

State of California **ENVIRONMENTAL PROTECTION AGENCY** RESOURCES AGENCY

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CALIFORNIA WATER QUALITY MONITORING COUNCIL

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

GOVERNOR SCHWARZENEGGER



Welcome to My Water Quality

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

→ Cal/EPA

Visit his Website

- → 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



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? (links to page 2)

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>> (links to page 2)





WHAT STRESSORS AND PROCESSES AFFECT OUR WATER QUALITY?

Benefical uses of our waters are affected by emerging contaminants, invasive species, trash, global warming, acidification, pollutant loads, and flow. More>>



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Home → Aquatic Ecosystem Health

Are Our Aquatic Ecosystems Healthy?

California has many types of aquatic habitats. Follow the links below to learn 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 this mixing zone. More >>



LAKES

California lakes, supporting deep water, wetlands, riparian woodlands, offer a quiet refuge for plants, animals and humans alike. More >>



STREAMS & RIVERS (links to page 3)

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. More >>

(links to page 3)



OCEAN WATERS

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. 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 >>

AQUATIC HEALTH LINKS

→ Stressors

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



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STREAM & RIVER LINKS

- → Stream and River Types (links to page)
- → Tools to Assess Biological and Physical Condition (links to page 12)
- → Laws, Regulations,

 Standards & Guidelines

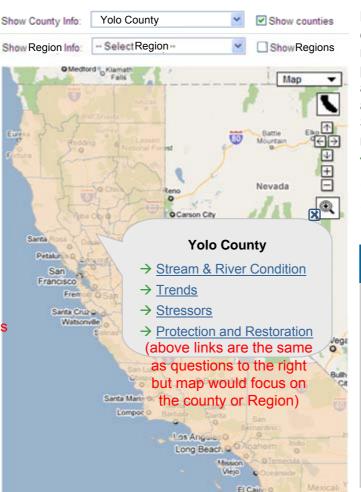
 (links to page 1)
- → Regulatory Activities
- → Enforcement Actions
- → Research (links to Healthy Stream Partnership page)
- → Monitoring Programs, Data Sources & Reports



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Are Our Stream & River Ecosystems Healthy?





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To view stream and river information:

- → Click on a county or
- → Select a County or Region from a pop-up menu above the map

QUESTIONS ANSWERED

- → What is the condition of our streams and rivers? (links to page 4)
- → What are the trends in the condition of our streams and river s? (links to page 8)
- → What are the stressors affecting the condition of our streams and rivers? (links to page 9)
- → What is being done to protect and restore our streams and rivers? (links to page 10)



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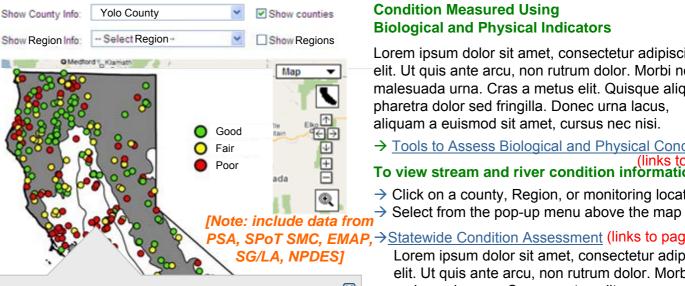
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What is the Condition of Our Streams & Rivers?



Sacramento River at I-Street Bridge



Condition Measured Using Biological and Physical Indicators

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→ Tools to Assess Biological and Physical Condition

To view stream and river condition information:

- → Click on a county, Region, or monitoring location or
- PSA, SPoT SMC, EMAP, → Statewide Condition Assessment (links to page 5) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut quis ante arcu, non rutrum dolor. Morbi nec malesuada urna. Cras a metus elit.
 - → Extent of Stream and River Resources (links to page 6) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut quis ante arcu, non rutrum dolor. Morbi nec malesuada urna. Cras a metus elit.
 - → Stream and River Types (links to page 11)
 - → Stream and River Water Quality Assessment and Impairments Pursuant to the Clean Water Act (links to Lorem ipsum dolor sit amet, consectetur page 7) elit. Ut quis ante arcu, non rutrum dolor. Morbi nec malesuada urna. Cras a metus elit.



