

North Idaho Air Quality Summary – October 2019

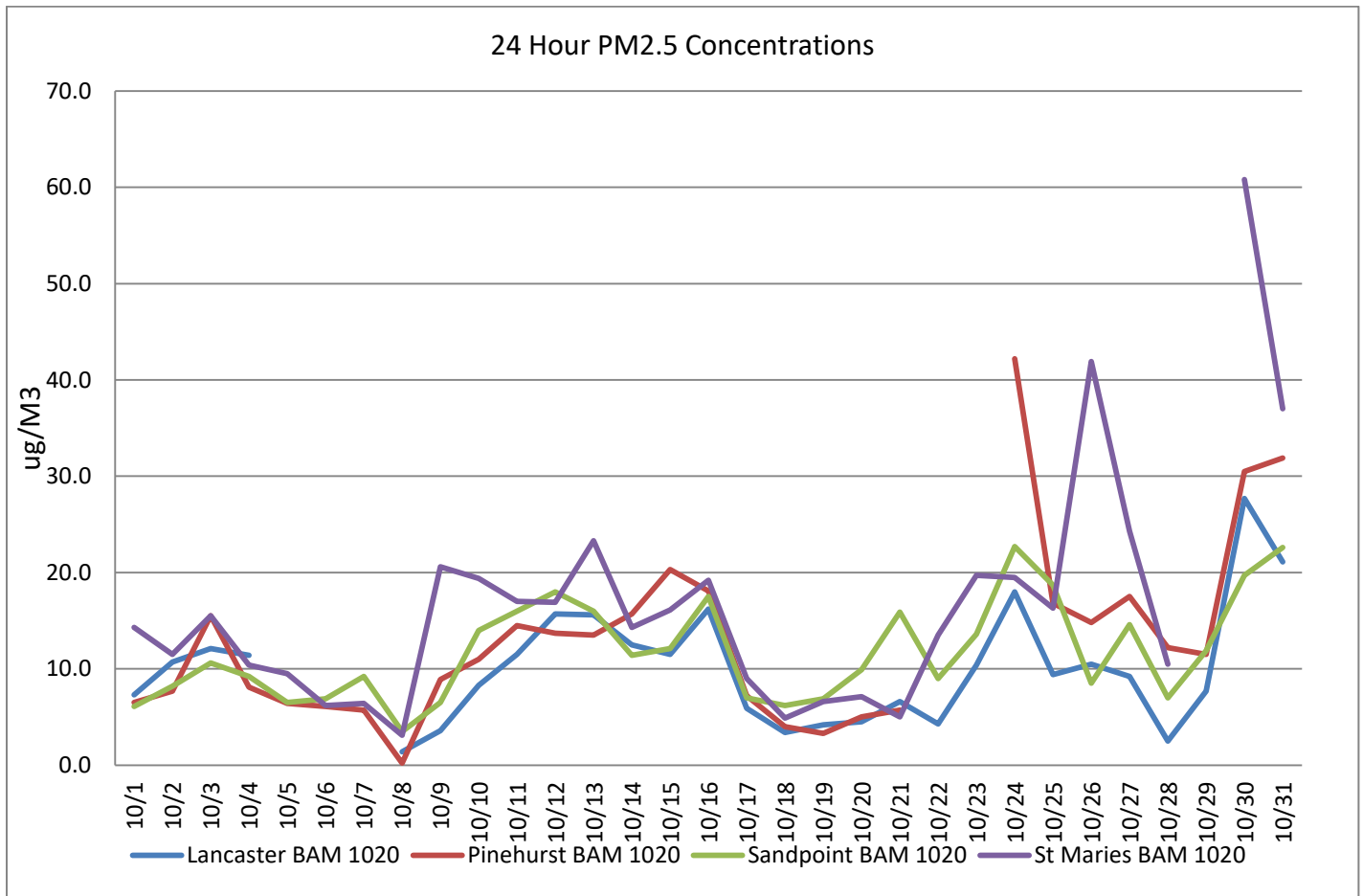
Page 1 of 5

This summary of North Idaho’s air quality is compiled from the various air quality samplers located in the Department of Environmental Quality’s Coeur d’Alene Region for the month of October 2019.

The Coeur d’Alene Regional Network encompasses the counties of Boundary, Bonner, Kootenai, Shoshone, and Benewah. The data presented in this report is considered preliminary data and has not been completely evaluated for all quality assurance requirements and is therefore subject to change.

PM2.5 CONTINUOUS DATA

The graph below displays the average daily 24-hour PM_{2.5} values for the month and is expressed in micrograms per cubic meter, ($\mu\text{g}/\text{m}^3$). These values were calculated by averaging hourly values midnight to midnight from the agency’s PM_{2.5} BAM samplers located in the Cities of Pinehurst, Sandpoint, and St. Maries and on Lancaster Road in Kootenai County. The 24 hour PM_{2.5} National Ambient Air Quality Standard (NAAQS) is $35 \mu\text{g}/\text{m}^3$.



