

MONITORING EMISSIONS AND AIR QUALITY TO ENSURE A HEALTHY ENVIRONMENT IN THE PEACE RIVER AREA.





GROWING AIR QUALITY INITIATIVES FOR OUR COMMUNITY

The Peace River Area Monitoring Program (PRAMP) is putting down roots and extending its branches with new monitoring, enhanced outreach and exciting partnerships. As we continue to grow, we appreciate the interest and support we see for air monitoring and air quality information from students, teachers, elected officials, residents and other stakeholders.

Deploying PRAMP's first Air Quality Health Index (AQHI) monitoring station was a highlight of the year. Working in partnership with the Woodland Cree First Nation, the new station was operational in October 2019. The AQHI is now updated every hour, and this new health information is a key element of PRAMP's outreach efforts in schools and communities.



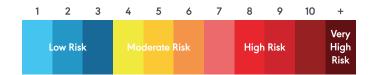
Honey bees and the relationship between air quality and honey production has also proven to be an engaging topic. We are pleased to work with local apiaries and to showcase local honey and beeswax products at our events.

Technology that includes the ability to operate air monitoring equipment and manage data remotely has always been a key enabler in PRAMP's monitoring program. As a result, we were well-positioned to continuing monitoring uninterrupted when the COVID-19 pandemic restrictions were put in place in the winter of 2020. Physical distancing requirements were and continue to be met when technicians visit stations. Monitoring and reporting has been maintained to the same high standards. Radio ads and an increase in online programs have also enabled PRAMP to continue providing air quality information to students and residents, even while they are at home.

A depth of technical knowledge, valued partnerships and a healthy dose of nimbleness (fueled by Peace River area honey) will allow PRAMP to continue to improve our monitoring and outreach programs, and ultimately ensure healthy air quality for the Peace River area.

Doug Dallyn, Garrett Tomlinson and Anthony TraversePRAMP Board Co-chairs

The Air Quality Health Index (AQHI), is a real-time air quality rating that indicates the level of relative health risk associated with local air quality.



AIR QUALITY MONITORING PROTECTS HEALTH

PRAMP's first AQHI station is now located on the Woodland Cree First Nation near the community of Cadotte Lake.

In September 2019, the new air monitoring station was introduced to community members through an Open House, lunch and tours of the station.

While PRAMP had been aware of air quality concerns in the Woodland Cree area, we had not been able to previously address



those due to the fixed nature of our air monitoring stations.

Real-time air quality data is available at PrampAirshed.ca and through the free AQHI mobile app. Local radio stations River Country 94.9, KIKS 106 and YL Country 94.9 also broadcast the AQHI daily at noon.

The new station which, now provides data on pollutants such as fine particulate matter, is a portable station which can be moved to areas of concern.

By supplying AQHI information, community members can now more easily assess the risk of poor air quality and safeguard their health particularly during seasonal wildfires and smoky days.



The Peace River Area is one of the top honey producing regions in Canada.







BEES NEED CLEAN AIR TOO

To learn more about honey harvested in our area and how production might be influenced by air quality, PRAMP visited three apiaries: seventh generation operator, Denis Simoneau; Mike and Corinna Williams of MCW Apiaries; and the largest organic apiary in Canada, Honey Bunny.

The beekeepers explained how poor air quality, especially wildfire smoke, impacts their honey harvests. After the prolonged period of wildfire smoke in 2018, all three producers experienced lower than normal yields.

PRAMP recorded interviews with beekeepers and made a short video. Kids are keen on bees and love to hear how PRAMP is working to keep them healthy.

AIR QUALITY **EDUCATION & OUTREACH**

Education and Outreach Coordinator Eileen Coristine was busy in 2019 sharing air quality information with grade five students. Many students had been directly impacted by air quality and could talk first-hand about the effects of wildfire smoke.

Students learned about the importance of air quality monitoring and how air quality can impact their health. They also learned about the impacts on our environment and in particular, the health of local honey bees.

Unfortunately, COVID-19 measures suspended planned grade four classroom visits and presentations to community groups. The subject of those workshops was to be vermicomposting, which is a method of composting using worms to create soil as they digest compostable food waste reducing the amount of material going into landfills. Earlier in the year, PRAMP and the Peace Airshed Zone Association (PAZA) shared a booth at the Mighty Peace Teachers' Convention in Grande Prairie. Air quality programs and presentations that supplement Alberta Education curriculum were shared. Teachers

In 2019, PRAMP visited over 250 students in six schools sharing air quality information.

were enthusiastic and shared tips about building resources around the science and health curriculums for each grade.

PRAMP also partnered with the Alberta Airsheds Council (AAC) and

encouraged people to reduce air pollution by pledging online to join the Sixty Seconds or Less Campaign to limit vehicle idling.

