2026 Ambient Air Monitoring Network Plan

By

Jill Schulte

For the

Air Quality Program

Washington State Department of Ecology
Olympia, Washington

June 2026, Publication 26-02-010

Publication Information

This document is available on the Department of Ecology's website at:
~~https://apps.ecology.wa.gov/publications/summarypages/2602010~~ (not a live link)

Contact Information

Air Quality Program

P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-6800
Website[1]: Washington State Department of Ecology

ADA Accessibility

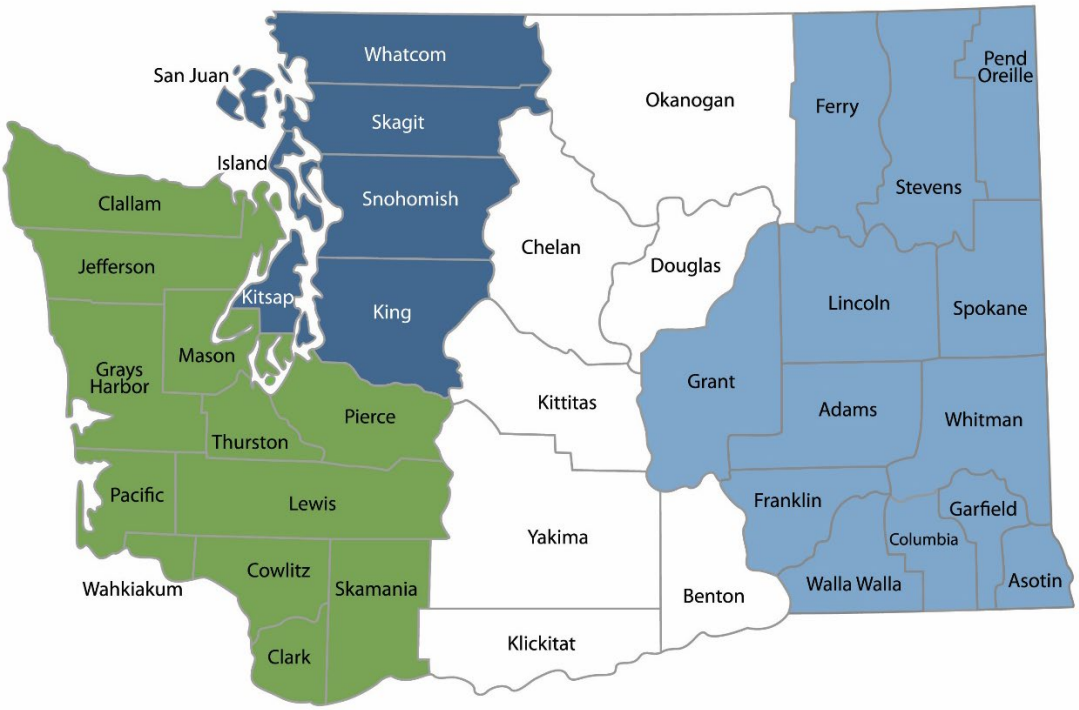
The Department of Ecology is committed to providing people with disabilities access to our information and services by meeting or exceeding the requirements of state and federal laws.

To request an ADA accommodation, email airmonitoring@ecy.wa.gov, call (360)-407-6800, or call Ecology through the Washington Telecommunication Relay for services including text telephone (TTY) at 711 or through your preferred relay service provider. Visit ecology.wa.gov/ADA for more accessibility information.

[1] www.ecology.wa.gov/contact

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400

Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	P.O. Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	P.O. Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 West Alder Street Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 North Monroe Spokane, WA 99205	509-329-3400
Headquarters	Statewide	P.O. Box 46700 Olympia, WA 98504	360-407-6000

2026 Ambient Air Monitoring Network Plan

Air Quality Program
Washington State Department of Ecology
Olympia, WA

June 2026 | Publication 26-02-010

Table of Contents

List of Figures and Tables ..... **vii**

Figures vii

Tables vii

Acronyms ..... **ix**

Executive Summary **1**

Purpose 1

Network modifications 1

Introduction **5**

Background Information **6**

Monitoring Objectives 6

Network Evaluation 9

Monitoring Partners 10

Washington Core-Based Statistical Areas 10

Maintenance Areas 12

Monitoring Network Design **13**

Carbon monoxide (CO, 42101) 16

Nitrogen dioxide (NO_2, 42602/42600) 18

Ozone (O_3, 44201) 20

Sulfur dioxide (SO_2, 42401) 22

Particulate matter ≤2.5 µm ($PM_{2.5}$, 88101/88502) 24

Particulate matter ≤10 µm (PM_{10}, 81102) 41

Meteorological monitoring (61101/61102/61103/61104/62101) 43

Lead (Pb) 45

Chemical Speciation Network (CSN) 45

National Core (NCore) 52

National Air Toxics Trends Station (NATTS) 53

Photochemical Assessment Monitoring Station (PAMS) 53

References **55**

Appendices 56
Appendix A. Criteria Pollutant Design Values 56
Appendix B. Monitoring Waivers 61
Appendix C. Special Purpose Monitors (SPMs) Statements of Purpose 67
Appendix D. Detailed Site and Monitor Information 69
Appendix E. Interstate Memorandum of Understanding 73
Appendix F. Public Comment Period 77

List of Figures and Tables

Figures

Figure 1. Map of SensWA locations in Washington as of May 2026 9
Figure 2. Washington's Core-Based Statistical Areas (CBSAs), U.S. Census Bureau 2020 11
Figure 3. Map of all Washington Network monitoring sites 13
Figure 4. Map of Washington Network CO monitoring sites 17
Figure 5. Map of Washington Network NO_x and Trace NO_y monitoring sites 19
Figure 6. Map of Washington Network ozone monitoring sites 21
Figure 7. Map of Washington Network SO_2 monitoring sites 23
Figure 8. Map of Washington Network $PM_{2.5}$ monitoring sites 27
Figure 9. Annual $PM_{2.5}$ design values, Ellensburg 2019-2025 30
Figure 10. 24-hour $PM_{2.5}$ design values, Ellensburg 2019-2025 31
Figure 11. Map of Washington Network non-regulatory $PM_{2.5}$ monitoring sites 36
Figure 12. Estimated annual $PM_{2.5}$ design values, Moses Lake, Ritzville, and Rosalia, 2016-2025 38
Figure 13. Estimated 24-hour $PM_{2.5}$ design values, Moses Lake, Ritzville, and Rosalia, 2016-2025 39
Figure 14. Map of Washington Network PM_{10} monitoring sites 42
Figure 15. Map of Washington Network meteorological monitoring sites 44
Figure 16. Map of Washington Chemical Speciation Network monitoring sites 46
Figure 17. Aerial photo of proposed Tacoma-S 35th and Windom St site 48
Figure 18. Map of proposed Tacoma-S 35th and Windom St site 49
Figure 19. Photo from proposed Tacoma-S 35th and Windom St site facing north 50
Figure 20. Photo from proposed Tacoma-S 35th and Windom St site facing east 50
Figure 21. Photo from proposed Tacoma-S 35th and Windom St site facing south 51
Figure 22. Photo from proposed Tacoma-S 35th and Windom St site facing west 51
Figure 23. Wind rose showing year-round wind patterns at Tacoma-S 36th St (530530024), 2021-2025 52

Tables

Table 1. Summary of applicable spatial scales for criteria pollutants and monitoring objectives . 7
Table 2. Washington's CBSA populations over 50,000 or with SLAMS monitors (U.S. Census Bureau, 2026) 11
Table 3. Washington maintenance areas within their 20-year maintenance planning period and methods of demonstrating NAAQS attainment 12
Table 4. Summary of parameters monitored at Washington Network monitoring sites 14
Table 5. Washington Network CO monitoring sites 16
Table 6. Washington Network NO_2 and Trace NO_y monitoring sites 18
Table 7. Washington Network ozone monitoring sites 20
Table 8. EPA minimum monitoring requirements for ozone 22

Table 9. Washington Network SO_2 monitoring sites 23
Table 10. Washington Network FEM and FRM $PM_{2.5}$ monitoring sites 24
Table 11. EPA minimum monitoring requirements for FRM/FEM $PM_{2.5}$ 27
Table 12. $PM_{2.5}$ collocation requirements 29
Table 13. Ellensburg $PM_{2.5}$ design values, 2019-2025. 31
Table 14. Calculations for probability of a NAAQS violation at Ellensburg 32
Table 15. Washington Network non-regulatory $PM_{2.5}$ monitoring sites 33
Table 16. Moses Lake, Ritzville, and Rosalia estimated $PM_{2.5}$ design values, 2016-2025. 39
Table 17. Calculations for probability of a NAAQS violation at Moses Lake-Balsam St, Ritzville-Alder St, and Rosalia-Josephine St 40
Table 18. Washington Network PM_{10} monitoring sites 42
Table 19. EPA minimum monitoring requirements for PM_{10} 43
Table 20. Washington Network meteorological monitoring sites 43
Table 21. Washington Chemical Speciation Network monitoring sites 45
Table 22. Chemical Speciation Network monitoring parameters 46
Table 23. NCore parameters monitored at Bahokas Peak and Seattle-Beacon Hill 52
Table 24. Carbon monoxide (CO) 2025 design values 56
Table 25. Nitrogen dioxide (NO_2) 2025 design values (ppb) 56
Table 26. Ozone (O_3) 2025 design values (ppm) 56
Table 27. Sulfur dioxide (SO_2) 2025 design values (ppb) 57
Table 28. $PM_{2.5}$ 2025 24-hour design values and estimated design values ($\mu g/m^3$) 57
Table 29. $PM_{2.5}$ 2025 annual design values and estimated design values ($\mu g/m^3$) 58
Table 30. PM_{10} 2025 design values 60
Table 31. Statements of purpose for Special Purpose Monitors (SPMs) 67
Table 32. Location information for Washington Network monitoring sites 69
Table 33. Supplemental Site and monitor information for recently-added sites 73

Acronyms

AQS	EPA's Air Quality System database
BAM	Beta Attenuation Monitor
BCAA	Benton Clean Air Agency
CBSA	Core-Based Statistical Area
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSA	Combined Statistical Area
CSN	Chemical Speciation Network
DV	Design Value
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
FEM	Federal Equivalent Method
FRM	Federal Reference Method
IMPROVE	Interagency Monitoring of Protected Visual Environments
MSA/ µSA	Metropolitan Statistical Area/Micropolitan Statistical Area
NAAQS	National Ambient Air Quality Standard
NATTS	National Air Toxics Trends Station
NCore	National Core
NO	Nitrogen Oxide
NO_2	Nitrogen Dioxide
NO_X	Oxides of Nitrogen
NO_y	Total Reactive Oxides of Nitrogen
NWCAA	Northwest Clean Air Agency
O_3	Ozone
ORCAA	Olympic Region Clean Air Agency
Pb	Lead
$PM_{2.5}$	Particulate matter ≤ 2.5 micrometers in diameter
PM_{10}	Particulate matter ≤ 10 micrometer in diameter
$PM_{10-2.5}$	Particulate matter ≤10 microns and > 2.5 micrometers in diameter
ppb	parts per billion
ppm	parts per million
PAMS	Photochemical Assessment Monitoring Station
PQAO	Primary Quality Assurance Organization
PSCAA	Puget Sound Clean Air Agency
PSD	Prevention of Significant Deterioration
QA	Quality Assurance
QC	Quality Control
SLAMS	State and Local Air Monitoring Station
SO_2	Sulfur Dioxide
SPM	Special Purpose Monitor
SRCAA	Spokane Region Clean Air Agency
SWCAA	Southwest Clean Air Agency
STN	Speciation Trends Network
$\mu g/m^3$	micrograms per cubic meter
VOC	Volatile Organic Compound
YRCAA	Yakima Region Clean Air Agency

Executive Summary

Purpose

The Washington State Department of Ecology (Ecology) reviews its ambient air monitoring network each year to ensure that it collects adequate, representative, and useful air quality data on which to base policy decisions. This report summarizes the results of the 2026 review and fulfills the requirements of 40 C.F.R. Part 58.10. The annual review process includes:

- Documenting Ecology's ambient air quality monitoring objectives, network design, and compliance with federal monitoring requirements;
- Identifying modifications to Ecology's ambient air monitoring network since the previous annual network plan; and
- Identifying proposed modifications to the network in the upcoming 18 months.

Network modifications

A summary of recent and planned network modifications is provided below. Additional details on network modifications are provided in the relevant parameter-specific sections of this document.

Recent modifications

Carbon monoxide (CO, 42101)

- The Olympic Region Clean Air Agency (ORCAA) temporarily relocated National Core (NCore) monitoring for CO from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA's then-Office of Air Quality Planning and Standards (OAQPS) in correspondence to Ecology on August 21, 2025.

Nitrogen oxides (NO_2/NO_y, 42602/42600)

- ORCAA temporarily relocated NCore monitoring for NO_y from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Ozone (44201)

- ORCAA temporarily relocated NCore monitoring for ozone from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Sulfur dioxide (SO_2, 42401)

- ORCAA temporarily relocated NCore monitoring for SO_2 from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.
- The Northwest Clean Air Agency's (NWCAA's) SLAMS for SO_2 at Anacortes-O Ave (530570011) was retroactively discontinued as of September 30, 2024. This network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan.

Regulatory $PM_{2.5}$ (88101)

- The Puget Sound Clean Air Agency (PSCAA) established a new SLAMS for $PM_{2.5}$ at the Kent-S 236th St site (530330095) on November 12, 2025. This network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan.
- NWCAA added a Special Purpose Monitor (SPM) for $PM_{2.5}$ at the Oak Harbor-Goldie Rd monitoring site (530290003) in May 2026.
- PSCAA discontinued their $PM_{2.5}$ SLAMS monitor at the former Tacoma-Alexander Ave monitoring site (530530031) on September 4, 2025, due to termination of their lease. PSCAA is currently working to establish a replacement SLAMS monitor for $PM_{2.5}$ in the same area. This temporary network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan.

Non-regulatory $PM_{2.5}$ (88502)

- The Spokane Regional Clean Air Agency (SRCAA) added a new SPM for non-regulatory $PM_{2.5}$ at the Liberty Lake-E Country Vista Dr monitoring site (530630055) on September 26, 2025.
- Ecology added a new SPM for non-regulatory $PM_{2.5}$ at Mabton-B St (530770018) on October 13, 2025.
- Ecology added a new SPM for non-regulatory $PM_{2.5}$ at Granger-E Mentzer Ave (530770019) on October 13, 2025.
- ORCAA temporarily relocated NCore monitoring for non-regulatory $PM_{2.5}$ from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.
- Ecology discontinued the SPM for non-regulatory $PM_{2.5}$ at Leavenworth-Evans St (530070010) on July 26, 2025. Ecology added a SensWA to provide AQI information at the former site.

- Ecology and the Tulalip Tribes retroactively discontinued the Tribal non-regulatory $PM_{2.5}$ monitor at Tulalip-Totem Beach Rd (530610021) as of May 26, 2025. Ecology and the Tulalip Tribes added a SensWA to provide AQI information at a nearby location.
- Ecology discontinued the LaCrosse-Hill St (530750005) SLAMS for non-regulatory $PM_{2.5}$ on June 2, 2026. This network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan. Ecology added a SensWA to provide AQI information at the former site.

Meteorological (61101/61102/61103/61104/62101)

- ORCAA temporarily relocated NCore meteorological monitoring from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.
- Ecology temporarily suspended meteorological monitoring at the Kennewick-Metaline monitoring site (530050002) in August 2025 due to a planned construction project on the roof of the school where the site is located. The construction project required the meteorological tower to be temporarily removed from the roof. Ecology expects to reestablish meteorological monitoring in 2026 or 2027.

Planned modifications

Nitrogen dioxide (NO_2, 42602)

- Ecology plans to establish a new SPM for NO_2 at Tacoma-S 35th and Windom St (530530035) in summer 2026.

Regulatory $PM_{2.5}$ (88101)

- Ecology proposes to replace the SLAMS for regulatory $PM_{2.5}$ at Ellensburg-Ruby St (530370002) with a SPM for non-regulatory $PM_{2.5}$ on January 1, 2027. The analysis supporting this proposed network modification was described in Ecology's 2025 Ambient Air Monitoring Network Assessment. Ecology seeks EPA Regional Administrator approval for this SLAMS network modification.
- NWCAA plans to establish a new SPM for $PM_{2.5}$ at Friday Harbor-2nd St N (530550001) in August 2026. This site will be at the same location where Ecology operated a temporary SPM for non-regulatory $PM_{2.5}$ in 2019.
- Ecology plans to establish a new SPM for $PM_{2.5}$ at Tacoma-S 35th and Windom St (530530035) in summer 2026.

Non-regulatory $PM_{2.5}$ (88502)

- Ecology proposes to replace the SLAMS for regulatory $PM_{2.5}$ at Ellensburg-Ruby St (530370002) with a SPM for non-regulatory $PM_{2.5}$ on January 1, 2027. The analysis supporting this proposed network modification was described in Ecology's 2025

Ambient Air Monitoring Network Assessment. Ecology seeks EPA Regional Administrator approval for this SLAMS network modification.

- Ecology proposes to discontinue the Ritzville-Alder St (530010003), Rosalia-Josephine St (530750006), and Moses Lake-Balsam St (530251002) SLAMS for non-regulatory $PM_{2.5}$. Ecology seeks EPA Regional Administrator approval for these SLAMS network modifications. Ecology plans to add SensWA to provide AQI information at the former sites.
- Ecology proposed to discontinue the Pomeroy-Pataha St non-regulatory $PM_{2.5}$ SLAMS nephelometer in 2025. This network modification was approved in EPA Region 10's response to Ecology's 2025 Ambient Air Monitoring Network Plan. Ecology has delayed the discontinuation but expects to make this modification in 2026 or 2027. Ecology plans to add a SensWA to provide AQI information at the former site.

Chemical Speciation Network (CSN)

- Ecology proposes to relocate the Supplemental Chemical Speciation Network (CSN) sampling currently at Tacoma-L St (530530029) to the new Tacoma-S 35th and Windom St (530530035) site in summer 2026.

Introduction

This document summarizes Ecology's annual review of the Washington Ambient Air Monitoring Network (Washington Network) in accordance with 40 C.F.R. Part 58.10.

EPA's ambient air quality surveillance regulations in 40 C.F.R. Part 58 require states to establish air quality surveillance systems in their State Implementation Plans (SIPs). An air quality surveillance system consists of a network of State and Local Air Monitoring Stations (SLAMS). These stations measure ambient concentrations of those air pollutants, for which 40 C.F.R. Part 50 sets standards. SLAMS must meet the requirements of 40 C.F.R. Part 58 contained in:

- Appendix A (Quality Assurance Requirements)
- Appendix C (Ambient Air Quality Monitoring Methodology)
- Appendix D (Network Design Criteria)
- Appendix E (Probe and Path Siting Criteria)

States determine if they conform to Appendices A and C in part through periodic system and performance audits. States conform to Appendices D and E by conducting an annual network review of their air quality surveillance systems. This review is documented in an annual network plan that meets the following requirements:

- The plan describes any network modifications planned in the upcoming 18 months. Network modifications are subject to approval of the EPA Regional Administrator.
- For each existing and proposed monitoring site, the plan includes the following information:
    - The AQS site number
    - The represented MSA or other geographic area
    - The special scale, sampling method, and operating schedule for each monitor
- The plan must be made available for public inspection and comment for at least 30 days prior to submission to EPA. The final plan includes and addresses comments received through the public notification process.

Background Information

Monitoring Objectives

The Washington Network was designed to meet the three monitoring objectives defined in 40 C.F.R. Part 58 Appendix D:

1. **Provide air pollution data to the public in a timely manner.** Ecology provides timely air quality data to the public in a variety of ways:
    - Near-real-time data are available on Ecology's monitoring website.
    - Near-real-time data are submitted to EPA's AirNow system for public display and reporting.
    - Ecology conducts public outreach and issues alerts and bulletins when air quality is compromised.
2. **Support compliance with National Ambient Air Quality Standards (NAAQS) and development of pollution control strategies.** Ambient air quality data are used to:
    - Determine compliance with the NAAQS
    - Determine the location of maximum pollutant concentrations
    - Track the progress of SIPs
    - Determine the effectiveness of air pollution control programs
    - Develop responsible and cost-effective emission control strategies
    - Assist with permitting work
3. **Support air pollution research.** Ecology and its partners use ambient air quality data to improve understanding of air pollution and its consequences. Research applications of air quality include:
    - Improving air quality forecasting
    - Evaluating the effects of air pollution on public health
    - Informing dispersion models
    - Identifying air quality trends and emerging pollution issues
    - Analyzing pollution episodes

In order to meet these three objectives, 40 C.F.R. Part 58 Appendix D calls for the design of SLAMS networks to include several different types of monitors. These general types are sites that:

1. Determine the highest pollutant concentrations expected in the area covered by the network.

2. Determine representative pollutant concentrations in areas of high population density.
3. Determine the impact of significant sources or source categories on pollutant concentrations in the ambient air.
4. Determine general background pollutant concentrations.
5. Determine the regional extent of pollutant transport between populated areas.
6. Determine the impacts on visibility or vegetation (welfare impacts) in more rural and remote areas.

Appendix D of 40 C.F.R. Part 58 also provides guidance on spatial scales of representativeness for stations in a SLAMS network. Ideally, the station is located so that its sample represents the air quality across the scale that the station is intended to represent. Appendix D defines the following spatial scales:

1. **Microscale**: Area dimensions between several and 100 meters.
2. **Middle scale**: Areas between 100 and 500 meters, typically several city blocks.
3. **Neighborhood scale**: Areas between 0.5 and 4 kilometers with relatively uniform land use.
4. **Urban scale**: Areas with city-like dimensions between 4 and 50 kilometers. Urban and neighborhood scales can overlap considerably. Heterogeneous urban areas may not have a single representative site.
5. **Regional scale**: Areas from tens to hundreds of kilometers with relatively homogeneous geography and no large sources.
6. **National and global scales**: Scales representing the nation or globe as a whole.

Table 1 summarizes the appropriate spatial scales for each criteria pollutant and applicable site types.

Table 1. Summary of applicable spatial scales for criteria pollutants and monitoring objectives

Scale	SO_2	CO	O_3	NO_2	Pb	PM_{10}	$PM_{2.5}$	Site Types
Micro	✓	✓		✓	✓		✓	Highest concentration; source impact
Middle	✓	✓		✓	✓	✓	✓	Highest concentration; source impact
Neighborhood	✓	✓	✓	✓	✓	✓	✓	Highest concentration; population; source impact; general/background
Urban	✓		✓	✓			✓	Highest concentration; population; general/background; regional transport; welfare-related impacts
Regional	✓		✓				✓	General/background; regional transport; welfare-related impacts

Other ambient monitoring data needs

Nephelometer monitoring

At many non-regulatory $PM_{2.5}$ monitoring sites, Ecology uses nephelometers to estimate $PM_{2.5}$ concentrations and inform the public of air quality conditions. Typically, nephelometer monitoring sites use site-specific $PM_{2.5}$ correlations developed from historical collocated Federal Reference Method (FRM) or Federal Equivalent Method (FEM) monitor data. Lower concentration sites may use generalized regional correlations developed at sites with similar geographic and source characteristics. These sites are operated in accordance with 40 C.F.R. Part 58 Appendix A requirements for quality assurance and quality control, and Appendix E requirements for probe and path siting criteria where possible. At nephelometer sites where $PM_{2.5}$ concentrations are consistently measured at or greater than 80 percent of the NAAQS, Ecology transitions to FEM monitoring.

$PM_{2.5}$ sensors

Ecology supplements the Washington Network of fixed monitoring sites with a network of custom $PM_{2.5}$ sensors called the SensWA, designed and built by Ecology. SensWA sensors receive pre-deployment laboratory evaluation, preventive maintenance and component replacements, real-time data screening, and bias correction based on local collocation results. SensWA contain two side-by-side $PM_{2.5}$ sensing elements to support data validation and rapid identification of faulty sensors. Many SensWA are operated with solar power to allow for monitoring in previously inaccessible locations. To the extent possible, SensWA are sited to meet 40 C.F.R. Part 58 Appendix E siting criteria for $PM_{2.5}$ monitoring.

Ecology considers the SensWA to be a mid-tier instrument whose performance and data quality are superior to those of typical consumer-grade sensors but not as high as established $PM_{2.5}$ instruments such as beta attenuation monitors. Ecology uses the SensWA to monitor smoke from wildland fires, inform smoke management decisions, evaluate ongoing monitoring needs in previously unmonitored communities, and respond to emergent events. Ecology has also added SensWA to all ozone and PM_{10} monitoring sites in the Washington network that previously lacked a $PM_{2.5}$ measurement. These sensors serve as an important public information tool during summer wildfire smoke events and have eliminated much confusion around conflicting AQI information from monitoring sites for other pollutants during periods of elevated $PM_{2.5}$.

The SensWA are used primarily as a public information tool. Their data are submitted to AirNow for display on the Fire & Smoke Map, but not to AQS. A map of SensWA locations as of May 2026 is shown in Figure 1. As new SensWA are deployed frequently and existing sites can be relocated, this map is subject to change. Since data from the SensWA are not submitted to AQS, they are not included in the Ambient Air Monitoring Network Plan aside from this summary.

