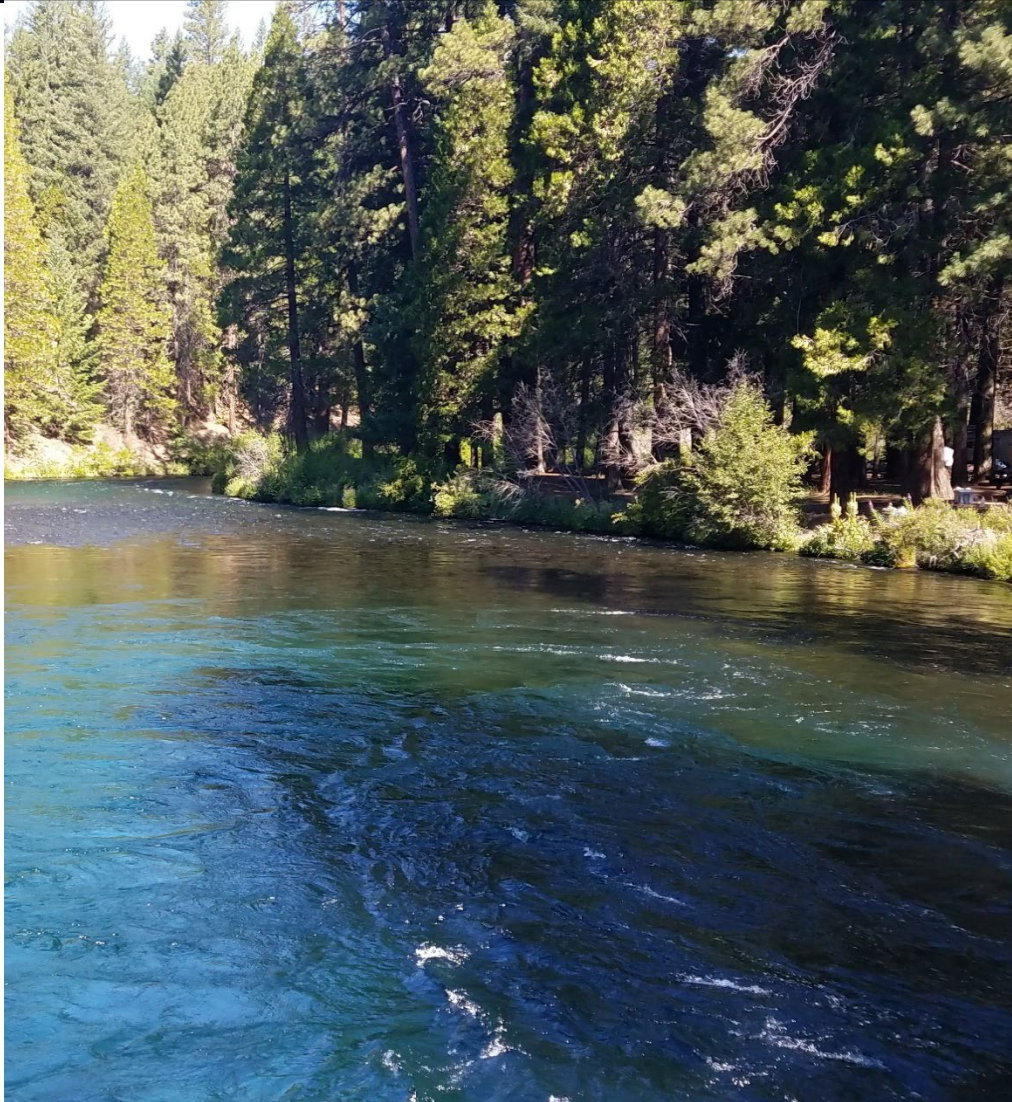




# Oregon Water Quality Index Data Summary

## Water Years 2015-2024

June 2025



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This document was prepared by: Kat Maloney

The Oregon Department of Environmental Quality  
Laboratory and Environmental Assessment Division  
7202 NE Evergreen Parkway, Suite 150  
Hillsboro, Oregon 97124

Contact: Kat Maloney  
Phone: 503-880-0655  
[kat.maloney@deq.oregon.gov](mailto:kat.maloney@deq.oregon.gov)

