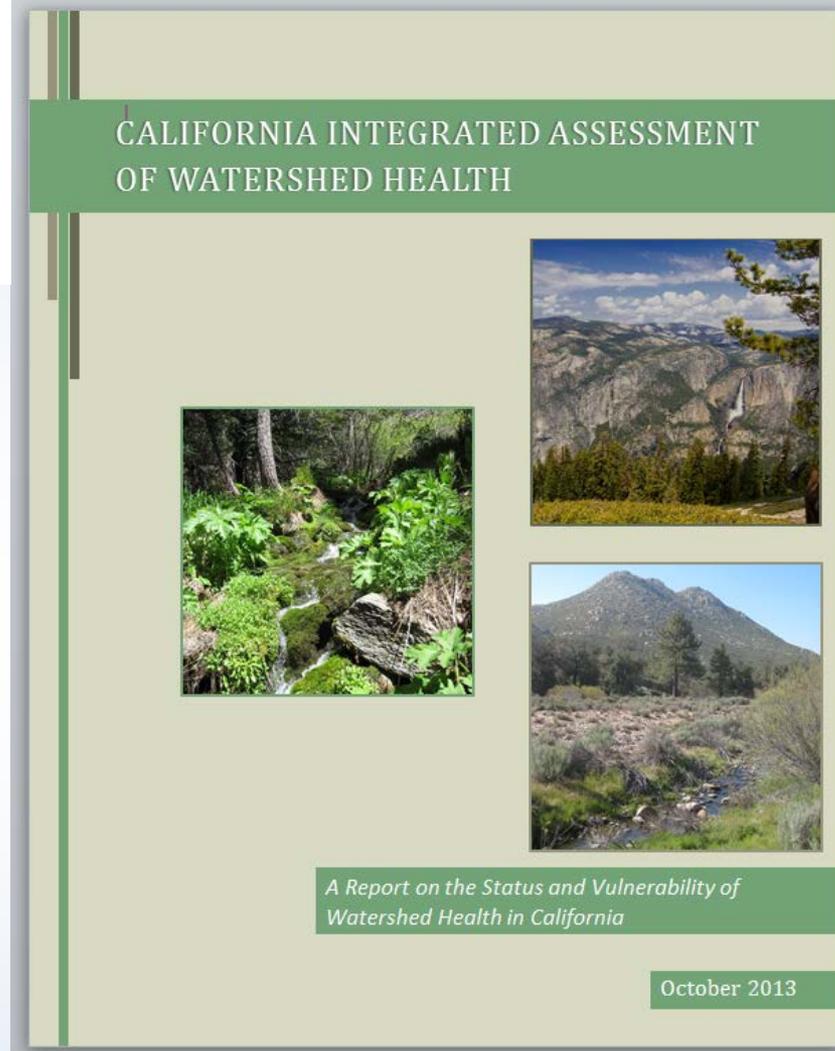




Summary of California Integrated Assessment of Watershed Health Report



Presentation to California Water Quality Monitoring Council

February 19, 2014

Lori Webber

State Water Board

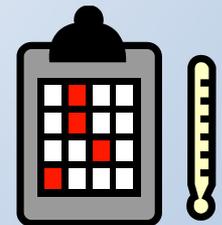
California Integrated Assessment of Watershed Health

- Partnership between **USEPA Healthy Watershed Initiative** and the **Healthy Streams Partnership**.
 - USEPA funded
 - Technical work conducted by Cadmus
 - HSP served as the technical review team
- Objective: Develop integrated assessments of watershed health for California
 - Multimetric indices
- Project initiated in 2011
 - Update to Council March 2013
 - Final report released October 2013

Terminology

Indicator or Metric = measurement of something (water temperature, % natural land cover)

Multimetric Index = a group of indicators (metrics) aggregated to measure something complex (biological integrity, watershed health)



