



## REQUEST FOR DECISION

**MEETING DATE:** June 19, 2023

**TITLE:** Alberta Capital Airshed Presentation

**DIVISION:** Planning & Infrastructure

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### SUMMARY:

Julie Kusiek, Chair of the Community Collaboration Committee from the Alberta Capital Airshed (ACA), will provide a presentation on the link between air quality and climate change, as well as the work of the committee to address air quality concerns and monitoring in the region.

Gary Redmond, Executive Director of Alberta Capital Airshed, will also present further details on the organization and Spruce Grove's membership.

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### PROPOSED MOTION:

A motion is not required.

### BACKGROUND / ANALYSIS:

Alberta Capital Airshed (ACA) is a multi-stakeholder not-for-profit organization that collects and reports on air quality and raises awareness of air quality in the community.

- As a member of ACA, the City participates in the Community Collaboration Committee. This committee includes municipal representation from across ACA, Alberta Environment and Protected Areas, and several not-for-profit community and environmental organizations. Together, the committee identifies local and/or common issues related to air quality and works towards collaborative solutions.
- Air quality is a measure of how clean or polluted the air is. Monitoring air quality is important because polluted air can be consequential for community health and the environment.
- Today, many communities across Canada are used to seeing the Air Quality Health Index (AQHI) as a way of easily understanding outdoor air quality. The AQHI uses a formula of

three core air pollutants - nitrogen dioxide, ground-level ozone, and fine particulate matter, to arrive at a number between one and 10+.

- The Alberta Environment and Protected Areas (AEPA) *Five-Year Air Quality Deposition Monitoring, Evaluation and Reporting Plan 2021-2025* flags Spruce Grove as a community with gaps in air quality monitoring - **specifically Spruce Grove lacks AQHI-level air quality monitoring**. Appendix A1 ranks Spruce Grove 17<sup>th</sup> in the province for priority.
- Providing the AQHI in a community currently requires the presence of a continuous monitoring station. All told, a station typically costs about \$300,000-\$350,000 to build and roughly \$50,000 to operate each year.
- This past fall, a pilot program started in the City of Leduc. The pilot aims to bring AQHI to additional communities in a way that is more economically feasible (equipment approximated at \$10,000). The technology being piloted is an Aeroqual AQY, which is a small unit with sensors and meteorological monitoring equipment that can be moved by one person. The pilot program, led by AEPA, will help determine if this type of technology is accurate enough to provide AQHI in communities. This pilot is expected to run for one year.
- In partnership with ACA, the City hosts purple air and a passive site (monitored once a month) which further monitoring could build on at <https://capitalairshed.ca/monitoring-data/live-air-data-map/>

## OPTIONS / ALTERNATIVES:

- Opportunities for Spruce Grove in partnership with ACA include:
  - Discuss a partnership between Spruce Grove, ACA, and AEPA to establish and maintain monitoring of an AQHI station at the conclusion of the Leduc Pilot review.
  - Work together on educational messaging for idling signage and educational awareness as part of the City's adaptation-related education programs and supports.
  - Provide input to ACA's initiatives to further support municipalities in tools to build awareness and communication related to air quality. Present at a future Clean Air Webinar, presented by ACA, to highlight the work Spruce Grove is doing in relation to air quality and climate change.
  - Continue to work through the ACA Community Collaboration Committee to identify other initiatives of joint interest.

## CONSULTATION / ENGAGEMENT:

The City of Spruce Grove is a member of the ACA and the City's Senior Environmental Advisor sits on the Community Collaboration Committee to share information, raise issues, and collaborate on air quality matters.

## **IMPLEMENTATION / COMMUNICATION:**

During the third week of May 2023, Mayor Acker shared information an air quality advisory for Spruce Grove residents on social media due to provincial wildfires. The link provided connected to AQHI data in Parkland County.

## **IMPACTS:**

### Adaptation

Outdoor and other activities may be impacted. For example, during the week of May 15, 2023, the opening of Ken Morrison/REMAX Excellence Spray Park at Jubilee Park was delayed due to reduced air quality for staff safety. Sport authorities and school boards also have standards of practice in this regard - local track meets and other sporting activities were recently impacted and/or cancelled.

Spruce Grove's Strategic Plan 2022-2025 identified an action to "Explore opportunities for indoor recreation during extreme heat or poor air quality times" with a priority year to report in 2024. Some recreation centres are planned or being reviewed for HVAC system upgrades and are currently contemplated as part of the Civic Centre design considerations.

As well, municipalities are beginning to activate "extreme weather responses" such as the City of Edmonton who activated during the third week of May. When the response is active, the City opens all its facilities for those seeking respite from wildfire smoke, in this case, or heat and cold weather in other scenarios. As part of the unsheltered recommendations approved by Council, an extreme weather activation plan was included. It was mainly within the context of facilities that could be used in extreme heat or cold, but air quality could also be included.

### Mitigation

In addition to those actions in the Climate Change Implementation Plan, seek opportunities to collaborate through the Edmonton Metropolitan Region Board and other regional, provincial, and federal partners on wildfire prevention and other GHG reduction mechanisms.

As part of the Climate Change Implementation Plan, a planned action is educational signage on idling - a specific measure to reduce air pollution/GHGs.

## **FINANCIAL IMPLICATIONS:**

AQHI monitoring equipment upgrades (pilot project success dependent) and idling signage are projected to be addressed within existing Environment budgets.

Other facility or lifecycle financial implications will be reviewed through the budget process.