



The logo for the California Water Quality Monitoring Council is displayed on a white rectangular background. At the top, the word "CALIFORNIA" is written in blue, spaced-out capital letters. Below this is a stylized graphic of rolling hills and water, rendered in shades of green and blue. At the bottom of the logo, the words "WATER QUALITY" are written in large, bold, white capital letters, with "WATER" in blue and "QUALITY" in green. Below "WATER QUALITY", the words "MONITORING COUNCIL" are written in smaller, blue, spaced-out capital letters.

Maximizing the Effectiveness of Water Quality Data Collection & Dissemination

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State Water Resources Control Board

I am Jon Marshack,  
with the California State Water Resources Control Board.  
And I am staff to the California Water Quality Monitoring Council.



## Everyone Needs Data

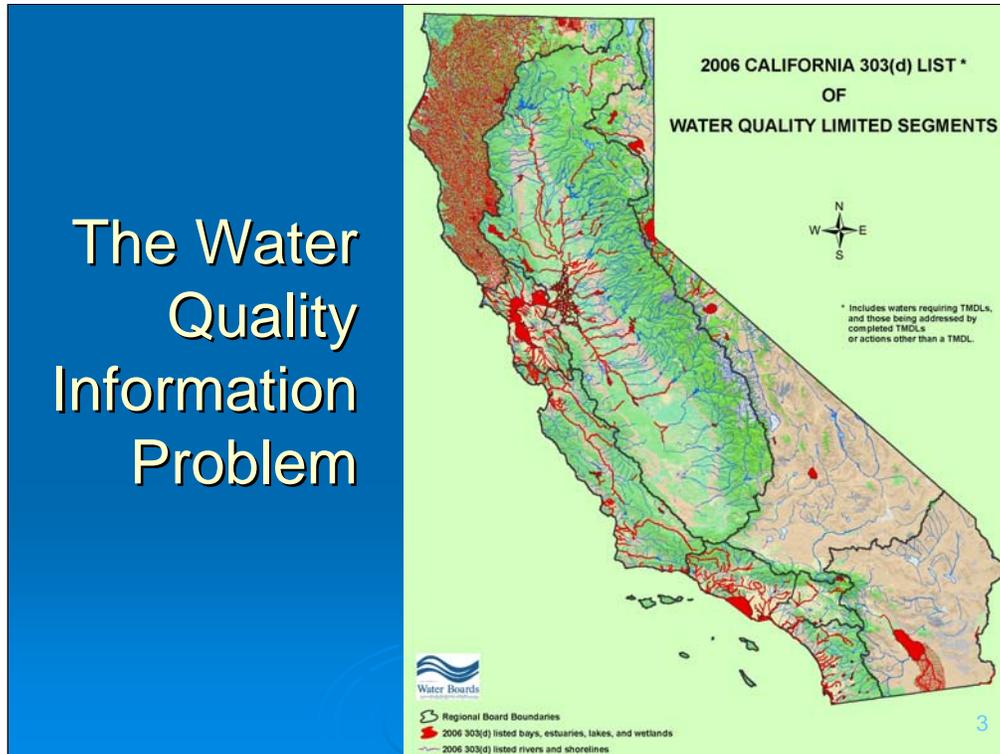
- 211,000 miles of rivers & streams
- >1.6 million acres lakes
- 1,100 miles of coastline
- 1.3 million acres of bays and estuaries
- 15 million acre-feet of groundwater extracted per year

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Many local, state, and federal **agencies**, regulated **dischargers**, and hundreds of **water bond grant recipients** spend millions of dollars each year collecting water quality data in California.

These data must be turned into **useable information** to help decision makers and stakeholders understand

- The **status** of our waters and aquatic ecosystems,
- **Public health and welfare issues** related to water quality, and
- The **effectiveness of agency programs** to manage our water resources.



But California's water quality information **system is defective**

- There are **inconsistent monitoring objectives** and **methods to collect and assess the data**, as shown in this map of 2006 impaired waters listings.

