

We Monitor the Air You Breathe

Vision 2030
Stakeholder and Community Consultation
Discussion Guide

2017

## **ABOUT THIS CONSULTATION**

Fort Air Partnership (FAP) has embarked on a planning exercise that will create a blueprint for the organization's future growth and development. Called Vision 2030, it is important to the success of this exercise that all of FAP's stakeholders have a chance to provide input and opinion.

To help guide this input, we have created this Consultation Discussion Guide. There are four main topics for discussion and accompanying questions that we would like people to provide responses to. Please feel free to invite friends and colleagues to participate in this consultation. Written input can be sent to:

E-mail: mailto:info@fortairmail.org

Mail: PO Box 3051, Fort Saskatchewan, AB T8L 2T1

This guide is available on our website at <u>fortair.org</u> and in print. If you have any questions about the consultation or would like to have a hard copy of the Guide sent to you, please email us or call toll free 800-718-0471.

Our thanks to MEGlobal for sharing its recent visioning process, and inspiring us to do our own.

#### **COMMITMENTS AND LIMITATIONS**

We are excited to have the involvement and input of our stakeholders regarding our future growth and development. Following the consultation, we will report back on what we heard. The Board will consider the input through a number of lenses such as feasibility, desirability, funding and other factors and use that information to help guide the organization's future direction and activities.

It is important, however, for us to mention and stakeholders to know that any new initiatives or services that Fort Air Partnership may employ will be contingent on identifying sufficient and sustainable funding for development and operational support.

# **TABLE OF CONTENTS**

Brief Background on FAP	. 4
Map of Airshed and Monitoring Network	. 6
Topics for Discussion	
Section A: Air Quality Information	. 7
Section B: Organizational Structure and Boundaries	. 9
Section C: Funding1	LC
Section D: Education and Outreach	11
Summary of Questions1	12

# **BRIEF BACKGROUND ON FAP**

Fort Air Partnership (FAP) is a not-for-profit organization formed in 1997 to monitor the air people breathe within a 4,500 square kilometer Airshed located immediately north and east of Edmonton. With <u>Alberta's Industrial Heartland</u> within our borders, we collect and report on air quality data in a region with some of the most concentrated industrial development in the province.

Our collection and reporting on substances that affect air quality is rigorously controlled, monitored and guided by objectives set by the Government of Alberta. Our work is transparent, governed by a volunteer Board of Directors, guided by an expert, scientific Technical Working Group, and driven by national and provincial standards. Continuous data is collected 24 hours a day, seven days a week and made available to anyone. This data is collected by a qualified third party contractor hired by FAP.

The Board of Directors is composed of public, industry and government representatives. It follows a consensus decision-making model that enables all parties to have an equal say in decisions. The Technical Working Group directs the management of the air monitoring activities, and provides advice and counsel to the Board on technical matters. The Network Manager, who oversees the day-to-day management and operation of the monitoring network, is the committee's chair. Like the Board, the Technical Working Group consists of representatives from industry, government and the public.

#### **Our Vision**

Public, industry and government have a clear understanding of ambient air quality in the region.

#### **Our Mission**

To operate a regional network to monitor and report credible and comprehensive ambient air quality information.

#### **Our History**

FAP was established as a community-driven organization to provide credible information on air quality to the community. The Airshed boundaries were established in 1999 based on the following considerations:

- Existing emissions data and air quality monitoring data.
- Potential effects of air emissions on human/animal health, and related air quality modeling results.
- The proximity of Elk Island National Park.
- The proximity of the City of Edmonton as a source of emissions impacting air quality in the region.

Our Airshed includes several counties and the communities of Fort Saskatchewan, Gibbons, Bon Accord, Bruderheim, Lamont, Redwater, Waskatenau and Thorhild, as well as Elk Island National Park.

Highway 834 is the eastern boundary. The southern boundary follows Highway 16 to Edmonton's city limits. The western boundary follows Edmonton's city limits north and west to Highway 28. The western boundary continues north following Highways 803 and 651 to Highway 661. The northern boundary runs through the hamlet of Newbrook, approximately 88 kilometres northeast of Fort Saskatchewan.

FAP reached a significant milestone in 2000 when we were officially recognized as one of Alberta's nine Airsheds. In 2003, we began reporting ambient air quality data from a collection of monitoring stations that had been independently operated by industry.

