2005 Annual Report

CASA
Clean Air Strategic Alliance

About CASA

The Clean Air Strategic Alliance (CASA) is a multi-stakeholder partnership, composed of representatives selected by industry, government and non-government organizations. Stakeholders are committed to developing and applying a comprehensive air quality management system for all Albertans.

All CASA groups and teams, including the board of directors, make decisions and recommendations by consensus. Recommendations are likely to be more innovative and long lasting than those reached through traditional negotiation processes.

Vision

The air will be odourless, tasteless, look clear and have no measurable short or long-term adverse effects on people, animals or the environment.

Mission

To recommend strategies to assess and improve air quality in Alberta, using a consensus process.

Contents

Mandate

CASA was established by Ministerial Order as an advisory committee under the Environmental Protection and Enhancement Act and the Department of Energy Act to undertake and report on:

1. The operation of the Comprehensive Air Quality Management System (CAMS).
2. The conduct of strategic air quality planning for Alberta through shared responsibility and the utilization of a consensus building collaborative approach. Planning shall include:
   i. clear identification of issues;
   ii. prioritization of specific problems;
   iii. allocation and coordination of resources;
   iv. development of action plans; and
   v. evaluation of results.
3. The prioritization of problems with respect to air quality in Alberta and specific actions or action plans and activities to resolve such problems. The action plans will prescribe guidelines for the initiatives to be undertaken, the economic and environmental consequences, and what outcomes are expected from each initiative.

Decisions on matters of policy and action of CASA will be based on consensus. Where consensus policy and action matters are not achieved, yet some action is deemed necessary, specific alternatives will be provided to the Ministers for decision. The alternatives will reflect the extent of consensus and areas of agreement, the specific issues about which there is no consensus, and the reasoning behind the differing views.

Progress reports will measure and compare the actual benefits and results to projected outcomes, responsibility, accountability and performance of the initiatives; and any reports submitted will be jointly presented to the Ministers of Environment and Energy.

CASA supports the following 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.

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Highlights

2005 Arthur Kroeger College Award for Policy Leadership

CASA received the 2005 Arthur Kroeger College Award for Policy Leadership, which is awarded annually by Carleton University to an individual or organization that serves as a model to others on how to define an issue and successfully advance the policy process through the use of innovative leadership. CASA's process of bringing together stakeholders with diverse, and often conflicting, perspectives and positions to address air quality issues is widely respected in Canada, and has sparked international interest. One of the most important benefits of CASA is that not only can stakeholders use it to address existing air quality concerns, but the organization also anticipates issues and finds ways to deal with them before air quality is affected.

Donna Tingley, Dave Byler and **Tom Marr-Laing** accept the award for *Policy Leadership* on behalf of CASA

CCME Pollution Prevention Award

CASA received a 2005 Canadian Council of Ministers of the Environment (CCME) Pollution Prevention Award, a national award launched in 1997 to give national recognition to companies and organizations showing cutting-edge accomplishment and leadership in pollution prevention.

The Award recognized the Flaring and Venting Project Team for their collaborative work to develop short-term and long-term actions and strategies to address potential and observed health and environmental impacts associated with emissions from oil and gas flaring and venting.

The award also noted that, since the Project Framework was implemented, there has been a 70 percent reduction in solution gas flaring when compared to the 1996 baseline. In 2003, about 95.3 percent of solution gas was conserved or used in other manners, with less than five percent being flared or vented

Aboriginal membership

In 2005, the CASA board created one board position for First Nations and another for Métis. The board has been working with Alberta First Nations and Métis to identify their respective representatives. Attendance at board meetings by the Métis Settlements General Council commenced in 2005.

Revised identity, mission, goals and CAMS

Thanks to the work of the Performance Evaluation Implementation Committee, the CASA board recently approved a revised CASA identity, mission, goals and Comprehensive Air Quality Management System (CAMS).

Identity

The Clean Air Strategic Alliance is a multi-stakeholder partnership, composed of representatives selected by industry, government and non-government organizations.

Mission

To recommend strategies to assess and improve air quality in Alberta, using a consensus process.

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.

Revised CAMS

The CAMS was revised to accurately reflect current practice with respect to consultation, implementation, the effect of resources on prioritization and documentation.

Flaring and venting – coal bed methane and well test time limits

Coal bed methane (CBM), also known as natural gas from coal, is showing promise as an important new source of energy in Alberta. The CASA board approved ten recommendations made by the Flaring and Venting Project Team concerning both dry and wet coal bed methane as well as nitrogen fracturing. The consensus report and recommendations were forwarded for information to the Multi-stakeholder Advisory Committee led by Alberta Energy and co-chaired by Alberta Environment.

The Flaring and Venting Project Team also recommended a time limit of 72 hours, with some exceptions, for most oil and gas well test flaring and venting.

In the Zone conference

Over 200 delegates from near and far attended the successful *In the Zone – Airsheds Zones Conference* on October 23 – 25, 2005. Representatives from government, industry and non-government organizations informed delegates of their unique perspectives on air quality monitoring. Existing and forming air shed zones in Alberta provided an overview of operations, which was followed by management, technical and process sessions. Alberta Environment had their mobile air monitoring units on hand for in-depth tours.

Confined Feeding Operations Project Team

Building on a statement of opportunity about air emissions from confined feeding operations submitted in 2004, a diverse range of stakeholders continued to work collaboratively through the CASA process to define the issue, form a project team and develop an emissions inventory.

Air Quality Education and Outreach Clearinghouse

As follow-up to the Air Quality Education and Outreach Workshop held in 2004, a unique pilot project was created in 2005. The online Air Quality Education and Outreach Clearinghouse is a one year pilot project located on the CASA website as a one-stop site to find information on air quality education and outreach programs and materials in Alberta. The clearinghouse is located at **www.casahome.org/education**.

Message from the President

Peter Watson, President

In its eleventh year, CASA personified excellence in leading the way, working together and making a difference. Its reach extended across government ministries, industrial sectors and non-government organizations to build strong, enduring multi-stakeholder partnerships which developed recommendations that ultimately possessed meaning, commitment and positive environmental outcomes.

CASA led the way by serving as a model to others. In 2005, CASA was the recipient of national recognition for distinction in both policy leadership and pollution prevention. The CASA process was emulated by both new and existing multi-stakeholder organizations seeking a better way to achieve collaborative, committed decisions. CASA again freely shared its expertise and experience with many organizations.

CASA's successful approach fostered positive relationships among diverse stakeholders to build the capacity and willingness to tackle complex air quality issues. In 2005, over 100 stakeholder organizations worked together on 11 project teams and 4 implementation teams on issues that ranged from indoor air quality to the air quality implications of confined feeding operations. This year, the board created four new teams and approved recommendations from five teams that had completed their work.

As CASA matures, the environmental outcomes of its efforts are apparent. CASA is making a tangible difference as many air quality initiatives in Alberta trace their roots back to the CASA project team table. For example, solution gas flaring and venting in Alberta has been significantly reduced. But it hasn't stopped there. The Flaring and Venting Project Team reconvened in 2005 to make further recommendations regarding an emerging issue, the development of coal bed methane, and to recommend timelines for well test flaring and venting.

CASA truly is making a difference for air quality in Alberta. I am very impressed with the dedication and commitment of all members to pursue shared outcomes and foster a sustainable partnership. As a result, CASA's success has garnered the respect and recognition of Albertans and others across the country. I look forward to working with CASA to meet the challenges of the future.

Board of Directors as of December 31, 2005 unless otherwise noted

Sector: Industry

Member category	Association/affiliation	Representative
Agriculture	Alberta Beef Producers	Herman Schwenk (to Mar. 1) Len Vogelaar (from Feb. 24)
Alternate energy	Alternate energy producers	Theresa Howland
Chemical manufacturers	Canadian Chemical Producers Association	Ron Steffan (to Aug. 24) Wendy Lyka (from Aug. 24)
Forestry	Alberta Forest Products Association	Brian Gilliland
Mining	Mining industry	Wayne Kenefick
Oil and gas (large producers)	Canadian Association of Petroleum Producers	Dave Byler **CASA vice-president**
Oil and gas (small producers)	Small Explorers and Producers Association of Canada	Mitch Shier
Petroleum products	Canadian Petroleum Products Institute	Dave Barrett
Utilities	Utilities	Bob Page

Sector: Government

Federal	Environment Canada	Jim Vollmershausen
Local (rural)	Alberta Association of Municipal Districts and Counties	Phyllis Kobasiuk
Local (urban)	Alberta Urban Municipalities Association	Darren Aldous
Provincial	Alberta Environment	Peter Watson (from Feb. 18) **CASA President**
Provincial	Alberta Health and Wellness	Wayne McKendrick
Provincial	Alberta Energy	Jane Currie (to Sept. 4) Sandra Locke (from Sept. 4)

Sector: Non-Government Organization

Consumers/transportation issues	Alberta Motor Association	Vacant
Health issues	The Lung Association, Alberta & NWT	Wanda Wetterberg (May 3 to Nov. 29) Tony Hudson (from Nov. 29)
Pollution issues	Pembina Institute	Tom Marr-Laing (to June 16) **CASA vice-president**
Pollution issues	Toxics Watch Society of Alberta	Myles Kitagawa
Wilderness issues	Prairie Acid Rain Coalition and Bert Riggall Environmental Foundation	Martha Kostuch (from June 16) **CASA vice-president**

Alternates as of December 31, 2005 unless otherwise noted

Sector: Industry

Member category	Association/affiliation	Representative
Agriculture	Wild Rose Agricultural Producers	Grace MacGregor (to Nov. 22) Terry Murray (from Dec. 1)
Alternate energy	Alternate energy producers	David Baker
Chemical manufacturers	Canadian Chemical Producers Association	Barbra Korol
Forestry	Alberta Forest Products Association	Keith Murray
Mining	Mining industry	Ron Laing
Oil and gas (large producers)	Canadian Association of Petroleum Producers	Bill Clapperton
Oil and gas (small producers)	Small Explorers and Producers Association of Canada	Heather Douglas (to Sept. 21)
Petroleum products	Canadian Petroleum Products Institute	Ted Stoner
Utilities	Utilities	Mike Kelly

Sector: Government

Federal	Environment Canada	Tim Goos
Provincial	Alberta Environment	John Donner (to June 16) John Knapp (from June 16)
Provincial	Alberta Health and Wellness	Alex Mackenzie
Provincial	Alberta Energy	Jane Clerk (to March 17) Jerry MacPherson (from Sept. 4)

Sector: Non-Government Organization

Consumers/transportation issues	Alberta Motor Association	Dan VanKeeken (to April 18)
Health issues		Vacant
Pollution issues	Lake Wabamun Enhancement and Protection Association	Linda Duncan
Pollution issues	Residents for Accountability in Power Industry Development	Ian Peace
Wilderness issues	South Peace Environmental Association	Bob Cameron

Thank you to past board members

CASA gratefully acknowledges the contribution of board members, indicated below, who stepped down in 2005.

Jane Clerk	Alberta Energy
Jane Currie	Alberta Energy
John Donner	Alberta Environment
Heather Douglas	Small Explorers and Producers Association of Canada
Phyllis Kobasiuk	Alberta Association of Municipal Districts & Counties
Grace MacGregor	Wild Rose Agricultural Producers
Herman Schwenk	Alberta Beef Producers
Ron Steffan	NOVA Chemicals Corporation
Rob Taylor	Alberta Motor Association
Dan VanKeeken	Alberta Motor Association
Wanda Wetterberg	The Lung Association, Alberta & NWT

Message from the Executive Director

Donna Tingley, Executive Director

2005 was an exciting year for the Clean Air Strategic Alliance as the organization received accolades for both policy leadership and pollution prevention in the national arena. The CASA consensus process and partnership approach continued to generate interest from inside and outside Alberta from others who grapple with complex issues and hope to replicate our achievements. Nationally and internationally, we responded to requests to share our best practices in achieving consensus, building capacity and bringing diverse stakeholders to resolve complex issues.