[www.oregon.gov/deq](http://www.oregon.gov/deq)



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# Introduction

This report provides a general statistical overview of water quality status and trends across Oregon using the Oregon Water Quality Index. The Index, which DEQ has calculated for more than three decades, analyzes a defined set of discrete water quality variables and produces scores describing the general water quality of a network of locations on Oregon's rivers and streams. This report does not include lakes, wetlands, estuaries, marine waters or groundwater resources. Variables included in the Index are dissolved oxygen (percent saturation and concentration), biochemical oxygen demand, pH, total solids, ammonia and nitrate nitrogen, total phosphorus, temperature and bacteria (*E. coli*). Index scores range from 10 (worst case) to 100 (ideal water quality). DEQ uses the Index to communicate information on the overall water quality of Oregon's rivers in an easy-to-understand, non-technical manner to the public, agency managers and the Oregon Legislature.

For this report, DEQ calculated Water Quality Index results on all samples meeting data quality and quantity requirements collected from Oct. 1, 2015, through Sept. 30, 2024. The agency calculated seasonal averages for the summer season (June through September) and fall-winter-spring season (October through May) and used the minimum of these seasonal 10-year averages for scoring purposes. Once scored, sites were given a status designation varying from Excellent to Very Poor. Sites with sufficient data, i.e., 30 or more scores, were analyzed for significantly improving or declining 10-year trends using the nonparametric Seasonal-Kendall test, which factors in normal seasonal variation. DEQ reports the magnitude and direction of significant trends at the 80 percent or greater confidence level. For more information on the reporting methods and uses of the index, as well as an interactive map showing site locations, status and trends visit

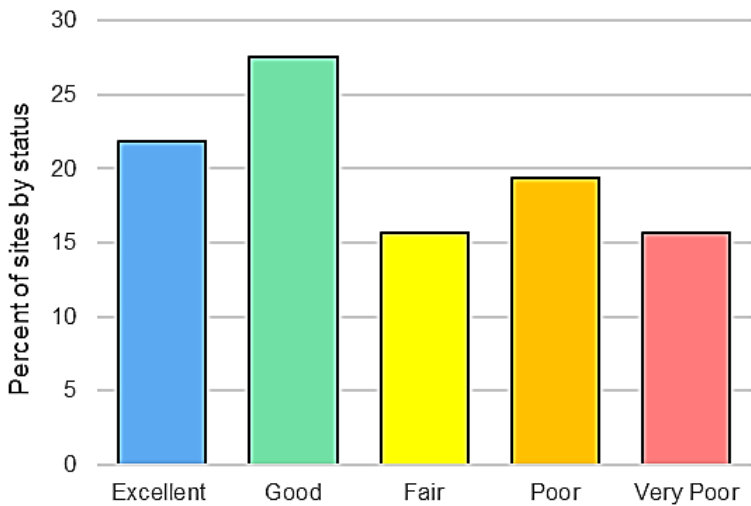
<http://www.oregon.gov/deq/wq/Pages/WQI.aspx>.

**The Water Quality Index is not compared to water quality standards.** It does not evaluate if beneficial uses are supported and it does not have regulatory standing, nor does it attempt to identify pollutant sources contributing to water quality impairments. These points are included in the Integrated Report, a biennial assessment of Oregon's surface waters required by the Clean Water Act; the Total Maximum Daily Load reports, which are science-based plans to clean up polluted water so that the waterbody meets state water quality standards; and the Oregon Statewide Water Quality Status and Trends Report, an annual assessment of Oregon's surface water that includes more parameters and is not calculated as an index. While the Integrated Report, TMDL reports and the Status and Trends Report may incorporate the raw data used in the Water Quality Index, the analyses are different and, under certain circumstances, may identify results that appear to be inconsistent with the Water Quality Index. Links to these reports are included at the end of this document.

