About CASA

The Clean Air Strategic Alliance was established in March 1994 as a new way to manage air quality in Alberta.

CASA supports three air quality management goals:
1. Protect the environment by preventing short- and long-term adverse effects on people, animals, and the ecosystem.
2. Optimize economic efficiency.
3. Promote pollution prevention and continuous improvement.

Vision

The air will have no adverse odour, taste, or visual impact and have no measurable short- or long-term adverse effects on people, animals, or the environment.

Mission

CASA is a multi-stakeholder alliance composed of representatives selected by industry, government, and non-government organizations to provide strategies to assess and improve air quality for Albertans, using a collaborative consensus process.

Mandate

1. Implement the Comprehensive Air Quality Management System for Alberta,
2. Conduct strategic air quality planning for Alberta through shared responsibility and use of a consensus-building, collaborative approach, and
3. Prioritize concerns with respect to air quality in Alberta and develop specific actions or action plans and activities to resolve those concerns.

Responsibility for specific air quality planning is shared among stakeholders. Regulatory implementation, licensing, compliance, control, and enforcement remain with existing government agencies.

The Government of Alberta (GoA) provides core funding to CASA. Financial information for fiscal year 2019 is available on the CASA website.

Previous annual reports included an evaluation of CASA’s performance measures. At the time of publishing, CASA was updating its strategic plan and associated performance measures, and so are not reported against in 2019.
2019 CASA Highlights

25-Year Anniversary Celebration
CASA celebrated its 25-year anniversary with an evening event on December 12, 2019 at the Edmonton Federal Building. Many current and former Board members, project team members, staff, and partners gathered to celebrate CASA’s many accomplishments since its inception in 1994. The evening was generously supported by Heartland Generation and Canadian Fuels Association, with space being provided by the GoA.

CASA President Bev Yee delivered remarks from the Honourable Jason Nixon, Minister of Environment and Parks, while Vice presidents Leigh Allard and Jim Hackett recounted 15 More Years of CASA Success, which built on CASA’s 10 Successes in 10 Years at the tenth anniversary celebration. The group was honoured to have Chief Leonard Standing On The Road of the Montana First Nation attend the celebration and speak to attendees.

Through 25 years, CASA continues to dedicate itself to be a leader in multi-stakeholder organizations. Our recommendations, advice, and tools continue to have a lasting impact on the management of air quality in Alberta and beyond.

Governance Review Committee
Following the strategic planning sessions in 2018, the Governance Review Committee (GRC) was established and began meeting in 2019 to fulfill the strategic priority of undertaking a governance review. The committee’s terms of reference were approved by the CASA Board in December. The GRC will prepare a Current State Analysis Report and draft a Board of Directors Charter, while providing educational and feedback sessions to the Board during the process. The team is expected to submit these deliverables by the end of 2020.

Ambient Air Quality Objectives
In 2016, CASA established the Ambient Air Quality Objectives Project Team (AAQO Project Team) to inform AEP’s development of Canadian Ambient Air Quality Standards (CAAQS). This includes using CASA’s multi-stakeholder table to develop standards PM$_{2.5}$, ozone, NO$_x$ and SO$_2$, and TRS and H$_2$S. CAAQS have been development for long-term air zone management and are reported on annually. Standards are being developed based on a thorough review of scientific information, adverse health and ecosystem effects specific to the substance, and current technological and economic factors.

Interest-Based Conflict Resolution Training
CASA, along with the Alberta Water Council (AWC) held a two-day Interest-Based Conflict-Resolution Training Workshop in October. The workshop was led by a team of professionals from ADR Institute of Alberta, and registration was open to partners of CASA and the AWC. The workshop filled up quickly and was well received by participants. Due to the success, CASA and the AWC will investigate hosting another workshop in 2020 with a focus on interest based negotiation.
President’s Message

It was with great pleasure that I assumed the role of CASA president this year. CASA is a prime example of a “made in Alberta” success story that has been recognized provincially, nationally, and internationally, and I have been a longstanding supporter of the collaborative, multi-stakeholder approach that CASA pioneered and continues to champion.

Bringing diverse interests together in search of creative solutions to difficult problems has been CASA’s strength. CASA participants provided consensus advice on a flaring and venting framework that led to substantially reduced emissions from those important sources in our province. Emissions from Alberta’s electricity generation sector also fell in response to the Electricity Management Framework. CASA’s advice to government, industry, and other stakeholders has covered a wide range of topics from vehicle emissions and odour management, to the still-timely issue of particulate matter and ozone.

