



Status Report

March 2013

Jon B. Marshack, D.Env.
Monitoring Council Coordinator

Senate Bill 1070

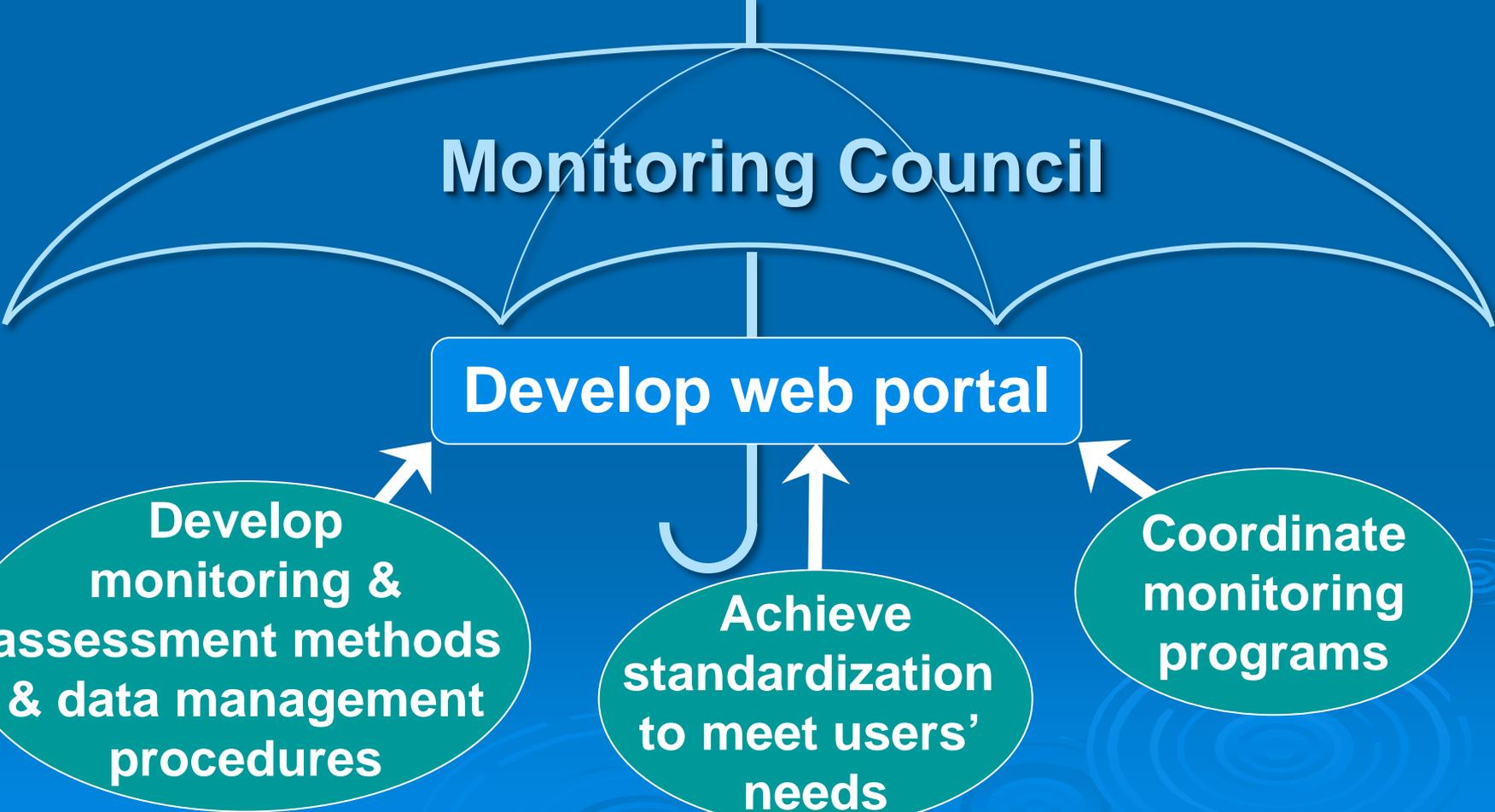
- ◆ Required formation of California Water Quality Monitoring Council
 - ◆ Memorandum of Understanding between
 - ◆ California Environmental Protection Agency
 - ◆ California Natural Resources Agency
- ◆ Develop recommendations
 - ◆ Maximize efficiency and effectiveness of existing water quality data collection and dissemination
 - ◆ Ensure collected data available to decision makers and public
- ◆ Comprehensive Monitoring Program Strategy