# 2024 Water Quality Index Status and Trends

## Status

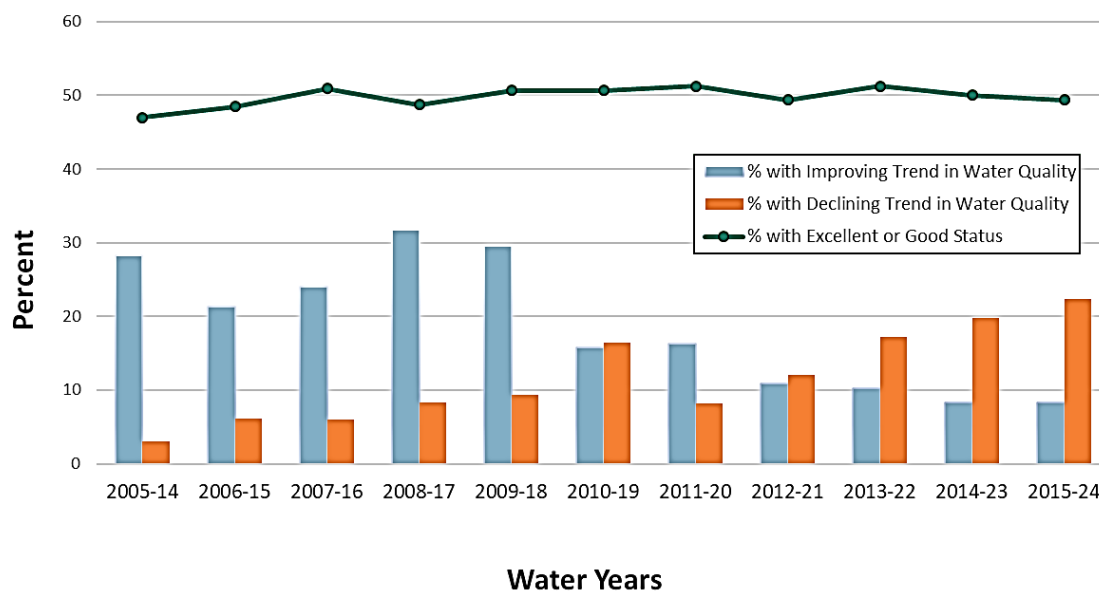
Oregon Water Quality Index results for water years 2015-2024 show 49 percent of sites in excellent or good status, 16 percent in fair and 35 percent in poor or very poor status for the statewide ambient monitoring network of 160 sites (Figure 1). Three sites reported in 2015 and 2016 were part of a special study and were dropped from the ambient network at the completion of the study. These three sites were Willow Creek at Heppner Junction (10708), Fifteenmile Creek at Boyd Market Rd (12550) and John Day River at Clyde Park (31990).



**Figure 1. Percent of sites with scores in each Oregon Water Quality Index status.**

## Trends

A trend analysis was completed for 157 of the 160 sites. Of the locations where a trend analysis could be completed, 8 percent showed an Improving trend in water quality, while 22 percent had a Declining trend in water quality (Figure 2). The remaining 70 percent of sites have no statistically significant trend. Of the sites with improving trends, 85 percent are categorized as Fair to Very Poor status. This is up from 38 percent last year. On the other hand, 54 percent of the sites identified with Declining water quality remain categorized as Excellent or Good status. Those locations should be evaluated further to avoid a continuing decrease in water quality status. The Skipanon River at Highway 101, Crooked Creek at Kiger Road, and South Fork Blitzen River at Blitzen Crossing monitoring locations did not have the required 30 or more scores in this data window to calculate a trend. Specifically, the Skipanon River site is tidally influenced, and high conductivity samples are not included in the analysis because they do not accurately reflect ambient water quality as this study is intended. The Blitzen River and Crooked Creek sites are two of the most remote locations in the ambient network. They were difficult to access during large portions of the year.



