

Presentation to Parkland County Council

November 22, 2016



- Who we are
- What we do
 - Monitoring
 - Education & Outreach
 - Management of Air Quality Issues
- New monitoring needs
- Membership
- Questions

- Multi-stakeholder, not-for-profit regional organization
- Funded by Alberta Government and our members
- Three roles of an Airshed
 1. Monitor and share air quality data
 2. Provide education and outreach
 3. Develop air quality management plans

ACA Members

Industry

- Strathcona Industrial Association
 - *Air Products*
 - *AltaSteel*
 - *Capital Power*
 - *Celanese*
 - *Enbridge*
 - *EPCOR Gold Bar Wastewater Treatment Plant*
 - *Imperial Oil*
 - *Keyera Alberta EnviroFuels*
 - *Kinder Morgan*
 - *Owens Corning*
 - *Rio Tinto Alcan*
 - *Suncor*
- Lehigh Cement
- Momentive Specialty Chemicals
- ATCO Energy Solutions



ACA Members

Government

- Alberta Environment and Parks
- Alberta Health Services
- City of Edmonton
- City of St. Albert
- City of Leduc
- Strathcona County
- City of Spruce Grove

Pending members:

- *Sturgeon County*
- *Town of Beaumont*
- *Town of Calmar*
- *Town of Thorsby*
- *Town of Stony Plain*



ACA Members

Non-Governmental Organizations

- Alberta Lung Association
- ECO-AIR
- MacEwan University
- Northern Alberta Institute of Technology
- University of Alberta
- Pembina Institute
- Inside Education



Board (2016/17)

Government (4) – Strathcona County, City of Edm, AB Env & Parks, AB Health Serv
NGO (4) – Pembina Institute, Eco Air, NAIT, Inside Education
Industry (3) – Lehigh Cement, SIA (Capital Power and Rio Tinto Alcan)
Public (1)

Communications

- Strategies, Media

Technical Working Group

- AQ monitoring

Outreach

- Air Ambassadors

Issues Management

- AQ management



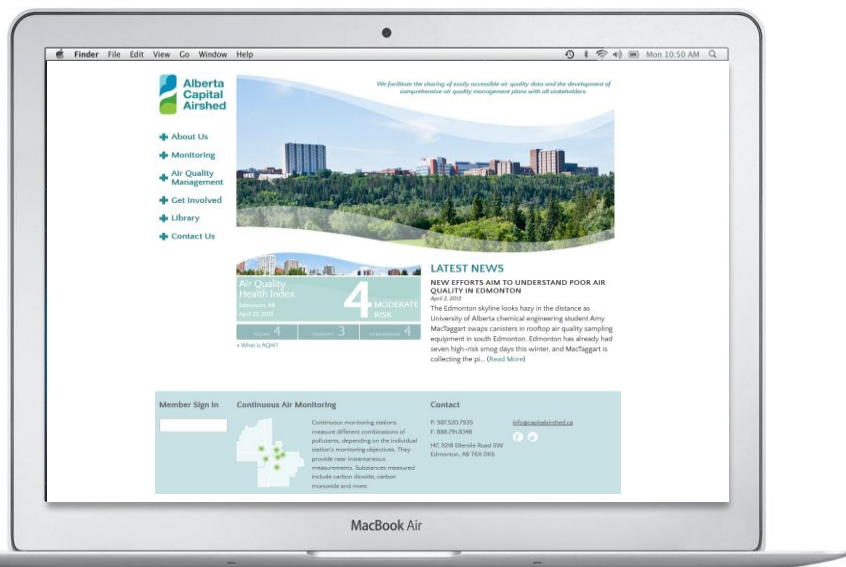
Continuous Ambient Air Monitoring Stations

 In place for > 10 years

 New stations in 2015 & 2016



www.capitalairshed.ca



- Website
 - Live data of all stations
 - AQHI
 - AQ Plans
 - How to get involved
 - Library of information (including videos)

Presentation Videos



A Collaborative Process for Odour Mgmt - Celeste Dempster at the Odour Management...



Public Health Perspective on Odour - Ludmilla Rodriguez at the Odour Management ...



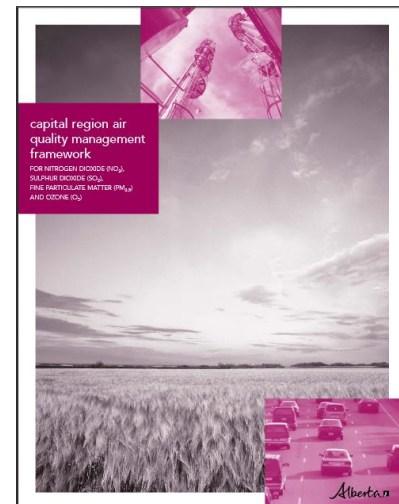


- School Presentations
 - Grade 5 Weather
 - Clean Air Responsible Schools (CARS) – citizen science AirBeams



Fine Particulate Matter Response Plan

- ACA is supporting Alberta Environment & Parks in the development and implementation of the Capital Region Fine Particulate Matter Response Plan, along with municipalities and industry.
- The goal is to reduce and maintain ambient fine PM below the Canadian Ambient Air Quality Standards at all monitoring stations within the Capital Region.
- This will be done by managing emissions that contribute to the formation of fine particulate matter. The response plan includes actions for both government and stakeholders.