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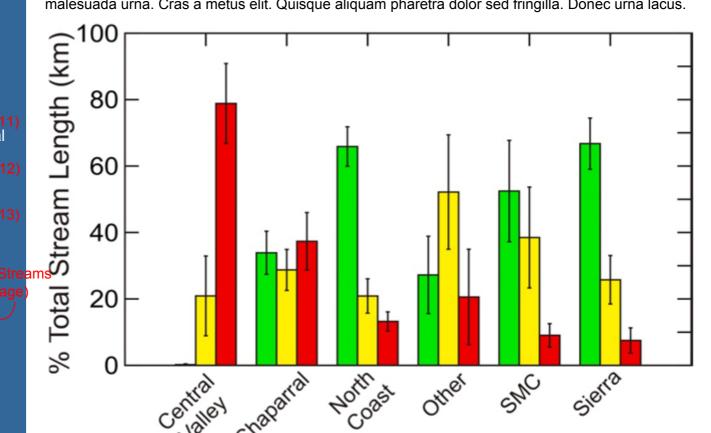


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Statewide Condition of Our Streams & Rivers

Condition by Ecoregion

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What is the Extent of Our Stream & River **Resources?**





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Statewide Figures

- → Perennial Streams and Rivers
 - → xx,xxx km (x,xxx miles)
 - \rightarrow xx% of the total
- → Non-Perennial Streams and Rivers
 - → xxx,xxx km (x,xxx miles)
 - → xx% of the total
- → Stream and River Types (links to page 11)

To view stream and river info by Region:

- → Click on a water quality control region or
- → Select from the pop-up menu above the map

[Note: include caveat that headwaters are largely not mapped (get text from Pete Ode)1



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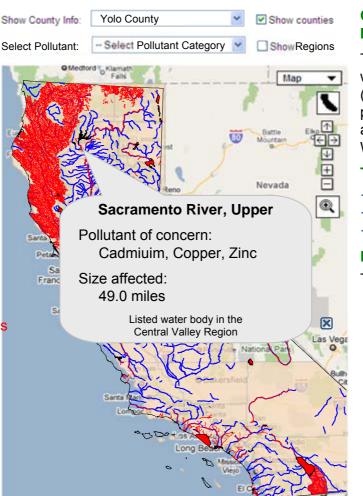
What is the Condition of Our Streams & Rivers?

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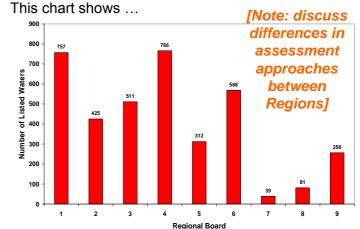
Clean Water Act Assessments and **Impaired Streams and Rivers**

This interactive map shows which of California's waters are listed as impaired for aquatic life uses (i.e., may not protect aquatic life) and which pollutants are involved. Also shown are condition assessments pursuant to Section 305(b) of the Clean Water Act. [Note: Add disclaimer language - Hunt]

To view stream and river information:

- → Click on a county or
- → Select County from the pop-up menu above map
- → Select Pollutant Category from the pop-up menu

Listed Waters by Water Quality Control Region





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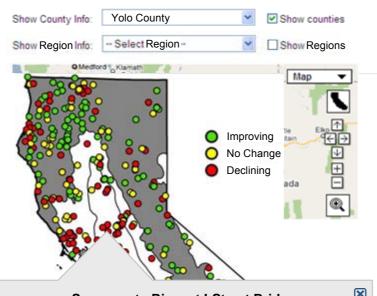
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What Are the Trends in Stream & River Condition?





Much of the water quality information for California streams was gathered in studies designed to identify problem areas and recommend solutions.

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Assessment of trends over time requires studies specifically designed for that purpose that can be maintained over many funding cycles. The trends information presented here is primarily from one largescale State/federal program. Other trend monitoring programs have begun recently, but do not yet have a long enough data record to be presented here.