**Figure 2. Percentages of sites with Improving or Declining trends and the percentage of sites with Excellent or Good status by OWQI reporting period, over the last ten years. Sites determined to have no trend in a reporting period are not shown.**

# Where are we seeing improving and declining water quality?

## Improving Trends

Sites with significantly improving Water Quality Index trends in 2024 were spread across the state (Table 1). The site showing the greatest improvement, based on the magnitude of the trend, was Bully Creek at Highway 20 in the Malheur Basin. Three sites are showing an Improving trend for the first time, and three sites have shown Improving trends consistently over the last three years. The site at Johnson Creek at Southeast 17<sup>th</sup> Ave. in the Lower Willamette Basin has had Improving trends for four years in a row. The subindices showing consistent improvement during this time include Nitrogen, Phosphorous, bacteria (*E. Coli*) and total solids. The Johnson Creek Watershed Council, Metro, East Multnomah Soil and Water Conservation District, as well as the cities of Gresham, Milwaukie and Portland, have spent several years focusing on stream restoration efforts within the Johnson Creek Watershed. It is possible stream enhancement efforts have contributed to the improving trends at this location over the last four years. However, even with Improving subindex scores, this site maintains a status of Very Poor.

Out of thirteen sites with Improving trends during this reporting period, only two, or 15 percent, were at sites in with a Good or Excellent status. In addition, the average Improving trend magnitude was higher at sites in Fair to Very Poor status than at sites in Good or Excellent status, indicating the largest gains in water quality occurred at sites most in need of improvement (Excellent or Good, n = 2,  $\bar{x}$  = 2.0, Fair to Very Poor n = 11,  $\bar{x}$  = 6.7).

**Table 1. Sites monitored by DEQ showing significant Improving trends in water quality for water years 2015-2024. Sites are listed by basin. Magnitude indicates the rate of change (i.e., higher numbers equal more rapid change). For the ten-year trend, blue or red squares indicate Improving or Declining trends. For sub-index status, blue indicates Excellent, green indicates Good, yellow indicates Fair, orange indicates Poor, and red indicates Very Poor status. Sub-index codes: T = Temperature, D = Dissolved Oxygen, B = BOD, TS = Total Solids, N = Nitrogen, P = Phosphorous and E = *E. coli*.**

| Station                   | Location Description                     | Land Use    | OWQI Score | OWQI Status | OWQI Trend and Magnitude | OWQI Trend for Past 10 Reporting Years | Sub-Index Status and Trend                                                                                                                      |                                                                                                                                                 |   |   |    |   |   |   |   |   |
|---------------------------|------------------------------------------|-------------|------------|-------------|--------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---|---|----|---|---|---|---|---|
|                           |                                          |             |            |             |                          |                                        | T                                                                                                                                               | pH                                                                                                                                              | D | B | TS | N | P | E |   |   |
| DESCHUTES BASIN           |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 10690                     | Metolius R at Bridge 99 (Camp Sherman)   | Forest      | 92         | Excellent   | ↑                        | 1.8                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ | ↑ | ↑  | ↓ |   | ↓ |   |   |
| 36776                     | Trout Creek ds of Mud Springs Creek      | Agriculture | 49         | Very Poor   | ↑                        | 6.2                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ |   | ↓  |   | ↑ |   | ↑ | ↑ |
| KLAMATH BASIN             |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 10759                     | Lost R at HWY 39 (us Merrill)            | Agriculture | 38         | Very Poor   | ↑                        | 15.1                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ | ↑ |    |   | ↑ | ↑ | ↑ | ↑ |
| 10764                     | Klamath R ds Big Bend Powerhouse         | Forest      | 65         | Poor        | ↑                        | 8.6                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ |   |    |   | ↑ |   | ↑ |   |
| MALHEUR BASIN             |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 10728                     | Willow Creek at RR Xing east of Vale     | Agriculture | 25         | Very Poor   | ↑                        | 0.1                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ | ↑ |    |   | ↑ |   |   |   |
| 11043                     | Bully Creek at HWY 20 (Vale)             | Agriculture | 34         | Very Poor   | ↑                        | 19.5                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |   |   |    | ↓ | ↑ | ↑ | ↑ |   |
| SOUTH COAST BASIN         |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 11486                     | S Fk Coquille R at Broadbent             | Forest      | 84         | Fair        | ↑                        | 6.1                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |   |   |    |   | ↑ |   |   |   |
| NORTH COAST BASIN         |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 11434                     | Clatskanie R at HWY 30 (Clatskanie)      | Forest      | 85         | Good        | ↑                        | 2.1                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |   |   |    | ↑ | ↑ | ↓ |   |   |
| WILLAMETTE BASIN - LOWER  |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 10458                     | Tualatin R at Elsner Rd                  | Agriculture | 46         | Very Poor   | ↑                        | 8.9                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |   |   | ↑  | ↑ | ↑ | ↑ |   |   |
| 10459                     | Tualatin R at HWY 210 (Scholls)          | Agriculture | 37         | Very Poor   | ↑                        | 1.0                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |   |   | ↑  |   | ↑ |   |   |   |
| 10469                     | Fanno Creek at Bonita Rd (Tigard)        | Urban       | 51         | Very Poor   | ↑                        | 3.1                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |   |   | ↑  |   |   | ↑ | ↑ |   |
| 11321                     | Johnson Creek at SE 17th Ave. (Portland) | Urban       | 44         | Very Poor   | ↑                        | 2.0                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ | ↑ | ↓  |   |   |   | ↑ | ↑ |
| WILLAMETTE BASIN - MIDDLE |                                          |             |            |             |                          |                                        |                                                                                                                                                 |                                                                                                                                                 |   |   |    |   |   |   |   |   |
| 10929                     | McKenzie R at Hendricks Bridge           | Forest      | 79         | Poor        | ↑                        | 3.0                                    | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑ |   |    | ↑ | ↑ |   | ↑ |   |

