

Dallas

Community Air Management Program

Monthly Data Summary
December 2023 and January 2024

For Questions or Comments:

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Sensor Data Information

- Disclaimer
- When using data from D-CAMP, please note the following:
- The data presented on this website are not validated or verified
- The data does not come from regulatory monitors. This data cannot be used to infer violations of the the National Ambient Air Quality Standards (NAAQS) or other regulatory violations
- This data should be used with discretion
- Data from regulatory monitors is available here: <https://www.tceq.texas.gov/airquality/monops>

Data Guidance

Low Level of Air Pollution	O ₃ less than 35 ppb
	NO ₂ less 50 ppb
	PM ₁₀ less than 75 µg/m ³
	PM _{2.5} less than 17 µg/m ³
	CO less than 18ppm
Moderate Level of Air Pollution	SO ₂ less than 38ppb
	O ₃ higher than 35 ppb and less than 70 ppb
	NO ₂ higher 50 ppb and less than 100 ppb
	PM ₁₀ higher than 75 µg/m ³ and less than 150 µg/m ³
	PM _{2.5} higher than 17 µg/m ³ and less than 35 µg/m ³
High Level of Air Pollution	CO higher than 18ppm and less than 35ppm
	SO ₂ higher than 38ppb and less than 75ppb
	O ₃ higher than 70 ppb
	NO ₂ higher 100 ppb
	PM ₁₀ higher than 150 µg/m ³
	PM _{2.5} higher than 35 µg/m ³
	CO higher than 35ppm
	SO ₂ higher than 75ppb

Technical Information

Sensors Used in the Network

There are five AQMesh monitors currently operating in the network. These units use an optical light scattering sensor to measure particulates. They use electrochemical sensors to measure other pollutants. All AQMesh units measure particulate (PM), ozone (O₃), and nitrogen dioxide NO₂.

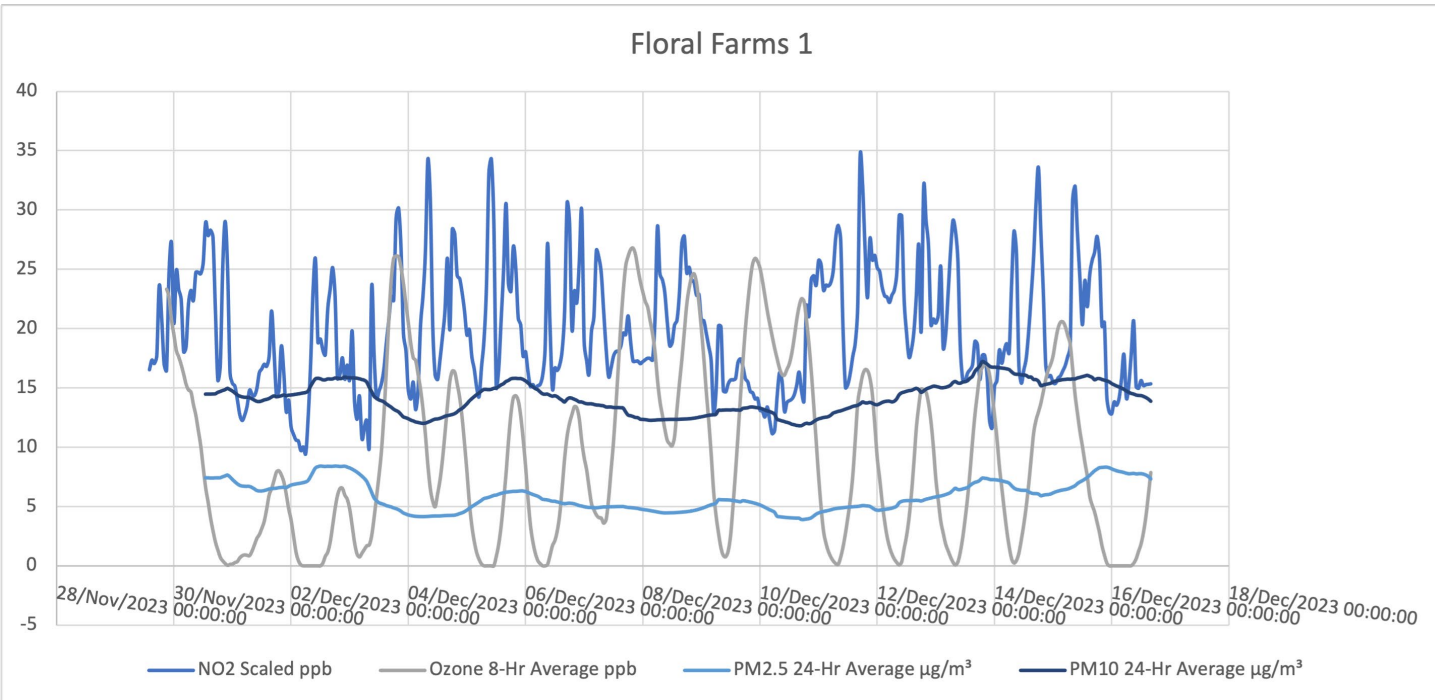
The AQMesh units also have sensors for ambient temperature, humidity, and barometric pressure. Extreme conditions of these factors can impact the accuracy of the sensors for all the measured pollutants. When the unit detects extreme conditions, it will cease to report one, or more, affected pollutants. Once it detects that the environmental conditions have returned to normal, reporting will resume.

Sensor Accuracy

- A primary goal of D-CAMP is to provide the most accurate data possible with the available technology. To meet this goal, all the sensors used in the network undergo a period of co-location before they are placed in the field.
- Co-location refers to the process of operating a regulatory grade reference monitor (FRM/FEM) and non-reference monitor (air sensor) at the same time and location under real-world conditions for a defined evaluation period. Collocating air sensors with regulatory monitors can help evaluate the accuracy of the sensors by comparison of the two data sets.
- At the end of the co-location period, the data is compared, and correction factors are calculated for each pollutant and each sensor.
- These correction factors have been applied to the data in this report.
- This co-location process provides a more accurate view of the air quality than some networks, such as the Purple Air network, that do not use this procedure.

