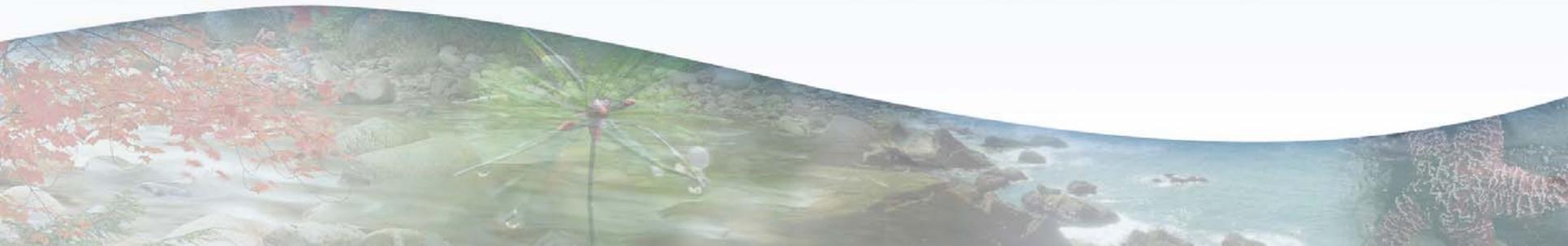


Item 7

Status Update TMDL Implementation in Region 1

Bryan McFadin

July 15, 2010



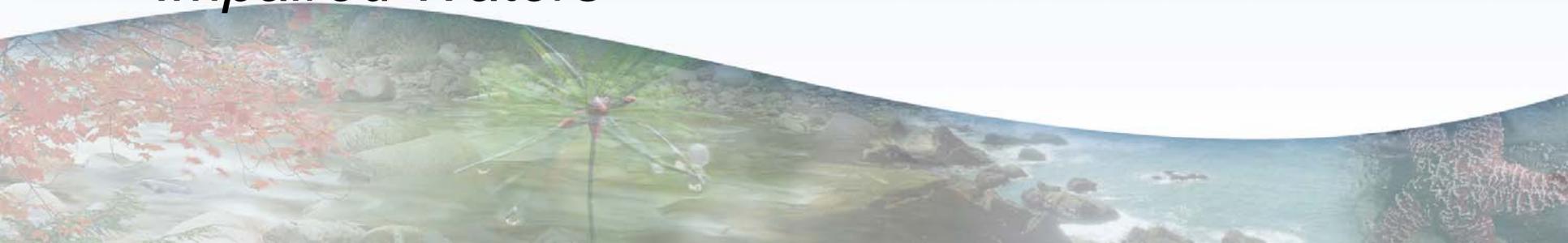
Presentation Topics

- I. TMDL Implementation in California
- II. Status of Consent Decree TMDLs
- III. Sediment implementation
- IV. Temperature implementation



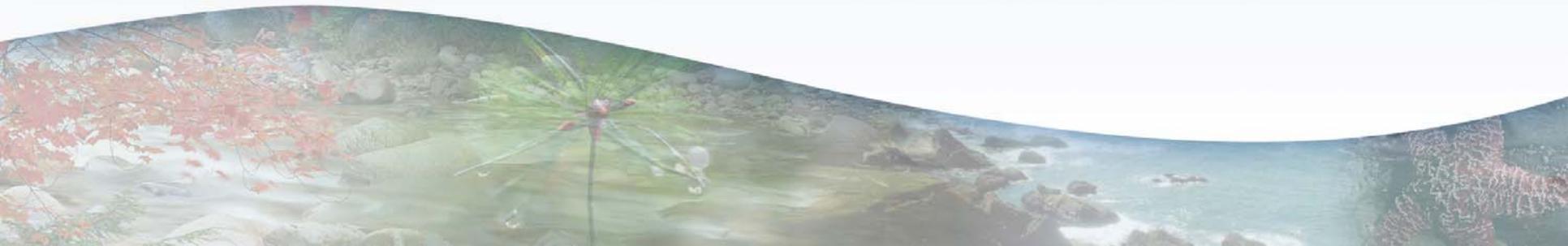
TMDL Implementation in CA

- TMDL Program original intent
 - Develop TMDL when traditional controls on point sources are inadequate to meet water quality standards (WQS)
 - A planning and management program designed to attain and maintain WQS
- State Board Resolution 2005-0050:
Water Quality Control Policy for Addressing Impaired Waters



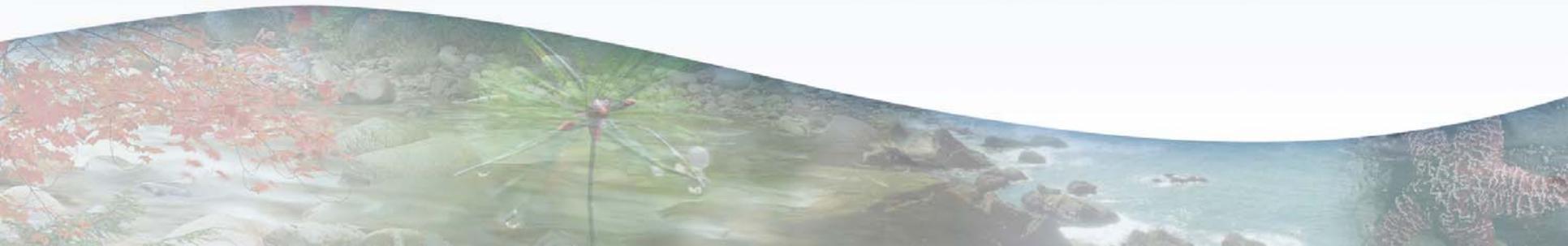
Status of Consent Decree TMDLs

- See Handout
- Four waterbody-pollutant pairs delisted
- Technical TMDLs established for all other Consent Decree waterbodies
 - Klamath River TMDLs to be approved by EPA before Dec 31, 2010



