California: Healthy Watersheds + High Quality Waters Project

A PHASED STRATEGY FOR
HEALTHY WATERSHED AND HIGH QUALITY PROTECTION

Meet the Team Surface Water Ambient Monitoring Program



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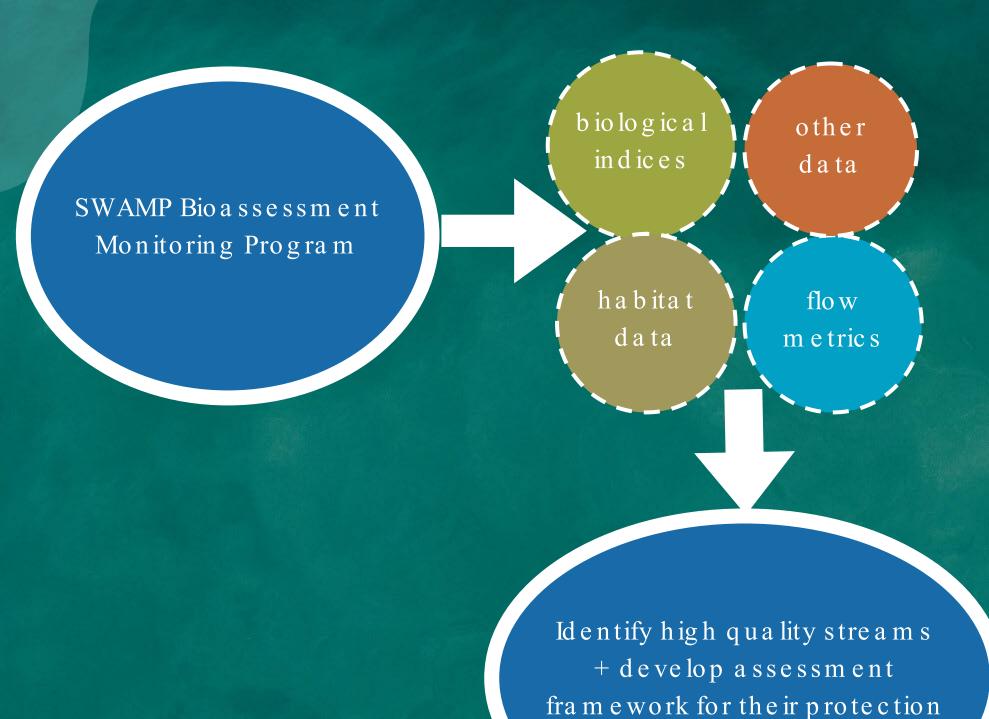
Introduction to CA's Landscape

189, 454miles of river>3,000 lakes + reservoirs2.9 - 4.3 million acres wetlands

A global biodiversity hotspot with the highest total number of species and highest number of endemic species in the US.

A highly altered landscape with the most rare and imperiled species of any state, with more than 30% of California's species threatened with extinction.





Monitoring program role in protection efforts

SWAMP program data and information is used for beneficial use and water quality standards assessment for the protection of environmental and public health.

CA Integrated Assessment of Watershed Health

2013

Watershed condition
Watershed vulnerability
Stream health (2013 map pictured on right)



Landscape Condition

Patterns of natural land cover, natural disturbance regimes, lateral and longitudinal connectivity of the aquatic environment, and continuity of landscape processes.



Geomorphology

Stream channels with natural geomorphic dynamics.



Habitat

Aquatic, wetland, riparian, floodplain, lake, and shoreline habitat. Hydrologic connectivity.



Water Quality

Chemical and physical characteristics of water.



