



Freedom To Create. Spirit To Achieve.

# Environment

**Annual Report**  
2009-2010

**Government of Alberta** ■

# Environment

## Annual Report 2009-2010

### CONTENTS

|            |  |
|------------|--|
| <b>3</b>   | <b>Preface</b>                                   |
| <b>6</b>   | <b>Minister's Accountability Statement</b>       |
| <b>7</b>   | <b>Message from the Minister</b>                 |
| <b>8</b>   | <b>Management's Responsibility for Reporting</b> |
| <b>9</b>   | <b>Results Analysis</b>                          |
| 10         | Ministry Overview                                |
| 13         | Review Engagement Report                         |
| 14         | Performance Measures Summary Table               |
| 17         | Discussion and Analysis of Results               |
| 72         | Expense by Function                              |
| <b>73</b>  | <b>Financial Information</b>                     |
| 74         | Table of Contents                                |
| 76         | Auditor's Report                                 |
| 77         | Financial Statements                             |
| <b>127</b> | <b>Other Information</b>                         |

# Preface

The Public Accounts of Alberta are prepared in accordance with the *Financial Administration Act* and the *Government Accountability Act*. The Public Accounts consist of the annual report of the Government of Alberta and the annual reports of each of the 24 ministries.

The annual report of the Government of Alberta released June 24, 2010 contains Ministers' accountability statements, the consolidated financial statements of the Province and *The Measuring Up* report, which compares actual performance results to desired results set out in the government's business plan.

**This annual report of the Ministry of Environment contains the Minister's accountability statement, the audited consolidated financial statements of the ministry and a comparison of actual performance results to desired results set out in the ministry business plan. This ministry annual report also includes:**

- the financial statements of entities making up the ministry including the Department of Environment and the Climate Change and Emissions Management Fund, for which the Minister is responsible;
- other financial information as required by the *Financial Administration Act* and *Government Accountability Act*, either as separate reports or as a part of the financial statements, to the extent that the ministry has anything to report; and
- financial information relating to the Environmental Protection Security Fund.

# **BUILDING COMMON GROUND**

At Alberta Environment, our mission is to work with Albertans to ensure that, as a province, we're making the best environmental decisions possible.

Alberta's prosperity, current and long-term, depends on the protection of our air, land and water. Whether as leader, advisor or partner, the Ministry of Environment's priority is to ensure our environment continues to sustain a high quality of life. It starts with building common ground, our theme for the 2009-2010 Annual Report.

At Alberta Environment, our mission is to work with Albertans to ensure that, as a province, we are making the best environmental decisions possible. To achieve this, we have moved beyond our traditional methods.

Over the past year, in addition to ongoing regulatory and stewardship activities, Alberta Environment staff have undertaken exceptional work in two key areas: developing clean-energy solutions and transitioning to environmental cumulative effects management.

This fiscal year, the ministry continued to work with other government departments, industry and academic and research centres to reduce greenhouse gas emissions and ensure Alberta is a responsible clean-energy producer. This includes helping Albertans conserve and use energy more efficiently, supporting clean-energy technology such as carbon capture and storage, and investing in research for clean-energy solutions in the oil sands region and across the province. As a major global energy producer, the onus is on Alberta to demonstrate it is also a leader in developing our resources in an environmentally sustainable way.

Key to Alberta's clean-energy future is the establishment of a cumulative effects management system. Alberta Environment has been working with government colleagues, stakeholders, municipalities, First Nations and Aboriginal communities to ensure our plans for the future integrate the environmental, social and economic outcomes Albertans desire. The ministry is no longer focusing solely on single projects; it is developing approaches to manage the cumulative impact of all development on the environment – social, economic and environmental. Cumulative effects management will help us sustain our environment while allowing for future development.

The following pages outline the major accomplishments of the fiscal year 2009-2010, and highlight the accomplishments of some department staff who, with the support of the entire ministry, are truly building common ground for environmental management in Alberta.

# Minister's Accountability Statement

The ministry's annual report for the year ended March 31, 2010, was prepared under my direction in accordance with the *Government Accountability Act* and the government's accounting policies. All the government's policy decisions as at September 7, 2010, with material economic or fiscal implications of which I am aware have been considered in the preparation of this report.

*Original signed by*

*Honourable Rob Renner  
Minister of Environment*

## Message from the Minister



I am proud of the contribution and dedication of my ministry's staff and numerous partners who have worked to achieve many of the core business goals outlined in the 2009-2010 Environment Business Plan.

The theme of this year's annual report resonates throughout all of Alberta Environment's business. "Building common ground" speaks to the importance of shared goals and partnerships, which results in the best environmental decisions possible. Despite the challenges of a global economic downturn, Alberta Environment rose to the occasion and provided adaptable and resilient solutions to deliver sound and innovative environmental programs and services.

Alberta is one of the world's major global energy producers. This reality comes with the responsibility to demonstrate we are also a world leader in environmentally sustainable resource development and unflinching environmental protection. Our 2009-2010 investments and accomplishments speak directly to our efforts to be a responsible clean-energy producer and our ongoing work to protect our air, land, water and biodiversity.

Alberta continues to have a high quality environment. In 2009-2010, the Government of Alberta directed \$368 million toward sustaining Alberta's environment. Among our top priorities were developing clean-energy solutions and transitioning to a cumulative effects management system: an outcomes-focused, environmental approach to manage the cumulative environmental impacts of development in our province. These are initiatives that are moving forward with the support of our partners, and my ministry continues to work hand-in-hand to build common ground with other government departments, industry, academics and research centres. It is through common goals and cooperation that we can reduce greenhouse gas emissions and ensure Alberta is investing in energy conservation, clean-energy technology and research for clean-energy solutions in the oil sands region and across the province.

In addition to these two areas, Alberta Environment achieved important success with its ongoing regulatory and stewardship priorities and initiatives, including overseeing sustainable environmental management, ensuring safe and adequate supplies of water, taking further action on climate change, developing a renewed plan to ensure air quality, reducing and finding innovative ways to manage waste and supporting land use planning.

My department also had a year of fiscal prudence. Each government ministry took action to help lower the deficit and improve government's fiscal position. Alberta Environment reviewed priorities, opportunities and challenges as a department and was able to implement cost saving measures while maintaining a high level of protection for the environment. We worked closely with our partners to achieve our common goals, while finding common ways to ensure fiscal savings and sustainable funding.

This year's annual report outlines my ministry's major accomplishments for 2009-2010 and goes further to share some of our staff's experiences and highlights in their efforts to build common ground with our partners through conversation, relationship building, collaborative projects and our everyday interactions. Building common ground is all about collectively identifying and celebrating our successes, developments and ongoing dedication to build a strong economy while continuing to ensure a safe and healthy environment for all Albertans.

*Original signed by*

*Honourable Rob Renner  
Minister of Environment*

# Management's Responsibility for Reporting

The Ministry of Environment includes the department, the Environmental Appeals Board, and the Climate Change and Emissions Management Fund.

The executives of the individual entities within the ministry have the primary responsibility and accountability for the respective entities. Collectively, the executives ensure the ministry complies with all relevant legislation, regulations and policies.

Ministry business plans, annual reports, performance results and the supporting management information are integral to the government's fiscal and business plans, annual report, quarterly reports and other financial and performance reporting.

Responsibility for the integrity and objectivity of the consolidated financial statements and performance results for the ministry rests with the Minister of Environment. Under the direction of the Minister, I oversee the preparation of the ministry's annual report, including consolidated financial statements and performance results. The consolidated financial statements and performance results, of necessity, include amounts that are based on estimates and judgements. The consolidated financial statements are prepared in accordance with the Canadian generally accepted accounting principles for the public sector as recommended by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants. The performance measures are prepared in accordance with the following criteria:

- Reliability – Information agrees with the underlying data and with the sources used to prepare it.
- Understandability and Comparability – Actual results are presented clearly and consistently with the stated methodology and presented on the same basis as targets and prior years' information.
- Completeness – Performance measures and targets match those included in Budget 2009. Actual results are presented for all measures.

As Deputy Minister, in addition to program responsibilities, I establish and maintain the ministry's financial administration and reporting functions. The ministry maintains systems of financial management and internal control which give consideration to costs, benefits, and risks that are designed to:

- provide reasonable assurance that transactions are properly authorized, executed in accordance with prescribed legislation and regulations, and properly recorded so as to maintain accountability of public money;
- provide information to manage and report on performance;
- safeguard the assets and properties of the province under ministry administration;
- provide Executive Council, Treasury Board, the Minister of Finance and Enterprise and the Minister of Environment any information needed to fulfill their responsibilities; and
- facilitate preparation of ministry business plans and annual reports required under the *Government Accountability Act*.

In fulfilling my responsibilities for the ministry, I have relied, as necessary, on the executive of the individual entities within the ministry.

*Original signed by*

*Jim Ellis*

*Deputy Minister of Environment*

September 7, 2010



---

# Results Analysis

---

## Ministry Overview

The Ministry of Environment consists of the department, the Environmental Appeals Board and the Climate Change and Emissions Management Fund. In addition, three Delegated Administrative Organizations report to the Minister and operate with separate board governance and financial management: the Alberta Recycling Management Authority, the Beverage Container Management Board and the Alberta Used Oil Management Association.

The ministry's authority to carry out its mandate is primarily based on the *Environmental Protection and Enhancement Act*, the *Water Act* and the *Climate Change and Emissions Management Act*.

## Environmental Appeals Board

*Justice Delmar Perras, Chair*

The Environmental Appeals Board (EAB) is a quasi-judicial board that operates at arm's length from Alberta Environment and reports directly to the Minister of Environment. Consistent with the principles of natural justice, the EAB provides fair, impartial and efficient resolution of appeals that are received under the *Environmental Protection and Enhancement Act*, the *Water Act*, the *Climate Change and Emissions Management Act* and the *Government Organization Act*. The EAB's preferred method of resolving appeals is mediation. However, when an appeal proceeds to a hearing, in most cases, the EAB makes recommendations to the Minister, who makes the final decision. On preliminary matters and in certain types of appeals the EAB makes the final decision.

The EAB issues its own annual report at [www.eab.gov.ab.ca/publications.htm](http://www.eab.gov.ab.ca/publications.htm).

## Alberta Environment

*Jim Ellis, Deputy Minister*

Alberta Environment oversees policies and initiatives associated with air quality, water management, waste management, environmental emergencies, land reclamation and climate change. Alberta Environment manages the provincial environmental regulatory process and develops cumulative effects management criteria. The department supports and directs environmental emergency management in cooperation with partners and coordinates public education on conservation and environmental protection. Alberta Environment is also responsible for environmental monitoring and compliance programs to enforce Alberta's environmental legislation and regulations.

The ministry is organized into four main business divisions: Environmental Assurance, Environmental Stewardship, Environmental Management and Strategic Support and Integration. These divisions are supported by People Services, Communications, Legal Services and Finance and Administration.

## **Ministry Divisions**

### ***Environmental Assurance Division***

*Ernie Hui, Assistant Deputy Minister*

Environmental Assurance is responsible for policy development, science and support, monitoring and reporting. Key activities include development of policy, legislation, new standards and approaches to managing water quantity, quality and drinking water, air quality, waste management, climate change, science and policy research, and environmental monitoring, while supporting cumulative effects management and liaising with the Climate Change and Emissions Management Corporation in administering the Climate Change and Emissions Management Fund.

### ***Environmental Stewardship Division***

*Beverly Yee, Assistant Deputy Minister*

Environmental Stewardship coordinates the development of major environmental strategies, fosters relationship and capacity-building with Alberta Environment's partners and leads the department's efforts on conservation, stewardship, education and outreach. Key activities include Aboriginal and intergovernmental consultation, renewal of the *Water for Life* strategy, management of waste stewardship programs, education and outreach work and transboundary water negotiations.

### ***Environmental Management Division***

*Rick Brown, Assistant Deputy Minister*

The Environmental Management Division implements place-based environmental and resource management outcomes, stewards cumulative effects management systems and delivers on the ministry's regulatory mandate under the *Environmental Protection and Enhancement Act* and the *Water Act*. The division is also responsible for operation and maintenance of provincially-owned water management infrastructure, dam safety, flow forecasting and river engineering. Key activities include the improvement of regulatory services, implementation of basin management plans, coordination of water allocation and management discussions between stakeholders and development of a regional support team, which provides strategic operational support to all regions and implementation of cumulative effects management.

### ***Strategic Support and Integration Division***

*Al Sanderson, Assistant Deputy Minister*

Strategic Support and Integration Division identifies environmental trends, strategic risks and opportunities and ensures they are incorporated in Alberta Environment's strategic, business and corporate operational plans. The division provides leadership and support on strategic, business, operational and legislative planning, integrated risk management, performance measurement, program evaluation, project management, strategic intelligence and information technology systems.

## **Ministry Support Areas**

### ***People Services***

*Mary Jefferies, Leader*

People Services sets the overall strategy for Alberta Environment's most important asset - its people. People Services provides advice, guidance and strategic direction for initiatives and activities impacting the people of Alberta Environment. Key activities include planning, coordinating, implementing and evaluating succession management plans, recruitment and classification actions, organizational design processes, organizational and staff development plans, workplace culture initiatives and health and safety strategies.

### ***Communications***

*Mark Cooper, Director*

Communications provides the ministry with communication resources to build open communication between the ministry and Albertans. The branch provides communications support to department initiatives, programs and services. It also works in partnership with government ministries, other orders of government and community and industry organizations to communicate key events and initiatives. Communications provides communications support for strategic and newsworthy department actions and serves as a spokesperson for the ministry on corporate issues.

### ***Legal Services***

*Darin Stepaniuk, Director*

Legal Services supports the ministry in achieving its objectives by providing timely, effective advice to the Minister and all levels of the ministry using a corporate counsel model. The ministry's legal services are shared with Sustainable Resource Development and the Parks Division of Tourism, Parks and Recreation.

### ***Finance and Administration***

*Mike Dalrymple, Executive Director and Senior Financial Officer*

Finance and Administration leads and supports several department-wide systems, including managing requests and inquiries related to the *Freedom of Information and Privacy Act*, records management, accommodations, contract and grant processing and management, financial statements preparation, IMAGIS reporting, budget and forecast preparation, procurement card management and revenue processing.

# Review Engagement Report



To the Members of the Legislative Assembly

I have reviewed the performance measures identified as "Reviewed by Auditor General" included in the *Ministry of Environment's 2009-10 Annual Report*. These performance measures are prepared based on the following criteria:

- Reliability – Information agrees with the underlying data and with sources used to prepare it.
- Understandability and Comparability – Actual results are presented clearly and consistently with the stated methodology and presented on the same basis as targets and prior years' information.
- Completeness – performance measures and targets match those included in Budget 2009. Actual results are presented for all measures.

My review was made in accordance with Canadian generally accepted standards for review engagements and, accordingly, consisted primarily of enquiry, analytical procedures and discussion related to information supplied to my Office by the Ministry. My review was not designed to provide assurance on the relevance of these performance measures.