The Monitoring Council's Solution

- 💧 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 

Theme-Specific Workgroups

Issue-experts represent key stakeholders



The diagram features a large white umbrella shape at the top. Inside the umbrella, the text 'Monitoring Council' is centered. Below this, a blue rounded rectangle contains the text 'Develop web portal'. Three white arrows point upwards from three green ovals towards this central box. The ovals contain the following text: 'Develop monitoring & assessment methods & data management procedures' (left), 'Achieve standardization to meet users' needs' (center), and 'Coordinate monitoring programs' (right). The background is a solid blue color with faint white concentric circles at the bottom.

Monitoring Council

Develop web portal

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

**Achieve
standardization
to meet users'
needs**

**Coordinate
monitoring
programs**

Role of the Monitoring Council

- 💧 Establish policies and guidelines
- 💧 Clearinghouse for standards, guidelines & collaboration
- 💧 Resolve key issues
- 💧 Provide support
- 💧 Improve visibility





Website and Portals

www.CaWaterQuality.net

CALIFORNIA WATER QUALITY MONITORING COUNCIL

- [Home](#)
- [Safe to Drink](#)
- [Safe to Swim](#)
- [Safe to Eat Fish](#)
- [Ecosystem Health](#)
- [Stressors & Processes](#)
- [Contact Us](#)

My Water Quality | Monitoring Council | This site is hosted by the Surface Water Ambient Monitoring Program (SWAMP) |

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- [Cal/EPA](#)
- [Natural Resources Agency](#)
- [About the California Water Quality Monitoring Council](#)
- [Web Portal Partners](#)
- [Monitoring & Assessment Programs, Data Sources & Reports](#)
- [Water Quality Standards, Plans and Policies](#)
- [Regulatory Activities](#)
- [Enforcement Actions](#)
- [Research](#)
- [State & Regional Water Boards](#)
 - [Performance Report](#)
 - [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 that may be viewed across space and time. Initial web portal development concentrates on four theme areas, with web portals to be released one at a time. Click the [Contact Us](#) tab for more information.

The Monitoring Council seeks to provide multiple perspectives on water quality information and to highlight existing data gaps and inconsistencies in data collection and interpretation, thereby identifying areas for needed improvement in order to better address the public's questions. Questions and comments should be addressed through the [Contact Us](#) tab.



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. [\[Future Portal\]](#)



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?