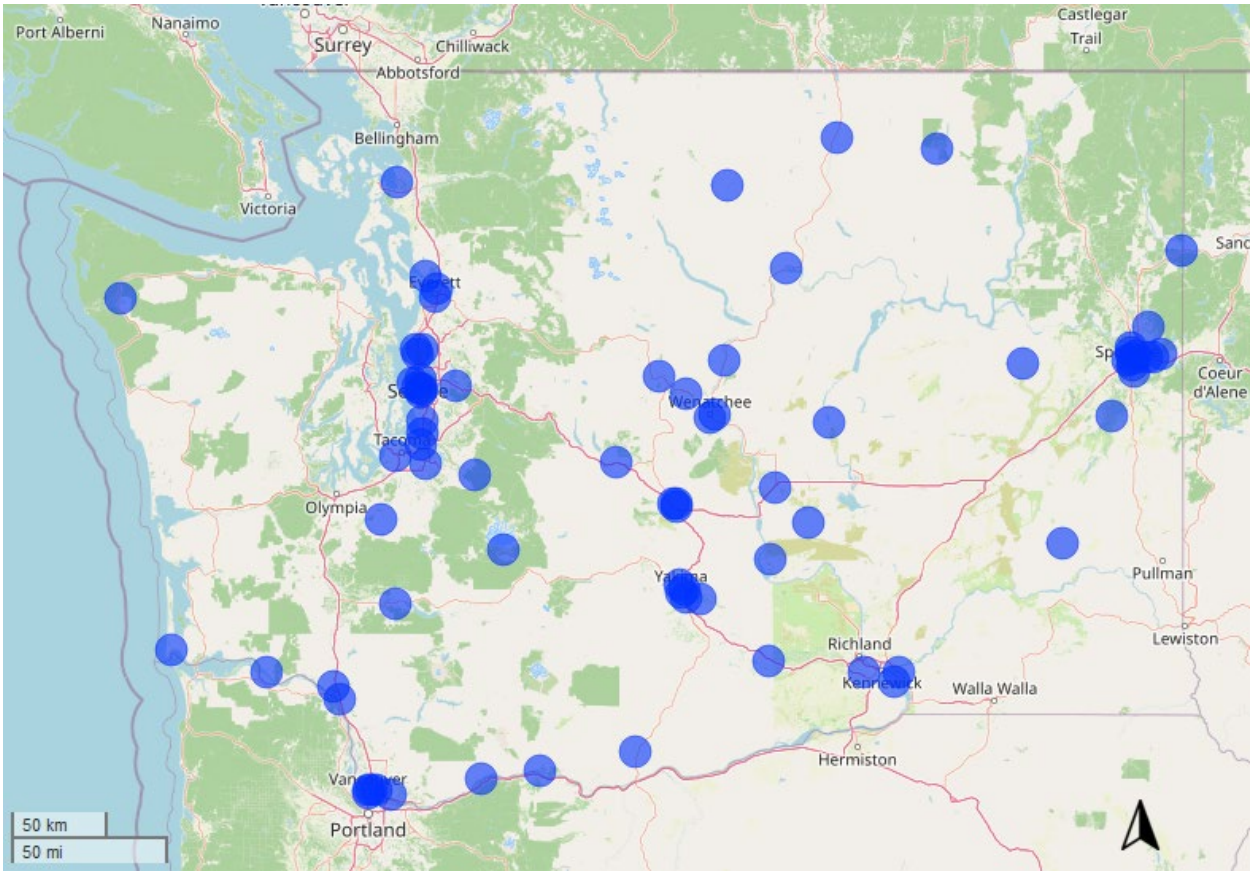


Figure 1. Map of SensWA locations in Washington as of May 2026.

Network Evaluation

Ecology uses a variety of tools to evaluate how well its monitoring network is meeting the monitoring objectives defined in 40 C.F.R. Part 58 Appendix D. These tools include:

- EPA minimum monitoring requirements in 40 C.F.R. Part 58 Appendix D
- Results of Ecology's most recent 5-year Ambient Air Quality Monitoring Network Assessment
- Analyses of historic monitoring data
- Census data on population density and demographics
- Dispersion and air quality forecast models
- Planning requirements, including SIPs and maintenance plans
- Jurisdictional boundaries
- Results of special monitoring studies

The suitability of individual monitoring sites is evaluated according to the probe and monitoring path siting criteria described in 40 C.F.R. Part 58 Appendix E.

Monitoring Partners

Ecology is the Primary Quality Assurance Organization (PQAO) for the Washington Network, which is operated in partnership with a variety of local, tribal and federal agencies.

Local clean air agencies

- Benton Clean Air Agency (BCAA)
- Northwest Clean Air Agency (NWCAA)
- Olympic Region Clean Air Agency (ORCAA)
- Puget Sound Clean Air Agency (PSCAA)
- Spokane Regional Clean Air Agency (SRCAA)
- Southwest Clean Air Agency (SWCAA)
- Yakima Regional Clean Air Agency (YRCAA)

Tribal nations

- Makah Tribe
- Confederated Tribes of the Colville Reservation
- Quinault Indian Nation
- Spokane Tribe of Indians
- Tulalip Tribes
- Yakama Nation

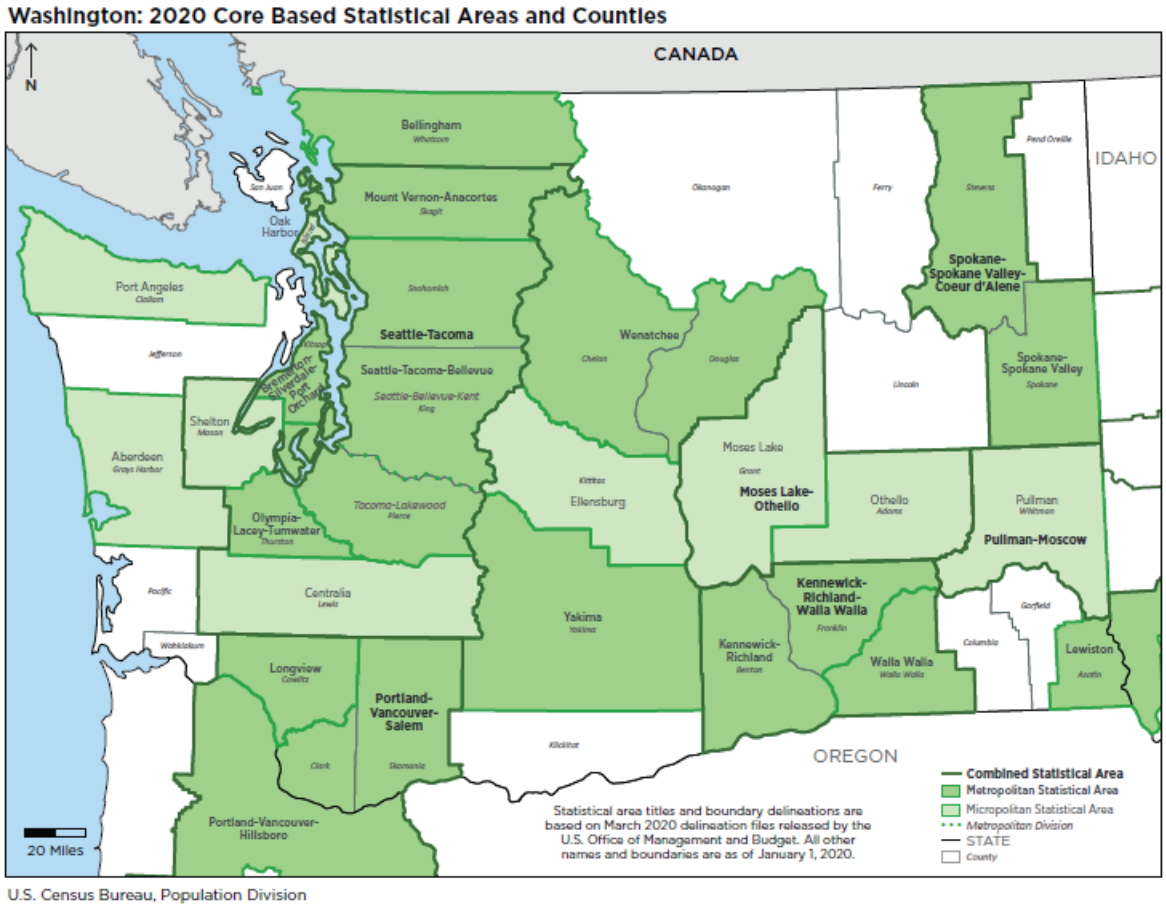
Federal partners

- National Park Service

The monitoring sites described in this document are all operated as part of Ecology's PQAO. Many are owned and operated by the partners listed above, and others are owned and operated by Ecology.

Washington Core-Based Statistical Areas

The minimum monitoring requirements listed in 40 C.F.R. Part 58 Appendix D are based on the core-based statistical areas (CBSAs) defined by the U.S. Office of Management and Budget. Washington's CBSAs are shown in the map in Figure 1 (U.S. Census Bureau, 2020). The populations of CBSAs in Washington over 50,000 people or with SLAMS monitors are listed in Table 2.



U.S. Census Bureau, Population Division

Figure 2. Washington's Core-Based Statistical Areas (CBSAs), U.S. Census Bureau 2020

Table 2. Washington's CBSA populations over 50,000 or with SLAMS monitors (U.S. Census Bureau, 2026)

Core-Based Statistical Area	2025 Population
Seattle-Tacoma-Bellevue, WA MSA	4,161,883
Portland-Vancouver-Hillsboro, OR-WA MSA	2,542,282
Spokane-Spokane Valley, WA MSA	608,012
Kennewick-Richland, WA MSA	324,334
Olympia-Lacey-Tumwater, WA MSA	304,261
Bremerton-Silverdale-Port Orchard, WA MSA	283,374
Yakima, WA MSA	259,185
Bellingham, WA MSA	236,392
Mount Vernon-Anacortes, WA MSA	132,975
Wenatchee, WA MSA	128,414
Longview, WA MSA	114,885
Moses Lake, WA µSA	105,727

Core-Based Statistical Area	2025 Population
Centralia, WA μSA	88,062
Oak Harbor, WA μSA	85,657
Port Angeles, WA μSA	78,202
Aberdeen, WA μSA	78,144
Shelton, WA μSA	71,165
Lewiston, ID-WA MSA	65,450
Walla Walla, WA MSA	62,361
Ellensburg, WA μSA	48,803

Washington shares the Portland-Vancouver-Hillsboro, OR-WA CBSA with the state of Oregon. The minimum monitoring requirements for PM_{10}, $PM_{2.5}$, ozone, and NO_2 in this CBSA are met through a combination of monitors operated by Washington Network agencies and the Oregon Department of Environmental Quality (DEQ). Ecology and Oregon DEQ renewed a Memorandum of Understanding on April 5, 2024, to formalize this arrangement (Appendix E).

Maintenance Areas

As of July 1, 2026, Washington has two maintenance areas for criteria pollutants within their 20-year maintenance planning period. During the 20-year maintenance planning period, maintenance areas demonstrate continued attainment of the NAAQS either through monitoring or through EPA-approved alternate methods. These methods are summarized in Table 3.

Table 3. Washington maintenance areas within their 20-year maintenance planning period and methods of demonstrating NAAQS attainment

Maintenance Area (Pollutant)	End of Maintenance Period	Method of Demonstrating NAAQS Attainment
Tacoma ($PM_{2.5}$)	3/12/2035	Tacoma-L St $PM_{2.5}$ monitor (530530029)
Whatcom County Intalco (SO_2)	1/16/2045	Calculated cumulative potential to emit of all stationary SO_2 sources in maintenance area.

Washington has maintenance areas that fall within the jurisdiction of local clean air agencies. In accordance with its maintenance plan, the Northwest Clean Air Agency (NWCAA) submits annual information verifying continued attainment. This verification information can be found in the document "Verification of Continued Attainment in Select Maintenance Areas (2026)" submitted concurrently with this plan. This document also includes final verification reporting from the Spokane Regional Clean Air Agency (SRCAA) for the Spokane County PM_{10} and CO maintenance areas, whose 20-year maintenance planning periods ended in 2025.

Monitoring Network Design

As of July 1, 2026, Ecology and its partners operate 71 monitoring sites as part of the Washington Network. These sites are shown on the map in Figure 2, and the parameters monitored are summarized in Table 4. Detailed location information is provided in Appendix D. All monitoring sites described in this plan are operated under the Washington Department of Ecology's PQAO. Other monitoring sites, such as IMPROVE sites, are operated in Washington as part of separate PQAOs, but those networks are outside the scope of this document.

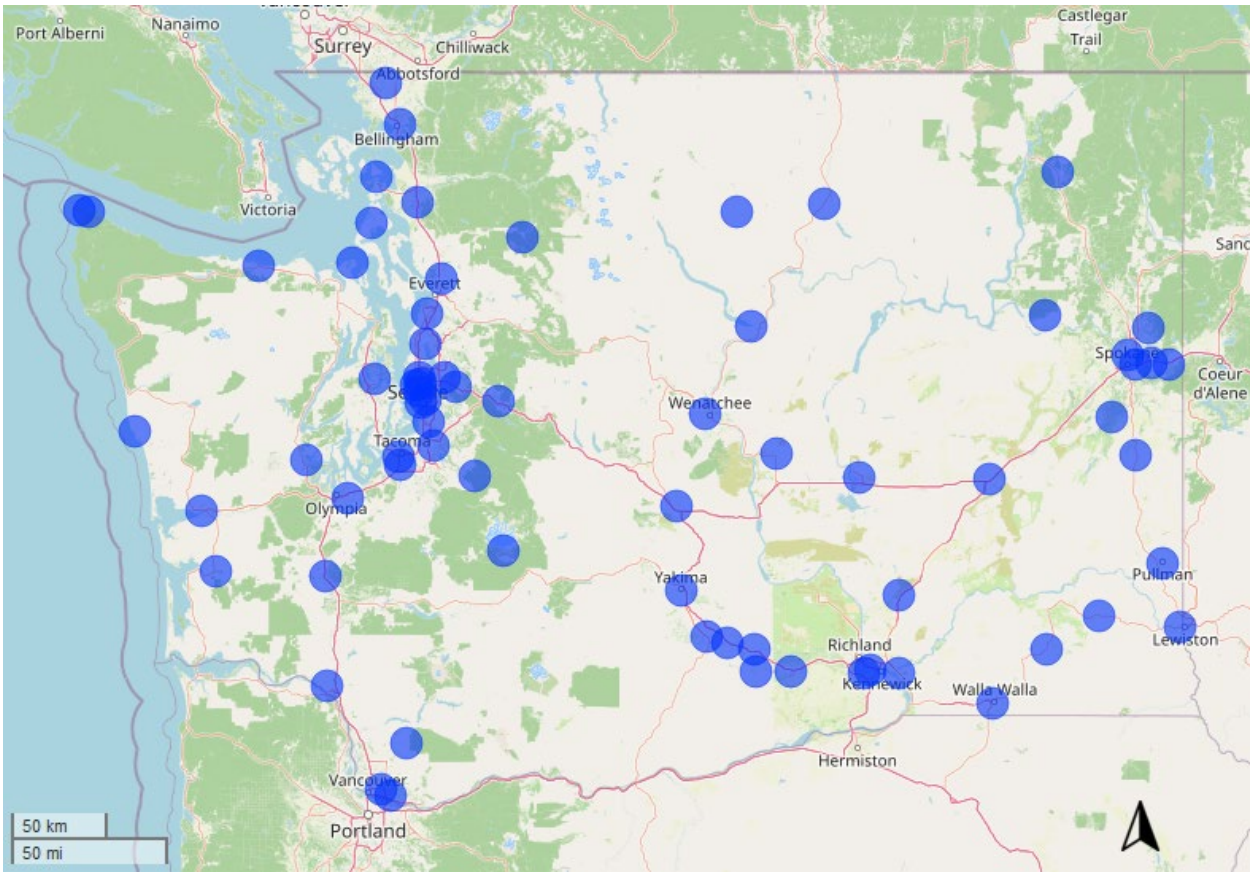


Figure 3. Map of all Washington Network monitoring sites

Table 4. Summary of parameters monitored at Washington Network monitoring sites

CBSA	Site	AQS ID	CO	NO_2	O_3	SO_2	$PM_{2.5}$ (FEM)	$PM_{2.5}$ (Non-FEM)	PM_{10}	Met	CSN
Aberdeen, WA	Aberdeen-Division St	530272002						x			
Aberdeen, WA	Taholah-Quinault Tribe	530270011						x			
Bellingham, WA	Bellingham-Pacific St	530730019					x				
Bellingham, WA	Custer-Loomis	530730005			x						
Bremerton-Silverdale-Port Orchard, WA	Bremerton-Spruce Ave	530350007					x				
Centralia, WA	Chehalis-Market Blvd	530410004						x			
Ellensburg, WA	Ellensburg-Ruby St	530370002					x				
Kennewick-Richland, WA	Kennewick-Metaline	530050002						x	x	x	
Kennewick-Richland, WA	Kennewick-S Steptoe St	530050003			x						
Kennewick-Richland, WA	Mesa-Pepiot Way	530210002						x			
Kennewick-Richland, WA	Prosser-Highland Dr	530050004						x			
Lewiston, ID-WA	Clarkston-13th St	530030004						x			
Longview, WA	Longview-30th Ave	530150015						x			
Moses Lake, WA	Moses Lake-Balsam St	530251002						x			
Moses Lake, WA	Quincy-3rd Ave NE	530251003						x		x	
Mount Vernon-Anacortes, WA	Anacortes-O Ave	530570011			x		x				
Mount Vernon-Anacortes, WA	Mt Vernon-S Second St	530570015						x			
None	Dayton-W Main St	530130002						x			
None	Omak-Colville Tribe	530470013					x			x	
None	Pomeroy-Pataha St	530230001						x			
None	Port Townsend-San Juan Ave	530310003						x			
None	Raymond-4th St	530490003						x			
None	Twisp-S Lincoln St	530470009						x			
Oak Harbor, WA	Oak Harbor-Goldie Rd	530290003					x				
Olympia-Lacey-Tumwater, WA	Lacey-College St	530670013			x		x				
Othello, WA	Ritzville-Alder St	530010003						x			
Port Angeles, WA	Bahokas Peak	530090019	x	x	x	x		x		x	
Port Angeles, WA	Neah Bay-Makah Tribe	530090015						x			
Port Angeles, WA	Port Angeles-E 5th St	530090017						x			
Portland-Vancouver-Hillsboro, OR-WA	Vancouver NE 84th Ave	530110024					x				
Portland-Vancouver-Hillsboro, OR-WA	Vancouver-Blairmont Dr	530110011			x					x	
Portland-Vancouver-Hillsboro, OR-WA	Yacolt-Yacolt Rd	530110022						x			
Pullman, WA	Pullman-Dexter SE	530750003						x			
Pullman, WA	Rosalia-Josephine St	530750006						x			

CBSA	Site	AQS ID	CO	NO_2	O_3	SO_2	$PM_{2.5}$ (FEM)	$PM_{2.5}$ (Non-FEM)	PM_{10}	Met	CSN
Seattle-Tacoma-Bellevue, WA	Auburn-29th St	530330047						x			
Seattle-Tacoma-Bellevue, WA	Bellevue-SE 12th St	530330031						x			
Seattle-Tacoma-Bellevue, WA	Darrington-Fir St	530610020					x				
Seattle-Tacoma-Bellevue, WA	Everett-Beverly Park Rd	530610022					x		x		
Seattle-Tacoma-Bellevue, WA	Enumclaw-Mud Mtn.	530330023			x						
Seattle-Tacoma-Bellevue, WA	Issaquah-Lake Sammamish	530330010			x						
Seattle-Tacoma-Bellevue, WA	Kent-S 236th St	530330095					x				
Seattle-Tacoma-Bellevue, WA	Lake Forest Park	530330024						x			
Seattle-Tacoma-Bellevue, WA	Marysville-7th Ave	530611007					x				
Seattle-Tacoma-Bellevue, WA	Mt Rainier-Jackson Visitors Ctr	530530012			x						
Seattle-Tacoma-Bellevue, WA	North Bend-North Bend Way	530330017			x			x		x	
Seattle-Tacoma-Bellevue, WA	SeaTac-Sunset Park	530330040					x				
Seattle-Tacoma-Bellevue, WA	Seattle-10th & Weller	530330030	x	x			x			x	
Seattle-Tacoma-Bellevue, WA	Seattle-Beacon Hill	530330080	x	x	x	x	x		x	x	x
Seattle-Tacoma-Bellevue, WA	Seattle-Duwamish	530330057		x			x		x		
Seattle-Tacoma-Bellevue, WA	Seattle-South Park	530331011						x			
Seattle-Tacoma-Bellevue, WA	Tacoma-L Street	530530029					x				x
Seattle-Tacoma-Bellevue, WA	Tacoma-S 36th St	530530024		x			x			x	
Seattle-Tacoma-Bellevue, WA	Tukwila Allentown	530330069					x				
Shelton, WA	Shelton-W Franklin	530450007						x			
Spokane-Spokane Valley, WA	Cheney-Turnbull	530630001			x						
Spokane-Spokane Valley, WA	Colville-E 1st St	530650005					x	x	x	x	
Spokane-Spokane Valley, WA	Liberty Lake-E Country Vista Dr	530630055						x			
Spokane-Spokane Valley, WA	Spokane Valley-E Broadway Ave	530630017					x		x		
Spokane-Spokane Valley, WA	Spokane-E Sprague Ave	530630054						x			
Spokane-Spokane Valley, WA	Spokane-Greenbluff	530630046			x						
Spokane-Spokane Valley, WA	Spokane-Monroe St	530630047						x			
Spokane-Spokane Valley, WA	Wellpinit-Spokane Tribe	530650002						x			
Walla Walla, WA	Burbank-Maple St	530710006							x	x	

CBSA	Site	AQS ID	CO	NO_2	O_3	SO_2	$PM_{2.5}$ (FEM)	$PM_{2.5}$ (Non-FEM)	PM_{10}	Met	CSN
Walla Walla, WA	Walla Walla-12th St	530710005						x			
Wenatchee, WA	Chelan-Woodin Ave	530070007						x			
Wenatchee, WA	Wenatchee-Fifth St	530070011						x		x	
Yakima, WA	Granger-E Mentzer Ave	530770019						x			
Yakima, WA	Mabton-B St	530770018						x			
Yakima, WA	Sunnyside-S 16th St	530770005					x				
Yakima, WA	Toppenish-Yakama Tribe	530770015					x			x	x
Yakima, WA	Yakima-4th Ave	530770009					x		x		x

Carbon monoxide (CO, 42101)

There are three CO monitoring sites in the Washington Network. All Washington Network CO monitoring sites collect hourly data with method code 593 (Teledyne API 300 EU). The monitoring objective of the Bahokas Peak and Beacon Hill CO monitors is general/background, and the monitoring objective of the Seattle-10th & Weller CO monitor is source-oriented. All CO monitors have a continuous arc of 360 degrees of airflow. All CO monitors in the Washington Network meet the applicable requirements of 40 C.F.R. Part 58 Appendices A, C, D, and E.

Table 5. Washington Network CO monitoring sites

AQS ID	Site Name	CBSA	Established	Type	Scale	POC
530090019	Bahokas Peak	Port Angeles, WA	11/2025	SLAMS, NCore	Regional	2
530330030	Seattle-10th & Weller	Seattle-Tacoma-Bellevue, WA	04/2014	SLAMS, Near-road	Microscale	1
530330080	Seattle-Beacon Hill	Seattle-Tacoma-Bellevue, WA	03/2007	SLAMS, NCore	Urban	1

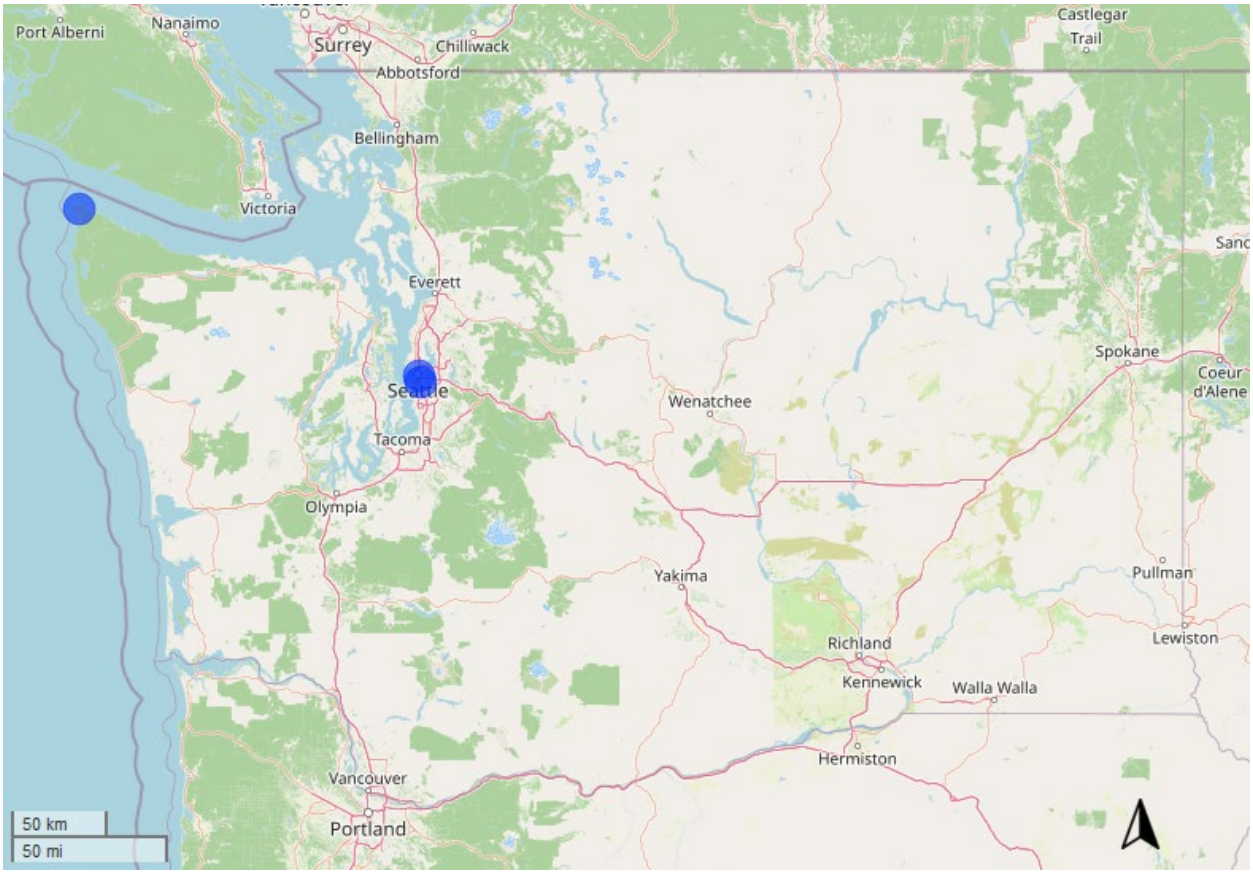


Figure 4. Map of Washington Network CO monitoring sites

Minimum monitoring requirements

Ecology is required to operate a CO monitor collocated with one required near-road NO_2 monitor in CBSAs with a population of 1,000,000 or more. In the Seattle-Tacoma-Bellevue CBSA, this requirement is met at the Seattle-10th & Weller near-road monitoring site (530330030). In the Portland-Vancouver-Hillsboro, OR-WA MSA, Oregon DEQ fulfills this requirement.

Recent modifications

Bahokas Peak: The Olympic Region Clean Air Agency (ORCAA) temporarily relocated National Core (NCore) network monitoring for CO from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Recommended/proposed modifications

None.