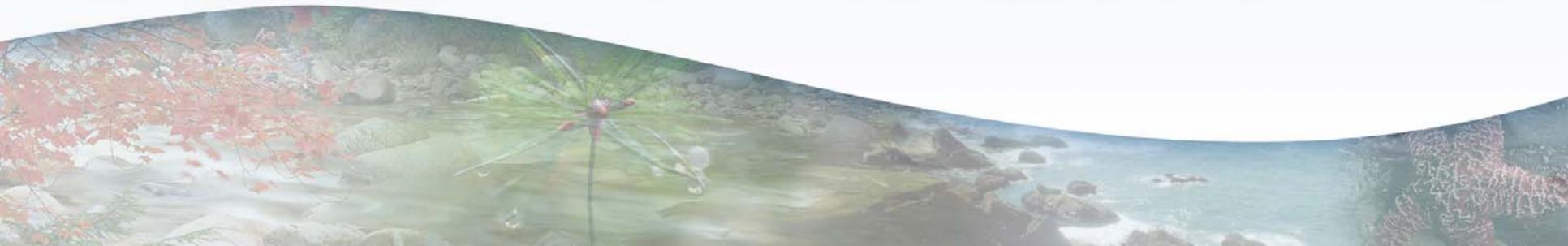
Status of Consent Decree TMDLs

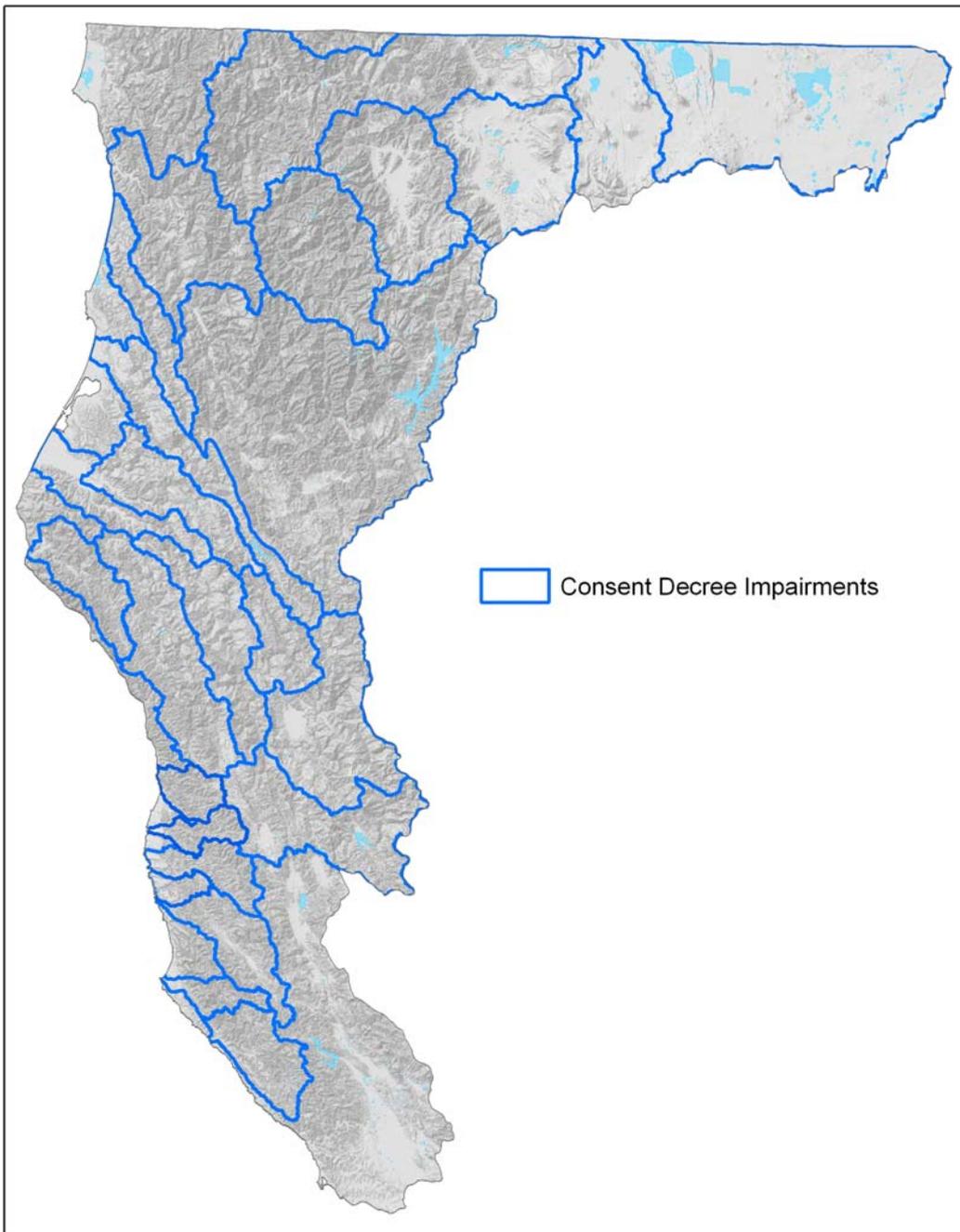
- All Sediment TMDLs addressed
- All Nutrient/DO TMDLs addressed
- Roughly half of Temperature TMDLs addressed