Partnerships have been a foundational piece of CASA’s success, and the board, teams, and staff have all been active contributors. Their dedication and commitment and that of the many organizations our members represent have not wavered over the quarter century CASA has endured.

As we face the environmental, social, and economic challenges of a new decade, we will need a strong team approach to achieve our goals and maintain CASA’s effectiveness. I look forward to collaborating and tapping into the enthusiasm, experience, and insight of CASA as, together, we tackle important air quality issues in Alberta.

Bev Yee
President
Executive Director’s Message

CASA had the opportunity in 2019 to reflect on our work over the last 25 years and consider what sort of organizational structure and purpose would best carry us forward to the future. Building on the discussions and insight that arose from a strategic planning session in late 2018, the Board established a Governance Review Committee to make recommendations about future governance model practices, structures, and processes of CASA. At the same time, work continued to develop the multi-year strategic plan, which is expected to be ready in early 2020.

Project teams continue to be where much of CASA’s hard work gets done. This year, the three active teams—ROVER III, EFR, and AAQO—continued their work, but all experienced short-term delays due to factors beyond their control.

In the spirit of building and enhancing partnerships and informing a wider audience about the importance of air quality issues, the Board decided to scope a symposium to raise awareness and understanding of air quality in Alberta and the Canadian Ambient Air Quality Standards (CAAQS).

As part of its own effort to remain informed about current and emerging air issues, the Board heard presentations this year on a diversity of topics from industry, non-government, and other organizations. We expanded our outreach using various communications tools, including developing a video about CASA. Reflecting our commitment to consensus-based decision making, we co-hosted an interest-based negotiation session with the AWC.

The GoA showed its confidence in CASA by providing multi-year funding until 2023. As was the case with many other organizations, CASA experienced budget cuts in 2019 but was able to address these reductions without negatively affecting our ongoing work.

This year, CASA celebrated a quarter century of multi-stakeholder collaboration on air quality issues. This highlight was recognized at an event to which previous CASA Board members and others were invited. We are tremendously grateful to all those who laid the foundation for our organization and to those who currently devote considerable time and effort in support of CASA.

Andre Asselin
Executive Director
Secretariat
(as of December 31, 2019)

Andre Asselin
Executive Director
Anuja Ramgoolam
Operations Manager
Cara McInnis
Communications Adviser
Christa Edwards
Board and Office Administrator
Katie Duffett
Project Manager

Kim Sanderson
Writing and Editing Support (Contracted)
Lauren Hall
Project Manager
Matt Dance
Project Manager (Contracted)
Sunny Yeung
Accountant (Contracted)
Marie-Claire St-Jacques was a Project Manager with CASA until March 2019.

Board of Directors

The following were members of the CASA Board of Directors as of December 31, 2019. CASA is very grateful for the ongoing commitment and support of these individuals and the organizations they represent.

<table>
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<tr>
<th>Stakeholder Group</th>
<th>Sector</th>
<th>Director</th>
<th>Alternate Director</th>
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<td>Industry</td>
<td>Petroleum Products</td>
<td>Alison Miller</td>
<td>Rob Hoffman</td>
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<td>Mining</td>
<td>Rob Beleutz</td>
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<td>Oil and Gas - Large Producers</td>
<td>Keith Murray</td>
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<td>Agriculture</td>
<td>Rich Smith</td>
<td>Humphrey Banack</td>
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<td>Utilities</td>
<td>Jim Hackett (Vice President)</td>
<td>Ahmed Idriss</td>
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<td>Oil and Gas - Small Producers</td>
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<td>Leigh Allard</td>
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<td>NGO Rural</td>
<td>Ann Baran</td>
<td>Randy Angle</td>
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<td>NGO Industrial</td>
<td>Ruth Yanor</td>
<td>Benjamin Israel</td>
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<td>NGO Urban</td>
<td>Bill Calder (Vice President)</td>
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<td>Consumer Transportation</td>
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<td>Indigenous</td>
<td>First Nations</td>
<td>Holly Johnson Rattlesnake</td>
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<td>Métis</td>
<td>Mary Onukem</td>
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<td>Provincial Government - Environment</td>
<td>Bev Yee (President)</td>
<td>Tom Davis</td>
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<td>Local Government - Rural</td>
<td>Kathy Rooyakkers</td>
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<td>Local Government - Urban</td>
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CASA thanks the following directors and alternates, who stepped down in 2019, for their contributions:

Brian Ahearn
Petroleum Products

Claude Chamberland
Oil and Gas, Large Producers

Rick Blackwood
Provincial Government, Environment and Parks

Scott Wilson
NGO Consumer Transportation

Wayne Ungstad
NGO Rural
Project Teams and Committees

Ambient Air Quality Objectives Project Team

At its December 2016 meeting, the CASA Board approved a statement of opportunity from AEP for the formation of an AAQO Project Team. The priorities for this work are in response to the development of CAAQS for PM$_{2.5}$, ozone, NO$_2$, SO$_2$, TRS, and H$_2$S.

AAQOs are used in several ways, including assessing compliance near major industrial air emission sources and to report on the state of Alberta’s atmospheric environment. These values are also applied in various assessments to model and predict the impact on air quality and human and environmental health (e.g., Environmental Impact Assessments, Human Health Risk Assessments).

The project team has recommended revised AAQOs for PM$_{2.5}$ and ozone and provided advice for a TRS/H$_2$S guideline. These recommendations were approved by the Board and transmitted to AEP.

In 2019 the project team continued work on the NO$_x$ and SO$_2$ AAQOs and plans to provide them to the Board in 2020. In addition to the AAQO recommendations, the team will provide advice on methods to prioritize substances for the next AAQO review project.

Electricity Framework Review Project Team

The EFR project team was initiated in July 2018 to conduct the third five-year review of the Emissions Management Framework for Alberta’s Electricity Sector. Through this review, the team’s goal is to ensure that the Framework reflects current circumstances. The project is being completed in two phases, with the initial phase completed in December 2018. Phase 2 was initiated in February 2019.

The project team’s initial task was to recommend a NO$_x$ emission standard for natural gas-fired turbines. They were not able to reach consensus on this task, but in 2018 they developed an interim report that summarized the work completed by the team and the perspectives of the stakeholders involved. The Board approved the interim report and it was transmitted to AEP as advice to use in their decision making.

The second phase includes discussions on emissions standards for biogas, biomass, and reciprocating engine electricity generation; AEP’s emissions trading system; and a literature review on environmental and health effects of substances produced through electricity generation, among other tasks. This work will continue into late 2020 when the project team will provide recommendations on the remaining project tasks to the Board.
ROVER III Project Team

In 2017, CASA launched its third ROVER project to assess in-use vehicle emissions using remote sensing technology. Based on the 2014 Air Pollutant Emissions Inventory, the on-road transportation sector is a large emission source of NOx as well as being a source of volatile organic compounds and primary PM2.5.

In 2018 the project team identified study sites where it expects to see a high proportion of heavy-duty vehicles, include Edmonton, Calgary, Red Deer, Grande Prairie, and Fort McMurray. Diesel engine exhaust emitted by these vehicles has been shown to have negative effects on human respiratory health. The field season originally planned for 2019 was delayed to ensure the availability of the best technology to capture the desired types of emissions.

The study sites were finalized in 2019, and the team began working on obtaining the municipal and provincial permits necessary to conduct the field work. Data collection is scheduled to begin in May 2020, with the project completed by December 2020.

Governance Review Committee

In December 2018 the CASA Board approved the establishment of the Ad Hoc GRC following the completion of the strategic planning session on October 31 and November 1, 2018. From this session four strategic priorities emerged, one of which was a governance review.

The goal of the GRC is to complete this strategic priority. The committee will review the design of the CASA governance model, including governing strategy, structure, roles, processes, competencies, and culture. The work of the GRC aims to maximize the value, contributions, and effectiveness of the Board and staff towards achieving the organization’s vision and mission.

Terms of Reference were approved by the Board at the December 2019 meeting, and outlined several products that the GRC will be responsible for delivering. These include a Current State Analysis Report, a Board of Directors Charter, and educational feedback sessions to enable the Board of directors to provide opportunities for input and to acquaint all Board members with findings and progress.

These deliverables are expected to be presented for Board consideration by December 2020.