Nitrogen dioxide (NO_2, 42602/42600)

There are four hourly NO_2 (42602) monitoring sites in the Washington Network and two sites that monitor hourly trace NOy, NO, and NO_y-NO (42600, 42601, 42612). Seattle-Beacon Hill monitors all four parameters.

The monitoring objective of the trace NO_y monitors is general/background. The monitoring objective of the Seattle-Beacon Hill NO_2 monitor is population exposure, and the monitoring objective of the near-road and Seattle-Duwamish NO_2 monitors is highest concentration/source-oriented. All NO_2 and NO_y monitors have a continuous arc of 360 degrees of airflow. All NO_2 and NO_y monitors in the Washington Network meet the applicable requirements of 40 C.F.R. Part 58 Appendices A, C, D, and E.

Table 6. Washington Network NO_2 and Trace NO_y monitoring sites

AQS ID	Site Name	CBSA	NO_2	Trace NO_y	Est.	Type	Scale	Method	POC
530090019	Bahokas Peak	Port Angeles, WA		✓	11/2025	SLAMS, NCore	Regional	Teledyne API 200 EU (699)	2
530330030	Seattle-10th & Weller	Seattle-Tacoma-Bellevue, WA	✓		04/ 2014	SLAMS, Near-road	Microscale	Teledyne API 200 EU (599)	1
530330080	Seattle-Beacon Hill	Seattle-Tacoma-Bellevue, WA	✓	✓	08/ 2013	SLAMS, NCore	Urban	NO_2: Teledyne API T500U (212) Trace NO_y: Teledyne API T200U (599)	NO_2: 1 NO_y 2
530330057	Seattle-Duwamish	Seattle-Tacoma-Bellevue, WA	✓		11/ 2024	SPM	Microscale	Teledyne API N500 (256)	1
530530024	Tacoma-S 36th	Seattle-Tacoma-Bellevue, WA	✓		01/ 2016	SLAMS, Near-road	Microscale	Teledyne API 200 EU (599)	1

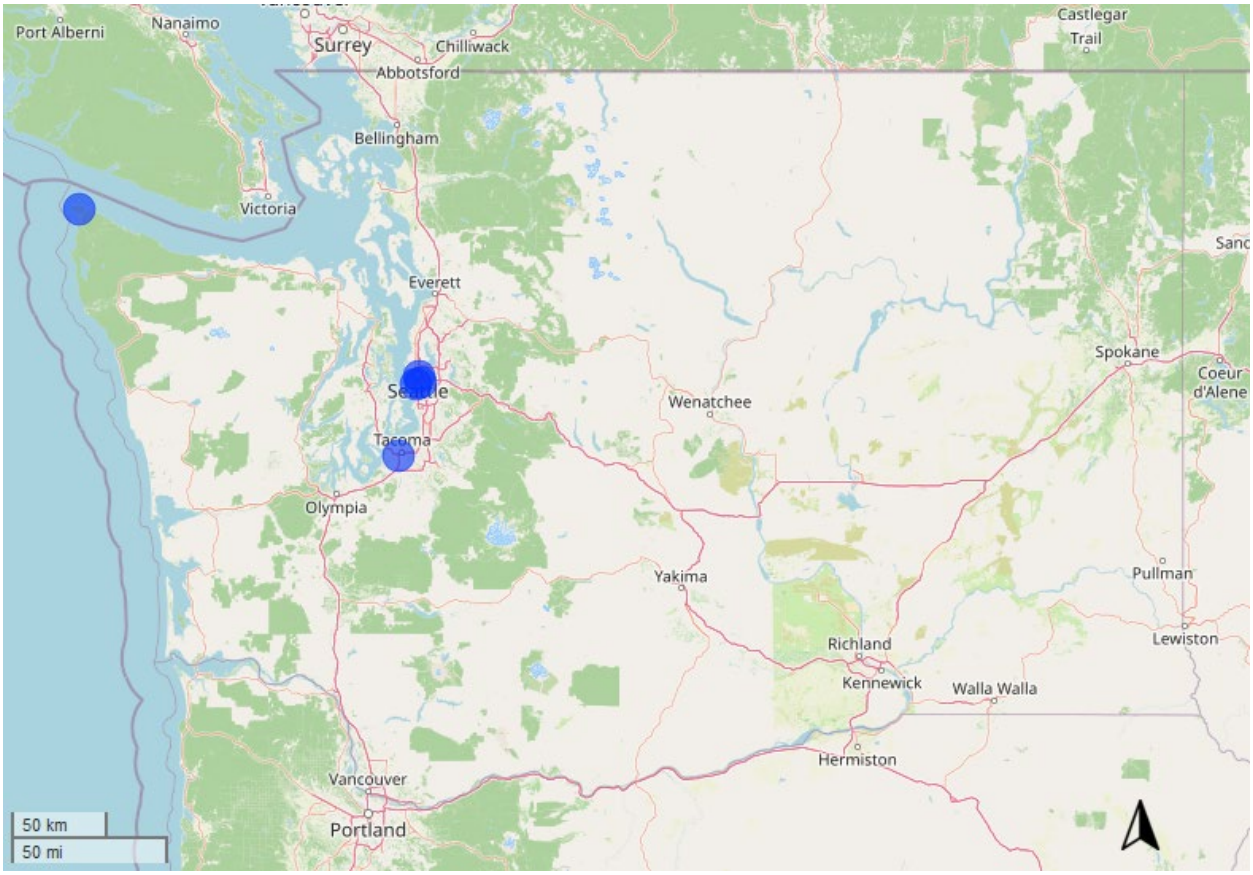


Figure 5. Map of Washington Network NO_x and Trace NO_y monitoring sites

Minimum monitoring requirements

Ecology is required to monitor both near-road and area-wide NO_2 in each CBSA with a population of 1,000,000 or greater. In CBSAs with a population of 2,500,000 or more, two near-road NO_2 monitoring sites are required. Ecology fulfills the near-road monitoring requirements for the Seattle-Tacoma-Bellevue, WA MSA at the Seattle-10th & Weller (530330030) and Tacoma-S 36th St (530530024) near-road sites. Seattle-Beacon Hill (530330080) fulfills the requirement for area-wide NO_2 monitoring.

In the Portland-Vancouver-Hillsboro, OR-WA MSA, the Oregon Department of Environmental Quality (DEQ) fulfills these requirements. This MSA surpassed 2.5 million people in 2020, which prompts the requirement for a second near-road NO_2 site. Oregon DEQ is currently working to establish a second near-road site near Interstate 5 in North Portland.

Recent modifications

Bahokas Peak: ORCAA temporarily relocated NCore monitoring for NO_y from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Recommended/proposed modifications

Tacoma: Ecology plans to establish a new SPM for NO_2 at Tacoma-S 35th and Windom St (530530035) in summer 2026. Detailed site location information is provided in the Chemical Speciation Network (CSN) section of this document.

Ozone (O_3, 44201)

There are 13 ozone monitoring sites in the Washington Network. All Washington Network ozone sites collect data under method code 087 (UV Absorbance) using Teledyne API 400 analyzers and all report data using POC 1. The monitoring objective of most ozone monitors is population exposure; exceptions are two monitors for general/background (Bahokas Peak and Mt Rainier-Jackson Visitors Ctr) and two monitors for regional transport (Custer-Loomis and Enumclaw-Mud Mtn). All O_3 monitors have a continuous arc of 360 degrees of airflow unless noted with a footnote in Table 7. All ozone monitors in the Washington Network meet the applicable requirements of 40 C.F.R. Part 58 Appendices A, C, D, and E unless noted.

Washington's ozone monitoring season is May 1-September 30. Ozone monitors operate only during this season except those noted with a * in Table 7, which operate year-round.

Table 7. Washington Network ozone monitoring sites

AQS ID	Site Name	CBSA	Established	Type	Scale
530570011	Anacortes-O Ave	Mount Vernon-Anacortes, WA	05/2012	SLAMS	Neighborhood
530090019	Bahokas Peak*	Port Angeles, WA	11/2025	SLAMS, NCore	Regional
530630001	Cheney-Turnbull	Spokane-Spokane Valley, WA	05/1999	SLAMS	Urban
530730005	Custer-Loomis	Bellingham, WA	04/1989	SLAMS	Regional
530330023	Enumclaw-Mud Mtn	Seattle-Tacoma-Bellevue, WA	07/1998	SLAMS	Urban
530330010	Issaquah-Lake Sammamish	Seattle-Tacoma-Bellevue, WA	12/1975	SLAMS	Urban
530050003	Kennewick-S Steptoe St	Kennewick-Richland, WA	06/2015	SLAMS	Urban
530670013	Lacey-College St	Olympia-Lacey-Tumwater, WA	05/2022	SLAMS	Urban
530530012	Mt Rainier-Jackson Visitors Ctr*[2]	Seattle-Tacoma-Bellevue, WA	07/1998	SLAMS	Regional
530330017	North Bend-North Bend Way	Seattle-Tacoma-Bellevue, WA	06/1998	SLAMS	Neighborhood
530330080	Seattle-Beacon Hill*	Seattle-Tacoma-Bellevue, WA	03/2007	SLAMS, NCore	Urban
530630046	Spokane-Greenbluff	Spokane-Spokane Valley, WA	04/1990	SLAMS	Urban

[2] The Mt Rainier-Jackson Visitors Ctr monitor (530530012) inlet is located on the side of a building with an arc of unrestricted airflow of approximately 190 degrees. Relocation of this monitor to meet the requirements of 40 C.F.R. Part 58 Appendix E 2.3(b) is not possible due to monitor's location at a historic building in a National Park.

AQS ID	Site Name	CBSA	Established	Type	Scale
530110011	Vancouver-Blairmont	Portland-Vancouver-Hillsboro, OR-WA	05/1988	SLAMS	Urban

* indicates year-round monitor.

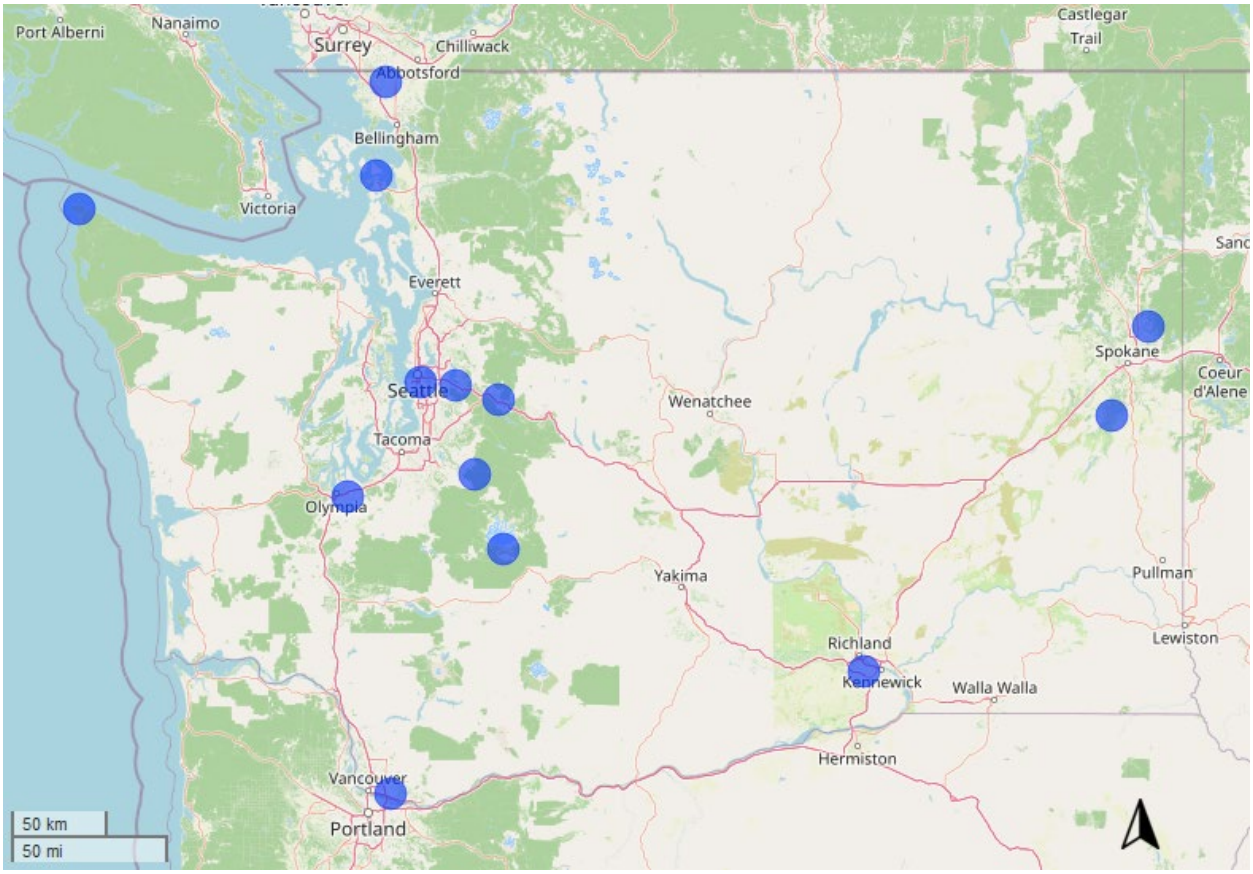


Figure 6. Map of Washington Network ozone monitoring sites

Minimum monitoring requirements

The Washington Network meets the minimum monitoring requirements for ozone defined in 40 C.F.R. Part 58 Appendix D. In each CBSA, the number of existing ozone monitors meets or exceeds the number of required monitors, as summarized in Table 8. The design values listed are the maximum valid design value of all sites within the CBSA. For a full list of design values at all ozone sites in the Washington Network, see Appendix A.

Table 8. EPA minimum monitoring requirements for ozone

CBSA	2025 Population Estimate	Highest Monitoring Site	2025 Design Value (ppm)	Number of Required Monitors	Number of Existing Monitors
Seattle-Tacoma-Bellevue, WA	4,161,883	Enumclaw-Mud Mtn	0.066	3	5
Portland-Vancouver-Hillsboro, OR-WA**	2,542,282	Portland-Carus	0.069	2	5
Spokane-Spokane Valley, WA	608,012	Spokane-Greenbluff	0.063	2	2
Kennewick-Richland, WA	324,334	Kennewick-S Steptoe St	0.064	1	1
Olympia-Lacey-Tumwater, WA	304,261	Lacey-College St	0.053*	0	1
Bellingham, WA	236,392	Custer-Loomis	0.051*	0	1
Mount Vernon-Anacortes, WA	132,975	Anacortes-O Ave	0.042	0	1
Port Angeles, WA	78,202	Cheeka Peak/Bahokas Peak	0.049*	0	1

* Design values are estimated from incomplete data

** Washington shares the Portland-Vancouver-Hillsboro MSA with the state of Oregon. The minimum monitoring requirements for ozone in this MSA are met through a combination of monitors operated by Ecology and Oregon DEQ. Ecology and Oregon DEQ renewed a Memorandum of Understanding on April 5, 2024, to formalize this arrangement (Appendix E).

Recent modifications

Bahokas Peak: ORCAA temporarily relocated NCore monitoring for ozone from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Recommended/proposed modifications

None.

Sulfur dioxide (SO_2, 42401)

There are two SO_2 monitoring sites in the Washington Network. Both SO_2 monitors report data using POC 2 with an objective of general/background. Both SO_2 monitors have a continuous arc of 360 degrees of airflow. Both SO_2 monitors in the Washington Network meet the applicable requirements of 40 C.F.R. Part 58 Appendices A, C, D, and E.

Table 9. Washington Network SO_2 monitoring sites

AQS ID	Site Name	CBSA	Established	Type	Scale	Method
530090019	Bahokas Peak	Port Angeles, WA	11/2025	SLAMS, NCore	Regional	TAPI 100 EU (600)
530330080	Seattle-Beacon Hill	Seattle-Tacoma-Bellevue, WA	03/2007	SLAMS, NCore	Urban	TAPI 100 EU (600)

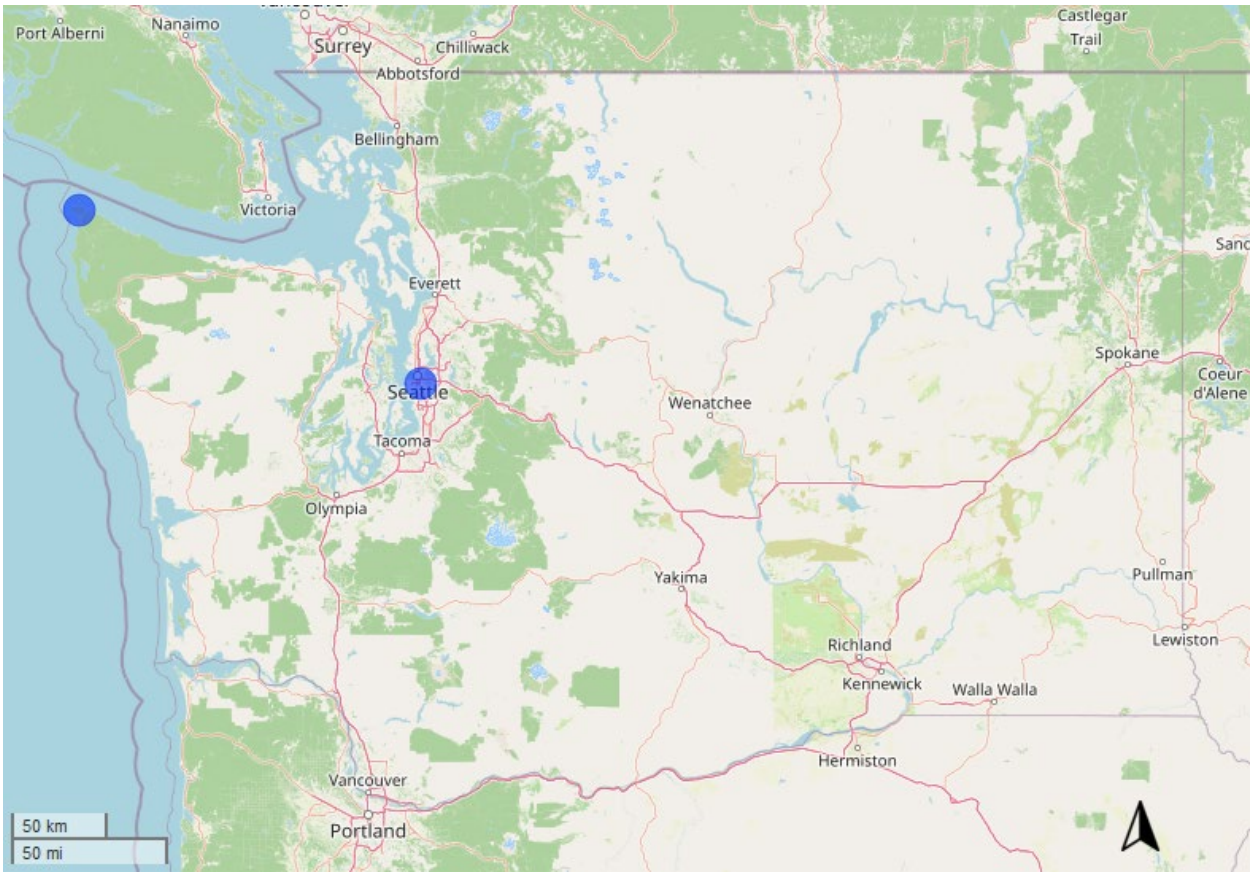


Figure 7. Map of Washington Network SO_2 monitoring sites

Minimum monitoring requirements

The Seattle-Beacon Hill NCore site (530330080) is used to satisfy the minimum monitoring requirement for the Seattle-Tacoma-Bellevue, WA CBSA, which is the only CBSA in Washington with required SO_2 monitoring based on the Population Weighted Emissions Index.

Recent modifications

Bahokas Peak: ORCAA temporarily relocated NCore monitoring for SO_2 from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Anacortes: NWCAA's SLAMS for SO_2 at Anacortes-O Ave (530570011) was retroactively discontinued as of September 30, 2024. This network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan.

Recommended/proposed modifications

None.

Particulate matter ≤2.5 µm ($PM_{2.5}$, 88101/88502)

FRM/FEM $PM_{2.5}$ (88101)

There are 24 sites in the Washington Network that monitor $PM_{2.5}$ with FRM and/or Class III FEM monitors. All sites listed in Table 10 are suitable for comparison with the annual $PM_{2.5}$ NAAQS with the exception of the Everett-Beverly Park Rd and Oak Harbor-Goldie Rd SPMs. As a unique micro-scale site for a localized hotspot, the Everett-Beverly Park Rd monitor will be suitable for comparison with the 24-hour $PM_{2.5}$ NAAQS after 24 months of operation but will not be suitable for comparison with the annual $PM_{2.5}$ NAAQS, consistent with 40 C.F.R. Part 58.30. The Oak Harbor-Goldie Rd SPM does not meet the Probe and Monitoring Path Siting Criteria described in 40 C.F.R. Part 58 Appendix E and is thus not suitable for comparison with the $PM_{2.5}$ NAAQS.

All BAM 1020 and BAM 1022 monitors operate continuously. Sampling schedules for filter-based FRMs are noted next to the monitor's POC in Table 10 (1:3 or 1:6). All $PM_{2.5}$ monitors in the Washington Network meet the applicable requirements of 40 C.F.R. Part 58 Appendices A, C, D, and E except where the site name is noted with a footnote in Table 10 below.

Table 10. Washington Network FEM and FRM $PM_{2.5}$ monitoring sites

AQS ID	Site Name	CBSA	Est.	Type	Scale/ Objective	Method	POC
530570011	Anacortes-O Ave	Mount Vernon-Anacortes, WA	10/ 2011	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530730019	Bellingham-Pacific St	Bellingham, WA	01/ 2018	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530350007	Bremerton-Spruce Ave	Bremerton-Silverdale-Port Orchard, WA	05/ 2012	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530650005	Colville- E 1st St	Spokane-Spokane Valley, WA	11/ 2019	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5

AQS ID	Site Name	CBSA	Est.	Type	Scale/ Objective	Method	POC
530610020	Darrington-Fir St	Seattle-Tacoma-Bellevue, WA	12/ 2010	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530370002	Ellensburg-Ruby St	Ellensburg, WA	10/ 2007	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530610022	Everett-Beverly Park Rd	Seattle-Tacoma-Bellevue, WA	06/ 2024	SPM	Micro/ Highest concentration and source oriented	Met One BAM 1020 (170)	5
530330095	Kent-S 236th	Seattle-Tacoma-Bellevue, WA	11/ 2025	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530670013	Lacey-College St	Olympia-Lacey-Tumwater, WA	01/ 2025	SLAMS	Neighborhood/ Population exposure	Met One BAM 1022 (209)	8
530611007	Marysville-7th Ave	Seattle-Tacoma-Bellevue, WA	02/ 2010	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530290003	Oak Harbor-Goldie Rd[3]	Oak Harbor, WA	05/ 2026	SPM	Neighborhood/ Population exposure	Met One BAM 1022 (209)	8
530470013	Omak-Colville Tribe	None	10/ 2010	Tribal	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530330040	SeaTac-Sunset Park	Seattle-Tacoma-Bellevue, WA	04/ 2025	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530330030	Seattle-10th & Weller	Seattle-Tacoma-Bellevue, WA	06/ 2014	SLAMS, Near-road	Micro/ Highest concentration and source oriented	Met One BAM 1020 (170)	5
530330080	Seattle-Beacon Hill	Seattle-Tacoma-Bellevue, WA	02/ 2010	SLAMS, NCore	Urban/ General background	Met One BAM 1022 (Primary) (209); Met One E-SEQ-FRM (Collocated) (545) (1:3)	Primary: POC 8 Collocated: POC 1
530330057	Seattle-Duwamish	Seattle-Tacoma-Bellevue, WA	12/ 2009	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (Primary) (170); Met One E-SEQ-FRM (Collocated) (545) (1:6)	Primary: POC 5 Collocated: POC 1

[3] The Oak Harbor-Goldie Rd PM2.5 SPM does not meet the Probe and Path Siting Criteria described in 40 C.F.R. Part 58, Appendix E due to the proximity of the 18 meter-high trees approximately 15 meters south of the monitor.

