



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

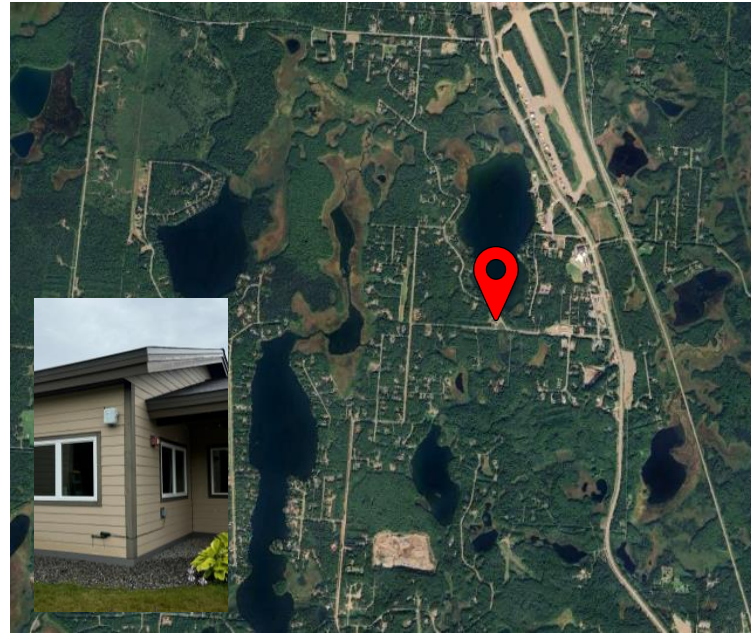
2024 Summer Season Air Quality Report for Willow, Alaska

The QuantaQ MODULAIR sensor in Willow (24091 Long Lake Rd, Willow, AK 99688) was installed on 08/06/2024.

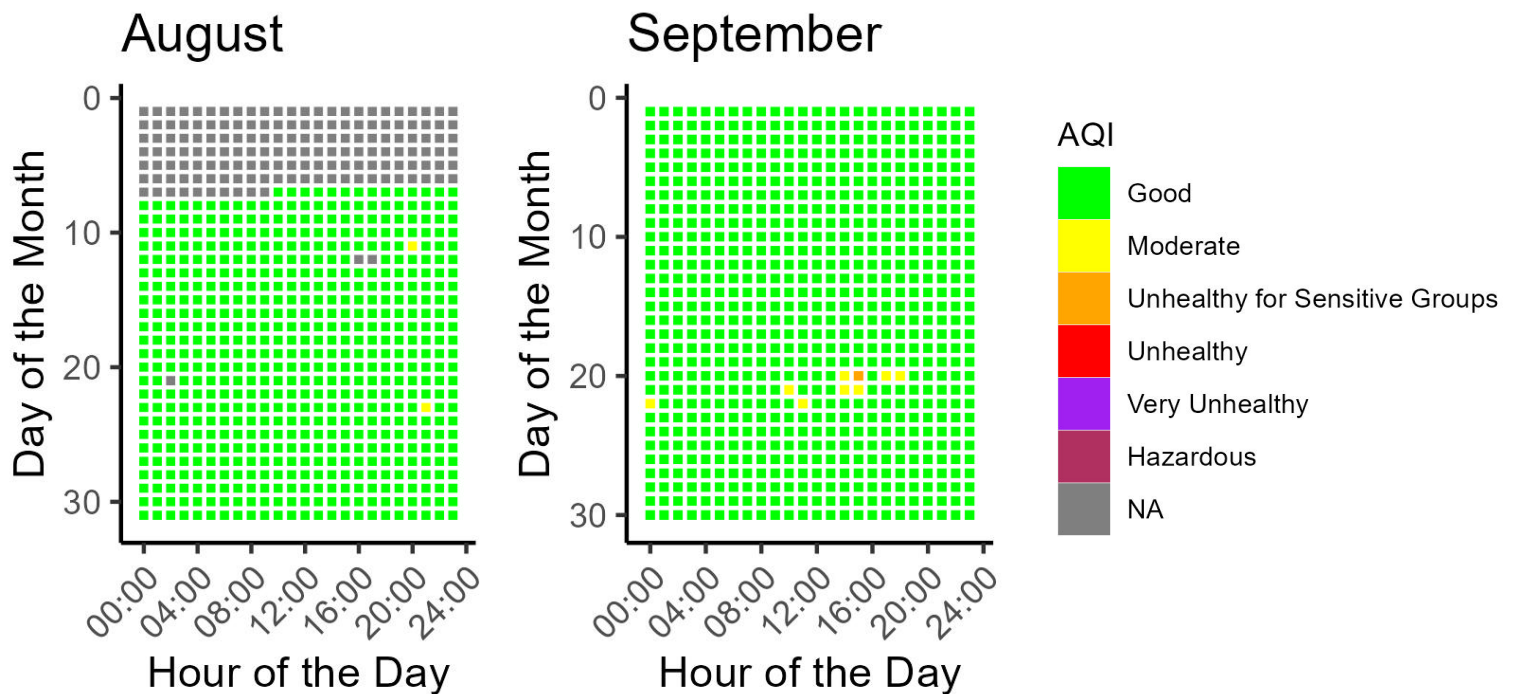
The sensor measures for carbon monoxide (CO), ozone (O₃), nitrogen oxide (NO), nitrogen dioxide (NO₂), particulate matter (PM_{2.5} and PM₁₀), temperature (°C), and relative humidity (RH).