Floral Farms 1

Data Summary December 2023

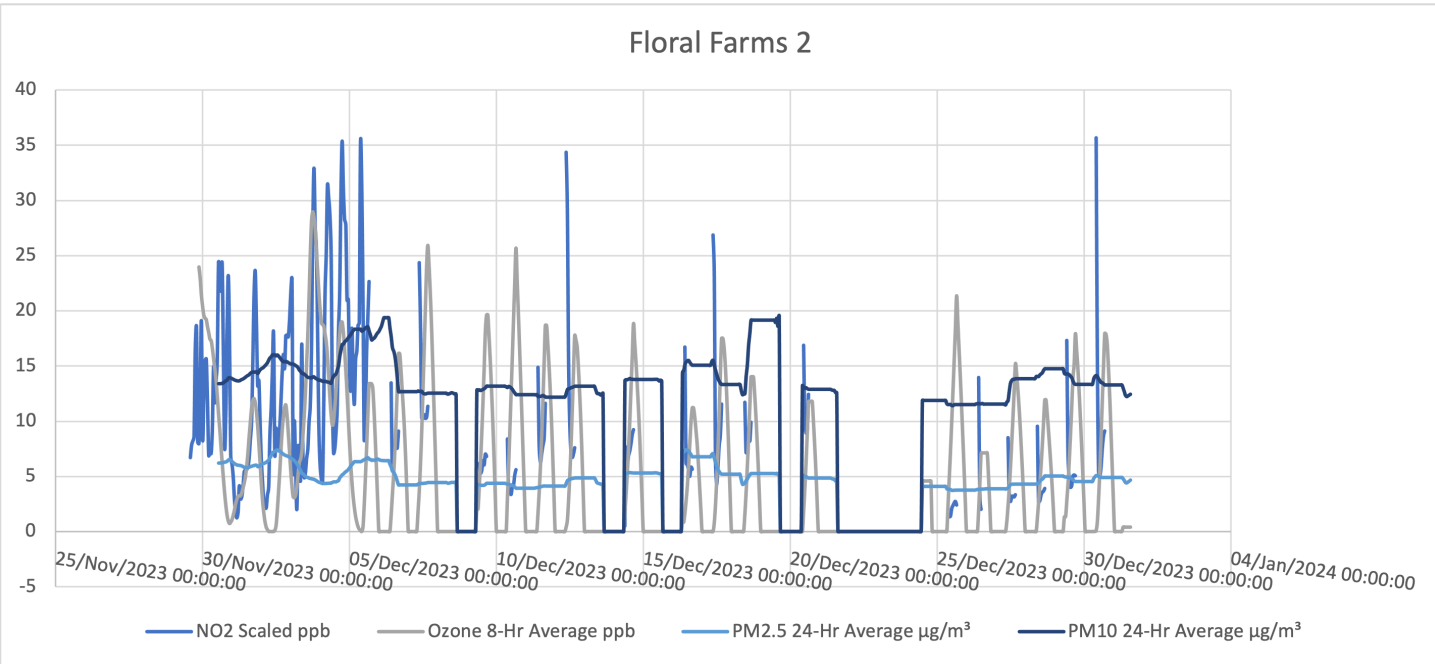


Data Summary

Floral Farms 1	NO ₂ Hourly Average (ppb)	O ₃ 8-Hr Average (ppb)	PM _{2.5} 24-Hr Average ($\mu\text{g}/\text{m}^3$)	PM ₁₀ 24-Hr Average ($\mu\text{g}/\text{m}^3$)
Average Concentration	19.5	9.2	5.8	14.2
Maximum Observed Concentration	34.6	26.8	8.4	17.2

Floral Farms 2

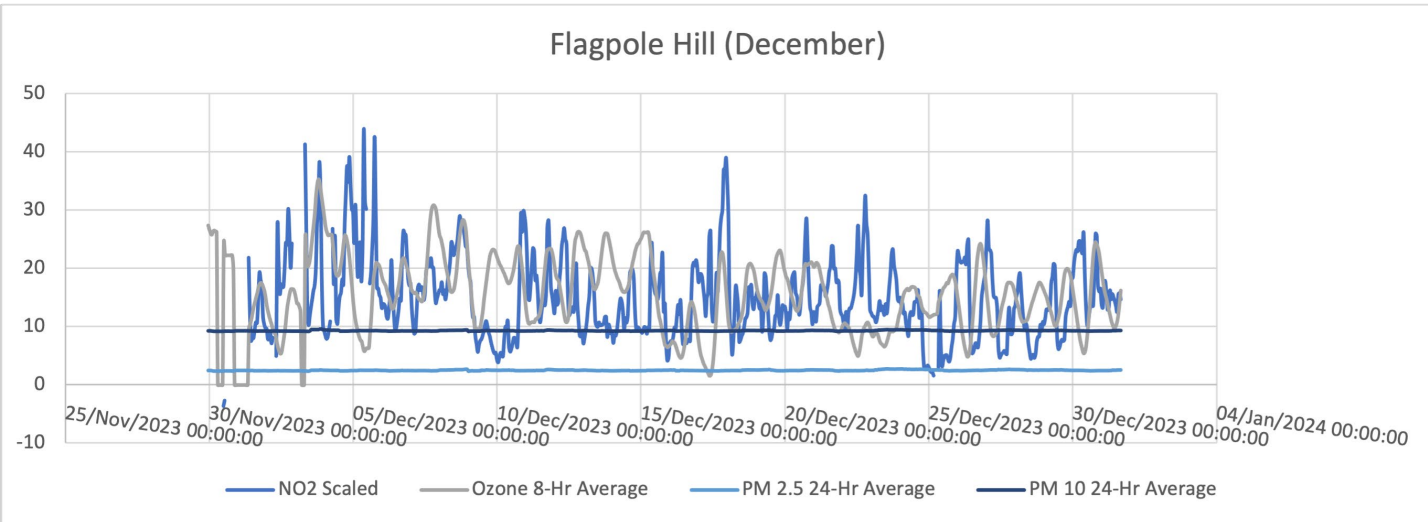
Data Summary December 2023



Data Summary

Floral Farms 2	NO ₂ Hourly Average (ppb)	O ₃ 8-Hr Average (ppb)	PM _{2.5} 24-Hr Average (µg/m ³)	PM ₁₀ 24-Hr Average (µg/m ³)
Average Concentration	10.7	4.7	4.9	13.9
Maximum Observed Concentration	35.7	29.0	7.4	19.5