In this example, **differences in assessment strategies** makes it appear that North Coast Region waters are the most impaired, when they are actually some of the state's cleanest waters.

- Often it is not possible to **integrate data** from different studies.
- And there is **no single user-friendly place** to access the data.

## The Response – Senate Bill 1070

- ◆ Became state law in 2006
- ◆ Required formation of California Water Quality Monitoring Council
- ◆ Memorandum of Understanding between
  - ◆ California Environmental Protection Agency
  - ◆ California Natural Resources Agency
- ◆ By December 1, 2008: Monitoring Council recommendations
  - ◆ Maximize efficiency and effectiveness of existing water quality data collection and dissemination
  - ◆ Ensure collected data available to decision makers and public

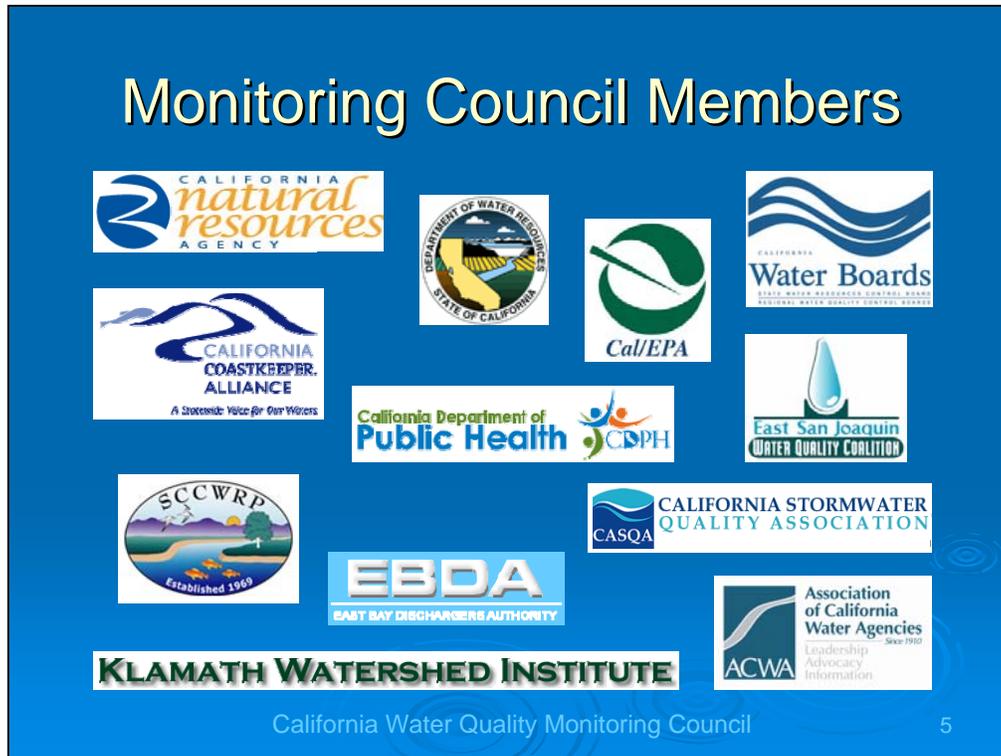
California Water Quality Monitoring Council

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In response, **State Senate Bill 1070** was signed into law in 2006, requiring the **California Environmental Protection Agency** and the **California Natural Resources Agency** to establish the **California Water Quality Monitoring Council**.

The legislation required that by December 1, 2008 the Monitoring Council report its **recommendations**

- For **maximizing the efficiency and effectiveness** of existing water quality data collection and dissemination,
- And for ensuring that collected data are available for use by decision makers and the public.



Members of the Monitoring Council represent:

- State regulatory and resource management agencies
- The regulated community
- Water supply interests
- Citizen monitoring groups
- The scientific community and
- The public

**The breadth of representation on this council is unique.**

## The Monitoring Council's Solution

Don't get mired in technical details!

