

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

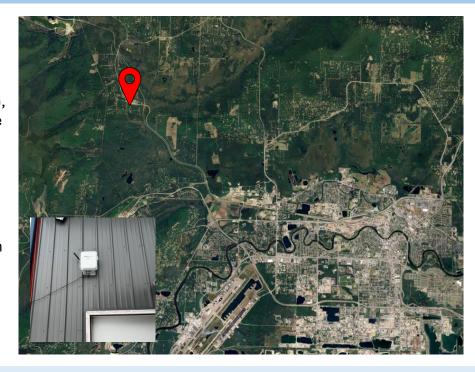
2024 Summer Season Air Quality Report for Goldstream, Fairbanks, Alaska

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

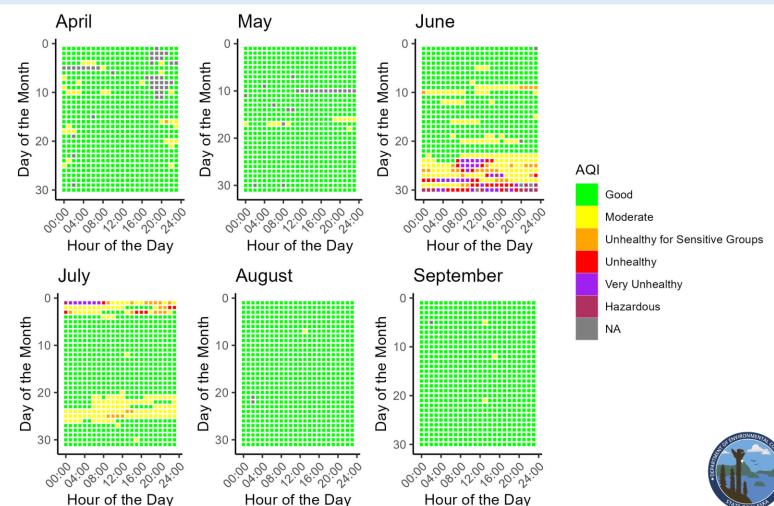
The sensor measures for carbon monoxide (CO), ozone (O_3) , nitrogen oxide (NO), nitrogen dioxide (NO_2) , particulate matter $(PM_{2.5}$ and $PM_{10})$, temperature (°C), and relative humidity (RH). Data is collected every minute and is then processed into hourly averages.

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 April 1, 2024, to September 30, 2024.



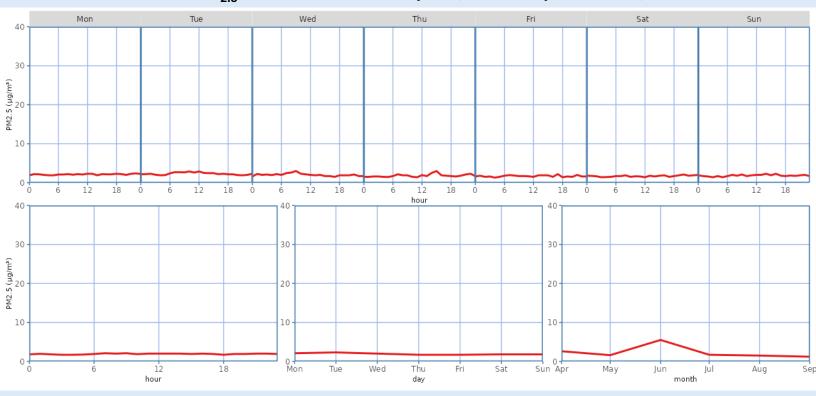
Daily $PM_{2.5}$ Air Quality Index (AQI) for April 1, 2024 - September 30, 2024



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2024 Summer Season Air Quality Report for Goldstream

Median PM_{2.5} Concentrations for April 1, 2024 - September 30, 2024



Descriptive Statistics of Air Pollutants*

Parameter	1-hr PM _{2.5} (µg/m³)	24-hr PM _{2.5} (μg/m³)	1-hr PM ₁₀ (µg/m³)	24-hr PM ₁₀ (μg/m³)	1-hr O ₃ (ppb)	1-hr NO ₂ (ppb)	1-hr NO (ppb)	1-hr CO (ppb)
Min								
	0.10	0.30	0.00	0.30	1.60	1.85	1.43	209.99
Mean								
	7.02	6.99	21.49 **	20.56 **	26.93	14.09	3.12	420.97
1 st Max								
	383.70	192.80	1608 **	215 **	71.83	42.31	136.84	3483.55
2 nd Max								
	349.60	105.00	1122 **	132 **	68.01	33.64	102.33	2238.81

Data Discussion

Goldstream's $PM_{2.5}$ ambient air quality for the summer 2024 season fell mostly in the "good" range of the Air Quality Index (AQI; more information about AQI is provided on page 3) throughout April and May, and August and September. June and July both experienced prolonged periods of "moderate" levels, with several days reaching "unhealthy" and "very unhealthy" levels throughout June and into July. Prolonged elevated levels of $PM_{2.5}$ concentrations were due to smoke from wildfires across Interior Alaska. Diurnal patterns show little variability of $PM_{2.5}$ concentrations across different times of day or days of the week.

* 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).

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^{**} PM10 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.

2024 Summer Season Air Quality Report for Goldstream

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!

Isaac Van Flein (Fairbanks): 907-451-2253 / isaac.vanflein@alaska.gov

Ayla Crosby (Anchorage): 907-269-7750 / ayla.crosby@alaska.gov



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