Between 2005 and 2009, we implemented and expanded a monitoring network to better understand ambient air quality throughout the region, and worked with Environment Canada on a Volatile Organic Compound study. At the time, the most significant improvements to the monitoring network involved identifying redundant monitoring stations and redeploying monitoring resources throughout the Airshed.

In 2010, Fort Air Partnership redefined its air monitoring objectives to support the regional approach to monitoring adopted in Alberta. A comprehensive third party network assessment was completed to determine how best to meet these objectives.

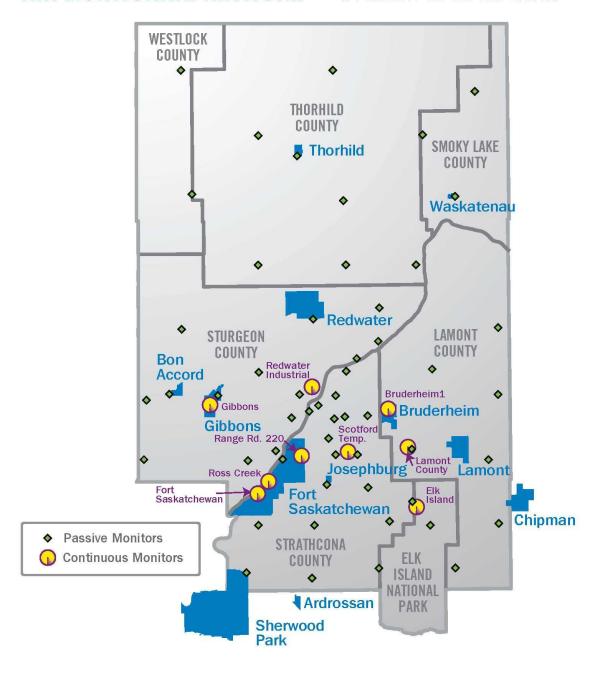
In 2013, the FAP Board approved a new regional network air monitoring plan that has changed the way air quality is being monitored within the Airshed. The changes are resulting in a better understanding of the impact of all emission sources on ambient air quality, not just those that are regulated. A regional air monitoring network offers stakeholders more benefits and responds better to community, government and industry needs.

In February of 2016, as part of the monitoring plan, a new air monitoring station was added in the Town of Gibbons, and a portable air monitoring station will be added to the network in 2017.



# AIR MONITORING NETWORK

We Monitor the Air You Breathe



## **TOPICS FOR DISCUSSION**

# **Section A: Air Quality Information**

# **Monitoring & Reporting**

Fort Air Partnership currently monitors and reports on ambient air quality data 24 hours a day, seven days a week using nine continuous monitoring stations and 57 passive monitors. Our current mandate is to monitor and report on ambient air quality to ensure that everyone has a comprehensive understanding of ambient air quality in the FAP region. We monitor 19 substances that are known to be emitted by various sources in the Airshed. We also monitor for several weather conditions like temperature, wind direction, wind speed, relative humidity and barometric pressure.

Part of our role is to interpret results, and where possible determine the reason or reasons for an ambient air quality event or exceedance, particularly when it is a region-wide ambient air quality event such as a forest fire, or a weather condition such as a temperature inversion. We also enable comparisons to other areas of Alberta by publishing our data in printed reports and making it accessible on-line through our live data site.

It is not our role to explain connections between the ambient air quality data we collect and the possible impacts on health, climate change, the environment, land use planning or other areas, although our data is used by others, such as the Government of Alberta to determine these connections. However, we share this information when it is provided to us. For example, the Government of Alberta calculates the <u>Air Quality Health Index</u> (AQHI) and its relationship to people's health.

#### **Sharing Information**

The live data we collect from our stations is posted in near real-time on our <u>website</u>. Dates, times and locations are adjustable and the readings can be compared to provincial objectives. Since data is sent directly from analyzers collecting the data at our stations to the website it is not considered validated (also known as "raw") data.

The data we collect is tested, reviewed and validated through a rigorous quality assurance program to ensure it is of a high quality. Once it is validated, it is archived in a <u>Government of Alberta Air Data Warehouse</u> where it can be accessed by various levels of government, industry, researchers and all members of the public. Historical raw data is available for 45 days on our website. After that the validated data can be searched and viewed in the Air Data Warehouse.

The front page of our website shows a daily and forecast AQHI from our stations that produce that information (Bruderheim, Fort Saskatchewan, Gibbons, Lamont County and Elk Island National Park). A weekly chart of our AQHI results are summarized on our website, and shared through social media and the media. We also produce public quarterly and annual reports.