AQS ID	Site Name	CBSA	Est.	Type	Scale/ Objective	Method	POC
530630017	Spokane Valley-E Broadway Ave	Spokane-Spokane Valley, WA	01/ 2021	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530770005	Sunnyside-S 16th St	Yakima, WA	05/ 2023	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530530029	Tacoma- L Street	Seattle-Tacoma-Bellevue, WA	01/ 2010	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530530024	Tacoma-S 36th St	Seattle-Tacoma-Bellevue, WA	01/ 2016	SLAMS, Near-road	Microscale/ Highest concentration and source oriented	Met One BAM 1020 (170) (Primary and Collocated)	Primary: POC 5 Collocated: POC 6
530770015	Toppenish-Yakama Tribe	Yakima, WA	08/ 2008	Tribal	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530330069	Tukwila Allentown	Seattle-Tacoma-Bellevue, WA	04/ 2021	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530110024	Vancouver NE 84th Ave	Portland-Vancouver-Hillsboro, OR-WA	12/ 2014	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (170)	5
530770009	Yakima-4th Ave	Yakima, WA	05/ 2011	SLAMS	Neighborhood/ Population exposure	Met One BAM 1020 (Primary) (170); Met One E-SEQ-FRM (Collocated) (545) (1:6)	Primary: POC 5 Collocated: POC 1

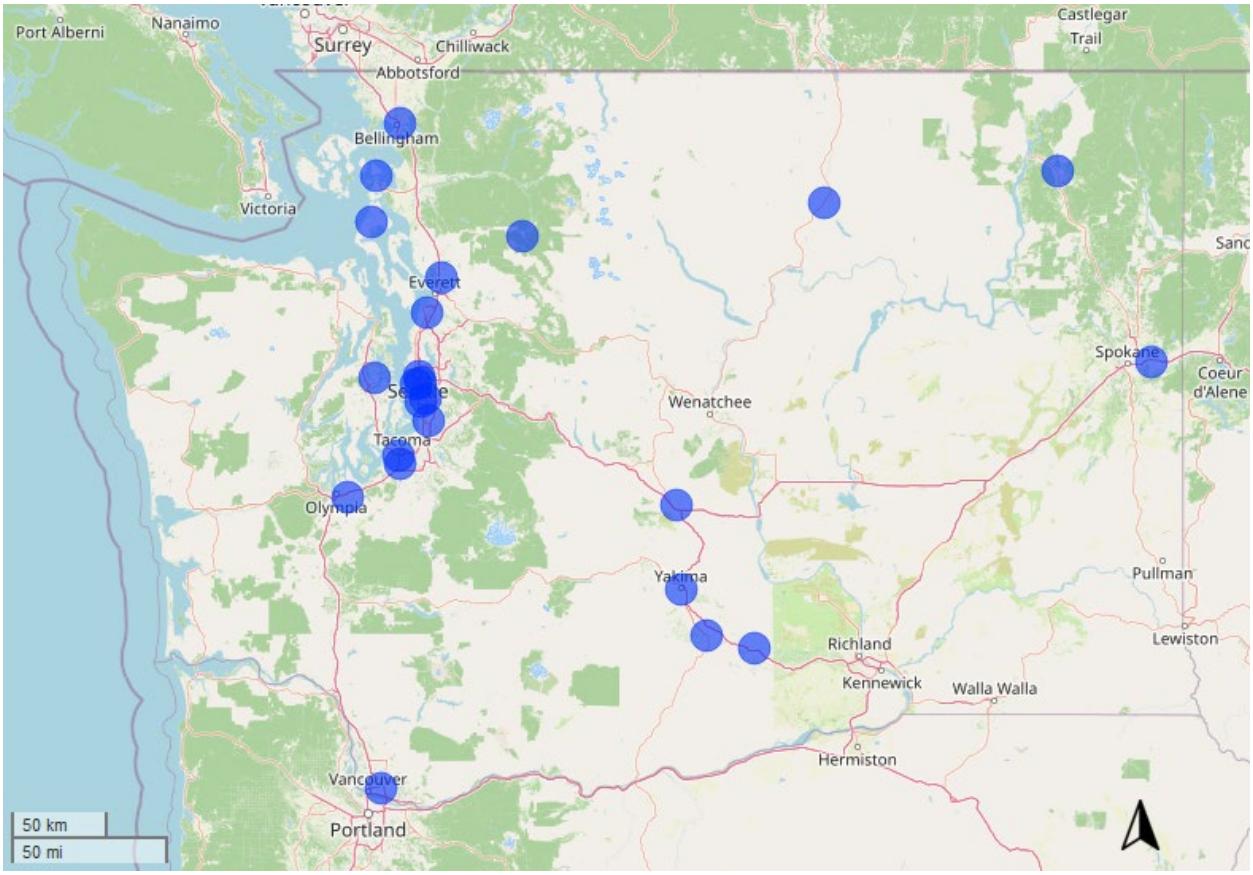


Figure 8. Map of Washington Network $PM_{2.5}$ monitoring sites

Minimum monitoring requirements

Minimum monitoring requirements for $PM_{2.5}$ are defined in 40 C.F.R. Part 58 Appendix D. Table 11 below summarizes the number of required and existing monitors in each of Washington's CBSAs where monitoring is conducted. The design values listed are the maximum valid design value of all sites within the CBSA. The Washington Network is currently meeting or exceeding the minimum monitoring requirements in all CBSAs.

For a full list of design values at all Washington Network $PM_{2.5}$ monitoring sites, see Appendix A.

Table 11. EPA minimum monitoring requirements for FRM/FEM $PM_{2.5}$

CBSA	2025 Population Estimate	Highest 2025 24-hour Design Value (µg/m³) (Site)	Highest 2025 Annual Design Value (µg/m³) (Site)	Number of Required Monitors	Number of Existing Monitors
Seattle-Tacoma-Bellevue, WA	4,161,883	24 (Marysville-7th Ave/Tacoma-L St)	8.1 (Marysville-7th Ave)	3	10
Portland-Vancouver-Hillsboro, OR-WA**	2,542,282	20 (Vancouver-NE 84th Ave)	5.9 (Portland-SE Lafayette St)	2	4

CBSA	2025 Population Estimate	Highest 2025 24-hour Design Value (µg/m^3) (Site)	Highest 2025 Annual Design Value (µg/m^3) (Site)	Number of Required Monitors	Number of Existing Monitors
Spokane-Spokane Valley, WA	608,012	33 (Colville-E 1st St)	8.4 (Colville-E 1st St)	2	2
Olympia-Lacey-Tumwater, WA	304,261	13* (Lacey-College St)	4.1* (Lacey-College St)	0	1
Bremerton-Silverdale, WA	283,374	13 (Bremerton-Spruce Ave)	4.4 (Bremerton-Spruce Ave)	0	1
Yakima, WA	259,185	27* (Toppenish-Ward Rd)	8.5* (Toppenish-Ward Rd)	1	3
Bellingham, WA	236,392	11 (Bellingham-Pacific St)	5.2 (Bellingham-Pacific St)	0	1
Mount Vernon-Anacortes, WA	132,975	10 (Anacortes-O Ave)	4.7 (Anacortes-O Ave)	0	1
Ellensburg, WA	48,803	18 (Ellensburg-Ruby St)	5.6 (Ellensburg-Ruby St)	0	1

*Design value was estimated from incomplete data.

** Washington shares the Portland-Vancouver-Hillsboro MSA with the state of Oregon. The minimum monitoring requirements for $PM_{2.5}$ in this MSA are met through a combination of monitors operated by Ecology and the Oregon DEQ. Ecology and Oregon DEQ renewed a Memorandum of Understanding on April 5, 2024, to formalize this arrangement (Appendix E).

At-risk community monitoring requirement: In February 2024, EPA strengthened the annual NAAQS for $PM_{2.5}$ from 12.0 µg/m^3 to 9.0 µg/m^3. Along with this revision, EPA also modified the network design criteria for $PM_{2.5}$ in 40 CFR part 58, appendix D, 4.7.1(b)(3), which applies to MSAs where three SLAMS for $PM_{2.5}$ are required:

> "For areas with additional required SLAMS, a monitoring station is to be sited in an at-risk community with poor air quality, particularly where there are anticipated effects from sources in the area (e.g., a major industrial area, point source(s), port, rail yard, airport, or other transportation facility or corridor)."

Ecology notes that the $PM_{2.5}$ sources provided as examples in 40 CFR part 58, appendix D, 4.7.1(b)(3) are not the dominant sources of $PM_{2.5}$ emissions in Washington, which are wildfires and residential wood combustion.

In the Seattle-Tacoma-Bellevue, WA MSA, the requirement for monitoring in an at-risk community with poor air quality is already met at the Seattle-10th & Weller monitoring site (530330030). Seattle-10th & Weller is located less than 100 meters from the major transportation corridor of Interstate 5 and routinely records higher design values than several other monitoring sites in the MSA. Thus Seattle-10th & Weller meets the requirements for (relatively) poor air quality and anticipated impacts from sources.

Seattle-10th & Weller can also be considered in fulfillment of the network design criteria 40 CFR part 58, appendix D, 4.7.1(b)(2), "For CBSAs with a population of 1,000,000 or more persons, at least one $PM_{2.5}$ monitor is to be collocated at a near-road NO_2 station required in section 4.3.2(a) of this appendix." Since the 4.7.1(b)(2) requirement is also met by the Tacoma-S 36th near-road site, Ecology considers the requirements of 4.7.1(b) fully met, with Tacoma-S 36th used to fulfill 4.7.1(b)(2) and Seattle-10th & Weller used to fulfill the revised 4.7.1(b)(3).

Collocation requirements

The monitoring sites listed in Table 12 are used to fulfill the collocation requirements described in 40 C.F.R. Part 58 Appendix A.

Table 12. $PM_{2.5}$ collocation requirements

Method Code	# Primary Monitors	# Required Collocated Monitors	# Active Collocated Monitors	Site	Distance between collocated monitors (m)
209	3	1	1	Seattle-Beacon Hill	4
170	21	3	3	Tacoma-S 36th (530530024); Seattle-Duwamish (530530057); Yakima-4th Ave S (530770009)	2 2 2

Recent modifications

The Puget Sound Clean Air Agency (PSCAA) established a new SLAMS for $PM_{2.5}$ at the Kent-S 236th St site (530330095) on November 12, 2025. This network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan.

NWCAA added a Special Purpose Monitor (SPM) for $PM_{2.5}$ at the Oak Harbor-Goldie Rd monitoring site (530290003) in May 2026.

PSCAA discontinued their $PM_{2.5}$ SLAMS monitor at the former Tacoma-Alexander Ave monitoring site (530530031) on September 4, 2025, due to termination of their lease. PSCAA is currently working to establish a replacement SLAMS monitor for $PM_{2.5}$ in the same area. This temporary network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan.

Recommended/proposed modifications

Ellensburg: Ecology proposes to replace the SLAMS for regulatory $PM_{2.5}$ at Ellensburg-Ruby St (530370002) with a SPM for non-regulatory $PM_{2.5}$ on January 1, 2027. The analysis supporting this proposed network modification was described in Ecology's 2025 Ambient Air Monitoring Network Assessment.

The Ellensburg $PM_{2.5}$ FEM monitor was established in October 2014 due to concerns over elevated wintertime concentrations as measured by the non-regulatory nephelometer

previously used for $PM_{2.5}$ monitoring at the site. For several years after installing the FEM, Ecology and local partners at the city, county, and other local organizations invested funding and resources in local efforts to reduce $PM_{2.5}$ pollution. Ellensburg's annual and 24-hour $PM_{2.5}$ design values have steadily declined since installation of the FEM and are now well below 80% of the NAAQS. Ecology considers Ellensburg to be a success story for improvements in air quality and reductions in $PM_{2.5}$ pollution.

As described in Ecology's 2025 Ambient Air Monitoring Network Assessment, Ecology has a policy of FEM monitoring at sites whose design values exceed 80% of their respective NAAQS. At sites where design values are consistently below this threshold, non-regulatory monitoring can be used as a means of resource savings. In 2025, Ecology identified Ellensburg as a suitable candidate for non-regulatory $PM_{2.5}$ monitoring, consistent with this policy. Ecology plans to continue providing $PM_{2.5}$ AQI information to the public using a non-regulatory monitor.

Estimated annual and 24-hour design values are shown in Figure 12 and Figure 13, with the NAAQS shown in the dashed line and 80% of the NAAQS shown in the dotted line. Ellensburg is routinely affected by wildfire smoke in the summer and fall, often for prolonged periods. Ecology calculated design values both with and without the inclusion of data flagged with informational flags for wildfire smoke impacts in AQS. The wildfire-influenced design values are shown in the dashed line, and the calculations without these data included are shown in the solid line.

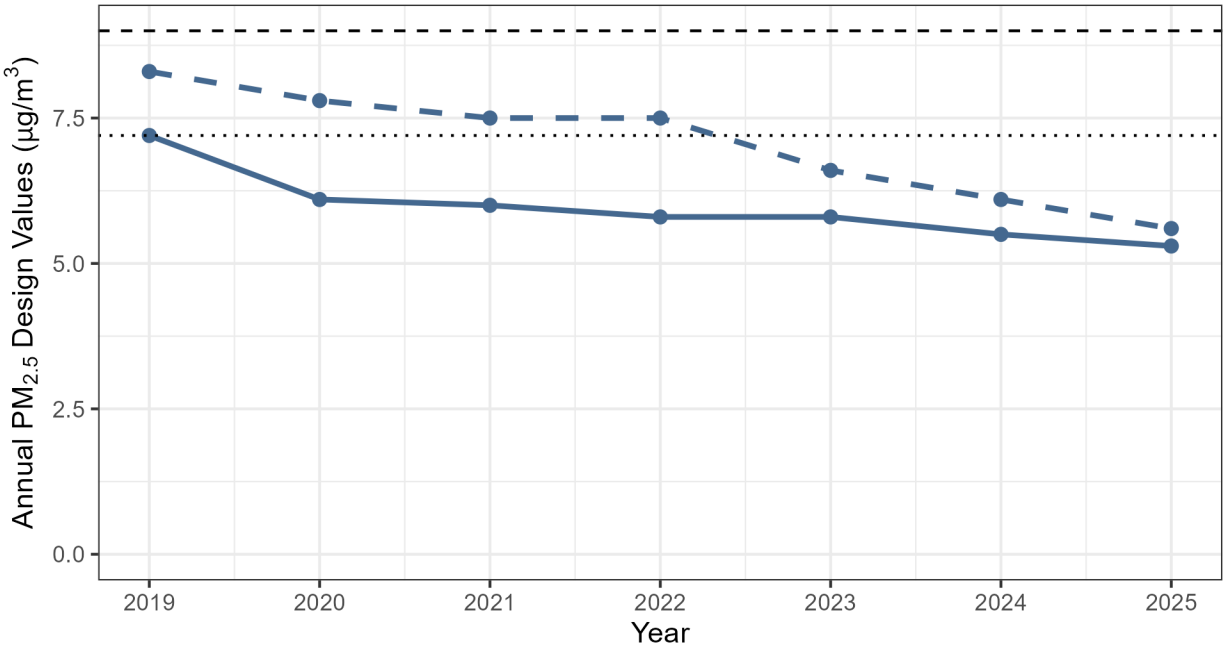


Figure 9. Annual $PM_{2.5}$ design values, Ellensburg 2019-2025

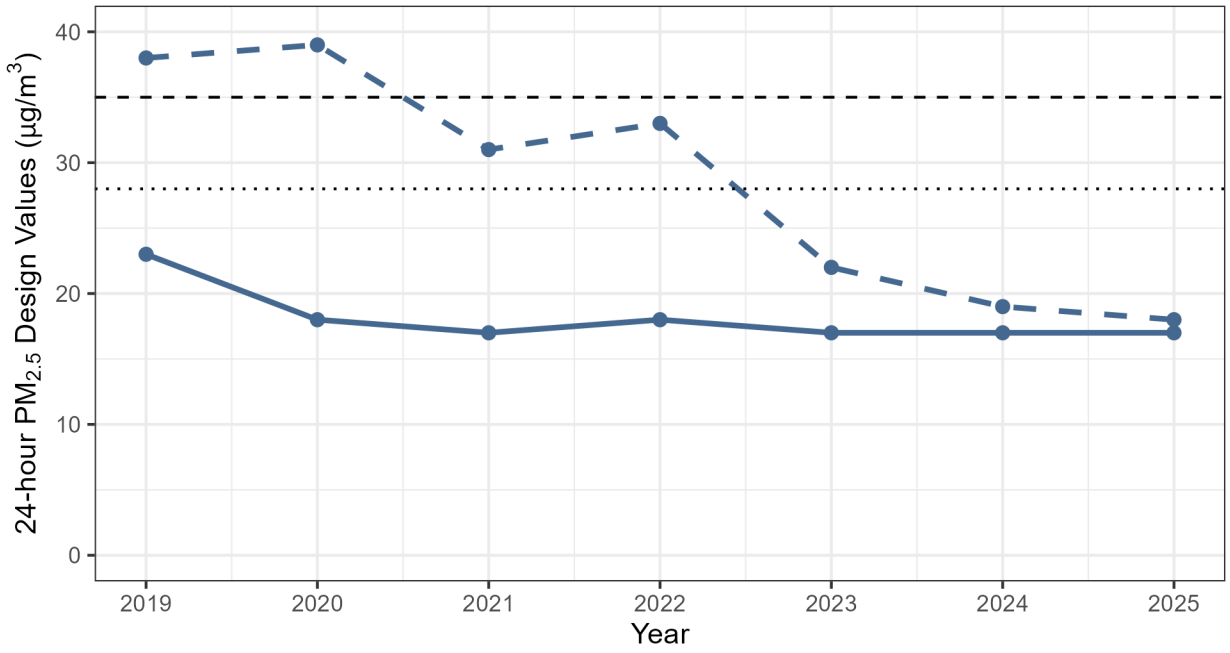


Figure 10. 24-hour $PM_{2.5}$ design values, Ellensburg 2019-2025

Design values were calculated excluding data flagged with informational flags for wildfire smoke impacts in AQS. Design values calculated from all data are provided in parenthesis.

Table 13. Ellensburg $PM_{2.5}$ design values, 2019-2025.

Year	Site	Annual design value (µg/m³)	24-hour design value (µg/m³)
2019	Ellensburg-Ruby St	7.2 (8.3)	23 (38)
2020	Ellensburg-Ruby St	6.1 (7.8)	18 (39)
2021	Ellensburg-Ruby St	6.0 (7.5)	17 (31)
2022	Ellensburg-Ruby St	5.8 (7.5)	18 (33)
2023	Ellensburg-Ruby St	5.8 (6.6)	17 (22)
2024	Ellensburg-Ruby St	5.5 (6.1)	17 (19)
2025	Ellensburg-Ruby St	5.3 (5.6)	17 (18)

Ecology requests EPA Region 10 Administrator approval to discontinue the Ellensburg-Ruby St SLAMS for $PM_{2.5}$ under the criteria provided for in 40 C.F.R. Part 58.14(c)(1): "Any $PM_{2.5}$, O_3, CO, PM_{10}, SO_2, Pb, or NO_2 SLAMS monitor which has shown attainment during the previous five years, that has a probability of less than 10 percent of exceeding 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past, and which is not specifically required by an attainment plan or maintenance plan".

The probability of exceeding 80 percent of the $PM_{2.5}$ NAAQS is assessed according to the calculation method described in EPA's 2007 Ambient Air Monitoring Network Assessment Guidance:

Equation 1. Probability of NAAQS violation (U.S. EPA, 2007)

$$\bar{X} + \frac{t * s}{\sqrt{n}} < 0.8 * NAAQS$$

Where:

X is the average design value
t is the student's t-value for *n*-1 degrees of freedom at the 90% confidence level
s is the standard deviation of design values
n is the number of design values

Ecology calculated this probability using the design values calculated without the inclusion of days flagged as wildfire-influenced.

Table 14. Calculations for probability of a NAAQS violation at Ellensburg

Site	Form	Comparison Value (left side of Equation 1) (µg/m^3)	80% of NAAQS (µg/m^3)
Ellensburg-Ruby St	Annual	6.4	7.2
Ellensburg-Ruby St	24-hour	19.8	28

For both the annual and 24-hour standards, the comparison values (left side of Equation 1) are less than 80% of the NAAQS, and thus the probability of exceeding 80% of the NAAQS is less than 10%.

Following the minimum monitoring requirements described in 40 C.F.R. Part 58, Appendix D, no monitoring sites are required in the Ellensburg, WA µSA because µSAs have no minimum monitoring requirements. The Ellensburg-Ruby St $PM_{2.5}$ monitor has not recorded a NAAQS violation in the past 5 years. After removing days flagged as influenced by wildfires, the monitor has a probability of less than 10% of exceeding 80% of both NAAQS. The Ellensburg-Ruby St $PM_{2.5}$ monitor is not required by an attainment plan or maintenance plan. Therefore, Ecology has determined that the criteria for discontinuation in 40 C.F.R. Part 58.14(c)(1) are met.

Friday Harbor: NWCAA plans to establish a new SPM for $PM_{2.5}$ at Friday Harbor-2nd St N (530550001) in August 2026. This site will be at the same location where Ecology operated a temporary SPM for non-regulatory $PM_{2.5}$ in 2019.

Tacoma: Ecology plans to establish a new SPM for $PM_{2.5}$ at Tacoma-S 35th and Windom St (530530035) in summer 2026. Detailed site location information is provided in the Chemical Speciation Network (CSN) section of this document.

Non-regulatory $PM_{2.5}$ (88502)

Ecology and its partners operate 39 monitoring sites with non-regulatory $PM_{2.5}$ instruments to report estimated $PM_{2.5}$ concentrations and the AQI to the public. Most have a monitoring objective of population exposure; exceptions are three sites for general/background (Bahokas Peak, Chelan-Woodin Ave, Twisp-S Lincoln St) and one for regional transport (Moses Lake-Balsam St). All non-regulatory $PM_{2.5}$ monitors meet any applicable requirements of 40 C.F.R. Part 58 Appendices A, C, D, and E, except where the site name is noted with a footnote in Table 15 below.

Table 15. Washington Network non-regulatory $PM_{2.5}$ monitoring sites

AQS ID	Site Name	CBSA	Est.	Type	Scale	Method	POC
530272002	Aberdeen-Division St	Aberdeen, WA	08/2002	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530330047	Auburn-29th St[4]	Seattle-Tacoma-Bellevue, WA	03/2021	SPM	Neighborhood	Ecotech M9003 (812)	4
530090019	Bahokas Peak	Port Angeles, WA	11/2025	SLAMS, NCore	Regional	Radiance Research M903 (771)	4
530330031	Bellevue-SE 12th St	Seattle-Tacoma-Bellevue, WA	12/2016	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530410004	Chehalis-Market Blvd	Centralia, WA	12/2009	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530070007	Chelan-Woodin Ave	Wenatchee, WA	12/2002	SPM	Neighborhood	Radiance Research M903 (771)	4
530030004	Clarkston-13th St	Lewiston, ID-WA	03/2007	SLAMS	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530650005	Colville-E 1st St	Spokane-Spokane Valley, WA	10/2015	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530130002	Dayton-W Main St	None	02/2009	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530770019	Granger-E Mentzer Ave	Yakima, WA	10/2025	SPM	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530050002	Kennewick-Metaline	Kennewick-Richland, WA	08/2004	SLAMS	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8

[4] The Auburn-29th St monitor does not meet 40 C.F.R. Part 58, Appendix E Probe and Path Siting Criteria requirements due to its proximity to a line of trees approximately 8 meters from the probe.

AQS ID	Site Name	CBSA	Est.	Type	Scale	Method	POC
530330024	Lake Forest Park[5]	Seattle-Tacoma-Bellevue, WA	10/2003	SLAMS	Middle	Ecotech M9003 (812)	4
530630055	Liberty Lake-E Country Vista Dr	Spokane-Spokane Valley, WA	09/2025	SPM	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530150015	Longview-30th Ave	Longview, WA	03/2003	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530770018	Mabton-B St	Yakima, WA	10/2025	SPM	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530210002	Mesa-Pepiot Way	Kennewick-Richland, WA	01/2003	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530251002	Moses Lake-Balsam St	Moses Lake, WA	01/2004	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530570015	Mt Vernon-S Second St	Mount Vernon-Anacortes, WA	07/2005	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530090015	Neah Bay-Makah Tribe	Port Angeles, WA	02/2010	Tribal	Neighborhood	Radiance Research M903 (771)	4
530330017	North Bend-North Bend Way	Seattle-Tacoma-Bellevue, WA	03/2003	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530230001	Pomeroy-Pataha St	None	05/2017	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530090017	Port Angeles- E 5th St	Port Angeles, WA	04/2015	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530310003	Port Townsend-San Juan Ave	None	10/2002	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530050004	Prosser-Highland Dr	Kennewick-Richland, WA	10/2022	SPM	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530750003	Pullman-Dexter SE	Pullman, WA	10/2002	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530251003	Quincy-3rd Ave NE	Moses Lake, WA	06/2017	SPM	Neighborhood	Radiance Research M903 (771)	4
530490003	Raymond-4th St	None	10/2023	SPM	Neighborhood	Radiance Research M903 (771)	4

[5] The Lake Forest Park monitor does not meet 40 C.F.R. Part 58, Appendix E Probe and Path Siting Criteria requirements because it is located in a parking lot with adjacent trees.

AQS ID	Site Name	CBSA	Est.	Type	Scale	Method	POC
530010003	Ritzville-Alder St	Othello, WA	03/2001	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530750006	Rosalia-Josephine St	Pullman, WA	10/2002	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530331011	Seattle-South Park[6]	Seattle-Tacoma-Bellevue, WA	10/2003	SLAMS	Microscale	Ecotech M9003 (812)	4
530450007	Shelton-W Franklin	Shelton, WA	04/2011	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530630054	Spokane-E Sprague Ave	Spokane-Spokane Valley, WA	01/2024	SPM	Middle	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530630047	Spokane-Monroe St	Spokane-Spokane Valley, WA	05/2004	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530270011	Taholah-Quinault Tribe	Aberdeen, WA	04/2004	Tribal	Neighborhood	Radiance Research M903 (771)	4
530470009	Twisp-S Lincoln St	None	06/2020	SPM	Neighborhood	Radiance Research M903 (771)	4
530710005	Walla Walla-12th St	Walla Walla, WA	10/2002	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530650002	Wellpinit-Spokane Tribe	Spokane-Spokane Valley, WA	10/2008	Tribal	Neighborhood	Met One BAM 1022 w/$PM_{2.5}$ SCC (171)	8
530070011	Wenatchee-Fifth St	Wenatchee, WA	11/2012	SLAMS	Neighborhood	Radiance Research M903 (771)	4
530110022	Yacolt-Yacolt Rd	Portland-Vancouver-Hillsboro, OR-WA	07/2003	SLAMS	Neighborhood	Radiance Research M903 (771)	4

[6] The Seattle-South Park monitor does not meet 40 C.F.R. Part 58, Appendix E Probe and Path Siting Criteria requirements because the probe is affixed to the side of the building with only a 180-degree arc of free airflow.

