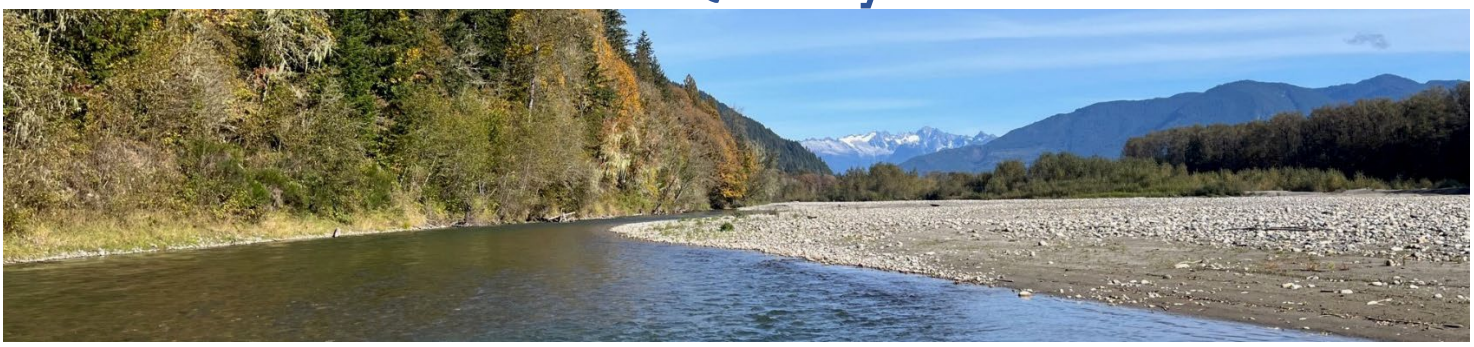
Focus on: Water Quality Assessment



New draft Water Quality Assessment results available to public

An interactive online tool, the Water Quality Assessment pulls together existing credible data for fresh and marine water in Washington. This tool helps us, and others, see where water quality is improving, where to prioritize future improvement plans, and where we need more data. Before we finalize the Assessment, we invite public review of the data.

Working towards cleaner water

The federal Clean Water Act sets a national goal that water should be "fishable and swimmable." To achieve this goal and meet legal requirements, Washington has established state water quality standards designed to protect the designated uses for lakes, streams, and marine waters. Designated uses include using the water for drinking, recreation, and as habitat for fish and other aquatic life. The water quality standards set limits to address toxic chemicals, such as lead and conventional pollutants, such as harmful bacteria. They also set limits on other conditions, such as water temperature, because water that is too warm harms fish and other aquatic life.

It is our responsibility to categorize state waters as clean or polluted, commonly referred to as a state's 303(d) list under the federal Clean Water Act (see the section below to learn more about our categories). We use the availible data in the Assessment to determine if Washington's streams, lakes, and marine water meet the water quality standards or if they are polluted. As part of this work, we must regularly update the Assessment based on new data, or changes in the standards.

Ecology holds an annual statewide meeting with Tribes, interested parties and local organizations to discuss our prioritized water cleanup work. This is in addition to local meetings our cleanup staff have when we start new projects. We start new projects based on the resources we have and on criteria such as how severe the pollutant is, how much risk to public health or aquatic species, and resource constraints.

Statewide data collection effort

We use data gathered by Ecology and readily available data from local, state, and federal agencies, Tribes, and environmental groups. To help ensure that the data we use are accurate, all data must meet our quality assurance requirements (our policy for ensuring credible data[1]). For this Assessment, we evaluated over 85 million data points from many water bodies across the state, including 9,322 miles of streams, 449 lakes and 633 square miles of marine water.

While this is a vast amount of water and data, the Assessment actually represents only a portion of Washington's total waterbodies – 17% of marine waters, 11% of lakes, 88% of the Columbia and Snake Rivers,

[1] https://apps.ecology.wa.gov/publications/SummaryPages/2110032.html

and 4% of rivers and streams. In other words, this is not a report card for water quality for all of Washington, but instead a snapshot in time of water quality for water where there is data.