- Focus first on streamlined data access
  - Theme-based web portals
  - Directly address users' questions
  - Single global point of entry
- Theme-specific workgroups
- Overarching Monitoring Council guidance

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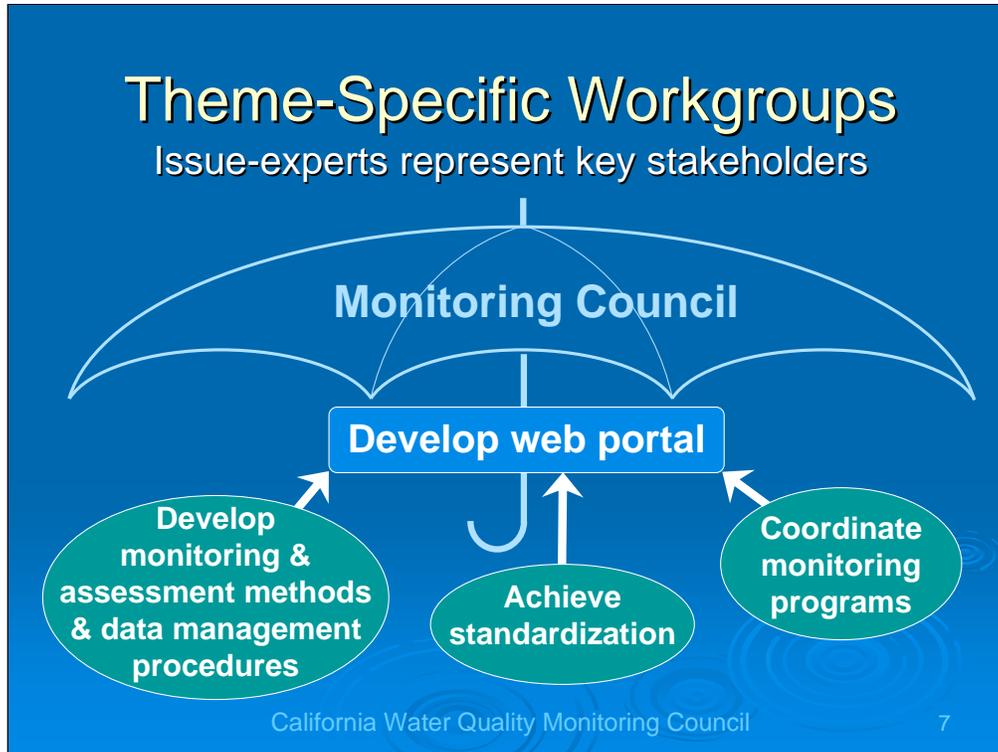
Rather than focusing on technical details, such as methods consistency and standard data formats, the recommendations presented a **new solution**.

The Monitoring Council believes that the best way to coordinate and enhance California's monitoring, assessment and reporting efforts is **first** to provide a platform for **intuitive, streamlined access** to water quality information **that directly addresses users' questions**.

### **Theme-specific workgroups,**

under the overarching guidance of the Monitoring Council,

- **Evaluate existing** monitoring, assessment and reporting **efforts**
- And work to **enhance** those efforts so as to improve the **delivery** of water quality information to the user, in the form of **theme-based internet portals**.



Each portal is developed and maintained by  
a **theme-specific workgroup**.

The green ovals at the bottom together represent  
the efforts of such a workgroup.

The workgroups are

- **staffed by issue experts** representing key stakeholders
- that develop a **web portal** devoted to their specific theme.

Each workgroup **coordinates** existing monitoring programs  
within their theme,

Developing monitoring and assessment methods  
and data management procedures according to  
performance measures defined by Monitoring Council.

The goal is to achieve a level of **standardization**  
necessary to meet **users' needs**.

## Role of the Monitoring Council

- Establish policies and guidelines
- Clearinghouse for
  - Standards
  - Guidelines
  - Collaboration

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### The Monitoring Council

- Establishes **common policies and guidelines** for the workgroups and the monitoring programs they represent; and
- Acts as a **clearinghouse** for standards, guidelines, and collaboration.