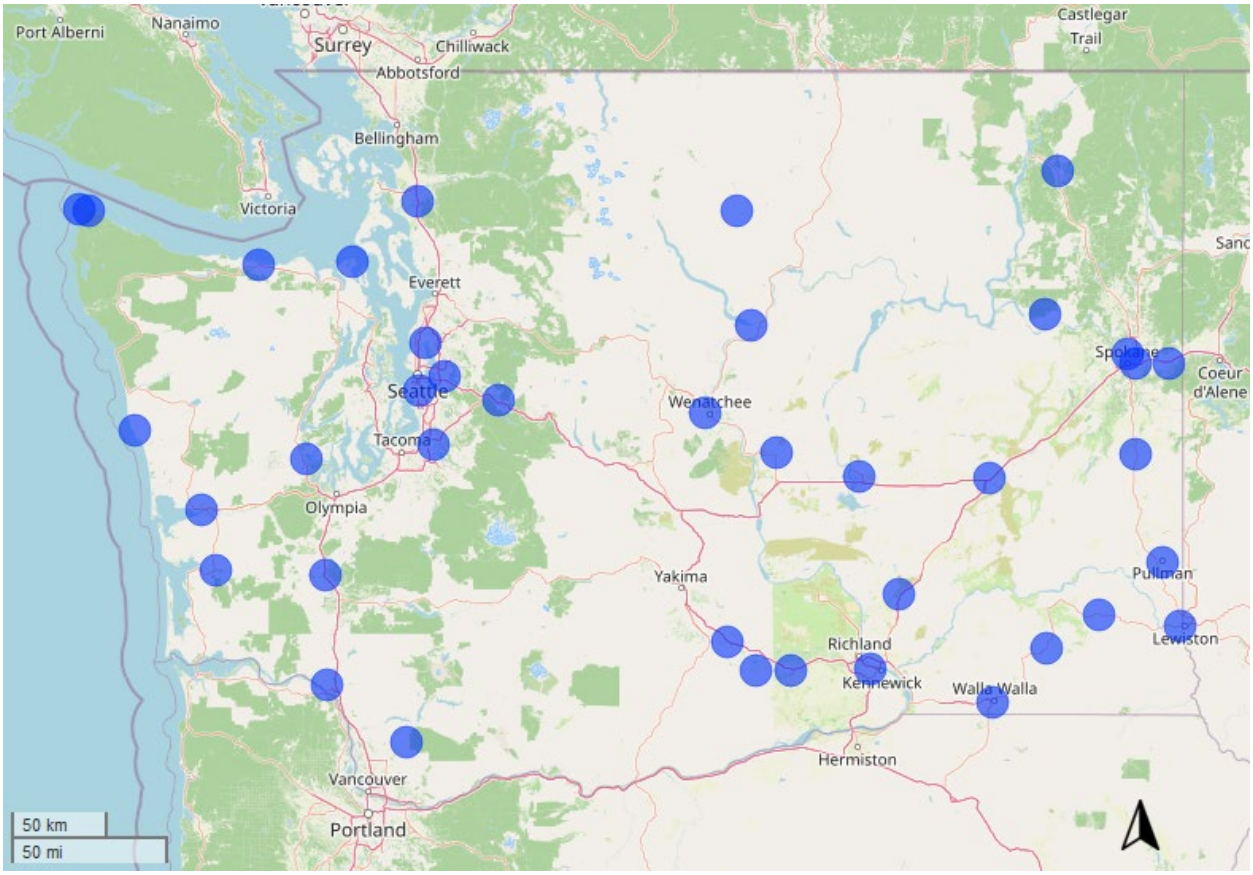


Figure 11. Map of Washington Network non-regulatory $PM_{2.5}$ monitoring sites

Regional background/transport requirements

Appendix D (4.7.3) of 40 C.F.R. Part 58 requires each state to operate at least one $PM_{2.5}$ monitoring site for regional background and one for regional transport. The Bahokas Peak NCore site serves as Washington's regional background site, and the Moses Lake SLAMS is designated as a regional transport site.

Recent modifications

Liberty Lake: SRCAA added a new SPM for non-regulatory $PM_{2.5}$ at the Liberty Lake-E Country Vista Dr monitoring site (530630055) on September 26, 2025.

Mabton: Ecology added a new SPM for non-regulatory $PM_{2.5}$ at Mabton-B St (530770018) on October 13, 2025.

Granger: Ecology added a new SPM for non-regulatory $PM_{2.5}$ at Granger-E Mentzer Ave (530770019) on October 13, 2025.

Bahokas Peak: ORCAA temporarily relocated NCore monitoring for non-regulatory $PM_{2.5}$ from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site (530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Leavenworth: Ecology discontinued the SPM for non-regulatory $PM_{2.5}$ at Leavenworth-Evans St (530070010) on July 26, 2025. Ecology added a SensWA to provide AQI information at the former site.

Tulalip: Ecology and the Tulalip Tribes retroactively discontinued the Tribal non-regulatory $PM_{2.5}$ monitor at Tulalip-Totem Beach Rd (530610021) as of May 26, 2025. Ecology and the Tulalip Tribes added a SensWA to provide AQI information at a nearby location.

LaCrosse: Ecology discontinued the LaCrosse-Hill St (530750005) SLAMS for non-regulatory $PM_{2.5}$ on June 2, 2026. This network modification was approved by EPA Region 10 in the response to Ecology's 2025 Ambient Air Monitoring Network Plan. Ecology added a SensWA to provide AQI information at the former site.

Recommended/proposed modifications

Ellensburg: As described in the Regulatory $PM_{2.5}$ section above, Ecology proposes to replace the SLAMS for regulatory $PM_{2.5}$ at Ellensburg-Ruby St (530370002) with a SPM for non-regulatory $PM_{2.5}$ on January 1, 2027. The analysis supporting this proposed network modification was described in Ecology's 2025 Ambient Air Monitoring Network Assessment. Ecology seeks EPA Regional Administrator approval for this SLAMS network modification.

Pomeroy: Ecology proposed to discontinue the Pomeroy-Pataha St non-regulatory $PM_{2.5}$ SLAMS nephelometer in 2025. This network modification was approved in EPA Region 10's response to Ecology's 2025 Ambient Air Monitoring Network Plan. Ecology has delayed the discontinuation but expects to make this modification in 2026 or 2027. Ecology plans to add a SensWA to provide AQI information at the former site.

Moses Lake, Ritzville, and Rosalia: Ecology proposes to discontinue the Ritzville-Alder St (530010003), Rosalia-Josephine St (530750006), and Moses Lake-Balsam St (530251002) non-regulatory SLAMS nephelometers. These three sites are part of Ecology's Agricultural Burn (AgBurn) network used for smoke management associated with commercial agricultural burning. Due to routinely low concentrations and infrequent smoke impacts at these sites, Ecology's AgBurn team has determined that smoke in these communities can be adequately monitored using SensWA. Ecology plans to add SensWA to provide AQI information at the former sites.

As non-regulatory nephelometers, these monitors cannot definitively demonstrate "attainment" following the criteria in 40 C.F.R. Part 58.14(c)(1). However, based on the available $PM_{2.5}$ data from the correlated nephelometers, the probability of exceeding 80 percent of either the 24-hour or the annual $PM_{2.5}$ NAAQS is below the required 10 percent threshold for discontinuation in 58.14(c)(1).

Estimated annual and 24-hour design values are shown in Figure 12 and Figure 13, with the NAAQS shown in the dashed line and 80% of the NAAQS shown in the dotted line.

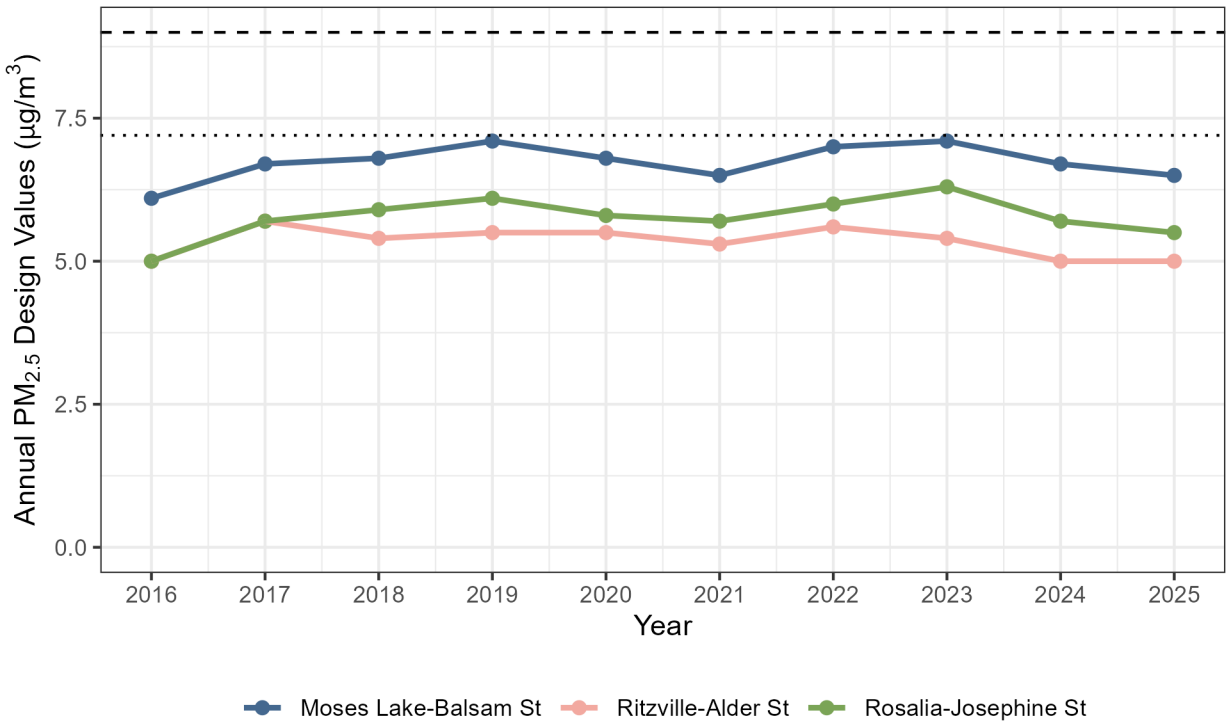


Figure 12. Estimated annual $PM_{2.5}$ design values, Moses Lake, Ritzville, and Rosalia, 2016-2025

While all three sites are routinely impacted by wildfire smoke, in 2017-2018 and 2020-2021, eastern Washington experienced extreme and prolonged wildfire smoke impacts that had double-digit impacts on 24-hour design values. Ecology calculated estimated 24-hour design values both with and without the inclusion of exceedances of the 24-hour NAAQS that were flagged with informational wildfire flags on nearby regulatory monitoring sites. The wildfire-influenced 24-hour estimated design values are shown in the dashed line, and the calculations without these data included are shown in the solid line.

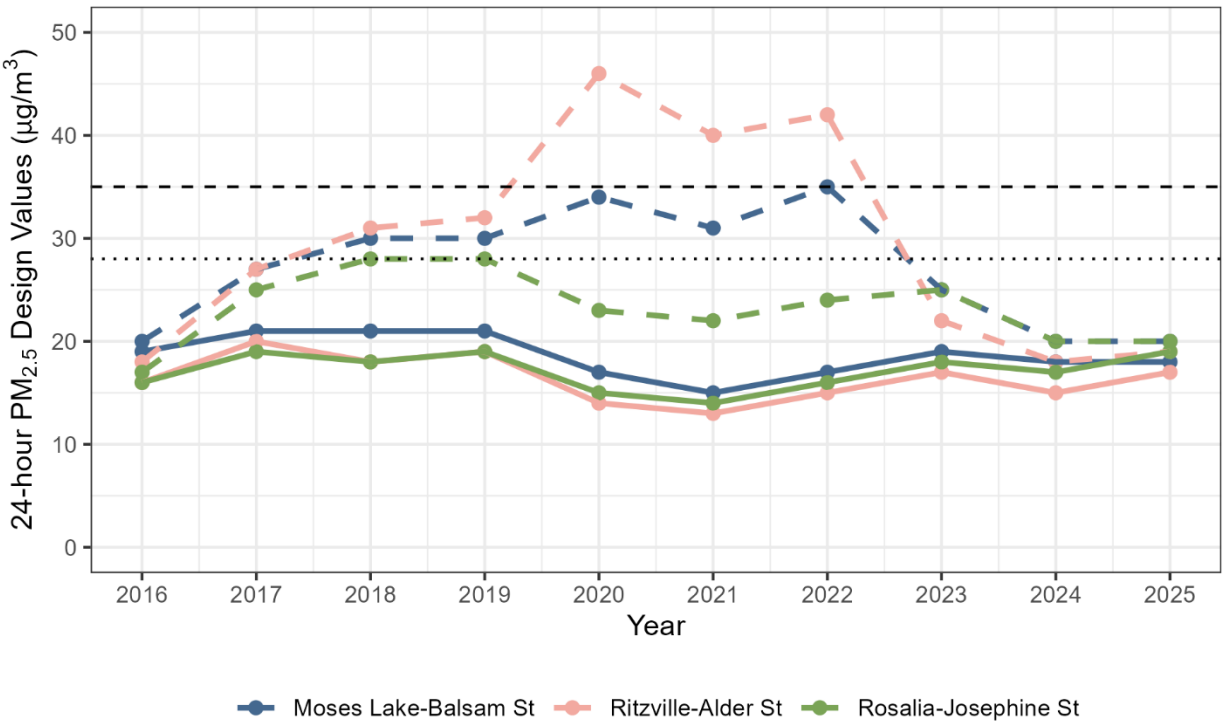


Figure 13. Estimated 24-hour $PM_{2.5}$ design values, Moses Lake, Ritzville, and Rosalia, 2016-2025

24-hour estimated design values are shown excluding exceedances of the 24-hour NAAQS flagged as wildfire-influenced. Estimated design values calculated from all data are provided in parenthesis. Because all annual design values were below the level of the NAAQS and had a probability of less than 10% of exceeding 80% of the NAAQS with all data included, annual design values were not analyzed excluding data flagged as influenced by wildfire smoke.

Table 16. Moses Lake, Ritzville, and Rosalia estimated $PM_{2.5}$ design values, 2016-2025.

Year	Site	Annual design value (µg/m³)	24-hour design value (µg/m³)
2016	Moses Lake-Balsam St	6.1	19 (20)
2017	Moses Lake-Balsam St	6.7	21 (27)
2018	Moses Lake-Balsam St	6.8	21 (30)
2019	Moses Lake-Balsam St	7.1	21 (30)
2020	Moses Lake-Balsam St	6.8	17 (34)
2021	Moses Lake-Balsam St	6.5	15 (31)
2022	Moses Lake-Balsam St	7.0	17 (35)
2023	Moses Lake-Balsam St	7.1	19 (25)
2024	Moses Lake-Balsam St	6.7	18 (20)
2025	Moses Lake-Balsam St	6.5	18 (20)
2016	Ritzville-Alder St	5.0	16 (18)
2017	Ritzville-Alder St	5.7	20 (27)
2018	Ritzville-Alder St	5.4	18 (31)
2019	Ritzville-Alder St	5.5	19 (32)

2020	Ritzville-Alder St	5.5	14 (46)
2021	Ritzville-Alder St	5.3	13 (40)
2022	Ritzville-Alder St	5.6	15 (42)
2023	Ritzville-Alder St	5.4	17 (22)
2024	Ritzville-Alder St	5.0	15 (18)
2025	Ritzville-Alder St	5.0	17 (19)
2016	Rosalia-Josephine St	5.0	16 (17)
2017	Rosalia-Josephine St	5.7	19 (25)
2018	Rosalia-Josephine St	5.9	18 (28)
2019	Rosalia-Josephine St	6.1	19 (28)
2020	Rosalia-Josephine St	5.8	15 (23)
2021	Rosalia-Josephine St	5.7	14 (22)
2022	Rosalia-Josephine St	6.0	16 (24)
2023	Rosalia-Josephine St	6.3	18 (25)
2024	Rosalia-Josephine St	5.7	17 (20)
2025	Rosalia-Josephine St	5.5	19 (20)

Ecology requests EPA Region 10 Administrator approval to discontinue the Moses Lake-Balsam St, Ritzville-Alder St, and Rosalia-Josephine St SLAMS for nonregulatory $PM_{2.5}$ under the criteria provided for in 40 C.F.R. Part 58.14(c)(1): "Any $PM_{2.5}$, O_3, CO, PM_{10}, SO_2, Pb, or NO_2 SLAMS monitor which has shown attainment during the previous five years, that has a probability of less than 10 percent of exceeding 80 percent of the applicable NAAQS during the next three years based on the levels, trends, and variability observed in the past, and which is not specifically required by an attainment plan or maintenance plan".

The probability of exceeding 80 percent of the $PM_{2.5}$ NAAQS is assessed according to the calculation method described in EPA's 2007 Ambient Air Monitoring Network Assessment Guidance, which is provided as Equation 1 in the Regulatory $PM_{2.5}$ section above.

Ecology calculated this probability using the estimated 24-hour design values calculated without the inclusion of days flagged as wildfire-influenced.

Table 17. Calculations for probability of a NAAQS violation at Moses Lake-Balsam St, Ritzville-Alder St, and Rosalia-Josephine St

Site	Form	Comparison Value (left side of Equation 1) (µg/m^3)	80% of NAAQS (µg/m^3)
Moses Lake-Balsam St	Annual	6.9	7.2
Moses Lake-Balsam St	24-hour	19.8 (30.5)	28
Ritzville-Alder St	Annual	5.5	7.2
Ritzville-Alder St	24-hour	17.7 (30.8)	28
Rosalia-Josephine St	Annual	6.0	7.2
Rosalia-Josephine St	24-hour	18.1 (24.2)	28

For both the annual and 24-hour standards at all three sites, the comparison values (left side of Equation 1) are less than 80% of the NAAQS, and thus the probability of exceeding 80% of the NAAQS is less than 10%.

All three monitoring sites are located in Micropolitan Statistical Areas: Moses Lake-Balsam St in the Moses Lake, WA µSA, Ritzville-Alder St in the Othello, WA µSA, and Rosalia-Josephine St in the Pullman, WA µSA. Following the minimum monitoring requirements described in 40 C.F.R. Part 58, Appendix D, no monitoring sites are required in Micropolitan Statistical Areas. After removing days flagged as influenced by wildfires, estimated design values at all three sites are below both $PM_{2.5}$ NAAQS and have a probability of less than 10% of exceeding 80% of both NAAQS. No site is required by an attainment plan or maintenance plan. Therefore, Ecology has determined that the criteria for discontinuation in 40 C.F.R. Part 58.14(c)(1) are met.

The Moses Lake-Balsam St monitor is the state's designated regional transport monitor, as required by 40 C.F.R. Part 58 Appendix D 4.7.3. Moses Lake was chosen in order to capture the impacts of wildfire smoke transport between eastern and western Washington. Upon discontinuation of the site, Ecology plans to designate the North Bend-North Bend Way non-regulatory $PM_{2.5}$ monitor as the state's regional transport monitor. North Bend is similarly positioned to provide information about regional transport of wildfire smoke between eastern and western Washington.

Particulate matter ≤10 µm (PM_{10}, 81102)

There are eight PM_{10} monitoring sites in the Washington Network. All have a monitoring objective of population exposure with the exception of Seattle-Beacon Hill, which has a monitoring objective of general/background, and Everett-Beverly Park Rd, which has a monitoring objective of highest concentration. All monitor for PM_{10} with BAM 1020s (Method 122) using POC 5.

Table 18. Washington Network PM_{10} monitoring sites

AQS ID	Site Name	CBSA	Est.	Type	Scale
530710006	Burbank-Maple St	Walla Walla, WA	08/2017	SLAMS	Neighborhood
530650005	Colville-E 1st St	Spokane-Spokane Valley, WA	10/2015	SLAMS	Neighborhood
530610022	Everett-Beverly Park Rd	Seattle-Tacoma-Bellevue, WA	06/2024	SPM	Micro
530050002	Kennewick-Metaline	Kennewick-Richland, WA	10/1994	SLAMS	Neighborhood
530330080	Seattle-Beacon Hill	Seattle-Tacoma-Bellevue, WA	03/2003	SLAMS, NCore	Urban
530330057	Seattle-Duwamish	Seattle-Tacoma-Bellevue, WA	07/2024	SLAMS	Neighborhood
530630017	Spokane Valley-E Broadway Ave	Spokane-Spokane Valley, WA	03/2021	SLAMS	Neighborhood
530770009	Yakima-4th Ave S	Yakima, WA	04/2000	SLAMS	Neighborhood

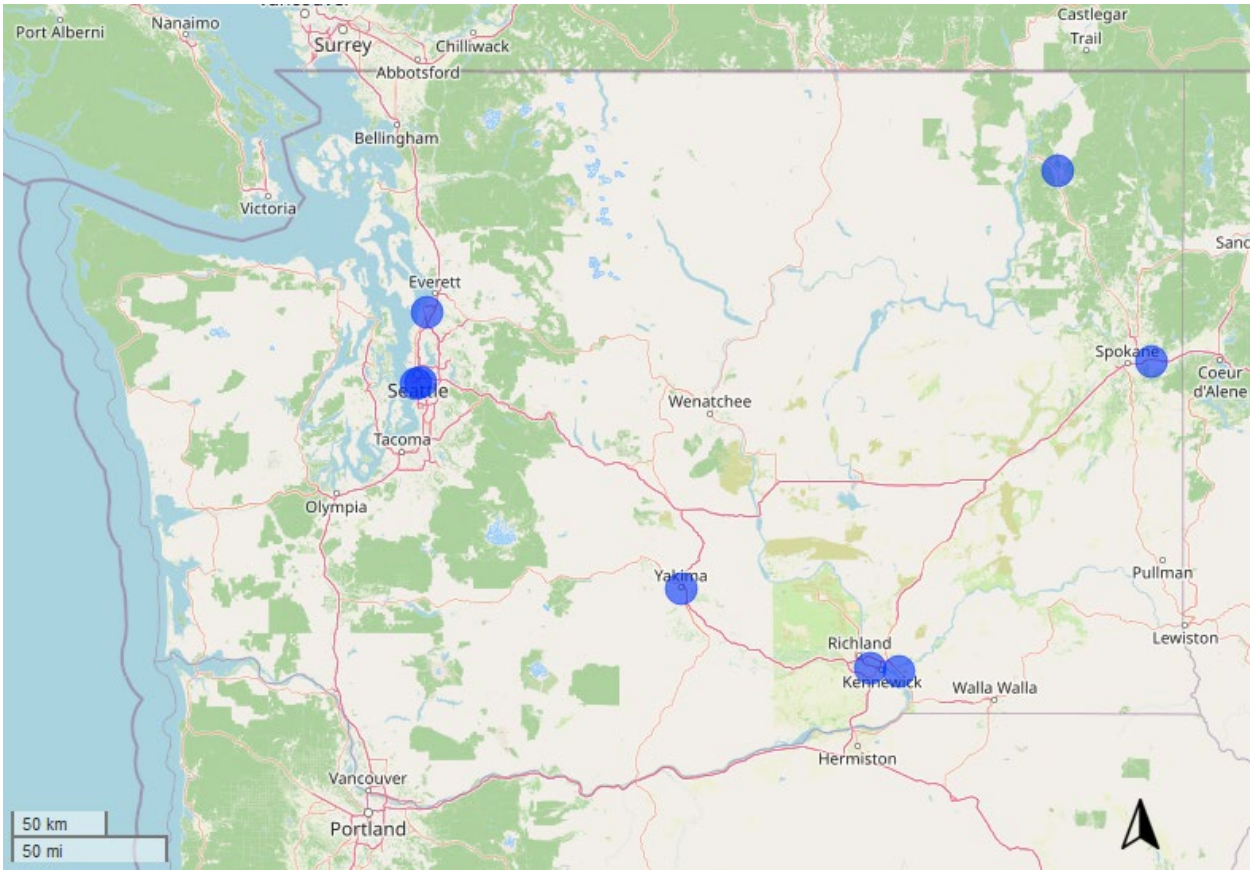


Figure 14. Map of Washington Network PM_{10} monitoring sites

The Washington Network is currently not meeting the PM_{10} minimum monitoring requirements defined in 40 C.F.R. Part 58 Appendix D in all metropolitan areas, as summarized in Table 19, and has approved waivers from EPA Region 10 for the remaining unmet requirements.

Table 19. EPA minimum monitoring requirements for PM_{10}

Core-Based Statistical Area	2025 Population Estimate	Maximum 24-hour concentration in µg/m^3 (2023-2025)	Number of Required Monitors	Number of Existing Monitors
Seattle-Tacoma-Bellevue, WA	4,161,883	47 (Seattle-Beacon Hill)	2	2
Portland-Vancouver-Hillsboro, OR-WA	2,542,282	41 (Portland-SE Lafayette)	2	2
Spokane-Spokane Valley, WA	608,012	281 (Spokane Valley-E Broadway Ave)	4	2*
Kennewick-Richland, WA	324,334	209 (Kennewick-Metaline)	3	1*
Yakima, WA	259,185	177 (Yakima-4th Ave S)	1	1
Walla Walla, WA	62,361	226 (Burbank-Maple St)	0	1

*EPA Region 10 issued Ecology a waiver for the unmet monitoring requirements in the Kennewick-Richland and Spokane-Spokane Valley CBSAs in its February 12, 2025, response to Ecology's 2024 Ambient Air Quality Network Plan, effective for five years. A copy of that correspondence is provided in Appendix B.

Recent modifications

None.

Recommended/proposed modifications

None.

Meteorological monitoring (61101/61102/61103/61104/62101)

There are 13 meteorological monitoring sites in the Washington Network. The Kennewick-Metaline meteorological monitors are currently suspended pending a roof renovation project in 2025-2026. All Washington Network meteorological monitoring sites collect scalar and vector wind speed and direction using RM Young or Vaisala sonic anemometers (method codes 062 and 060, respectively) and ambient temperature under method code 040 (electronic or machine average). All Washington Network meteorological sites follow EPA's monitoring guidelines for prevention of significant deterioration (PSD).

