

Healthy Watersheds Partnership

CA Water Quality Monitoring Council Meeting

June 6, 2019

Ali Dunn, Co-Chair



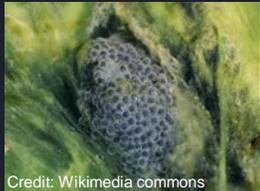
HWP KEY OBJECTIVES



- Coordinate and collaborate watershed protection efforts statewide



- Develop and/or make available integrated assessment methods, approaches, data and tools



- Communicate and share watershed data and information via Healthy Watersheds Portal



- Prioritize watershed restoration and management actions

A scenic view of a river flowing over large, light-colored rocks. The water is clear and reflects the surrounding greenery and sky. The background is a dense forest of tall evergreen trees under a clear blue sky. The foreground shows the rippling surface of the water.

A VERY BRIEF BACKGROUND...

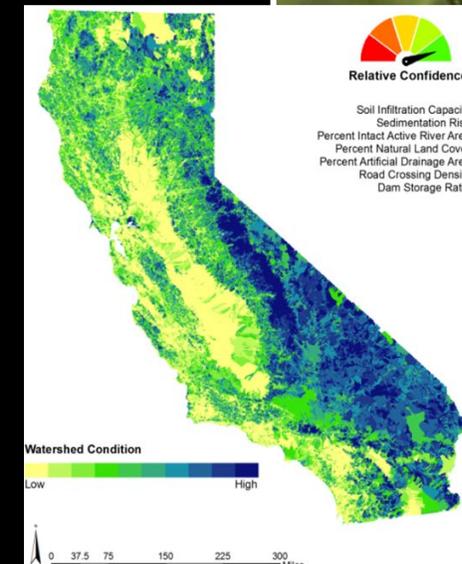
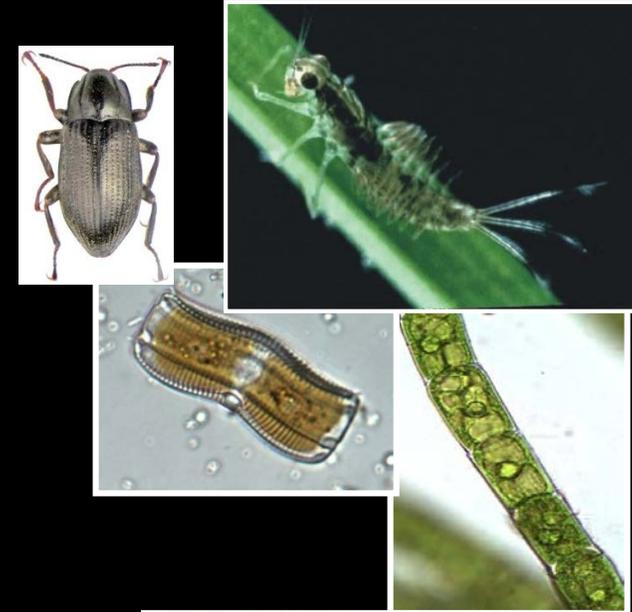
California's resource agencies need tools to prioritize protection/remediation

➤ State agencies are building capacity to directly monitor ecological condition

- *benthic invertebrates + benthic algae*
- *riparian condition indicators*

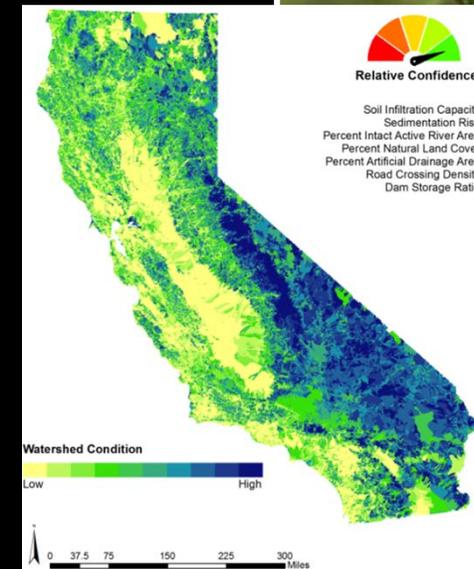
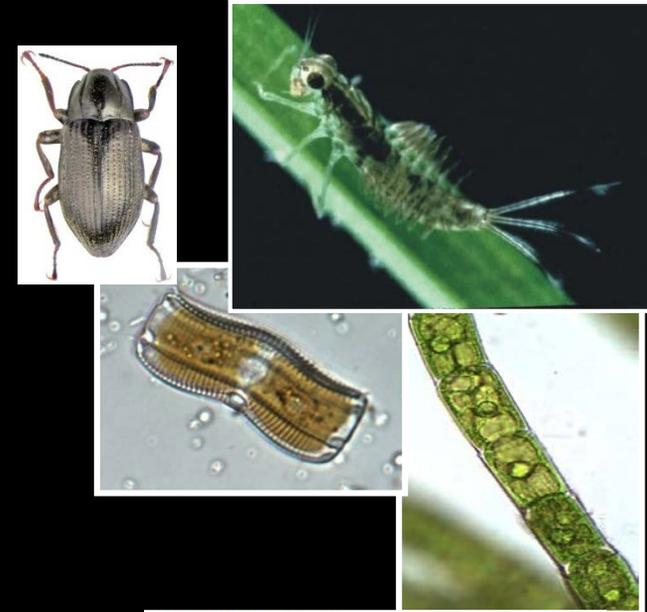
➤ Data needed for assessing watershed health and vulnerability are increasingly available

