

## Focus on: Water Quality Assessment



### Candidate Water Quality Assessment submitted to EPA

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 finalized the Assessment, we hosted a public review and comment period. The candidate Assessment was submitted to EPA on April 25, 2025.

### 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 available 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 it poses 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<sup>1</sup>](https://apps.ecology.wa.gov/publications/SummaryPages/2110032.html)). For this Assessment, we evaluated over 85 million data points from many water bodies across the state, including 10,047 miles of streams and rivers, 449 lakes and 633 square miles of marine water.

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<sup>1</sup> <https://apps.ecology.wa.gov/publications/SummaryPages/2110032.html>

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, 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 36 Category 5 listings for harmful algae blooms, mostly in lakes where there are focused efforts to gather this data.

There are 89,061 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<sup>2</sup>](#) 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.

<sup>2</sup> <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                    | 805          | 1182        | 1792         | 938         | 1612        | <b>6329</b>  |
| Dissolved Oxygen            | 7            | 1402        | 1160         | 298         | 1102        | <b>3969</b>  |
| pH                          | 54           | 1235        | 1526         | 89          | 530         | <b>3434</b>  |
| Temperature                 | 325          | 1238        | 1932         | 969         | 1673        | <b>6137</b>  |
| Toxics                      | 4852         | 2077        | 17361        | 211         | 1237        | <b>25738</b> |
| Sediment Quality            | 7871         | 388         | 31113        | 2918        | 282         | <b>42572</b> |
| Other                       | 1            | 106         | 188          | 520         | 67          | <b>882</b>   |
| <b>Total</b>                | <b>13915</b> | <b>7628</b> | <b>55072</b> | <b>5943</b> | <b>6503</b> | <b>89061</b> |

## 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.

## Submission to EPA

We accepted feedback on the draft Assessment from Nov. 4, 2024 to Jan. 10, 2025. We received 249 comments from 41 entities on a variety of topics. We carefully considered all comments and made updates to the Assessment as needed. Our [response to comments](#) document is available on Ecology's webpage. We submitted the updated Assessment (known as the Candidate Assessment) to EPA on April 25, 2025 for their review.

If you have questions about the Assessment, please email [303d@ecy.wa.gov](mailto:303d@ecy.wa.gov).

## Next Steps

We will soon begin collecting data for the next Assessment. 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](#)
- [2022 Water Quality Assessment – Response to Comments](#)
- [2022 Water Quality Assessment – Supporting Information Document](#)



Assessment Team  
[303d@ecy.wa.gov](mailto:303d@ecy.wa.gov)  
 360-407-6600



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