To illustrate its vision, the Monitoring Council and its workgroups are developing the **My Water Quality** website to provide a **single, global access point** to a set of **theme-based internet portals** for water quality monitoring data and assessment information.

The website is designed around **intuitively clear questions** that are readily understood by managers, the public, and scientists.

- Is our water safe to drink?
- Is it safe to swim in our waters?
- Is it safe to eat fish and shellfish from our waters?
- Are our aquatic ecosystems healthy?
- What stressors and processes affect our water quality?

CA.GOV State of California ENVIRONMENTAL PROTECTION AGENCY RESOURCES AGENCY CALIFORNIA WATER QUALITY MONITORING COUNCIL

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

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

GOVERNOR SCHWARZENEGGER Visit his Website

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

Is It Safe to Swim In Our Waters?

Show County Info: -- Select County --

Monterey County

- [beach closure information](#)
- [bacterial impairment listings](#)
- [bacterial sampling data](#)
- [beach improvement projects](#)

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 the Show County Info menu.

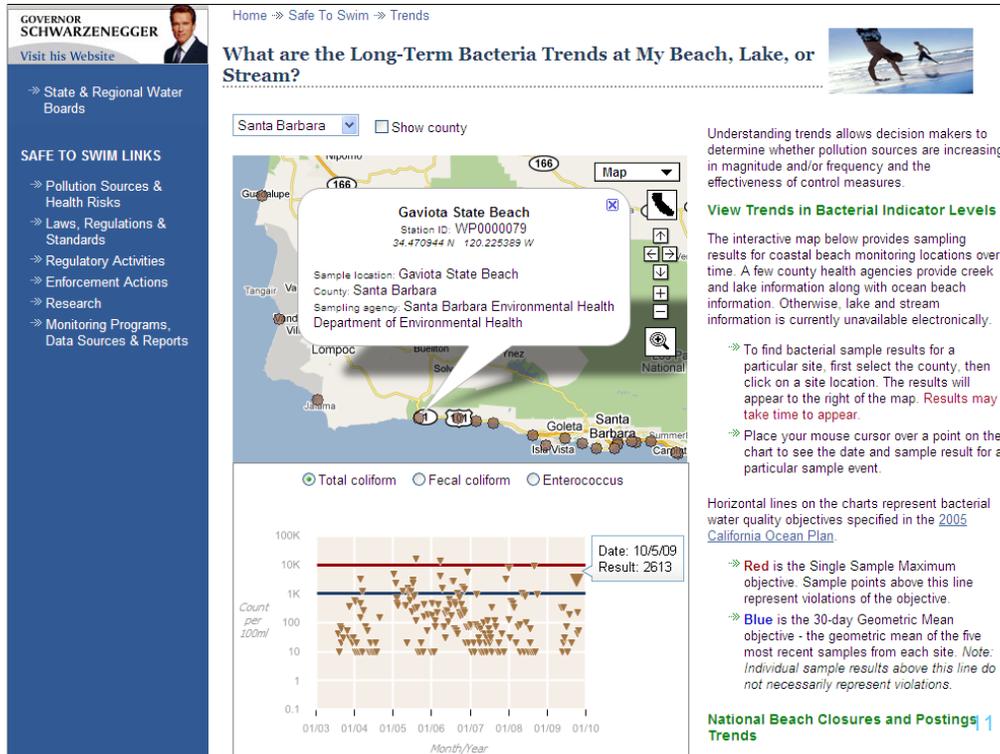
QUESTIONS ANSWERED

- [Can I swim at my beach, lake, or stream?](#)
- [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?](#)

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Each question leads to a series of web pages that provide **map-based access to summary assessment products** and more detailed monitoring data that address **more detailed questions**.

