

Oregon Integrated Report Frequently Asked Questions



State of Oregon
Department of
Environmental
Quality

Oregon DEQ published the 2022 Integrated Report and compiled a list of Frequently Asked Questions (FAQ) to assist with the understanding of the report. The Integrated Report consists of an on-line searchable database and a [web-based map tool](#).

Information on the Integrated Report

What is the Integrated Report?

The federal Clean Water Act requires Oregon to report on the quality of its surface waters every two years. Oregon surface waters are assessed to determine if they contain pollutants at levels that exceed protective water quality standards. The result of these analyses and conclusions is called the “Integrated Report” because it combines the requirements of Clean Water Act section 305(b) to develop a status report and the section 303(d) requirement to develop a list of impaired waters. Oregon’s Integrated Report is presented in an online database and accessible through a web-based tool map that is both transparent and easy to use.

The Integrated Report categorizes all assessed waterbodies. Oregon Department of Environmental Quality used water quality data to evaluate the most common beneficial uses, such as aquatic life, drinking water or recreation. Waterbodies that exceed protective water quality standards are identified as impaired, (which is also referred to as the “303(d) List”). Identifying a waterbody as impaired initiates the prioritization and development of a Total Maximum Daily Load.

Readily available data and information are reviewed and assessed using the Methodology for [Methodology for Oregon’s 2022 Water Quality Report and List of Water Quality Limited Waters](#). The Integrated Report is submitted to the U.S. EPA for approval in May 2022.

What is the 303(d) List?

Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that do not meet the state water quality standards. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters. A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards.

The 303(d) list identifies where Oregon surface waters are not meeting water quality standards and the cause of those impairments when they are known.

The 303(d) list is published by the Oregon Department of Environmental Quality as part of the more comprehensive Integrated Report required every two years. The 303(d) list consists of waterbodies identified as Category 5: Impaired.

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*DEQ is a leader in
restoring, maintaining
and enhancing the
quality of Oregon’s air,
land and water.*

What is new for the 2022 Integrated Report?

In 2018/2020, DEQ redefined how it identified the segments of waterbodies it uses to conduct assessments within waterbodies. DEQ migrated its hydrologic framework from the outdated Longitude Latitude Identification (LLID) system to the National Hydrography Dataset (NHD) framework, which is the national and state hydrologic framework standard. These waterbody segments are referred to as “assessment units”, which are fixed for each assessment cycle. During the 2018/2020 Integrated Report public comment period, DEQ received comments expressing concern about watershed units and the visualization of impaired waterbodies within watershed assessment units. DEQ revised its map display to represent impaired watershed units as purple polygons and identified impaired waterbodies within the assessment unit as dashed purple lines.

Previous assessment methodologies for watershed units pooled data together from multiple monitoring locations in the sub-watershed to arrive at a single assessment unit conclusion for the watershed unit. However, by doing this, specific details about where impairments occurred in a given sub-watershed occurred only through analysis of the raw assessment data files.

In the 2022 Integrated Report, watershed units were assessed at each individual monitoring station. This approach identifies the specific monitoring station and streams within a watershed unit where the impairment occurs. Ultimately, the watershed unit will have a single assessment conclusion for reporting purposes.

Monitoring station conclusions were compiled to determine a waterbody conclusion, and waterbody conclusions were rolled up to an assessment unit conclusion. If one monitoring station was considered impaired, the assessment unit would be reported as impaired. A screen shot of a watershed unit from the web-based map tool is shown below:

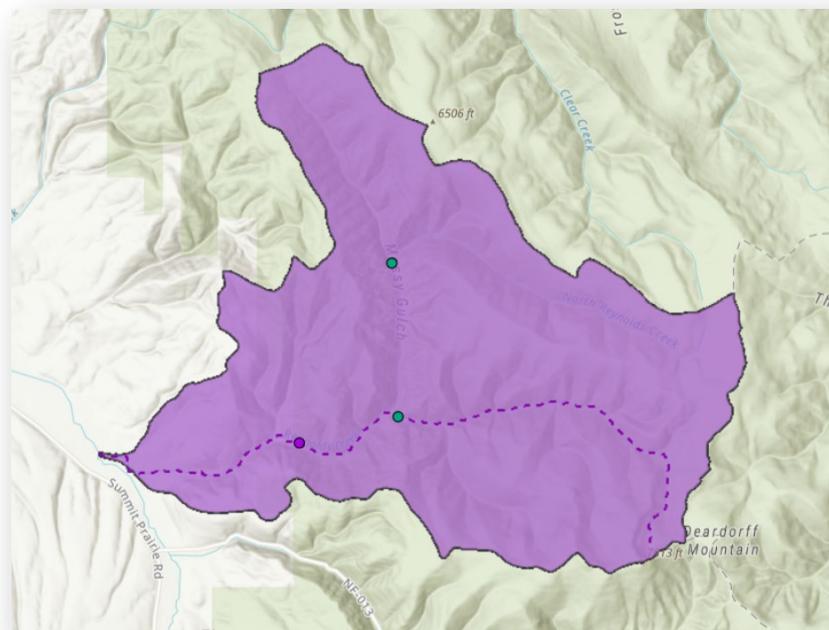


Figure 1: Screen shot of a watershed unit from DEQ’s web-based map tool

In addition to its revised assessment methodology for watershed assessment units, DEQ completed several improvements in the 2022 Integrated Report. These improvements included expanded rationales for support of assessment conclusions and increased the use of continuous datasets for pH and delisting