Table 20. Washington Network meteorological monitoring sites

AQS ID	Site Name	Established	Type	Scale
530710006	Burbank-Maple St	03/2018	SLAMS	Urban
530090019	Bahokas Peak	11/2025	SLAMS, NCore	Urban

AQS ID	Site Name	Established	Type	Scale
530650005	Colville-E 1st St	05/2016	SLAMS	Urban
530050002	Kennewick-Metaline (suspended)	08/2012	SLAMS	Urban
530330017	North Bend-North Bend Way	01/2000	SLAMS	Urban
530470013	Omak-Colville Tribe	10/2010	Tribal	Urban
530251003	Quincy-3rd Ave NE	06/2017	SPM	Urban
530330030	Seattle-10th & Weller	04/2014	SLAMS, Near-road	Urban
530330080	Seattle-Beacon Hill	01/1991	SLAMS, NCore	Urban
530530024	Tacoma-S 36th St	02/2016	SLAMS, Near-road	Urban
530770015	Toppenish-Yakama Tribe	06/2009	Tribal	Urban
530110011	Vancouver-Blairmont Dr	12/2007	SLAMS	Urban
530070011	Wenatchee-Fifth St	11/2012	SLAMS	Urban

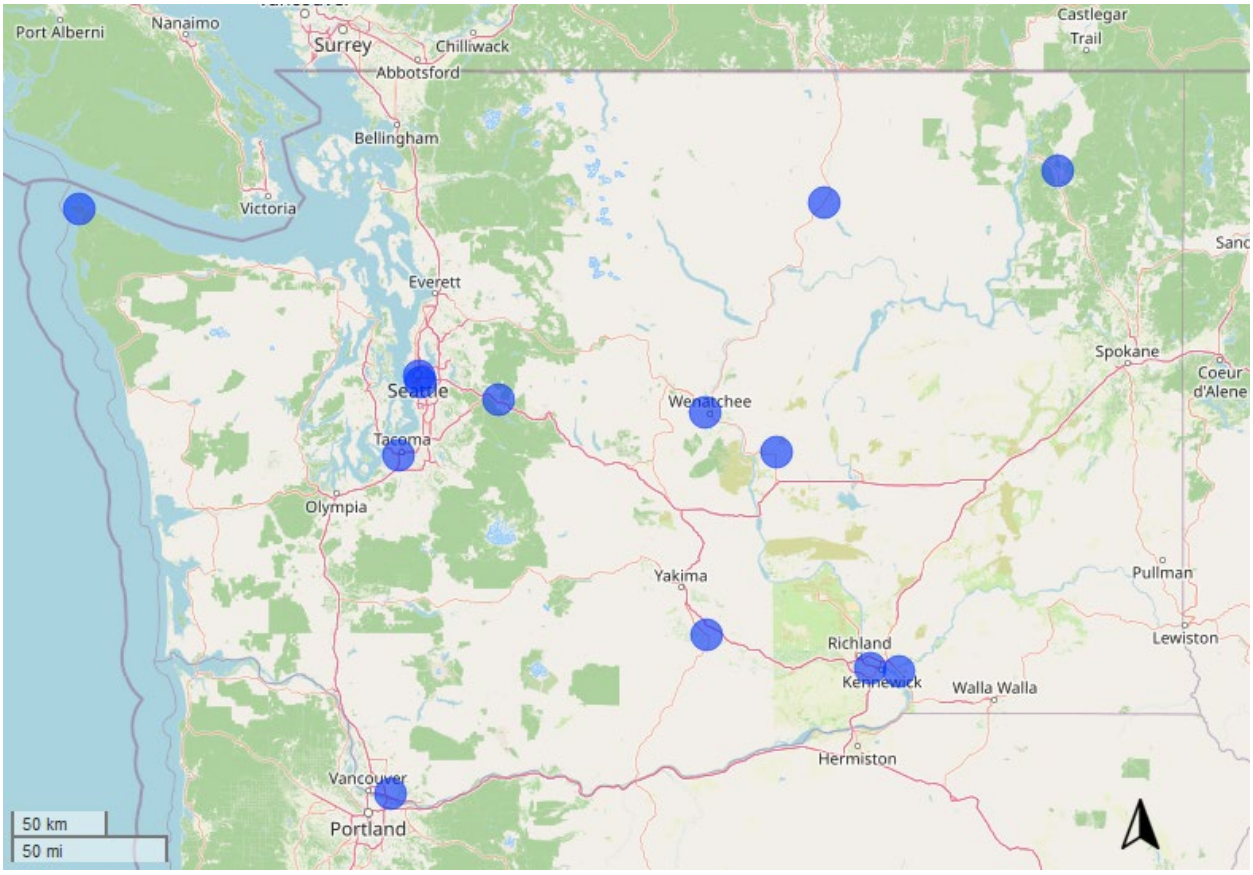


Figure 15. Map of Washington Network meteorological monitoring sites

Recent modifications

Bahokas Peak: ORCAA temporarily relocated NCore meteorological monitoring from the former Cheeka Peak monitoring site (530090013) to the new Bahokas Peak monitoring site

(530090019) in November 2025. This network modification was approved by EPA OAQPS in correspondence to Ecology on August 21, 2025.

Kennewick: Ecology temporarily suspended meteorological monitoring at the Kennewick-Metaline monitoring site (530050002) in August 2025 due to a planned construction project on the roof of the school where the site is located. The construction project required the meteorological tower to be temporarily removed from the roof. Ecology expects to reestablish meteorological monitoring in 2026 or 2027.

Recommended/proposed modifications: None.

Lead (Pb)

Ecology reports Pb in PM_{10} concentrations as part of the National Air Toxics Trends Station (NATTS) monitoring at Seattle-Beacon Hill (530330080). At the request of EPA, Ecology ceased reporting to parameter code 85129 and began reporting to parameter code 85128 (POC 6) as of January 1, 2019. The monitor has an objective of population exposure.

As described in 40 C.F.R. Part 58, Appendix D (4.5), source-oriented lead monitoring is required in the vicinity of sources that emit 0.5 tons per year or more of lead. No Washington Pb sources exceeded 0.5 tons per year in the 2023 National Emissions Inventory, and therefore no source-oriented Pb monitoring is required.

Chemical Speciation Network (CSN)

Ecology and its partners operate 4 speciation monitoring sites as part of the national Chemical Speciation Network, including one Speciation Trends Network (STN) site and three supplemental CSN sites. Monitoring objectives, methods and POCs vary by site and parameter.

Table 21. Washington Chemical Speciation Network monitoring sites

AQS ID	Site Name	CBSA	Established	Type	Scale
530330080	Seattle-Beacon Hill	Seattle-Tacoma-Bellevue, WA	02/2000	Speciation Trends Network (STN)	Urban
530530029	Tacoma-L St	Seattle-Tacoma-Bellevue, WA	01/2006	Supplemental CSN	Neighborhood
530770015	Toppenish-Ward Rd (Yakama Tribe)	Yakima, WA	11/2023	Supplemental CSN	Neighborhood
530770009	Yakima-4th Ave S	Yakima, WA	11/2007	Supplemental CSN	Neighborhood

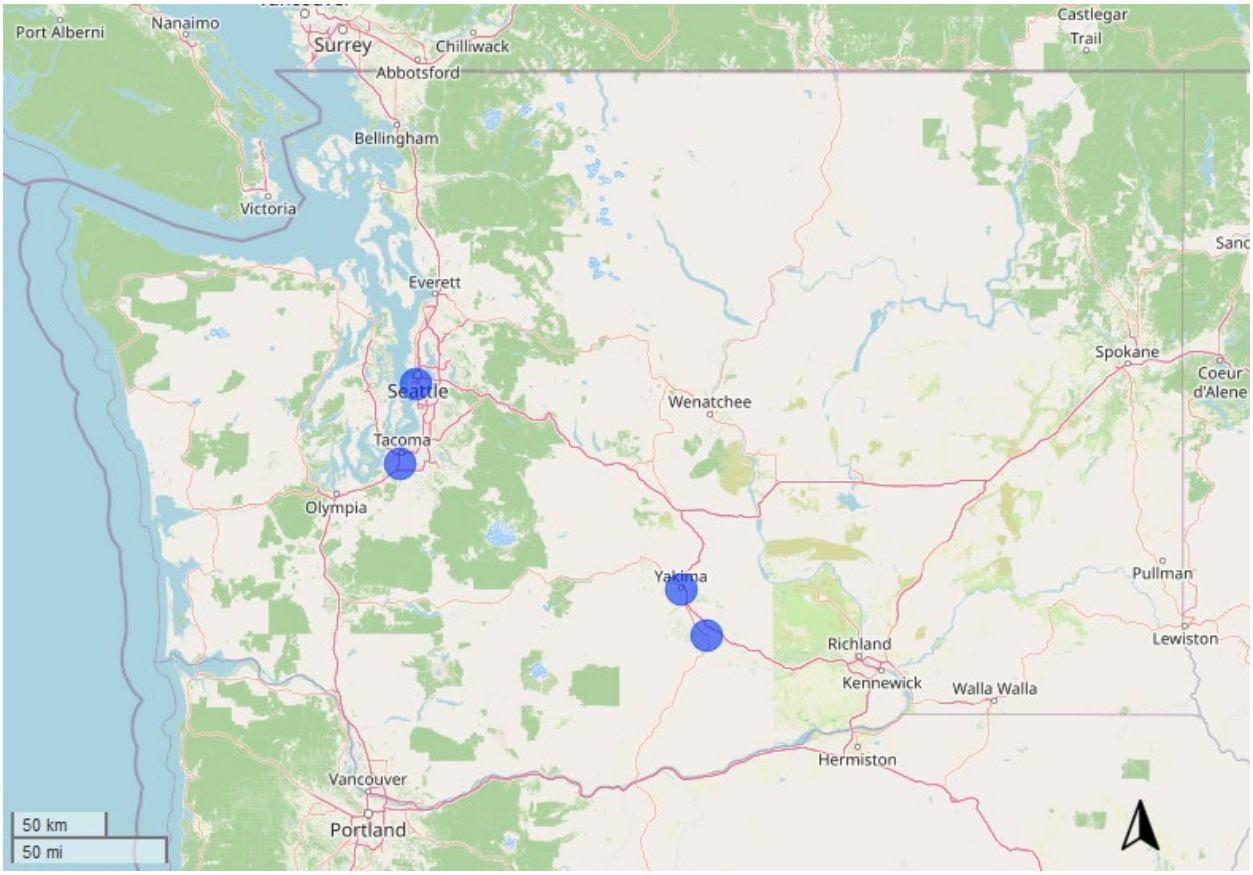


Figure 16. Map of Washington Chemical Speciation Network monitoring sites

Each speciation site samples the following parameters:

Table 22. Chemical Speciation Network monitoring parameters

Code	Parameter	Code	Parameter	Code	Parameter	Code	Parameter
88102	Antimony	88126	Iron	88167	Zinc	88370	OC CSN Rev Unadjusted
88103	Arsenic	88128	Lead	88168	Strontium	88374	OC1 CSN Rev Unadjusted
88104	Aluminum	88131	Indium	88169	Sulfur	88375	OC2 CSN Rev Unadjusted
88107	Barium	88132	Manganese	88176	Rubidium	88376	OC3 CSN Rev Unadjusted
88109	Bromine	88136	Nickel	88180	Potassium	88377	OC4 CSN Rev Unadjusted
88110	Cadmium	88140	Magnesium	88184	Sodium	88378	OP CSN Rev Unadjusted
88111	Calcium	88152	Phosphorus	88185	Zirconium	88380	EC CSN Rev Unadjusted
88112	Chromium	88154	Selenium	88301	Ammonium Ion	88383	EC1 CSN Rev Unadjusted
88113	Cobalt	88160	Tin	88302	Sodium Ion	88384	EC2 CSN Rev Unadjusted
88114	Copper	88161	Titanium	88303	Potassium Ion	88385	EC3 CSN Rev Unadjusted
88115	Chlorine	88164	Vanadium	88306	Total Nitrate	88388	OP CSN Rev Unadjusted
88117	Cerium	88165	Silicon	88355	OC CSN Rev Unadjusted	88403	Sulfate
88118	Cesium	88166	Silver	88357	EC CSN Rev Unadjusted	88502	$PM_{2.5}$ Speciation Mass

Recent modifications

None.

Recommended/proposed modifications

Ecology proposes to relocate the Supplemental CSN monitors at the Tacoma-L St monitoring site (530530029) to a new monitoring site at Tacoma-S 35th and Windom St (530530035) in summer 2026. The analysis supporting discontinuation of Supplemental CSN monitoring at Tacoma-L St was described in Ecology's 2025 Ambient Air Monitoring Network Assessment. Briefly, Ecology has operated Supplemental CSN monitors at Tacoma-L St since 2007. Over that time period, $PM_{2.5}$ concentrations have declined, and sources of $PM_{2.5}$ at Tacoma-L St have been thoroughly characterized by analysis of the available data.

The new Tacoma-S 35th and Windom St site will have SPMs for $PM_{2.5}$ and NO_2 as well as an aethalometer to measure UV and black carbon. The purpose of the site will be to characterize air quality impacts of a new warehouse development in Tacoma, which is expected to bring substantial diesel truck traffic to a previously unmonitored neighborhood. Ecology expects that Supplemental CSN monitoring will provide value in addressing the relative contributions of diesel exhaust sources to concentrations of $PM_{2.5}$ at a new monitoring site.

Proposed site name: Tacoma-S 35th and Windom St

Start date: August 2026

AQS ID: 530530035

Street address: 3410 S 35th St, Tacoma, WA 98409

Geographic coordinates: (47.228106, -122.479455)

CBSA represented: Seattle-Tacoma-Bellevue, WA MSA

Distance to any obstructions and obstruction height: None.

Distance to nearest road: 10 meters

Traffic count of nearest road: 2,406 AADT

Method: MetOne SASS/URG

Operating schedule: 1:6

Monitoring objective: Highest concentration/source impact

Spatial scale of representativeness: Micro scale

Probe height: 2 meters

An aerial photo and map of the nearby area are shown in Figure 17 and Figure 18 (source: Google Earth).

Figure 17. Aerial photo of proposed Tacoma-S 35th and Windom St site

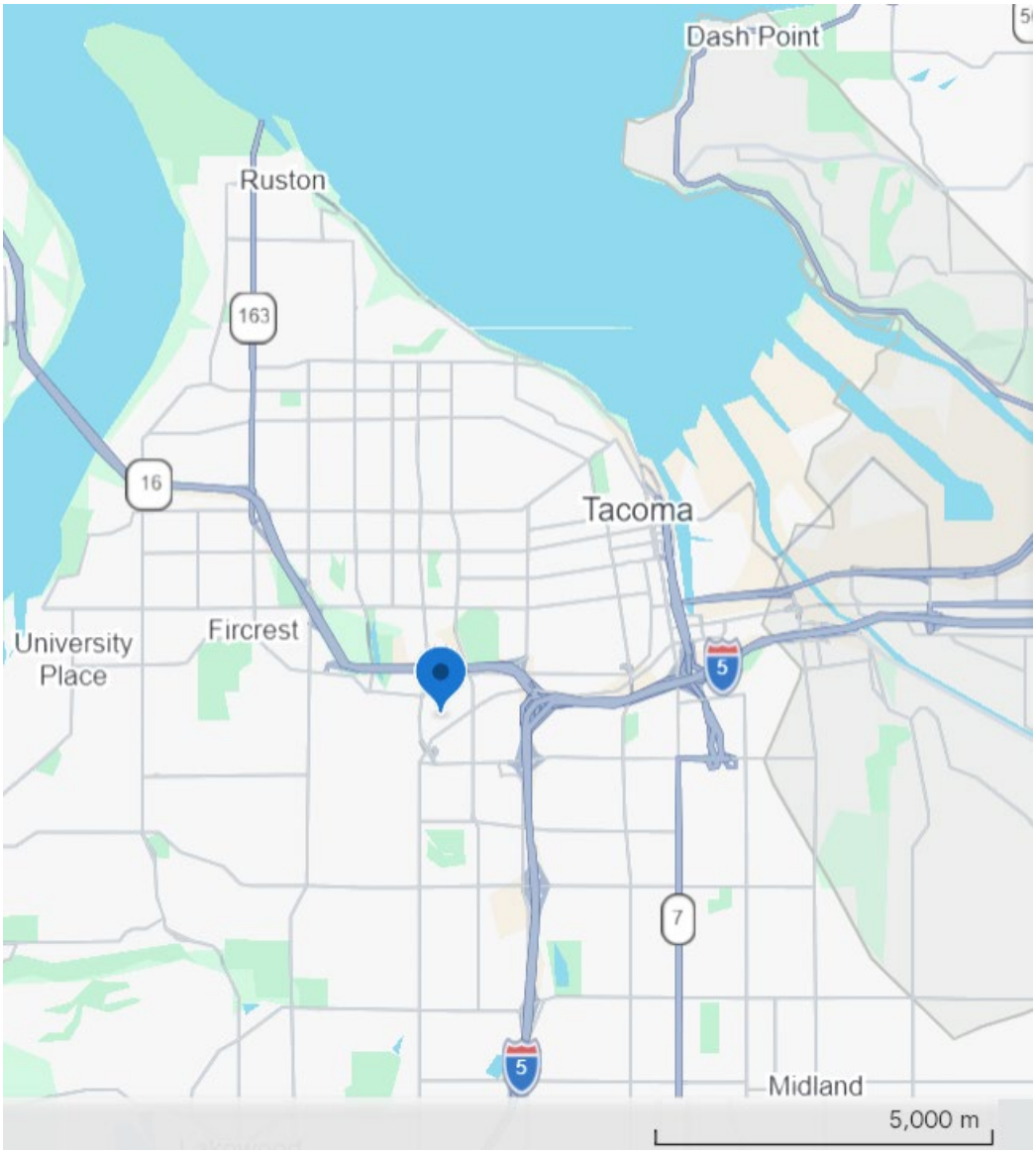


Figure 18. Map of proposed Tacoma-S 35th and Windom St site

Directional photos from the proposed site facing north, east, south, and west are provided in Figure 19 through Figure 22 (source: Google Maps).

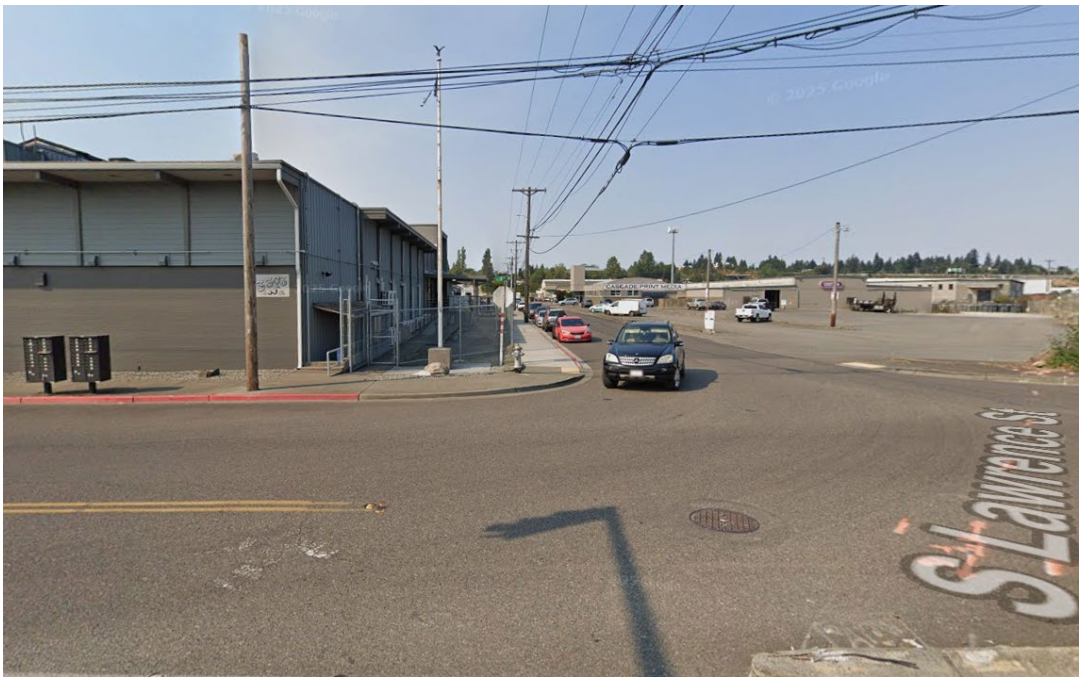


Figure 19. Photo from proposed Tacoma-S 35th and Windom St site facing north

Figure 20. Photo from proposed Tacoma-S 35th and Windom St site facing east

Figure 21. Photo from proposed Tacoma-S 35th and Windom St site facing south

Figure 22. Photo from proposed Tacoma-S 35th and Windom St site facing west

The dominant wind direction in the area, as measured at the Tacoma-S 36th St monitoring site (530530024) approximately 1.5km away, is from the southwest. North to northeast winds are also frequent, as shown in the wind rose in Figure 23.

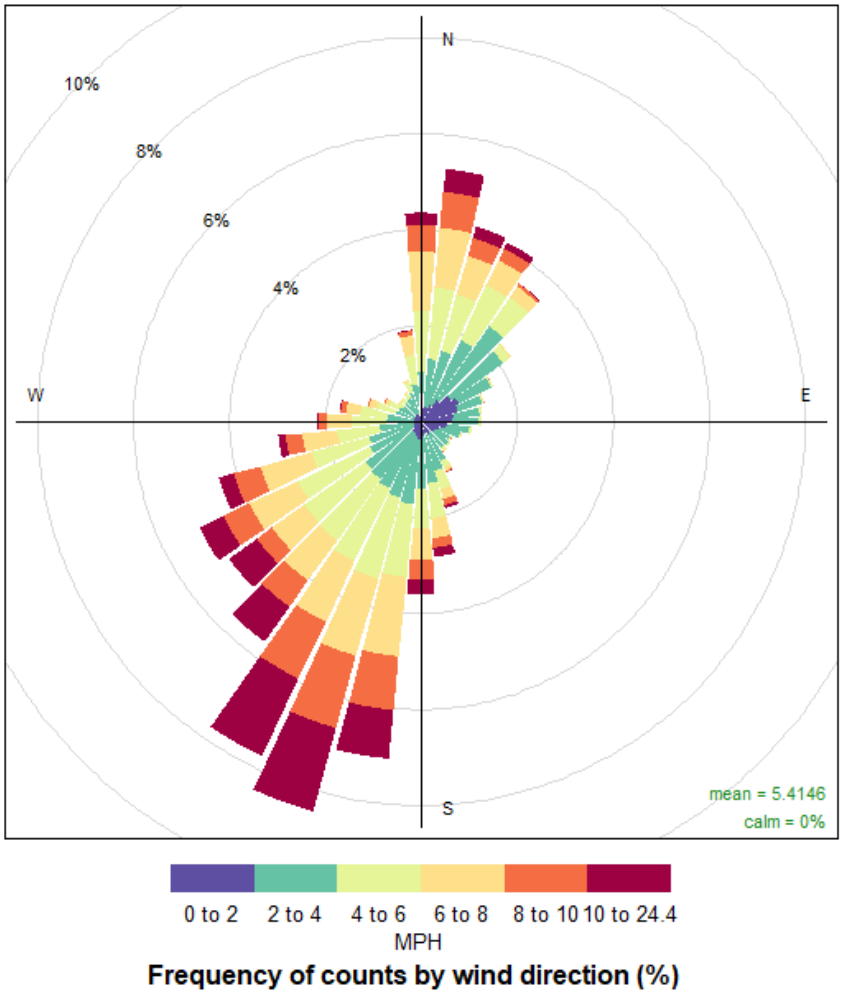


Figure 23. Wind rose showing year-round wind patterns at Tacoma-S 36th St (530530024), 2021-2025

National Core (NCore)

There are two NCore sites in the Washington Network: Seattle-Beacon Hill (530330080) is an urban NCore site in the Seattle-Tacoma-Bellevue, WA CBSA, and Bahokas Peak (530090019) is a rural NCore site in the Port Angeles, WA CBSA. The parameters monitored at each site are summarized in Table 23. ORCAA is funded directly by EPA for operation of the Bahokas Peak NCore site. Per ORCAA's arrangement with EPA, the site does not include FRM/FEM $PM_{2.5}$, $PM_{10-2.5}$ or NO_2 monitoring.

Table 23. NCore parameters monitored at Bahokas Peak and Seattle-Beacon Hill

Parameter	Bahokas Peak	Seattle-Beacon Hill
Trace CO (42101)	✓	✓

Parameter	Bahokas Peak	Seattle-Beacon Hill
Trace NO_y (42600)	✓	✓
Area-wide NO_2 (42602)		✓
Ozone (44201)	✓	✓
Trace SO_2 (42401)	✓	✓
Filter-based PM_{10} (85101)		✓
Filter-based $PM_{2.5}$ (88101)	(IMPROVE only)	✓
Continuous FEM $PM_{2.5}$ (88101)		✓
Nephelometer $PM_{2.5}$ (88502)	✓	
Meteorological (61101/61102/61103/61104/62101/64101/62201)	✓	✓
$PM_{2.5}$ speciation	(IMPROVE only)	IMPROVE and CSN
$PM_{10-2.5}$ (86101)		✓

Recommended/proposed modifications

In 2025, Ecology and ORCAA proposed a temporary, 1-year relocation of the former Cheeka Peak National Core (NCore) site (530090013) to nearby Bahokas Peak (530090019) due to an unplanned and protracted loss of electrical power at Cheeka Peak. This modification was approved in correspondence from EPA's then-Office of Air Quality Planning and Standards (now Office of State Air Partnerships) in August 2025.

Ecology committed to revisit this temporary relocation in the 2026 Ambient Air Monitoring Network Plan. As the former Cheeka Peak site is still without electrical power as of spring 2026, ORCAA does not anticipate that relocation will be possible for the foreseeable future. Ecology plans to revisit the status of the relocation in the 2027 Ambient Air Monitoring Network Plan.

Seattle-Beacon Hill: In the 2025 Ambient Air Monitoring Network Plan, Ecology described the slight relocation of the Seattle-Beacon Hill site (530330080) planned within Jefferson Park to a new location approximately 290 meters northwest of the current location. While initially planned for winter 2025-2026, this relocation has been delayed to late 2026.

National Air Toxics Trends Station (NATTS)

Seattle-Beacon Hill (530330080) is a National Air Toxics Trends Station (NATTS) as well as a CSN, NCore and SLAMS site.

Photochemical Assessment Monitoring Station (PAMS)

Ecology is required to conduct PAMS measurements at the Seattle-Beacon Hill NCore site (530330080), as PAMS measurements are required at each NCore site in a core-based statistical area (CBSA) with population 1,000,000 or more (40 C.F.R. Part 58 Appendix D), which applies to the Seattle-Tacoma-Bellevue, WA CBSA.

The following PAMS parameters are monitored at Seattle-Beacon Hill:

- Hourly averaged VOCs
- Three 8-hour average carbonyl samples per day on a 1/3 schedule
- Hourly averaged O_3
- Hourly averaged NO, true nitrogen dioxide (NO_2), and total reactive nitrogen (NO_y)
- Hourly averaged ambient temperature
- Hourly vector-averaged wind direction
- Hourly vector-averaged wind speed
- Hourly average atmospheric pressure
- Hourly averaged relative humidity
- Hourly precipitation
- Hourly averaged mixing height

In November 2020, EPA Region 10 approved a waiver request to collect the required solar and ultraviolet radiation parameters at the Seattle-Duwamish site (530330057) as an alternative location due to the lack of suitable space for those measurements at Seattle-Beacon Hill. In May 2026, Ecology requested a 1-year extension of this waiver in order to continue collecting these measurements at Seattle-Duwamish through the 2026 PAMS season. Ecology plans to relocate these parameters to the new Seattle-Beacon Hill location for the 2027 PAMS season.

Recommended/proposed modifications

As described in the NCore section above, Ecology is planning a slight relocation of the Seattle-Beacon Hill site within Jefferson Park to a new location approximately 300 meters northeast of the current location. Once the site is relocated, there will be sufficient space to relocate solar and ultraviolet radiation monitoring to Seattle-Beacon Hill from Seattle-Duwamish. Ecology expects to relocate monitoring for these parameters prior to the start of the 2027 PAMS season.

References

Ambient Air Monitoring Reference and Equivalent Methods, 40 C.F.R. Part 53, 2024.

Ambient Air Quality Surveillance, 40 C.F.R. Part 58, 2024.

Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), EPA-450/4-87-007, May 1987.