- *monitoring data (e.g., SWAMP)*
- *remote sensing data*



Limits to effective interagency coordination

- Need a common framework for interpreting watershed health and vulnerability
- Need better tools for coordinating and communicating priorities for protection and remediation
- Need an objective approach for tracking progress on acquisition/restoration



USEPA Healthy Watershed Initiative

EPA HWI website

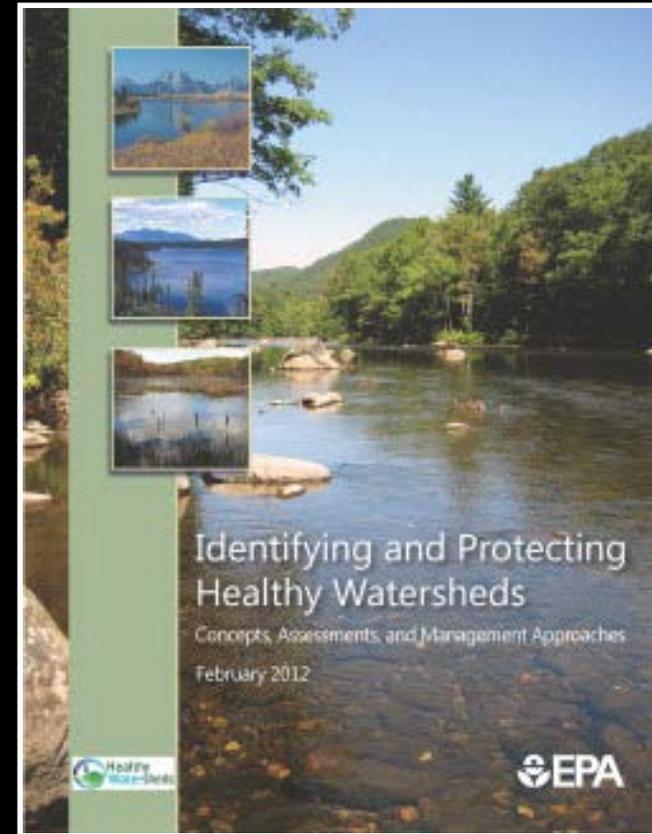
www.epa.gov/healthywatersheds

Goals of the Initiative

- Protect and maintain healthy watersheds, and increase their numbers over time.
- Raise the visibility and importance of protecting high quality waters.