We are most appreciative of the unparalleled commitment of our members and stakeholders as they are the true key to our success. CASA also is thankful for our many funders who support the myriad activities that make the CASA process so successful, from day to day operations to such diverse activities as information gathering and conference sponsorship.

In 2005, four project teams and committees were created, namely Indoor Air Quality, Confined Feeding Operations, Science Symposium on Nitrogen and Particulate Matter and Ozone Implementation. In taking on new challenges, CASA welcomed stakeholders who are new to CASA; stakeholders who bring their unique perspectives and expertise to enrich the process and outcomes. In 2005, CASA also welcomed Alberta's seventh airshed zone, formed by the Lakeland Industry and Community Association in east central Alberta.

Over the past eleven years, CASA has not stood still or rested on its laurels. CASA's ability to evolve and achieve was reflected in a number of events in 2005. The addition of aboriginal representation on the CASA board is one example. Another is the revision of our mission, goals, identity and the Comprehensive Air Quality Management System, CASA's decision-making tool. Not shying away from tough issues, as evidenced in our new teams, is another.

The Secretariat worked hard this year to ensure that the board and teams received the necessary support to achieve their goals. We take pride in being a responsible and ethical organization with lean, efficient administration.

Secretariat

Executive Director
Donna Tingley

Science Advisor
Marianne English
(celebrated 10 years)

Office Manager
Bernice Lloyd

Communications Advisor
Geoff Williams (to April 15)
Sharon Hawrelak (from June 27)

Senior Project Manager
Kerra Chomlak (celebrated 5 years)

Project Managers
Matthew Dance
Ahmed Idriss (to July 29)
Bettina Mueller (from November 15)

Finance Officer
Joanne Dixon

Administrative Assistants
Marlene Parker (to November 30)
Wilma Raman-Nair (from November 28)
Sherri Clark (to October 26)

Thank you to **Kim Sanderson**, **Ingrid Liepa**, **Christa Cruthers**, **Rona Marak** and **Haydee Jelinski** for applying their skills as consultants to various CASA teams this year.

Evaluating and Measuring CASA Performance

Performance evaluation

In the belief that "what gets measured gets done," CASA has a strong system for measuring and evaluating its performance. When CASA was established in 1994, an article was included in the bylaws to ensure that overall organizational performance is evaluated on a regular basis. Article 16 of the CASA bylaws requires that *"The performance of the Society will be evaluated upon the expiration of three years from the date of its incorporation, or the date of its last performance evaluation, by the Members of the Society."*

The third performance assessment, the first to be done by an independent consultant, was commenced in June 2004. Based on the independent evaluation, the Performance Evaluation Steering Committee concluded that overall, CASA is an effective organization that is making progress on its mandate and is following its procedures. Five areas for improvement arose from the 2004 CASA performance evaluation: public involvement, implementation, prioritization/ resources, goals/key focus areas and document clarification. The board approved a plan for addressing the five areas for improvement in 2005.

All five areas were addressed in a revised Comprehensive Air Quality Management System (CAMS), approved by the board in September. The CAMS document incorporated the board's discussions and stakeholder consultations on each of the five areas by more accurately representing the process followed in practice by CASA.

Additional procedures were introduced for implementation (please see Implementation later in this report). In keeping with the practice that every three years a priority setting process on the importance of existing and emerging air quality issues is commenced by the board, this process was introduced at the September board meeting and will continue into 2006.

2005 performance measures results

The CASA business plan contains five performance measures, established by the board of directors, to reflect the organizational performance of CASA. These are:

1. Improved air quality indicators in areas of CASA action.
2. Capability to measure air quality effects on humans and the ecosystem.
3. Number of recommendations through the Comprehensive Air Quality Management System process implemented.
4. Degree of CASA members, partners and clients' satisfaction with the CASA approach.
5. Degree of recognition by emitters and the general public of CASA as a major vehicle for delivering improved air quality management for Alberta.

2005 performance measures results (continued)

1. Improved air quality

CASA's mandate includes the evaluation of air quality in Alberta through a collaborative process.

To assess progress, two sets of indicators were defined; one set is based on concentrations of selected substances in the air and the other set is based on exceedances of the Alberta ambient air quality one-hour guideline of three substances. Analysis began with data from 1994 because that was the year CASA was formed. Please note that this performance measure is calculated every three years, with the next calculation due in 2007.

Concentrations of selected substances

Annual average ambient concentrations and the annual peak concentrations across Alberta are the two indicators chosen for this set. The specific substances, as shown in Figures 1 and 2, were selected because:

- They are substances of concern in Alberta.
- They affect air quality in Alberta.
- They are associated with issues addressed by one or more CASA project teams.
- Data on each substance is readily available in electronic form.

The annual average concentration of wet deposition of acidifying emissions is also analyzed as part of this indicator set. Benzo(a)pyrene was included in previous reports, but its monitoring was discontinued in 2001 so it has been dropped as an indicator.

Figures 1 and 2 reflect differing levels of progress for the selected substances. Only benzene and sulphur dioxide showed overall reductions in both ambient and peak concentrations between 1994 and 2003. Ambient levels for fine particulates and hydrogen sulphide dropped, but the peak concentrations for both substances rose. For nitrogen dioxide, a small downward trend is indicated for peak concentrations, but a slight upward trend in ambient levels. There were small upward trends in both indicators for ozone. No trend was apparent in the average annual wet deposition.

Figure 1: **Change in average concentration of selected substances** (1994 to 2003)

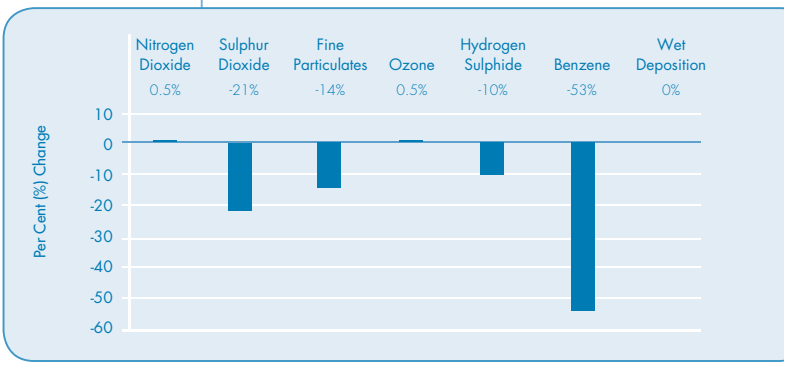
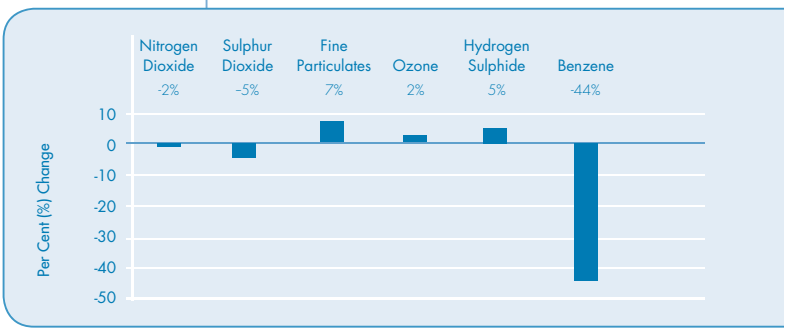


Figure 2: **Change in annual peak concentration of selected substances** (1994 to 2003)



Exceedances of the Alberta ambient guidelines

Exceedances of the Alberta ambient one-hour guideline across Alberta for three substances (sulphur dioxide, hydrogen sulphide and nitrogen dioxide) provides the second set of indicators. The data was obtained from industrial compliance, airshed and Alberta Environment monitoring stations between 1994 and 2003.

The overall downward trend for sulphur dioxide exceedances continues, and a new significant downward trend was found for hydrogen sulphide exceedances (see Figures 3 and 4). There have been so few exceedances of the guideline for nitrogen dioxide that a chart is not provided.

Figure 3: **Sulphur Dioxide** - Per cent exceedances from industry, airshed and provincial data (1994 to 2003)

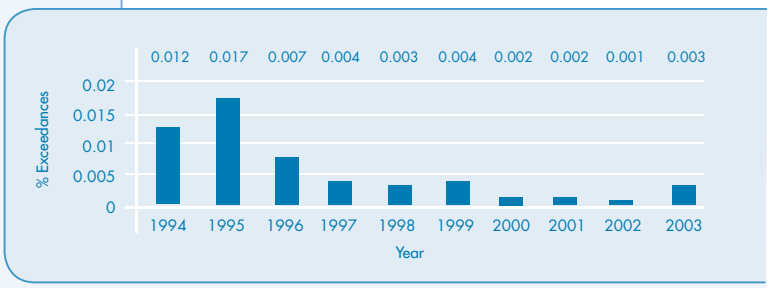
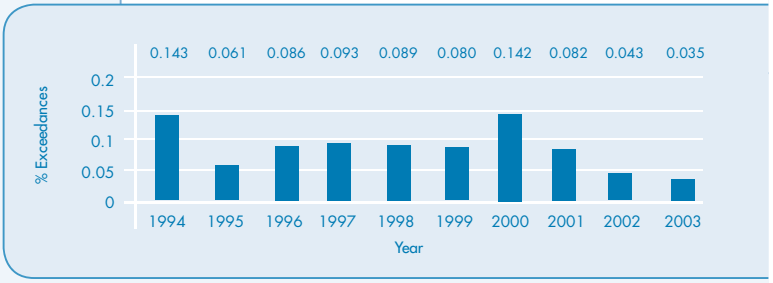


Figure 4: **Hydrogen Sulphide** - Per cent exceedances from industry, airshed and provincial data (1994 to 2003)



2. Capability to measure air quality effects

Four indicators were developed to represent capability to measure air quality effects and are calculated every three years, with the next calculation due in 2007. To keep the indicators simple, efforts focused on monitoring, which is an important part of measuring effects. In order to define air quality effects, a measure of air quality and a measure of the effects are needed, thus resulting in three types of monitoring indicators:

- Ambient air quality.
- Ecological effects.
- Human health effects.

The ambient air quality indicator is based on the number of air quality monitoring sites and instruments in use as a percentage of the number of sites and instruments expected to be in operation in Alberta, as described in the Ambient Air Quality Strategic Plan. In 1994, the value of this ambient indicator was 31 per cent; and in 2003 it was 48 per cent, up one percent from 2002. This does indicate that progress has been made over the last ten years in our capability to measure concentrations of substances of concern.

Two ecological effects monitoring indicators have been defined. One is based on the number of ecological monitoring sites that have been put in place as a percentage of the number of expected sites, as described in the Ambient Air Quality Strategic Plan. The second ecological effects monitoring indicator is simply the total number of ecological monitoring sites that have been implemented. The results for these two indicators are unchanged from 2002, at 33 per cent and 10 sites respectively. In comparison, there were no ecological effects monitoring sites in Alberta in 1994.

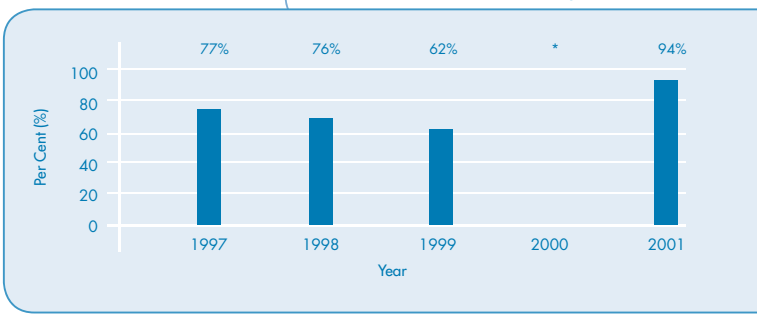
A preliminary human health monitoring indicator was developed in 2004 to indicate the extent to which data of the type required by the CASA Human Health Monitoring Framework (approved by the CASA board in 1999) is being collected in Alberta. The extent to which this monitoring is being done was assessed on a scale of one to five, and compared against the ideal (a score of "5"). For 2004, the rating was 2/5, or 40 per cent, which compares favourably against a value of zero in 1994. This indicator will be used in the short term only, and a more comprehensive human health monitoring indicator is expected to be developed by 2007.

