

Developing Temperature Standards The Washington Experience

A brief discussion on the history and current status of Washington's efforts

With reflections on the process

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A Brief History:

Since the mid-1980's stakeholders have expressed concern about the temperature criteria.



Some argued the criteria were too stringent . . .

Others thought it was not stringent enough



Recognizing its importance, WA initiated an evaluation of the temperature criteria in 1993.

The review effort expanded:

From a technical workgroup process . . . to a comprehensive examination of the literature.

Well over 400 technical studies were used to derive biologically-based recommendations.



In 2000, Ecology joined an EPA workgroup to help develop regional temperature guidance.

The EPA process was used to refine our technical evaluation.

In April 2003, EPA released its regional temperature guidance.

In July 2003, Ecology adopted revisions to its standards.

The state's original technical recommendations and final rule closely matched EPA's guidance.

Fish. Use Type	Orig. Tech Rec.	Final WA Rule	EPA Guidance
Char Rearing	13C (55.4F)	12C (53.6F)	12C
Char Spawning	9C (48.2F)	9C	9C
Salmon and Trout Core Rearing	16C (60.8F)	16C	16C
Salmon and Trout Noncore Rearing	None	17.5C (63.5F)	18C (64.4F)
Salmon and Trout Spawning	13C	13C	13C

Criteria are a 7-day average of daily maximum temperatures.

WA planned on a two-step transition to the new standards:

Step 1: Convert the previously designated aquatic life uses to the equivalent new uses

Step 2: Spend the following 2-3 years validating the transformed uses

- revising the rule as appropriate -

Example of Step 1

Old Standards	New Standards
"Extraordinary" spawning and rearing (16C 1-DMax)	Spawning and "core" rearing (16C 7-DADMax)
"Excellent" spawning and rearing (18C 1-DMax)	Spawn. and "non-core" rearing (17.5C DADMax)

We used EPA's terminology thinking it would make approval easier.

EPA initially agreed with our two-step transition to the new standards.

But an Oregon court case altered their position

EPA determined they could not legally rely on the state's commitment to take the second step of confirming the designated uses.

EPA has now spent over two years examining fisheries information for the state.



They now appear to know what changes they would like to see to our new standards.

EPA wants "Core Rearing" (16C) applied for:

- Summer spawning (Jun 1 – Sept 15)
- Summer rearing by multiple salmon species
- Summer foraging by sub-adult bull trout

EPA wants "Char" (12C) applied:

- Where char spawning occurs
- Where USFWS wants to encourage spawning
- Where USFWS wants char habitat connected.

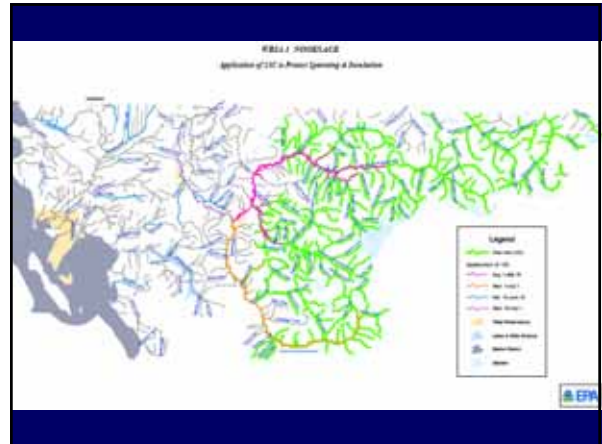
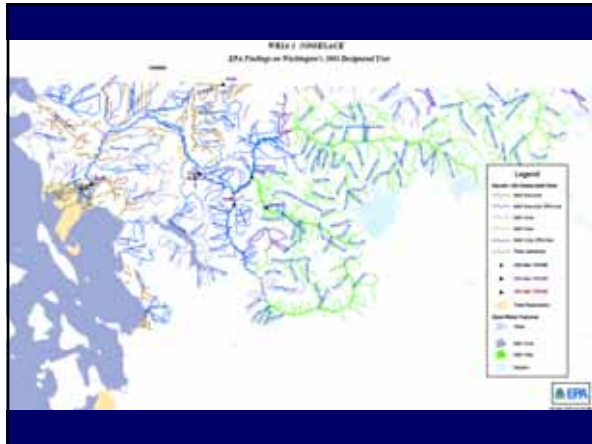
EPA wants the supplemental spawning criteria (13C and 9C) applied seasonally to:

- "Core" rearing waters used for spawning in the summer months (Jun 1st - Sept 15th) (13C)
During a default time frame in all other "core" waters (e.g., Oct 1 - May 15) (13C)
- Where "char" summer spawning occurs (as early as Aug 21) (9C).

Where Are We Now?



EPA created maps showing what the uses should be to meet their guidance
(EPA sent out public draft in Feb 2005)



The information collected by EPA:
 Creates a record that makes it all but impossible for EPA to approve our adopted standards.

Ecology has asked EPA for a formal decision - even if it results in a disapproval -
 We want EPA and the federal fish agencies to clearly articulate:
 "What changes are necessary to gain compliance with the federal Clean Water Act and the Endangered Species Act."

Once EPA has completed its review, WA will decide on the most appropriate response.

- Allow federal promulgation
- Adopt a corrective state rule
- ?

Changes to Dissolved Oxygen Criteria
 Upgrading the fisheries uses changes the dissolved oxygen criteria
 Criteria change from 8.0 to 9.5 mg/l
 EPA must consult with the fed. fish agencies

Unfortunately, the ESA agencies question whether the criteria fully protects spawning.
 - a potential future challenge -

EPA's Guidance and Lessons Learned

1. EPA views its guidance as the best interpretation of the available science
2. All salmonid life-stage uses must be geographically described and protected
3. EPA is focused on satisfying concerns of the federal ESA fish agencies

4. State discretion is limited in ESA waters
5. The terminology is important: ("noncore" interpreted as "fish aren't important").

Bottom Line Impressions

EPA says states have discretion to deviate from their temperature guidance, but . . .

It will be very difficult to set criteria that:

- a) differ at all from EPA guidance, and that
- b) do not fully match the recovery goals of the federal fish agencies.



Updated information on the EPA review will be placed on Ecology's homepage:

<http://www.ecy.wa.gov/programs/wq/swqs>

Join our WQS list-serve online!

Questions?