



ALBERTA AIRSHEDS
COUNCIL

Alberta Airsheds Council Update





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Airsheds serve in the public interest by:

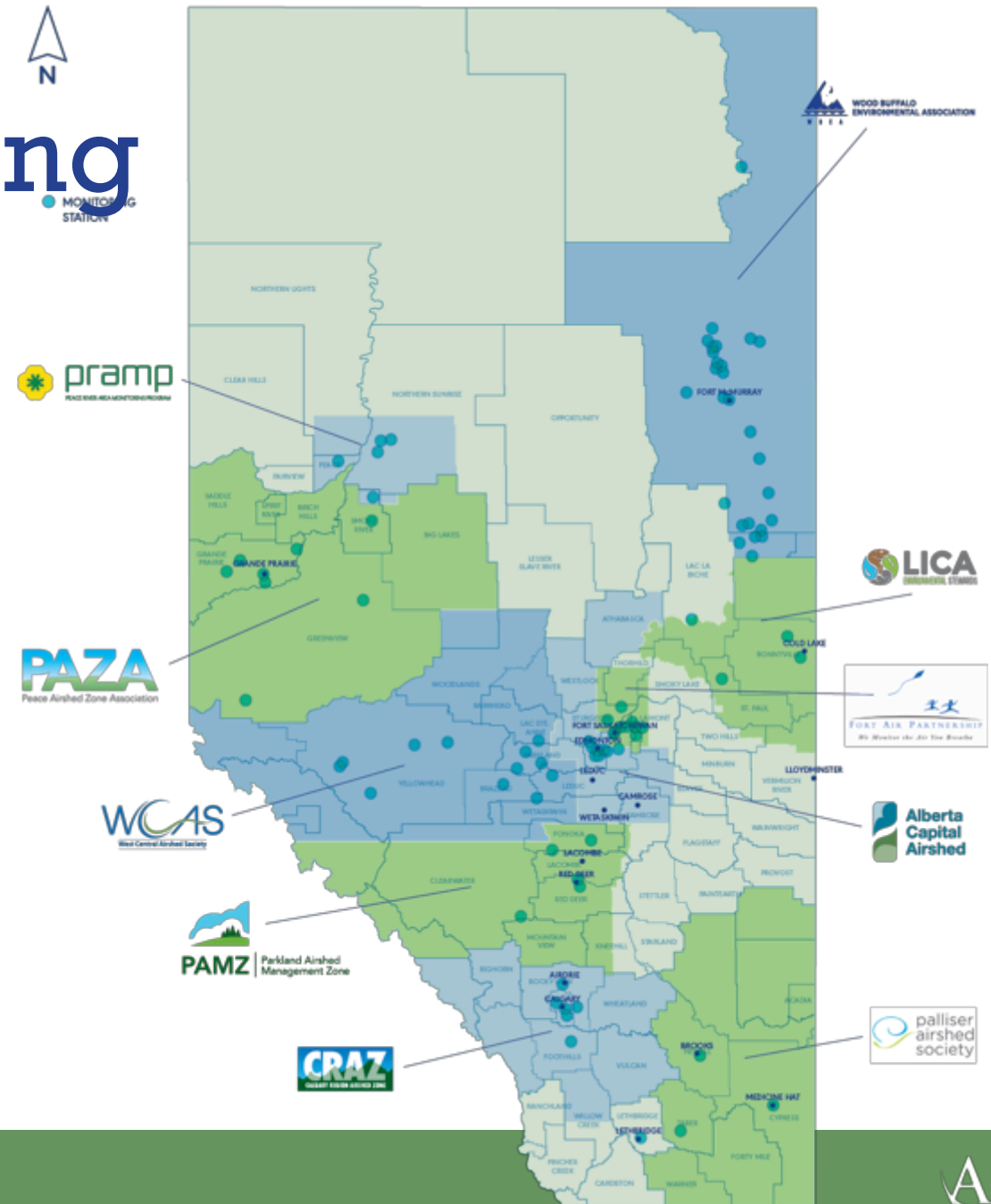
- meeting or exceeding the highest air monitoring standards
- ensuring unbiased data and analysis is available to all stakeholders and partners
- being responsive to community concerns
- raising awareness through community engagement and education



Air Quality Monitoring

Where we Monitor

- 10 Airsheds
- 88 continuous monitoring stations
- Hundreds of other monitoring sites measuring a variety of air quality parameters using an assortment of monitoring technologies

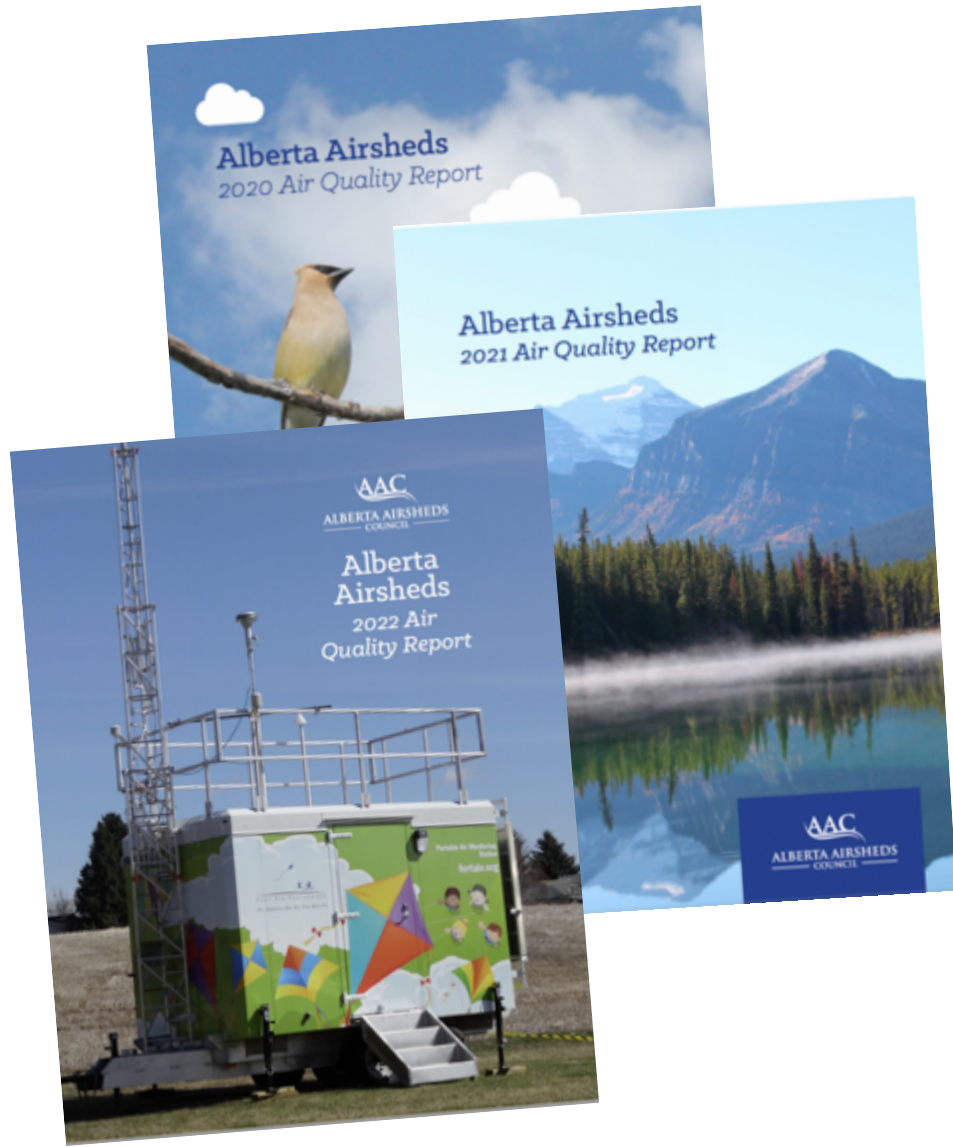


Innovative Air Education Program (IAEP)



1. Alberta Environment (EPA) asked AAC to take on the project and provided \$300K grant.
2. Goal: Reduce NOx emissions in Alberta, and particularly in urban areas.
3. ZGM has been retained (RFP process) to develop education and social change campaign.

Education and Outreach



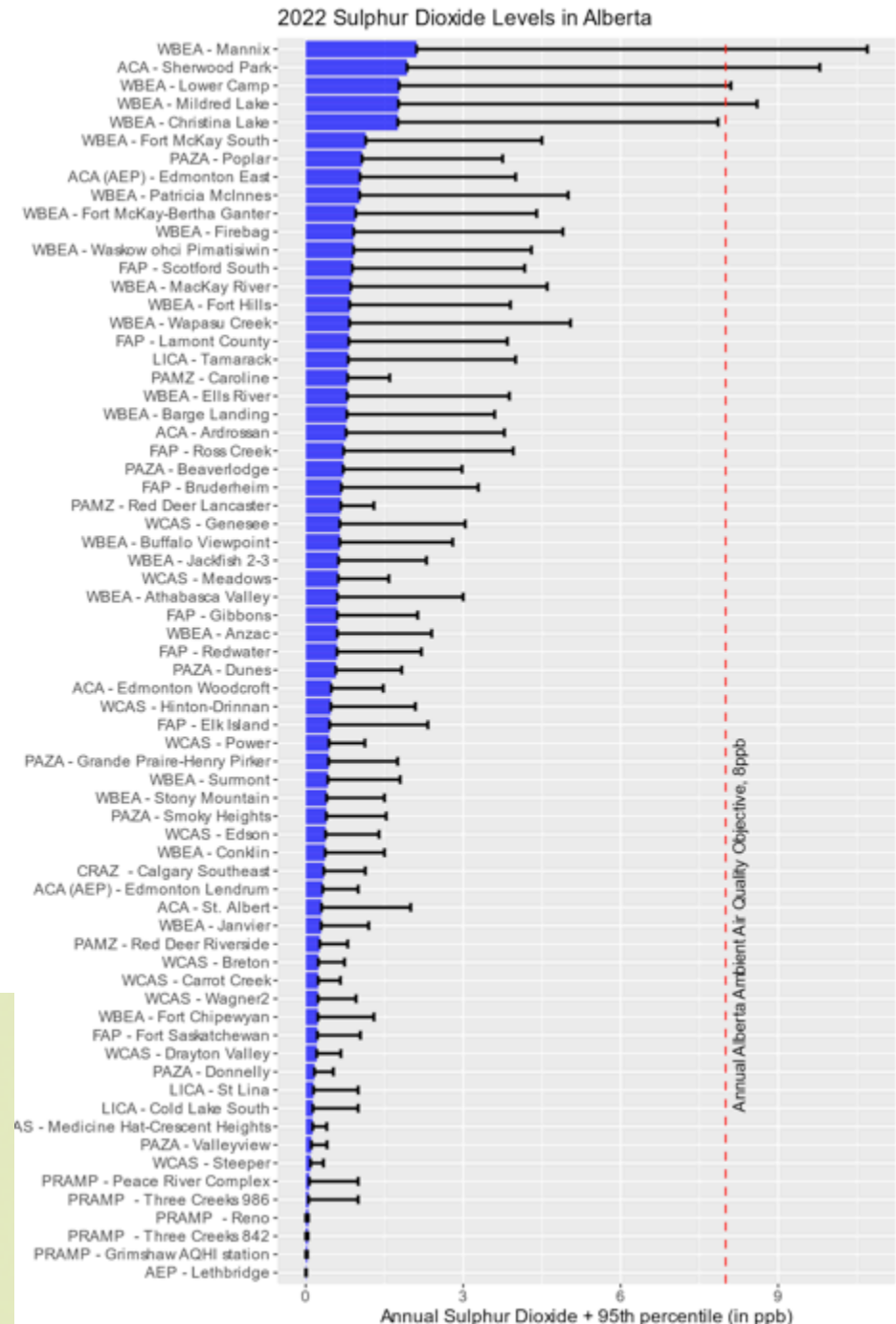
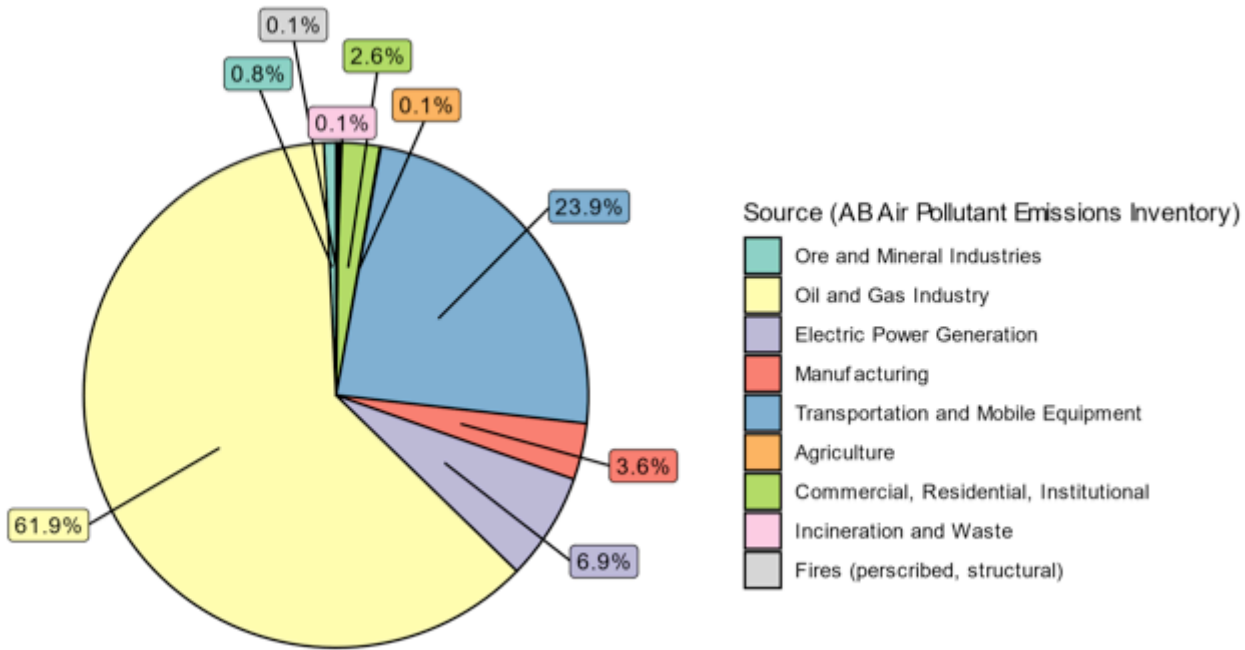
The AAC prepares annual **Alberta Airsheds Air Quality Reports** that provide a summary of the air quality data collected and verified by Alberta's Airsheds, on behalf of all of Alberta's air quality stakeholders and partners.

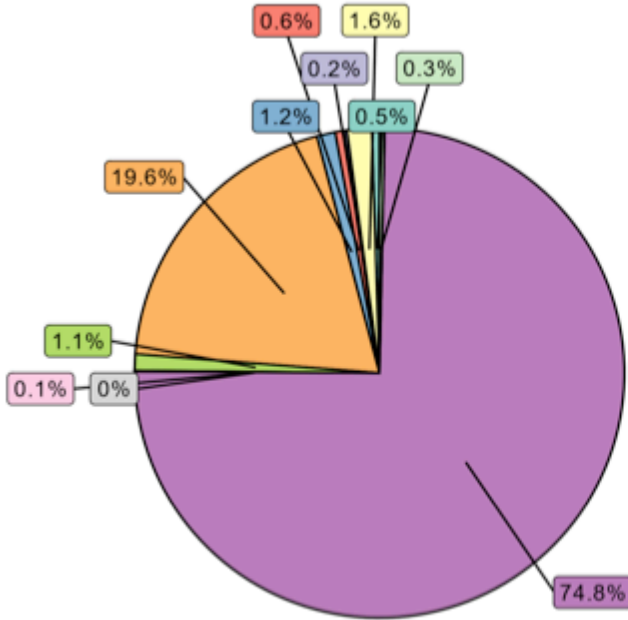


2022 Air Quality Monitoring Profiles

- Description of impacts to human health of four common air pollutants (NO_2 , $\text{PM}_{2.5}$, SO_2 , O_3)
- Sources of common air pollutants using pie charts
- Air quality data from continuous monitoring stations using graphs displaying annual averages and 95th percentile markers

2022 NO₂ Profiles



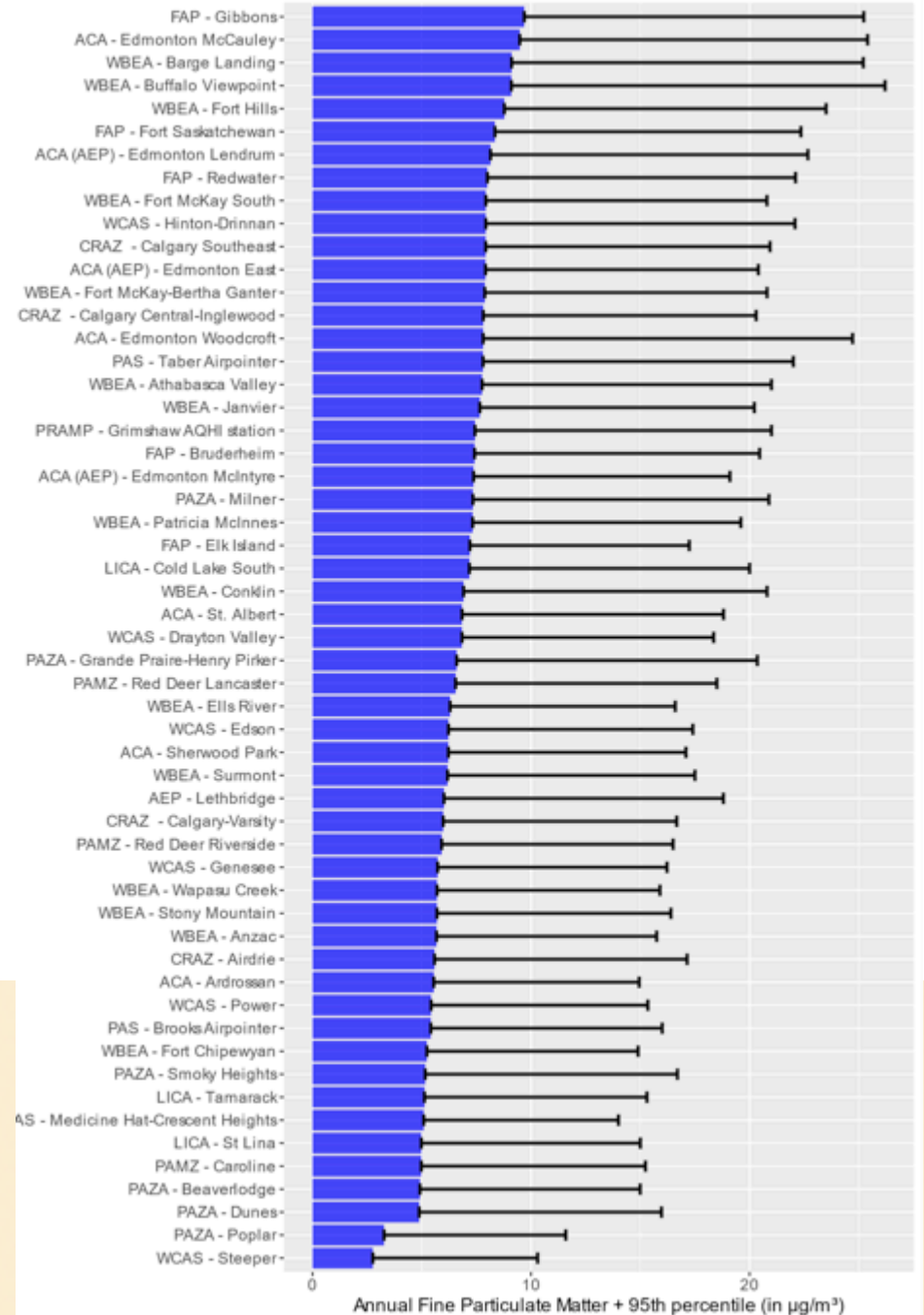


Source (AB Air Pollutant Emissions Inventory)