Three Categories of Indicators

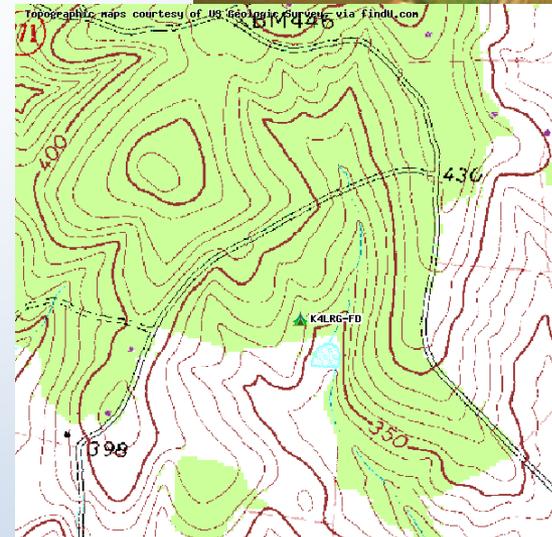
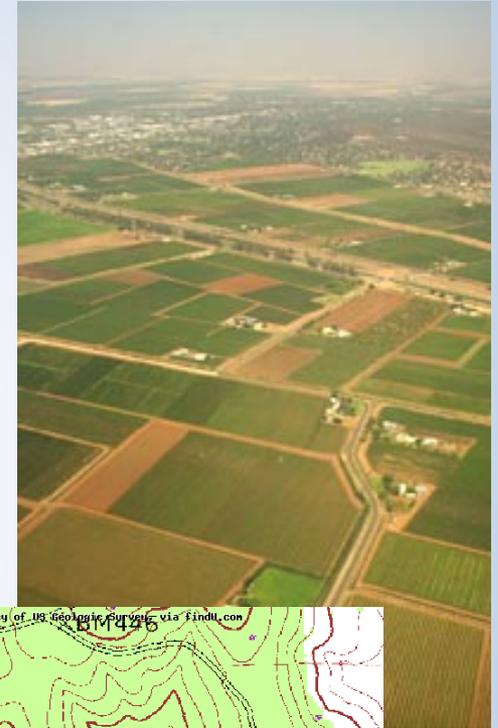
**Watershed
Condition
Indicators**

**Stream
Health
Indicators**

**Watershed
Vulnerability
Indicators**

Watershed Condition Indicators

- Structural components of watershed condition, landscape condition
- Geospatial datasets, based on remote sensing
- Examples: land use, soils
- Continuous and complete coverage across the state



Stream Health Indicators



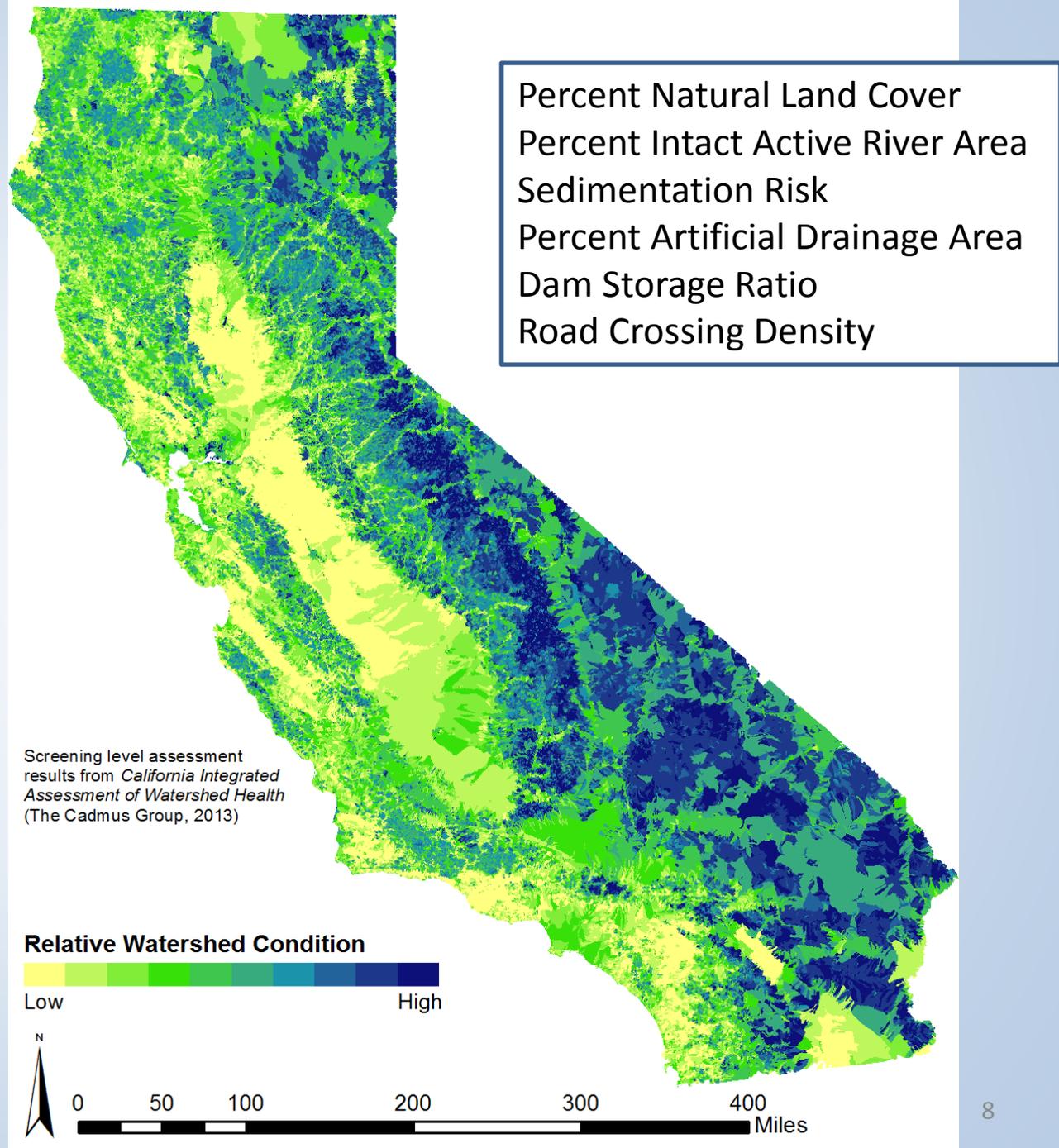
- Characterize instream conditions
- Field monitoring datasets
- Examples: water quality and habitat measurements
- Many watersheds throughout the state have not been monitored
- Statistical models were developed to predict values in unmonitored locations