3. Recommendations implemented

CASA teams make recommendations for consideration by the CASA board of directors. The intent of this indicator is to measure the degree to which recommendations that can lead directly to improved air quality (that is, substantive recommendations) have been implemented within three years of their approval by the CASA board. This indicator is a snapshot taken three years after the recommendations were approved, and complex actions may take more than three years to be fully implemented. Recommendations accepted by the board that are administrative or operational are not included in this indicator.

The percentage of substantive recommendations from 2001 implemented by 2005 is 94 percent. *Please note that no substantive recommendations were made in 2000.

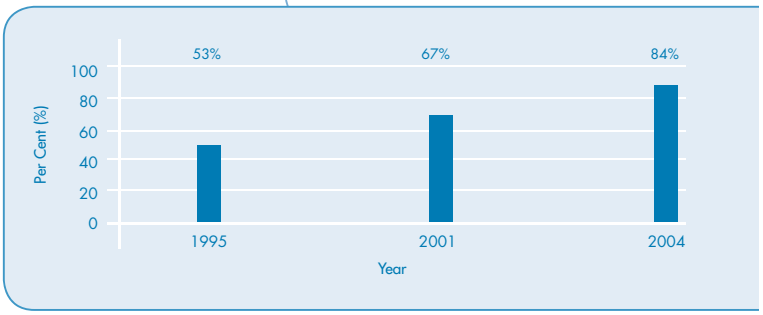
Figure 5: Number of recommendations implemented



4. Stakeholder satisfaction

The indicator for this performance measure was derived from surveys of CASA stakeholders conducted in 1995, 2001 and 2004. These surveys asked CASA members, partners and clients about various things, but the performance indicator for this measure is based on answers to one question on stakeholder satisfaction with the CASA way of addressing air quality issues. As shown in Figure 6, there has been a steady improvement. The next stakeholder satisfaction survey is due in 2007.

Figure 6: Degree of satisfaction with the CASA approach



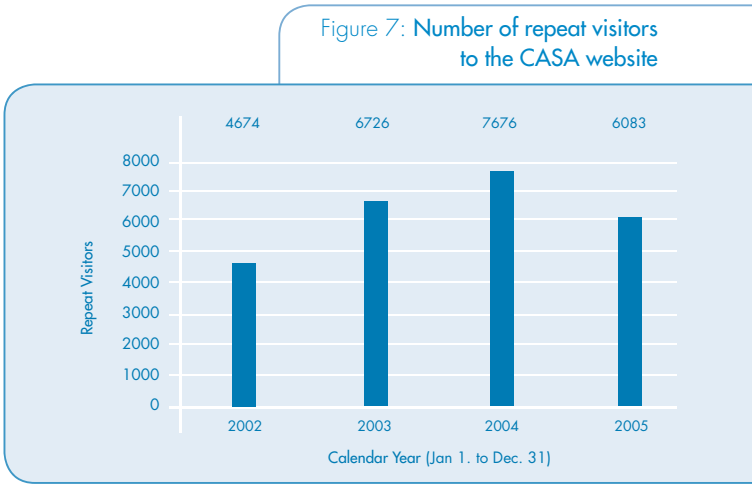
5. Degree of recognition

To measure how well Albertans recognize the CASA organization and its accomplishments, one indicator based on CASA website usage and three indicators based on media coverage are calculated each year.

Website indicator

In 2005, there was a slight decline in the number of repeat visitors to the CASA website over 2003 and 2004, but still a significant increase over 2002, as apparent in Figure 7.

Figure 7: Number of repeat visitors to the CASA website



News stories indicators

There are three news stories indicators in the degree of recognition performance measure. 2005 was the third year the news stories indicators were calculated. News stories in 2005 show a slight increase over 2004 in the news stories that mention CASA. However, air quality also was mentioned more often, so the percentage of news stories that mention CASA in relation to those that mention air quality has decreased somewhat.

Figure 8: **CASA news stories count**

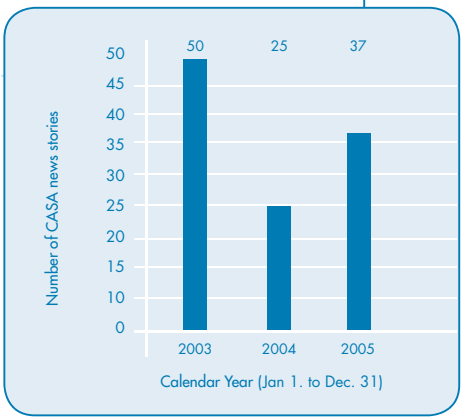


Figure 9: **CASA news stories as a percentage of air quality news stories**

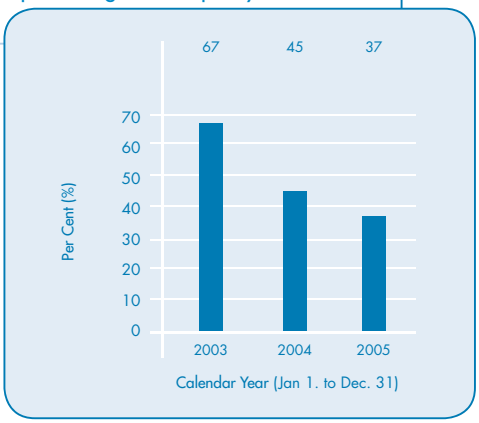
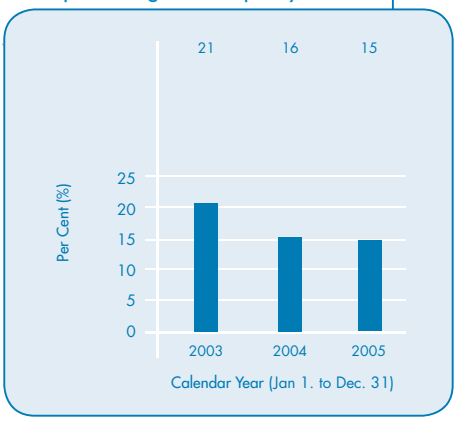


Figure 10: **CASA-air quality stories as a percentage of air quality stories**



CASA Teams

The work of CASA is achieved largely though the participation of teams of individuals representing stakeholders who share an interest in a specific issue. Most issues are brought to the CASA board in the form of a statement of opportunity. When the board of directors agrees that CASA should take on an issue, a working group is formed to draft terms of reference for a project team. Once the board approves those terms of reference, a project team is formed. The project team is accountable to the board while individual participants are accountable to their stakeholder organizations. As appropriate, recommendations from a project team lead to the formation of another team to oversee their implementation.

The CASA board of directors also forms committees to achieve specific organizational goals not directly associated with project teams.

Board Committees

Executive

The executive committee of the board is composed of four positions: the president, two vice-presidents, and the secretary-treasurer. Members from each sector (government, industry and non-government organizations) are represented on the executive committee.

The executive committee oversees CASA finances and the operation of the secretariat. It also sets the agenda and presides at board meetings and monitors board effectiveness and adherence to policies and procedures. The committee provides impartial leadership, liaises with government ministers, advocates on behalf of CASA and represents CASA.

Performance evaluation implementation

CASA's bylaws require the organization to undertake a performance evaluation every three years. The Performance Evaluation Implementation Committee was created to oversee the independent performance evaluation in 2004. In 2005, CASA addressed the five areas for improvement that arose from the 2004 CASA performance evaluation: public involvement, implementation, prioritization/resources, goals/key focus areas and document clarification.

A major outcome of this committee's work was the review of the CASA vision, mission, identity, mandate, goals and the Comprehensive Air Quality Management System (CAMS). The CASA board approved a revised mission, identity, goals and CAMS in September. The committee completed its work in September. The next performance evaluation is slated for 2007.

The members of the executive committee are:

Peter Watson, president
Representing the government sector

Martha Kostuch, vice-president
Representing the non-government organization sector

Dave Byler, vice-president
Representing the industry sector

Donna Tingley, secretary-treasurer
Executive director of CASA

Communications

Goals

1. Increase and maintain stakeholder awareness, understanding, support for, engagement, and commitment to the CASA process and vision.
2. Increase individual Albertans' awareness, understanding, support for, engagement, and commitment to the CASA process and vision.
3. Move toward influencing individual Albertans' decisions and behaviours related to air quality, in support of the CASA vision.

Report for 2005

The Communications Committee provides strategic advice on communications at CASA. In 2005, the committee provided input on streamlining communications at CASA to facilitate increased emphasis on pursuing strategic directions, such as media relations. One of the outcomes was a condensed strategic communications plan.

The committee organized a successful air quality education and outreach workshop in 2004. In 2005, the CASA board approved the recommendations arising from the workshop, which included the creation of a pilot project: an online air quality education and outreach clearinghouse. The clearinghouse provides information on educational opportunities and materials from organizations actively involved with air quality education and outreach initiatives in Alberta online via the CASA website. The pilot project commenced in September 2005 and will be evaluated at the end of one year.

The communications committee commenced a review of the two performance measures which have implications for CASA communications: the stakeholder satisfaction and degree of recognition performance measures.

Performance measures

Objectives

- To define one or more appropriate performance indicator(s) for each of five performance measures.
- To develop a plan for obtaining a baseline for each indicator and calculate the indicator.
- To assess progress by comparing the current value of the indicator with the baseline.
- To report to the CASA board on performance.

Report for 2005

In accordance with the performance measures stewardship processes, the subcommittee presented results to the board for the degree of recognition indicators for 2004 and the average degree of implementation of substantive recommendations approved in 2001 (please see the 2005 *performance measures results* section earlier in this report).

A pilot project to review CASA's performance measures and indicators was commenced by the subcommittee. The current performance measures and indicators were reviewed for relevance to CASA's vision, mandate and goals and consistency with CASA's principles and criteria for performance indicators. Although all performance measures were found to be relevant, a few of the indicators did not satisfy all of the principles and criteria. The subcommittee also surveyed active and recent CASA teams. Suggestions were received for several additional performance measures and indicators and refinements to some of the current indicators.

Procedures for calculating the current performance measures were documented in a handbook, which will ensure consistency in the way the measures are calculated over time.

The results for all of the performance indicators are available in the *Measuring CASA performance* section of this annual report.

Project Teams

Airshed zones conference

Goal

The Airshed Zone Workshop will act as a catalyst for the advancement of the Airshed Zone initiative and concept by facilitating communication between existing and forming zones, government and interested members of the Alberta public. Furthermore, education, information sharing and networking will be encouraged as a means of supporting development of new zones and maintaining the sustainable operation of current airshed zones.

Report for 2005

The Airshed Workshop Organizing Committee was formed in early 2005 with the primary task of organizing the airshed zones conference. On October 23 - 25, CASA hosted 205 delegates at the first *In the Zone: Alberta Airshed Zones Conference* in Edmonton. Delegates came from all over Alberta and Canada to listen, learn and share expertise about airshed zones.

Perspectives on air quality monitoring at the provincial level were received from Alberta Environment, CASA, local government, industry and non-governmental organizations. All seven airshed zones in Alberta provided overviews of operations and monitoring. The second day of the conference featured three streams:

- Process information sessions, including steps to zone formation, consensus decision making and funding formulas.
- Technical sessions on air quality monitoring methods, data handling and emergency response planning.
- Management sessions on topics such as human health, odour, education and outreach and air quality management.