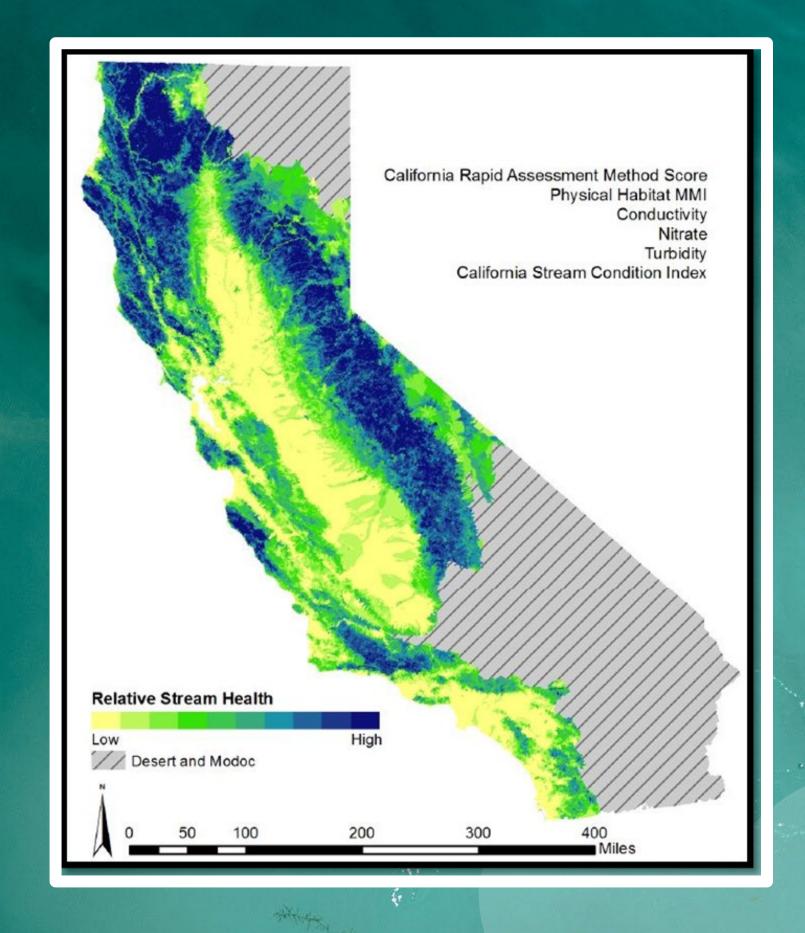
Hydrology

Hydrologic regime: Quantity and timing of flow or water level fluctuation. Highly dependent on the natural flow (disturbance) regime and hydrologic connectivity, including surface-ground water interactions.



Biological Condition

Biological community diversity, composition, relative abundance, trophic structure, condition, and sensitive species.



Why protect healthy watersheds?

Water Board Mission

To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use for the benefit of present and future generations.





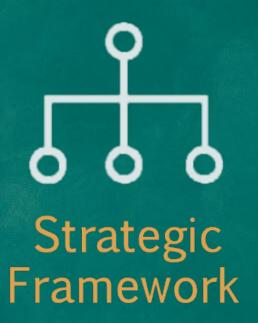




Establish Protection Strategy

Create an internal, integrated and data-driven protection strategy for healthy watersheds and high quality waters assessment

Protection Strategy Overview



To articulate project intent, guiding principles, outcomes and objectives



Action Plan

Road map of actions needed to achieve objectives in strategic framework



Data-driven tool to support management actions & strategic decision-making

Dashboard

Applications

Regulatory

Integrated Report: identify and categorize high quality waters/healthy watersheds
Statewide permitting: baseline, data driven context for decision-making; e.g., monitoring requirements for project runoff in identified healthy watersheds.

TMDLs: support alternative TMDL development

Non - regulatory

319 (h): support funding decisions for protective actions and projects



Protection Actions at the Water Boards

Integrated Report assessments
Non point source program

Integrated Report





Integrated Report Assessments
Waterbodies assessed with CSCI score of 0.79 or higher placed in
Category 1 of the 2020–2022 Integrated Report

•All core beneficial uses are supported



Nonpoint Source Program Goals



Goal 1. Develop Assessment Dashboard

•Objectives and milestones: develop strategic action plan, phased implementation

Goal 2. Use the NPS Grant Program to protect high quality and/or healthy watersheds.

•Objectives and milestones: allocate % of CWA 319 funds to protection of high quality waters listed in Category 1 of IR, use landscape assessment tool to identify high quality, healthy and/or threatened waters to be included as program preferences in NPS Grant Program

Regional NPS Examples

Central Coast Water Board
Goal 1: Prevent and/or correct threats to
high quality waters

Objectives and Milestones:

Utilize NPS Grant Program funds for projects that protect high quality waters; solicit NPS grant projects to prevent and/or correct threats to high quality waters (2020 – 2025)

San Diego Water Board

Goal 1: Protect and restore natural flow regimes; net gain in wetland and riparian areas and quality; RARE beneficial use is not impaired; streams support ecologically balanced and sustainable communities of native organisms.

Objectives and Milestones

- Improve stream and wetlands conditions by protecting and restoring natural flow regimes and controlling NPS pollution to support ecologically-balanced communities of native organisms
- Support development of biological objectives for ephemeral streams;...
- Use CSCI scores to identify priority NPS and point source pollution efforts