Air Quality Health Index

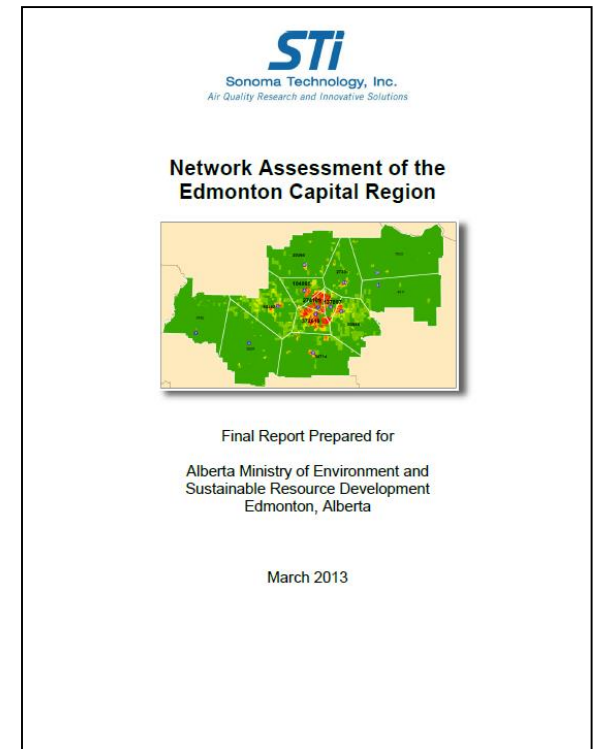


Measures pollutants known to affect health:

- Ozone
- Sulphur Dioxide
- Fine Particulate Matter (PM_{2.5})
- Hydrogen Sulphide
- Nitrogen Dioxide
- Carbon Monoxide

Gaps in AQ data identified

- Leduc area
- Spruce Grove area
- Morinville area
- Ardrossan area



New Monitoring Needs

Future Monitoring Priorities



New Monitoring Needs

Future
Monitoring
Priorities

Proposed
passive
monitoring
networks



Advantages of ACA Membership

- Collaborate with capital region municipalities:
 - Monitoring data
 - Addressing air quality issues
 - Support for addressing odour and other nuisance issues
 - Promoting benefits of clean air
 - Participate on Board, Technical Working Group, Communications and Outreach Team, Issue Management Committee
- Membership Fee = \$7500/year (but halved as Parkland County is not entirely within ACA area) = \$3750/year

Municipal Membership Benefits

- Perception
 - “Asthma capital of Alberta/Western Canada/the World”!
- Reality
 - What is air quality?
 - What is odour?
 - What are the influences within the Capital Region?
 - How does our landscape influence air quality?
 - How do our decisions influence air quality?
 - Can we make a difference?
- How does Strathcona County provide expertise to answer these questions?

Airshed Expertise => Municipal Capacity

- Fort Air Partnership
- Capital Region Air Quality Management Framework
 - Steering Committee to develop the Framework
 - Oversight Advisory Committee to implement the Framework
- Alberta Capital Airshed (Board member since 2012)
- Strathcona County Air Action Committee
 - TOR for Capital Region PM Response
 - Annual update to CRAQMF OAC
 - MDP

Benefits

- Science-based information
- Common messaging across gov'ts
- Expertise
- Resources



- + About Us
- + Monitoring
- + Air Quality Management
- + Idle Free Toolkit
- + Get Involved
- + Library
- + Contact Us



Air Quality Health Index

	CURRENT	TODAY	TONIGHT	TMRW
EDMONTON	3	3	2	2
STRATHCONA COUNTY	3	3	2	2
ST ALBERT	N/A	3	2	2

What is AQHI? September 28, 2016

BREATHING TOGETHER

A short documentary about the importance of air quality and the Alberta Capital Airshed.

LATEST NEWS

ALBERTA'S OILSANDS INDUSTRY A MAJOR SOURCE OF HARMFUL AIR POLLUTION, STUDY SAYS
 May 25, 2016
<http://www.cbc.ca/news/technology/oilsands-soas-1.3599074> (Read More)

HOT SPOTS DEPICT HOW COAL PLANTS CONTRIBUTE TO EDMONTON POLLUTION IN NEW ENVIRONMENT CANADA IMAGES
 October 8, 2015
<http://edmontonjournal.com/news/local-news/hot-spots-depict-how-coal-plants-contribute-to-edmonton-pollution-in-new-environment-canada-images> (Read More)



HOME / ENVIRONMENT AND NATURAL RESOURCES /

Share f t in e

Air and air quality

Discover more about Alberta's air quality, air quality measurements and how it is affected by natural and human sources.