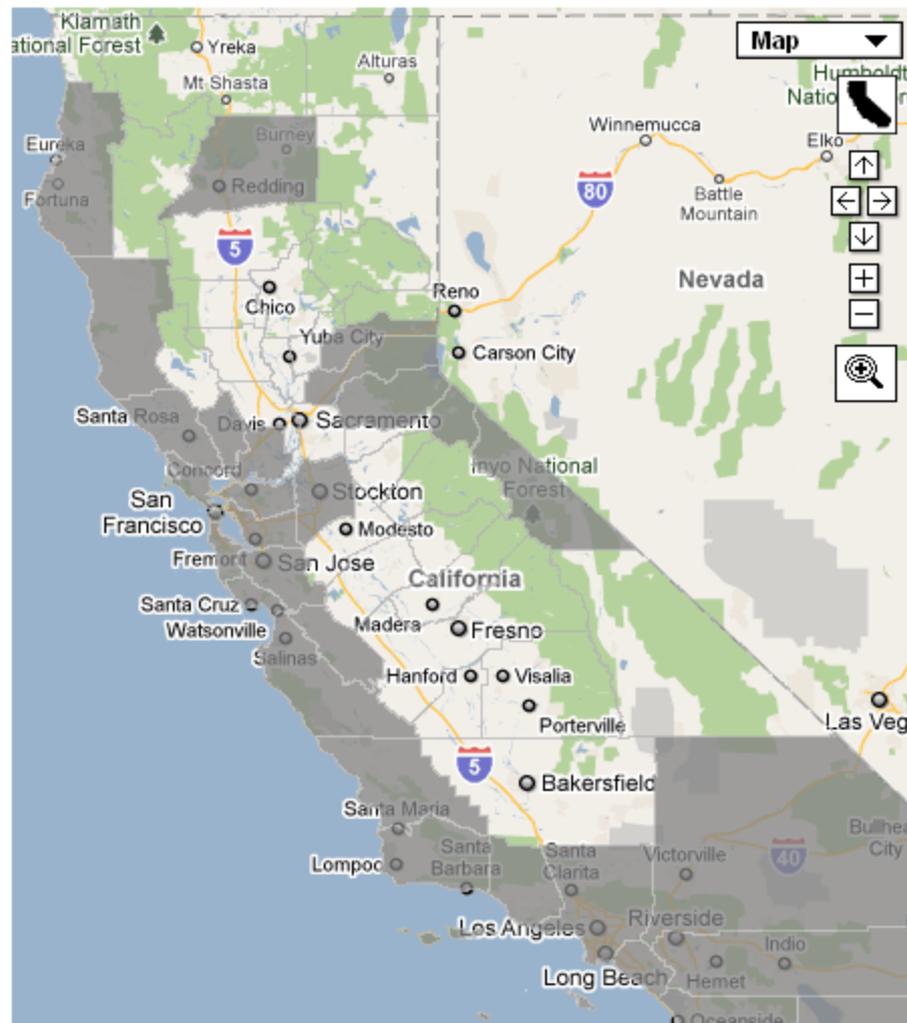
The health of fish and other aquatic organisms and communities depends on the chemical, physical, and biological quality of the waters in which they live. [More>>](#)

Home → Safe To Swim



Is It Safe to Swim In Our Waters?

Show County Info:



Beach water quality monitoring and strong pollution prevention measures are critical for protecting beach goers from waterborne diseases. Monitoring is performed by city and 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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- Natural Resources Agency
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SAFE TO SWIM LINKS

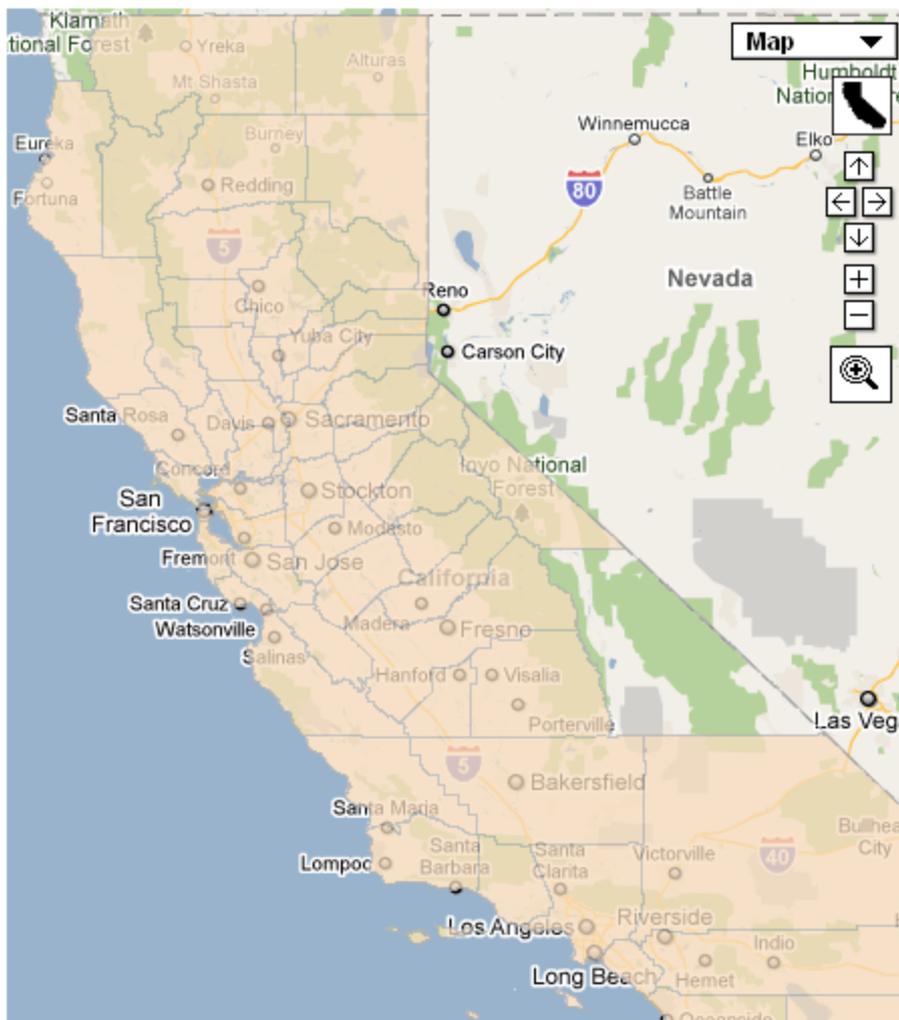
- Pollution Sources & Health Risks
- Laws, Regulations & Standards
- Regulatory Activities
- Enforcement Actions
- Research
- Monitoring Programs, Data Sources & Reports