#### **Data Use by Others**

Ambient air quality data collected by FAP is used in many ways:

- By us to compare to <u>Alberta Ambient Air Quality Objectives</u> and to report exceedances to Alberta Environment and Parks.
- By Alberta Environment and Parks to compare to Air Management Frameworks and to report against the <u>Canadian Ambient Air Quality Standards</u>.
- By Alberta Environment and Parks to calculate and forecast the Air Quality Health Index. This
  information is then used by Alberta Health Services to issue air quality advisories when required
  (i.e. during forest fires).
- By both Alberta Environment and Parks and industry as input to air quality models.
- Data is also used by Environment Canada in a national database and in the United States on their <u>AIRNOW website</u>.

#### **Questions to Consider:**

- 1. Would you agree that FAP's efforts to share ambient air quality information are transparent and sufficient? If no, what additional ways would you suggest ambient air quality data be communicated?
- 2. Would you support FAP getting more involved in assessing data trends, comparing our data to other jurisdictions and helping to explain the impacts of the ambient air quality data we are collecting? If so, what additional interpretations and explanations would you like to see?

#### **Other Types of Air Monitoring**

FAP currently operates monitoring equipment that meets provincial, international and national standards. There are other technologies that we don't use that could provide other types of assessments of local ambient air quality. For example: handheld portables that monitor for particulate matter. These can be useful for increasing the general awareness of impacts on air quality in very localized areas.

For the most part the substances we currently monitor for are required by government regulation. However, some monitoring activity is not required by law but rather meets the needs of industry, government, researchers or the public. With appropriate funding, FAP has the structure and expertise to do more of this work, and increase the understanding and awareness of ambient air quality in the Airshed.

We are currently not involved in emergency response ambient air quality monitoring. However, if there is an event in the region our data is available to others to help them assess what the on-going impact of the emergency event may be on ambient air quality.

#### **Question to Consider:**

3. Do you think FAP should adopt other types of monitoring to expand its understanding of local ambient air quality, even if that type of monitoring is not required by provincial or national regulations?

#### **Section B: Organizational Structure and Boundaries**

FAP is a not-for-profit, independent organization registered under the Societies Act. It is led by a 12-person Board of Directors. The Board is composed of representatives from the public, industry (via the Northeast Capital Industrial Association), local municipalities (via the Alberta's Industrial Heartland Association) and the provincial government (Alberta Health Services and Alberta Environment and Parks). Staff and people on Board subcommittees provide technical expertise as needed to operate the monitoring network. Only Board members are considered members of Fort Air Partnership. There is no mechanism for others to join the Society.

#### **Questions to Consider:**

- 4. Should people other than Board Directors be allowed to be members of FAP (i.e. should FAP have a general membership in addition to the Board of Directors)? If yes, please explain why.
- 5. Should the Board be expanded to include other types of representation? If yes, please specify the types of representation that should be added.

There are nine Airsheds in Alberta that were created at different times in response to concerns about ambient air quality in their areas. Therefore, Airshed boundaries were arbitrarily set to address local ambient air quality concerns. In FAP's case, our boundaries do not align with any municipal or provincial boundaries. This results in FAP having monitoring responsibility for portions of several Counties, while the remaining portions are either covered by another Airshed or have no Airshed coverage at all.

FAP's southern boundary is adjacent to the <u>Alberta Capital Airshed</u>, which monitors air quality in Edmonton, Sherwood Park and St. Albert. However, in other directions, communities near our network are not served by any other Airshed.

#### **Questions to Consider:**

- 6. Is it important to you that FAP's boundaries align with others like municipal boundaries or provincial regional planning areas (e.g. North Saskatchewan Regional Land Use Framework)? If yes, please explain why.
- 7. What are your thoughts about FAP offering its services to communities outside of its current boundaries?
- 8. Do you think there would be more benefits to stakeholders like you if there was one large regional Airshed with responsibility to monitor ambient air quality for the entire Capital Region? If so, why?

# **Section C: Funding**

FAP receives the majority of its funding from the <u>Northeast Capital Industrial Association</u> (NCIA). The Association represents both industry with regulatory requirements to support ambient air quality monitoring, and industry in the region without such regulatory requirements that see the value in supporting ambient air quality monitoring in the region. We also receive funding from the Government of Alberta for two continuous ambient air monitoring stations that we operate on their behalf and funding from Alberta's Industrial Heartland Association for communications and outreach activities.