for dissolved oxygen impairments. Thus, the 2022 Integrated Report incorporated more continuous datasets for an expanded set of parameters (i.e. temperature, dissolved oxygen, and pH).

The assessment results will also be displayed in a [Searchable Online Database](#)

What are the categories used in the Integrated Report?

For this assessment, DEQ analyzed readily available data to determine whether their beneficial uses are supported. In Oregon, these uses could include: aesthetic quality, boating, commercial navigation and transportation, fish and aquatic life, fishing, hydropower, industrial water supply, irrigation, livestock watering, water supply (public and private), water contact recreation, and wildlife and hunting. DEQ used the 2022 assessment methodology to determine if a waterbody meets the beneficial uses. Oregon does not have sufficiently robust data to be able to use Category 1: all designated uses are supported. Based on guidance from U.S. EPA, DEQ uses the following condition categories:

Category 2: At least one core beneficial use is supported and none is known to be impaired.

Category 3: Not enough information to determine beneficial use support.

Category 4: Available data and/or information indicate that at least one designated use is not being supported but a TMDL is not needed.

Category 5: At least one beneficial use is not supported and a TMDL is needed.

Oregon also uses several sub-categories. The subcategories used in the 2022 Integrated Report are:

- **Category 3B: Insufficient Data; Exceedance**
 - This category is used when there is insufficient data to determine use support, but some data indicate non-attainment of a criterion.
- **Category 3C: Insufficient Data; Potential Concern**
 - This category is used to identify waters when data are insufficient to determine full use of support, but show potential concern.
- **Category 3D Insufficient Data; not Technologically Feasible to Assess**
 - Some of our water quality criteria values are below the ability to detect using common laboratory analysis techniques. This category is used when all the available data has criteria values below the test method’s quantification limits.
- **Category 4A**

- Clean-up plans ([also called TMDLs](#)) that will result in the waterbody meeting water quality standards and supporting its beneficial uses have been approved.
- **Category 4B**
 - Other pollution control requirements are expected to address pollutant of concern and will result in attainment of water quality standards.
- **Category 4C:**
 - The impairment is caused by pollution, not a pollutant. For example, flow, or lack of flow, are not considered pollutants, but may be affecting the waterbody’s beneficial uses.

See page 16 in [Methodology for Oregon’s 2022 Water Quality Report and List of Water Quality Limited Waters](#), document for a more through explanation of the categories.

What does an impairment mean?

A waterbody is listed as impaired if data or information indicates that at least one beneficial use is not being fully supported and a TMDL or other plan is needed to address the issue. The waterbody may meet water quality criteria during some years, but data indicate that the beneficial use is not always supported.

Assessment methodology

How is the Integrated Report assessment information organized?

The Integrated Report assessment uses the Oregon Water Resources Department (OWRD) basin as a high level organizing feature. Within each basin, DEQ divides waters up further into Assessment Units based on the NHD. For each assessment unit, DEQ assigns one of five status categories based on whether beneficial uses are supported. If uses are not supported, parameters causing the impairment are also identified when they are known.

How are surface waters subdivided for the assessment?

Because waterbody characteristics change as they flow from headwaters to the mouth (due to flow, adjacent land uses, and other characteristics), DEQ divides up waterbodies into “Assessment Units.” Assessment Units are segments or areas of streams that are predetermined based on similar hydrology and represent similar environmental/hydrographic characteristics. Assessment units can vary in size from less than one stream mile to greater than 200 stream miles. Assessment units are further grouped into five distinct types.

Rivers and Streams	Lakes, Reservoirs, Estuaries	Watersheds	Beaches	Ocean
<ul style="list-style-type: none"> •Strahler stream order 5 or higher •Divided by: <ul style="list-style-type: none"> •Change in designated use •Change in stream order •HUC-10 boundary 	<ul style="list-style-type: none"> •Greater than 20 hectares •Broken by change in designated uses 	<ul style="list-style-type: none"> •Strahler stream order 4 or less •Divided by <ul style="list-style-type: none"> •Sub-watershed •HUC-12 boundary 	<ul style="list-style-type: none"> •OR Health Authority and EPA beach designations that already exist •Remaining beaches were visually delineated 	<ul style="list-style-type: none"> •Defined using Oregon HUC 8 boundaries •Encompass Oregon territorial waters extending up to three miles offshore

Glossary

“**Strahler stream order**” - Strahler Stream Order is a stream classification system based on a hierarchy of tributaries. The uppermost channels in a drainage network (i.e., headwater channels with no upstream tributaries) are designated as first-order streams down to their first confluence. When two first-order streams come together, they form a second-order stream. When two second-order streams come together, they form a third-order stream. When two streams of different order confluence, they form a stream of the maximum order of both.