More on this topic

[Air Quality Health Index](#)

Relation of air quality outside to your health using a scale from 1 to 10.

[Air quality legislation, standards, regulations and codes](#)

Legislation, regulations, codes, standards and directives on air quality in Alberta.

[Air quality management frameworks](#)

Frameworks for the management of air quality in Alberta.

[Air quality modelling](#)

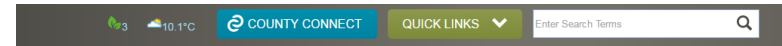
Air quality modelling of pollutant dispersion.

[Clean air strategy](#)

Strategy and action plan to enhance air quality and air quality monitoring in Alberta.

[General information on air quality](#)

How air quality is measured and other information on air quality.



RESIDENTS BUSINESSES DEPARTMENTS

Assessment and Tax

Capital Planning and Construction

Communications

Corporate Planning

Economic Development and Tourism

Emergency Services

Where are you? Home Departments Planning & Development Services Environmental Planning

Air quality in Strathcona County

Air quality in Strathcona County

The [Alberta Capital Airshed \(ACA\)](#) is a not-for-profit, multi-stakeholder organization that monitors and provides public information on air quality, as well as develops recommendations regarding air quality management and monitoring. Strathcona County is a member of the ACA.

Ambient air monitoring

Ambient air is simply outside air, or air found outside buildings or structures. Air quality levels are assigned using measured data from ambient air monitoring stations in the Capital Region. Monitoring is conducted by airsheds, municipalities, industry and Alberta Environment and Parks. Stations operated by industry are found around the Edmonton area and measure contaminants specific to the provincial approvals for each industrial operator. Ambient air quality stations operated by Alberta Environment and Parks measure air contaminants and calculate the provincial [Air Quality Health Index \(AQHI\)](#).

Fort Air Partnership

We Monitor the Air You Breathe

Air Quality Health Index for SEP 28 2016
 Locations: Lamont County, Fort Saskatchewan, Bruderheim, Gibbons, Elk Island

Fort Saskatchewan
 Current: 2
 Today: 3
 Tonight: 2
 Tomorrow: 2

What do the numbers mean? Learn more...

[Go to LIVE DATA FEED](#) [Read the LATEST NEWS](#)

We now post a weekly report of the AQHI readings from our five stations that collect the data.

Benefits

- Ardrossan AQMS (Clean Air Day 2015)
 - MOU between SIA, ACA and Strathcona County
 - Construction (2015) and annual operations (2016+)
 - Retrofit equipment at Sherwood Park AQMS



Benefits

- AQHI reported for Strathcona County!
- Resident education
- Council education
- Odour Mgmt Guide

Air Quality Health Index

Provides hourly information you can use to protect your health



Look for the green leaf at www.strathcona.ca



Stick with only clean, dry wood in your backyard fire pit.



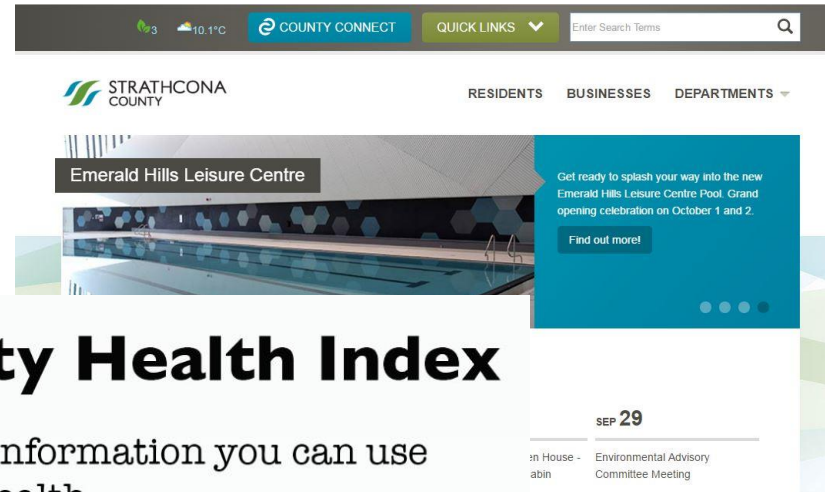
Help keep the air quality pleasant for everyone!

Burning clean, dry wood limits smoke and helps keep the air clear in your neighbourhood.

Learn about air quality and more from the Environmental Advisory Committee!



www.strathcona.ca/EAC



Future Benefits

- We all take responsibility!
- Expand air quality monitoring network to address gaps in region
- Influence North Saskatchewan Regional Plan
- Leverage partner funds for MAML and PAML to be deployed in Strathcona County
- Engage administrative leaders around air quality issues
- Lead municipalities in knowledge and awareness

Questions?

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Alberta Capital Airshed

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Strathcona County