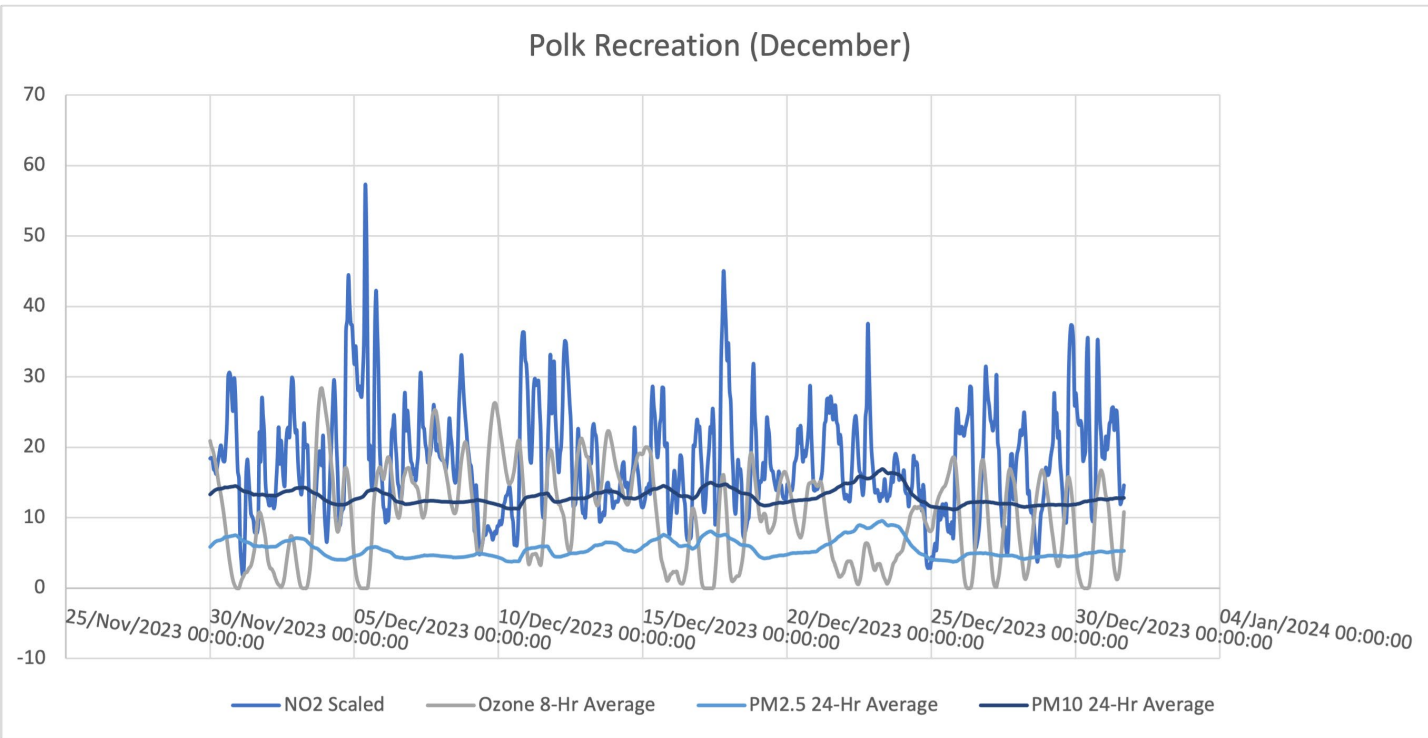
Flagpole Hill Park Data Summary December 2023



Data Summary

Flagpole Hill (December)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	15.02	15.89	2.45	9.29
Maximum Observed Concentration	43.89	35.27	2.73	9.5575

Polk Recreation Center Data Summary December 2023

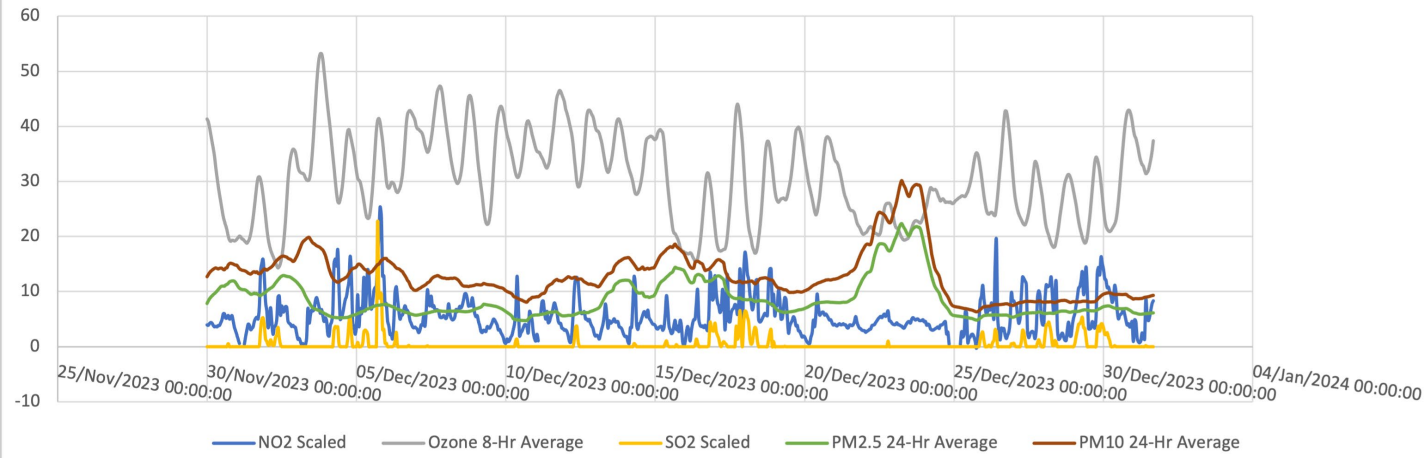


Data Summary

Polk Recreation (December)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	18.05	10.11	5.55	13.00
Maximum Observed Concentration	56.86	28.37	9.59	16.9

Mountain Creek Library Data Summary December 2023

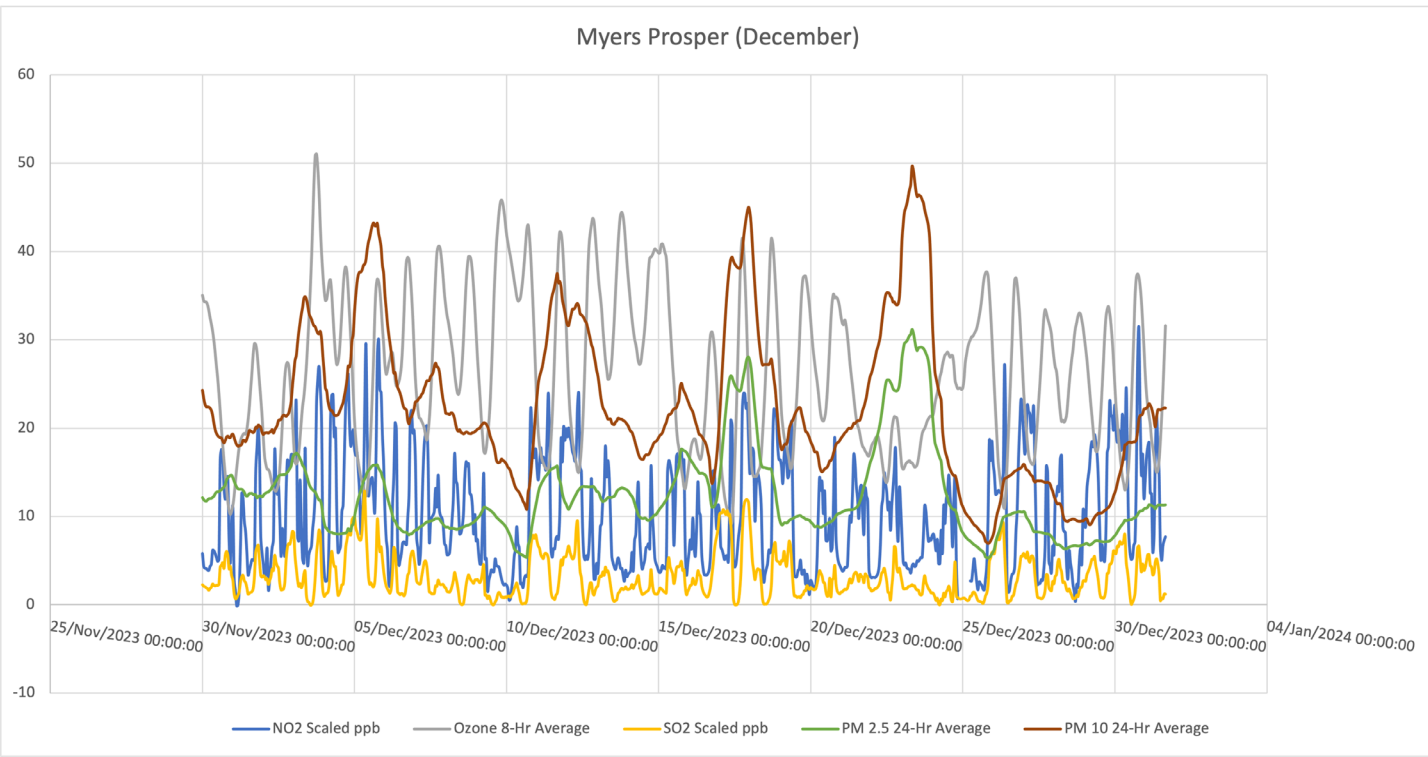
Mountain Creek (December)