The committee compiled the evaluation results and will present a report and recommendations to the board in early 2006.

Ambient monitoring strategic planning

Goal

Alberta will possess a dynamic, effective and efficient framework that provides the foundation for the development of the best ambient air quality monitoring system in the world.

Report for 2005

The ambient monitoring strategic planning project team was formed in 2004 to review and update *A Strategic Plan for Air Quality Monitoring in Alberta*, presented to the CASA board in November 1995, as well as the *Alberta Ambient Monitoring Implementation Design Team – Report to the CASA Board*, presented to the CASA board in December 1997.

The team completed a review of ambient air quality monitoring frameworks in other jurisdictions with the intent of identifying the best practices of each which may be applicable to Alberta. The team is now considering the following in strategic plan development:

1. Ambient air quality, ecological effects and human health effects monitoring technologies and associated costs.
2. Monitoring regimes in other jurisdictions.
3. The geographic distribution of monitoring stations.
4. The roles of airshed zones, government and industry.
5. Flexibility to respond to future growth and development.
6. Other ambient air quality management initiatives including CASA initiatives, such as the PM and Ozone framework.

Confined feeding operations

Background

In 2004, the CASA Board of Directors received a statement of opportunity submitted jointly by Alberta Beef Producers, Alberta Cattle Feeders Association, Alberta Chicken Producers, Alberta Egg Producers, Alberta Hatching Egg Producers, Alberta Milk, Alberta Pork, Alberta Turkey Producers and Alberta Agriculture, Food and Rural Development to proactively address confined feeding operations air quality concerns in a collaborative process. A working group was formed to scope the issues and develop terms of reference for a CASA project team to develop an air quality strategic plan for confined feeding operations.

Goals

The CASA Confined Feeding Operations (CFO) Project Team will work within the CASA consensus process to develop a strategic plan to improve the management of air emissions from existing and future CFOs in Alberta and to improve relationships between stakeholders. In developing the plan, the team will consider the following principles:

- Continuous improvement and pollution prevention to protect air quality;
- Prevention of short and long-term adverse effects on human, animal and ecosystem health due to air emissions; and
- Assurance that air quality recommendations maximize social, economic, environmental and health benefits and minimize social, economic, environmental and health costs.

Report for 2005

In September 2005, the CASA board approved by consensus a terms of reference for a project team on confined feeding operations. Stakeholders had already met on three occasions as a working group in 2005. The first project team meeting was held on October 21, 2005, at the Poultry Research Centre at the University of Alberta Farm in Edmonton. A tour of the poultry, dairy and swine research facilities at the farm followed. The team developed a work plan based on the terms of reference. A sub-group was also created to advise on the development of an emissions inventory.

Coordination workshop

Purpose

The Coordination Workshop Organizing Committee was formed to plan the CASA Project Team Coordination Workshop to bring CASA stakeholders together to:

1. Develop a better understanding of what the project teams are doing, and
2. Provide a forum to identify key linkages and dependencies between CASA teams to help them operate more efficiently.

Report for 2005

Since the integration workshop in September 1996, CASA has increased its efforts to improve coordination among teams and CASA stakeholders as a whole. The first coordination workshop occurred in 2001. A second successful workshop was held in Edmonton at the end of November 2004, attended by more than 70 CASA stakeholders. More than 20 presenters provided information on all CASA teams, the board and six airshed zones. The CASA board approved the organizing committee's report in March 2005.

Based on feedback from the evaluation forms and verbal feedback the committee received, 87% of participants were satisfied with the workshop outcomes. There were only minor suggestions for improvement.

Based on stakeholders' comments provided at the workshop, a need for improved coordination between CASA initiatives and other government initiatives was identified, especially when there are common stakeholders involved in both initiatives. The committee observed that communication could be increased between airshed zones to help new zones gain access to information from existing zones. The committee recommended that CASA organize future coordination workshops every 1.5 to 3 years as per the 2001 workshop recommendations.

CASA project teams and the secretariat reviewed the report in 2005, giving special consideration to their role in:

- Improved coordination among other CASA teams and airshed zones; and
- Improved communication with the public and government agencies.

Ecological effects monitoring workshop

CASA has had a long-standing interest in the ecological effects of air quality and in 2004, the board agreed that a workshop to increase board members' knowledge of and commitment to ecological effects monitoring would be valuable. A workshop organizing committee was formed to plan and hold the ecological effects workshop and to report back to the CASA board.

Purpose

1. Increase board members' knowledge about ecological effects monitoring.
2. Give the board the option to start a new program, to join an existing program or potentially to agree to a strategy or framework to implement.
3. Be used as a decision tree for the board to make educated and informed decisions.
4. Show how to use the outcomes of ecological monitoring programs to direct policies.

Report for 2005

The Ecological Effects Monitoring Workshop was held on June 15, 2005 in Edmonton, with over thirty participants and nine presenters who shared their knowledge and expertise about ecological effects monitoring in Alberta. The workshop was preceded by the 37th Air Pollution Workshop and International Symposium in April 2005 in Banff on the science of ecological effects monitoring. This conference provided excellent international context and background on the topic, and CASA board members and other stakeholders were encouraged to attend. The CASA workshop was organized to provide more in-depth information to participants on what is being done in Alberta to monitor ecological effects.

The committee recommended a phased approach to ecological effects monitoring based on workshop discussion and input from the presenters and participants. As a first step towards identifying gaps and determining the best way to address them, and to facilitate sharing of information, the committee recommended that one main database would be very useful to researchers, regulators, industry, and any Albertan with an interest in biomonitoring. A comprehensive database of ecological effects monitoring activities in Alberta would aid growth and coordination of future and existing ecological effects monitoring endeavours. Alberta Environment has taken the lead in compiling a database of biomonitoring projects completed or now underway in Alberta, with the goal of completing the database by the end of 2006.

The committee recognized that there is a gap in linking air quality to effects on biological receptors. Once the database has been compiled, additional work will be needed to determine a path forward for ecological effects monitoring in Alberta. When the database is completed, the CASA board will consider creating a team to assess options and recommend the most appropriate direction for moving ecological effects monitoring forward in Alberta.

Electrical efficiency and conservation

Goal

Implement the energy efficiency and conservation recommendations (65-68) found in the 2003 report of the Electricity Project Team, with the aim of increasing electricity efficiency and expanding conservation efforts within the province. This work will include identifying the resources required to implement the various programs recommended.

Objectives

1. Develop efficiency measurement mechanisms for the electricity supply chain and set a numerical target for electrical energy efficiency.
2. Collect and develop credible information on electricity efficiency to support the proposed targets and programs.
3. Identify tools and mechanisms to implement the energy efficiency and energy conservation recommendations in the November 2003 report of the EPT to the CASA Board.
4. Identify the costs, benefits, co-benefits, and barriers and assists to market penetration of electrical efficiency and conservation measures for all users of electricity.
5. Identify cost effective approaches and programs to develop electrical efficiency and energy conservation, including implementers and time frames.

Report for 2005

Based on two reports completed in 2004, the team decided to focus on setting electrical efficiency targets by sector. The residential sector was selected as the first to be addressed.

A report was commissioned to provide an overview of residential electrical efficiency programs across Canada and parts of the United States, and to summarize the electrical efficiency potential of the residential sector. The report outlined four programs with the potential to achieve a 160 GWh reduction in total electricity use in Alberta over two years.

The team considered, in more detail, the process it could use to make recommendations for other sectors, including industrial, commercial and institutional, with the aim of developing an overall electrical efficiency target for Alberta.

Flaring and venting

Purpose

- To assess the performance of and make recommendations regarding the Alberta solution gas flaring and venting management framework.
- To develop recommendations to address a broader range of flaring and gas venting issues in Alberta.

Objectives

- Determine whether the solution gas flaring reduction targets for 2000 and 2001 have been met.
- Determine, based on improved information, firm future reduction targets, time lines and threshold volumes for solution gas flaring.
- Evaluate the royalty treatment of flared and vented gas and cost sharing programs and their implication for achieving future reduction targets.
- Evaluate the approval process and determine if fixed term approvals are required.
- Review performance requirements and efficiency standards, and determine the feasibility of combustion efficiency standards for all flares.
- Assess research findings and their implication for management of flaring and venting.
- Review information on gas venting and mitigation approaches and recommend a venting management framework, including short-term actions and long-term strategies.
- Review and develop recommendations with regard to EUB Guide 60, and Guide 60 Updates and Clarifications document.
- Develop recommendations for a strategy to respond to the issues associated with flaring and venting.
- Review information and develop recommendations for the regulation of flaring and venting associated with coal bed methane/natural gas from coal development.

Report for 2005

The Flaring and Venting Project Team made recommendations on two aspects of flaring and venting in 2005: coal bed methane development and time limits for flaring and venting.

Coal bed methane (CBM), also known as natural gas from coal, is showing promise as an important new source of energy in Alberta. The Multi-stakeholder Advisory Committee (MAC) led by Alberta Energy and co-chaired by Alberta Environment asked CASA's flaring and venting project team (FVPT) to make recommendations associated with coal bed methane development. The CASA board approved the ten recommendations made by the team concerning both dry and wet coal bed methane as well as nitrogen fracturing. The consensus report and recommendations were forwarded to the MAC for information.

With respect to time limits, the Flaring and Venting Project Team recommended a time limit of 72 hours, with some exceptions, for most oil and gas well test flaring and venting. This limit is based on data gathered by the Alberta Energy and Utilities Board (EUB), the Canadian Association of Petroleum Producers and the Small Explorers and Producers Association of Canada on testing of more than 2200 wells in Alberta in early 2005. The team also made a number of recommendations regarding dry coal bed methane wells, including one that would limit flaring and venting on development wells to 120 hours per zone tested.

The team plans to reconvene in 2007 to review both frameworks: one on the management of flaring and venting and the other on coal bed methane.

Indoor air quality

Goal

The indoor air within Alberta should be sufficiently free from physical, chemical and biological contaminants that affect the health, safety and comfort of the occupants.

Report for 2005

Indoor air quality is a complex topic, and the CASA board affirmed its importance by approving terms of reference for a new indoor air quality project team in June. People spend most of their time indoors, making indoor air quality a major health issue. Various agencies have jurisdiction in this area, so this topic will enable CASA to work with several new stakeholders.

The project team will develop indoor air quality targets for Alberta and define a plan for the development and implementation of the strategies, tools and resources to achieve the Alberta targets. The project team has expended most of its effort this year towards establishing the team, developing a work plan and gathering information. A request for proposal was issued for a literature review of regulatory and best practices in Alberta and other jurisdictions.

Priority setting workshop

As part of its mandate, Alberta Environment develops and reviews ambient air quality objectives. Based on the success and feedback from the first priority-setting workshop held in 2000, the department again requested CASA's assistance. The purpose of the 2004 priority setting workshop was to provide input to Alberta Environment on priority substances for development of new ambient air quality objectives, or review of existing objectives.

Purpose

The purpose of the Priority Setting Workshop Committee is to oversee the 2004 Priority Setting Workshop, to report back on process issues and make recommendations to the CASA Board, Alberta Environment and workshop participants.

Report for 2005

The Priority Setting Workshop was held in 2004. The Priority Setting Workshop Committee recommended that Alberta Environment develop ambient air quality objectives or review any existing objectives for the following seven priority substances as part of its next three-year work plan: nitrogen oxides, benzene, benzo-a-pyrene, naphthalene, formaldehyde, hydrogen fluoride and carbonyl sulphide. A list of substances that are important but require additional information before a decision can be made on their priority status was also developed. The committee also recommended that the ambient air quality objectives being developed for carbon disulphide and sulphur dioxide should be completed as quickly as possible.

Renewable and alternative energy

Goal

Create recommendations to implement the renewable and alternative energy recommendations found in the 2003 report of the Electricity Project Team (EPT), with the aim of increasing the supply of renewable and alternative electrical energy in the province to meet the target of 3.5 per cent new renewable and alternative electrical energy, as defined in recommendation 58 of the EPT report, by January 1, 2008.

Objectives

1. Develop tools and mechanisms to facilitate meeting the target and to implement the renewable and alternative electrical energy recommendations as described in the EPT report.
2. Develop a renewable and alternative electrical energy target beyond 2008, with corresponding tools and mechanisms.
3. Develop cost effective approaches and programs that enable the development of renewable and alternative electrical energy.
4. Develop interim benchmarks and reporting for the period between the present and January 1, 2008 to determine if the target is achievable and allow for adjustments to ensure the target is reached.

Report for 2005

The Renewable and Alternative Energy Project Team presented a report to the CASA board on December 1, 2005. The CASA board approved, by consensus of its industry, government and non-governmental stakeholders, 17 recommendations with the aim of increasing the supply of renewable and alternative electrical energy in Alberta.

Key recommendations of the report included:

- The CASA Renewable and Alternative Energy Project Team will assess progress towards the 2008 target to increase renewable and alternative energy in Alberta by 3.5%.
- The Government of Alberta will report annually on the amount of new renewable and alternative electrical energy produced in Alberta, commencing in 2006.

The CASA Renewable and Alternative Energy Project Team will work with the Government of Alberta on a policy framework to encourage the development of renewable and alternative electrical energy in Alberta.

Science symposium on nitrogen

Goal

The 2006 Science Symposium Organizing Committee will organize a symposium to:

1. Address issues related to the science of nitrogen emissions and their environmental effects, and
2. Examine risks and management approaches for these issues in Alberta.

Report for 2005

In 2002 CASA held a science symposium on Air Quality and Health. The organizing committee for the symposium recommended that another science symposium be held in three to five years. The CASA board accepted this recommendation. At the June 2005 CASA board meeting, a statement of opportunity was presented for a science symposium on nitrogen issues. The statement of opportunity was jointly prepared by the Acid Deposition Assessment Group (ADAG) in Alberta Environment and the Cumulative Environmental Management Association (CEMA). They proposed that a science symposium be held in 2006 to improve understanding of the behavior and effects of nitrogen emissions on the environment in Alberta. The CASA board accepted the statement of opportunity and an organizing committee was created to organize CASA's third science symposium, this time on the topic of nitrogen, to be held in the fall of 2006.

The Science Symposium on Nitrogen will be of interest to anyone who emits, manages or is affected by nitrogen emissions. It will provide:

1. An update on the latest science/research related to nitrogen emissions and their impacts.
2. An update on approaches for managing nitrogen impact issues.
3. Opportunities to discuss both the science and management of nitrogen in the Alberta context with experts in the field.

Implementation Teams

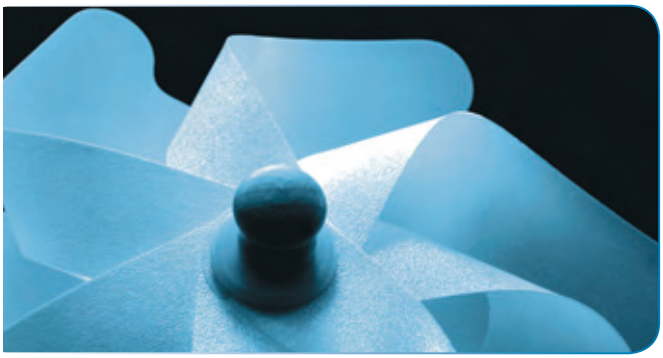
Ambient monitoring operations

The Ambient Monitoring Operations Steering Committee (OSC) provides overall direction, tracks progress and makes budgetary decisions regarding the implementation of the provincial ambient air quality monitoring network. The committee has membership representing government, industry and airsheds.

Purpose

The OSC:

- Provides overall direction for the provincial ambient air quality monitoring network.
- Oversees the implementation of the ambient monitoring strategic plan.
- Sets an annual budget for and oversees the development of the CASA Data Warehouse located online at http://www.casadata.org.
- Revises the strategic plan as necessary.



Report for 2005

The committee meets a minimum of twice a year to review progress in implementing the 1995 Strategic Plan for Ambient Air Monitoring and the 1997 implementation plan and to provide a forum to share information between the team members on new initiatives with regards to air monitoring and associated programs. The committee reviews the operation of the CASA Data Warehouse and budgets for enhancements.

The CASA performance measure for the percent of air monitoring stations identified in the 1997 implementation plan remains at 48% as of November 2005. This indicator does not include many enhancements to air monitoring in Alberta that have been implemented by airsheds, for example, new continuous monitoring stations, passive monitoring networks, and the capacity for portable air quality monitoring. Also, new monitoring technologies have been implemented at air monitoring stations.

The CASA Data Warehouse continues to be a focal point for the committee. This warehouse has received about 47,000 hits in 2005 up to the end of August, 72% from Canada, 13% from the USA and 15% from other parts of the world. The number of reports generated for this period from the data was 13,796. These statistics demonstrated the warehouse's importance and usefulness. Alberta Environment and the OSC are also working towards incorporating compliance data into the warehouse.

Human and animal health

Purpose

- Provide a plan for implementation of the recommendations from the Human Health Project Team and the recommendations from the Animal Health Project Team.

Objectives

- Review and provide an implementation plan for the recommendations from the Human Health Project Team and support the implementation of the plan as appropriate.
- Provide an implementation plan for the recommendations from the Animal Health Project Team and support the implementation of the plan as appropriate.
- Identify emerging issues in the area of air emissions and their effects on human and animal health.

Report for 2005

The CASA board approved the terms of reference for this team in March 2004. The team has focused its efforts this year on staying abreast of related developments in the human and animal health fields and on monitoring the implementation of recommendations from the CASA human health and from the animal health project teams.

The team has been working to resolve the security issues in the use of a toll-free phone number for the Comprehensive Human Health Monitoring System (CHHMS). The team also reviewed the draft CHHMS Assessment of Relevance and Implementation and heard a presentation on *Potential Health Impacts in Alberta from Climate Change* this year.

It was decided that a comprehensive review of the recommendations would be drafted by the Human Health Sub-group. Development commenced on the data collection tool.

The distribution of the Herd and Environmental Record System (HERS) and Community Monitoring brochures continued in 2005. Plans to have a contractor deliver a series of HERS workshops in 2006 are in place.

A HERS poster was produced and presented at the Alberta Energy and Utilities Board Synergy conference. The Alberta Environmental Farm Plan (AEFP) was approached with the suggestion that the HERS document be included in their materials and workshop. The team heard a presentation on *The Effects of Sulphur Dioxide and Cold Stress on Cattle*.

Particulate matter and ozone implementation

Background

The Multi-stakeholder Group (MSG) for Particulate Matter (PM) and Ozone was established by CASA in 1998 to provide input to Alberta Environment on the development of a Canada Wide Standard (CWS) for particulate matter and ozone. Following the signing of the CWS in 2000, Alberta Environment asked CASA to form the PM and Ozone Project Team in November of 2000 to develop the PM and Ozone Management Framework, which was approved by the CASA board in 2003. Implementation of the framework was undertaken by various parties.

Report for 2005

Underscoring the need to advance the 2003 PM and Ozone Framework, the CASA board agreed in 2005 to create the PM and Ozone Implementation Working Group to take a more active role in assessing and guiding overall framework implementation. The working group was assembled and met in 2005 to develop its terms of reference and review the status of PM and Ozone Framework recommendations and implementation progress.

Vehicle emissions

Goal

Recommend initiatives to reduce vehicle emissions and support the CASA vision of clean air.

Report for 2005

The Vehicle Emissions Team (VET) continues to make substantial progress in meeting its goals to pilot, monitor and evaluate vehicle emission reduction initiatives approved by the CASA board of directors. Although the VET is focused on emission reductions from passenger vehicles in major urban areas, the nature of the team's work has evolved to incorporate specific projects undertaken by sub-groups of the team.

Diesel particulate filter project

This one-year study, sponsored by CASA's VET, found that the filters performed well on two Edmonton Transit buses, even in very cold weather, and yielded significant reductions in emissions of total hydrocarbons, carbon monoxide and total particulate matter. The final report was distributed to diesel fleet managers and others throughout Alberta. The team will assess the adoption of the technology in Alberta and report back to the CASA board in 2007. More information on the project is available at http://CleanBus.ca.

ROVER II

The first ROVER (Roadside Optical Vehicle Emission Reporter) project in 1998 assessed actual in-use vehicle emissions using remote sensing technology. The ROVER II project will seek to replicate the ROVER I project by testing 50,000 vehicles in the same distribution in Edmonton, Calgary, Red Deer and Canmore in similar weather conditions.

Employer-based transportation demand management (TDM)

The Vehicle Emissions Team regards transportation demand management (TDM) as a key approach to reducing vehicle emissions in urban areas. The TDM subgroup developed a Clean Commute package for use by CASA stakeholders who are employers in Edmonton and Calgary. The CASA board was asked to use the Clean Commute package to evaluate and assess their current use of TDM measures, to consider implementing or modifying their programs as appropriate, and report back to the team in three years. Urban municipalities will be encouraged to promote such programs in their regions, and the team will also work with the CASA Communications Committee to develop communications tools to help with implementation and reporting on employer-based TDM measures.

Off road big industrial truck project (ORBIT)

Off-road heavy equipment is an important source of emissions in major developments such as mining and oil sands operations. Stakeholders have developed partnerships and projects to reduce emissions and are keeping the Vehicle Emissions Team apprised of their progress.

Implementation

CASA made significant progress in 2005 towards monitoring implementation of CASA recommendations. The degree to which recommendations are implemented has been tracked via the CASA Performance Measures, specifically performance measure 3 - recommendations implemented, for the past five years. In 2005, a rotation schedule was established for both CASA and external implementation teams to report progress on implementation at CASA board meetings. The board received progress reports from the Electricity Project, Particulate Matter and Ozone Management Framework and Acidifying Emissions Project in 2005.

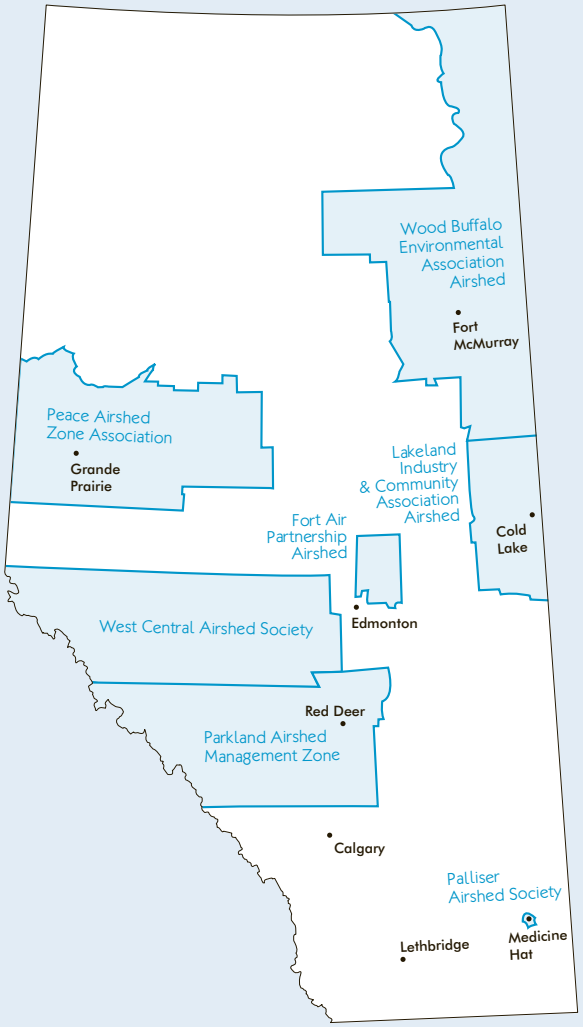
Considerable effort went into developing an implementation matrix to track recommendations previously approved by the board, which was approved in principle by the CASA board in 2005. Project teams have also taken steps to integrate implementation monitoring into their terms of reference, workplan and recommendations.