“**HUC**” – Hydrologic Unit Codes, or HUCs, are a nationwide system used by the United States Geological Survey (USGS) to delineate watersheds based on surface hydrologic features. This system divides the country into 21 regions (2-digit HUC), 222 subregions (4-digit HUC), 370 basins (6-digit HUC), 2,270 subbasins (8-digit HUC), ~20,000 watersheds (10-digit HUC), and ~100,000 subwatersheds (12-digit HUC). The 12-digit HUC is the smallest unit classified in Oregon.

“**Hectare**” - a metric unit of square measure, equal to 100 acres or 10,000 square meters, and is used to measure lake/reservoir area.

What is the difference between the Assessment Units in the 2022 Integrated Report and the Segments used in previous Integrated Reports?

Before the 2018/2020 Integrated Report cycle, segments were divided on a complex system based on monitoring station locations and designated uses. Those segments could change with each assessment cycle. This process led to a series of overlapping segments that differed by parameter assessed, and an entire waterbody was sometimes identified as impaired based on a single monitoring station. The new assessment units were established in 2018/2020 and continue to be used in biannual Integrated Reports. Assessment units are designed to be fixed in time and remain the same for all assessed parameters.

Old segmentation

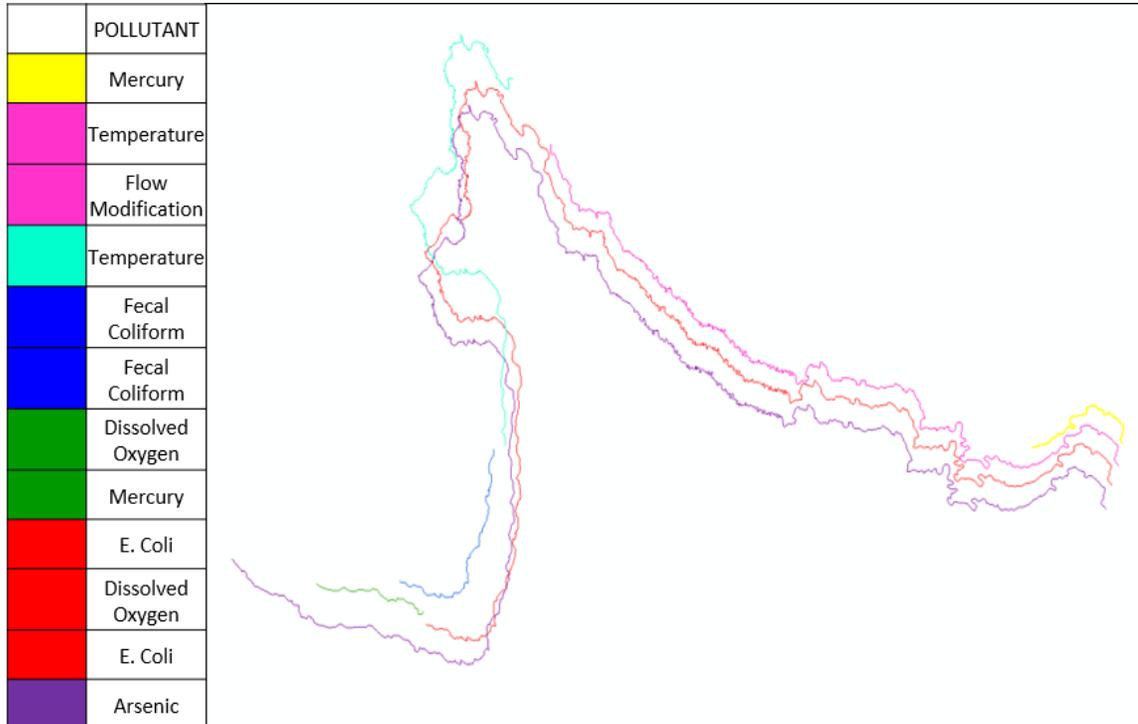


Figure 2. DEQ’s 2012 assessment methodology defines 8 overlapping segments for Powder River for reporting assessments.