Many of the states polluted waterbodies are where there is the most monitoring. To help prioritize our work, as the result of permit requirements and the work of our clean water partners, there is a priority on monitoring waterbodies where humans are and could be impacting water quality. This way we can tell if focused efforts are improving water quality. We have minimal data in the Assessment for Washington's more pristine, and often remote, waterbodies.

Snapshot of draft results

The most common water pollution problems continue to be elevated water temperatures and high bacteria levels, which combined make up nearly half of the total polluted water. The other common pollution problems are low dissolved oxygen and toxics (this includes many individual toxics). This is the first Assessment where Ecology has looked at harmful algae blooms, with 40 Category 5 listings for harmful algae blooms, mostly in lakes where there are focused efforts to gather this data.

There are 89,064 unique water quality *listings* on Washington waters. A listing is a unique combination of a waterbody segment, pollutant, and sample type (water, fish tissue, sediment, etc.). That means multiple types of data can be collected on the same water segment; a waterbody can be Category 5 for one pollutant, but Category 1 for another. See the table below or our WQ Assessment webpage[2] for more information.

Assessment category	What it means
Category 1: Meets tested standards	Water quality standards are met for pollutants that were tested
Category 2: Waters of concern	Some evidence of a water quality problem but not persistent enough to put it in Category 5
Category 3: Insufficient data	Not enough data to place into any other category
Category 4: Has a TMDL or alternative Pollution Control Program being implemented	Doesn't meet water quality standards but pollution control efforts are in place
Category 5: On the polluted/impaired water 303(d) List	Data indicates water quality standards are not being met and cleanup plan needed

Overall, 47% of streams (4,716 miles) and 21% of marine water (135 square miles) we assessed are Category 5, or 303d listed, for at least one pollutant. For some context on progress, 32% of assessed streams (3,218 miles) were in Category 5 at one point and are now in Category 4 because they have an active Total Maximum Daily Load (TMDL) or pollution control plan in place. The draft Assessment shows that site specific efforts to improve water quality are working, with more than 100 listings that were previously considered polluted now considered clean or meeting water quality standards.

The table on the next page gives the number of *listings* in each category for each pollutant. The largest number of listings (in all categories) are for Toxics and Sediment Quality that represent multiple parameters. This is because there are over 150 different toxic chemicals (pollutants) with water quality and sediment standards and we often test for multiple toxic pollutants in a single sample.

[2] https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d

Listings by Parameter Group	Category 1	Category 2	Category 3	Category 4	Category 5	Total
Bacteria	809	1181	1791	933	1610	**6324**
Dissolved Oxygen	7	1357	1158	298	1149	**3969**
pH	55	1235	1526	88	530	**3434**
Temperature	325	1237	1931	969	1673	**6135**
Toxics	4872	2077	17314	198	1271	**25732**
Sediment Quality	7871	388	31113	2918	282	**42572**
Other	1	109	197	520	71	**898**
Total	**13940**	**7585**	**55030**	**5919**	**6590**	**89064**

Using the Assessment

While we use the Assessment to prioritize cleaning up polluted water, the data results are also used by others for a variety of reasons. Tribes, federal, state, and local governments, and community organizations use the Assessment to design monitoring programs, use data in environmental reporting, and to design their own water quality improvement projects.

Provide feedback

We are accepting feedback on the draft Assessment from Nov. 4, 2024 to Jan. 10, 2025. We are holding a virtual public workshop on Nov. 13 where we will give a presentation on the Assessment and how to submit comments, followed by a question and answer session.

Register on Zoom – Nov. 13 at 2 p.m.

If you have questions about the Assessment, please email 303d@ecy.wa.gov.

Next Steps

After reviewing feedback, we will update the Assessment and submit it to EPA for approval.

We will begin collecting data for the next Assessment in the spring of 2025. The next Assessment will analyze water quality data collected from 2015 through 2024. We expect the next draft Assessment will be available for public review in 2027.

Related Information

- Water Quality Assessment
- Water Quality Assessment Policy 1-11
- 2022 Water Quality Assessement supporting information

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To request an ADA accommodation, contact Ecologyone at 360-407-6600 or email the Assessment Team at 303d@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility.