

Focus on: Natural Conditions in water quality standards



About surface water quality standards

Washington's surface water quality standards allow us to protect and regulate the quality of our lakes, river, streams, and marine water. We establish goals for a waterbody and set pollution limits to protect those goals, or designated uses. We put the pollution limits in our Clean Water Act tools such as permits, water quality clean up plans (TMDLs), and use them to identify impaired waters.

We typically set pollution limits, also called water quality criteria, based on the biological needs of the plants, animals, and people we intend to protect.

Accounting for natural differences in water quality

A waterbody may not meet the water quality criteria set to protect its uses because of human-caused pollution. In those cases, we may develop water quality clean up plans to address the human caused pollution.

However, in some cases a waterbody may not naturally meet water quality criteria. For example, a naturally low-flowing stream in a natural prairie without any human alteration or human-caused pollution may have higher temperatures than the limit set to protect fish.

The Natural Conditions part of our water quality standards can provide ways to account for these

unique natural situations. This is important because it allows us to focus resources on addressing pollution caused by humans.

How do the water quality standards allow for these natural differences?

Instead of setting pollution limits based on the biological needs of a plant or animal, we would set limits at what the waterbody can naturally meet.

Water quality standards can include a repeatable scientific method, like a recipe, to calculate natural protective criteria. By adopting into rule a method for calculating natural conditions, rather than a specific limit, it can help us account for the unique natural variety in the environment. If we don't have an approved method to develop natural conditions, we would need to do a separate rulemaking to set location-specific criteria each time. Also, these criteria can then be used to calculate limits for Clean Water Act tools as well.

When limits are based on natural conditions, the water quality standards can also have limits for how much human actions can change a parameter such as temperature or dissolved oxygen. For example, if a stream that supports fish is naturally warmer than the freshwater temperature criteria, human actions can't cause that stream to get warmer than the natural temperature of the stream by more than a minimal amount.

History of Washington's natural conditions

Washington's surface water quality standards have protected the natural conditions of waterbodies since 1967, with significant updates over time.

In 2021, EPA reconsidered and then disapproved some of Washington's rule language that addressed natural conditions. The reason for the disapproval was because the water quality standards did not specify that natural conditions criteria applied to aquatic life only, and should not apply to human health criteria for toxic substances.

Updating our natural conditions language

After EPA disapproved our rule language related to natural conditions, we made it a priority to propose new language. Without this language, we can't set the appropriate targets for cleanup plans for a waterbody that may need natural conditions criteria.

Also, without rule language that accounts for natural conditions, waterbodies in Washington may be identified as impaired when they may actually support their designated uses. This goes against the intent of our state Water Pollution Control Act (RCW 90.48), which clearly states that waterbodies should not be listed as impaired if those impairments are only due to natural causes.

Our proposed updates include:

- A statement that says we can use natural conditions to set site criteria.
- Methods to calculate new limits.
- Limits for human actions on certain parameters when we protect waters using natural limits.

Get involved

We invite you to comment on our proposed draft changes until 11:59 pm on July 12, 2024.

You can comment in the following ways:

- [Submit comments online](#) (until 11:59 p.m. on July 12, 2024)
- By US Mail (must be postmarked by July 12, 2024):

Marla Koberstein
WA Department of Ecology
PO Box 47696
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- At any of our public hearings listed below

Public workshop and hearings

Ecology will hold virtual public workshops and hearings on:

- June 27, 2024 – [Register here](#)
- July 2, 2024 – [Register here](#)

We will provide an overview of the proposed rule changes and hold a question and answer session. After questions, we will take formal testimony.

We plan to make a final decision on adopting the changes by fall of 2024. However, EPA must approve our updates to the water quality standards before they can be used for Clean Water Act programs.