Airshed Zones

Airshed zones are established by local stakeholders to deal with air quality issues in a specific region. CASA provides the framework within which an airshed zone functions but each operates independently from CASA as a non-profit society. Airshed zones are consensus-based and support the CASA vision.

Passive and/or continuous ambient air quality monitoring is conducted in each airshed zone and is funded by the partners in the airshed zone.

In 2005, the Lakeland Industry and Community Association became the seventh airshed zone operating in Alberta. Interest in forming new zones has been expressed in the Edmonton-Wabamun area, the Calgary/Bow Valley corridor and the Lethbridge region.



Reports from CASA airshed zones

Fort Air Partnership

The strength of the Fort Air Partnership continues to be based on the support received from residents of the airshed and other stakeholders. Funding from the Northeast Capital Industrial Association and Alberta's Industrial Heartland Association and assistance from the City of Fort Saskatchewan is gratefully acknowledged.

During 2005, the Fort Air Partnership generated and provided comprehensive and credible air quality information to the public, industries and government so that they could make appropriate choices and decisions about managing air quality in the airshed and its impacts on human health. This information was disseminated through an annual report, semi-annual community reports, weekly air quality reports, presentations to community groups, media updates and the Fort Air Partnership's website at **www.fortair.org.**

Airshed residents also got a more complete understanding of the quality of their outdoor air as a result of a volatile organic compounds (VOC) monitoring program. This joint project of the Fort Air Partnership and Environment Canada, which began in September 2004, was designed to provide us with a better understanding of what VOCs are present in the area and how their concentrations are affected by local weather conditions. Higher VOC concentrations can be expected during warmer summer months and lower levels during the winter. Since the levels did not trend this way during the first 12 months, the study has been extended to the end of March 2006 to provide another winter of data.

In July 2005, the Fort Air Partnership began collecting ozone, sulphur dioxide and nitrogen dioxide data through a network of 10 passive samplers. The Fort Air Partnership plans to extend its passive sampling network in early 2006 by adding 20 sites that will sample sulphur dioxide and hydrogen sulphide concentrations. Data from the passive samplers is intended to complement the data collected at the Fort Air Partnership's eight continuous monitoring stations and the six VOC monitoring sites. Passive samplers cost much less to operate than continuous analyzers, and because they do not have any power requirements they can be used in remote locations.

During 2005, the Fort Air Partnership also worked with school jurisdictions, industry and government representatives to produce teachers' resource kits on air quality and a complementary educational website that can be used by students, their parents and their teachers. With $50,000 funding from Dow Canada and support from many other partners, the Fort Air Partnership developed and pilot tested a video, poster and teacher's guide designed to enable junior high school teachers to integrate instruction about air quality into their coverage of the approved Alberta curriculum. With $48,000 in funding from Alberta Environment, the Fort Air Partnership also developed a new education section for its website. It will support the teachers' resource kits and is a low-cost way of making good educational information available province-wide. The teachers' resource kits will be distributed to junior high schools in the airshed, public libraries and project partners in February 2006 at which time the education section of the website will also be available for use.

Lakeland Industry and Community Association

The Lakeland Industry and Community Association (LICA) is a synergy group serving Alberta's Lakeland area, a region of mixed industry including oil and gas, agriculture, and Canada's largest air force base. Formed in 2000 as a forum for the discussion and resolution of community concerns about industrial development in the area, LICA is evolving into a prime example of the place-based approach to environmental management. The Association achieved a major milestone in this regard in 2005 with its endorsement by CASA as Alberta's seventh airshed zone.

Since July 2003, LICA has operated a 20-station passive network consisting of a strategic distribution of nitrogen dioxide, ozone, sulphur dioxide, and hydrogen sulphide monitors. In late October 2005, LICA commissioned a continuous air monitoring trailer, owned by Alberta Environment (AENV) and operated by LICA, in the City of Cold Lake. The trailer is equipped to continuously measure sulphur dioxide, nitrogen dioxide, oxides of nitrogen, ozone, total hydrocarbons, total reduced sulphur, respirable particulate matter ($PM_{2.5}$), wind speed, and wind direction.

Passive monitoring results for 2005 indicate that sulphur dioxide and nitrogen dioxide levels in the LICA region are well below the annual average ambient air quality objectives for those pollutants. Network average ozone and hydrogen sulphide concentrations are comparable with available measurements from the more rural parts of the province. The LICA Airshed Implementation Plan, completed in 2005, recommends the addition of four passive monitoring stations and two continuous monitoring trailers. The continuous trailers (to be located in an area surrounded by in-situ bitumen recovery operations and in an area relatively untouched by human activity), will be added to the network following approval by AENV for LICA to take over monitoring responsibilities for member companies. In 2006, AENV will amend operating approvals for LICA member companies who currently operate compliance air quality monitoring programs and who support and participate in LICA's regional air quality monitoring network.

In 2006, LICA will focus on communicating and promoting awareness of data available from the regional monitoring program, to increase and maintain stakeholder awareness, understanding, and support for the LICA airshed zone.

Palliser Airshed Society

The Palliser Airshed Society (PAS) currently has boundaries that include the City of Medicine Hat and the Town of Redcliff. PAS operates one continuous station with the following parameters; O_3 (ozone), NO_x (oxides of nitrogen), THC (total hydrocarbons), $PM_{2.5}$ (particulate matter less than 2.5 microns), CO (carbon monoxide) as well as meteorological parameters. PAS also has a 6 passive network that monitors for SO_2, NO_2 and O_3.

PAS has been working with various stakeholders in the southeast region of the Province to determine the feasibility of expanding the borders. Along with the expansion is a more in depth and comprehensive monitoring program that would increase the number of passives and continuous stations. The Palliser monitoring program continues to evolve with expectations to include additional analyzers in 2006 and to include a wider area for passive data.

For 2005 the annual averages were:

- NO_2 was 8.3 ppb (annual guideline is 32 ppb) which was the major pollutant of concern for the region.
- O_3 annual average was 24.7 ppb .
- CO average was 0.2 ppm.
- $PM_{2.5}$ was 3.1 $\mu g/m^3$.
- THC average was 2.0 ppm.

Parkland Airshed Management Zone

In 2005, Parkland Air Monitoring Zone's (PAMZ) Regional Air Quality Monitoring Program continued to address issues of concern to zone residents and to build a geographic air quality database including the zone's larger towns. Continuous air quality monitoring was conducted at twelve locations in the zone including the towns of Ponoka and Lacombe. In May, PAMZ took over operations of Alberta Environment's Red Deer Riverside Station. This station is part of the National Air Pollution Surveillance System (NAPS) and its data is used to better understand national issues such as climate change, trans-boundary pollution and ground-level ozone. Passive monitoring data collected by the PAMZ Passive Monitoring Program continues to demonstrate that regional SO_2 are declining and are now less than a third of what they were when monitoring began in 1999.

In January, an important milestone was achieved when The City of Red Deer joined PAMZ and was given a seat on the PAMZ Board. PAMZ continues to work at expanding its membership base to include active participation from all sectors and to this end a funding workshop was held in Rocky Mountain House in June. From that workshop it was decided to revisit the PAMZ vision and mission and a workshop for that purpose was held in Red Deer on September 28. The new vision and mission statements were finalized in November.

In June, PAMZ hosted its third Environment Canada "Let's Drive Green" Vehicle Emissions Inspection Clinic in Red Deer. The event was even more successful than the previous ones with 356 vehicles tested and a pass rate of 86%.

In September and October, PAMZ conducted its 4th Zone Air Issues Survey by mail-out, in-person and its website. The results of the survey are currently being tabulated and should be available in early 2006. The results of the survey are intended to be used as guidance in future discussions regarding the strategic directions that PAMZ may undertake with its regional air quality monitoring program and in its efforts to improve air quality in central Alberta.

PAMZ believes that in many cases the most effective approach to address issues is to provide input into processes that set provincial management policies. For this reason PAMZ is an active participant on a number of CASA project teams and committees. In 2005 PAMZ was represented directly on five teams and committees and PAMZ members served on a number of others.

Throughout the year PAMZ continued to work with Alberta Health and Wellness and the David Thompson Health Region on the design, development and funding of a Community Exposure and Health Effects Assessment Program (CEHEAP) and provide input on a Health Surveillance Program. Funding has now been secured for the CEHEAP program and implementation is now planned for 2006.

Good two-way communication remains a priority for PAMZ. The information booth was displayed at several community events during the year, three issues of the Zone newsletter were published, and the zone played a major role in organizing and assisting with the CASA Zones Conference. PAMZ continued its series of public presentations to raise public awareness and knowledge of air quality issues and included updates from the Natural Resources Conservation Board and the Red Deer River Watershed Alliance.

Peace Airshed Zone Association

In 2005 the Peace Airshed Zone Association (PASZA) continued its focus on building a solid foundation for its Regional Air Quality Monitoring Program with the addition of three continuous air quality monitoring stations.

In February, the Evergreen Park Station began operations. This station is located on the City of Grande Prairie's south eastern limit. While the Henry Pirker Station, located in Grande Prairie's northwest, provides an indication of emissions entering and within the city, the Evergreen Park Station provides a good indication of emissions leaving the city and any air quality impacts of a local pulp and paper mill located southeast of the city.

The Smoky Heights School Station began operations in March. It is located approximately 45 km northeast of Grande Prairie at a location that was chosen based on indications from the PASZA Passive Monitoring Network that this is an area with relatively high SO_2 levels, the cumulative effect of a number of upwind oil and gas production facilities.

In June, PASZA took over the operation of Alberta Environment's Beaverlodge Station. This station is identified as a National Air Pollution Surveillance System (NAPS) trans-boundary station and some of the funding for its operation and for the Henry Pirker Station, also identified as a NAPS station, is being provided by Alberta Environment.

In September, Alberta Environment (AENV) approached PASZA's Board of Directors with a request that PASZA consider expanding the zone's southern boundaries to include areas that were previously under consideration for an airshed that AENV was trying to facilitate in the Whitecourt-Swan Hills-Westlock area. A committee was formed and work is currently underway on a feasibility assessment of a possible future expansion of PASZA's boundaries.

PASZA recognizes that many of the issues of concern to its residents are shared with other Albertans and that management of some of these issues is more effective when tackled at the provincial level. Concerns about the air quality effects of Confined Feeding Operations (CFO) led to PASZA's participation in the CASA CFO Project Team formed in September. PASZA is also represented on two other current CASA Project Teams: the Ambient Monitoring Strategic Planning Team and the Ambient Air Monitoring Operations Steering Committee.

Communication with the public is a fundamental principle of the association and to this end, PASZA participated in several community events and locally held trade-fairs as well as the Airshed Zones Conference held in Edmonton in October.

West Central Airshed Society

In 2005, the West Central Airshed Society (WCAS) completed ten successful years, proving the consensus-driven, multi-stakeholder model for environmental monitoring is both effective and efficient. WCAS operates a network of twelve continuous online air quality monitoring stations, plus fourteen passive monitoring sites within the west central region of Alberta. The zone encompasses an area of about 46,000 square kilometres.

Stations are strategically located throughout the zone to represent areas with industrial activity and areas remote from man-made emission sources. The WCAS air quality monitoring program focuses on acid-forming gases, air quality parameters that may affect vegetation, and parameters that are of interest to health professionals. More information is available on our website at **www.wcas.ca**.

In 2005:

1. WCAS commissioned an ozone study, completed in 2005, which clearly indicated ground level ozone resulted from climatic conditions only.
2. WCAS commissioned a trend analysis of sulphur dioxide data. Preliminary results indicate a decrease in sulphur dioxide concentrations over the last ten years.
3. Development commenced on a new Hightower background air-monitoring station utilizing alternative power sources. The new station is expected to be operational in early spring 2006.