North Idaho Air Quality Summary – October 2019

Page 2 of 5

The table below shows the maximum 24 hour values calculated from continuous BAM monitoring for this reporting period. The NAAQS for PM_{2.5} is 35 µg/m³ for a 24 hour average. Depiction of preliminary continuous monitoring data in the table below is for informational purposes only and is considered preliminary data.

Monitoring Site	Highest Reading (µg/m ³)	Date
Lancaster BAM 1020	27.7	October 30
Pinehurst BAM 1020	42.2	October 24
Sandpoint BAM 1020	22.7	October 24
St. Maries BAM 1020	60.8	October 30

PM_{2.5} FEDERAL REFERENCE METHOD (FRM) DATA

At this time the Coeur d'Alene Regional Office of Idaho DEQ uses the Federal Reference Method Sampler (filter based) measurements for NAAQS compliance determination at the Pinehurst and St. Maries monitoring sites. This method requires that 75% of available data be collected per quarter. Other filter processing requirements are applicable to this method. The Coeur d'Alene Regional Office's collection efficiency rate for October is shown in the table below. The collection percentage could change based on quality assurance requirements yet to be completed.

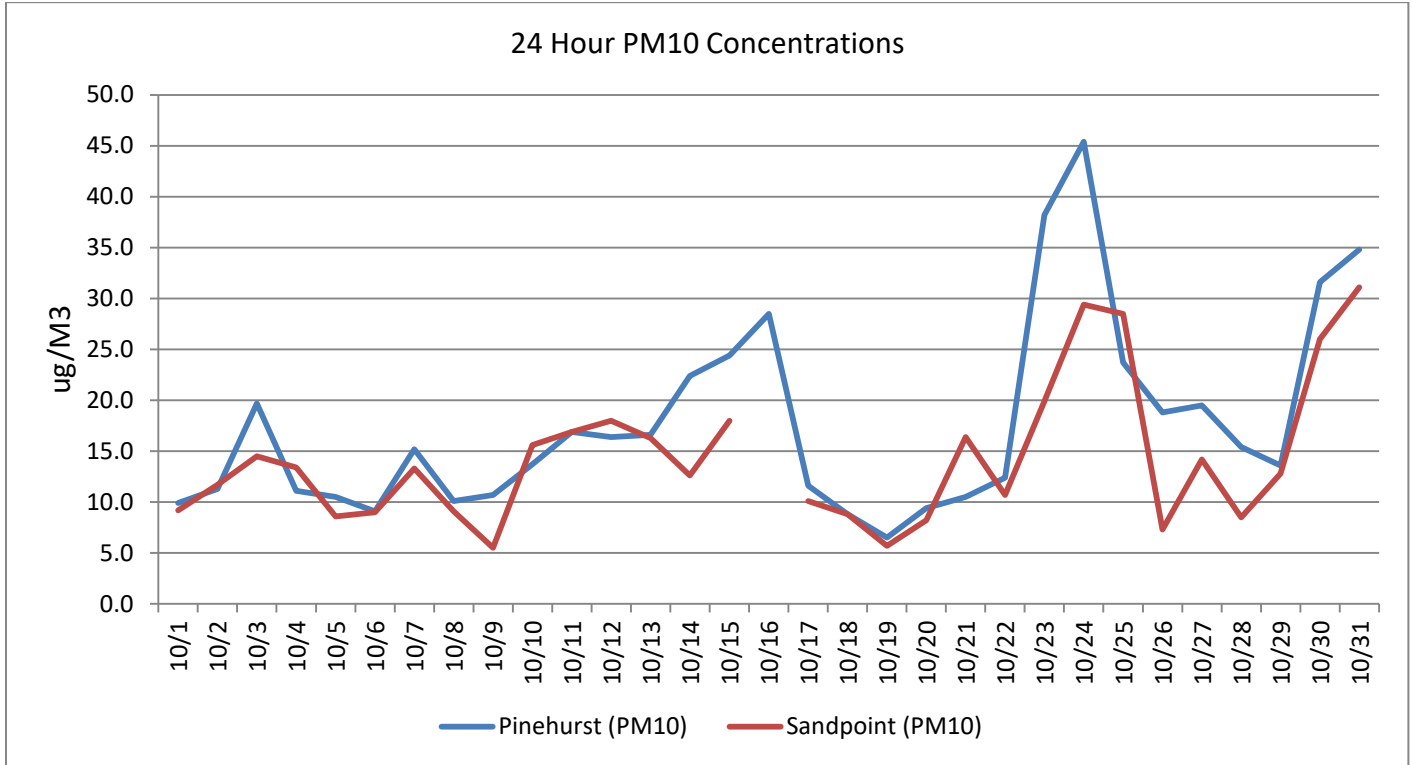
October FRM filter recovery Efficiency

Site	Sample Days	Valid Samples	Collection Percentage
Pinehurst	31	31	100%
St. Maries	31	31	100%

North Idaho Air Quality Summary – October 2019

PM10 CONTINUOUS DATA

The graph below shows the 24 hour values for PM10. There were no apparent exceedances of the 150 $\mu\text{g}/\text{m}^3$ standard for the 24 hour average.