National Primary and Secondary Ambient Air Quality Standards, 40 C.F.R. Part 50, 2024.

U.S. Census Bureau. "State-based Metropolitan and Micropolitan Statistical Areas Maps." https://www.census.gov/geographies/reference-maps/2020/demo/state-maps.html (February 2022).

U.S. Census Bureau. "Metropolitan and Micropolitan Statistical Areas Population Totals: 2020-2025." https://www.census.gov/data/tables/time-series/demo/popest/2020s-total-metro-and-micro-statistical-areas.html (April 2026).

U.S. EPA. "Ambient Air Monitoring Network Assessment Guidance." https://www.epa.gov/sites/default/files/2020-01/documents/network-assessment-guidance.pdf (February 2007).

Appendices

Appendix A. Criteria Pollutant Design Values

Table 24 through Table 30 show criteria pollutant design values for all sites in the Washington Network.

Table 24. Carbon monoxide (CO) 2025 design values

Site	AQS ID	2025 Exceedances
Cheeka Peak	530090013	0
Seattle 10th & Weller	530330030	0
Seattle Beacon Hill	530330080	0

Table 25. Nitrogen dioxide (NO_2) 2025 design values (ppb)

Site	AQS ID	2023 98th Percentile	2024 98th Percentile	2025 98th Percentile	2025 Design Value
Seattle 10th & Weller	530330030	50.4	46.7	45.9	48
Seattle Beacon Hill	530330080	42.0	40.3	38.1	40
Seattle-Duwamish	530330057	NA	NA	41.4*	41*
Tacoma S 36th	530530024	36.9	44.2	36.3	39

*indicates design value is not valid due to missing data.

Table 26. Ozone (O_3) 2025 design values (ppm)

Site	AQS ID	2023 4th Highest D8M	2024 4th Highest D8M	2025 4th Highest D8M	2025 Design Value
Anacortes 202 Avenue	530570011	0.046	0.040	0.042	0.042
Cheeka Peak	530090013	0.050	0.048	0.041*	0.046*
Cheney Turnbull	530630001	0.059	0.061	0.056	0.058
Custer Loomis	530730005	0.055	0.051*	0.047*	0.051*
Enumclaw Mud Mtn	530330023	0.068	0.070	0.062	0.066
Issaquah Lake Sammamish	530330010	0.056	0.059	0.054	0.056
Kennewick S Steptoe St	530050003	0.067	0.067	0.059	0.064
Lacey College St	530670013	0.055	0.054	0.052*	0.053*
Mt Rainier Jackson Visitors Ctr	530530012	0.057	0.058	0.057	0.057
North Bend North Bend Way	530330017	0.066	0.057	0.055	0.059
Seattle Beacon Hill	530330080	0.049	0.048	0.049	0.048
Spokane Greenbluff	530630046	0.062	0.066	0.061	0.063
Vancouver Blairmont Dr	530110011	0.062	0.063	0.057	0.060

D8M is the daily maximum 8-hour average concentration.
*indicates design value is not valid due to missing data.

Table 27. Sulfur dioxide (SO_2) 2025 design values (ppb)

Site	AQS ID	2023 99th Percentile	2024 99th Percentile	2025 99th Percentile	2025 Design Value
Cheeka Peak	530090013	1.0	0.8	0.5*	1*
Seattle-Beacon Hill	530330080	2.6	2.0	2.1*	2*

*indicates design value is not valid due to missing data.

Table 28. $PM_{2.5}$ 2025 24-hour design values and estimated design values (µg/m^3)

Design values from FEM and FRM monitors are in bold. Other values are estimated design values from non-regulatory monitors.

Site	AQS ID	2023 98th Percentile	2024 98th Percentile	2025 98th Percentile	2025 Design Value
Aberdeen-Division St	530272002	13.1	8.2	8.2	10
Anacortes-O Ave	**530570011**	**12.3**	**9.4**	**9.5**	**10**
Auburn-29th Street	530330047	17.4	16.0	17.1	17
Bellevue-SE 12th St	530330031	13.2*	7.9	9.0	10*
Bellingham-Pacific St	**530730019**	**12.4**	**11.1**	**10.3**	**11**
Bremerton-Spruce Ave	**530350007**	**18.9**	**10.6**	**10.0**	**13**
Chehalis-Market Blvd	530410004	18.6	13.7	15.3	16
Chelan-Woodin Ave	530070007	24.4	32.0	30.8	29
Clarkston-13th St	530030004	32.3	32.0	29.1	31
Colville-E 1st St	**530650005**	**31.4**	**22.1**	**45.9**	**33**
Darrington-Fir St	**530610020**	**22.4**	**14.6**	**21.2**	**19**
Dayton-W Main St	530130002	16.5	14.1	14.4	15
Ellensburg-Ruby St	**530370002**	**18.4**	**14.7**	**21.0**	**18**
Everett-Beverly Park Rd		**NA**	**13.9***	**11.9**	**13***
Kennewick-Metaline	530050002	16.1	15.5	17.9	17
Lacey-College St	**530670013**	**11.9**	**13.4**	**13.0***	**13***
Lake Forest Park Town Center	530330024	16.7	13.8	12.8	14
Longview-30th Ave	530150015	15.3	12.3	17.0*	15*
Marysville-7th Ave	**530611007**	**25.5**	**21.5**	**24.5**	**24**
Mesa-Pepiot Way	530210002	21.5	16.8	19.2	19
Moses Lake-Balsam St	530251002	20.8	15.3	22.5	20
Mt Vernon-S Second St	530570015	12.3	7.2	4.3	8
Neah Bay Makah Tribe	530090015	12.8	6.4	7.3	9
North Bend-North Bend Way	530330017	11.2	9.3	14.6	12
Omak-Colville Tribe	**530470013**	**51.2**	**24.5**	**23.7**	**33**
Pomeroy-Pataha St	530230001	14.8	17.7	16.4	16
Port Angeles- E 5th St	530090017	15.8	13.7	13.0	14
Port Townsend-San Juan Ave	530310003	10.9	9.3	9.3	10
Prosser-Highland Dr	530050004	20.1	23.7*	17.9	21*
Pullman-Dexter SE	530750003	20.2	19.7	18.1	19

Site	AQS ID	2023 98th Percentile	2024 98th Percentile	2025 98th Percentile	2025 Design Value
Quincy-3rd Ave NE	530251003	21.4	12.9	22.1*	19*
Raymond-4th St	530490003	11.9*	6.5	5.9	8*
Ritzville-Alder St	530010003	21.2	14.0	21.7	19
Rosalia-Josephine St	530750006	22.8	17.2	20.1	20
Seattle-10th & Weller	**530330030**	**19.1**	**15.8**	**16.8**	**17**
Seattle-Beacon Hill	**530330080**	**19.4**	**12.0**	**11.9**	**14**
Seattle-Duwamish	**530330057**	**22.7**	**16.5**	**13.9**	**18**
Seattle-South Park	530331011	20.8	15.7	15.6	17
Shelton-W Franklin	530450007	17.2	12.6	12.6	14
Spokane-E Sprague Ave	530630054	NA	23.6*	28.9	26*
Spokane-Monroe St	530630047	25.1	20.9	22.0	23
Spokane Valley-E Broadway Ave	**530630017**	**24.7**	**21.4**	**20.7**	**22**
Sunnyside-S 16th St	**530770005**	**29.5***	**25.2**	**19.4**	**25***
Tacoma-L Street	**530530029**	**28.5**	**19.0**	**23.1**	**24**
Tacoma-S 36th St	**530530024**	**21.5**	**14.9**	**17.9**	**18**
Taholah-Quinault Tribe	530270011	13.9	9.9*	8.9	11*
Toppenish-Yakama Tribe	**530770015**	**26.1**	**30.6**	**24.7***	**27***
Tukwila Allentown	**530330069**	**24.2**	**18.7**	**16.7**	**20**
Twisp-Lincoln St/Ewell St	530470009	21.7	18.9	29.7*	23*
Vancouver-NE 84th Ave	**530110024**	**25.4**	**16.6**	**18.7**	**20**
Walla Walla-12th St	530710005	17.9	20.8	16.2	18
Wellpinit-Spokane Tribe	530650002	27.0	19.3	28.8*	25*
Wenatchee-Fifth St	530070011	19.9	16.8*	61.2	33*
Yacolt-Yacolt Rd	530110022	16.9	14.8	14.1*	15*
Yakima-4th Ave	**530770009**	**25.4**	**26.4**	**24.1**	**25**

* indicates design value is not valid due to missing data.

Table 29. $PM_{2.5}$ 2025 annual design values and estimated design values (µg/m^3)

Design values from FEM and FRM monitors are in bold. Other values are estimated design values from non-regulatory monitors.

Site	AQS ID	2023 Annual Mean	2024 Annual Mean	2025 Annual Mean	2025 Design Value
Aberdeen-Division St	530272002	4.325	3.560	3.831	3.9
Anacortes-O Ave	**530570011**	**5.278**	**4.341**	**4.515**	**4.7**
Auburn-29th Street	530330047	6.930	5.987	6.354	6.4
Bellevue-SE 12th St	530330031	3.618*	2.861	3.461	3.3*
Bellingham-Pacific St	**530730019**	**4.966**	**5.610**	**4.976**	**5.2**
Bremerton-Spruce Ave	**530350007**	**4.905**	**3.913**	**4.348**	**4.4**
Chehalis-Market Blvd	530410004	5.669	4.529	4.577	4.9
Chelan-Woodin Ave	530070007	6.268	5.470	6.480	6.1
Clarkston-13th St	530030004	10.379	10.001	9.061	9.8
Colville-E 1st St	**530650005**	**10.113**	**6.918**	**8.077**	**8.4**
Darrington-Fir St	**530610020**	**4.226**	**4.387**	**6.605**	**5.1**
Dayton-W Main St	530130002	6.220	3.972	4.448	4.9
Ellensburg-Ruby St	**530370002**	**6.487**	**4.697**	**5.685**	**5.6**

Site	AQS ID	2023 Annual Mean	2024 Annual Mean	2025 Annual Mean	2025 Design Value
Everett-Beverly Park Rd		**NA**	**3.565***	**5.652**	**4.6***
Kennewick-Metaline	530050002	6.574	4.432	4.673	5.2
Lacey-College St	530670013	4.104	3.773	4.129*	4.1*
Lake Forest Park Town Center	530330024	6.130	4.818	5.233	5.4
Longview-30th Ave	530150015	4.929	4.525	4.565*	4.7*
Marysville-7th Ave	**530611007**	**8.450**	**7.880**	**7.968**	**8.1**
Mesa-Pepiot Way	530210002	7.658	4.579	5.315	5.9
Moses Lake-Balsam St	530251002	7.658	5.393	6.425	6.5
Mt Vernon-S Second St	530570015	4.309	2.867	2.128	3.1
Neah Bay Makah Tribe	530090015	3.995	3.078	2.912	3.3
North Bend-North Bend Way	530330017	3.205	3.001	3.959	3.4
Omak-Colville Tribe	**530470013**	**11.790**	**8.264**	**7.722**	**9.3**
Pomeroy-Pataha St	530230001	4.278	4.262	4.351	4.3
Port Angeles- E 5th St	530090017	6.717	5.977	6.075	6.3
Port Townsend-San Juan Ave	530310003	4.611	4.211	4.096	4.3
Prosser-Highland Dr	530050004	7.316	5.415*	5.559	6.1*
Pullman-Dexter SE	530750003	5.200	4.411	4.681	4.8
Quincy-3rd Ave NE	530251003	5.817	3.364	4.818*	4.7*
Raymond-4th St	530490003	4.131*	3.024	3.062	3.4*
Ritzville-Alder St	530010003	5.760	4.184	5.094	5.0
Rosalia-Josephine St	530750006	6.934	4.578	5.043	5.5
Seattle-10th & Weller	**530330030**	**7.856**	**6.472**	**7.731**	**7.4**
Seattle-Beacon Hill	**530330080**	**6.022**	**4.194**	**5.186**	**5.1**
Seattle-Duwamish	**530330057**	**7.746**	**6.474**	**5.903**	**6.7**
Seattle-South Park	530331011	8.149	7.176	6.878	7.4
Shelton-W Franklin	530450007	5.596	4.263	4.936	4.9
Spokane-E Sprague Ave	530630054	NA	5.213*	7.782	6.5*
Spokane-Monroe St	530630047	8.529	6.040	6.699	7.1
Spokane Valley-E Broadway Ave	**530630017**	**7.718**	**5.807**	**6.897**	**6.8**
Sunnyside-S 16th St	**530770005**	**9.051***	**6.794**	**7.435**	**7.8***
Tacoma-L Street	**530530029**	**7.175**	**5.105**	**5.258**	**5.8**
Tacoma-S 36th St	**530530024**	**6.432**	**4.710**	**6.089**	**5.7**
Taholah-Quinault Tribe	530270011	4.164	3.727*	3.599	3.8*
Toppenish-Yakama Tribe	**530770015**	**9.461**	**7.611**	**8.473***	**8.5***
Tukwila Allentown	**530330069**	**7.505**	**6.844**	**5.975**	**6.8**
Twisp-Ewell St/Lincoln St	530470016	7.849	5.981	9.206*	7.7*
Vancouver-NE 84th Ave	**530110024**	**6.397**	**4.446**	**5.714**	**5.5**
Walla Walla-12th St	530710005	6.798	5.376	5.579	5.9
Wellpinit-Spokane Tribe	530650002	5.977	4.286	5.854*	5.4*
Wenatchee-Fifth St	530070011	7.202	5.192*	9.981	7.5*
Yacolt-Yacolt Rd	530110022	4.959	3.864	4.398*	4.4*
Yakima-4th Ave	**530770009**	**8.791**	**7.131**	**8.285**	**8.1**

* indicates design value is not valid due to missing data.

Table 30. PM_{10} 2025 design values

Site	AQS ID	2023 Expected Exceedances	2024 Expected Exceedances	2025 Expected Exceedances	3-Year Estimated Exceedances
Burbank-Maple St	530710006	3	0	0	1
Colville-E 1st St	530650005	2	0	4	2
Everett-Beverly Park Rd	530610022	NA	0*	0	0*
Kennewick-Metaline	530050002	3	0	0	1
Seattle-Beacon Hill	530330080	0*	0	0	0*
Seattle-Duwamish	530330057	NA	0*	0	0*
Spokane Valley-E Broadway Ave	530630021	2	0	0	0.7
Yakima-4th Ave S	530770009	2.1	0	0	0.7

* indicates design value is not valid due to missing data.

Appendix B. Monitoring Waivers

Kennewick-Richland and Spokane-Spokane Valley PM_{10}

REGION 10
SEATTLE, WA 98101

February 12, 2025

Ms. Jill Schulte
Ambient Air Monitoring Coordinator
Department of Ecology
State of Washington
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Ms. Schulte:

The U.S. Environmental Protection Agency (EPA), Region 10 (R10) evaluated the Washington Department of Ecology's 2024 Annual Monitoring Network Plan (ANP) received June 28, 2024. By this letter, R10 documents its findings from the review, provides suggestions for continued improvement, and approves the State of Washington's 2024 ANP.

We appreciate the detail with which Ecology has documented network modification and the work Ecology and Local Air Agency staff have put into maintaining and improving the monitoring network. Notable improvements include establishing a new $PM_{2.5}$ State and Local Air Monitoring Station (SLAMS) sites at SeaTac, a new $PM_{2.5}$ Tribal site in Wapato, as well as three new $PM_{2.5}$ Special Purpose Monitoring (SPM) sites. Additionally, we understand Ecology plans to further expand Washington's regulatory monitoring network in coming years: a new ozone monitoring site in the Kennewick-Richland metropolitan statistical area (MSA) and new $PM_{2.5}$ monitoring sites in Liberty Lake, Friday Harbor, and Oak Harbor. We also appreciate Ecology providing detailed and timely information to EPA regarding the operation and performance of the supplemental SensWA instruments.

Thank you for documenting monitoring waivers for carbon monoxide (CO), PM_{10}, PAMS solar and ultraviolet radiation, and ozone (O_3) in Appendix B. We remind Ecology that these waivers will need to be revisited every five years. Thank you for submitting a waiver renewal request for PM_{10} minimum monitoring requirements for the Kennewick-Richland core-based statistical area (CBSA) on April 11, 2024. R10 provides our formal response to that request in this letter.

Thank you for submitting the Verification of Continued Attainment in Limited Maintenance Areas with the ANP. We also appreciate the inclusion of the Memorandum of Understanding (MOU) between Ecology and the Oregon Department of Environmental Quality (ODEQ) as Appendix E. This MOU formally establishes that the minimum monitoring requirements for the Portland-Vancouver-Hillsboro core-based statistical area (CBSA) are jointly met by the two agencies. This MOU was reaffirmed and resigned by Ecology and ODEQ in April 2024 and is valid through 2029.

We approve the following network modifications laid out in the ANP:

1. Establishing a new $PM_{2.5}$ SLAMS site at SeaTac Sunset Park (AQS-ID: 53-033-0040) by the end of 2024. Thank you for providing documentation on the site, including: a map and aerial image, photos facing the cardinal directions, and diagram of the site layout and nearby obstructions. The information you provided on the proposed site meets the requirements of 40 C.F.R. 58.10(a) and (b).

   While the addition of this site to the Seattle-Tacoma-Bellevue MSA is in excess of the minimum monitoring requirements for the MSA, the monitoring site will provide additional air quality information in an at-risk community close to a major airport. We appreciate that this addition aligns with the modified EPA air monitoring network design criteria set out in 40 C.F.R Part 58, Appendix D, § 4.7.1(b)(3).

2. Upgrading the Lacey-College St. $PM_{2.5}$ SLAMS (AQS-ID: 53-067-0013) from non-regulatory (88502 POC 8) to regulatory FEM (88101 POC 8) on January 1, 2025. Thank you for providing information on the proposed site per the requirements of 40 C.F.R. 58.10(a) and (b). While the addition of this site to the Olympia-Lacey-Tumwater MSA is in excess of the minimum monitoring requirements for the MSA, we agree it is valuable to have a regulatory $PM_{2.5}$ monitor in the Olympic Region Clean Air Agency's jurisdiction.

3. Establishing a PM_{10} SLAMS regulatory monitor at the Seattle-Duwamish site (AQS-ID: 53-033-0057). This addition is part of the expanded monitoring funded by Washington. The information you provided on the proposed monitor siting and reporting details meets the requirements of 40 C.F.R. 58.10(a) and (b). With the addition of this monitor, the Seattle-Tacoma-Bellevue CBSA now meets the minimum monitoring requirements for PM_{10}. Renewal of the PM_{10} monitoring waiver for this CBSA, which expires in 2025, is no longer necessary.

4. Discontinuation of the Cheney-Turnbull PM_{10} SLAMS monitor (AQS-ID: 53-063-0001). Ecology designated this PM_{10} monitor as a SLAMS site in 2021. R10 requested this change in the 2019 ANP response as part of the agreement on minimum monitoring requirements for the Spokane-Spokane Valley MSA. While the site was originally established for the purpose of providing regional background PM_{10} (per the 2019 waiver request), impacts from an adjacent unpaved road mitigate the usefulness of the monitoring data and violate the requirements of 40 C.F.R. Part 58, Appendix E, § 3(a).

   We approve the discontinuation per 40 C.F.R. 58.14(c)(2). Ecology provided data showing the Cheney-Turnbull PM_{10} monitor has consistently measured lower concentrations than the other PM_{10} monitors in the Spokane-Spokane Valley MSA during the previous five years. The monitor is not specifically required by an attainment or maintenance plan. The Spokane-Spokane Valley MSA meets minimum monitoring requirements for PM_{10} with the updated waiver approved below.

5. Updating the waiver for the PM_{10} minimum monitoring requirements in the Spokane-Spokane Valley CBSA from three required monitors to two. R10 waived the requirement for a fourth PM_{10} SLAMS site in this area in the 2019 ANP response letter. With the addition of the Cheney-Turnbull PM_{10} SLAMS site, the area had three SLAMS sites. In the 2024 ANP, Ecology provided information supporting the discontinuation of the Cheney-Turnbull site and evidence that two PM_{10} SLAMS sites in the MSA are sufficient to protect public health and to characterize regional PM_{10} air quality trends:
   a. The $PM_{2.5}$ and PM_{10} monitoring network is sufficient to protect public health without the Cheney-Turnbull site. The only days with high PM_{10} levels were due to region-wide wildfire smoke. During these events, the Air Quality Index (AQI) for $PM_{2.5}$ levels was higher than the AQI based on PM_{10}. Additional analysis showed that PM_{10} was highly correlated with $PM_{2.5}$ during these events, and that the 24-hour $PM_{2.5}$ NAAQS would be exceeded before PM_{10} levels approached their standard.

b. The Cheney-Turnbull monitor is not needed for verifying continued attainment in a maintenance area. The Spokane Valley – E Broadway Ave SLAMS site is the required monitor for demonstrating continued attainment of the PM_{10} standard for the Spokane County Maintenance Area; the other two monitors in the CBSA are outside of the Maintenance Area boundary.

40 C.F.R. Part 58, Subpart D, § 4.6(a) notes, "because sources of pollutants and local control efforts can vary from one part of the country to another[,] some flexibility is allowed in selecting the actual number of stations in any one locale." In addition, that section allows the Regional Administrator to approve modifications from the minimum monitoring requirements. For the reasons stated above and pursuant to 40 C.F.R. Part 58, Appendix D, § 4.6(a), EPA approves Ecology's request to update the waiver to only require two PM_{10} SLAMS sites for the Spokane-Spokane Valley CBSA. This PM_{10} network size waiver for reducing the monitoring requirements in the Spokane-Spokane Valley MSA to two stations is in effect for five years from the date of this correspondence. Additionally, changes to the air quality concentrations in the Spokane-Spokane Valley MSA may warrant modifying this waiver in the future.

6. Renewal of waiver for PM_{10} minimum monitoring requirements in the Kennewick-Richland MSA. R10 approved a waiver for the PM_{10} minimum monitoring requirements for this area on April 18, 2019, effective for five years. The waiver reduced the required number of PM_{10} monitors from 3-4 to one. Ecology submitted an updated waiver request on April 11, 2024 (see Enclosure 2). The waiver request documented that PM_{10} conditions in the MSA are similar to those documented in 2019: the only high PM_{10} levels observed by the monitor in the MSA are due to widespread windblown dust or wildfire smoke exceptional events that are captured by the current PM10 monitor in the MSA. By this letter, R10 approves the renewal of the waiver for PM_{10} minimum monitoring requirements for the Kennewick-Richland MSA for another five years.

7. Discontinuation of the Ferndale-Mountain View Rd (AQS-ID: 53-073-0017) and Ferndale Kickerville Rd (53-073-0013) SO_2 monitors after December 31, 2024. Thank you for providing background information on the establishment of these source-oriented monitoring sites, the area's designation as non-attainment, the curtailment of the facility, and the SO_2 levels measured at these sites before and after curtailment. We are also aware that the facility permanently shut down in 2023, and their Title V Air Operating Permit was terminated. The State Implementation Plan (SIP), entitled: "Redesignation to Attainment and 1st 10-year Maintenance Plan for the Intalco-Ferndale Sulfur Dioxide Nonattainment Area" (hereafter "SO_2 Maintenance Plan"), was submitted to EPA in the summer of 2024. The EPA's final approval of the SO_2 Redesignation and Maintenance Plan was signed by the R10 Deputy Regional Administrator on December 11, 2024 and published in the Federal Register on December 17, 2024[1]. EPA's action became effective on January 16, 2025.

   We agree that these monitors meet the requirements for discontinuation set out in 40 C.F.R. 58.14(c)(3). Both monitors are expected to have a record of five years without a violation of the NAAQS (2020-2024) upon certification of the 2024 data in early summer of 2025. The submitted SO_2 Maintenance Plan specifies using emissions inventories and modeling as the specific, reproducible approach to represent the air quality of the area.

Thank you for including details on the following network modifications completed in Washington in the period between ANP reports (July 2023 – July 2024) that do not require approval:

1. Establishing a supplemental chemical speciation network (CSN) station site at Toppenish-Ward Rd (AQS-ID: 53-077-0015) as of November 2, 2023. Ecology discontinued CSN sampling at the Seattle 10th &

[1] 89 FR 101896, https://www.govinfo.gov/content/pkg/FR-2024-12-17/pdf/2024-29575.pdf

Weller near-road site in 2022 and coordinated with EPA and the Yakama Nation to identify a suitable CSN site in the Lower Yakima Valley.

2. Discontinuation of the collocated $PM_{2.5}$ federal reference method (FRM) monitors at the Seattle-Duwamish SLAMS site (AQS-ID: 53-033-0057) and designation of the site's BAM 1020 federal equivalent method (FEM) as the primary monitor as of December 31, 2023. This modification was approved in the 2023 ANP response. Thank you for confirming this modification in the 2024 ANP.

3. Reduction of the sampling frequency of the collocated $PM_{2.5}$ FRM at the Yakima 4th Ave SLAMS site (AQS-ID: 53-077-0009) from 1-in-3 to 1-in-6 as of December 31, 2023. This modification was approved in the 2023 ANP response. Thank you for confirming this modification in the 2024 ANP.

4. Updating the method used to monitor PM_{10} at the Seattle-Beacon Hill SLAMS station (AQS-ID: 53-033-0080) from filter-based to a continuous BAM 1020 (81102 POC 5). This update means Ecology is no longer deficient in the PM_{10} collocation requirements of 40 C.F.R. Part 58 Appendix A, as noted in the 2023 ANP response. Thank you for documenting this update in the 2024 ANP.

5. Changes to Special Purpose Monitoring Sites (SPMs). Per the requirements of 40 C.F.R. 58.10(a)(1) and (2), details on SPMs must be included in the ANP.
   a. Establishing new FEM $PM_{2.5}$ and PM_{10} monitors at Everett-Beverly Park Road (AQS-ID: 53-061-0022) on June 17, 2024. Ecology established this site as part of the expansion of monitoring funded by Washington.
   b. Establishing a new non-regulatory $PM_{2.5}$ monitor at Spokane-E Sprague Ave (AQS-ID: 53-063-0054) on January 24, 2024. This site is also part of the expansion of monitoring funded by Washington.
   c. Establishing a new non-regulatory $PM_{2.5}$ monitor at the Raymond 4th St monitoring site (AQS-ID: 53-049-0003) on October 1, 2023.
   d. Discontinuation the non-regulatory $PM_{2.5}$ SPM at Winthrop-Chewuch Rd (AQS-ID: 53-047-0010) on April 30, 2024. Discontinuing SPM sites does not require prior approval from EPA per 40 C.F.R 58.20(f).
   e. Relocation of the non-regulatory $PM_{2.5}$ SPM in Twisp due to construction from Ewell St (AQS-ID: 53-047-0016) to S Lincoln St (AQS-ID: 53-047-0009) on June 3, 2024.
   f. Establishing a new FEM nitrogen dioxide (NO_2) monitor at the Seattle-Duwamish site (AQS-ID: 53-033-0057). This addition was planned to occur on October 1, 2024. This site is also part of the expansion of monitoring funded by Washington.