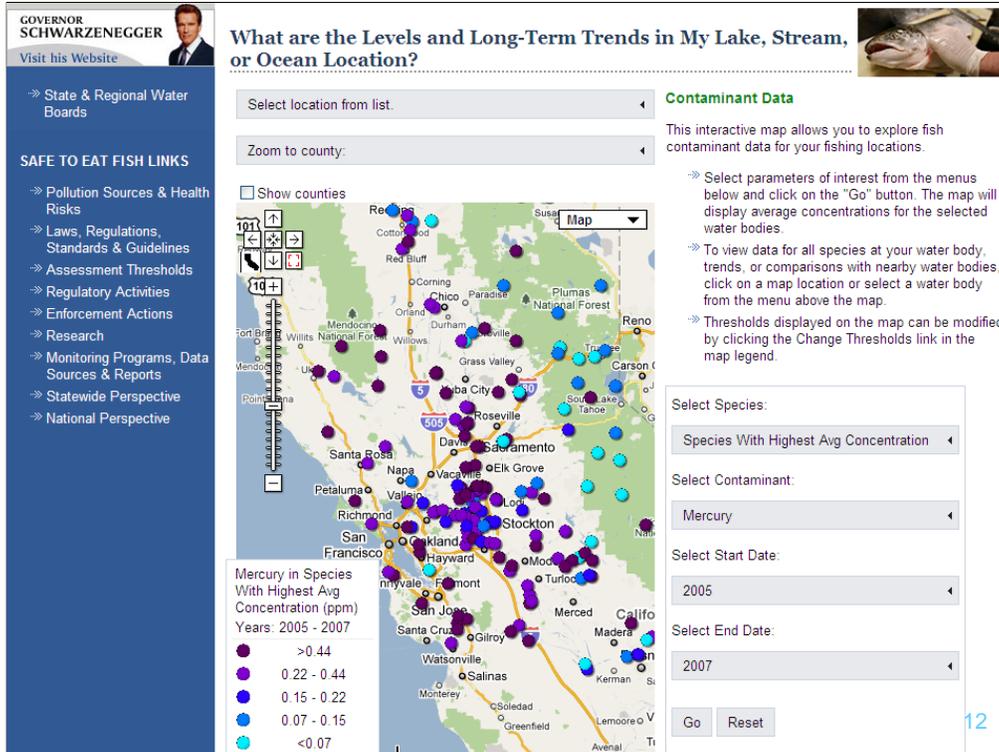
Links along the left-hand side of each page enable users to access **technical information** specific to each theme.



The **Safe-to-Swim portal** initially focuses on **Coastal Beaches, Bays & Estuaries**

- The **Beach Water Quality Workgroup** coordinates the monitoring efforts of state and local agencies and coastal dischargers, and the assessment efforts of regional environmental interests.
- These data and a variety of assessment tools are included in this web portal, released to the public in **July 2009**

This page of the Safe-to-Swim portal compares **bacterial indicator data** for specific coastal monitoring locations with **water quality standards** established to protect **recreational water use**.



The **Safe-to-Eat Fish and Shellfish portal** initially focuses on sport fish

- The **Bioaccumulation Oversight Group** is a collaborative effort of a number of state agencies and others to assess the accumulation of pollutants, such as mercury and legacy pesticides, in fish that people eat.
- A portal based on their work was released in **December 2009**

This page from the Safe-to-Eat Fish and Shellfish portal compares **concentrations of bioaccumulated pollutants** in fish from water bodies throughout the state using color coded ranges.

**Fish consumption advisories and safe eating guidelines** by water body are presented on other portal pages.

GOVERNOR SCHWARZENEGGER  
Visit his Website

Home → Safe To Eat → Impaired Waters

### Which Lakes, Streams, or Ocean Locations Are Listed By The State As Impaired?

County:  Water Body:

Show county

**SAFE TO EAT FISH LINKS**

- State & Regional Water Boards
- Pollution Sources & Health Risks
- Laws, Regulations, Standards & Guidelines
- Assessment Thresholds
- Regulatory Activities
- Enforcement Actions
- Research
- Monitoring Programs, Data Sources & Reports
- Statewide Perspective
- National Perspective

**Impaired Water Bodies**

Listing a water body as impaired in California is governed by the [State Water Board's 303\(d\) Listing Policy](#).