Wood Buffalo Environmental Association

The Wood Buffalo Environmental Association (WBEA) is an independent, community based, not-for profit society that continuously collects air quality data in the Wood Buffalo Region. WBEA is a dynamic collaboration of communities, environmental groups, industry, government and Aboriginal stakeholders. WBEA currently operates 13 air monitoring stations and 13 passive monitoring stations within the Wood Buffalo region. WBEA's monitoring programs include Air, Land and Human Exposure.

WBEA recognizes its responsibility to be transparent and accountable to residents of the Wood Buffalo Region. Care is taken to ensure that messages related to air quality are not lost in scientific jargon. The intent of communications is to explain what the WBEA does and the information it collects in a way that is meaningful to stakeholders.

2005 was a year of transition for the Wood Buffalo Environmental Association (WBEA). Given the need to help enhance the region's understanding of overall monitoring efforts and outcomes in Wood Buffalo, the role of communications was re-evaluated to more clearly define the scope of work and opportunities to work jointly with the oil sands region's two other environmental monitoring organizations.

After considerable planning and consultation, a more synergistic approach to community education and awareness initiatives was agreed to, where logical, between WBEA and the two organizations including the recruiting of a contract joint communications consultant. Hence, during the latter half of 2005, only those WBEA communications activities considered a priority were undertaken toward achieving the following goals:

- Fortifying stakeholder confidence and comfort in knowing the air quality of this region is monitored in real time, year-round.
- Demonstrating the value of the unique and instrumental role WBEA has in the region.
- Building assurance among stakeholders that the integrity of data collected and reported is scientifically credible.
- Reinforcing that WBEA is a non-profit, multi-stakeholder organization that is consensus-driven and community-minded.

One of the most significant undertakings in 2005 was the aligning of graphic standards and core messaging. To help achieve this goal, a visual graphic to reinforce the notion of air is now applied to all print materials, "the air we share" is the primary theme, and any sub-themes developed must have an obvious link.

Radio continues to be an effective communications tool and was used throughout 2005 in ongoing efforts to build stakeholder awareness and understanding of the WBEA. This involved one 30 second spot on local radio plus news sponsorship. Two radio spots entitled "Air Facts" were produced and rotated: one to promote the Air Quality Index (AQI) and the other to reinforce the extent of monitoring undertaken by the WBEA year-round.

For 2005, print advertising included special events, i.e. WBEA 2005 spring tradeshow participation, seasonal messages, and special program initiatives such as the Human Exposure Monitoring Program volunteer recruitment drive and post-study thank you message.

Participating at tradeshows continues to be highly effective in building awareness. Through using a survey, WBEA is able to track the number of stakeholders visiting the booth and as importantly, helps benchmark the effectiveness of communications from one year to the next. As an example, 285 stakeholders visited the booth in 2002 compared to 459 in 2005, an increase of almost 95%.

Spring and summer editions of the WBEA Quarterly Update newsletter were produced and distributed to Fort McMurray residents through the local daily newspaper and to surrounding Aboriginal communities.

A newly designed website was developed following a comprehensive review and assessment of the former WBEA site including its configuration, overall content, and aesthetic qualities. The driving goal behind this effort was to create a more navigable and accessible website for different stakeholder groups seeking different information **(www.wbea.org)**.

The WBEA introduced its first-ever Community Report entitled "the air we share." A digest version of WBEA's 2005 Annual Report, the intent of this community version was to provide regional stakeholders, namely Wood Buffalo residents, with meaningful information they could easily identify with.

Funding

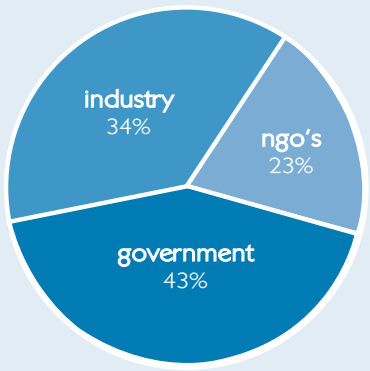
The core operations of CASA are supported by equal financial contributions from Alberta Environment, Alberta Energy and Alberta Health and Wellness. Industry, government and non-government organizations provide additional funding and in-kind support for CASA teams and in-kind support and funding for the airsheds.

CASA has tried to put an actual dollar figure on the support and assistance provided by each sector. The figures are compiled by examining time and travel costs, as well as cash and in-kind contributions and almost certainly under-record and under-estimate the actual value of stakeholder contributions. These figures are offered in the spirit of acknowledging and recognizing participant involvement.

Cash and in-kind contributions to CASA teams

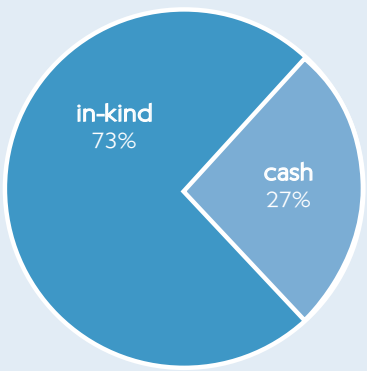
CASA teams

Industry	$ 227,565
Government	$ 295,225
Non-government organizations	$ 155,100
Combined	**$ 677,890**



Total cash and in-kind contributions

In-Kind	$ 493,340
Cash	$ 184,250
Combined	**$ 677,590**



The People

The following 224 people have given their time, effort, goodwill and expertise in the pursuit of the CASA vision. A profound thank you goes out to all our stakeholders and the organizations with which they are affiliated.

Grant Ainsley
Naresh Akkur
Darren Aldous
Randy Angle
Atta Atia
Diane Atkins
Ron Axelson
David Axford
David Baker
Justin Balko
Humphrey Banack
Ann Baran
Dave K. Barrett
Colin Beddoes
Larry Begoray
Carol Bettac
Michael Bisaga
Laura Blair
Fiona Boulet
Cheryl Bradley
James Brandt
James Brown
Michael Brown
Alan Brownlee
Dave Byler
Christine Byrne
Bob Cameron
Claude Chamberland
Denise Chang-Yen
Raynald Charest
Lawrence Cheng
Cindy Chiasson
Julia Ciccaglione
Bill Clapperton
Andrew Clayton
Jane Clerk
Simon Cobban
Jeff Cormier
Marilyn Craig
Keith Denman
Gur Dhaliwal
Frans M.J.A. Diepstraten
Randy Dobko
John Donner
Heather Douglas
John Drinkwater
Linda Duncan
Maureen Elko
Gerry Ertel
Rob Falconer
Judy Fenton
Eric Flanagan
Jillian Flett
Shannon Flint
Jason Foster
Kristina Friesen
Alexandra Frison
Paris Fronimos
Long Fu
Darcy Garchinski
Greg Gilbertson
Brian Gilliland
Tim Goos
David Graham
Geoff Granville
Mary Griffiths
Kevin Gunn
Jim Guthrie
Les Hagen
Shannon Hall
Howaida Hassan
Doug Heath
Wayne Hillier
Nolan Hindmarsh
Paul Hodgman
Ken Hogg
Gordon Howell
Theresa Howland
Tony Hudson
Bill Hume
Paul Hunt
Judy Huntley
Rick Hyndman
Ahmed Idriss
Ila Johnston
Les Johnston
Wayne Johnston
Zahir Karmali
Markus Kellerhals
Mike Kelly
Anouk Kendall
Joe Kendall
Wayne Kenefick
Myles Kitagawa
John Knapp
Simon Knight
Phyllis Kobasiuk
Brian Koberstein
Barbra Korol
Joe Kostler
Martha Kostuch
Len Kryzanowski
Patrick Kyle
Bevan Laing
Ron Laing
Tim Lambert
Shane Lamden
Frank Letchford
Tim Leung
David Lewin
Sandra Locke
Satwant Lota
Norm Lowe
Doris Ludlage
Wendy Lyka
Grace MacGregor
Glenn MacIntyre
Alexander MacKenzie
Doug MacLeod
Jerry MacPherson
Tom Marr-Laing
Murray Marsh
Grant Massie
David McCoy
Paula McGarrigle
Wayne McKendrick
Laura McLeod
Lynn McNeil
Morgan McRae
Sonja Mihelcic
Brian Mitchell
Russell Miyagawa
Myra Moore
Al Morin
Ed Morrow
Penny Mosman
Bettina Mueller
Bill Mullen
Usha Mulukutla
George Murphy
Keith Murray
Terry Murray
Bob Myrick
Carol Newman
Stan Nowakowski
Steve O'Gorman
Courtney Oishi
Leonard Olien
Ken Omotani
Jolene Ondrik
Bob Page
Rients Palsma
David Parker
John Parr
Sian Pascoe
Ron Pauls
Mike Pawlicki
Ian Peace
Kenneth Pearce
Bill Peel
Roxanne Pettipas
George Pfaff
Sarah Pinto
Gord Potter
Albert Poulette
Steven Probert
Keith Purves
Mike Queenan
Diane Radnoff
Gina Rau
Doreen Rempel
John Rilett
Greg Ritz
Jonathan Robb
Michael Rodyniuk
Mark Roedel
Mayne Root
Jesse Row
Jagtar Sandhu
Denis Sauvageau
Carleen Schaefer
Ron Schafer
Lawrence Schmidt
Al Schulz
Jason Schulz
Herman Schewenk
Bob Scotten
Morris Seiferling
Chris Severson-Baker
Barbara Shackel-Hardman
Nashina Shariff
Mitch Shier
Rob Shymanski
Sherry Sian
Kristofer Siriunas
Dave Slubik
Al Smandych
Elizabeth Smart
Bryan Smith
Karen Smith
Ralph Smith
Rich Smith
Jim Spangelo
David Spink
John Squarek
Roger Steele
Denis Stefani
Ron Steffan
Claire Stock
Ted Stoner
Jeff Strem
Lisa Strosher
Myles Strosher
Don Szarko
Karen Taguchi
Halyna Tataryn
Glenda Taylor
Tim Taylor
Jack Thompson
Gloria Trimble
Jim Turner
Reed Turner
Kerry Van Camp
Joyce Van Donkersgoed
Dan VanKeeken
James Vaughan
B.J. (Brendan) Vickery
Len Vogelaar
Jim Vollmershausen
Brian Waddell
Darcy Walberg
Yvonne Walsh
Ross Warner
Kevin Warren
Peter Watson
Eugene Wauters
Sue Welke
Wanda Wetterberg
Brian Wiens
Kimberley Williams
Scott Wilson
Raymond Wong
Brenda Woo
Ruth Yanor

Volunteers at CASA

A lot of effort is applied from those behind the scenes who support those who sit at the board or project team table. CASA is very grateful for the substantial and valuable contributions of time and expertise from those individuals who support their stakeholder representatives.

Laura Ferguson, a valued CASA volunteer since 1999, passed away unexpectedly on August 27, 2005. Laura volunteered accounting and other financial management services directly to the CASA secretariat. Her high level of professionalism, skill and experience left a legacy for CASA, the Environment Law Centre where she worked for 20 years, and the many other organizations with which she was associated.

The Organizations

The following 95 organizations have offered financial and in-kind support to CASA. This support ensures the continuing success of CASA.