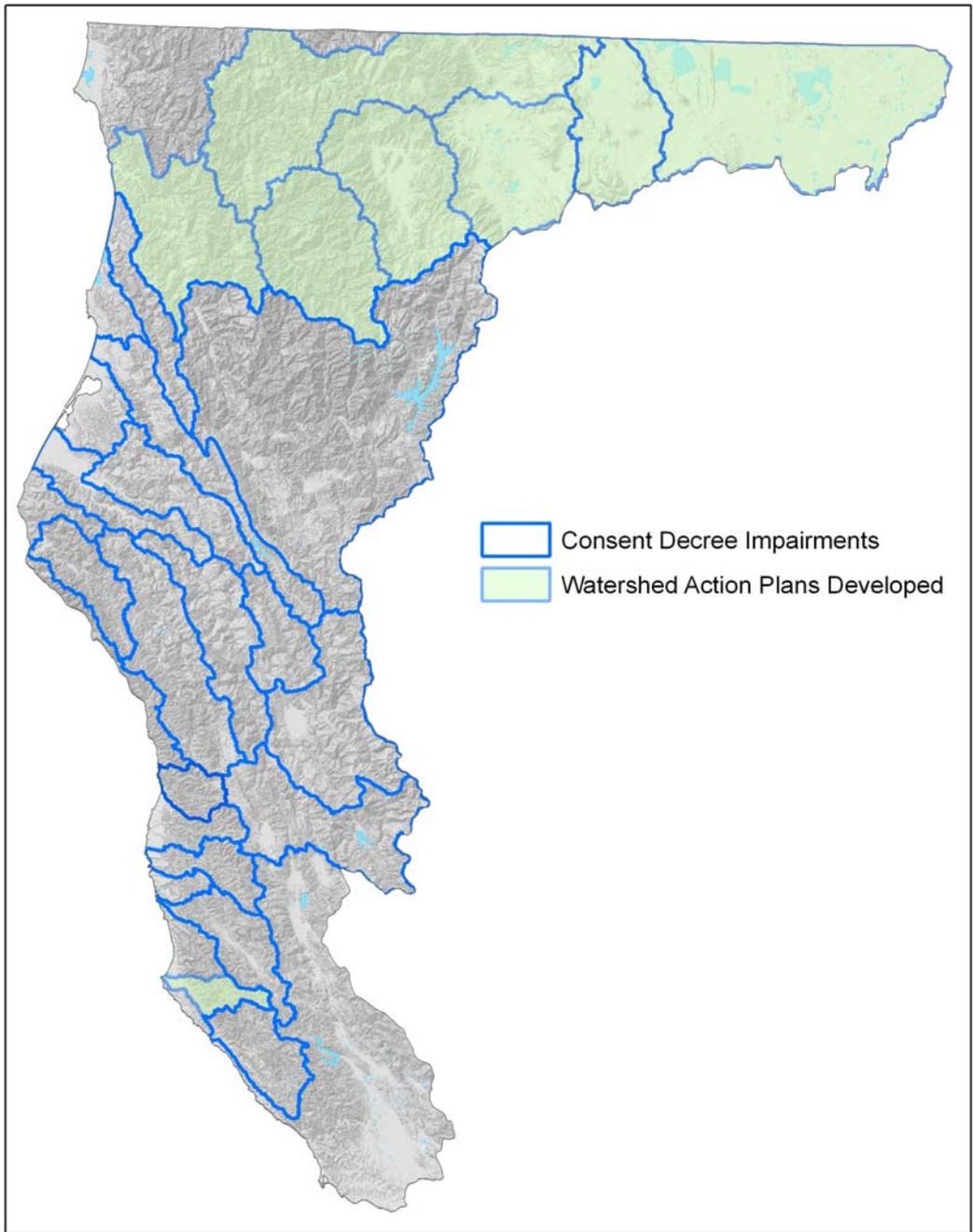
Status of Consent Decree TMDLs

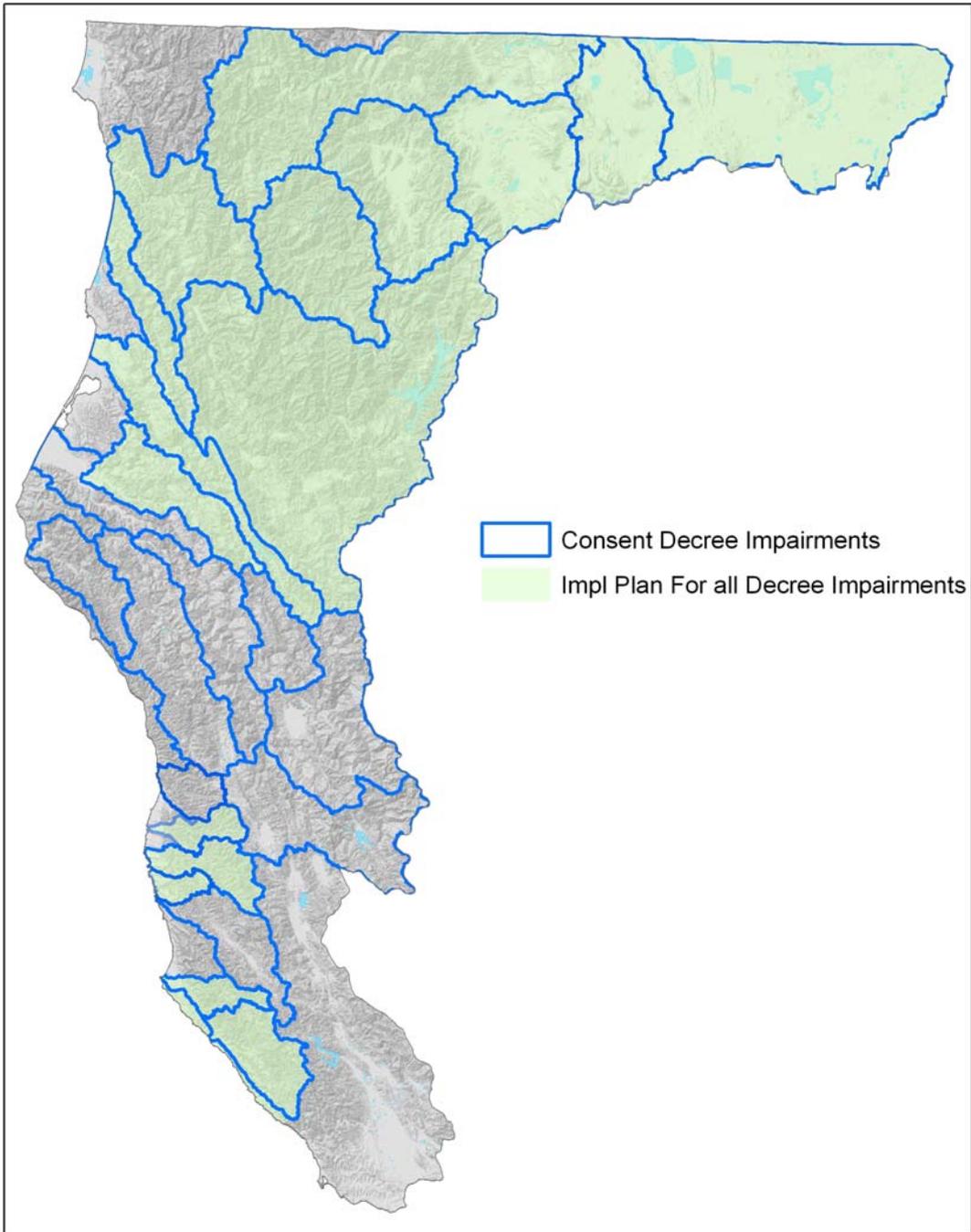
- Currently, no formal program of implementation for remaining temperature TMDLs.