Home → Safe To Eat



Is It Safe to Eat Fish and Shellfish From Our Waters?

Show County Info: Show counties



Fish and shellfish are nutritious and good for you to eat. But some fish and shellfish may take in toxic chemicals from the water they live in and the food they eat. Some of these chemicals build up in the fish and shellfish - and in the humans that eat fish and shellfish - over time. Although the chemical levels are usually low, it is a good idea to learn about advisories and monitoring in water bodies where you fish, and for fish or shellfish you eat.

QUESTIONS ANSWERED

- [Can I eat fish or shellfish caught in my lake, stream, or ocean?](#)
- [Does my lake, stream, or ocean location have fish or shellfish with contaminants at levels of concern?](#)
- [What are the levels and long-term trends in my lake, stream, or ocean location?](#)
- [Which lakes, streams, or ocean locations are listed by the State as impaired?](#)
- [What is being done to reduce these problems?](#)

Water Quality information addressing these questions is currently available for the counties that are shaded on this map. This information is available on the following pages:

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- Cal/EPA
- Natural Resources Agency
- About the California Water Quality Monitoring Council

SAFE TO EAT FISH LINKS

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

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AQUATIC HEALTH LINKS

- [Stressors](#)
- [Laws, Regulations & Standards](#)
- [Regulatory Activities](#)
- [Enforcement Actions](#)
- [Research](#)
- [Monitoring Programs, Data Sources & Reports](#)

[Home](#) → [Eco Health](#)



Are Our Aquatic Ecosystems Healthy?

California has many types of aquatic habitats. Follow the links below to learn more ...



WETLANDS

Wetlands form along the shallow margins of deepwater ecosystems such as lakes, estuaries, and rivers. They also form in upland settings where groundwater or runoff makes the ground too wet for upland vegetation. [More >>](#)



ESTUARIES

Estuaries are unique habitats found where rivers and the ocean mix. They feature a diverse array of plants and animals adapted to life along the mixing zone. *[Future Portal]*



STREAMS, RIVERS & LAKES

California's streams and rivers flow through diverse habitats, from mountain canyons, valleys, deserts, estuaries and urban areas. Riparian woodlands develop along stream banks and floodplains, linking forest, chaparral, scrubland, grassland, and wetlands. California lakes, supporting deep water, wetlands, riparian woodlands, offer a quiet refuge for plants, animals and humans alike. [More >>](#)



OCEAN

California has 1,100 miles of shoreline and 220,000 square miles of state and federal oceanic habitat, featuring one of the world's most diverse marine ecosystems. *[Future Portal]*



(Updated 6/15/12)

California

North Coast
Bay Area
Central Coast
South Coast
Central Valley
Lahontan
Colorado River Basin

Questions Answered

Background Info on Wetlands

About Wetlands Portal

Wetland Condition (CRAM)

Feedback

My Water Quality

Home

Water Quality Monitoring Council

California Wetlands Monitoring Workgroup

Contact Us

Welcome to the California Wetlands Portal

The purpose of the Wetlands Portal is to provide the public information on the quantity and quality of California wetlands.