Current Assessment Units

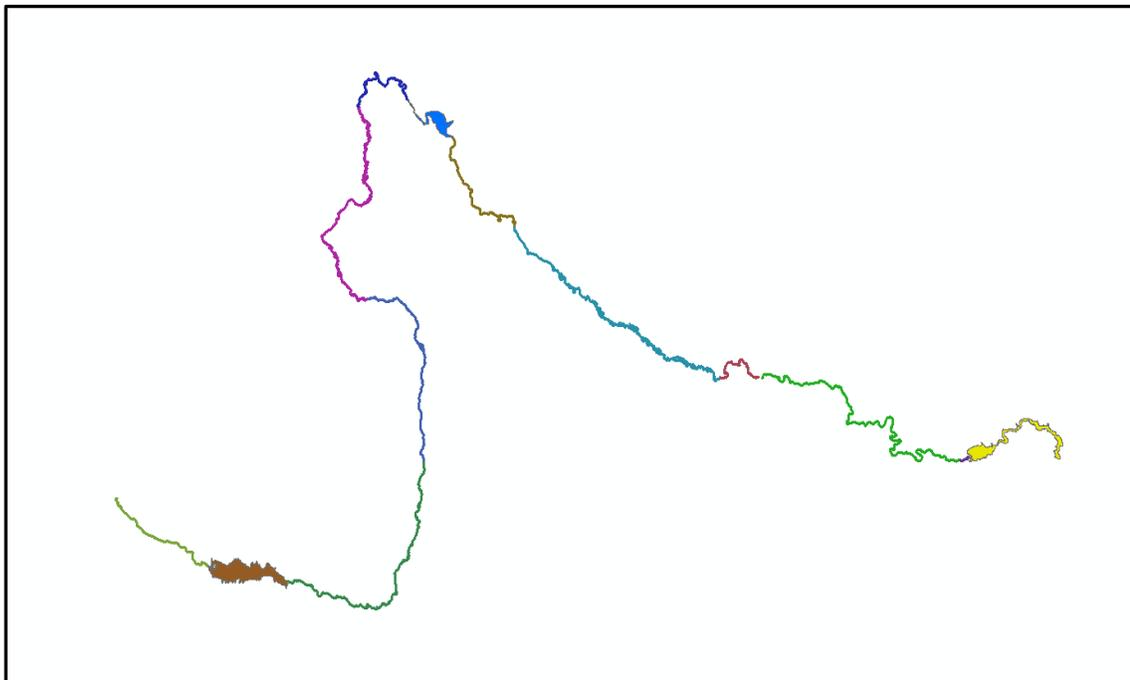


Figure 3. In the 2022 Methodology, the Powder River is divided into spatially distinct “assessment units” for reporting assessments.

What is a Watershed Assessment Unit?

In order to meet Clean Water Act requirements for assessing water quality in Oregon, DEQ must partition the state's waterbodies (streams, river, lakes, etc.) into assessment units, understanding that the water quality of one part of a waterbody may be different at different points of the waterbody. We developed several types of assessment units based on the nationally recognized hydrography dataset. In addition to assessment units established for segments of larger streams and rivers, our methods also involve an assessment unit referred to as a "watershed unit", which collectively represents small streams within a "sub-watershed" level. These 'watershed units' represent the smallest stream hydrologic classification areas currently mapped within Oregon and provide a tractable method for conducting a statewide assessment.

Because the number of waterbodies in Oregon total over 2 million, DEQ needed to group smaller waterbodies into manageable units for assessment purposes. In the absence of this approach for smaller streams within the upper reaches of watersheds, Oregon would have over 2 million assessment units, which would be impractical to assess relative to the state's monitoring and assessment resources. This grouping of smaller order streams is a standard practice employed by a number of other states that conduct their assessments in this manner.

How is a Watershed Assessment Unit assessed?

In the 2022 Integrated Report, watershed units were assessed at each individual monitoring station. This approach allows for identification of the specific monitoring station and stream within a watershed unit where the impairment occurs. The EPA requires assessment units to have a single assessment conclusion. Monitoring station conclusions were compiled to determine a waterbody conclusion, and waterbody conclusions were rolled up to a single assessment unit conclusion. If one monitoring station were considered impaired, the assessment unit was reported as impaired. Figure 4 and Figure 5 illustrate the process for rolling a monitoring location assessment conclusion into an assessment unit status.