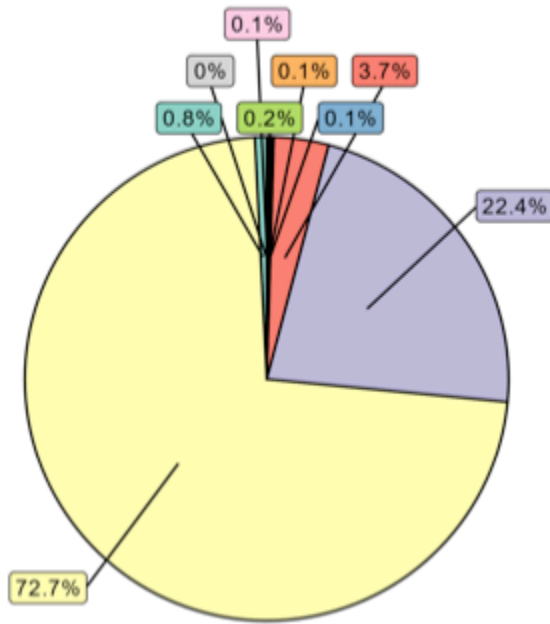
- Ore and Mineral Industries
- Oil and Gas Industry
- Electric Power Generation
- Manufacturing
- Transportation and Mobile Equipment
- Agriculture
- Commercial, Residential, Institutional
- Incineration and Waste
- Paints and Solvents
- Dust (roads, construction, tailings)
- Fires (prescribed, structural)