Explore your wetlands

Select a region to view interactive maps monitoring information related to wetlands and wetland projects.

- [North Coast](#)
- [San Francisco Bay Area](#)
- [Central Coast](#)
- [South Coast](#)
- [Central Valley](#)
- [Lahontan](#)
- [Colorado River Basin](#)

Questions Answered

Click on a question below to view summary information based on available monitoring results.

- [Where are California's wetlands? Is there a wetland near me?](#)
- [How much wetland habitat does California have?](#)
- [How much wetland habitat has California lost?](#)
- [How healthy are California's wetlands?](#)
- [What is being done to improve California's wetlands?](#)
- [What is the status of wetland mapping in California?](#)

Wetland Condition

The California Wetlands Portal reports on wetland condition on the [CRAM website](#).

News

Oct-18-2010

The California Natural Resources Agency released the second [State of the State's Wetlands report](#), which summarizes the progress made by



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WETLANDS

- > [Stressors](#)
- > [Laws, Regulations & Standards](#)
- > [Regulatory Activities](#)
- > [Enforcement Actions](#)
- > [Research](#)
- > [Monitoring Programs, Data Sources & Reports](#)



California Wetlands



Vernal Pool at Mather Field, Sacramento County
 At certain times of the year, vernal pools dot the landscape with colorful vegetation and unique wildlife.
 (David Rosen, Wildside Photography)

Click on an image above for more information



Wetlands have both aquatic and terrestrial characteristics. Wetlands form along the shallow margins of lakes, estuaries, and rivers, and in areas with high groundwater or shallow surface water, such as springs, wet meadows, ponds, and freshwater and tidal marshes. They often go through wet and dry cycles, and therefore support a unique array of life specially adapted to these conditions. Wetlands provide important habitat for birds, fish, and other wildlife. They support

QUESTIONS ANSWERED

What is the extent of our wetlands?

- > [Where did our numbers come from?](#)
- > [Where are they?](#)
- > [How much have we lost?](#)
- > [What types are there?](#)
- > [How do we classify them?](#)
- > [What services do they provide?](#)
- > [What is the status of mapping?](#)

How healthy are our wetlands?

- > [How do we know how they're doing?](#)
- > [How do we assess wetland health?](#)
- > [What studies have documented wetland condition?](#)

How are our wetlands protected?

- > [What regulations protect them?](#)



- Cal/EPA
- Natural Resources Agency
- About the California Water Quality Monitoring Council