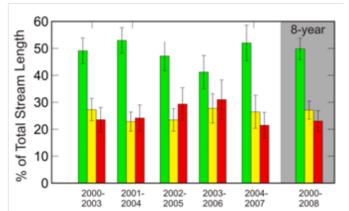
To view stream and river trend information:

- → Click on a county, Region, or monitoring location or
- → Select from the pop-up menu above the map

→ Statewide Trends

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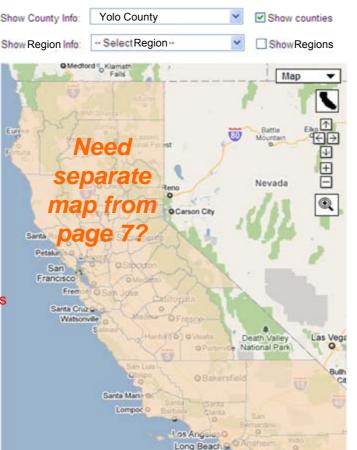
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What are the Stressors Affecting the Condition of our Streams and Rivers?





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To view stream and river information:

- → Click on a county or Region or
- → Select from the pop-up menu above the map

Physical Stressors

Text

Chemical Stressors

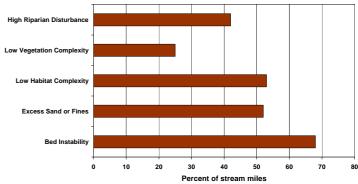
Text

from PSA, SPoT SMC, EMAP, CMAP, SG/LA, NPDES, land use, and pesticide use]

[Note: include data

The Extent of Stressor Impact

This chart shows ...





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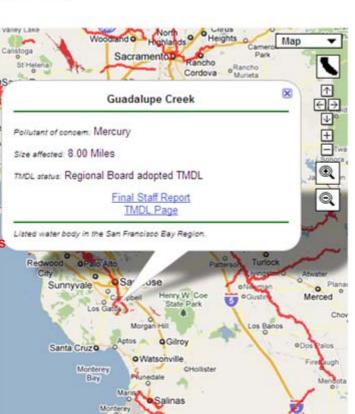


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What is Being Done to Protect and Restore Our **Streams and Rivers?**



Water Body: County: Show county



A number of programs address existing water quality problems that affect stream health.

Total Maximum Daily Loads (TMDLs)

This interactive map shows which of California's streams and rivers are listed as impaired for aquatic life uses and the Total Maximum Daily Load (TMDL) projects to reduce pollutants to acceptable levels.

To view stream and river TMDL information:

- → Click on a water body (shown in red), or
- → Select (or type) the county in the County or Region 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

[Show on map?] **Clean Water Grant Projects**

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Types of Streams & Rivers

[Add photos]



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→ Large Rivers

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→ Streams

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→ Perennial Streams

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→ Non-Perennial Streams

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Intermittent Streams

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Ephemeral Streams

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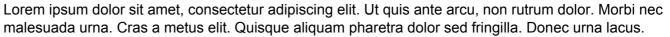
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Tools to Assess Biological and Physical Condition



Biological Assessment Indicators

→ Benthic Macro-Invertebrates (BMI)

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→ Algae

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Physical Habitat Assessment

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→ Link

Chemical Assessment

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→ Link

Toxicity Testing

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→ Link

Integrated Assessment Methods

→ California Rapid Assessment Method (CRAM) Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut quis ante arcu, non rutrum dolor.















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Laws, Regulations, Standards, and Guidelines to Protect Aquatic Life and Ecosystems



Introductory text

- → Aquatic Life and Ecosystem Protective Standards Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut quis ante arcu, non rutrum dolor. Morbi nec malesuada urna. Cras a metus elit. Quisque aliquam pharetra.
 - → Aquatic Life Protection Standards for Streams and Rivers The Water Quality Control Plans (Basin Plans) of the nine Regional Water Quality Control Boards include standards to protect aquatic life and ecosystems. These standards vary from place to place.



→ Development of Biological Objectives

The State Water Resources Control Board is developing statewide biological objectives to protect aquatic life uses of streams and rivers.

→ Clean Water Act Sections 303(d) and 305(b)

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Non-Point Source Policy

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→ Stormwater Program Permits

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→ Numeric Nutrient Endpoints Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut quis ante arcu, non rutrum