A review does not constitute an audit and, consequently, I do not express an audit opinion on these performance measures.

Based on my review, nothing has come to my attention that causes me to believe that the "Reviewed by Auditor General" performance measures in the Ministry's 2009-10 Annual Report are not, in all material respects, presented in accordance with the criteria of reliability, understandability, comparability, and completeness as described above. However, my review was not designed to provide assurance on the relevance of these performance measures.

Original signed by Merwan N. Saher, CA  
Auditor General

Edmonton, Alberta  
September 3, 2010

# Performance Measures Summary Table

| Core Business/Goal/Performance Measure   | Prior Year Actuals  |  |   |  | Target   | Current Actual  |
|--|---|--|---|--|--|---|
| <b>Safeguarding public and environmental health</b>  |   |  |   |  |  |   |
| <b>1 The cumulative effects of development on land, air, water and climate are managed to achieve Government of Alberta desired environmental outcomes</b> |   |  |   |  |  |   |
| 1.a  | Air Quality Index –<br>Measures the quality of Alberta's air based on five major pollutants: carbon monoxide, nitrogen dioxide, ozone, sulphur dioxide, and fine particulate matter – PM <sub>2.5</sub>   | “Good” air quality days 99% of the time (2005)                                   | “Good” air quality days 97% of the time (2006)                                  | “Good” air quality days 97% of the time (2007)                                   | “Good” air quality days 97% of the time (2008)                                   | “Good” air quality days 97% of the time (2009)                                  |
| 1.b*   | River Water Quality Index –<br>Measures the water quality of six major Alberta rivers at key sites, based on monthly data on four groups of variables (metals, bacteria, nutrients and pesticides) which are combined to provide an indication of overall water quality   | Five out of six river systems have “good” to “excellent” water quality (2004-05) | Two out of six river systems have “good” to “excellent” water quality (2005-06) | Five out of six river systems have “good” to “excellent” water quality (2006-07) | Five out of six river systems have “good” to “excellent” water quality (2007-08) | Six out of six river systems have “good” to “excellent” water quality (2008-09) |
| <b>2 The Ministry has effective risk management, preparation and responses to event and emerging and complex environmental issues</b>                      |   |  |   |  |  |   |
| 2.a*   | Environmental Emergencies Response Indicator –<br>Measures the response by Environment to environmental emergencies within established timelines  |  |   |  | 85% responded to within 50 minutes (2008-09)                                     | 90% responded to within 50 minutes (2009-10)                                    |
| <b>Leading and enabling citizens, communities, governments and industry to be environmental stewards</b>   |   |  |   |  |  |   |
| <b>3 People are aware of and understand existing and emerging environmental threats and opportunities</b>  |   |  |   |  |  |   |
| 3.a  | Client satisfaction with Information provided through Environment's Information Centre<br><br>Accessibility –<br>Measures the percentage of clients satisfied with accessibility to the Information Centre<br><br>Knowledge –<br>Measures the percentage of clients satisfied with Environment Information Centre knowledge |  |   |  | 86% (2008-09)<br><br>87% (2008-09)   | 92%<br><br>95%<br><br>Data not available<br><br>Data not available              |
| 3.b*   | Environmental Awareness Indicator –<br>Measures Albertans' awareness of one or more of the Government of Alberta's priority environmental initiatives   |  |   |  | 63% (2008)   | 67% (2009)  |

| Core Business/Goal/Performance Measure   | Prior Year Actuals   |                              |                              |                              | Target                        | Current Actual   |
|--|--|------------------------------|------------------------------|------------------------------|-------------------------------|------------------|
| <b>Leading and enabling citizens, communities, governments and industry to be environmental stewards</b> |  |                              |                              |                              |                               |                  |
| <b>4 Albertans, communities, governments and industry are good stewards of the environment</b>           |  |                              |                              |                              |                               |                  |
| 4.a*   | Personal Engagement Indicator –<br>Measures the percentage of Albertans that describe themselves as actively engaged in energy, waste or water conservation  |                              |                              |                              |                               |                  |
|  | Energy Conservation  |                              |                              |                              | 87%                           | 90%              |
|  | Waste Conservation   |                              |                              |                              | 87%                           | 90%              |
|  | Water Conservation   |                              |                              |                              | 83%                           | 90%              |
|  |  |                              |                              |                              | (2008)                        | 84%              |
|  |  |                              |                              |                              |                               | (2009)           |
| 4.b  | Beverage Container Return Rate –<br>Measures the return rate of beverage containers each year based on sales and returns   | 78%<br>(2005)                | 74%<br>(2006)                | 76%<br>(2007)                | 77%<br>(2008)                 | 85%              |
|  |  |                              |                              |                              |                               | 82%              |
|  |  |                              |                              |                              |                               | (2009)           |
| 4.c  | Used Oil Recovery Rate –<br>Measures the recovery rate of used oil each year expressed as a percentage of the estimated volume of recoverable oil and quantity recovered                             | 77%<br>(2005)                | 80%<br>(2006)                | 82%<br>(2007)                | 83%<br>(2008)                 | 82%              |
|  |  |                              |                              |                              |                               | 83%              |
|  |  |                              |                              |                              |                               | (2009)           |
| 4.d*   | Municipal Solid Waste To Landfills –<br>Measures Alberta's progress towards reducing the amount of municipal solid waste disposed in landfills as measured in kilograms of waste per capita annually | 806 kg<br>(2005)             | 818 kg<br>(2006)             | 838 kg<br>(2007)             | 841 kg<br>(2008)              | 800 kg           |
|  |  |                              |                              |                              |                               | 757 kg           |
|  |  |                              |                              |                              |                               | (2009)           |
| 4.e  | Electronic Recycling –<br>Measures the total tonnage of electronics collected and processed annually. Targets are set to achieve maximum recoverable volumes   | 4,366<br>tonnes<br>(2005-06) | 6,365<br>tonnes<br>(2006-07) | 9,428<br>tonnes<br>(2007-08) | 16,262<br>tonnes<br>(2008-09) | 18,795<br>tonnes |
|  |  |                              |                              |                              |                               | 18,621<br>tonnes |
|  |  |                              |                              |                              |                               | (2009-10)        |
| 4.f  | Paint Recycling –<br>Measures the total kilograms of paint collected and processed annually (in millions)  |                              |                              |                              | 2.3 kg<br>(2008-09)           | 1.8 kg           |
|  |  |                              |                              |                              |                               | 2.7 kg           |
|  |  |                              |                              |                              |                               | (2009-10)        |
| 4.g  | Facilities Recognized as EnviroVista Leaders –<br>Measures the number of regulated facilities recognized as EnviroVista Leaders  |                              |                              | 23<br>(2007)                 | 28<br>(2008)                  | 31               |
|  |  |                              |                              |                              |                               | 27               |
|  |  |                              |                              |                              |                               | (2009)           |