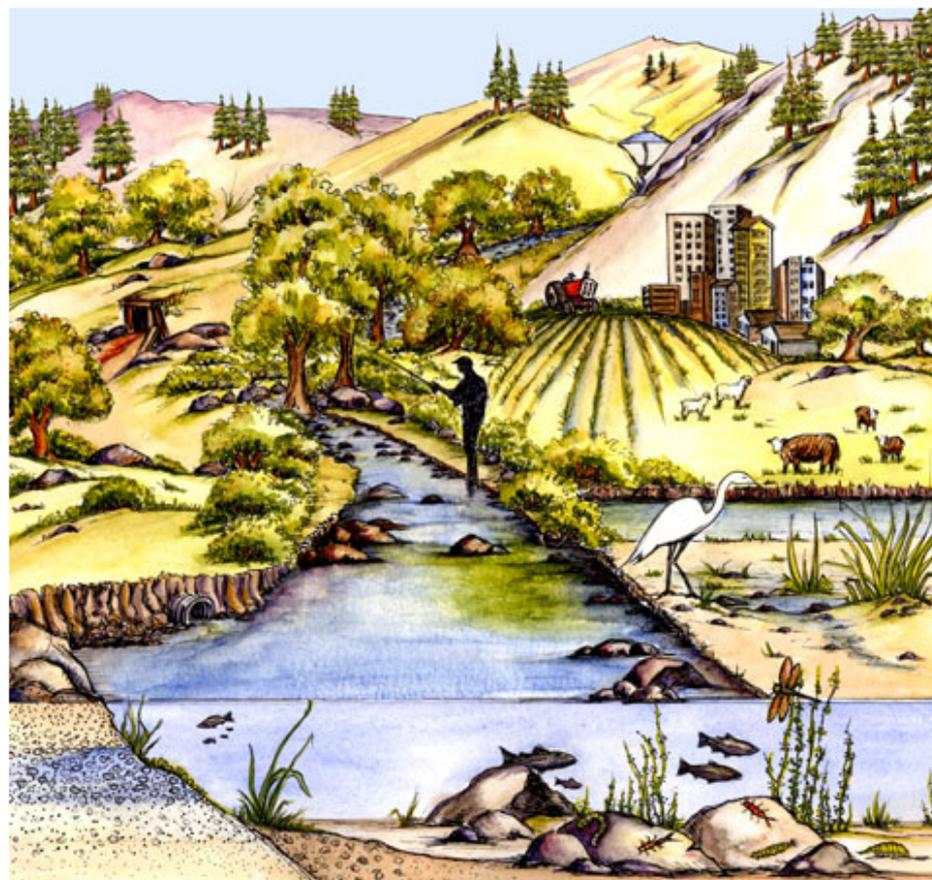
AQUATIC HEALTH LINKS

- Stressors
- Laws, Regulations & Standards
- Regulatory Activities
- Enforcement Actions
- Research
- Monitoring Programs, Data Sources & Reports

California Streams, Rivers and Lakes

[Urban](#) | [Agriculture](#) | [Other Uses](#) | [Fines & Sands](#) | [Gravels](#) | [Cobbles & Boulders](#) | [Riffles & Rapids](#) | [Buffer](#) | [Riparian Cover](#) | [Pools](#) | [Groundwater](#) | [Water Quality](#) | [Sediment Quality](#) | [Stream Gradient](#) | [Channel Stability](#) | [Channel Alteration](#) | [Algae](#) | [Bugs](#) | [Fish](#) | [Fish Contaminants](#) |

Also see: [Hydrologic Connectivity](#) | [Hydrologic Sufficiency](#) | [Invasive Species](#) | [Sediment Balance](#)



Healthy streams, rivers, and lakes provide safe drinking water, recreational opportunities, and important habitat for species ranging from the red-shouldered hawk to steelhead to crayfish and dragonflies. Maintaining healthy streams, rivers, and lakes can reduce the need for water treatment and water supply costs and make landscapes more resilient to climate change. To determine the health of a waterway and the flora and fauna that live there, investigators can use a combination of chemical, biological, and physical assessments. Among the characteristics that may be considered are habitat quality, aquatic life diversity, water chemistry, stream hydrology, the physical channel form, and sediment transport processes of the stream.

Navigation Instructions: [Show](#) | [Hide](#) .

→ [Portal Fact Sheet](#)

QUESTIONS ANSWERED

- [What is the extent of our stream and river resources?](#)
- [What is the condition of our streams and rivers?](#)
- [What is being done to make our waters healthier?](#)

→ [California Watersheds Slideshow](#) - Learn

Theme-Specific Workgroups and Portals

WATER BODY TYPES	THEMES				
	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 Waters?
Streams & Rivers	Safe Drinking Water Workgroup	[Diagonal Hatching]	SWAMP Bioaccumulation Oversight Group	SWAMP Healthy Streams Partnership	All Workgroups
Lakes				[Diagonal Hatching]	
Estuaries				Estuary Monitoring Workgroup	
Ocean Waters	N/A	Safe to Swim and Beach Water Quality Workgroups	N/A	Ocean Ecosystem Health Workgroup	
Wetlands	N/A	N/A		Wetland Monitoring Workgroup	
Groundwater	Safe Drinking Water Workgroup	N/A	N/A	N/A	
Tap Water		N/A	N/A	N/A	