Cash and In-Kind Contributions

Cash and in-kind support are crucial factors in CASA’s effectiveness and ability to undertake its work. Core funding is provided by the GoA and is not included in the contributions shown below. Government, industry, and non-government organizations all provided in-kind support. CASA has tried to assign a dollar value to this support by examining time and travel costs and other contributions but is confident that the true value of these contributions is both under-recorded and underestimated. The GoA generously provided office space as an in-kind contribution in 2019.
CASA would like to thank Heartland Generation and Canadian Fuels Association for generously sponsoring the 25 year anniversary event.
Alberta Airshed Zones and the Alberta Airsheds Council

The Alberta Airsheds Council (AAC) is a partnership of Alberta’s 10 Airsheds to support healthy air quality. Collaboration within and among Airsheds enables increased program alignment, cost efficiencies, and improved air quality monitoring and reporting. Airsheds operate regional networks responsible for monitoring, assessing, and educating Albertans on outdoor air quality. An important part of Alberta’s Clean Air Strategy, Alberta Airsheds now operate more than 70 continuous air quality monitoring stations plus hundreds of passive monitors in compliance with provincial and federal standards, including Alberta’s Air Monitoring Directive.

Air quality data and programs rely on the multi-stakeholder, consensus-based governance of each Airshed. Hundreds of stakeholders including municipalities, industry, Indigenous communities, federal and provincial governments, community members, and environmental groups contribute to the success of Airsheds. The contribution represents many areas of expertise and thousands of volunteer hours. Airsheds work hard to maintain long-standing trusted relationships in their communities.

In 2019, Airsheds continued to focus on the following key roles:

- **Air quality monitoring and reporting.** Airsheds are the backbone of Alberta’s ambient air monitoring network and provide data to report the Air Quality Health Index (AQHI) in over 30 communities. Monitoring areas continued to grow in 2019 with the expansion of Airshed boundaries for West Central Airshed Society, Peace Airshed Zone Association, and the Peace River Area Monitoring Program Committee.

- **Provincial policy development and regional planning.** Airshed representatives actively contribute to CASA-led initiatives. In collaboration with AEP and other stakeholders, Airsheds remain focused on understanding and addressing fine particulate matter and ozone exceedances and are preparing for efforts that will focus on anticipated additional exceedances of the CAAQS.

- **Education and outreach.** Through the AAC, Airsheds have developed engaging educational videos and other materials on key topics including *How does wildfire smoke affect my health?* and *What is an Airshed?* At open houses, trade shows, service club meetings, municipal Council meetings, schools, and on social media, Airsheds connect with stakeholders to raise awareness about air quality matters and educate on taking action to improve air quality. A large variety of educational materials are available at albertaairshedsCouncil.ca and all stakeholders are invited to use and share the materials. Air quality forums and workshops hosted by Alberta Capital Airshed and Calgary Region Airshed Zone provided valuable learning for a broad range of stakeholders on the topics of Wildfire Smoke: Impact on Human Health and Community Adaptation and Resiliency; and Building Healthier Communities Together.
In 2019, **Peace Airshed Zone Association (PAZA)** formalized its boundary expansion to encompass the entire MD of Greenview, including the Towns of Fox Creek and Grande Cache. To better understand the growth and development in PAZA’s region, a network assessment was completed to determine appropriate monitoring levels and locations. PAZA’s portable continuous monitoring station is currently located south of the Town of Wembley to capture background information as new developments plan and begin operations. PAZA continues to engage with area schools to educate and inform students on the importance of air quality and personal action. The annual Walk Through the Forest event, in conjunction with local forestry stakeholders, hosted 1000+ students as well as teachers and parents.

In Fall 2019, the **Peace River Area Monitoring Program (PRAMP)** Committee deployed its first AQHI station near Cadotte Lake on Woodland Cree First Nation land. The AQHI is one learning element in classroom sessions delivered by PRAMP’s new Education and Outreach Coordinator, along with information about the importance of healthy air quality for honeybees. The Peace River area is the honey capital of Canada and PRAMP’s connections with local apiaries have added a unique element to its education and outreach program.