Data Summary

Mountain Creek (December)	NO ₂ Hourly Average	O ₃ 8-Hr Average	SO ₂ Scaled	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	5.64	30.33	0.47	11.45	12.90
Maximum Observed Concentration	25.39	53.16125	22.68	22.34	30.16

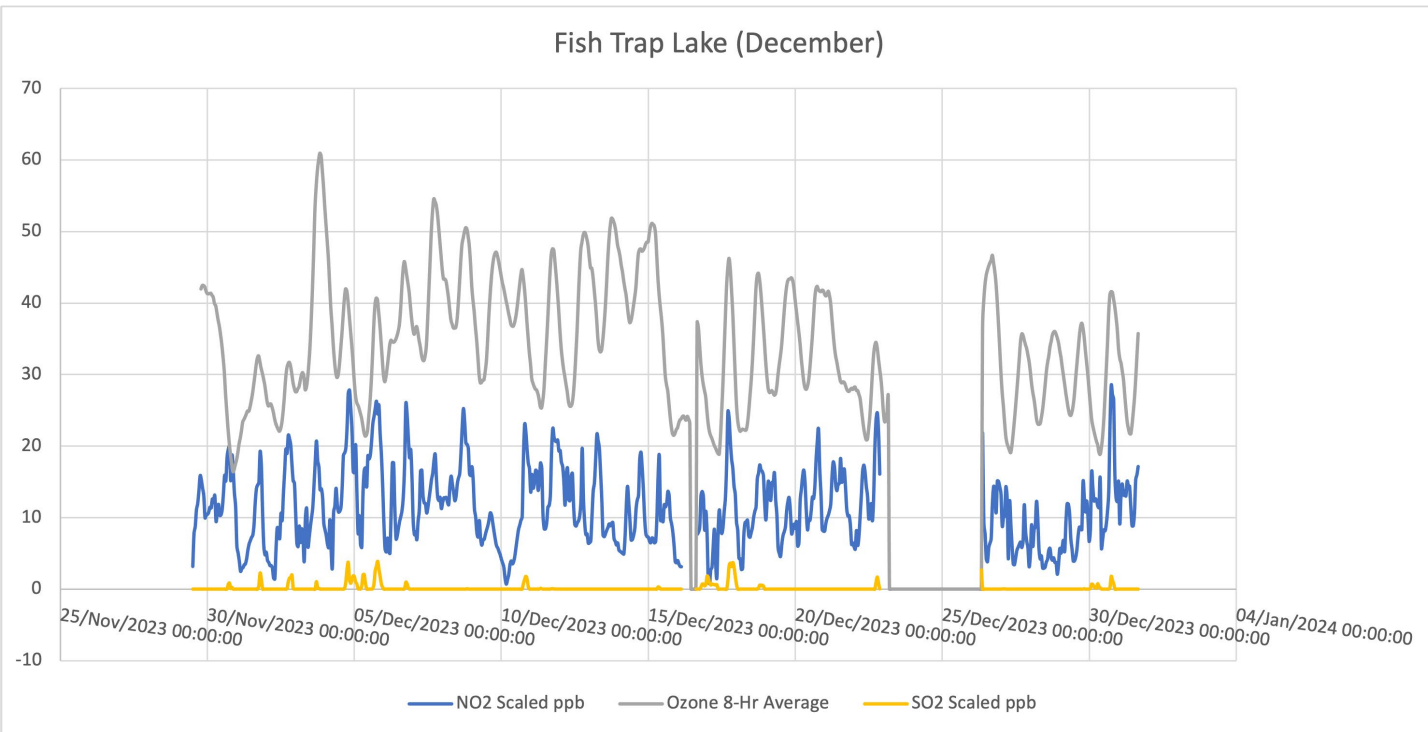
Myers Prosperity Park Data Summary December 2023



Data Summary

Myers Prosper (December)	NO ₂ Hourly Average	O ₃ 8-Hr Average	SO ₂ Hourly Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	10.29	26.43	3.18	12.36	22.49
Maximum Observed Concentration	31.44	51.06	34.9	31.18	49.64

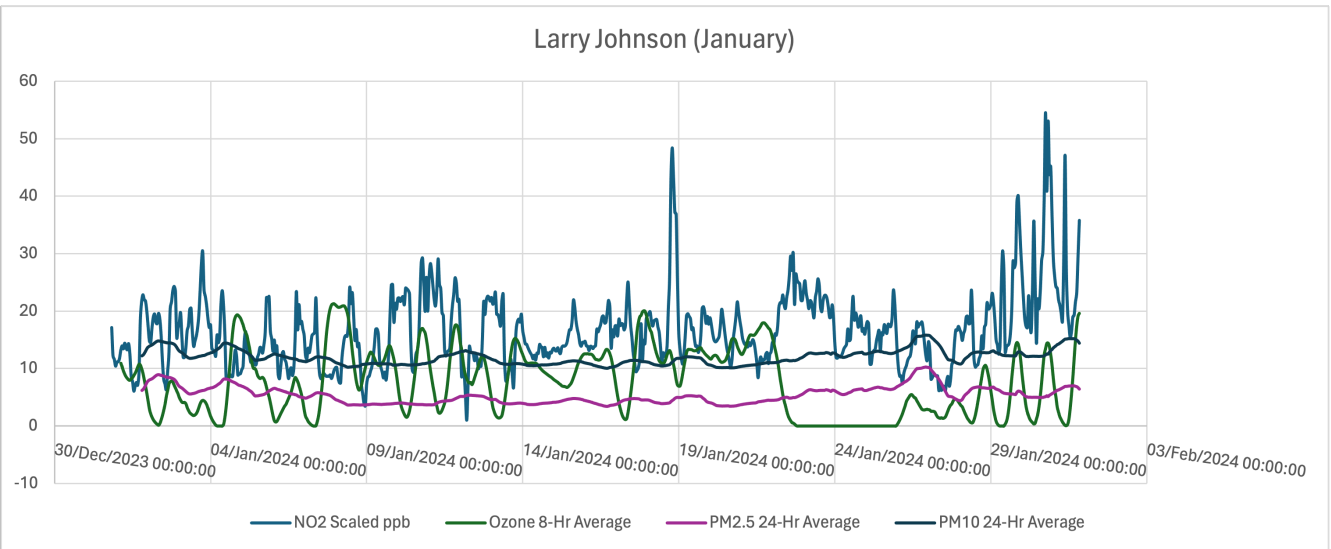
Fish Trap Lake Park Data Summary December 2023