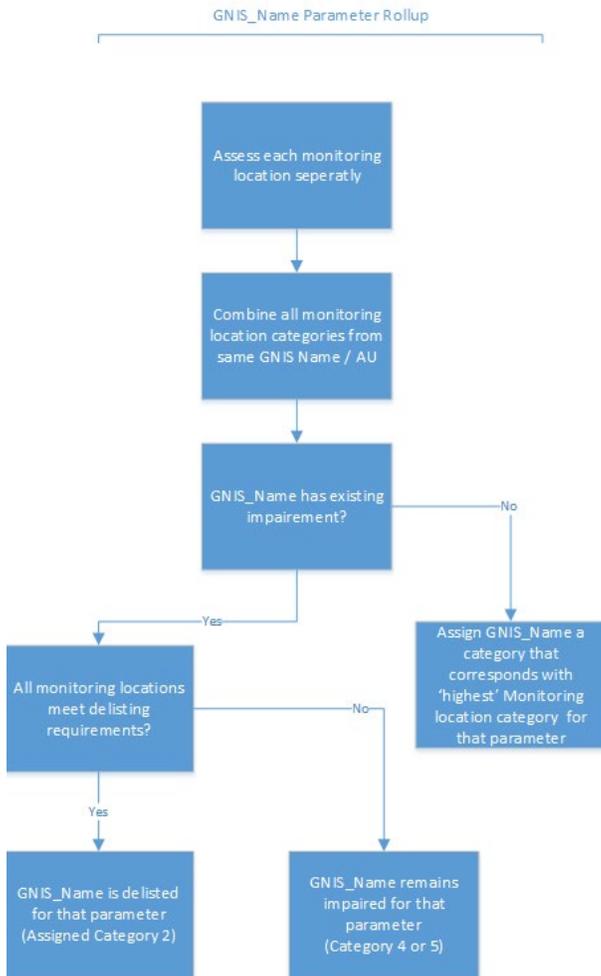


Figure 4. Flowchart to show how parameter categorical assignments at the monitoring location level are rolled up to an individual stream within a watershed assessment unit. The streams are defined by the NHD GINIS_Name.

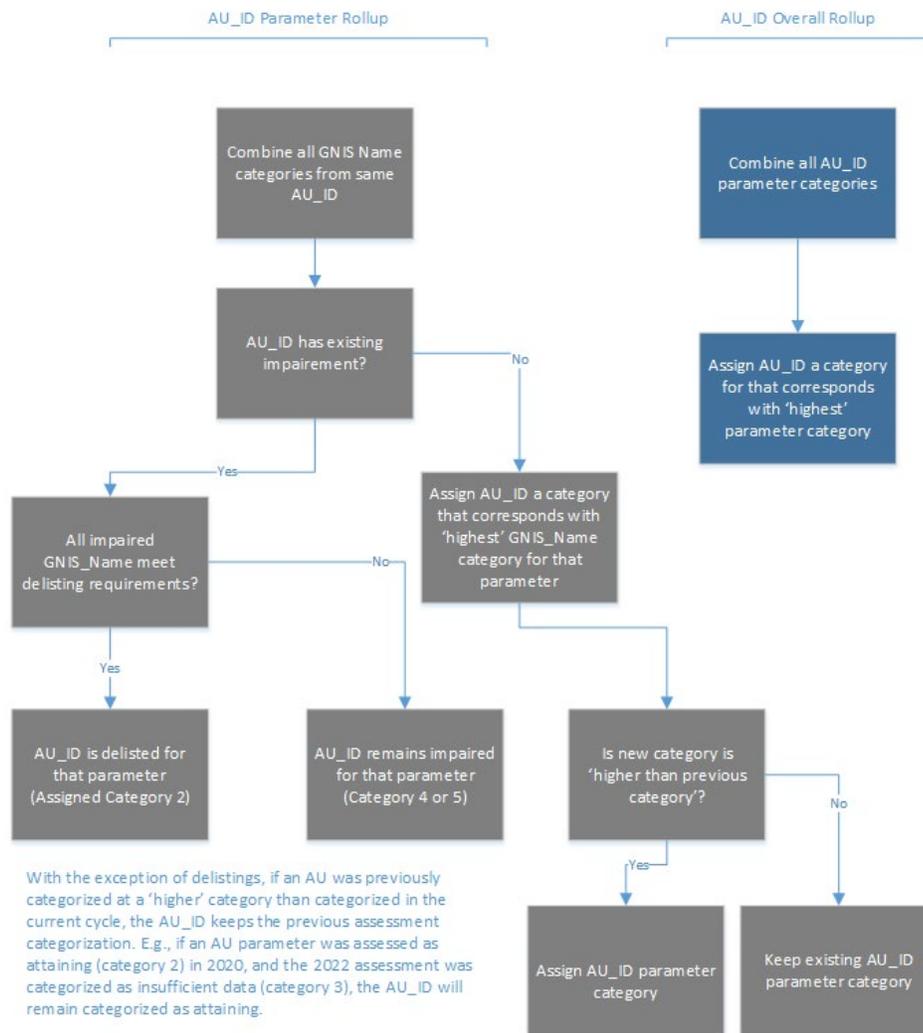


Figure 5. Flowchart showing how parameter categorical assignments for individual streams within a watershed assessment unit are rolled up to an overall assessment unit status.

The conclusions of the Integrated Report are a required “snapshot” of water quality across the state and are the beginning of the regulatory process, not the end. The data or information resulting in an identification of impairment is most relevant to the stream in which it was collected. Before a TMDL or permit can be developed, a deeper analysis into the extent of the water quality impairment and its possible causes must be conducted. Further data collection can then be targeted to refine report conclusions before beginning the permit, TMDL, or other regulatory mechanism.