Related Information

Visit our [rulemaking webpage](#) to learn more about the proposed changes. There you can learn about how we:

- Provide the technical basis for developing natural conditions criteria
- Plan to implement the rule
- Evaluated the potential costs and benefits

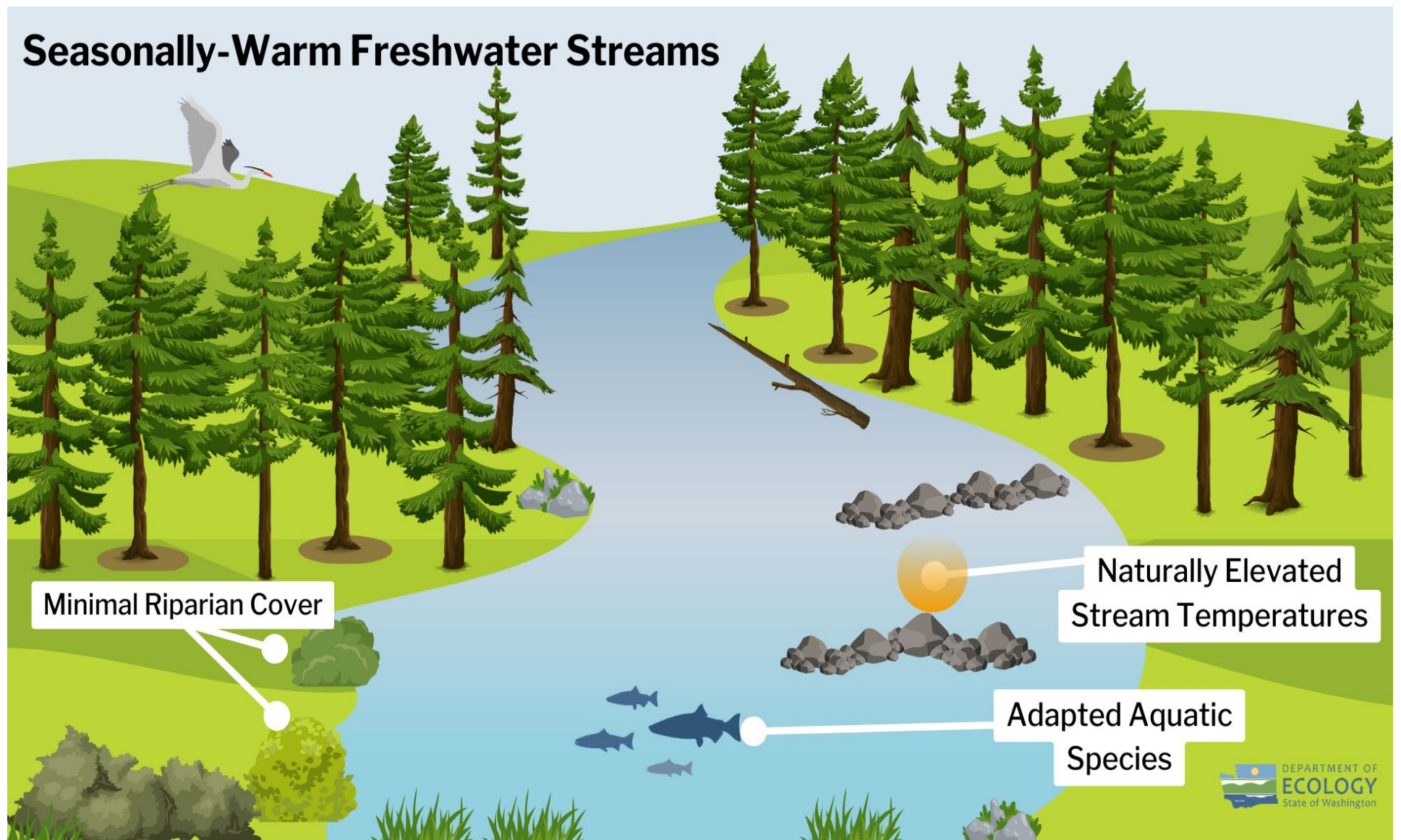
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ADA accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6600 or email at marla.koberstein@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility> or TTY call 711 or 877-833-6341

Seasonally-Warm Freshwater Streams



Example of a stream with naturally low shade which creates warmer water temperature. The aquatic species that call this stream home have adapted to the water.