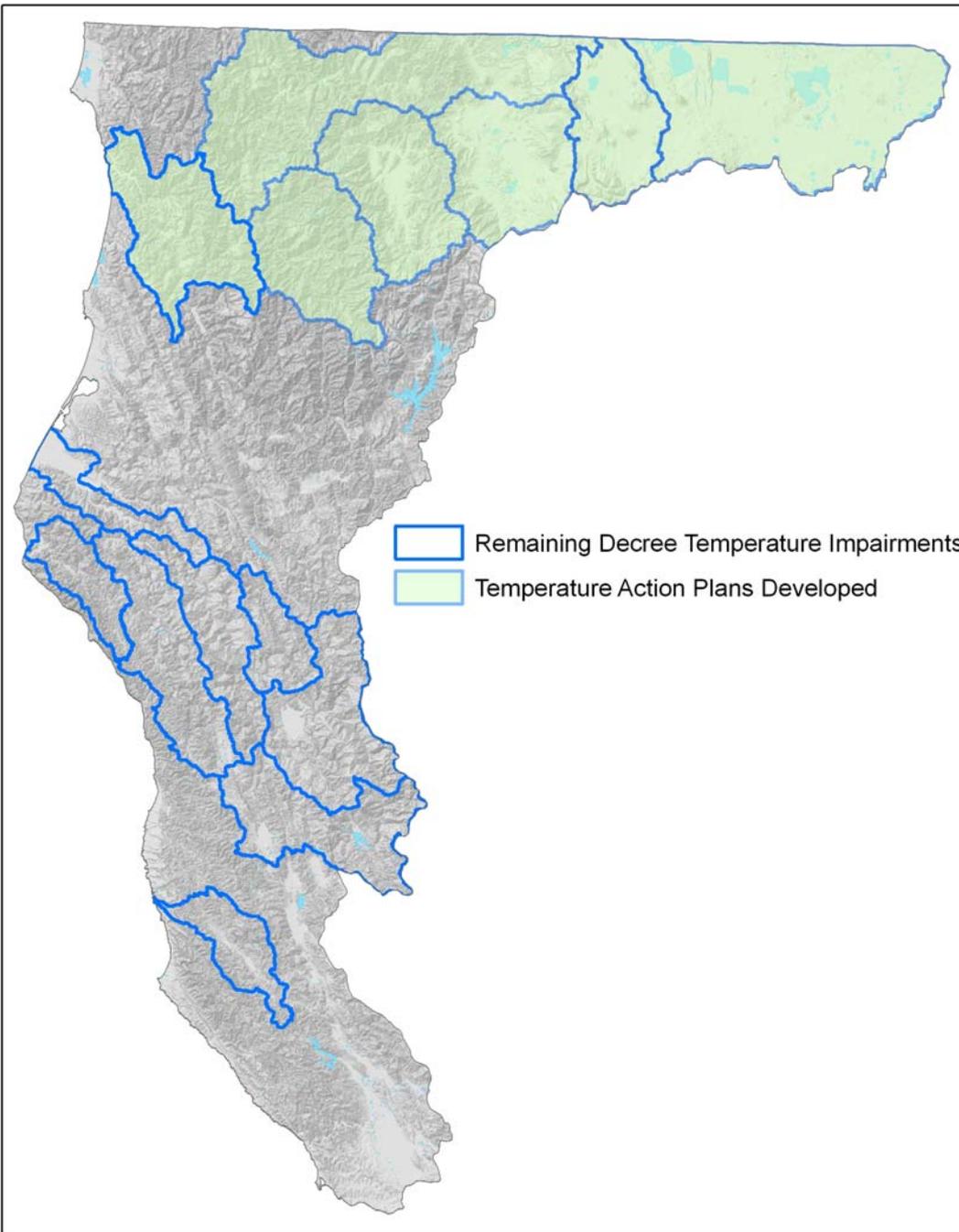


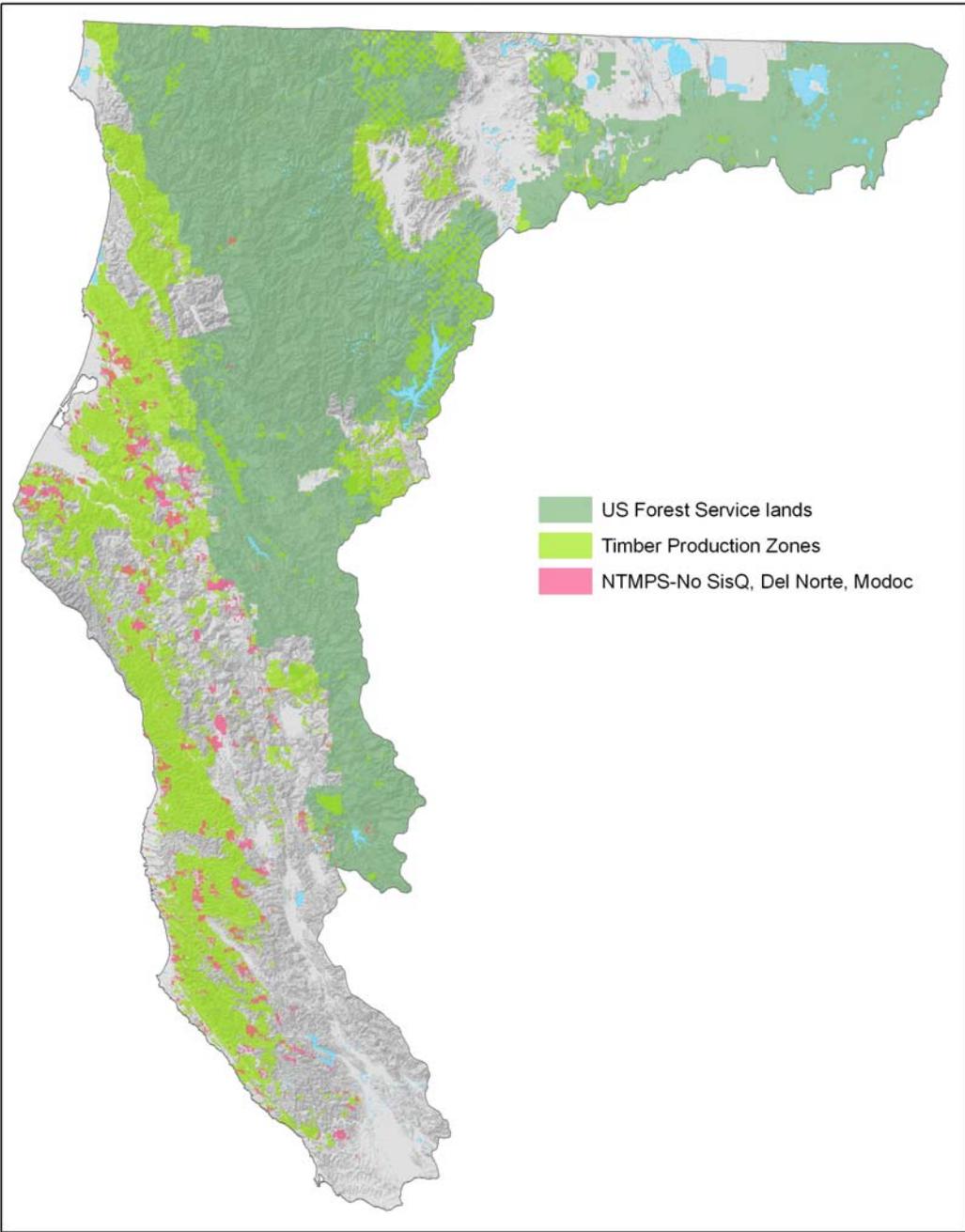


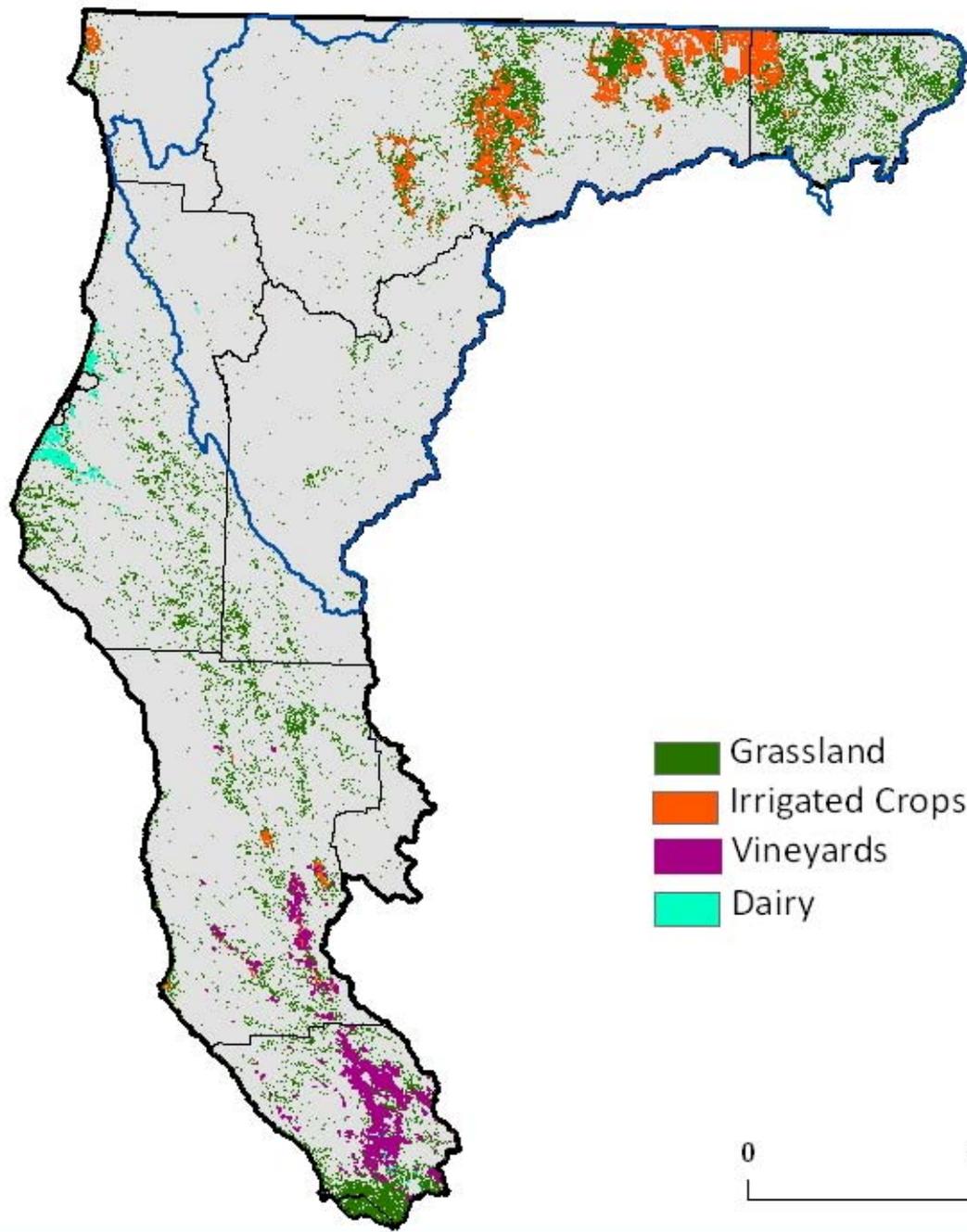
Consent Decree Impairments







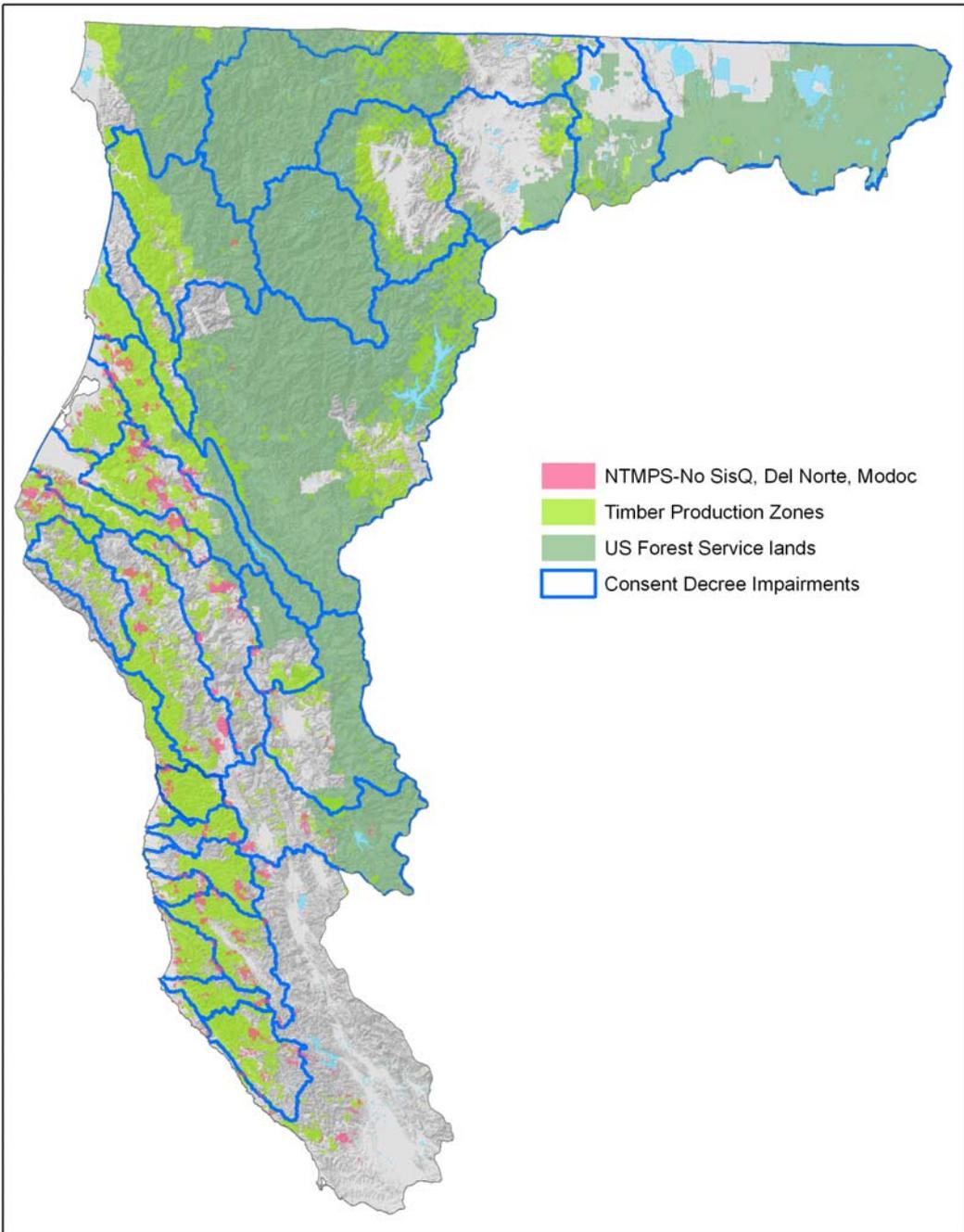




- Grassland
- Irrigated Crops and Pasture
- Vineyards
- Dairy

0 50 100 Miles





Sediment Implementation Program

Sediment TMDL Implementation Policy / Basin Plan Amendment

- Permitting Tools
- Enforcement Tools
- Grants
- Other Tasks

Sediment Control Permits

Existing:

- Timber Harvest (federal & non-federal harvest activities)
- 401 Certifications for Dredge and Fill Activities
- Storm Water (municipal, construction, industrial)
- Caltrans
- USFS lands
 - Addresses non-harvesting sources via expansion of existing waiver
 - Covers approx. 50% of North Coast Region

Under Development:

- County Roads in 5C Program
- Dairies regionwide
- Agriculture Activities (grazing, irrigated ag.) in the Klamath