## Declining Trends

Statewide, thirteen sites showed a Declining trend for the first time (Table 2). Eighteen sites are showing a Declining trend for the second year in a row. Twenty-two are now showing Declining trends despite showing Improving trends in the last five to ten years. The site that showed the greatest drop in water quality, based on the magnitude of the trend, was Bear Creek at Kirtland Road, in the Rogue Basin (Table 2). A site in the Upper Willamette Basin, Willamette Road at Highway 99E maintains an excellent status, even as it has shown a Declining trend for the last five years. The average Declining trend magnitude was higher at sites in Fair to Very Poor status than at sites in Good or Excellent status. This indicates the largest drops in water quality occurred at sites most in need of improvement (Excellent or Good,  $n = 19$ ,  $\bar{x} = -2.4$ , Fair to Very Poor  $n = 16$ ,  $\bar{x} = -4.5$ ).

**Table 2. Sites monitored by DEQ showing significant Declining trends in water quality for water years 2015-2024. Sites are listed by basin. Magnitude indicates the rate of change (i.e., higher numbers equal more rapid change). For the five-year trend, blue or red squares indicate Improving or Declining trends. For sub-index status, blue indicates Excellent, green indicates Good, yellow indicates Fair, orange indicates Poor, and red indicates Very Poor status. Sub-index codes: T = Temperature, D = Dissolved Oxygen, B = BOD, TS = Total Solids, N = Nitrogen, P = Phosphorous and E = *E. coli***