Data Summary

Fish Trap Lake (December)	NO ₂ Hourly Average	O ₃ 8-Hr Average	SO ₂ Hourly Average
Average Concentration	11.36	34.17	0.156
Maximum Observed Concentration	28.48	60.94875	3.87

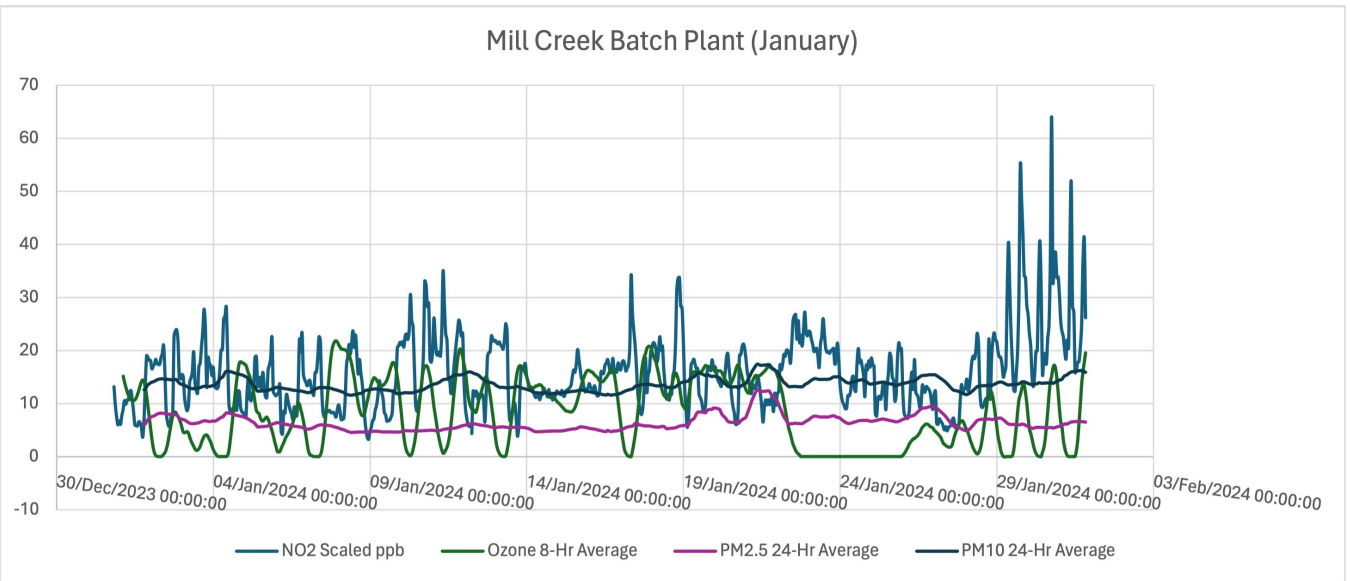
Larry Johnson Recreation Center Data Summary January 2024



Data Summary

Larry Johnson (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	16.66	7.4977	5.37	11.99
Maximum Observed Concentration	54.57	21.27	10.26	15.208

Mill Creek Batch Plant Data Summary January 2024

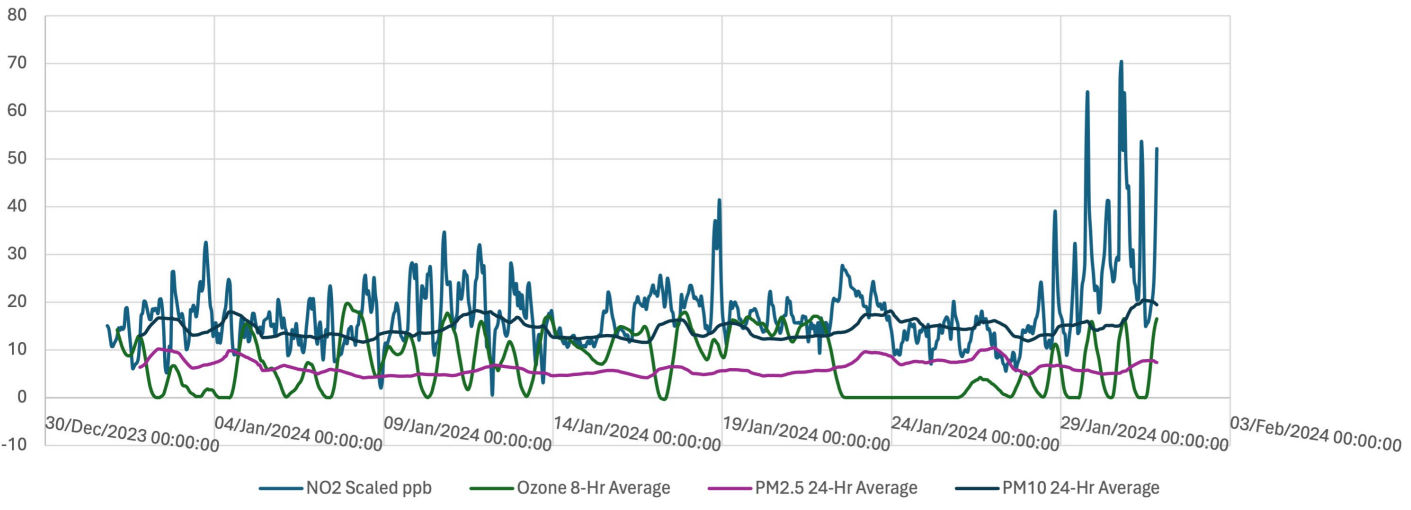


Data Summary

Mill Creek Batch Plant (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	15.75	8.12	6.403	13.69
Maximum Observed Concentration	64.01	21.81875	12.64	16.28