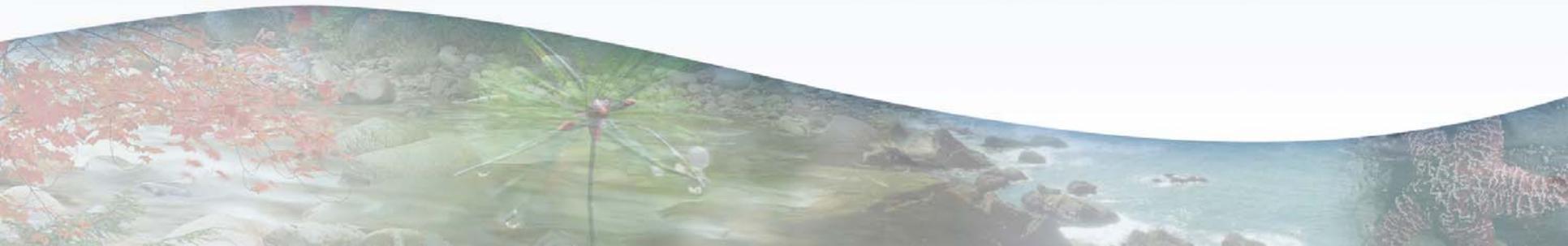
Planned:

- County Roads outside of 5C Program
- Grazing outside of Klamath and USFS lands
- Irrigated agriculture (including vineyards) outside Klamath

Sediment Implementation

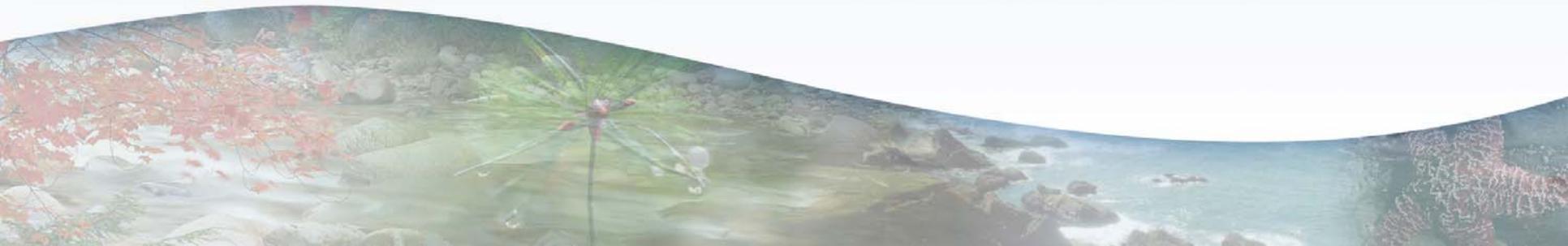
- Planning Efforts -

- Stream & Wetland System Protection Policy
- Restoration Projects Exemption Criteria
- Excess Sediment Amendment



Existing Temperature Implementation Mechanisms

- Action Plans
- USFS waiver (~50% of Region 1)
- Timber waiver and WDR process
- 401 certifications
- Stormwater permits
- Grants
- CEQA reviews
- Control of sediment discharges through the above processes



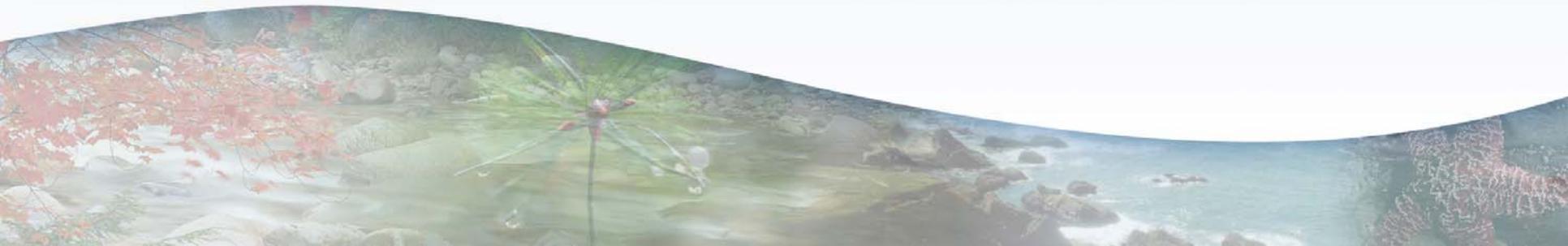
Comprehensive Temperature Program: Foundational Concepts

- Loss of stream shade is the predominant cause of temperature impairment in Region 1
- Actions required to address temperature impairments related to shade are the same as those required to prevent them



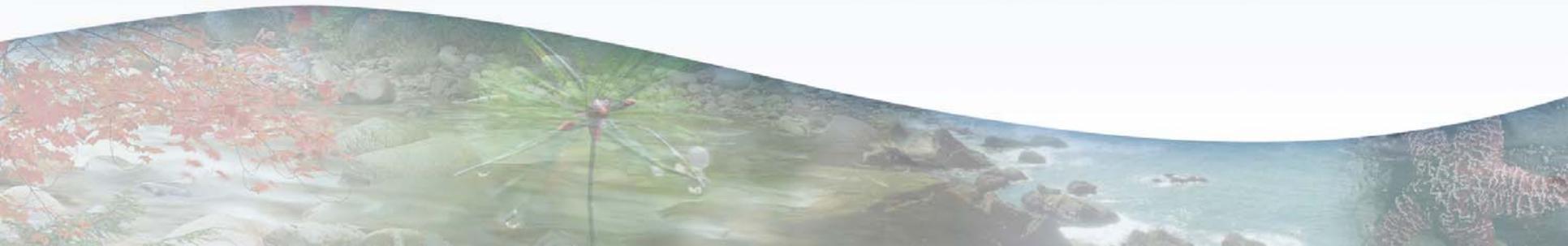
Comprehensive Temperature Program: Foundational Concepts

- Temperature impairment is primarily a nonpoint source issue
- Porter-Cologne and State Board guidance requires that nonpoint sources be addressed through permits, waivers, or prohibitions



Temperature Implementation Policy Development

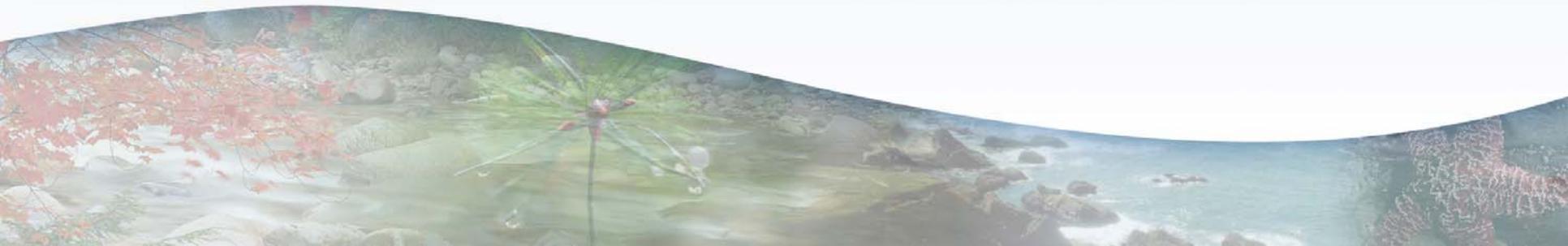
- Patterned after the Sediment TMDL Implementation Policy
- Region-wide in scope
- Proposed Policy would rely on existing authorities



Temperature Implementation Policy

In developing the proposed Policy, RB1 would generate the following work products:

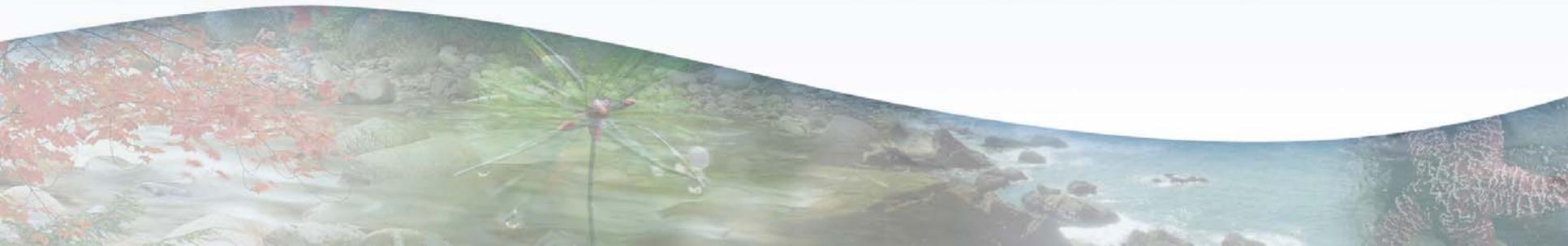
- a Board resolution
- a guidance document
- a basin plan amendment



Temperature Implementation Resolution

The proposed resolution would identify:

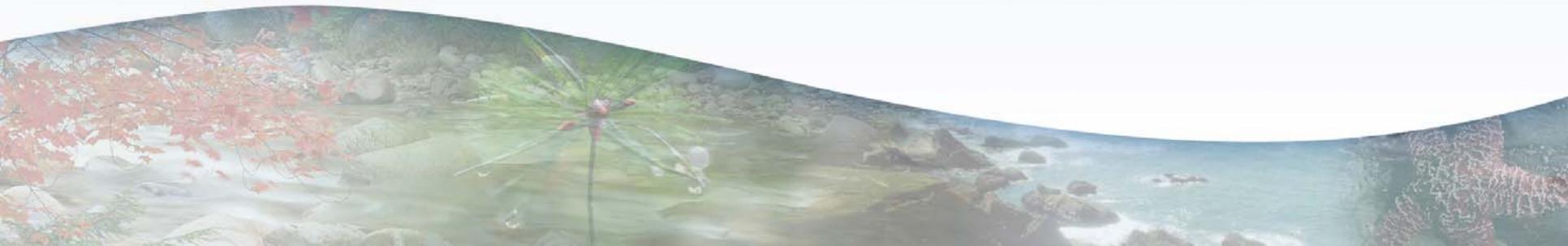
- The importance of shade in the protection of temperature
- The need to implement TMDLs
- The need to protect temperatures in both impaired and unimpaired waterbodies
- Existing regulatory mechanisms



Temperature Implementation Resolution

The proposed resolution would direct staff to:

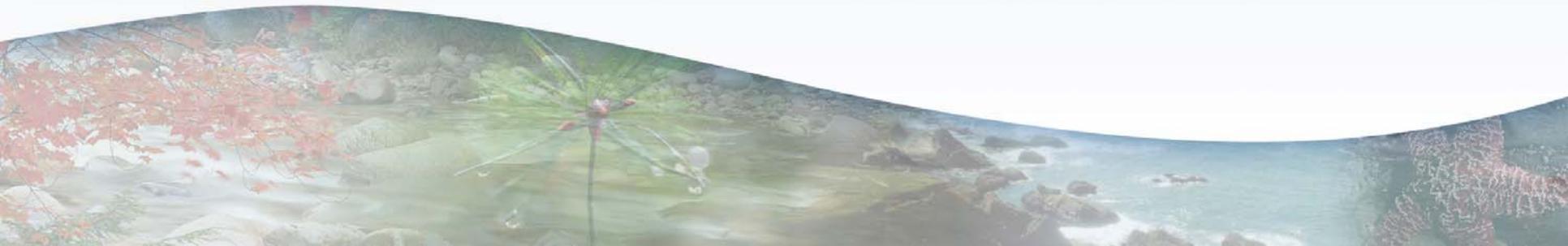
- Use existing tools (e.g. waivers, WDRs, prohibitions) to implement the temperature objective
- Develop additional permits/waivers (e.g. ag waiver) to implement the temperature objective
- Develop a guidance document
- Develop a Basin Plan amendment



Temperature Guidance Document

For each RB1 program/activity:

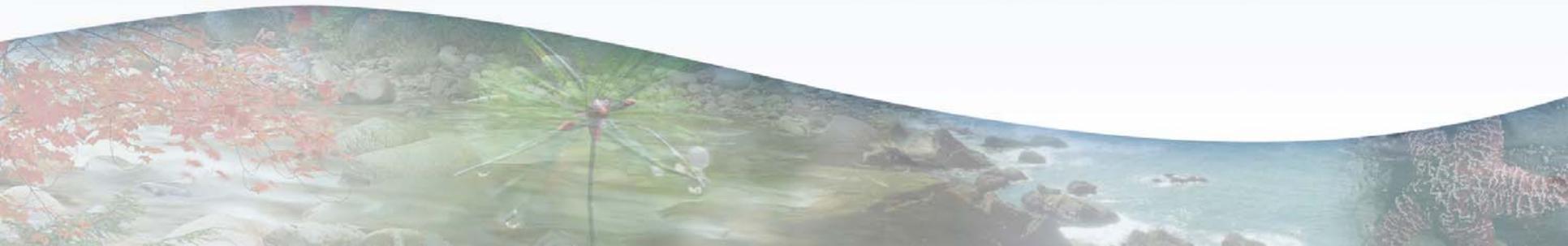
- Explicitly address the kinds of temperature issues that may be expected
- Provide direction regarding appropriate approaches to address temperature issues
- Identify issues staff and the public should consider while reviewing or developing projects



Temperature Guidance Document

For each RB1 program/activity:

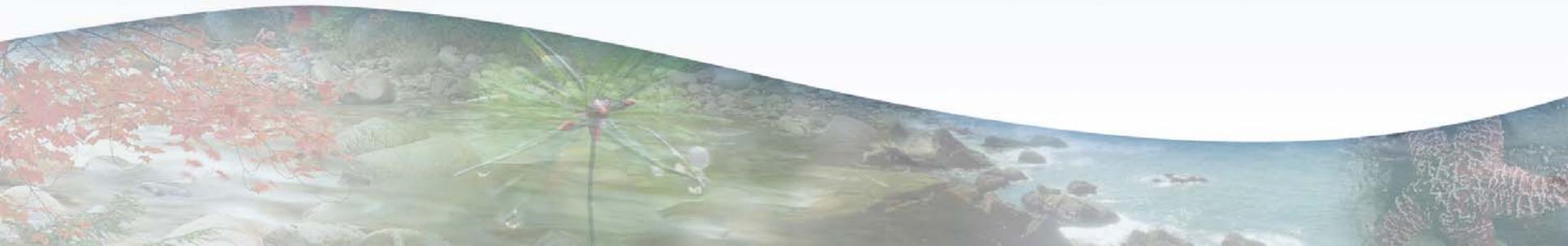
- Discuss methods to evaluate changes in temperature, and how temperature changes can affect other water quality parameters
- Discuss what is and isn't a temperature concern