More Than Just Data on the Web

- 💧 Forming and maintaining lasting relationships
 - 💧 Through theme-specific workgroups
- 💧 Implementing a portal design that requires & motivates parties to solve issues related to
 - 💧 Monitoring and assessment coordination
 - 💧 Data integration
- 💧 Directly addressing management questions
- 💧 Providing a structure that initiates dialogues
 - 💧 Induces broader-based thinking
 - 💧 Enables broader-based assessments

Wetland Monitoring Workgroup



- 💧 Third portal released to public
 - 💧 Updated portal about to be released
- 💧 Focus – Where are the wetlands & how are they doing?
- 💧 Data managed through WetlandTracker & eCRAM
 - 💧 About to release EcoAtlas with CARI
- 💧 Strategy in place to coordinate monitoring, assessment and reporting
- 💧 Develop and update standard methods & QA
 - 💧 Provide training and support
- 💧 Regular outreach to new agencies/organizations
- 💧 Funding through USEPA, CIAP & Water Boards

Bioaccumulation Oversight Group

- 💧 Second portal released to public
 - 💧 Regularly updated as new studies are published
- 💧 Initial focus – threats to human consumers from sport fish
 - 💧 Expanding – threats to aquatic life and wildlife
- 💧 Data managed through CEDEN
- 💧 BOG strategy in place to coordinate monitoring, assessment and reporting
 - 💧 Mussel Watch coordination requested
- 💧 SWAMP standard methods & QA
- 💧 Expanding workgroup membership through outreach
- 💧 SWAMP funding from Water Boards & USEPA

Healthy Streams Partnership



- 💧 Fourth portal released to public
- 💧 Initial focus – bioassessment and toxicity
 - 💧 Expanding – Healthy Watersheds Initiative project
 - 💧 Future – chemistry, physical habitat, algae
- 💧 Data managed through CEDEN
- 💧 SWAMP strategy in place to coordinate monitoring, assessment and reporting
- 💧 SWAMP standard methods & QA
- 💧 Score cards – initial development in Regions 3 and 9
- 💧 Membership could be expanded
- 💧 SWAMP funding from Water Boards & USEPA

Estuary Monitoring Workgroup

- 💧 Portal concept being developed
- 💧 Initial focus – San Francisco Bay-Delta
 - 💧 Automate Water Rights D-1641 reporting of water quality
 - 💧 Condition and drivers of biological resource patterns
- 💧 Data visualization through 34 North workgroup website
- 💧 Potential use of EcoAtlas for restoration project tracking
 - 💧 Endorsement from Sac-SJ Delta Conservancy
- 💧 Interagency Ecological Program currently coordinates monitoring, assessment and reporting
- 💧 Initial funding – State & Federal Contractors Water Agency
- 💧 Leadership from SFCWA and The Bay Institute

Safe to Swim Workgroup

- 💧 First portal released to public
- 💧 Initial focus – coastal beach bacterial indicators & closures
 - 💧 Future expansion – inland water bacteria, HABs
- 💧 Improved data management – new BeachWatch database
 - 💧 Data feed to CEDEN and USEPA
- 💧 Coastal beach monitoring data coordination only
- 💧 Plan to expand membership
 - 💧 Survey data source and user organizations
- 💧 Last workgroup meeting November 2011
- 💧 Lack of leadership beyond coastal monitoring
- 💧 Portal and workgroup funding through Water Boards

Safe to Drink Workgroup

- 💧 Portal concept and questions approved
- 💧 Focus – entire story of delivery of water to the consumer
 - 💧 Water safety at the tap
 - 💧 Source waters – surface water & groundwater
- 💧 DPH and WEF developing portal – minor workgroup input
- 💧 Workgroup leadership – Dept. of Public Health
- 💧 Drinking water data to be managed through DRINC portal
 - 💧 At UC Davis, ICE with CDPH funding
- 💧 Portal funding through Water Board contract with SCCWRP
 - 💧 Subcontract with Water Education Foundation
- 💧 No coordination of monitoring and assessment

