Calgary Region Airshed Zone - Purple Air Project

PURPLE AIR PROJECT

The Calgary Region Airshed Zone is collaborating with Environment and Climate Change Canada (ECCC) to bring Purple Air Monitoring to the region.

Purple Air Monitors are low cost sensors that are used to supplement government air data to provide a better understanding of local-scale air pollution. The level of pollution can change quickly and vary within the same neighbourhood, these monitors provide air quality maps for communities to better protect vulnerable populations.

PURPLE AIR SENSORS

The PA-II is an air quality sensor that measures realtime PM_{2.5} concentrations. Built-in WiFi enables the sensor to transmit data to the <u>PurpleAir</u> map, where it is stored and made available to any smart device.

Dimensions: 3.5 in x3.5 in x 5 in (85 mm x 85 mm x 125 mm)

SERVING THE COMMUNITY

Information available during smoke events to protect vulnerable populations.

Advise to modify activity (ex., cancel kids sports), stay indoors, or seek clean air shelters.

BENEFITS

Low Cost

Small Footprint

Ease of use – only needing power outlet and WiFi

Augments existing air quality technology and helps monitoring gaps in existing network

Real time data available at https://www2.purpleair.com/

WHAT IS PARTICULATE MATTER 2.5?

Particulate Matter 2.5 is tiny airborne particles that can be inhaled deep into the lungs. These particles can either be emitted directly by vehicles, industrial facilities, or natural sources like forest fires, or formed indirectly as a result of chemical reactions from other pollutants.

WHAT ARE THE HEALTH EFFECTS OF PM 2.5?

The smaller size of fine particulate matter allows it to penetrate deep into the lungs and can cause:

Aggravation of asthma, lung or heart disease in people who already suffer from these problems.

Difficulty in breathing in children and the elderly. Irritation of eyes, throat, skin and nose.

WHO IS THE MOST AFFECTED?

People with heart or lung disease, older adults and children are considered at greater risk from particles, especially when they are physically active. Exercises and physical activity can cause people to breathe faster and more deeply and to take more particles into their lungs.

HOW CAN YOU REDUCE PARTICULATE MATTER 2.5 IN THE AIR?

Drive efficiently, idle less and maintain your vehicle.

Take public transit, carpool, bike or walk.

Conserve energy use in your home by turning off lights and using energy efficient appliances.

Reduce and recycle.

Reduce use of gas-powered garden equipment.