Watershed Vulnerability Indicators

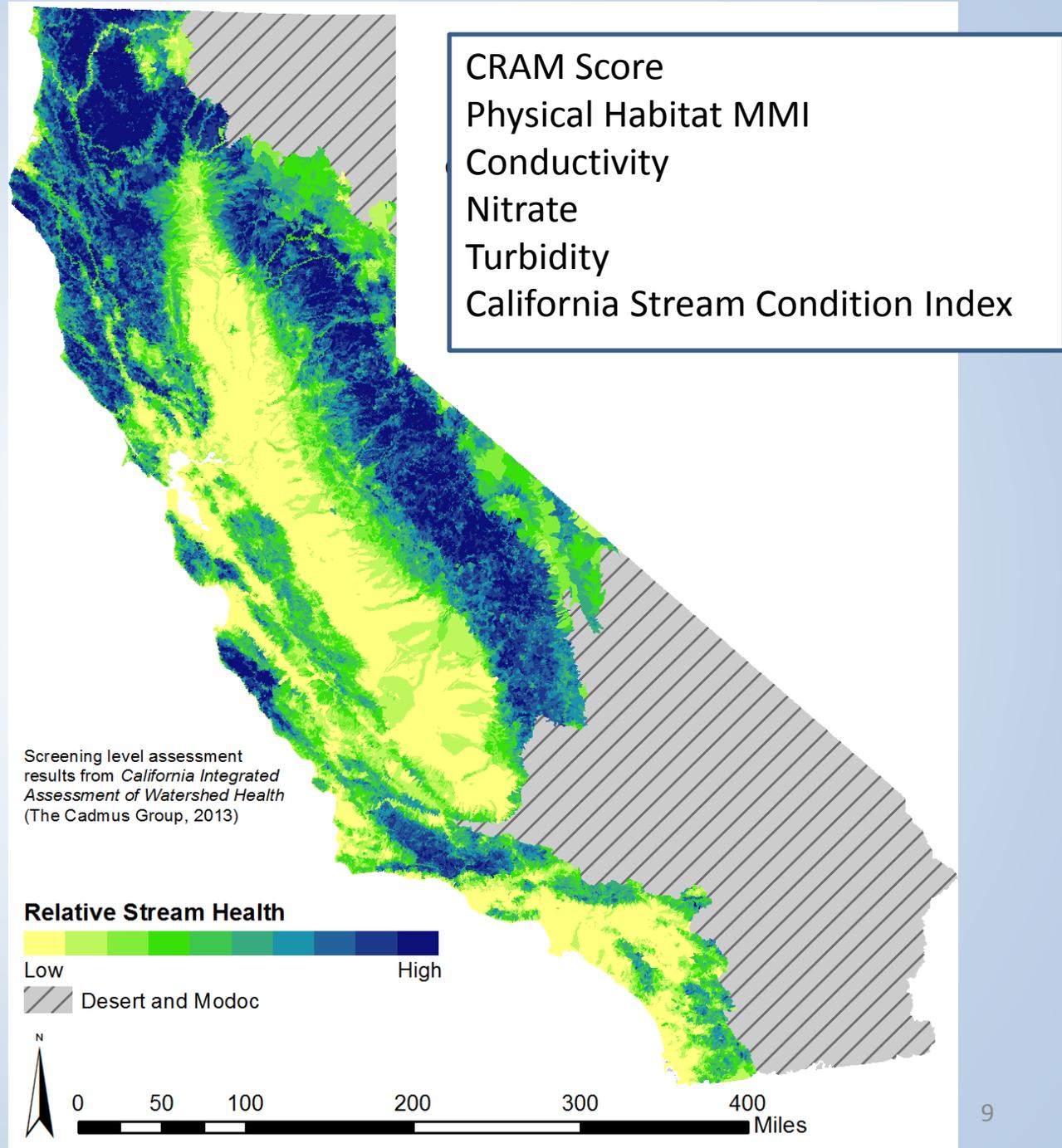
- Characterize potential exposure to future risks – e.g. climate change, fire.
- Modeled projections, continuous coverage across state.