Why is a watershed unit considered to be attaining when there is a solid purple line running through?

River and stream assessment units are assessed independently of surrounding watershed assessment units. Streams that are classified as fifth-order or higher, are larger and tend to have larger volumes of flow and runoff as they collect water from the smaller waterways flowing into them. As a result, assessment conclusions may be different for these larger river/stream assessment units. Assessed waterbodies (Stream Order 4 or lower) as part of watershed units are delineated on the web map as dashed lines that differ from River and Stream assessment units as solid purple lines.

Why do some green and yellow watershed assessment units not have any dashed lines in them?

Assessment conclusions for individual streams (Stream Order 4 or lower) in watershed units are represented as dashed lines in the current report. Watershed units that may be yellow or green without any dashed lines were assessments done in the 2018/2020 cycle, but no new data were assessed in the 2022 Integrated Report. When DEQ created its interactive map in the 2018/2020 cycle, only impaired streams within watershed units were identified on the map. Starting in 2022 Integrated Report for the interactive maps, all streams assessed in watershed units are represented as dashed lines (i.e. green = attaining, yellow = insufficient, purple = impaired).

How does DEQ make its assessment conclusions?

DEQ follows U.S. EPA guidance when developing its assessment methodology. DEQ uses its [Methodology for Oregon's 2022 Water Quality Report and List of Water Quality Limited Waters](#), which was developed and updated based on federal Clean Water Act requirements and Oregon's beneficial uses.

Using the assessment methodology, DEQ staff review water quality data and determine which assessment units do not meet either numeric water quality standards (such as dissolved oxygen or temperature) or narrative standards, and thus do not support their beneficial uses. Narrative standards include biological criteria which states; "*Waters of the State must be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities*" (OAR 340-041-0011). DEQ staff also use the methodology to determine when an assessment unit should be removed (delisted) from the 303(d) list.

What are DEQ's minimum data thresholds?

Minimum data thresholds for classifying a waterbody as impaired vary depending upon the pollutant standard being considered (more than 100 different pollutants are evaluated as part of the Integrated Report). Depending on the standard, different parameters have different minimum data thresholds to be classified as attaining or impaired. The "[Methodology for Oregon's 2022 Water Quality Report and List of Water Quality Limited Waters](#)" document describes these minimum data thresholds in detail.

For example, using grab sample data, in order to make a determination using the statistically-based binomial method about whether pH standards are being met within a given assessment unit, DEQ must have at least eight pH samples collected on separate days at a single monitoring location. In cases where the minimum data threshold within an assessment unit is not met, a determination of 'attains' or 'impaired' cannot be made; instead the waterbody is categorized as having 'insufficient data'.

Minimum sample sizes for determining water quality standards attainment, which may differ from listing data requirements, were added to the assessment methodology in 2022. Ten samples are required to determine attainment of aquatic life toxics criteria while a minimum of eight samples are required to determine that a waterbody is meeting standards for conventional pollutants (e.g., pH, bacteria, etc.) unless otherwise specified in the individual methodology.

How is a waterbody removed from the 303(d) list?

Waterbodies may be removed from the 303(d) list for a variety of reasons:

1. current data indicate that water quality standards are attained and delisting requirements are met indicating the waterbody is no longer impaired,
2. an error has been identified in the original Category 5 determination,
3. water quality standards, such as through updated science or improved measuring processes, have changed or no longer apply to a waterbody,
4. the expression of water quality standard pollutant has changed (e.g., now being measured as the dissolved fraction, when previously had been measured as the total amount of the pollutant),
5. a TMDL or other pollution control plan is in place, or

6. the impairment is caused by pollution rather than a known pollutant (i.e. flow or habitat modification).

DEQ has developed a delisting methodology outlined in its [Methodology for Oregon's 2022 Water Quality Report and List of Water Quality Limited Waters](#). DEQ staff use this methodology to review water quality data and determine whether a waterbody is in attainment of WQ criteria and supports its beneficial uses. Delisted waters must also receive EPA approval before they are considered final.

Special Topics

Why is there so much purple on the map?

The map of Oregon appears purple because it is a reflection of how DEQ is required to report its Integrated report assessment conclusions to EPA. DEQ must report whether or not a waterbody is attaining each applicable criteria. For example, if DEQ received data for 100 pollutants on a waterbody and that waterbody attained 99 out of 100 of its criteria, the waterbody appears purple on the map because one of its criteria was not attained. The Integrated Report assessment identified 13,590 parameters that attained their criteria and 5,223 parameters that were considered to be impaired (approximately 38%). As demonstrated by the assessment conclusions, although the map of Oregon looks purple for impaired waterbodies, Oregon continues to support high quality waters for many parameters.

Why a stream that does not exist appear on the map?