| Core Business/Goal/Performance Measure  | Prior Year Actuals |               |               |               | Target    | Current Actual |
|---|--------------------|---------------|---------------|---------------|-----------|----------------|
| <b>Leading and supporting the development and maintenance of critical regulatory systems and environmental infrastructure</b>                                       |                    |               |               |               |           |                |
| <b>5 Environmental infrastructure is developed and sustained to meet the Government of Alberta desired outcomes</b>   |                    |               |               |               |           |                |
| 5.a Effective Water Management Infrastructure Measures the:   |                    |               |               |               |           |                |
| Utilization   | 99.80%             | 99.80%        | 99.80%        | 99.50%        | 99%       | 99.2%          |
| Functional adequacy   | 95.10%             | 95.10%        | 95.10%        | 94.50%        | 95%       | 93.7%          |
| Physical condition of provincially owned water management infrastructure  | Good: 95.5%        | Good: 97.0%   | Good: 96.5%   | Good: 94.9%   | Good: 93% | Good: 94.2%    |
|   | Fair: 3.6%         | Fair: 2.9%    | Fair: 3.4%    | Fair: 4.8%    | Fair: 7%  | Fair: 4.7%     |
|   | Poor: 0.9%         | Poor: 0.1%    | Poor: 0.1%    | Poor: 0.3%    | Poor: 0%  | Poor: 1.1%     |
|   | (2005-06)          | (2006-07)     | (2007-08)     | (2008-09)     |           | (2009-10)      |
| 5.b Drinking Water Safety Indicator   |                    |               |               |               |           |                |
| Facility Design Standards – Measures the percentage of facilities meeting the newer standards (1997 or 2006 as applicable)  |                    | 81% (2006-07) | 85% (2007-08) | 87% (2008-09) | 90%       | 90% (2009-10)  |
| Facility Operational Requirements – Measures the number of incidents where regulatory requirements have not been met and that could lead to water quality incidents |                    | 32 (2006)     | 41 (2007)     | 26 (2008)     | 22        | 56 (2009)      |
| Water Quality Incidents – Measures the number of incidents involving drinking water not meeting specified quality requirements                                      |                    | 51 (2006)     | 42 (2007)     | 37 (2008)     | 36        | 36 (2009)      |

\* Indicates Performance Measures that have been reviewed by the Office of the Auditor of the General

These measures were selected for review by ministry management based on the following criteria established by government:

1. Enduring measures that best represent the goal and mandated initiatives,
2. Measures that have well established methodology and data reporting,
3. Measures that have outcomes over which the government had a greater degree of influence.

For more detailed information see Performance Measure Data Sources and Methodology in the Discussion and Analysis of Results section of the annual report.

For changes to performance measures refer to page 67 of the annual report.



## Discussion and Analysis of Results

The following pages tell the story of the Ministry of Environment: the highlights and challenges, as well as the contributions of our employees.

In the past year, the ministry has worked hard to ensure that, as a province, we make the best environmental decisions possible. Whether it is the stewardship fostered through the renewed Clean Air and *Water for Life* strategies, the innovation of mapping groundwater supplies through airborne geophysics or the diligence of our 107 environmental protection officers working within our communities, our efforts are unwaivering.

The model for much of this effort is a new cumulative effects management system, which requires the development of common ground between environmental, economic and social values.

Cumulative effects focuses on the impact of all development on the environment (land, air and water) on a regional, rather than project-by-project, basis. Its strength is the involvement of stakeholders—some 20 organizations in the past year—as well as other ministries, federal departments and First Nations. Regional advisory councils have been established and balance desired environmental, social and economic outcomes.

We are proceeding quickly in two priority areas. In the Lower Athabasca (oil sands) Region, we are developing regional thresholds for air, surface water, groundwater and establishing frameworks and tools for performance measurement and reporting. In the South Saskatchewan Region, we are drafting a surface water quality management framework, and have finalized a particulate matter and ozone management plan for Calgary.

We are managing cumulative effects on a larger scale as well. Alberta is doing its part to address the global challenge of climate change. *Alberta's 2008 Climate Change Strategy* continues to produce results—7.01 million tonnes of greenhouse gas emissions reductions were made by industry through both efficiency improvements and applied offsets and \$62.9 million contributed to the Climate Change and Emissions Management Fund for the 2009 compliance period and an additional \$1.4 million was contributed from previous compliance periods. Our effort is reflected in the government's support of four major carbon capture and storage projects. Both of these are key to our clean-energy future.

Internally, the ministry is aligning its infrastructure to support cumulative effects management. An example of this alignment is taking place within the Oldman Basin Water Management Operations branch. At one time, we were concerned with controlling water levels in reservoirs to meet set minimum water levels. Today we are thinking more broadly about what particular water levels mean for users and the environment.

Of particular note is the ministry's Partners in Resource Excellence program. Using a cumulative effects management approach, this program has made dramatic improvements in pipeline construction, and is poised to use the same process to reduce environmental disruption from oil exploration roads and drilling waste.

The Partners in Resource Excellence Program is but one of many programs underway at Alberta Environment that are laying the groundwork for excellence in environmental management for years to come. The GeoDiscover Alberta Program is another example. It aims to provide a complete inventory of land and geographic information by linking to partnering ministries. Similarly, the ministry launched the [Environmental Site Assessment Repository \(ESAR\)](#), an online searchable database that provides the public with easy access to scientific and technical information on environmentally assessed land throughout Alberta.

The basic management process of cumulative effects—coming together with stakeholders to establish the desired outcomes and then achieving them—is reflected again and again in the ministry's work, and reinforces this year's theme for the annual report, "Building Common Ground."

Our province will face significant environmental challenges ahead: continued development, climate change, and new standards and expectations for the environment globally—all unfolding simultaneously. Yet given the current work of the ministry, we are well positioned to respond to them.

## GOAL 1 Linked to Core Business 1 – Safeguarding Public and Environmental Health

The cumulative effects of development on land, air, water and climate are managed to achieve Government of Alberta desired environmental outcomes

---

The ministry and its partners are leading Alberta's transition to an outcomes focused cumulative effects management system that integrates social, economic, resource and environmental outcomes consistent with Alberta's *Land-use Framework*. The system will address the impacts of development on land, air, water and biodiversity, at a regional level. To facilitate the system, outcomes are defined and supported by coordinated environmental monitoring and compliance systems.

### IMPLEMENTING A NEW APPROACH

In the past, development in Alberta was approved on a project-by-project basis. Although approvals under the *Water Act* and the *Environmental Protection and Enhancement Act* already take multiple impacts on environmental capacities into account when setting the limits and conditions for regulated activities, the environment benefits from broader, collective approaches to achieve the best results. This is an example of building common ground.

Albertans have told us, over a consultation lasting three years, they desire regional management of our land and natural resources. As a result, we are introducing a new process for environmental management, one guided by the cumulative effects management system. Cumulative effects management considers the past, present, and anticipated use of Alberta's air, land and water. It determines the capacity of the environment in order to guide development activities in a region. Cumulative effects management facilitates the decision-making process by establishing desired environmental outcomes balanced with social and economic factors. Both the system and processes are aligned with the regional structure set out in the province's *Land-use Framework*.

Over the past year, the department has been laying the groundwork for cumulative effects management by:

- Supporting immediate priorities of the *Land-use Framework*, including providing input to the *Alberta Land Stewardship Act* and amending the *Environmental Protection and Enhancement Act* and *Water Act* to ensure that decision-makers act in accordance with any applicable regional plan. Environment also continues to work with other ministries and Regional Advisory Councils to support development of regional plans for the Lower Athabasca and South Saskatchewan Regions.

- Focusing on implementing an outcomes-focused cumulative effects management system within Alberta's *Land-use Framework* to address the impact of development on air, land, water and biodiversity at a regional level. The plans will include development of regional environmental thresholds and as part of the regional planning process the department continues to develop management frameworks for air, surface water and groundwater in the Lower Athabasca Region. In the South Saskatchewan Region, we continue to develop a surface water quality management framework and have finalized the Calgary Regional Airshed Zone particulate matter and ozone management plans.
- Building external understanding and alignment by:
  - meeting and providing an overview of cumulative effects management with over 20 stakeholder organizations,
  - meeting with Canadian and international federal departments, and
  - having community conversations with First Nations on cumulative effects management and our water allocation system.
- Identifying key policies, outcomes, and measures required to move forward with cumulative effects management, including determination of how the cumulative effects management process relates to other processes in the Government of Alberta. We are also considering how to adapt the department's organizational design to best support the management of cumulative effects. Many of our traditional functions will evolve to align with this new system.
- Reviewing whether or not new legislation (a proposed *Environmental Cumulative Effects Management Act*) is needed to facilitate the new cumulative effects management process. This review concluded that the existing *Water Act* and *Environmental Protection and Enhancement Act*, combined with the new *Alberta Land Stewardship Act*, already largely provide sufficient tools to implement a cumulative effects management system.
- Reviewing existing approval processes and adjusting, on the basis of continuous improvement, to achieve the desired outcomes identified through cumulative effects management.
- Ensuring our own staff and those in other ministries understand the new cumulative effects management process and their role.