| Station                      | Location Description                         | Land Use    | OWQI Score | OWQI Status | OWQI Trend and Magnitude | OWQI Trend for Past 10 Reporting Years | Sub-Index Status and Trend                                                                                                |    |   |   |    |   |   |   |   |
|------------------------------|----------------------------------------------|-------------|------------|-------------|--------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----|---|---|----|---|---|---|---|
|                              |                                              |             |            |             |                          |                                        | T                                                                                                                         | pH | D | B | TS | N | P | E |   |
| DESCHUTES BASIN              |                                              |             |            |             |                          |                                        |                                                                                                                           |    |   |   |    |   |   |   |   |
| 10506                        | Deschutes R at Warm Springs                  | Range       | 86         | Good        | ↓                        | -3.6                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑  | ↓ | ↓ |    |   | ↑ |   |   |
| 10511                        | Deschutes R at Mirror Pond (Bend)            | Mixed       | 92         | Excellent   | ↓                        | -1.9                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑  | ↑ | ↑ | ↓  |   | ↑ | ↑ |   |
| 10517                        | Crooked R at Lone Pine Rd                    | Range       | 77         | Poor        | ↓                        | -4.5                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    |   |   |    |   | ↓ |   |   |
| 10688                        | Deschutes R at Pringle Falls                 | Forest      | 89         | Good        | ↓                        | -3.4                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑  | ↑ | ↓ |    |   | ↑ |   | ↑ |
| 10696                        | Little Deschutes R at HWY 42                 | Forest      | 91         | Excellent   | ↓                        | -1.7                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> | ↑  | ↑ |   |    |   |   |   |   |
| GOOSE AND SUMMER LAKES BASIN |                                              |             |            |             |                          |                                        |                                                                                                                           |    |   |   |    |   |   |   |   |
| 10741                        | Honey Creek at Plush, OR                     | Range       | 61         | Poor        | ↓                        | -2.6                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    | ↑ |   |    |   | ↑ | ↓ |   |
| 12267                        | Deep Creek west of Adel, OR                  | Range       | 85         | Good        | ↓                        | -1.7                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    |   |   | ↓  |   |   | ↓ |   |
| 33930                        | Chewaucan River 2.4 miles u/s of Paisley, OR | Range       | 83         | Fair        | ↓                        | -4.7                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    | ↑ |   | ↓  | ↑ | ↑ | ↓ |   |
| GRANDE RONDE BASIN           |                                              |             |            |             |                          |                                        |                                                                                                                           |    |   |   |    |   |   |   |   |
| 10719                        | Grande Ronde R at HWY 82 (Elgin)             | Mixed       | 82         | Fair        | ↓                        | -3.4                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    |   |   | ↓  |   |   |   |   |
| 11457                        | Minam R at Minam                             | Forest      | 90         | Excellent   | ↓                        | -2.1                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    |   | ↑ | ↓  |   |   | ↑ |   |
| KLAMATH BASIN                |                                              |             |            |             |                          |                                        |                                                                                                                           |    |   |   |    |   |   |   |   |
| 10763                        | Klamath Strait at USBR Pump Station F        | Agriculture | 23         | Very Poor   | ↓                        | -1.3                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    | ↓ |   | ↓  |   | ↑ |   | ↑ |
| MALHEUR BASIN                |                                              |             |            |             |                          |                                        |                                                                                                                           |    |   |   |    |   |   |   |   |
| 11047                        | Malheur River at HWY 20 (Drewsev)            | Agriculture | 35         | Very Poor   | ↓                        | -3.0                                   | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |    | ↑ |   | ↓  |   |   | ↓ | ↓ |

**Table 2, Continued. Sites monitored by DEQ showing significant Declining trends in water quality for water years 2015-2024. Sites are listed by basin. Magnitude indicates the rate of change (i.e., higher numbers equal more rapid change). For the five-year trend, blue or red squares indicate Improving or Declining trends. For sub-index status, blue indicates Excellent, Green indicates Good, yellow indicates Fair, orange indicates Poor, and red indicates Very Poor status. Sub-index codes: T = Temperature, D = Dissolved Oxygen, B = BOD, TS = Total Solids, N = Nitrogen, P = Phosphorous and E = *E. coli*.**

[illegible]

# Which water quality sub-indices are improving or declining?

Trend analysis of water year 2024 data indicates that pH had the highest percentage of Improving sub-index scores at 35 percent (Figure 3). This year continues last year’s trend of Declining subindex scores. It is the second year in a row with over 20 percent of ambient monitoring sites having Declining subindex scores across all parameters. Prior to 2023, the last year the percentage of Declining subindex scores was above 20 percent was 2011. The analysis performed on 2024 data showed a one percent increase in Improving trends from the 2023 OWQI reporting period. This was the same percent increase documented in the 2023 OWQI (one percent increase in improving trends between 2022 and 2023).

Most of the improvement this year occurred in the Forest Land Use type, which had 26 more improving sub-index trends than last reporting period. The Forest Land Use type also saw eight more Declining sub-index trends than during the 2023 OWQI reporting period.

BOD had the highest percentage of Declining sub-index scores followed by dissolved oxygen, nitrogen and phosphorous. Although there were 49 Declining sub-index trends for BOD this year, there were six fewer Declining BOD trends than in the 2023 OWQI. Most of the stations with Declining BOD trends in 2024 were in the Forest Land Use type, whereas most Declining BOD trends in the 2023 OWQI were in the Agriculture land use type. There were 35 Declining DO sub-index trends in the 2024 OWQI, which is 17 more than in the 2023 OWQI reporting period.