DEQ used the High Resolution National Hydrography Dataset, specifically the NHDPlus HR, to draw its assessment units. The National Hydrography Dataset (NHD) is developed and maintained by a partnership between the USGS and EPA. The dataset intended to “develop nationally-consistent geospatial datasets for the Nation” and provide agencies and organizations a common baseline for mapping aquatic resources. A user can report suspected errors to the NHD Markup App at <https://edits.nationalmap.gov/markup-app>. This tool allows users to suggest edits, or “markups”, to the NHD, Watershed Boundary Dataset (WBD), and NHDPlus HR. Anyone with a Gmail account can suggest corrections and improvements to the data. Suggested edits are reviewed by the USGS and the NHD state stewards before they are approved for incorporation into the NHD or WBD datasets.

Can I swim at a beach listed as impaired for Water Contact Recreation?

Beaches listed as impaired mean that the beach does not fully support its Water Contact Recreation designated use over the time period assessed. Higher bacteria levels than what is safe for swimming may occur periodically throughout the year, and there may be times when swimming is not recommended during the times those high levels occur. Before recreating in the water, visit the Oregon Health Authority's website, which maintains current advisories at <http://www.healthoregon.org/beach>.

Can I harvest shellfish at a beach listed as impaired for Shellfish Harvesting?

The most commonly occurring toxins in shellfish harvested in Oregon waters are Paralytic Shellfish Toxin (PST) and Domoic Acid. These shellfish toxins are produced by species of naturally occurring marine algae and accumulate in shellfish that feed on the algae. Over the last 10 years, all of Oregon's coastline has had at least one closure issued by the Oregon Department of Agriculture which led to DEQ's determination of impairment for not fully supporting the Shellfish Harvesting use over the time period assessed.

DEQ is identifying Oregon's coastal waters as impaired due to the recurring nature of these advisories which indicate that there could be waterbody pollutants or conditions that should be investigated, identified, and controlled.

Shellfish from Oregon’s coast continue to be safe to harvest and eat most of the time. Advisories issued by the Department of Agriculture continue to be the best source of information about when and where conditions do not support shellfish harvesting and consumption. For additional information regarding when and where you should take precaution for harvesting shellfish containing natural toxins, see the Oregon Department of Agriculture current advisories and shellfish bed closures at <https://www.oregon.gov/oda/programs/foodsafety/shellfish/pages/shellfishclosures.aspx>.

Is it safe to eat fish from a waterbody listed as impaired for fish consumption?

The purpose of the 303(d) listings is to indicate where water quality does not meet water quality standards that protect beneficial uses of the water. DEQ does not issue advisories or guidance to the public on the safety or risk of consuming specific kinds of fish from specific streams in Oregon. The Oregon Health Authority provides advisories to the public on when and how the public should limit consumption of fish using data and information for specific waters and fish. The most commonly occurring advisories are based on mercury and PCBs in fish tissue. OHA has developed fact sheets and websites to provide the public information on mercury and PCBs in Oregon waters. Please see the following:

- <https://www.oregon.gov/deq/FilterDocs/MercuryORwaters.pdf> and
- <https://www.oregon.gov/oha/ph/HealthyEnvironments/Recreation/FishConsumption/Pages/index.aspx>

What if I have data that I would like DEQ to use for future Integrated Reports?

DEQ intends to begin its statewide request for data for the 2024 Integrated Report in early 2023. DEQ only accepts data during the call for data time period. However, if groups would like to begin preparations for data submittal, the data submission templates, instructions, and tutorials can be found at <https://www.oregon.gov/deq/wq/Pages/irCallforData.aspx>. In addition, you may also sign up to receive notifications to find out when DEQ is conducting its call for data.

What is ocean acidification?

Ocean acidification refers to a reduction in the pH of the ocean over an extended period of time, caused primarily by uptake of carbon dioxide (CO₂) from the atmosphere. For more than 200 years, or since the industrial revolution, the concentration of carbon dioxide (CO₂) in the atmosphere has increased due to the burning of fossil fuels and land use change. The ocean absorbs about 30 percent of the CO₂ that is released in the atmosphere, and as levels of atmospheric CO₂ increase, so do the levels in the ocean. When CO₂ is absorbed by seawater, a series of chemical reactions occur resulting in the seawater becoming more acidic. This can cause a detrimental impact on organisms such as oysters, clams, sea urchins, shallow water corals, deep sea corals, and calcareous plankton (<https://oceanservice.noaa.gov/facts/acidification.html>).

Water currents unique to the Pacific Northwest coastline make Oregon particularly vulnerable to ocean acidification and low dissolved oxygen (hypoxia). Seasonal winds during the spring and summer bring deep ocean water to the surface in a process called upwelling. Decomposition of organic matter near the ocean floor enriches upwelled water with carbon dioxide on top of the enrichment caused by fossil fuel combustion. Carbon dioxide-enriched water with increased acidity can impair shell formation by snails, clams, and oysters, decreasing the numbers and growth rates of native and commercially important species (Chan, F., et al The West Coast Ocean Acidification and Hypoxia Science Panel: Major Findings, Recommendations, and Actions. California Ocean Science Trust, Oakland, California, USA. April 2016).