Other accomplishments under Goal 1 include:

- Under the province's *Climate Change Strategy*, industry made efficiency improvements and applied offsets to achieve 7.01 million tonnes of greenhouse gas emission reductions and contributed \$62.9 million to the Climate Change and Emissions Management Fund for the 2009 compliance period. A calendar year is the basis for the compliance period in the fund, versus a fiscal year. This difference in reporting/compliance timelines means that during the 2009-2010 fiscal year, revenue in the Climate Change and Emissions Management Fund totalled \$60.4 million. Total reductions to date equal 17.28 million tonnes.
- The Government of Alberta announced support for a number of projects related to carbon capture and storage (CCS). The CCS projects will capture and store up to five million tonnes of CO<sub>2</sub> per year by 2015. These projects include:
  - greening oil sands supply at the upgrading stage (Quest Project and Alberta Carbon Trunk Line),
  - greening electricity production at Alberta coal-fired electricity plants (Project Pioneer),
  - a pipeline system to transport carbon dioxide (Alberta Carbon Trunk Line), and
  - producing clean energy with in-situ coal gasification (Swan Hills Synfuels Project).
- The ministry supported the province on a national and international level during international climate change talks throughout 2009 as well as Alberta's missions to the United States during this same period.
- In the first year of implementation, the three-year Consumer Energy Efficiency Incentive Program administered by Climate Change Central to promote wise energy use distributed more than \$11 million in rebates, resulting in 21,000 tonnes of GHG emissions being avoided per year. Nearly 400,000 tonnes of GHG emissions will be avoided over the life of the program.
- Leading the development of a Tailings Management Framework, the department is considering regulatory changes and other policy initiatives to improve the management and reclamation of tailings.
- The department supported the identification and mapping of 754 Environmentally Significant Areas in the province—a strategic conservation tool useful when developing land-use planning and policy.
- The department continued development of a Wetlands Policy and the renewal of Alberta's Water Allocation Management System.
- Under the *Water for Life Strategy* and *Land-Use Framework*, an inventory of over 14.7 million hectares of wetland was completed in the Upper Athabasca and Upper Peace Regions.
- Alberta Environment adopted a new green procurement policy.
- Environmental buildings must meet the Leadership in Energy and Environmental Design (LEED) silver requirements. As well, all large public government-owned buildings have been certified, or are awaiting final verification, under the Building Owners and Managers Association's Building Environmental Standards.



“We must recognize that we all have a part to play in this process—large and small—  
and we all have a choice to make it constructive or destructive. I choose the former.  
And I hope that all interested stakeholders can find the means and forums to do the same.”

**ANDY RIDGE**, DIRECTOR OF THE CLIMATE CHANGE SECRETARIAT

---

## An Insider's View of Clean-Energy Negotiations

---

*From December 15 to 18, 2009, an Alberta delegation led by Environment Minister Rob Renner attended the Copenhagen United Nations Climate Change Conference. The delegation supported the federal government in its negotiations. Andy Ridge, Director of the Climate Change Secretariat and a member of the delegation, posted blogs during this event via the Your Alberta Blog ([www.alberta.ca/blog](http://www.alberta.ca/blog)). His comments provide an insider's view of Alberta's efforts to work toward clean energy, and they are excerpted here:*

**On the relevance of international environmental protests to Alberta** (posted December 17, 2009):

After breakfast I, Environment Minister Rob Renner and the rest of the Alberta group made our way to the main conference centre—the Bella Centre, where the formal negotiations took place. We were greeted by people handing out everything from position pamphlets and environmentally-friendly bags to coffee and organic produce (the fair-trade chocolate-covered pumpkin seeds were amazing). A concerned but not confrontational mood surrounded us.

As we met with Canadian officials and delegations from countries such as Australia, Germany and the US, protests began taking place outside, and the mood there turned somber. I can tell you that being in the event centre to talk about solutions, to share Alberta's learnings, and to tell our clean-energy story to those developing a global framework, we were not influenced by the actions going on outside.

Heading out at the end of the day, we stopped to talk to a group of protesters. It was clear that for some of them this process is not working. The freedom to share positions, interests and feelings has been a fundamental tenet for this issue. However, one must ask: at what point does the message get lost?

Like Peewee Herman playing a bellman in the movie of his own life, we must recognize that we all have a part to play in this process—large and small—and we all have a choice to make it constructive or destructive. I choose the former. And I hope that all interested stakeholders can find the means and forums to do the same.

**On the significance of Alberta's environmental efforts** (posted December 18, 2009):

I heard a few times over the last couple of days that no deal was better than a high-level (non-binding) deal. Similar types of comments were made when we implemented Alberta's greenhouse gases regulatory system in 2007. Looking back, I can say that there are farmers, wind developers and municipalities—among others—who may disagree. They are getting support to reduce emissions through Alberta's carbon offset program. There are companies paying into a technology fund that would say \$187.8 million\* collected is far from 'nothing'. And there are over 17 million tonnes of emissions\* that didn't go into the atmosphere because of our program. Yes, we need to do more, but our efforts in Alberta are a start—hardly 'nothing'. \*Numbers updated to reflect totals as of end of March 2010

*Ridge's reflections touch on some of the steps Alberta is taking to reduce greenhouses gases and produce clean energy. These steps are only our first. Alberta is investing \$2 billion in carbon capture and storage that will result in a network of projects, pipelines, storage and financing unique in the world. Alberta is also pursuing renewable energy with its \$239 million bio-energy plan that includes a renewable fuel standard. We have recently committed almost \$30 million to waste-to-energy projects, and are one of the largest wind power producers in Canada.*

## Goal 1 Performance Measures

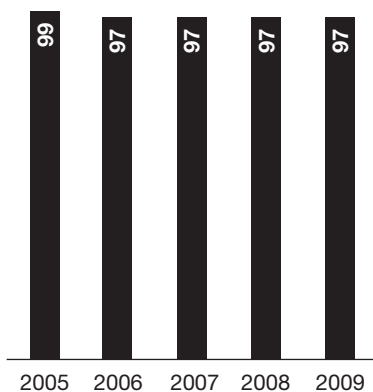
### 1a. Air Quality Index

The Air Quality Index measures the quality of Alberta's air based on five major pollutants: carbon monoxide, nitrogen dioxide, ozone, sulphur dioxide, and fine particulate matter – PM<sub>2.5</sub>.

#### Target

- 'Good' air quality days 97 per cent of the time

**Figure 1**  
Air Quality Index  
(percentage of good days)



#### Results Analysis

In 2009, Alberta had 'good' air quality occurring 97 per cent of the time, which met the 97 per cent target. There is not a statistically significant upward or downward trend in the Air Quality Index. Changes observed from year to year are primarily due to variations in factors such as weather. Air quality is influenced by a number of factors including vehicle emissions, weather patterns, wildfires and intensity of industrial development.