FAP has considerable expertise and experience that is in demand. As a public organization we have freely provided this knowledge set to others as we have no mechanism in place to recoup costs that may be incurred.

#### **Questions to Consider:**

- 9. Should FAP seek funding from non-NCIA member industries (small industry such as oil and gas wells and batteries\*) and other emitters in the region (such as gas stations and dry cleaners) that impact ambient air quality?
- 10. Individuals driving vehicles, operating fireplaces and engaging in other activities contribute to ambient air quality. Because of this, do you think residents should be charged a per capita fee to support ambient air quality monitoring and education?
- 11. Do you think FAP should introduce a fee for service program to offset its costs and market its knowledge and expertise to others who could benefit?
- 12. What other revenue sources should FAP consider?

<sup>\*</sup> A oil and gas battery or batteries is a system of tanks or surface equipment that receives natural gas or bitumen from one or more wells prior to delivery to market or other disposition. A battery may include equipment for separating and measuring oil, gas and water.

#### **Section D: Education and Outreach**

As a public organization, it is important that we help people understand the science of air monitoring and the impact of air quality on their everyday lives. We regularly produce a number of information products including school resources, reports, fact sheets, flyers, news releases and presentations, and disseminate them broadly across a number of platforms (website, social media, e-bulletin, advertising, displays, print products, signage) so stakeholders can easily access them.

In addition, Fort Air Partnership supports and assists where possible the efforts of other organizations with education mandates regarding air quality education. These include Environment Canada, Alberta Environment and Parks, Alberta Health Services, the Alberta Airsheds Council, various industry organizations, environmental groups, and the school system.

A school tours program is a permanent part of our outreach activities. We have formal partnerships with the Life in the Heartland organization, which is committed to enhancing communications with residents in Alberta's Industrial Heartland, and with the <u>Alberta Airsheds Council</u>, to produce educational material with a provincial focus. We provide information and maintain positive relationships with local municipal and provincial leadership, and engage with local stakeholders on issues of common interest regarding air quality.

#### **Questions to Consider:**

- 13. Do you believe there are gaps in the amount of education and outreach that is being done in the local region regarding ambient air quality? If yes, what are the gaps?
- 14. What role do you see FAP playing in expanding its education and outreach activities to fill these gaps? Please specify.

## **SUMMARY OF QUESTIONS TO CONSIDER**

- 1. Would you agree that FAP's efforts to share ambient air quality information are transparent and sufficient? If no, what additional ways would you suggest ambient air quality data be communicated?
- 2. Would you support FAP getting more involved in assessing data trends, comparing our data to other jurisdictions and helping to explain the impacts of the ambient air quality data we are collecting? If so, what additional interpretations and explanations would you like to see?
- 3. Do you think FAP should adopt other types of monitoring to expand its understanding of local ambient air quality, even if that type of monitoring is not required by provincial or national regulations?
- 4. Should people other than Board Directors be allowed to be members of FAP (i.e. should FAP have a general membership in addition to the Board of Directors)? If yes, please explain why.
- 5. Should the Board be expanded to include other types of representation? If yes, please specify the types of representation that should be added.
- 6. Is it important to you that FAP's boundaries align with others like municipal boundaries or provincial regional planning areas (e.g. North Saskatchewan Regional Land Use Framework)? If yes, please explain why.
- 7. What are your thoughts about FAP offering its services to communities outside of its current boundaries?
- 8. Do you think there would be more benefits to stakeholders like you if there was one large regional Airshed with responsibility to monitor ambient air quality for the entire Capital Region? If so, why?
- 9. Should FAP seek funding from non-NCIA member industries (small industry such as oil and gas wells and batteries) and other emitters in the region (such as gas stations and dry cleaners) that impact ambient air quality?
- 10. Individuals driving vehicles, operating fireplaces and engaging in other activities contribute to ambient air quality. Because of this, do you think residents should be charged a per capita fee to support ambient air quality monitoring and education?
- 11. Do you think FAP should introduce a fee for service program to offset its costs and market its knowledge and expertise to others who could benefit?
- 12. What other revenue sources should FAP consider?
- 13. Do you believe there are gaps in the amount of education and outreach that is being done in the local region regarding ambient air quality? If yes, what are the gaps?
- 14. What role do you see FAP playing in expanding its education and outreach activities to fill these gaps? Please specify.