Ocean Ecosystem Health Workgroup

- Three workgroup meetings in 2012
 - Interest and participation from wide variety of organizations
- Initial focus developed – Central Coast
 - Inputs of pollutants from the land
 - Coastal waters at risk – estuaries
 - Measures of ocean ecosystem health – mammals and HABs
 - Management impacts – ASBSs and MPAs
- Rocky Intertidal Portal near completion
- Seeking leadership – contract proposal developed
- Funding source(s) uncertain
- Data management uncertain

Data Management Workgroup

- Workgroup membership diverse – public and private orgs
- Focus – coordinate common issues of data management, web development and geospatial information
- Portals/Tools Subcommittee
 - Inventory of data and technology used in portals
- The Data Standards sub committee
 - Develop “best practices” to help make data accessible and portal ready
- Met jointly with Ecosystem Workgroups – common map
- Leadership uneven
- Members reluctant to recommend departmental actions

2011 Annual Report

- 💧 Current fiscal climate and lack of a specific appropriation hampers progress
- 💧 Difficult to convince agency staff to spend additional time to initiate and sustain collaboration
- 💧 Monitoring Council believes that direct involvement of Agency Secretaries is essential to future progress

Requested Action, January 2012

- Formally encourage Cal/EPA and Natural Resources Agency organizations to
 - Implement Monitoring Council's strategy
 - Be actively engaged with Monitoring Council and workgroups
 - Utilize tools developed by workgroups
 - Draft letter to departmental directors provided
- Encourage collaboration with outside organizations

Requested Action, January 2012

- Endorse statewide stewardship of National Hydrography Dataset (NHD) and National Wetland Inventory (NWI)
 - Coordinated common base map of California's water resources for use by all agencies & organizations
 - Maintaining updates and refinements for use by others

Requested Action, January 2012

- Encourage Ocean Protection Council to embrace Monitoring Council's strategy
 - Coordinate monitoring & assessment
 - Lead Ocean Portal development
- Raise awareness of *My Water Quality* web portals and coordination efforts of Monitoring Council and workgroups

Government Organizations Listed in SB 1070

- ◆ Initially focus on the . . . efforts of state agencies, including, but not limited to
 - ◆ State and Regional Water Boards
 - ◆ Department of Water Resources
 - ◆ Department of Fish and Game (Wildlife)
 - ◆ California Coastal Commission
 - ◆ State Lands Commission
 - ◆ Department of Parks and Recreation
 - ◆ Department of Forestry and Fire Protection
 - ◆ Department of Pesticide Regulation
 - ◆ Department of Health Services (Public Health)

Current Issues

- 💧 No response from Agency Secretaries on 2011 Annual Report and recommendations
- 💧 No briefing obtained with Resources Secretary
- 💧 Most funding to date through Water Boards
- 💧 No move to break down data silos
 - 💧 Most portal data is Water Board & contractor available
- 💧 Little demonstration that implementing Monitoring Council strategy is a priority for state governmental organization directors
 - 💧 Exceptions – Water Boards, Delta Conservancy

Where Do We Go From Here?

- 💧 Water Board involvement saturated
- 💧 Coordinator workload beyond saturated
- 💧 SB 1070 not a priority for Agency Secretaries and most departmental directors
- 💧 Cannot offer funding for coordination or portals
- 💧 Options
 - 💧 Continue to work on what is working
 - 💧 Abandon what is not working
 - 💧 Seek specific appropriation for SB 1070
 - 💧 Wait until state budget situation improves

SB 1070 Triennial Audit

- Commencing December 1, 2008, the Secretary of Cal/EPA shall conduct a triennial audit of the effectiveness of the monitoring program strategy
- The audit shall include, but need not be limited to, an assessment of:
 - Extent to which the strategy has been implemented
 - Effectiveness of the monitoring and assessment program and the monitoring council with regard to:
- The Secretary of the Cal/EPA shall consult with the Secretary of the Resources Agency in preparing the audit, consistent with the MOU.