Data is collected every minute and is then processed into hourly averages. The sensor in Willow has run well since it began sampling on August 7, 2024; there have been no physical issues with the sensor.

This data report covers the date range of August 7, 2024, to September 30, 2024.

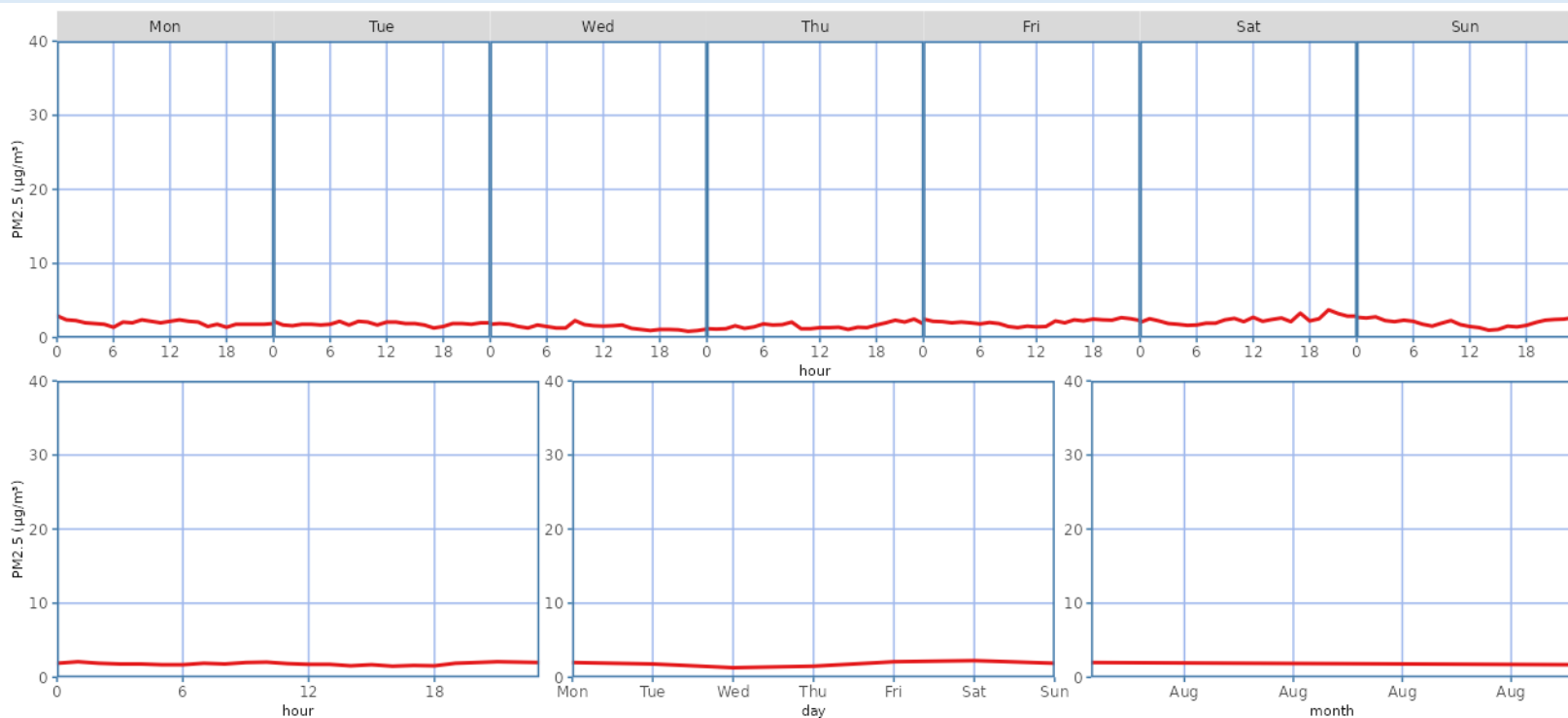


Daily PM_{2.5} Air Quality Index (AQI) for August 7, 2024 - September 30, 2024



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Median PM_{2.5} Concentrations for August 7, 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	0.20	0.60	2.00	0.60	4.20	1.83	1.45	227.30
Mean	2.20	2.19	38.41 **	20.4 **	20.36	14.65	2.29	330.03
1 st Max	46.30	6.10	6797 **	114 **	52.80	39.93	13.52	574.54
2 nd Max	18.80	4.60	5491 **	86 **	52.40	39.66	7.76	536.15

Data Discussion

Willow'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), with a very brief period of AQI levels reaching “moderate” and “unhealthy for sensitive groups” in mid-September. Diurnal patterns show little variability of PM_{2.5} concentrations across different times of day, days of the week, or different months.

* 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).

** 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.



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Resources



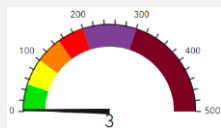
[Alaska Department of Environmental Conservation](#)



[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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