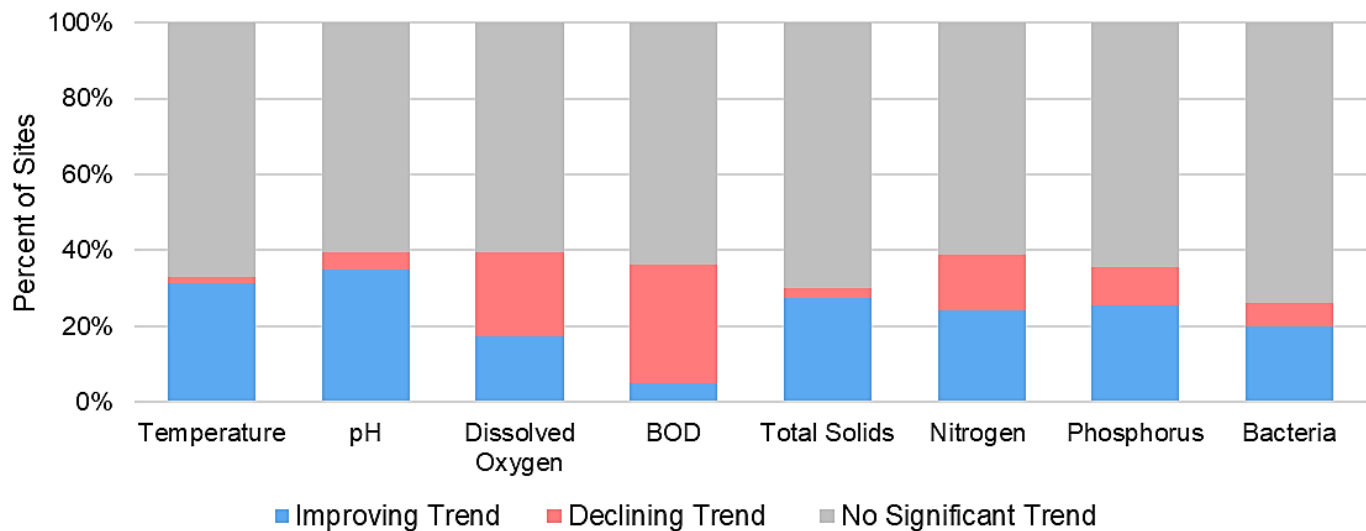
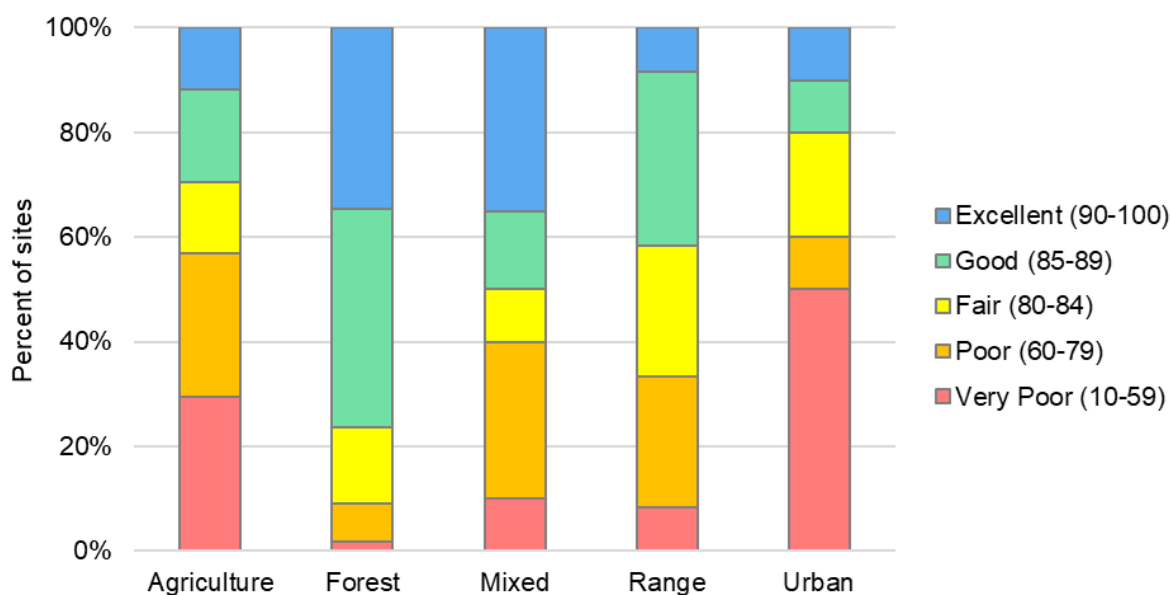


Figure 3. Sub-index trends for the 2024 water year (Oct. 1, 2015 to Sept. 30, 2024).