South Central Park Data Summary January 2024

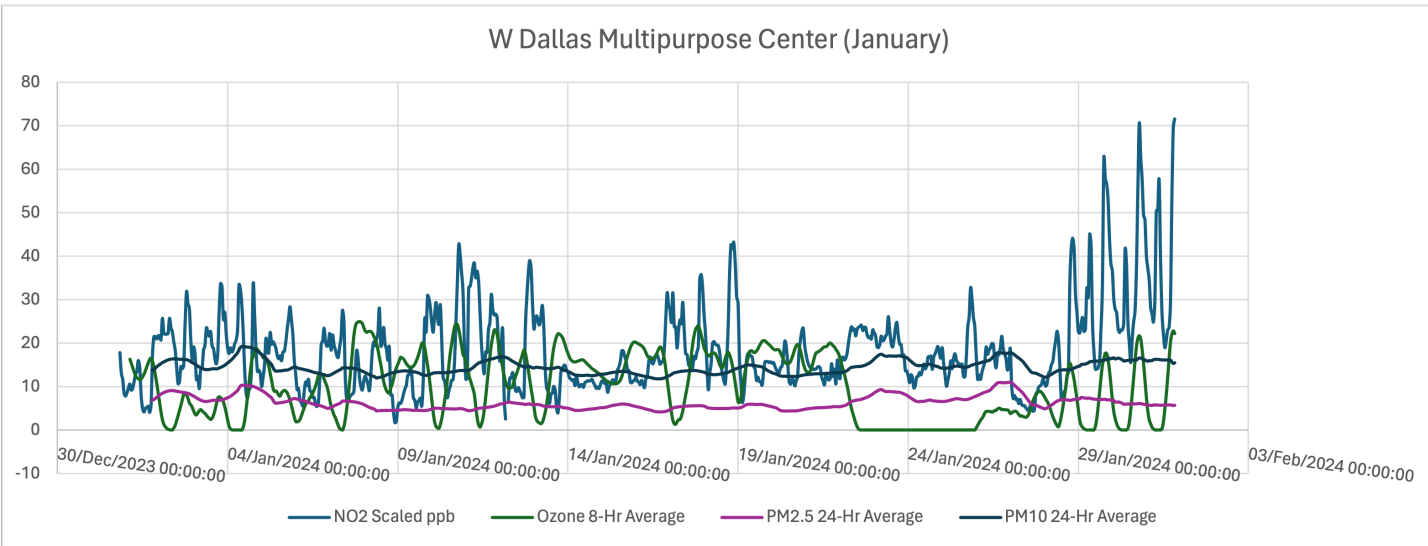
South Central Park (January)



Data Summary

South Central Park (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	17.52	7.12	6.247	14.52
Maximum Observed Concentration	70.31	19.71	10.41	20.45

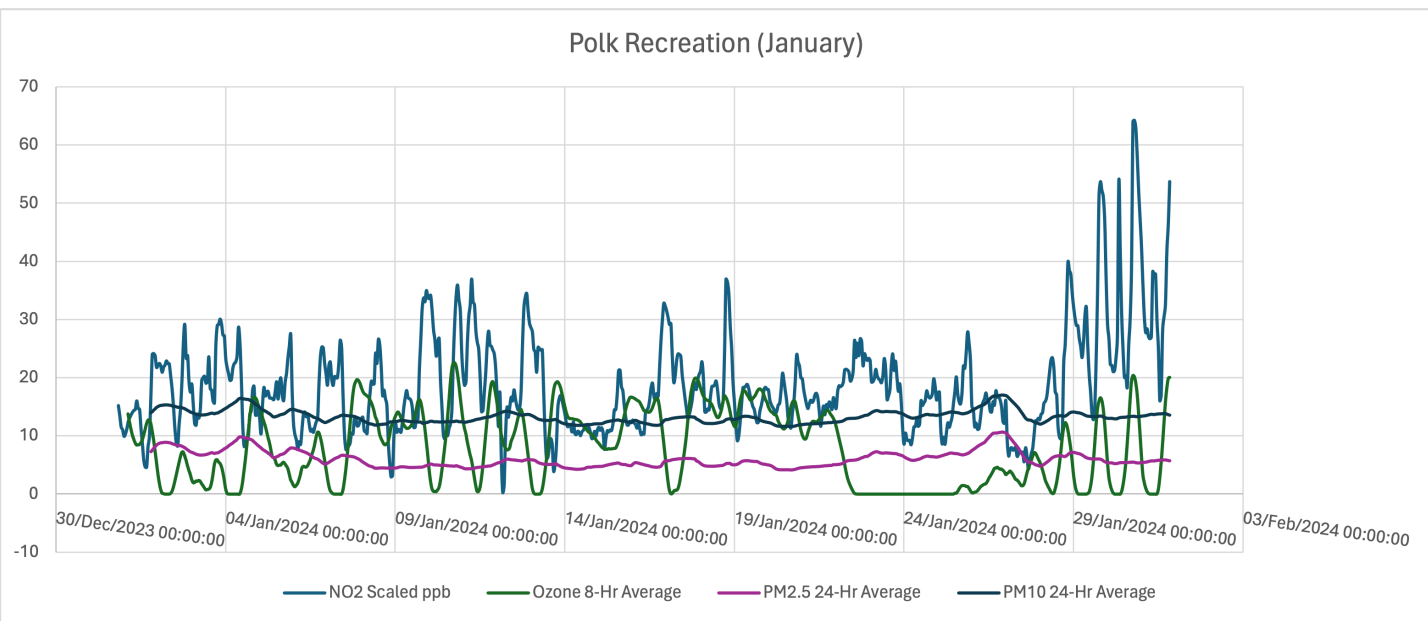
West Dallas Multipurpose Center Data Summary January 2024



Data Summary

W Dallas Multipurpose Center (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	18.37	9.75	6.30	14.43
Maximum Observed Concentration	71.53	25.025	11.063	16.58

Polk Recreation Center Data Summary January 2024

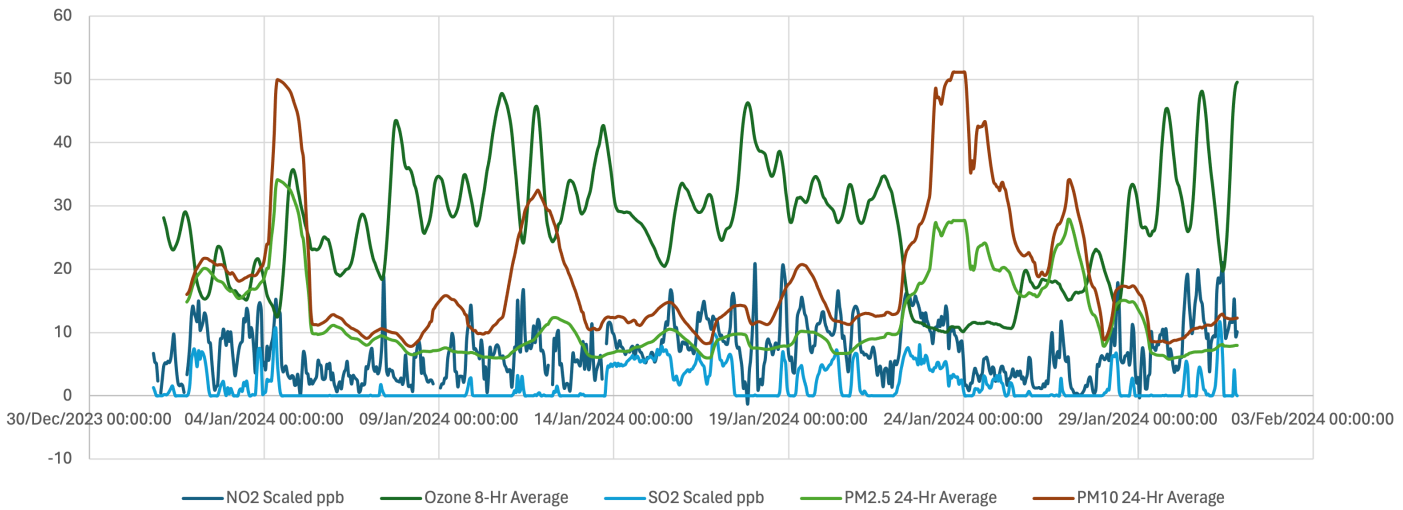


Data Summary

Polk Recreation Center (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	18.58	7.74	6.004	13.306
Maximum Observed Concentration	64.28	22.5575	10.6425	13.84375