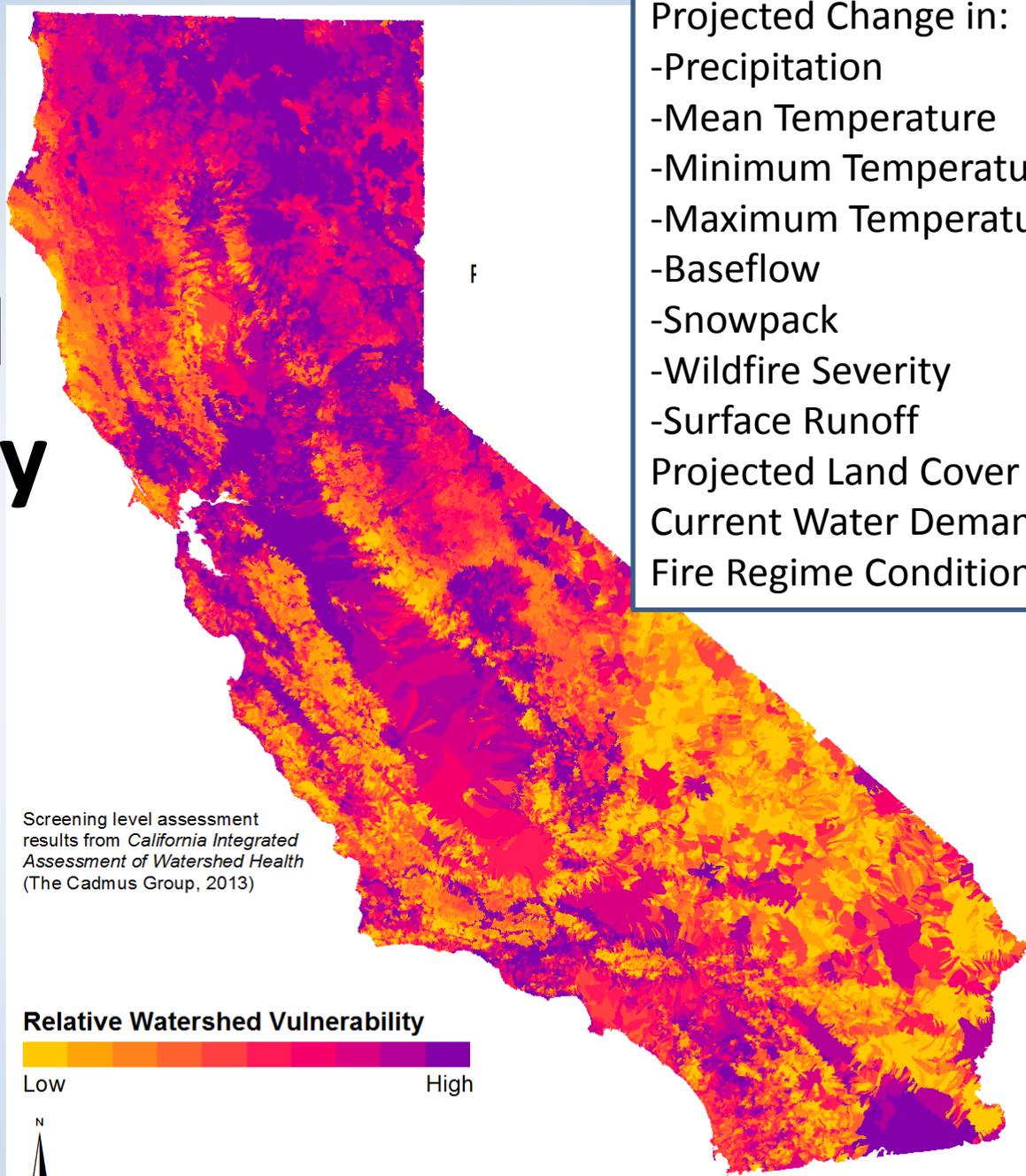
Relative Watershed Condition Index



Relative Stream Health Index

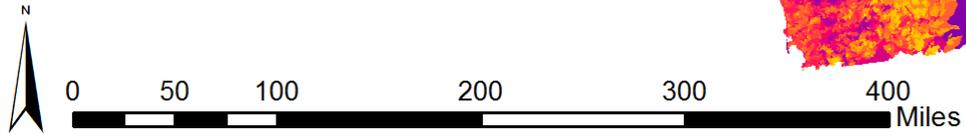


Relative Watershed Vulnerability Index



Screening level assessment results from *California Integrated Assessment of Watershed Health* (The Cadmus Group, 2013)

Relative Watershed Vulnerability
Low High



- Projected Change in:
- Precipitation
 - Mean Temperature
 - Minimum Temperature
 - Maximum Temperature
 - Baseflow
 - Snowpack
 - Wildfire Severity
 - Surface Runoff
- Projected Land Cover Change
Current Water Demand
Fire Regime Condition Class