The State and Regional Water Boards assess water quality data for California's waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. This biennial assessment is required under Section 303(d) of the [federal Clean Water Act](#).

The map shows California waters that were placed on the State's most current (2006) 303(d) list and which pollutants they contain that adversely impact

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This interactive map shows which of California's waters are listed as impaired for uses related to fish or shellfish consumption by humans and which pollutants are involved. Also shown are the Total Maximum Daily Load (TMDL) projects to reduce pollutants to acceptable levels.

**View 2006 303(d) Listing and current TMDL Information:**

- Click on a water body (shown in red), or
- Select (or type) the county in the County box, then select the water body from the Water Body menu, or
- Select (or type) the water body name directly in the Water Body box
- Use the magnifier tool to zoom into an area of interest (more highlighted water bodies will appear)
- Click on the state outline tool to return to a statewide view

**Suisun Bay**

Pollutant of concern: PCBs (Polychlorinated biphenyls)

Size affected: 25,335.00 Acres

TMDL status: Regional Board adopted TMDL

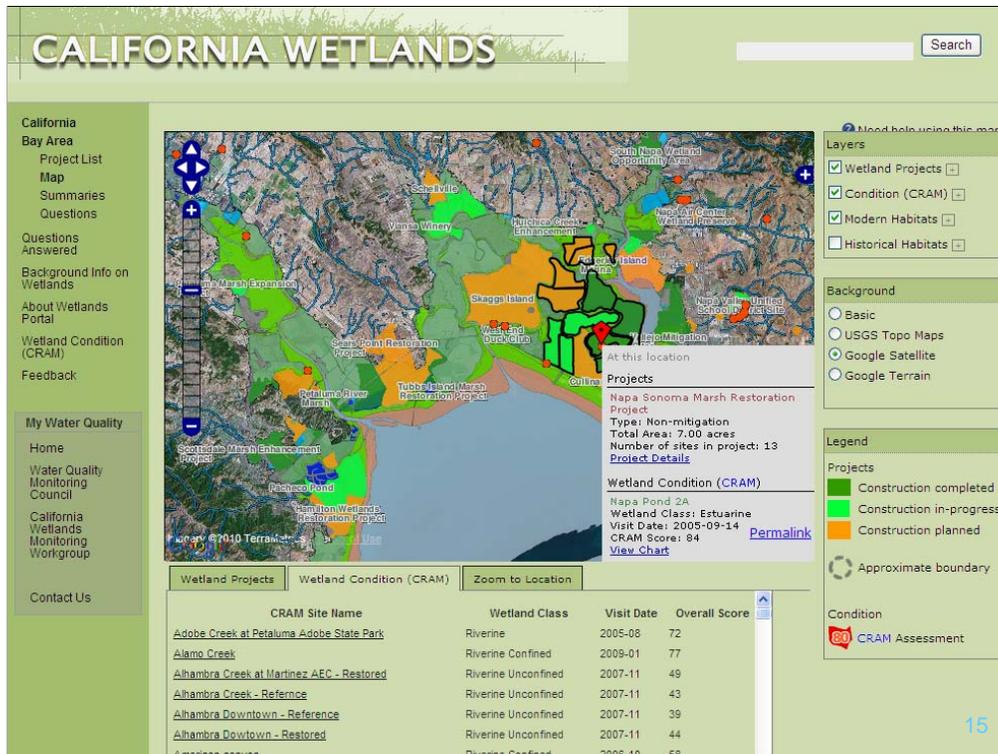
[Final Staff Report](#)  
[TMDL Page](#)

Listed water body in the San Francisco Bay Region.

This page from the Safe-to-Eat portal shows which **water bodies are listed as impaired for the fishing beneficial use**, based on bioaccumulated pollutants in fish and shellfish samples. Links to **TMDL information** for each water body show how each impairment is being addressed.