Mountain Creek Library Data Summary January 2024

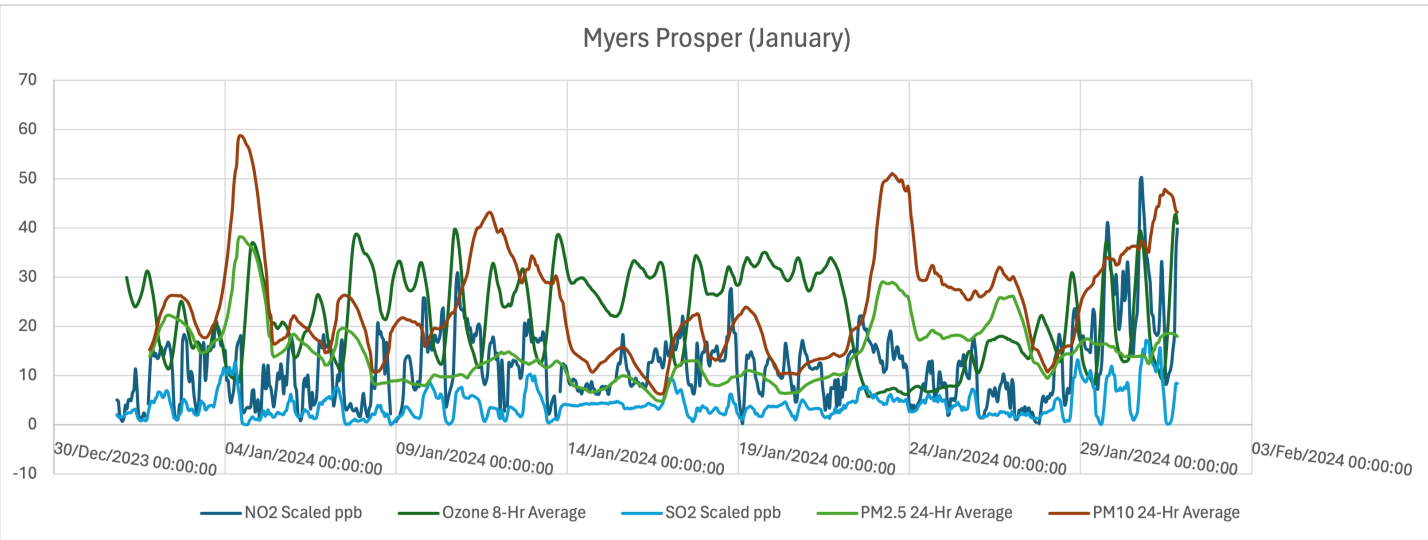
Mountain Creek Library (January)



Data Summary

Mountain Creek Library (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	SO ₂ Hourly Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	7.09	26.326	1.623	12.268	18.56
Maximum Observed Concentration	20.89	49.55125	11.7	34.08	51.147

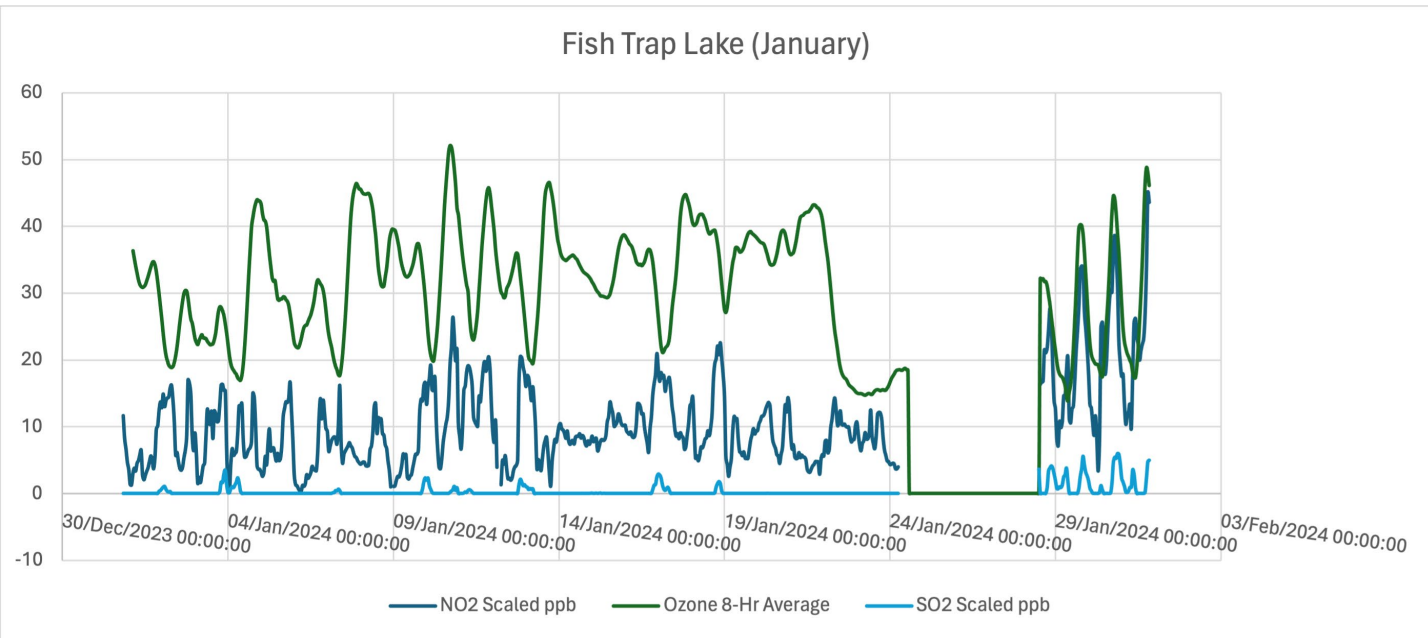
Myers Prosperity Park Data Summary January 2024



Data Summary

Myers Prosper (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	SO ₂ Hourly Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	11.85	21.958	4.085	14.66	24.52
Maximum Observed Concentration	50.25	42.7925	17.17	38.189	58.71