Temperature Guidance Document

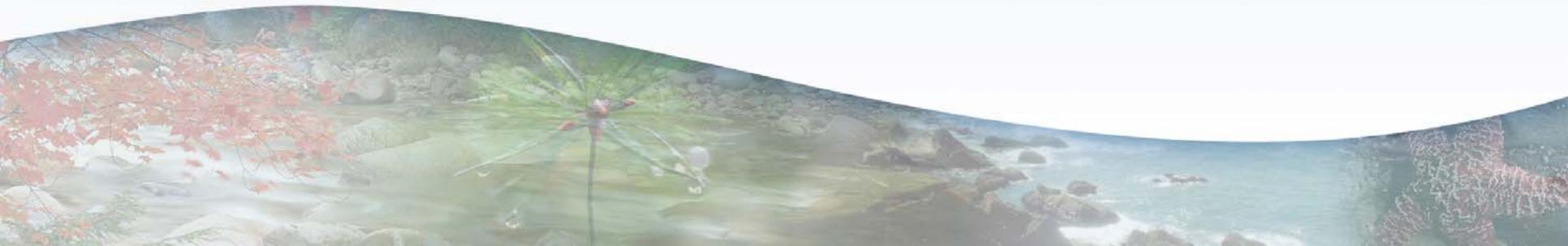
RB1 program/activities explicitly addressed:

- Silviculture
- 401 certs
- Nonpoint source permitting
- NPDES
- Cleanups and Landfills
- Flow issues
- Impairment assessment



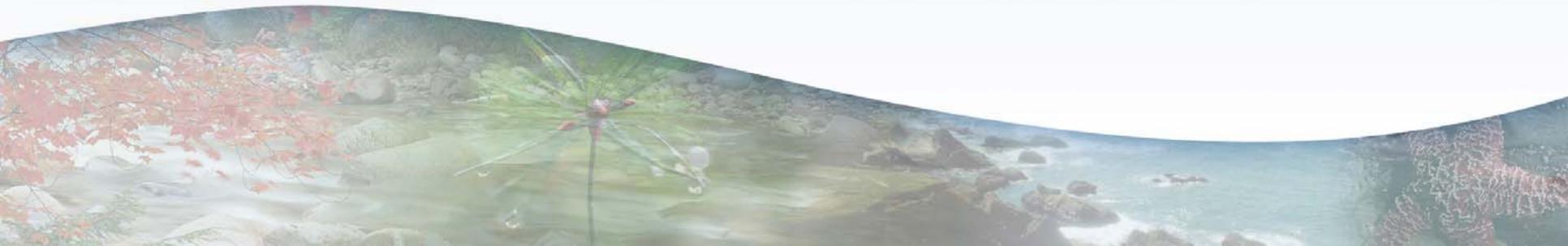
Temperature TMDL Implementation Policy

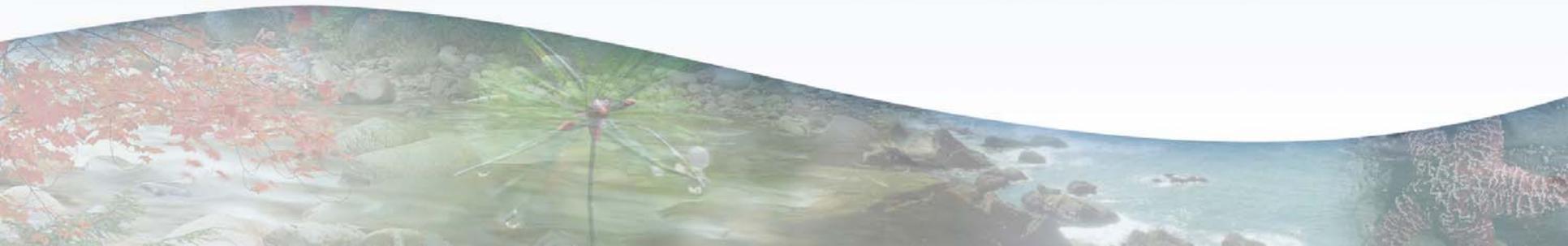
Incorporate Policy into the Basin
Plan, and incorporate guidance
concepts by reference



Current Activities

- Develop a temperature implementation policy for Board consideration
- Continue to implement sediment TMDLs consistent with the Sediment TMDL Policy in the Basin Plan

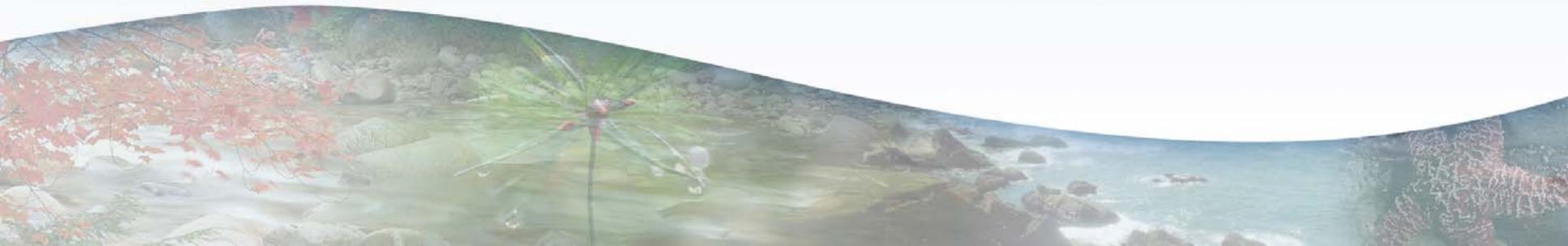




Temperature Guidance Document: Flow Issues

The proposed temperature guidance document would:

- Describe the process by which we would work with Division of Water Rights to address flow-related temperature impairments
- Identify approaches for evaluating effects of flow on temperature



Current Direction

- By 2013, develop a program of implementation for sediment and temperature water quality objectives that would amend the Basin Plan to:
 - Broaden sediment TMDL policy in Ch. 4 to the region
 - Add regionwide temperature policy in Ch. 4
 - Incorporate by reference EPA Consent Decree technical TMDLs
 - Include a schedule for implementation, including for completing nonpoint source permitting mechanisms



EPA Implementation Recommendations in Technical TMDLs

- Develop and submit implementation measures to EPA as part of State water quality management plan (40CFR130.6)
- Use existing laws and programs
 - State nonpoint source control program
 - Regulatory
 - Non-regulatory
 - Incentive-based
- Watershed management processes
- Section 319 programs
- Section 303(e) (continuing planning activities)



EPA Implementation Recommendations in Technical TMDLs

- Protect natural potential shade
- Private Lands: Use timber harvest permitting process to protect and restore shade
- USFS: Implement Northwest Forest Plan and associated standards and guides
- Implement Sediment TMDL actions
 - Use sediment source analysis to set sediment reduction priorities
- Public participation
- Monitoring

