Forest Practice Rules and the Basin Plan Water Quality Objective for Temperature

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Presentation Outline

- Interpretation of the Water Quality Objective for Temperature
- The Water Quality Objective for Temperature in relation to the FPRs
- Discussion
“The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature.

At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.”
COLD and WARM Beneficial Uses

• “Uses of water that support **cold** water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.”

• “Uses of water that support **warm** water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.”
Interpreting the Temperature Objective

Site-specific information

Do the temperatures reflect natural conditions?

Are temperatures increased 5 F?

Do the temperatures adversely affect beneficial uses?

Meeting the objective

Not meeting the objective

Yes

No
Interpreting the Temperature Objective

Site-specific project proposal

Will the project result in natural temperature conditions?

- Yes
  - Achieves the objective
- No
  - Will the resulting temperatures adversely affect beneficial uses?
    - No
      - Yes
        - Doesn’t achieve the objective
      - No
        - Would the temperatures increase 5 F?
          - No
            - Achieves the objective
          - Yes
            - Achieves the objective
What are natural temperatures?

“The water temperatures that result when the environmental factors that influence stream temperature have not been altered by human activities.”

Source: Scott River TMDL Staff Report
Will the project result in natural temperature conditions?

- Yes: Achieves the objective
- No: Will the resulting temperatures adversely affect beneficial uses?
  - Yes: Doesn’t achieve the objective
  - No: Would the temperatures increase 5°F?
    - Yes: Doesn’t achieve the objective
    - No: Achieves the objective
Water Quality Objective for Temperature

Key points:

- The objective applies to all waters of the state
- The objective applies to all beneficial uses
- The objective is zero temperature increase, unless demonstrations are made
- Where COLD and WARM beneficial uses are present, the objective limits any increase to 5 deg F
Class II-Large Streams

- Rules aim to prevent temperature increases in Class I streams caused by elevated Class II stream temperatures.

- Enhanced canopy retention of Class II streams within 1000’ of a Class I are intended to reduce temperatures before entering the Class I.
Class II-Large Streams

- What about upstream of 1000’?
- 50% canopy doesn’t ensure that the objective will be met
Outside Zone of Anadromy

- **Canopy requirements:**
  - 70% canopy on Class I
  - 50% canopy on Class II
- Shouldn’t rules designed to be protective of salmonids be applied to all salmonids, not just anadromous salmonids?
- Shouldn’t rules designed to protect temperature regimes be applied to all waters of the state, not just those with anadromous salmonids?
Questions?

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