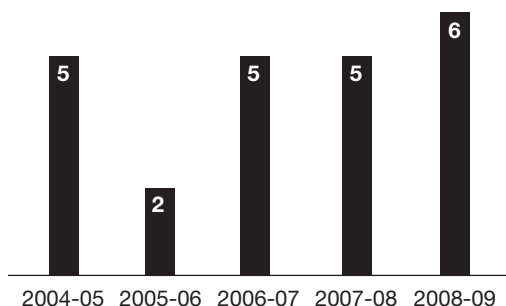
## 1b. River Water Quality Index

The River Water Quality Index measures the water quality of six major Alberta rivers at key sites based on monthly data on four groups of variables (metals, bacteria, nutrients and pesticides), which are combined to provide an indication of overall water quality.

### Target

- Six out of six river systems have 'good' to 'excellent' water quality

**Figure 2**  
River Water Quality Index  
(good to excellent water quality)



### Results Analysis

In 2008-2009, six out of six river systems assessed as part of the Alberta River Water Quality Index demonstrated 'good' to 'excellent' water quality. This is consistent with the target. Various natural and human factors, including flow volume, degree of development in the basin, point source effluent discharges and non-point source runoff (e.g., from agricultural fields), can influence the Index. Relatively low precipitation during 2008-2009 may have contributed to improved Index ratings in some rivers. Less precipitation generally results in reduced non-point source runoff, fewer exceedances of water quality guidelines, and higher Index ratings.

The Alberta River Water Quality Index examines a very broad range of water quality parameters, many of which tend to fluctuate over time. Hence, a small level of inter-annual variability in Index ratings is expected and typically observed.

## 1c. Total Greenhouse Gas Emissions (Under Development)

The performance measures tracks the success in meeting the greenhouse gas emissions growth targets measured in million tonnes of CO<sub>2e</sub> as outlined in *Alberta's 2008 Climate Change Strategy*.

## **GOAL 2** Linked to Core Business 1 – Safeguarding Public and Environmental Health

### The ministry has effective risk management, preparation and responses to events and emerging complex environmental issues

---

The ministry and its partners have to be aware of and manage environmental risks and opportunities. To do this, Environment advises other ministries across the Government of Alberta, municipalities and Albertans about emerging environmental issues and related threats to environmental and public health and safety. To respond to emerging and longer-term issues, the ministry works with partners to update or develop new policies and programs. Working with the Alberta Emergency Management Agency to prepare for and respond to environmental incidents and emergencies, the ministry helps plan hazard reduction and risk management with stakeholders. If required, the ministry takes part in, or directs, emergency response activities that could have an impact on our air, land and/or water.

## **PREPARATION IS CRITICAL**

Although environmental emergencies often receive high profile attention, Alberta Environment performs an overwhelming portion of our work on a proactive basis, building common ground with other ministries, municipalities and Albertans, thus achieving a high level of environmental health.

For example, Alberta Environment's 107 Environmental Protection Officers engage in education, prevention and enforcement. Although they carry out inspections and investigations and correct incidents of non-compliance, a major part of their efforts emphasize prevention and education within industry and the community.

Having an effective assurance program notwithstanding, not all emergencies can be prevented. The Alberta Environment Support and Emergency Response Team (ASERT) monitors and responds to environmental emergencies 24/7.

One such emergency tested the effectiveness of the department's preparation measures—in this instance, its new Community Spill Response Program. In the early hours of April 28, 2009, a cattle liner careened off Highway 2, rupturing its fuel tanks, and releasing diesel into the nearby Battle River. The Ponoka Fire Department, first on the scene, deployed containment booms to protect the shoreline and contain the diesel. They then deployed absorbent booms and pads to successfully recover the fuel.

The response, as smooth and straightforward as it was, was due to a continuously evolving relationship between government and communities. The Ponoka Fire Department had the good fortune of being one of five communities participating in the pilot of Alberta Environment's Community Spill Response Program. Fire department members received and had access to the Program's equipment trailer, as well as the supervision of Alberta Environment Emergency Responders.

Other 2009-2010 accomplishments under Goal 2 include:

- Alberta Environment issued or amended 34 administrative penalties, four tickets, 52 warning letters and a total of 15 Orders under the *Environmental Protection and Enhancement Act* and the *Water Act*.
- For the most serious offences, Alberta Environment laid charges against seven companies.
- Cautions were posted on the ministry website warning Albertans of the risk of naturally occurring blue-green algae in the province's lakes and reservoirs. Certain types of blue-green algae, or cyanobacteria, produce toxins that can be hazardous to people, pets and wildlife.



“The support from ASERT gave me the confidence to focus on the greatest and most serious on-site issues. As a responder in the northwest, it’s encouraging to see ASERT and our technical staff quickly coming to our aid when it really counts!”

**ARLEN HOGG**, ENVIRONMENTAL PROTECTION OFFICER IN NORTHERN REGION

---

## Building Common Ground with ASERT

---

Arlen Hogg, Environmental Protection Officer in Northern Region, was sleeping soundly when he was rudely awakened by a persistent beeping coming from his nightstand. It was not his alarm clock, it was his Blackberry. It was 6:04 a.m. on Wednesday, February 24. The Alberta Environment Support and Emergency Response Team (ASERT) was notifying him of a major blowout at a gas well near the Town of Hythe in northwest Alberta. They needed Hogg to get to the site.

“As the on-call responder, I had my emergency response kit already packed and was prepared to react at a moment’s notice,” said Hogg.

When Hogg arrived, Canadian Natural Resources Limited, owner of the well, was already on site. So were the Energy Resources Conservation Board and the local fire department. Alberta’s Mobile Air Monitoring Laboratory (MAML) was en route, and ASERT was coordinating efforts behind the scenes.

“I wasn’t sure what to expect when I arrived on scene,” said Hogg. “The assistance and support of everyone involved really helped make things run smoothly. No one plans for these things to happen, but we train to be as prepared as possible for when they do.”

The fire, which started in the early morning hours, consumed the derrick and rig buildings around the well site. Although the fire did not encompass a large land area, it did produce a great deal of smoke and there was worry of hydrogen sulphide leaks. Containing the fire would prove a difficult task, one that would require the skills of a variety of people throughout the department.

Tom Bourque, Monitoring Technologist, arrived with the MAML unit early Wednesday. The mobile air lab is sent to emergencies like the well blowout in Hythe to support air monitoring activities.

Emergency crews and people near a fire scene need to know whether or not air quality is affected. If the MAML shows poor air quality, safety measures can be implemented to minimize health effects. Air monitoring results taken throughout the duration of the fire indicated no hydrogen sulphide leaks—air quality remained good.

Over the next few days, emergency responders, monitoring staff and agency partners worked to get the fire stabilized. The well control specialists cleared the site, completed an assessment on the wellhead, and began executing a plan to gain control of the well.

“The support from ASERT gave me the confidence to focus on the greatest and most serious on-site issues,” said Hogg. “As a responder in the northwest, it’s encouraging to see ASERT and our technical staff quickly coming to our aid when it really counts!”

## Goal 2 Performance Measures

### 2a. Environmental Emergencies Response Indicator

The performance measure tracks the time from Alberta Environment Support and Emergency Response Team (ASERT) receiving information of an environmental emergency incident from the Coordination and Information Centre to the ASERT Duty Officer requesting a regional responder (Primary) to deploy. Minimization of response time can reduce the extent of environmental damage by ensuring the responsible party is doing all that is necessary to mitigate the issues as soon as possible.