# How does land use influence status?

Land use type is determined based on the dominant land use in a five-mile buffer around the stream channel above the monitoring site. The Mixed Land Use type was assigned when none of the land use designations made up more than 50 percent of the five-mile buffer. The “Forest Land Use type” for water quality monitoring purposes encompasses all lands designated under a general umbrella, which could possibly be downstream of private industrial forest lands (some harvested recently, others not), state forests (harvestable and/or non-harvestable), state parks, protected areas and federal forest lands. **The Water Quality Index is not intended to assess water quality in actively managed private timber lands.**

Although the Forest Land Use site had the largest number of Declining trends, it continued to have the highest percentage of Excellent and Good status sites. (Figure 4). There were few updates in the changes in status across land use type between the 2023 and 2024 reporting period. The 2024 reporting period is the third consecutive year with at least 40 percent of sites in the range land use type had a status of excellent or good. Also, this is the sixth consecutive year stations with the Forest Land Use type have had a significant decline in trends, with 2021 showing the greatest change from the prior reporting year.



**Figure 4. Influence of land use on water quality on OWQI scores.**

Several of the stations showing Declining trends over the last few years are located downstream of recent major wildfires (Figure 5). Wildfires are a well-documented cause for declines in water quality, and it can take a decade or more for the area impacted by a major wildfire to recover. When plant matter is destroyed by wildfires, heavy metals and nutrients that have been sequestered by the plants or bound in the soil are released back into the environment and are easily washed into streams. Landslides resulting from the loss of established vegetation can increase turbidity, total solids and nutrient loads downstream of the areas impacted by wildfires. A decrease in canopy cover can increase the amount of sunlight that reaches the stream, causing higher temperatures and algal blooms that can decrease DO. These changes in water quality are consistent with OWQI data over the last several years. Different management strategies for post-fire recovery areas can

influence the timing and magnitude of water quality impacts. However, even in areas with light post-fire activity, it can take several years for water quality to recover to pre-fire levels.

Other possible contributing factors to continued Declining trends include increased nutrient inputs and subsequent algal growth, increased ambient air temperatures and reduced flow. Central and Southwest Oregon have been experiencing drought conditions over the last several years, which reduces flow and can increase stream temperatures. This could account for the decline in BOD and overall OWQI scores in the Deschutes Basin. Additionally, water has been drawn down to historically low elevations at multiple reservoirs located on tributaries connected to the Willamette River over the last two years. High levels of turbidity and elevated temperatures were noted downstream during and after the drawdown period. The increase in temperatures and turbidity may potentially affect the BOD in the Upper Willamette Basin. Large winter storms and major flooding in the area near the Coast Fork in the Upper Willamette Basin in the last few years have been causing surges in runoff, sediment and erosion, which are likely impacting water quality in the area.

# Want additional information on water quality in Oregon?

As previously mentioned, **the Oregon Water Quality Index does not have regulatory standing, nor does it attempt to identify pollutant sources contributing to water quality impairments.** For additional information, visit:

- [Water Quality Status and Trends Analysis](#)
- [Oregon DEQ EPA-Approved Integrated Report](#)

For more information and related resources, visit the [Water Quality Index web page](#) for links to the following:

- Interactive map showing 2015-2024 status and trends for all monitoring sites
- Downloadable data summaries for all sites organized by basin
- Document on Reporting Methods and Uses of the Oregon Water Quality Index
- Downloadable Excel file of 2024 raw data and historical status and trends
- Documentation of the development and calculation methods of the Index

For additional information on historical drought conditions in Oregon, visit:

[Historical Data and Conditions | Drought.gov](#)