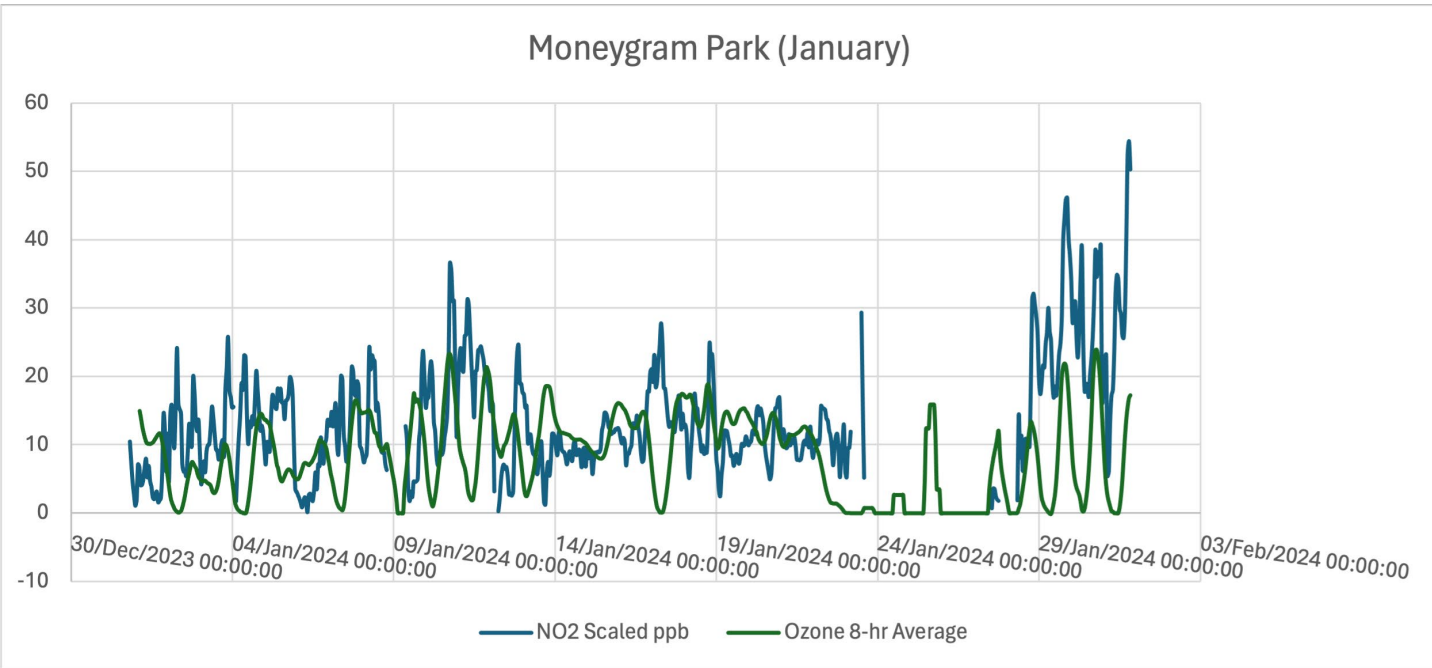
Fish Trap Lake Park Data Summary January 2024



Data Summary

Fish Trap Lake (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	SO ₂ Hourly Average
Average Concentration	10.33	30.64	0.327
Maximum Observed Concentration	45.02	52.14125	6.03

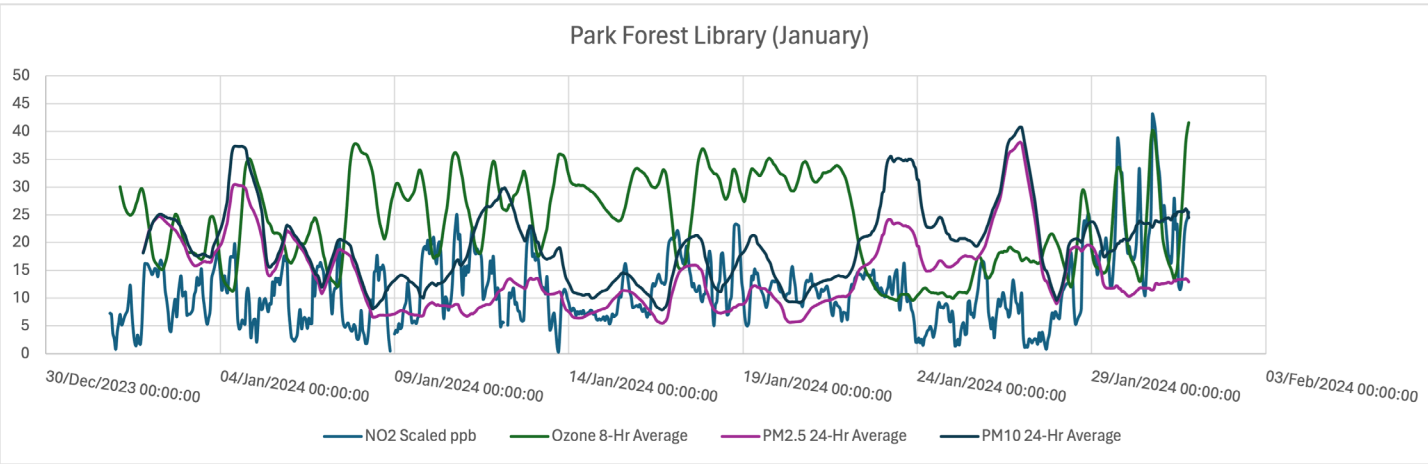
Moneygram Park Data Summary January 2024



Data Summary

Moneygram Park (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average
Average Concentration	13.37	8.07
Maximum Observed Concentration	54.45	23.88

Park Forest Library Data Summary January 2024



Data Summary

Park Forest Library (January)	NO ₂ Hourly Average	O ₃ 8-Hr Average	PM 2.5 24-Hr Average	PM 10 24-Hr Average
Average Concentration	11.51	23.52	14.299	19.519
Maximum Observed Concentration	43.05	41.61625	38.105	26.08

Notes - December

Floral Farms 1

- NO₂ : low
- O₃ : low
- PM-2.5 : low
- PM-10 : low

Floral Farms 2

- NO₂ : low
- O₃ : low
- PM-2.5 : low
- PM-10 : low

Flagpole Hill Park

- NO₂ : low
- O₃ : low
- PM-2.5 : low
- PM-10 : low

Polk Recreation Center

- NO₂ : low
- O₃ : low
- PM-2.5 : low
- PM-10 : low

Mountain Creek Library

- NO₂ : low
- O₃ : low
- SO₂ : low
- PM-2.5 : low
- PM-10 : low

Myers Prosperity Park

- NO₂ : low
- O₃ : low
- SO₂ : low
- PM-2.5 : low
- PM-10 : low

Fish Trap Lake Park

- NO₂ : low
- O₃ : low
- SO₂ : low

Notes - January

Larry Johnson Recreation Center

- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

Mill Creek Batch Plant

- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

South Central Park

- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

West Dallas Multipurpose

- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

Polk Recreation Center

- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low

Mountain Creek Library

- NO2 : low
- O3 : low
- SO2 : low
- PM-2.5 : low
- PM-10 : low

Myers Prosperity Park

- NO2 : low
- O3 : low
- SO2 : low
- PM-2.5 : low
- PM-10 : low

Fish Trap Lake Park

- NO2 : low
- O3 : low
- SO2 : low

Moneygram Park

- NO2 : low
- O3 : low

Park Forest Library

- NO2 : low
- O3 : low
- PM-2.5 : low
- PM-10 : low