   We remind Ecology that any SPM data collected by FEMs must be submitted to the Air Quality System (AQS) database per 40 C.F.R. 58.20(b). Additionally, all data from an SPM using an FRM or FEM which has operated for more than 24 months are eligible for comparison to the relevant NAAQS, per 40 C.F.R. 58.20(c). If Ecology wishes to redesignate any of these SPM sites as SLAMS, a formal request with the information required in 40 C.F.R. 58.10(b) must be provided in a future ANP.

Thank you for including details on the following network modifications planned for the next 18 months which may require approval in a future ANP:

1. Relocation of the Kent $PM_{2.5}$ SLAMS site (AQS-ID: 53-033-2004). The lease for this site was discontinued in July 2023. While Ecology and the operating agency, Puget Sound Clean Air Agency (PSCAA) planned to propose a replacement site in the 2024 ANP, installation is delayed until 2025.

2. Establishing a new Tribal regulatory $PM_{2.5}$ and meteorological monitoring site in Wapato. The Yakama Nation is the lead on establishing this site, which was funded via an ARP direct award. The 2024 ANP stated that the installation of the site was expected to be completed in 2024, but we understand it has

been delayed and is now expected to be established in 2025. As Tribal monitoring sites are their own designation (not designated SLAMS), R10 will work directly with the Tribe on confirming and documenting that it meets all the requirements of a regulatory monitoring site.

3. Temporary discontinuation of Yelm-Northern Pacific (AQS-ID: 53-067-0005) O_3 SLAMS site and relocation of O_3 as an SPM to Lacey-College St (AQS-ID: 53-067-0013). Ecology suspended O_3 monitoring at this site due to a construction project that was planned to be completed by the 2022 O_3 season, but delays have extended the timeline through 2025 as of the publication of the 2024 ANP. The Olympic Regional Clean Air Agency (ORCAA) has been operating a temporary O_3 SPM at the nearby Lacey site and will continue to do so until the Yelm site is re-established. Thank you for including details in this year's ANP on the updated plan to resume O_3 monitoring at the Yelm site in summer 2025. Ecology requested a waiver for this temporary suspension and relocation of O_3 monitoring, which was approved by R10 on May 5, 2022 and provided in the 2023 ANP as an appendix.

4. Addition of a second near-road site in the Portland-Vancouver-Hillsboro OR-WA MSA. Population in this MSA has increased to over 2.5 million people per the 2020 census results, triggering the requirement for a second site. We appreciate Ecology working with ODEQ on selecting an appropriate site. We understand that ODEQ is prioritizing the establishment of their PAMS site, and work on this near-road site will ramp up after the 2024 PAMS season. R10 will work closely with ODEQ and Ecology in selecting and establishing a site, which will need to be evaluated in a future ANP.

We did not identify any part of Washington's ambient air monitoring network that does not meet the minimum monitoring requirements set out in 40 C.F.R. Part 58. The enclosed Annual Monitoring Network Plan Checklist is the checklist EPA used to review your plan for overall items that are required to be included in the ANP along with our assessment of whether the plan submitted by your agency addresses those requirements. All comments conveyed via this letter and the enclosed checklist should be addressed in next year's annual monitoring network plan via corrections or addition of information to the plan. Please note that we cannot approve portions of the annual network plan for which the information in the plan is insufficient to judge whether the requirement has been met, or for which the information, as described, does not meet the requirements as specified in 40 C.F.R. 58.10 and the associated appendices. EPA Region 10 also cannot approve portions of the plan for which the EPA Administrator has not delegated approval authority to the regional offices.

Region 10 approves the State of Washington's 2024 ANP. Region 10 appreciates the timeliness and detail provided in the ANP. If you have any questions about our approval of the ANP, please contact me at (206) 553-0985 or Sarah Waldo at (206) 553-1504.

Sincerely,

DEBRA SUZUKI

Digitally signed by DEBRA SUZUKI
Date: 2025.02.12 20:03:22 -08'00'

Debra Suzuki, Manager
Air Planning and State/Tribal Coordination Branch

PAMS Solar and Ultraviolet Radiation

Ecology requested a 1-year extension to this waiver in May 2026. This appendix will be updated if the waiver extension is available prior to final publication of the 2026 Ambient Air Monitoring Network Plan.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3123

AIR & RADIATION DIVISION

November 3, 2020

Ms. Jill Schulte
Ambient Air Monitoring Coordinator
Department of Ecology
State of Washington
P.O. Box 47600
Olympia, Washington 98504-7600

Dear Ms. Schulte:

This letter is in response to your October 7, 2020, correspondence requesting a waiver to collect solar radiation measurements for the Seattle Photochemical Assessment Monitoring Station (PAMS) at an alternative location. In this correspondence you explained that the Seattle-Beacon Hill station (AQS ID: 53-033-0080), where the remainder of the PAMS sampling will be located, is unacceptable for solar radiation measurements. This is due to the shadow cast on the monitoring site for part of the day by a nearby driving range net. Your proposed solution is to locate the radiometer and pyranometer instruments at the Seattle-Duwamish monitoring station (AQS ID: 53-033-0057) instead. You explained that this alternative siting is appropriate because of the proximity of the stations (1.55 miles) and the lack of obstructions at the Seattle-Duwamish station.

My staff completed the review of the information you provided and consulted the EPA's Office of Air Quality Planning and Standards regarding this request. We agree that siting the PAMS solar radiation instrumentation at the Seattle-Duwamish station is an acceptable solution. Per 40 CFR Part 58, Appendix D, Section 5(c) the EPA can grant a waiver to allow the collection of required PAMS measurements at an alternative location if the alternative location will provide representative and useful data. In this instance, we conclude that those standards will be met at the alternative location.

Region 10 approves the alternative siting of the PAMS solar radiation measurements at the Seattle-Duwamish station (AQS ID: 53-033-0057), instead of the Seattle-Beacon Hill station (AQS ID: 53-033-0080). Please reference and attach this waiver in future Annual Network Plan reports, and address whether this alternative location continues to be appropriate in future five-year network assessments. We also request that you continue to keep my staff informed of any other developments with the PAMS monitoring. If you have any questions regarding this waiver, please contact me at (206) 553-0985 or Sarah Waldo at (206) 553-1504.

Sincerely,

DEBRA SUZUKI Digitally signed by DEBRA SUZUKI Date: 2020.11.03 11:30:16 -08'00'

Debra Suzuki, Manager
Air Planning, State/Tribal Coordination Branch

Appendix C. Special Purpose Monitors (SPMs) Statements of Purpose

Ecology is required to include a statement of purpose for each SPM in the annual monitoring network plan according to 40 C.F.R. Part 58.20. Table 31 below contains the statements of purpose for each SPM in the Washington Network.

Table 31. Statements of purpose for Special Purpose Monitors (SPMs)

Site	AQS ID	Parameter	Statement of Purpose
Auburn-29th St SE	530330047	$PM_{2.5}$ AQI (88502)	PSCAA established the Auburn SPM nephelometer site to report neighborhood-scale $PM_{2.5}$ concentrations and AQI in the Auburn area. The site operates as a non-regulatory SPM site because a line of evergreen trees approximately 8 meters from the site prevents the site from meeting probe and path siting criteria for SLAMS $PM_{2.5}$ monitoring.
Chelan-Woodin Ave	530070007	$PM_{2.5}$ AQI (88502)	The Chelan monitoring site was previously operated by the U.S. Forest Service as a non-EPA federal monitor to inform smoke management decisions. Ecology temporarily took over operational responsibility for the site as a SPM on October 1, 2018.
Everett-Beverly Park Rd	530610022	$PM_{2.5}$ (88101), PM_{10} (81102)	The Everett-Beverly Park Rd micro-scale $PM_{2.5}$ and PM_{10} monitors have objectives of highest concentration and source impacts. The monitoring site is located at Fairmount Elementary School in unincorporated Snohomish County, adjacent to an aggregate yard that has been the subject of numerous dust and noise complaints. The monitors are located approximately 17 meters from the fenceline of the aggregate yard.
Granger-E Mentzer Ave	530770019	$PM_{2.5}$ AQI (88502)	Ecology established the Granger-E Mentzer Ave SPM for non-regulatory $PM_{2.5}$ to evaluate neighborhood-scale $PM_{2.5}$ concentrations and report the AQI in a previously unmonitored community.
Mabton-B St	530770018	$PM_{2.5}$ AQI (88502)	Ecology established the Mabton-B St SPM for non-regulatory $PM_{2.5}$ to evaluate neighborhood-scale $PM_{2.5}$ concentrations and report the AQI in a previously unmonitored community.
Liberty Lake-E Country Vista Dr	530630055	$PM_{2.5}$ AQI (88502)	SRCAA established the Liberty Lake-E Country Vista Dr SPM for non-regulatory $PM_{2.5}$ to evaluate neighborhood-scale $PM_{2.5}$ concentrations and report the AQI in a previously unmonitored community.
Oak Harbor	530290003	$PM_{2.5}$ (88101)	NWCAA established the Oak Harbor SPM for $PM_{2.5}$ to evaluate neighborhood-scale $PM_{2.5}$ concentrations and report the AQI in a previously unmonitored community.
Prosser-Highland Dr	530050004	$PM_{2.5}$ AQI (88502)	BCAA established the Prosser SPM for $PM_{2.5}$ to evaluate neighborhood-scale $PM_{2.5}$ concentrations and report the AQI in a previously unmonitored community. BCAA uses Prosser data to evaluate air quality complaints, inform curtailment calls, and identify opportunities for wood stove replacement funding in their jurisdiction.
Raymond-4th St	530490003	$PM_{2.5}$ AQI (88502)	ORCAA operates the Raymond-4th St $PM_{2.5}$ SPM in order to report the AQI and support its air quality management efforts in Pacific County.

Site	AQS ID	Parameter	Statement of Purpose
Quincy-3rd Ave NE	530251003	$PM_{2.5}$ AQI (88502)	Ecology established the Quincy-3rd Ave NE SPM site to provide meteorological and non-FEM $PM_{2.5}$ data in a previously unmonitored community and to support a health risk assessment of diesel emissions in the Quincy area published in 2020.
Seattle-Duwamish	530330057	NO_2 (42602)	PSCAA established the Seattle-Duwamish NO_2 SPM as a highest-concentration/source-oriented monitor whose purpose is to characterize air quality impacts of diesel truck traffic along a major freight corridor.
Spokane-E Sprague Ave	530630054	$PM_{2.5}$ AQI (88502)	SRCAA established the Spokane-E Sprague Ave SPM in 2024 to evaluate middle-scale $PM_{2.5}$ impacts in neighborhoods adjacent to industrial Spokane and Interstate 90.
Twisp-S Lincoln St	530470009	$PM_{2.5}$ AQI (88502)	The previous Twisp monitoring site was operated by the U.S. Forest Service as a non-EPA federal monitor to inform smoke management decisions. Ecology temporarily took over operational responsibility for monitoring at the previous Twisp-Glover site on October 1, 2018. Ecology relocated the site to Twisp-Ewell St in 2020 and relocated the site back within 1 block of Glover St, renamed Twisp-S Lincoln St in 2024.

Appendix D. Detailed Site and Monitor Information

Appendix D contains location information for all Washington Network monitoring sites.

Location information for Washington Network monitoring sites

Table 32. Location information for Washington Network monitoring sites

Site Name	AQS ID	Latitude	Longitude	Street Address	City	Zip code
Aberdeen-Division St	530272002	46.97228	-123.83173	359 N Division St	Aberdeen	98520
Anacortes-O Ave	530570011	48.52008	-122.613213	3rd St between O Ave and Commercial Ave	Anacortes	98221
Auburn-29th St	530330047	47.2814	-122.2233	402 29th St	Auburn	98002
Bellevue-SE 12th St	530330031	47.600863	-122.148397	14310 SE 12th St	Bellevue	98007
Bellingham-Pacific St	530730019	48.760036	-122.456463	2221 Pacific St	Bellingham	98229
Bremerton-Spruce Ave	530350007	47.592675	-122.62739	3250 Spruce Ave	Bremerton	98310
Burbank-Maple St	530710006	46.20011	-119.00862	755 Maple St	Burbank	99323
Bahokas Peak	530090019	48.371035	-124.673712	Bahokas Peak Rd	Neah Bay	98357
Chehalis-Market Blvd	530410004	46.66409	-122.96732	350 N Market Blvd	Chehalis	98532
Chelan-Woodin Ave	530070007	47.83861	-120.02306	428 W Woodin Ave	Chelan	98816
Cheney-Turnbull	530630001	47.4164	-117.52982	26010 S Smith Rd	Cheney	99004
Clarkston-13th St	530030004	46.425416	-117.060445	13th St and Port Way	Clarkston	99403
Colville-E 1st St	530650005	48.54469	-117.903222	261 E 1st St	Colville	99114
Custer-Loomis	530730005	48.95074	-122.55441	1330 Loomis Trail Rd	Custer	98240
Darrington-Fir St	530610020	48.2468	-121.6031	1085 Fir St	Darrington	98241
Dayton-W Main St	530130002	46.318	-117.985	206 W Main St	Dayton	99328
Ellensburg-Ruby St	530370002	46.99364	-120.545	201 N Ruby St	Ellensburg	98926
Enumclaw-Mud Mtn.	530330023	47.1411	-121.9379	30525 SE Mud Mountain Rd	Enumclaw	98022
Everett-Beverly Park Rd	530610022	47.893718	-122.269825	11401 Beverly Park Rd	Everett	98204
Granger-E Mentzer Ave	530770019	46.348137	-120.193817	315 E Mentzer Ave	Granger	98932
Issaquah-Lake Sammamish	530330010	47.5525	-122.064722	2000 NW Sammamish Rd	Issaquah	98027
Kennewick-Metaline	530050002	46.21835	-119.20152	5929 W Metaline Ave	Kennewick	99336

Site Name	AQS ID	Latitude	Longitude	Street Address	City	Zip code
Kennewick-S Steptoe St	530050003	46.204582	-119.243743	526 S Steptoe St	Kennewick	99336
Kent-S 236th St	530330095	47.390821	-122.25585	6300 S 236th St	Kent	98032
Lacey-College St	530670013	47.029396	-122.821548	1900 College St SE	Lacey	98503
Lake Forest Park	530330024	47.75452	-122.28034	17171 Bothell Way NE	Lake Forest Park	98155
Liberty Lake-E Country Vista Dr	530630055	47.66145	-117.13367	20150 E Country Vista Dr	Liberty Lake	99019
Longview-30th Ave	530150015	46.139443	-122.961944	1234 30th Ave	Longview	98632
Mabton-B St	530770018	46.211968	-119.994452	500 B St	Mabton	98935
Marysville-7th Ave	530611007	48.054315	-122.171529	1799 7th St	Marysville	98270
Mesa-Pepiot Way	530210002	46.5754	-119.0021	200 Pepiot Rd	Mesa	99343
Moses Lake-Balsam St	530251002	47.1303	-119.2737	412 S Balsam St	Moses Lake	98837
Mt Rainier-Jackson Visitors Ctr	530530012	46.785857	-121.737107	52807 Paradise Rd E	Ashford	98304
Mt Vernon-S Second St	530570015	48.4102	-122.3376	1600 S 2nd Street	Mount Vernon	98273
Neah Bay-Makah Tribe	530090015	48.366058	-124.610045	1321 Bay View Avenue	Neah Bay	98357
North Bend-North Bend Way	530330017	47.49022	-121.77278	902 SE North Bend Way	North Bend	98045
Oak Harbor-Goldie Rd	530290003	48.313931	-122.646196	2882 Goldie Rd	Oak Harbor	98277
Omak-Colville Tribe	530470013	48.39999	-119.51896	8th Ave E & Okanogan-Omak East Rd	Omak	98841
Pomeroy-Pataha St	530230001	46.474438	-117.614764	572 Pataha St	Pomeroy	99347
Port Angeles-E 5th St	530090017	48.115	-123.436434	102 E 5th St	Port Angeles	98362
Port Townsend-San Juan Ave	530310003	48.12919	-122.77897	3939 San Juan Avenue	Port Townsend	98368
Prosser-Highland Dr	530050004	46.20890	-119.75267	2001 Highland Dr	Prosser	99350
Pullman-Dexter SE	530750003	46.7244	-117.18014	240 SE Dexter St	Pullman	99163
Quincy-3rd Ave NE	530251003	47.24126	-119.84595	330 3rd Ave NE	Quincy	98848
Raymond-4th St	530490003	46.688218	-123.731764	503 4th St	Raymond	98577
Ritzville-Alder St	530010003	47.128	-118.3819	109 W Alder Ave	Ritzville	99169

Site Name	AQS ID	Latitude	Longitude	Street Address	City	Zip code
Rosalia-Josephine St	530750006	47.23136	-117.36856	906 S Josephine Ave	Rosalia	99170
SeaTac-Sunset Park	530330040	47.4785	-122.3111	13831 18th Ave S	SeaTac	98168
Seattle-10th & Weller	530330030	47.597222	-122.319722	10th Ave S & S Weller St	Seattle	98104
Seattle-Beacon Hill	530330080	47.5682	-122.3086	4103 Beacon Ave S	Seattle	98108
Seattle-Duwamish	530330057	47.559975	-122.338265	4700 E Marginal Way S	Seattle	98134
Seattle-South Park	530331011	47.5297	-122.3203	8201 10th Ave S	Seattle	98108
Shelton-W Franklin	530450007	47.21355	-123.10081	122 W Franklin St	Shelton	98584
Spokane Valley-E Broadway Ave	530630017	47.663962	-117.25765	11016 E Broadway Ave	Spokane	99206
Spokane-E Sprague Ave	530630054	47.657087	-117.367795	2904 E Sprague Ave	Spokane	99202
Spokane-Greenbluff	530630046	47.827128	-117.27422	9814 Greenbluff Rd E	Colbert	99005
Spokane-Monroe St	530630047	47.69983	-117.42631	4601 N Monroe St	Spokane	99205
Sunnyside-S 16th St	530770005	46.32033	-119.9981	810 S 16th St	Sunnyside	98944
Tacoma-L Street	530530029	47.18631	-122.45154	7802 L St S	Tacoma	98444
Tacoma-S 36th St	530530024	47.22634	-122.46256	1802 S 36th St	Tacoma	98418
Taholah-Quinault Tribe	530270011	47.3442	-124.2879	600 Chitwhin Dr	Taholah	98587
Toppenish-Yakama Tribe	530770015	46.38024	-120.33266	141 Ward Rd	Toppenish	98948
Tukwila Allentown	530330069	47.498535	-122.278385	11675 44th Ave E	Tukwila	98178
Twisp-S Lincoln St	530470009	48.36472	-120.12007	100 S Lincoln St	Twisp	98856
Vancouver NE 84th Ave	530110024	45.64336	-122.58737	2722 NE 84th Ave	Vancouver	98662
Vancouver-Blairmont Dr	530110011	45.6121	-122.5194	1500 SE Blairmont Dr	Vancouver	98683
Walla Walla-12th St	530710005	46.05881	-118.35147	200 S 12th Ave	Walla Walla	99362
Wellpinit-Spokane Tribe	530650002	47.88528	-117.98865	6208 Wellpinit-Westend Rd	Wellpinit	99040
Wenatchee-Fifth St	530070011	47.43061	-120.34195	1300 Fifth St	Wenatchee	98801
Yacolt-Yacolt Rd	530110022	45.86639	-122.40889	406 W Yacolt Rd	Yacolt	98675

Site Name	AQS ID	Latitude	Longitude	Street Address	City	Zip code
Yakima-4th Ave	530770009	46.59495	-120.51228	402 S 4th Ave	Yakima	98902

Appendix E: Supplemental Site and Monitor Information

In its response to Ecology's 2025 Ambient Air Monitoring Network Plan, EPA Region 10 requested that Ecology provide additional site and monitor information for sites recently added to the Washington Network in order to support evaluation of 40 C.F.R. Part 58 Appendix E Probe and Monitoring Path Siting Criteria. This information is provided in Table 33.

Table 33. Supplemental site and monitor information for recently-added sites

Site Name	Parameters	AQS ID	Distance to nearest road (m)	Traffic count of nearest road (AADT)
Bahokas Peak	CO, NO_y, O_3, SO_2, non-regulatory $PM_{2.5}$	530090019	3,540	880
Granger-E Mentzer Ave	Non-regulatory $PM_{2.5}$	530770019	85	1,446
Kent-S 236th St	$PM_{2.5}$	530330095	163	18,988
Lacey-College St	O_3, $PM_{2.5}$	530670013	125	27,605
Liberty Lake-E Country Vista Dr	Non-regulatory $PM_{2.5}$	530630055	260	10,075
Mabton-B St	Non-regulatory $PM_{2.5}$	530770018	170	2,845
Oak Harbor-Goldie Rd	$PM_{2.5}$	530290003	23	3,000
SeaTac-Sunset Park	$PM_{2.5}$	530330040	250	13,568
Seattle-Beacon Hill (after relocation)	CO, NO_2, NO_y, O_3, SO_2, $PM_{2.5}$, PM_{10}	530330080	100	20,555
Seattle-Duwamish	$PM_{2.5}$, PM_{10}, NO_2	530330057	80	40,000

Appendix F. Interstate Memorandum of Understanding

Memorandum of Understanding
Between
Oregon Department of Environmental Quality
And
Washington Department of Ecology

I. PURPOSE

This Memorandum of Understanding (MOU) is entered into by and between the Oregon Department of Environmental Quality Air Quality Program, hereinafter referred to as ODEQ, and the Washington Department of Ecology Air Quality Program, hereinafter referred to as WDOE.

The purpose of this MOU is to agree in principle to cooperate with shared resources to collectively meet the United States Environmental Protection Agency (US EPA) minimum monitoring requirements for criteria air pollutants in the Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area (MSA).

II. STATEMENT OF MUTUAL BENEFITS AND INTEREST

The Portland-Vancouver-Hillsboro, OR-WA MSA consists of Clackamas, Columbia, Multnomah, Washington, and Yamhill Counties in Oregon and Clark and Skamania Counties in Washington. The network design criteria for ambient air quality monitoring described in 40 C.F.R § 58 Appendix D require that in areas where metropolitan statistical areas (MSAs) cross jurisdictional boundaries, "full monitoring requirements apply separately to each affected State or local agency in the absence of an agreement between the affected agencies and the EPA Regional Administrator." This MOU establishes an agreement that ODEQ and WDOE cooperatively meet the minimum monitoring requirements in the Portland-Vancouver-Hillsboro, OR-WA MSA.

The Portland-Vancouver-Hillsboro, OR-WA MSA had an estimated population of 2,508,050 as of July 1, 2023. Based on 40 C.F.R § 58 Appendix D, the following minimum monitoring requirements for criteria pollutants apply to an MSA of this population size:

Pollutant	**Minimum Number of Required Monitors**
Ozone (O_3)	2
Carbon Monoxide (CO)	1
Nitrogen Dioxide (NO_2)	3
Sulfur Dioxide (SO_2)	1
Particulate Matter ≤10µm (PM_{10})	2
Fine Particulate Matter ($PM_{2.5}$)	3

As of January 1, 2024, the minimum monitoring requirements were met or exceeded in the Portland-Vancouver-Hillsboro, OR-WA MSA for each of the criteria pollutants listed above with the exception of Nitrogen Dioxide (NO_2). ODEQ is currently working with EPA Region 10 to

identify a suitable location and secure funding for the installation of a second near-road NO_2 monitoring site in the Portland area.

III. GENERAL ROLES

ODEQ and WDOE formally agree to collectively provide adequate criteria pollutant monitoring as required by 40 C.F.R § 58 Appendix D. Each agency shall inform the other agency at its earliest convenience via telephone or email of any monitoring changes within the Portland-Vancouver-Hillsboro, OR-WA MSA that impact the minimum monitoring requirements. In the event that new minimum monitoring requirements are imposed after the execution of this MOU, ODEQ and WDOE agree to consult and jointly determine how to meet the new requirements.

IV. IT IS MUTUALLY AGREED AND UNDERSTOOD BY AND BETWEEN THE SAID PARTIES THAT:

A. This instrument is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures, including those for government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties, and shall be independently authorized by appropriate statutory authority. This instrument does not provide such authority.

B. This instrument in no way restricts ODEQ or WDOE from participating in similar activities with other public or private agencies, organizations, and individuals.

C. Pursuant to Section 22, Title 41, United States Code, no Member of, or Delegate to, Congress shall be admitted to any share or part of this instrument, or any benefits that may arise therefrom.

D. Nothing in this MOU shall be construed as obligating either party to expend funds or to make any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively allocated for this purpose.

E. Modifications within the scope of this instrument shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by both parties.

F. Either party(s), in writing, may terminate the MOU in whole, or in part, at any time before the date of expiration provided that written notice is sent to the other party at least 120 calendar days prior to the termination date.

G. This MOU shall be effective upon execution by both parties and shall remain in effect for a period of 5 years unless otherwise modified. This agreement can be extended if mutually agreed to by both parties.

H. The principal contacts for this instrument are:

Oregon Department of Environmental Quality
Anthony Barnack, Ambient Monitoring Coordinator
7202 NE Evergreen Parkway, Suite 150
Hillsboro, OR 97124-6166
(971) 806-2223

Washington Department of Ecology
Jill Schulte, Air Monitoring Coordinator
PO Box 47600
Olympia, WA 98504-7600
(360) 790-6538

In Witness whereof, the parties hereto have executed this MOU as of the last date written below:

4/5/2024 DocuSigned by: Matthew R. Shrensel

Date Matthew Shrensel
Interim Air Quality Monitoring Manager
Oregon Department of Environmental Quality

4/5/2024 DocuSigned by: Sean Lundblad

Date Sean Lundblad
Technical Services Section Manager, Air Quality Program
Washington Department of Ecology

Appendix G. Public Comment Period

The 2026 Ambient Air Monitoring Network Plan is available for public inspection and comment from May 20, 2026, through June 19, 2026. Any comments received and responses to those comments will be included in this Appendix in the final publication.