



# Valley Water

Clean Water • Healthy Environment • Flood Protection



# Regional Temperature Study: Background and Status

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# Beneficial Uses



## Los Gatos Creek

- Cold freshwater habitat
- Fish migration
- Fish spawning
- Preservation of rare & endangered species
- Warm freshwater habitat
- Wildlife habitat
- Municipal & domestic water supply
- Freshwater replenishment to surface waters
- Groundwater recharge
- Water contact recreation
- Non-contact water recreation

# Regional Temperature Study (RTS)

Are temperature evaluation guidelines developed from studies on multiple salmonid species across the Pacific Northwest ecologically appropriate for CCC steelhead?



United States  
Environmental Protection  
Agency

Region 10  
Office of Water

EPA 910-B-03-002  
April 2003

## **EPA Region 10 Guidance For Pacific Northwest State and Tribal Temperature Water Quality Standards**

*“Because this guidance reflects EPA’s current analysis of temperature considerations for Pacific Northwest salmonid species, EPA intends to consider it when reviewing Pacific Northwest State and Tribal temperature WQS or promulgating federal temperature WQS in Idaho, Oregon, or Washington.”*



## Phase 1:

Eagle Creek  
Cascade Locks, OR

Are the regulatory standards derived from northern populations of steelhead applicable to steelhead in the CCC DPS range?



- A) Review of existing literature and data to determine extent of available information.
- B) Data acquisition and analysis to predict the probability of steelhead occurrence based on temperature.



# Central California Coast (CCC) Steelhead DPS

- Listed as threatened under the ESA
- Range from the Russian River to Aptos Creek



# Phase 2: Potential Next Steps?

## 1. Studies of natural/historical water temperatures

- a. Reference sites
- b. Modeling

## 2. Additional field data collection

- a. Additional temperature data
- b. Growth data

## 3. Experimental studies

- a. Stream-side aerobic scope, cardiac performance,  $CT_{max}$
- b. Laboratory growth



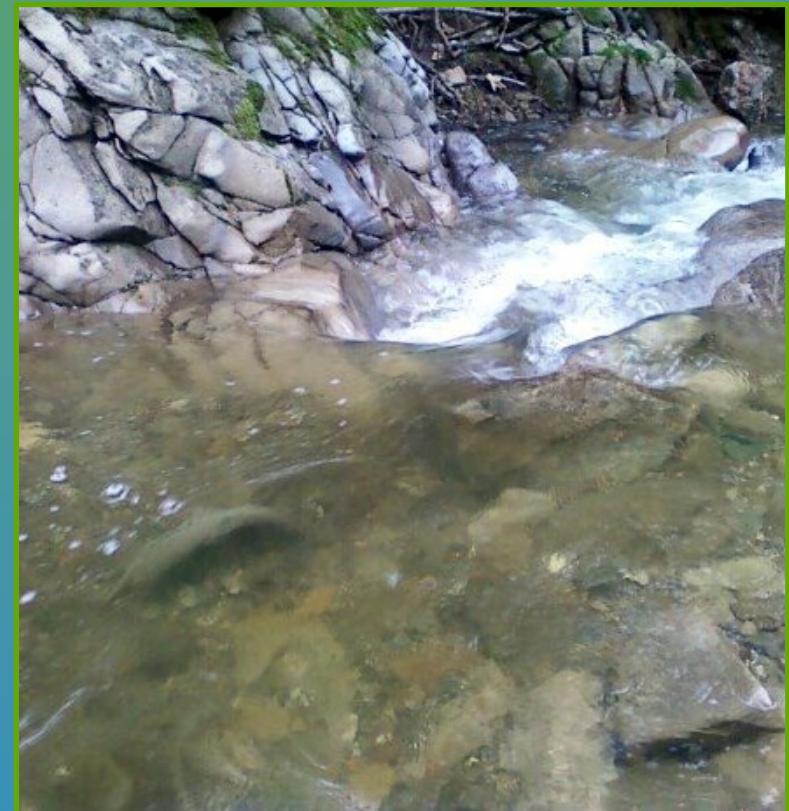
A streamside respirometry setup from the Siletz River, OR.  
*Terra Dressler (UCSB)*

Regional Temperature Study

# Goal

Develop an approach for determining regionally appropriate temperature evaluation guidelines for supporting cold freshwater and migration habitat of CCC steelhead.





# Questions?

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