Demonstrations

California, Alabama, Wisconsin





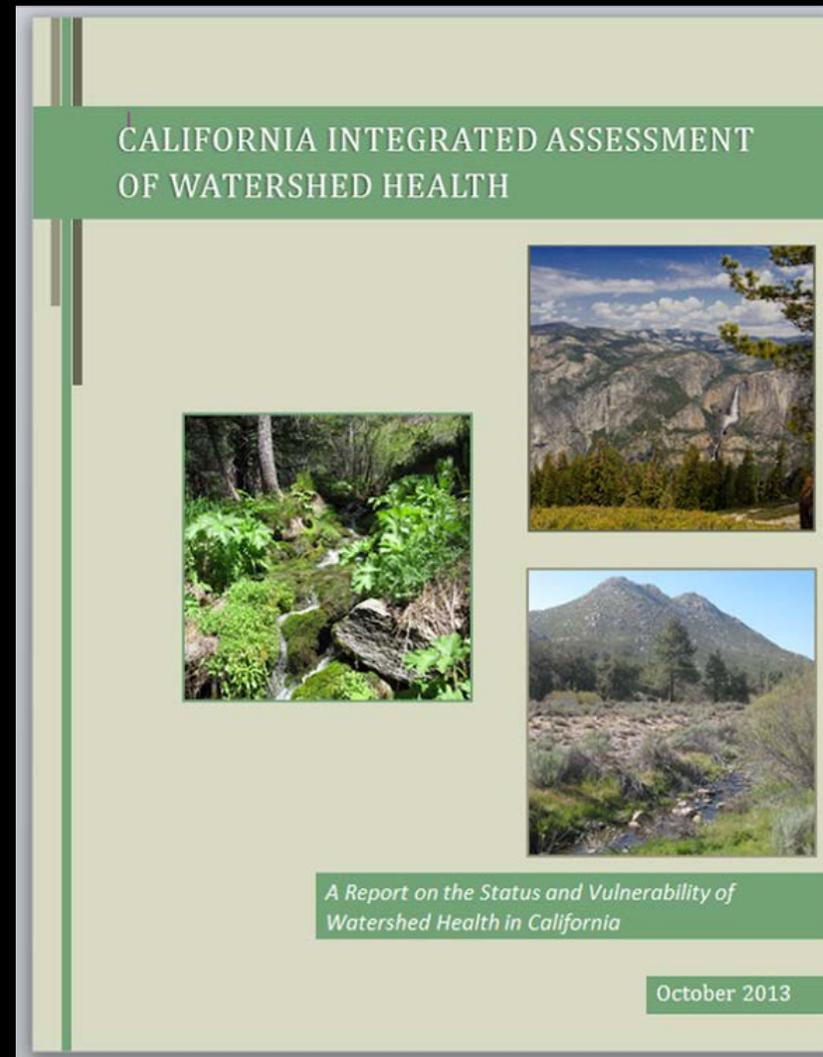
California Integrated Assessment of Watershed Health

Project initiated in 2011

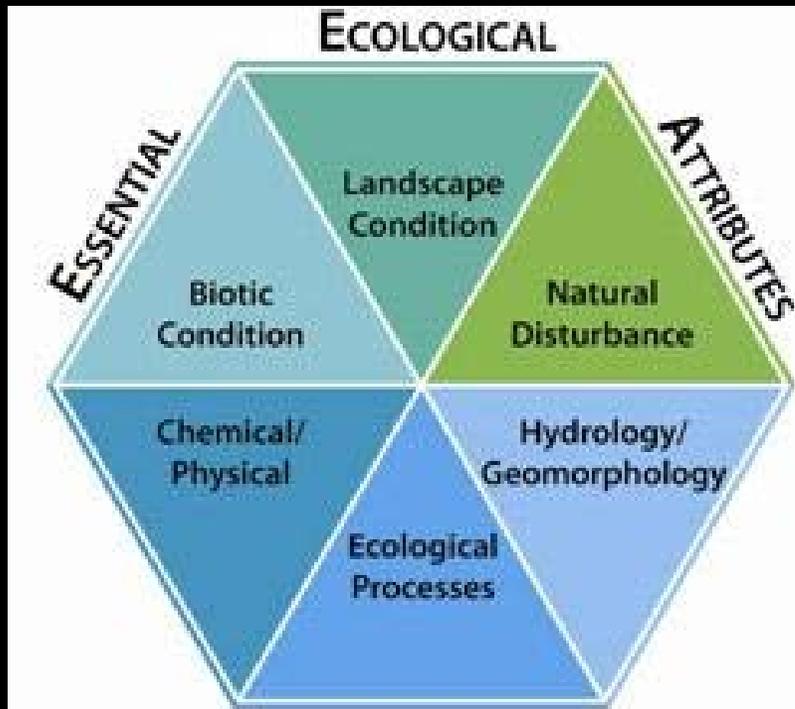
Final report released October 2013

Funded by US EPA with technical support from The Cadmus Group

http://www.mywaterquality.ca.gov/monitoring_council/healthy_streams/docs/ca_hw_report_111213.pdf



HWI's six indicators of watershed health



Landscape Condition

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



Geomorphic Condition

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.

A scenic view of a river flowing over large rocks, surrounded by dense green forest under a clear blue sky. The water is clear and reflects the surrounding greenery. The text "AND, THE PRESENT..." is overlaid in white on the water.

AND, THE PRESENT...



1. Update integrated assessment framework with new datasets and approaches

Examples: The Nature Conservancy's Freshwater Species database, CNRA's Ecological Performance Measures approach, CDFW's Areas of Conservation Emphasis (ACE)

2. Create web-based tool/dashboard to integrate and assess data and information about watershed conditions

Hosted on an overhauled and refreshed HWP Portal

3. Conduct regional case studies to inform local examples of healthy watershed planning and protection actions.

North Coast Regional watershed/landscape assessment (Dr. Le and team!)