2022 PM_{2.5} Profiles

2022 Fine Particulate Matter Levels in Alberta



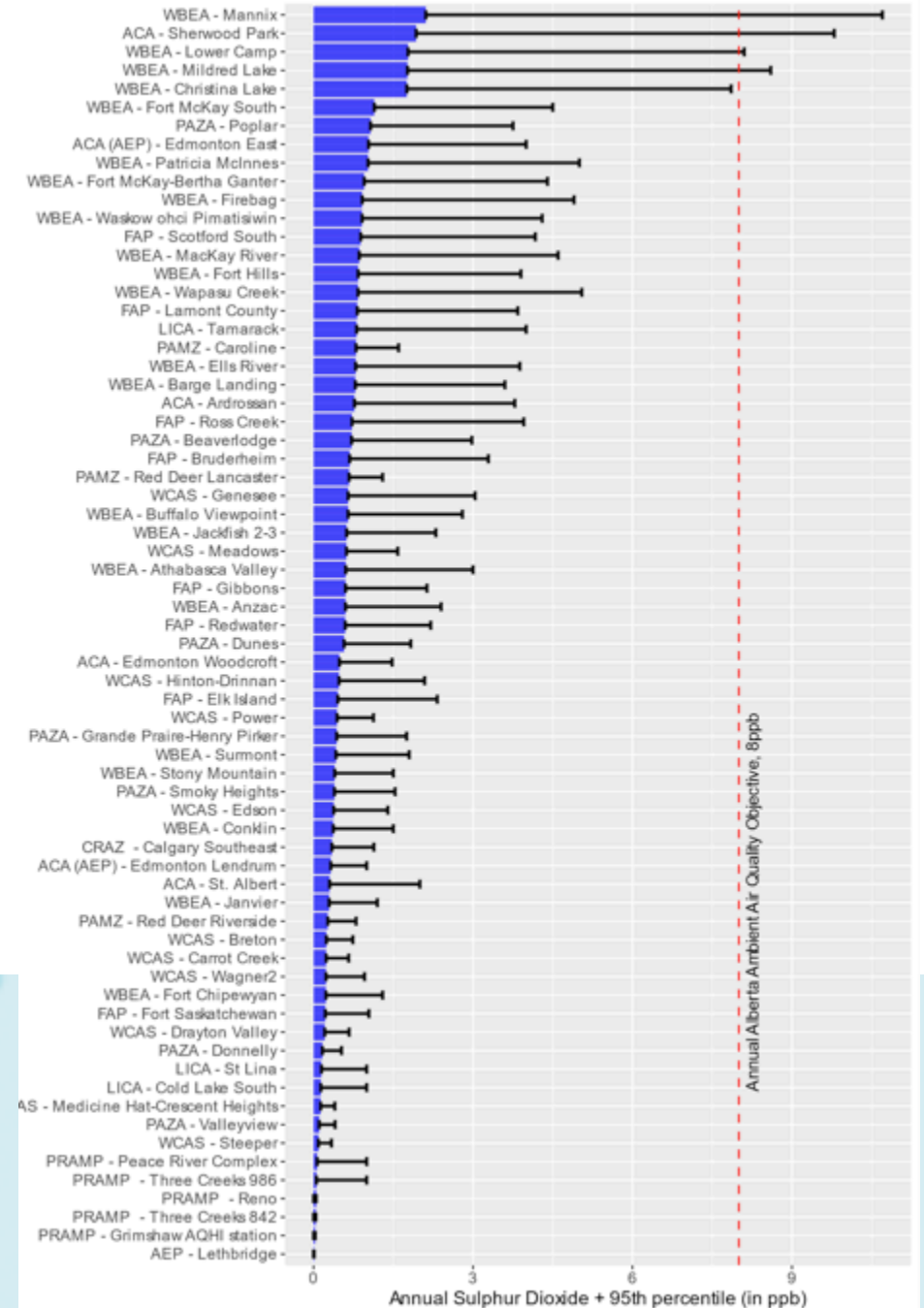
2022 SO₂ Profiles



Source (AB Air Pollutant Emissions Inventory)

- Ore and Mineral Industries
- Oil and Gas Industry
- Electric Power Generation
- Manufacturing
- Transportation and Mobile Equipment
- Agriculture
- Commercial, Residential, Institutional
- Incineration and Waste
- Fires (prescribed, structural)

2022 Sulphur Dioxide Levels in Alberta

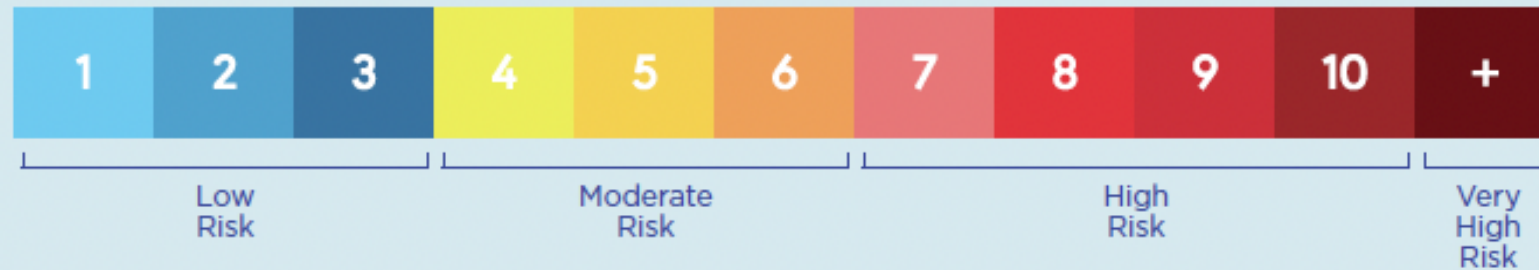


Annual Alberta Ambient Air Quality Objective, 8ppb

Annual Sulphur Dioxide + 95th percentile (in ppb)

Air Quality Health Index (AQHI)

- Data collected by Alberta's Airsheds is used to calculate the AQHI, a real-time air quality rating which is reported in over **35 Alberta communities**.
- In Alberta, all monitoring stations saw AQHI ratings in the low-risk range for 88% to 99.5% of the 2022 year, with a **provincial average AQHI reading of 2.2** (based on 334,017 hours of data).





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