Action on Smoking and Health
Agriculture and Agri-Foods Canada
Agrium
Alberta Agriculture, Food and Rural Development
Alberta Association of Municipal Districts & Counties
Alberta Beef Producers
Alberta Cattle Feeders' Association
Alberta Energy
Alberta Energy and Utilities Board
Alberta Environment
Alberta Federation of Labour
Alberta Forest Products Association
Alberta Health and Wellness
Alberta Human Resources and Employment
Alberta Infrastructure and Transportation
Alberta Milk
Alberta Motor Association
Alberta Motor Transport Association
Alberta Pork
Alberta Poultry Producers
Alberta Urban Municipalities Association
AMAROK Consulting
ATCO Power
Bert Riggall Environmental Foundation
Building Owner & Managers Association of Edmonton
Calgary Health Region
Canada Mortgage and Housing Corporation
Canadian Association of Petroleum Producers
Canadian Chemical Producers' Association
Canadian Hydro Developers Inc.
Canadian Natural Resources Limited
Canadian Petroleum Products Institute
Capital Health
City of Calgary
City of Edmonton
Chinook Health Region
Climate Change Central
ConocoPhillips Canada
Cumulative Environmental Management Association
David Thompson Health Region
Direct Energy Marketing Limited
Dow Chemical Canada Inc
Edmonton Transit System
Enervision
ENMAX Energy Corporation
Environment Canada
Environmental Law Centre
EPCOR
Focus
Fort Air Partnership
Friends of an Unpolluted Lifestyle
Graymont Limited
Health Canada
Heenan Blaikie LLP Lawyers
Howell Mayhew Engineering Inc.
Husky Oil Limited
Imperial Oil Resources
Intensive Livestock Working Group
Lafarge Canada Inc.
Lake Wabamun Enhancement & Protection Association
Mewassin Community Action Council
Meteorological Service of Canada
MGV Energy Inc.
Natural Resources Canada
Natural Resources Conservation Board
Nexen
Northern Forestry Centre
Northern Lights Health Region
NOVA Chemicals Corporation
Palliser Airshed Society
Parkland Airshed Management Association
Peace Airshed Zone Association
Pembina Institute
Petro-Canada
Prairie Acid Rain Coalition
Pristine Power Inc.
Renewable Energy Solutions
Residents for Accountability in Power Industry Development
Rocky Mountain House Community Health Centre
Seacor Environmental Ltd.
Shell Canada Limited
Small Explorers & Producers Association of Canada
Society for Environmentally Responsible Livestock Operations
Southern Alberta Environmental Group
South Peace Environmental Association
Suncor Energy Inc.
Syncrude Canada Ltd.
The Lung Association – Alberta and NWT
Toxics Watch Society of Alberta
TransAlta Corporation
Vision Quest Windelectric Inc.
West Central Airshed Society
Weyerhaeuser Company Ltd.
Wild Rose Agricultural Producers
Wood Buffalo Environmental Association

Financial Statements

of The Clean Air Strategic Alliance Association, December 31, 2005

Auditors' Report

To the Members of The Clean Air Strategic Alliance Association

We have audited the balance sheet of The Clean Air Strategic Alliance Association as at December 31, 2005 and the statements of revenue, expenditures and fund balances and cash flow for the year then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Association as at December 31, 2005 and the results of its operations and its cash flow for the year then ended in accordance with Canadian generally accepted accounting principles.

Chartered Accountants
January 26, 2006

Deloitte.

Deloitte & Touche LLP
2000 Manulife Place
10180 - 101 Street
Edmonton AB T5J 4E4
Canada

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Balance Sheet

	2005			2004
	Core	**External Projects**	**Total**	Total
Assets				
Current				
Cash	$ 18,439	$ 163,113	$ 181,552	$ 195,251
Investments	700,000	110,000	810,000	710,000
Accrued interest	933	147	1,080	710
Accounts receivable	13,009	51,660	64,669	84,719
Interfund (payable) receivable	(2,737)	2,737	–	–
Prepaid expenses	3,212	–	3,212	3,212
	$ 732,856	$ 327,657	$ 1,060,513	$ 993,892
Capital Assets (Note 3)	$ 3,520	–	$ 3,520	$ 5,028
	$ 736,376	**$ 327,657**	**$ 1,064,033**	$ 998,920
Liabilities				
Current				
Accounts payable & accrued liabilities	$ 56,514	$ 14,795	$ 71,309	$ 80,032
Deferred contributions (Note 4)	385,654	312,862	698,516	641,802
	442,168	327,657	769,825	721,834
Fund Balances				
Board restricted	240,000	–	240,000	200,000
Unrestricted				
Invested in capital assets	3,520	–	3,520	5,028
Available for operations	50,688	–	50,688	72,058
	294,208	**–**	**294,208**	277,086
	$ 736,376	**$ 327,657**	**$ 1,064,033**	$ 998,920

Approved by the board

Peter Watson, President

Donna Tingley, Executive Director

Statement of Revenue, Expenditures and Fund Balances

Year ended December 31, 2005

	2005			2004
	Core	**External Projects**	**Total**	Total
Revenue				
Grants	$ 726,498	$ 166,768	$ 893,266	$ 1,004,792
Interest	17,122	4,512	21,634	15,233
	743,620	**171,280**	**914,900**	1,020,025
Expenses				
Projects	269,765	–	269,765	309,572
Communications	123,923	–	123,923	100,370
External projects	–	171,280	171,280	265,940
Board support	84,899	–	84,899	87,168
General and administrative	246,259	–	246,259	244,020
Statement of concern	1,652	–	1,652	2,480
	726,498	**171,280**	**897,778**	1,009,550
Net Revenue	**17,122**	**–**	**17,122**	10,475
Fund Balance, Beginning of Year	**277,086**	**–**	**277,086**	266,611
Fund Balance, End of Year	**$ 294,208**	**$ –**	**$ 294,208**	$ 277,086

Statement of Cash Flow

Year ended December 31, 2005

	2005	2004
Net Inflow (Outflow) of Cash Related to the Following Activities		
Operating Activities		
Net revenue	$ 17,122	$ 10,475
Add item not requiring an outlay of cash		
Depreciation	1,508	2,155
	18,630	12,630
Increase in accrued interest	(370)	(147)
Decrease (increase) in accounts receivable	20,050	(42,020)
Increase in prepaid expenses	–	(554)
(Decrease) increase in accounts payable	(8,723)	19,538
Increase in deferred contributions	56,714	117,614
Decrease in due to National Climate Change Secretariat	–	(269,222)
Increase (Decrease) in Cash and Short-Term Investments	**86,301**	(162,161)
Cash and Short-Term Investments, Beginning of Year	**905,251**	1,067,412
Cash and Short-Term Investments, End of Year	**$ 991,552**	$ 905,251
Represented By:		
Cash	$ 181,552	$ 195,251
Term deposits with maturities under 90 days	810,000	710,000
	$ 991,552	$ 905,251

Notes to the financial statements

Year ended December 31, 2005

1. Description of Operations

The Clean Air Strategic Alliance Association ("CASA" or the "Association") is a non-profit organization incorporated March 14, 1994 under the Societies Act of Alberta and is not taxable under the Canadian Income Tax Act. The Association is comprised of members from three distinct stakeholder categories; industry, government and non-government organizations. The Association has been given shared responsibility by its members for strategic air quality planning, organizing and coordination of resources and evaluation of results in Alberta. In support of these objectives, the Association receives cash funding from the Province of Alberta as well as cash and in-kind support from other members.

2. Accounting Policies

These financial statements have been prepared on a fund accounting basis using the deferral method of accounting in accordance with Canadian generally accepted accounting principles ("GAAP") and include the following significant accounting policies:

Funds maintained

Core Project Fund

Funds provided by governments together with interest earned are used to support general operations. The fund balance is an accumulation of interest earned. In 2000, the Board of Directors internally restricted accumulation of this fund to $200,000 to pay necessary expenses in the event of the wind down of the Association. During the year, an additional $40,000 was restricted for future wind down expenses.

The unrestricted portion of this fund consists of:

- The undepreciated balance of capital assets entitled investment in capital assets; and
- The remainder of the fund entitled available for operations.

The change in the investment in capital assets represents the amount of depreciation recorded during the year.

External Projects Fund

Funds provided by CASA stakeholders together with interest earned are raised and expended by project teams for specific purposes.

Cash and cash equivalents

Cash and cash equivalents consist of cash in bank and term deposits with original maturity dates not exceeding 90 days.

Capital assets

Capital assets are recorded at cost. Depreciation, which is based on the cost less the residual value over the useful life of the asset, is computed using the declining-balance method at the rates disclosed in Note 3.

Long-lived assets are tested for recoverability whenever events or changes in circumstances indicate their carrying amount may not be recoverable. An impairment loss is recognized when its carrying value exceeds the total undiscounted cash flows expected from their use and eventual disposition. The amount of the impairment loss is determined as the excess of the carrying value of the asset over its fair value.

Non-monetary support

Association members contribute non-monetary support including staff resources, meeting space and publication support. The value of this non-monetary support is not reflected in these financial statements.

Revenue recognition

Grants are recognized as income at an amount equal to expenses incurred. Interest is earned from investments computed on the accrual basis.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the recorded amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from these estimates. Significant areas requiring the use of management's estimates include the collectible amounts of accounts receivable, the useful lives of capital assets and the corresponding rates of amortization and the amount of accrued liabilities.

Interest rate and credit risk

The Association is exposed to interest rate risk on interest earned from investments deposits because the interest rate fluctuates with the prime rate. The Association is exposed to credit risk through accounts receivable. This risk is minimized as the core funding is received from governments and project funding is received prior to expenditures being incurred.

Fair value of financial instruments

The Association's financial instruments consist of cash, investments, accounts receivable and accounts payable and accrued liabilities. It is management's opinion that the Association is not exposed to significant currency or credit risks arising from these financial instruments.

3. Capital Assets

	2005				2004
	Depreciation Rates	**Cost**	**Accumulated Depreciation**	**Net Book Value**	Net Book Value
Computer equipment	30%	$ 32,659	$ 29,322	$ 3,337	$ 4,767
Furniture and equipment	30%	4,419	4,236	183	261
		$ 37,078	**$ 33,558**	**$ 3,520**	$ 5,028

4. Deferred Contributions

Core Fund

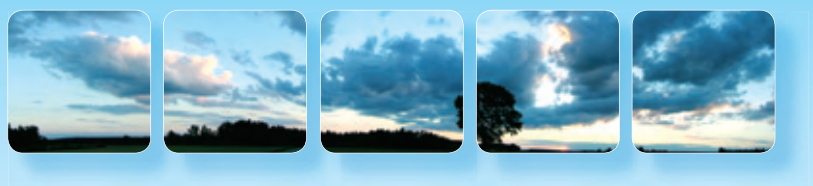
During the period, the Association received grants totaling $759,500 (2004 - $816,875) from the Province of Alberta. The purpose of the grants is to provide core funding in support of the Association's objectives as described in Note 1. The regulations to the Department of the Environment Act, the Department of Energy Act and the Department of Health Act, under which the grants have been provided, specify that grants must either be used for the purposes specified in the grant, be used for different purposes if such different purposes are agreed to by the applicant and the respective Minister, or be returned to the Province. Accordingly, in the event the Association does not utilize the funds in pursuit of its objectives, any unexpended grant monies remaining may have to be repaid to the Province of Alberta.

	2005	2004
Deferred core fund contributions, beginning of year	$ 349,752	$ 258,609
Grant monies received	759,500	816,875
National Climate Change Secretariat investment income	–	6,727
Other funds received	2,900	16,650
Grant funds allocated to external projects	–	(5,500)
Revenue recorded based on allowable expenditures	(726,498)	(743,609)
Deferred core fund contributions, end of year	**$ 385,654**	$ 349,752

External Projects Fund

Deferred external project contributions are comprised of monies received for specific external projects, which have not been expended for the purposes specified in the mandates of the projects.

	2005	2004
Deferred external project contributions, beginning of year	$ 292,050	$ 265,579
Grant monies received and interest earned	193,218	286,911
Grant funds allocated from core projects fund	–	5,500
Revenue recorded based on allowable expenditures	(171,280)	(265,940)
Refund to grantor	(1,126)	–
Deferred external project contributions, end of year	**$ 312,862**	$ 292,050



Clean Air Strategic Alliance

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This annual report is
recyclable and contains
30% post-consumer fiber