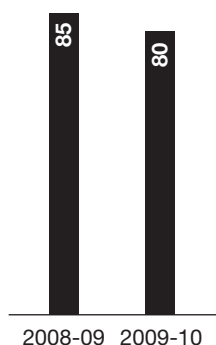
#### Target

- 90 per cent responded to within 50 minutes

#### Figure 3

##### Environmental Emergencies Response Indicator

(percentage of environmental emergency incidents responded to within 50 minutes)



#### Results Analysis

For the 2009-2010 fiscal year, 80 per cent of the environmental emergencies were responded to within 50 minutes, which did not meet the target. This is because some of the calls the Duty Officer received required more information about the incident in order to complete an assessment. In certain emergencies, the assessment required more time as the Duty Officer needed to ensure the emergency responder had the information needed to deploy safely.

**GOAL 3** Linked to Core Business 2 – Leading and Enabling Individuals, Communities, Governments and Industry  
to be Environmental Stewards

## People are aware of and understand existing and emerging environmental threats and opportunities

---

The ministry will enhance its capacity to share information and knowledge about the state of the environment and emerging issues with Albertans. This will involve information-sharing partnerships with a variety of public agencies and non-government organizations. The ministry will have reliable and readily accessible environmental data, information and knowledge that are representative of Alberta's diverse environment and responsive to existing and emerging environmental issues. By gathering and disseminating information in an effective, accurate manner and using knowledge networks for monitoring and reporting, the ministry will help Albertans become more informed environmental stewards.

### FINDING WATER FROM THE AIR

Good environmental management can only succeed through the strong, long-term support and engagement of all partners and stakeholders. Alberta Environment continually strives to strengthen these relationships and help all Albertans become more informed environmental stewards. It does this, in part, by gathering and disseminating information in an effective, accurate manner, and using knowledge networks for monitoring and reporting as a part of building common ground.

The department's foray into airborne physics and creating an interactive mapping application to display water well information are good examples of connecting information with the people who need it to assist decision making. For approximately 30 days beginning in January 2010, specially-equipped planes flew about 120 metres from the ground towing a large low-frequency radio transmitter behind them. They used electromagnetic waves to help locate underground water supplies. This innovative technique, called airborne geophysics, measured the electrical properties of the earth, rock and water below ground level without affecting the land or people.

The survey is part of a multi-year, provincial groundwater mapping and inventory program commissioned by Alberta Environment and the Alberta Geological Survey. The first phase of flights covered a large area between Edmonton and Calgary and surrounding areas where groundwater is heavily used.

Ongoing mapping and modeling of Alberta's groundwater resources is one of the key actions outlined in Alberta's *Water for Life* Action Plan. "Alberta is growing and thriving, but with that growth, comes increased pressure on our resources," said Environment Minister Rob Renner. "We're using the latest technology to obtain a clearer understanding of our groundwater so Alberta can make better water management decisions for a sustainable future."

Other 2009-2010 accomplishments under Goal 3 include:

- Alberta Environment began implementation of the renewed *Water for Life* Strategy to ensure the province has the quality and quantity of water needed now and into the future to support the environmental, economic and social needs of Albertans. We:
  - finalized database structure templates for meteorological and groundwater data,
  - validated hydrometric stations, metadata and time series data,
  - completed setup and configured WISKI (water information system) to accept near-real-time data, and
  - designated the Athabasca Watershed Council the province's tenth Watershed Planning and Advisory Council.
- Employees shared their stories about the oil sands in a video to help Albertans understand the challenges we face in the oil sands region and how we are overcoming them. They discussed the development of the oil sands, the application of compliance tools and regulations and the ongoing work to ensure sustainable, responsible development.
- Environment Minister Rob Renner met with key U.S. environmental, policy and industry leaders in California to share Alberta's efforts to advance greener energy production and discuss general environmental issues.
- The department's international work on such initiatives as the Pacific Northwest Economic Region, the European Union trade negotiations and the Commission for Environmental Cooperation under the North American Free Trade Agreement, has also raised broader awareness of our leadership in environmental management.



- The department launched the [Environmental Site Assessment Repository \(ESAR\)](#), an online searchable database that provides fast and easy access to scientific and technical information on environmentally assessed land throughout Alberta. Environmental site assessments determine the quality of soil and groundwater of a site, particularly at retail gas stations and other commercial and industrial sites. The launch of the ESAR will significantly improve transparency and risk management for Alberta Environment. It will also allow planners, municipalities, land owners, realtors and others to make better-informed land management decisions.
- To further enhance transparency and make it easier for Albertans to find environmental information in their geographical area, Alberta Environment introduced interactive mapping applications, including:
  - [Air Quality Index](#),
  - [Flood Hazard Mapping](#), and
  - [Alberta Water Well Information Database](#).
- In keeping with openness and transparency, the department responded to approximately 1,625 requests for information through the Routine Disclosure Initiative. This is another mechanism for the public to access environmental information in a timely manner.



“The collaborative effort of Alberta Environment with other provincial, federal and municipal agencies has given us the capacity to reach many well owners. Nearly two dozen staff from government agencies, including Alberta Environment, have participated in workshop delivery.”

**KRISTA TREMBLETT**, EDUCATION PROGRAM COORDINATOR

---

## Working Well to Protect Our Groundwater

---

For more than two years, the Working Well program has been helping landowners across Alberta to operate and maintain their wells. The Working Well program supports Alberta's *Water for Life* strategy. It helps to assure safe, secure drinking water for Albertans, specifically by protecting groundwater supplies.

Well owners across the province have participated in community workshops to learn the basics about groundwater, common well problems, contamination risks and best management practices. In 2009, 32 workshops reached over 1,000 well owners in 24 municipalities—bringing the total to more than 1,600 owners in 41 municipalities since 2008.

The success of the program is rooted in extensive common interests. In the past, Environment, Agriculture and Rural Development, and Agriculture and Agri-Food Canada provided information and advice to well owners. This collaboration continues today through the Working Well program. Support is also provided by Alberta Water Well Drilling Association, Alberta Health Services and Leduc County.

"The collaborative effort of Alberta Environment with other provincial, federal and municipal agencies has given us the capacity to reach many well owners," says Krista Tremblett, Education Program Coordinator. "Nearly two dozen staff from government agencies, including Alberta Environment, have participated in workshop delivery."

The "workshops have been very successful," adds Tremblett. "We have received scores of positive comments from workshop participants on things from the professionalism and knowledge of presenters to the quality of information materials."

## Goal 3 Performance Measures

### 3a. Client Satisfaction with Information Provided through Environment's Information Centre

This performance measure tracks the opinions of Albertans on the service they receive from the Information Centre. This measure is comprised of two sub-measures:

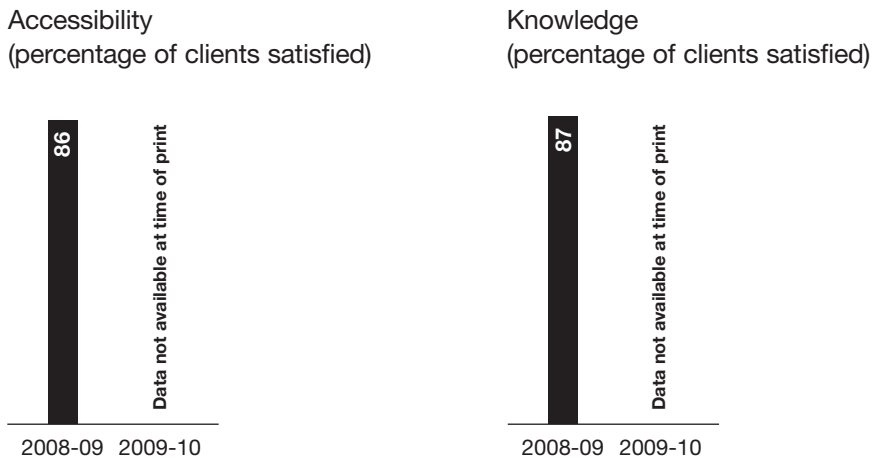
- **Accessibility**  
The percentage of clients satisfied with accessibility to Environment's Information Centre.
- **Knowledge**  
The percentage of clients satisfied with Environment's Information Centre knowledge.