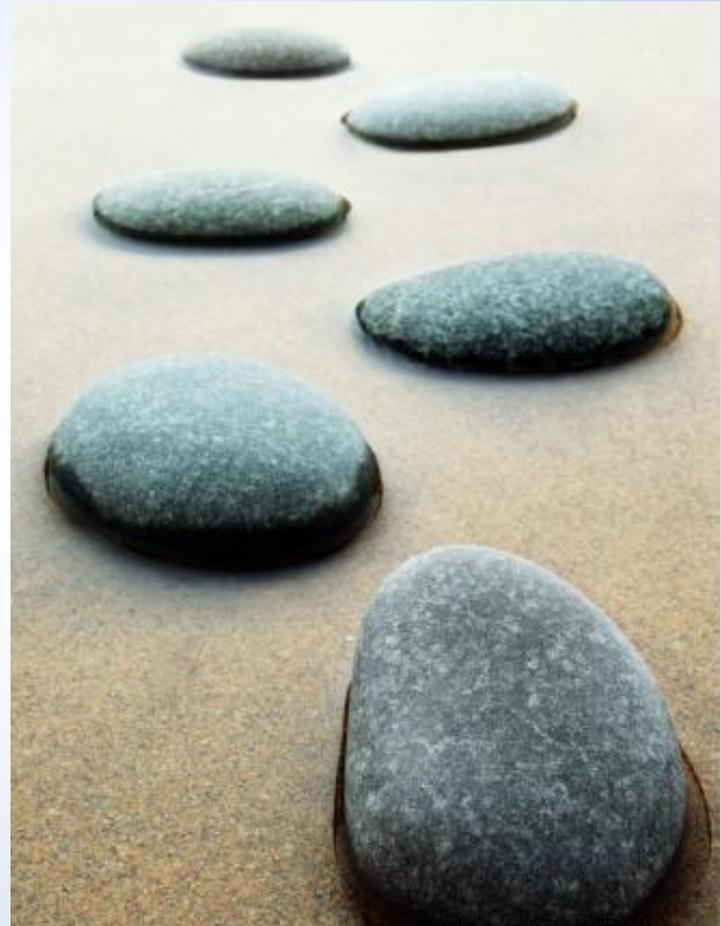
Next Steps

HSP meeting on 1/16/14.

Discussion included:

- Display assessment results on Healthy Streams Portal
- Integrate with EcoAtlas
- Building on assessment framework (incorporating new indicators, thresholds)
- Coordinate with other workgroups (CWMW) and programs (NPS, forestry)

Input from Council members welcome



Healthy Streams Partnership

http://www.mywaterquality.ca.gov/monitoring_council/healthy_streams/

Healthy Streams Portal

http://www.mywaterquality.ca.gov/eco_health/streams/

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