The screenshot displays the website for the California Water Quality Monitoring Council. At the top, it features the CA.GOV logo and the text "State of California ENVIRONMENTAL PROTECTION AGENCY RESOURCES AGENCY CALIFORNIA WATER QUALITY MONITORING COUNCIL". Navigation links include "Home", "Safe to Drink", "Safe to Swim", "Safe to Eat Fish", "Ecosystem Health", "Stressors & Processes", and "Contact Us". A search bar is located in the top right corner. Below the navigation, a green bar lists "Estuaries | Lakes | Streams & Rivers | Ocean | Wetlands". The main content area is titled "Are Our Aquatic Ecosystems Healthy?" and includes a sub-header "California has many types of aquatic habitats. Follow the links below to learn more...". It lists five categories: ESTUARIES, LAKES, STREAMS & RIVERS, OCEAN, and WETLANDS, each with a brief description and a "More >>" link. A sidebar on the left features a profile for Governor Schwarzenegger and a section titled "AQUATIC HEALTH LINKS" with links to "Stressors", "Laws, Regulations, Standards & Guidelines", "Regulatory Activities", "Enforcement Actions", "Research", and "Monitoring Programs, Data Sources & Reports".

Aquatic ecosystem health information is presented in separate portals for each **water body type**.



The first Aquatic Ecosystem Health portal focuses on **Wetlands**

- The **California Wetland Monitoring Workgroup** coordinates the efforts of 23 state, federal, and local organizations to assess the **extent** and **health** of California's wetlands
- Their **California Wetlands portal** was released in **March of this year**

This page from the California Wetlands portal provides map-based access to

- the historic and modern **extent** of wetland habitat,
- wetland **condition scores** using the California Rapid Assessment Method, and
- the status of wetland **restoration projects**.



The graphic features a blue background with the title "Initial Water Quality Portals" at the top. The "Water Quality" part of the title is enclosed in a square logo with a stylized 'W' and 'Q' and the words "Water Quality" below it. Below the title are four rows, each with a small image on the left and a text box on the right. The first row shows people swimming with the text "IS IT SAFE TO SWIM IN OUR WATERS?" and "Coastal beaches, bays & estuaries – July 2009". The second row shows a fish being held with the text "IS IT SAFE TO EAT FISH AND SHELLFISH?" and "Sport fish – December 2009". The third row shows birds in a wetland with the text "ARE OUR AQUATIC ECOSYSTEMS HEALTHY?" and "Wetlands – March 2010", "Streams – Future", and "Marine Rocky Intertidal – Future". The fourth row shows a person drinking from a glass with the text "IS OUR WATER SAFE TO DRINK?" and "Groundwater – Future". At the bottom, it says "California Water Quality Monitoring Council" and "16".

## Initial Water Quality Portals

- IS IT SAFE TO SWIM IN OUR WATERS?**
  - Coastal beaches, bays & estuaries – July 2009
- IS IT SAFE TO EAT FISH AND SHELLFISH?**
  - Sport fish – December 2009
- ARE OUR AQUATIC ECOSYSTEMS HEALTHY?**
  - Wetlands – March 2010
  - Streams – Future
  - Marine Rocky Intertidal – Future
- IS OUR WATER SAFE TO DRINK?**
  - Groundwater – Future

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These initial themes were chosen for action, based on existing efforts that had already made substantial progress.

Other workgroups are organizing to develop additional portals on

- **healthy streams,**
- **marine rocky intertidal ecosystems,** and
- the safety of California's **groundwater resources for human consumption.**

## California's Comprehensive Water Quality Monitoring Program Strategy

[www.waterboards.ca.gov/water\\_issues/  
programs/monitoring\\_council](http://www.waterboards.ca.gov/water_issues/programs/monitoring_council)

### *My Water Quality Portals*

[www.CaWaterQuality.net](http://www.CaWaterQuality.net)

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As called for by the enabling legislation,  
the Monitoring Council is poised to propose  
a **comprehensive water quality  
monitoring program strategy** for California,  
based on its recommendations  
and the success of initial workgroup and web portal efforts.

Information on the California Water Quality Monitoring Council,  
including the draft strategy,  
and the **My Water Quality web portals**  
are on the internet at the addresses shown here.

I would be happy to answer your questions.