**West Central Airshed Society (WCAS)** completed a network assessment to determine how its broad network of monitoring sites, many of which have been in place for over 20 years, meets the needs of the current environment (population, emissions sources, etc.). WCAS’ Drayton Valley station was upgraded and formally re-opened to provide AQHI readings for the local community. WCAS also expanded its area and initiated several outreach activities to increase knowledge of air quality.
In 2019, the **Wood Buffalo Environmental Association (WBEA)** reviewed 15 years of data from its Terrestrial Environmental Effects Monitoring program which resulted in the publication of nine scientific papers that explored the effects of air emissions and deposition in the region. The WBEA also continued with its Community Odour Monitoring Program (COMP), which compares user-submitted information about odours to the data collected at WBEA air monitoring stations. The WBEA launched a COMP website (www.comp.wbea.org) that allows users to view all the odours observations submitted through the app and learn about odours and air quality.

The **Calgary Region Airshed Zone (CRAZ)** Air Quality Management Planning Committee completed a review and produced an Achievement Report of the Particulate Matter and Ozone Plan. The committee finalized and updated the plan to include the new standards set by CAAQS. The plan will now be called the Air Quality Management Plan. CRAZ’s Portable Air Monitoring Lab (PAML) is currently on a four-year deployment schedule. Every six months the PAML is relocated to one of four different locations being used to gather air data and provide the municipalities with an AQHI. Until April 2020 the PAML will be in the Town of Canmore.

**LICA’s (Lakeland Industry & Community Association)** “Air Quality DNA Data Visualization” was updated to include over a decade of air monitoring data. The DNA visualization is a novel approach to help Albertans understand air quality in an approachable and engaging way. LICA also installed air quality displays in community centers in Cold Lake and Bonnyville. These displays include a unique AQHI lantern and posters with information to promote clean air. With the Portable Air Monitoring System (PAMS) located near Charlotte Lake, Phase 2 of a project to quantify odours in and around the Town of Bonnyville continued in 2019; LICA has been able to identify odour-causing compounds, their concentrations, and sources. The PAMS will be relocated to a new community in early 2020.

**Palliser Airshed Society (PAS)** completed the long-range plan for our airpointer™ portable monitor. The airpointer™ which is currently at the Medicine Hat Trap Club will be moved to Taber in spring 2020 and then to Brooks in fall 2021. There have been administrative changes as well with Ken Pearl retiring as Executive Director in January; Susan McIntosh from AEP retired from the Board of directors in September. PAS looks forward to increasing our education and outreach initiatives in 2020 as well as launching a new website.

For more information, visit:  
www.albertaairshedsuncouncil.ca
CASA Participating Organizations

CASA could not be successful without the help of the many organizations that support participants on the Board and project teams. CASA is very grateful to these organizations for providing financial and in-kind contributions of time and expertise.

Alberta Agriculture and Forestry
Alberta Airsheds Council
Alberta Beef Producers
Alberta Canola Producers
Alberta Capital Airshed
Alberta Energy
Alberta Energy Regulator
Alberta Environment and Parks
Alberta Environmental Network
Alberta Federation of Agriculture
Alberta Forest Products Association
Alberta Health
Alberta Health Services
Alberta Motor Association
Alberta Motor Transport Association
Alberta Newsprint Company
Alberta Transportation
Alberta Pacific Forest Industries Inc.
ATCO Power Canada Ltd.
Calgary Region Airshed Zone
Canadian Association of Petroleum Producers
Canadian Fuels Association
Capital Power Corporation
Chamberland Consulting Ltd.
Chemistry Industry Association of Canada
City of Calgary
City of Edmonton
City of Grande Prairie
City of Red Deer
Dow Chemicals
ENMAX
Environment and Climate Change Canada
Fort Air Partnership
Government of Alberta
Graymont Western Canada Inc.
Health Canada
Heartland Generation
Imperial Oil Ltd.
Innotor
Inter Pipeline
International Council on Clean Transportation
Maxim Power Corp.
MEG Energy
Methanex Corporation
Mewassin Community Council
NextEra Energy Canada
North West Redwater Partnership
North West Refinery
Notinto Sipiiy Conservation Authority
NOVA Chemicals Corporation
Palliser Airshed Zone
Parkland Fuel Corporation
Pembina Institute
Prairie Acid Rain Coalition
R. Angle Consulting
Repsol
Rural Municipalities of Alberta
Samson Cree Nation
Southern Alberta Group for the Environment
Suncor Energy
Syncrude
The Lung Association Alberta and NWT
TC Energy
TransAlta
West Central Airshed Society
Weyerhaeuser Company Ltd.