizations
  - 💧 Regional monitoring programs
  - 💧 Citizen monitoring groups
- 💧 Coordinate formation of new workgroups



**Maximizing the  
Efficiency and Effectiveness of  
Water Quality Data  
Collection and Dissemination  
and Ensuring that Collected Data are Maintained  
and Available for Use by Decision-makers and the Public**

Recommendations of the  
**California Water Quality  
Monitoring Council**

submitted to  
**Linda S. Adams**  
**Secretary for Environmental Protection**

and  
**Mike Chrisman**  
**Secretary for Resources**

**State of California**  
**December 1, 2008**