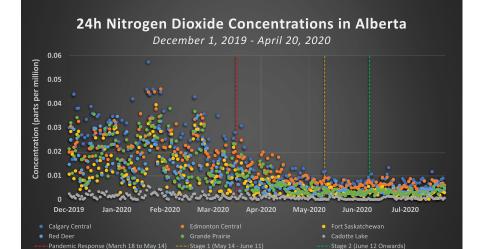
FIND US ON FACEBOOK & TWITTER

Over the past year, we have strengthened our social media presence and built a strong platform to expand our reach and share important air quality information.

While Albertans stayed home during the COVID-19 pandemic, PRAMP was able to reach a wide audience with the Healthy Communities Need Clean Air Contest, a creative opportunity for youth to learn about air quality (in partnership with the Alberta Airsheds Council) and its very own Clean Air Day Photo Contest to showcase the beauty of the Peace River Area.

We continue to build our social media presence and encourage members of our community to support our mission and follow us on Facebook and Twitter @prampairshed.

Nitrogen dioxide is released from the burning of fuel and the emissions of vehicles, power plants and home heating. NO_a exposure has been linked to respiratory disease.



COVID-19 & AIR QUALITY

This chart presents a preliminary analysis of NO₂ monitoring data during the pandemic. Coloured dots represent a 24-hr average concentration of NO₂. Vertical dashed lines represent the start of a different stage of Alberta's response to COVID-19.

- Pandemic Response Stage strongest public health guidelines
- Stage 1 some businesses and services reopened
- Stage 2 further reopening of businesses and relaxing of restrictions on gatherings

During the Pandemic Response Stage, vehicle use declined as non-essential services shut down and working from home increased. This timing coincided with warming spring temperatures and Albertans burning less fuel to heat their homes. Both decreases likely influenced the downward change in concentrations. Stages 1 and 2 saw relaxed restrictions; however, many Albertans continued to work from home so changes in air quality are very subtle.

As our behaviours change and the world recovers from COVID-19, there will be ongoing analyses of air quality patterns by PRAMP, researchers and many others.

PRAMP SUMMARY OF REVENUE AND EXPENSES

April 1, 2019 to March 31, 2020

REVENUE

| Oil Sands Monitoring Service Contract | 1,143,570 |
|---------------------------------------|-----------|
| Education and Outreach Grant | 66,435 |

EDUCATION AND OUTREACH GRANT EXPENSES

| Outreach Materials and Promotion | 21,203 |
|----------------------------------|--------|
| Planning and Delivery | 25,150 |
| Advertising | 4,730 |
| Community Events and Travel | 12,937 |
| Photography and Supplies | 2,415 |
| | |

| Total Grant Expenses | 66,435 |
|-----------------------------------|---------|
| MONITORING AND REPORTING EXPENSES | |
| Monitoring Expenses | 84,914 |
| Station Management | 374,531 |
| Program Management | 176,100 |
| Report Production | 65,136 |
| Amortization | 118,026 |
| Society (Office) Management | 49,506 |
| Capital Acquistion | 274,340 |
| | |

THANK YOU MEMBERS & SUPPORTERS

GOVERNMENT

- Alberta Energy Regulator
- Alberta Environment and Parks
- Alberta Health
- Alberta Health Services
- Métis Nation of Alberta. Region 6
- MD of Smoky River
- Northern Sunrise County
- Town of Falher
- Town of Grimshaw
- Woodland Cree First Nation

COMMUNITY

- NAIT Boreal Research Institute
- Public Members

INDUSTRY

- Baytex Energy
- CNRL
- Obsidian Energy
- Prosper Petroleum
- Tervita

COVID-19 **GUIDELINES**

Total Contract Expenses

Enjoying time outside is good for our health. To stay safe and avoid the spread of the COVID-19 virus. follow these guidelines:



Check the Air Quality Health Index to make sure it is in a healthy range

Maintain a distance of 2 metres from others

1,142,553







Wash your hands frequently and avoid touching your face



https://www.alberta.ca/alberta-relaunch-strategy.aspx

BOARD OF DIRECTORS

Doug Dallyn

Co-chair Community

Garrett Tomlinson

Co-chair Government

Anthony Traverse

Co-chair Industry

Shelly Shannon

Secretary/Treasurer Community

Matt Flette

Director Industry

Kenda Friesen/Art Laurin

Directors Industry

Kevin Kemball

Director Community

Krista Park

Director Government

Elvis Thomas

Director Government

Andy Trudeau

Director Government

Corinna Williams

Director Government

CONTACT US

Visit our website **prampairshed.ca** for Dashboard Reports, live air quality data, AQHI rating, resources and updates. Sign up for our newsletter.

Karla Reesor, Executive Director karla@prampairshed.ca

Michael Bisaga and Lily Lin, Technical Program Managers
pramptech@prampairshed.ca

Eileen Coristine, Education and Outreach Coordinator outreach@prampairshed.ca

Brenda Barber, Office Manager officemanager@prampairshed.ca

Follow us on Twitter and Facebook @prampairshed



Did you know you can find up-to-date reports on each of our air monitoring stations from our Dashboard Reports?