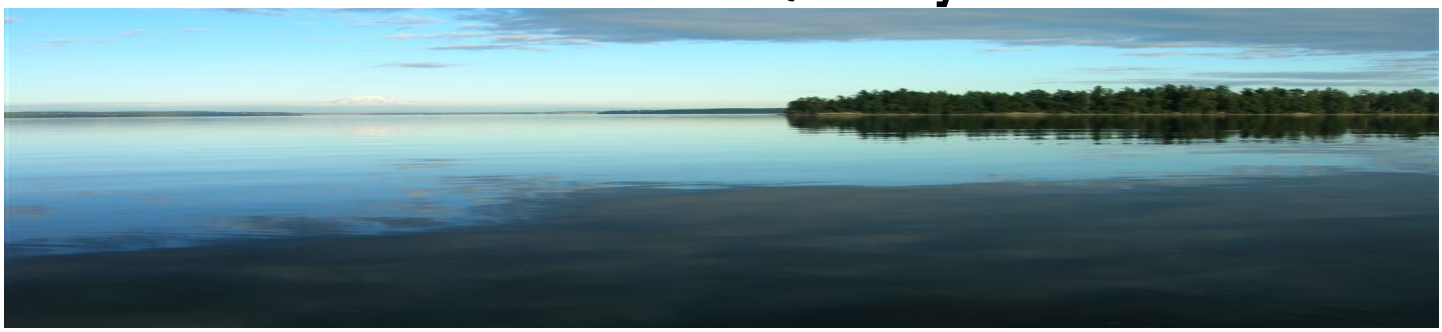
Focus on: Draft Water Quality Assessment



Water Quality Assessment results available for public input

The Department of Ecology has completed updates to the state's Water Quality Assessment and is asking for feedback as part of a public review from April 8 – June 4, 2021. Taking the form of an interactive online tool, the Assessment pulls together existing data for fresh and marine water. This tool helps us, and others see where water quality is improving, where to prioritize future improvement plans, and where we need more 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 beneficial uses of lakes, streams, and marine waters. Beneficial 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 arsenic, 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 (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.

Statewide data collection effort

We use data gathered by Ecology and readily available data from several other local, state, and federal agencies, tribes, and environmental groups. To help ensure that the data we use is accurate, all data must meet our quality assurance requirements (our policy for ensuring credible data). The Assessment includes data from many water bodies across the state, including 9,279 miles of streams, 434 lakes and 619 square miles of marine water. With the use of a new automation tool, we analyzed approximately 66 million data points.

While this is a vast amount of water and data, the Assessment actually represents only 15% of Washington's total waterbodies. 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. With a significant increase in available monitoring data, we were able to assess 2,094 water body segments for the first time, adding a wealth of water quality data to the database.

Snapshot of draft results

There are 42,170 unique water quality *listings* on Washington water, a 41% increase from the last assessment. 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, so a waterbody can be rated as Category 5 for one pollutant, but Category 1 for another. See the table below or our webpage 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 evaluate if it meets water quality standards
Category 4: Has a TMDL or alternative Pollution Control Program	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

The most common water pollution problems continue to be elevated water temperatures and high bacteria levels, which combined make up more than half of the total polluted water. The other common pollution problems are low dissolved oxygen and toxics (a broad category that includes many individual toxics).

Overall, out of the 9,279 unique river miles we assessed, 47% of streams (4,317 miles) and 21% of marine water (105 square miles) are Category 5, or 303d listed, for at least one pollutant. For some context on progress, 35% of assessed streams (3,249 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 table below gives the number of *listings* in each category for each pollutant and you can see the largest number of listings have been tested for Toxics. This is because there are over 100 different toxic chemicals (pollutants) with water quality standards and we often test for multiple toxic pollutants in a single sample. That is also why many of those listings need more data.

Listings by Parameter	Category 1	Category 2	Category 3	Category 4	Category 5	Total
Bacteria	818	1,031	1,454	888	1,380	**5,571**
Dissolved Oxygen	16	1,352	1,020	246	1,074	**3,708**
pH	77	1,112	1,238	73	443	**2,943**
Temperature	1,228	1,112	1,087	969	1,354	**5,750**
Toxics	4,698	1,734	15,159	189	967	**22,747**
Other	142	165	412	524	208	**1,451**
Total	**6,979**	**6,506**	**20,370**	**2,889**	**5,426**	**42,170**

The draft Assessment also shows that local efforts to improve water quality are working, with more than 100 listings that were previously considered polluted are now considered clean or meeting water quality standards. However, there is still more work to be done. Ecology meets annually with interested stakeholders, tribes, and local organizations to prioritize where water improvement work will occur. We evaluate improvement efforts based on criteria such as how severe the pollutant is, how much risk to public health or aquatic species, and resource constraints.

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 stakeholders use the Assessment to design monitoring programs, use data in environmental reporting, and to design their own water quality improvement projects.

One of the new features of the online Assessment tool is the ability to add a layer of demographic information from the U.S. Census. This means that you can not only look at the water quality data for a specific location or watershed, but also learn more about the people living in that area. The Census has statistics on language, income, and education for populations in the area, which Ecology and other organizations can use to prioritize work in overburdened communities.

Opportunities for input

We are inviting people to review the draft Assessment. Please visit our Assessment website to access the public review draft and other materials. As a part of the review process, Ecology is holding a virtual training on April 20 at 1:30p.m. to offer background information on the Assessment and tips on how a reviewer can use the search and map tools to review their areas of interest. Register for the online webinar training.

The deadline for comments is **5:00 p.m., Friday, June 4, 2021**. We prefer comments be submitted through the online comment form provided in the Assessment tool or by email at 303d@ecy.wa.gov. Mail in comments should be addressed to Jeremy Reiman, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.

Next steps

After the public review period, we will make necessary changes to the final Water Quality Assessment based on comments received. The final Assessment will be submitted to EPA to meet Clean Water Act requirements.

Related Information

- Water Quality Assessment
- Water Quality assessment Policy 1-11
- Water Quality improvement projects

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To request an ADA accommodation, contact Ecology by phone at 360-407-6600 or email at Jeremy.Reiman@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.