

# Department of Environmental Conservation's Air Monitoring Program Community-Based Air Monitoring Project

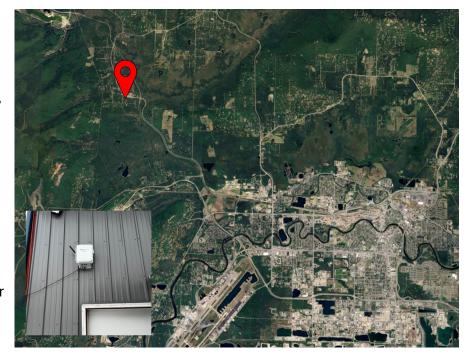
# 2024-25 Winter Season Air Quality Report for Goldstream, Fairbanks, Alaska

The QuantAQ MODULAIR<sup>™</sup> sensor in Goldstream (711 Sheep Creek Rd, Fairbanks, AK 99709) was installed on 02/20/2024.

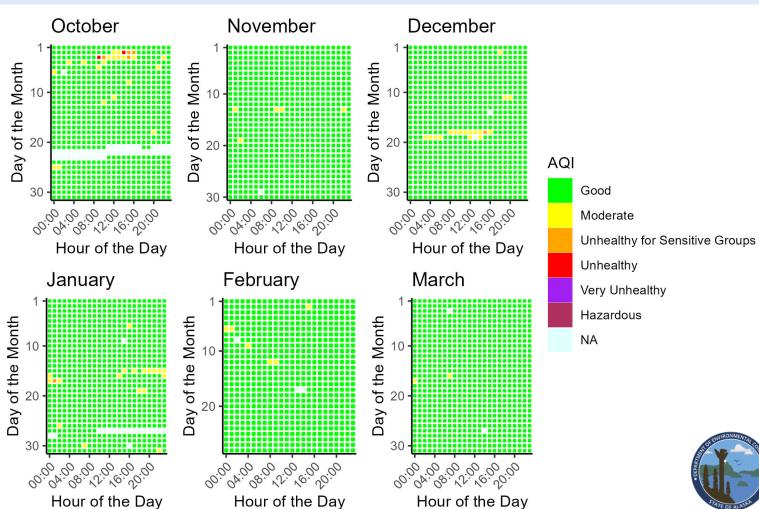
The sensor measures for carbon monoxide (CO), ozone  $(O_3)$ , nitrogen oxide (NO), nitrogen dioxide (NO<sub>2</sub>), particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), temperature (°C), and relative humidity (RH). Data is collected every minute and is then processed into hourly averages.

The sensor in Goldstream has run well since its installation in February of 2024; there have been no physical issues with the sensor.

This data report covers the date range of October 1, 2024, to March 31, 2025.



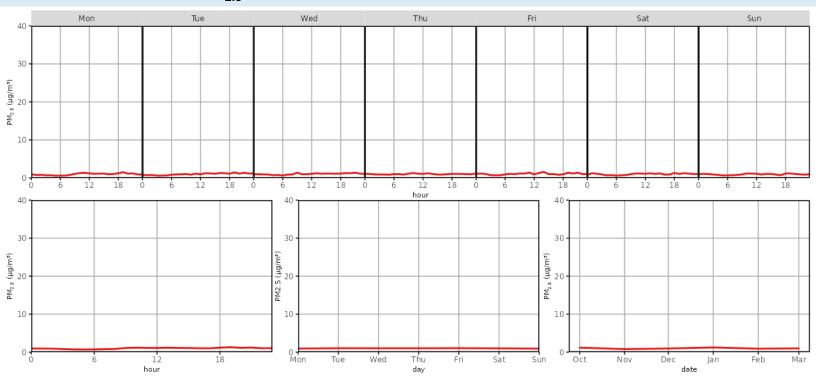
## Daily PM<sub>2.5</sub> Air Quality Index (AQI) for October 1, 2024 – March 31, 2025



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## 2024-25 Winter Season Air Quality Report for Goldstream

## Median PM<sub>2.5</sub> Concentrations for October 1, 2024 – March 31, 2025



## **Descriptive Statistics of Air Pollutants\***

Parameter	1-hr PM <sub>2.5</sub> (µg/m³)	24-hr PM <sub>2.5</sub> (μg/m³)	1-hr PM <sub>10</sub> (µg/m³)**	24-hr PM <sub>10</sub> (μg/m³)**	1-hr O <sub>3</sub> (ppb)	1-hr NO <sub>2</sub> (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
Min								
	0.06	0.28	0.00	0.29	3.03	3.66	1.46	0.30
Mean								
	1.72	1.68	5.36	4.51	22.65	19.02	6.67	0.41
1 <sup>st</sup> Max								
	69.20	13.72	745.00	63.96	51.48	29.53	547.95	1.50
2 <sup>nd</sup> Max								
	61.44	9.66	719.00	36.62	51.39	29.42	284.00	1.40

#### **Data Discussion**

Goldstream's  $PM_{2.5}$  ambient air quality for the winter 2024-25 season fell mostly in the "good" range of the Air Quality Index (AQI; more information about AQI is provided on page 3). AQI levels reached "unhealthy" for two hours in early October, likely from wildfire smoke. December and January experienced very brief periods in the "moderate" to "unhealthy for sensitive groups" AQI ranges. Diurnal patterns show little variability of  $PM_{2.5}$  concentrations across different times of day or days of the week.

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<sup>\*</sup> These statistics are based on preliminary data readings and are intended to provide a brief overview of sensor activity. Finalized data may be obtained upon request and through our annual statistical reports. Data from the community sensor network is non-regulatory and not comparable to the EPA's National Ambient Air Quality Standards (NAAQS; more information about the EPA NAAQS is provided on page 3).

<sup>\*\*</sup> PM<sub>10</sub> particle sensors are influenced by weather events such as fog and snow due to hygroscopic effects, creating false maximum values that do not pose health risks.

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### Resources



Alaska Department of Environmental Conservation





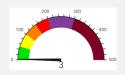
**EPA NAAQS Information** 





Air Quality Index (AQI) Basics





Real-Time AQI Data



### **Data Access**

To access historical data for your community's sensor, please email a request to: AMQA-Data-Request@alaska.gov . Data will be provided in Excel or .csv format.

## **Questions or Comments?**

Please contact us!

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