DEQ determined that ocean acidification is a potential concern in Oregon’s coastal waters, and that the data is insufficient to identify the water as impaired and in need of a TMDL. DEQ continues to support categorizing Oregon territorial waters as “of potential concern” (Category 3B) for ocean acidification. DEQ is engaged on a number of fronts to address the impact of ocean acidification. DEQ operates several

programs that track greenhouse gas emissions in Oregon and that reduce these emissions. DEQ's Mandatory Greenhouse Gas Reporting program requires that large sources of GHG emissions in Oregon report those emissions annually, including natural gas suppliers, electric utilities, large industrial facilities, and other suppliers of fossil fuels. Collectively, this program collects data on over 80% of the GHG emissions in the state.

DEQ also operates programs that encourage the reduction of GHG emissions from our transportation sector, which is the largest sector of emissions in Oregon and nationally. Our Clean Fuels Program requires suppliers of gasoline and diesel to invest in projects that procure non-fossil fuels, such as ethanol, biodiesel, and electricity, for Oregon's transportation sector. Recently, DEQ has also begun issuing rebates to Oregonians purchasing electric vehicles to hasten the adoption of these clean vehicles in Oregon. Finally, DEQ has a diverse set of programs that assess Oregonians' contribution to global GHG emissions through our consumption of food, goods and services; these programs raise awareness of different consumption and disposal options for Oregonians that can lower our global contribution to GHG emissions. The EQC also just adopted major new greenhouse gas regulations – called the Climate Protection Program – that establishes new, enforceable, and declining limits on the emissions allowed from fossil fuels used throughout Oregon. These limits apply to gasoline, diesel, natural gas, and propane used in a wide variety of applications, including transportation and space heating. In addition, DEQ is also participating in efforts within Oregon and other west coast states to address the causes and effects of ocean acidification, such as the West Coast Ocean Acidification and Hypoxia Science Panel and Oregon's Ocean Acidification and Hypoxia Council.

What does it mean for my permit if I discharge to a waterbody that is impaired for Harmful Algal Blooms or biocriteria?

In most cases, DEQ does not have information regarding the specific pollutant(s) of concern that is responsible for the algal blooms, biocriteria impacts, etc. Often the stressor is not known until a TMDL is developed, which will identify the cause of the impairment, including linking a pollutant to the water quality condition. The TMDL will identify the pollutant of concern for the impairments and derive the wasteload allocations for the relevant pollutants from discharging facilities. When a permit is developed prior to having the pollutant(s) of concern identified, no reasonable potential analysis can be conducted. However, when DEQ undertakes a revision of a permit and has information related to the pollutant of concern that is relevant to the facility, DEQ may include monitoring or other appropriate requirements in the permit.

Impaired Watershed Assessment Units

What does it mean for my permit if I discharge to an impaired watershed unit?

The data and/or information resulting in the identification of impairment is most relevant to the stream in which it was collected. If the permittee discharges into a distinctly different stream than the waterbody identified as impaired with no hydrological connection to the stream used in the assessment within the Watershed Assessment Unit, DEQ will evaluate permit requirements based solely on the water quality within the segment to which the facility discharges.

If the permittee discharges upstream of the impairment in a watershed assessment unit, a reasonable potential analysis and assessment will need to be performed to determine if they are causing or contributing to the impairment before a determination can be made as to whether there are specific requirements or limits that will be included based on discharging to an impaired waterbody.

What does it mean to have an impaired watershed unit?

When a watershed unit has been reported as Category 5 (“Impaired”), it indicates that an impairment exists within the watershed unit, not that the entire watershed is impaired. Impaired waterbodies within a watershed assessment unit are illustrated by a dotted purple line on DEQ’s interactive map. The report/list does not, unto itself, specify or determine any regulatory actions or consequences (other than identifying that an area has impairment and is in need of follow-up investigation and development of management plan). Follow-up monitoring attention on impaired assessment units will be necessary to better delineate/characterize the extent of impairment before any prescriptive regulatory actions are taken (e.g. permit limits, TMDL or other management response). Follow-up investigations would initially focus on the sampling stations in the watershed assessment unit that indicated impairment, as well as additional sampling efforts, to better delineate/characterize the full extent of impairment. Source reductions or management responses would be required of nonpoint sources within the watershed through the TMDL development process and resulting Water Quality Management Plans, not assessments identified in the Integrated Report. Using the watershed unit approach to partition waterbodies does not change how TMDLs are developed, which are developed at a larger scale than assessment units (typically basin or sub-basin scale).

Alternative formats

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email deqinfo@deq.state.or.us.