Air Quality Actions

There was an Air Pollution Forecast and Caution (Stage 1 Burn Ban) issued in north Idaho during the month of October. It was issued on October 30 and was continued into November. The Forecast and Caution was issued due to stagnant atmospheric conditions and elevated $\text{PM}_{2.5}$ levels across north Idaho. The NWS issued an air stagnation advisory for eastern Washington and north Idaho on November 1.

The CRB seasonal monitors deployed in the Kootenai Valley were shut down on October 1, 2019. These are utilized to monitor crop residue burning during the spring and fall burn seasons. The St. Maries precision FRM lost one day due to an equipment malfunction.

North Idaho Air Quality Summary – October 2019

Page 4 of 5

NETWORK INFORMATION

The table below summarizes all active and inactive air quality samplers located within the North Idaho area during the month of October 2019.

Site	Monitor	Type	Comments	Current Status	Data Completeness
Lancaster / Rathdrum Prairie	BAM 1020 PM2.5	Continuous		Active	94.4%
Lancaster / Rathdrum Prairie	Meteorological Tower	Continuous		Active	100%
St. Maries	BAM 1020 PM2.5	Continuous		Active	97.8%
St. Maries	Met One E-Seq-FRM PM2.5	Filter		Active	100%
St. Maries	Precision E-SQ-FRM	Filter		Active	80%
Pinehurst	Met One E-Seq-FRM PM2.5	Filter		Active	100%
Pinehurst	BAM 1020 PM2.5	Continuous		Active	97.3%
Pinehurst	BAM PM10	Continuous		Active	99.8%
Pinehurst	Meteorological Tower	Continuous		Active	99.8%
Sandpoint U of I Extension Office	Meteorological Tower	Continuous		Active	100%
Sandpoint U of I Extension Office	BAM 1020 PM2.5	Continuous		Active	99.8%
Sandpoint U of I Extension Office	BAM 1020 PM10	Continuous		Active	98.1%
Lakes Management Plan	Meteorological Tower	Continuous		Active	94%
3 Meter G C Met	Meteorological Tower	Continuous		Active	99.7%
Porthill International Border Site	MET One E-Sampler Wind speed & direction	Continuous	CRB Seasonal	Inactive	NA
Mt. Hall School	MET One E-Sampler Wind speed & direction	Continuous	CRB Seasonal	Inactive	NA

During October 14 of 14 active samplers achieved 75% or greater data completeness.

North Idaho Air Quality Summary – October 2019

AIR QUALITY INDEX

The air quality index is a tool used to convey information to the public regarding local levels of air pollution and the associated health concerns. These levels are depicted in the table below.

Air Quality Index (AQI): Particle Pollution

Index Values	Levels of Health Concern	Cautionary Statements
0-50	Good	None
51-100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.
101-150	Unhealthy for Sensitive Groups	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion outdoors.
151-200	Unhealthy	People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion outdoors. Everyone else should reduce prolonged or heavy exertion.
201-300	Very Unhealthy	People with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
301-500	Hazardous	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

Below is a table showing the total weekday Air Quality Index (AQI) values for each of the reporting cities located in North Idaho for this reporting month. Differences in totals were due to sampler down time.

October 2019

Coeur d'Alene	Pinehurst	Sandpoint	St. Maries
Green = 15	Green = 10	Green = 13	Green = 7
Yellow = 5	Yellow = 10	Yellow = 9	Yellow = 12
Orange = 0	Orange = 0	Orange = 0	Orange = 1
Red = 0	Red = 0	Red = 0	Red = 1
Purple = 0	Purple = 0	Purple = 0	Purple = 0
Maroon = 0	Maroon = 0	Maroon = 0	Maroon = 0

2019 YEAR TO DATE AQI TOTALS

Coeur d'Alene	Pinehurst	Sandpoint	St. Maries
Green = 201(94%)	Green = 177(84%)	Green = 200(93.5%)	Green = 153 (72%)
Yellow = 12 (6%)	Yellow = 34(16%)	Yellow = 14 (6.5%)	Yellow = 50 (24%)
Orange = 0	Orange = 0	Orange = 0	Orange = 6 (3%)
Red = 0	Red = 0	Red = 0	Red = 2 (1%)
Purple = 0	Purple = 0	Purple = 0	Purple = 0
Maroon = 0	Maroon = 0	Maroon = 0	Maroon = 0

For further information about air quality in Idaho and the northwest region visit the following sites on the Internet or contact Ralph Paul, Coeur d'Alene Region Airshed Coordinator, at 208-769-1422.

<http://www.deq.idaho.gov/>

<http://www.deq.idaho.gov/daily-air-quality-reports-forecasts>

www.airnow.gov/index.cfm?action=airnow.fcsummary&stateid=16