#### Target

- Accessibility: 92 per cent
- Knowledge: 95 per cent

**Figure 4**

Client Satisfaction with Information Provided through Environment's Information Centre



#### Results Analysis

For current Client Satisfaction with Information Provided through Environment's Information Centre performance measure results, please visit [www.environment.gov.ab.ca/info/home.asp](http://www.environment.gov.ab.ca/info/home.asp).

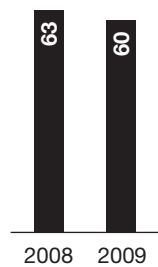
### 3b. Environmental Awareness Indicator

Environmental Awareness Indicator measures Albertans' awareness of one or more of the Government of Alberta's priority environmental initiatives, which include: Alberta's Climate Change Action Plan, the *Water for Life* strategy, the *Land-use Framework*, the *Too Good to Waste* strategy and the Cumulative Effects Management Framework.

#### Target

- 67 per cent

**Figure 5**  
Environmental Awareness Indicator  
(percentage)



#### Results Analysis

In the 2009 calendar year, the percentage of Albertans' awareness of one or more of the Government of Alberta's priority environmental initiatives decreased from 63 per cent in 2008 to 60 per cent in 2009. The results reflect lower than expected awareness levels. New initiatives such as the Energy Efficiency Rebate Program, the *Water for Life* action plan and the Milk Container Refund Program were first introduced in 2009 and it is too early to determine the impact of these initiatives.

In 2010, these initiatives should assist in improving Albertans' awareness of the Government of Alberta's priority environmental initiatives. Awareness of the Cumulative Effects Management Framework and the *Land-use Framework* may also increase as these frameworks are incorporated into the development of regional plans.

**GOAL 4** Linked to Core Business 2 – Leading and Enabling Individuals, Communities, Governments and Industry  
to be Environmental Stewards

## Albertans, communities, governments and industry are good stewards of the environment

---

The ministry encourages and supports environmental stewardship by working in a wide variety of partnerships to enable environmental entrepreneurship and innovation. Success in developing a culture of stewardship rests on increasing the knowledge, motivation and capacity of stewards. Incentives can support the behaviours and values associated with a stewardship ethic.

### FOSTERING STEWARDSHIP

We at Alberta Environment believe anyone can be a steward of the environment. We all have a role to play in taking care of our environment for future generations and creating common ground.

However, successful stewardship begins with developing a culture of stewardship. This is why we focus our efforts on increasing the knowledge, motivation and capacity of citizens. Over the past year, the department hosted meetings with diverse stakeholders who share the same resources; developed a guidebook for users to measure and conserve water; supported the Emerald Awards; and organized events during Environment Week.

As well, Alberta Environment fosters a culture of stewardship by advancing policies that encourage collaboration on a regional basis. The Government of Alberta has supported this effort by renewing its policies on water and air:

- In July the Clean Air Strategic Alliance forwarded its recommendations for a renewed *Clean Air Strategy*. The new Strategy and accompanying Action Plan is now being drafted by a cross-ministry working group.
- In November 2009 we released the *Water for Life* Action Plan, the roadmap the government and its partners will follow over the next 10 years to assure a healthy and sustainable water supply. The Action Plan supports the goals and directions in Alberta's renewed *Water for Life* strategy of 2008.

Other 2009-2010 accomplishments under Goal 4 include:

- Alberta Environment completed work with the federal and provincial governments, representatives of industry and health, and environmental non-government organizations to propose a new Comprehensive Air Management System for Canada. This features a collaborative approach with governments and other parties working together for better air quality based on national Canadian Ambient Air Quality Standards, consistent requirements to ensure good industry performance and place-based air quality management.
- The department adopted in October 2009, along with the federal, and other provincial and territorial governments in the Canadian Council of Ministers of the Environment forum, a new Canada-wide vision for water. Minister Renner and other environment ministers across the country also approved in principle two major initiatives designed to reduce the amount of waste generated and sent to landfills.
- The department reached agreement with Indian and Northern Affairs Canada to co-fund water needs assessments with individual First Nations, supporting the department's water management program. The Tsuu T'ina First Nation completed its assessment in 2009, and assessments for the Siksika First Nation, Blood Tribe and Maskwacis Cree Nations have begun.
- We published the *Water Measurement Guidebook* in July to instruct water users on how to take water measurements. Water Approvals staff promote the guidebook to licensees whose diversion works are unmetered.
- Sixty-two events were organized in 21 communities by local organizations and community groups in support of Environment Week. Events focused on education, empowerment and engaging community members to protect and preserve the environment.
- During the fiscal year, the One Simple Act program encouraged public involvement in environmental stewardship, partnered with players from the Edmonton Eskimos and the Calgary Stampeders, Evergreen Sports Programming, and the Cities of Edmonton and Calgary to challenge students to make good environmental choices. The GreenZone Sustainability Blitz visited 50 schools to reach over 16,000 students and hundreds of teachers.
- Beverage container recycling increased five per cent from last year; the program now has an 82 per cent overall return rate – up 5 per cent from last year.
- Alberta became the first province to include all beverage containers in a regulated deposit-refund program when it added dairy containers on June 1, 2009.
- Recovery of all used oil waste streams remains high, at 82.5 per cent for used oil, 91 per cent for used oil filters and 85.5 per cent for used oil containers. A communications campaign promoted used oil recycling to three-quarter of a million Albertans.
- Central Region staff hosted the first-ever Recreation Lakes Meeting to engage stakeholders in the future of recreation lakes management. Thirty-eight attendees from major recreational lakes in Alberta represented municipalities, stewardship groups, First Nations and lake residents. They identified three priorities: increased public understanding of legislation, legislative authority and enforceability; lake health, riparian alteration and lake levels; and awareness of all lake issues.



“We can't expect our stakeholders to change unless we change. We need to take time to listen and understand other perspectives. And we can do this without compromising the environment. After all, we're all partners in the same community, and we're all learning together.”

**DOUG KULBA**, RESOURCE ASSURANCE SPECIALIST



---

## Environmental Excellence Grows Out of Social Trust

---

The department has been instrumental in the development of an innovative way of reducing the cumulative effect of laying pipelines across Alberta, which is one of the largest land disturbance activities in the province. An opportunity to build common ground and improve relationships appeared when a call for help came from energy company Devon Canada. The call was answered by Doug Kulba, a resource assurance specialist for the department. Doug had seen first-hand the cumulative impact pipeline construction has had on the land. This was the beginning of Innovative Pipeline Strategies, the flagship project of the Partners in Resource Excellence (PRE) program. This program facilitates industry, government and landowners working together to achieve economic, environmental and social excellence..

PRE provides a forum for stakeholders to come together to develop innovative resource solutions using technology and best practices. It provides a working model for staff and stakeholders to forge partnerships, identify environmental outcomes, and develop solutions. Stakeholders work in a spirit of joint stewardship, sharing responsibility for our air, land and water.

As such, PRE is an “on-the-ground example of how cumulative effects management works,” according to Kulba. It provides real examples of how ministry staff can work cooperatively with stakeholders to develop place-based outcomes that simultaneously meet social, environmental and economic needs.

The critical factor to the success of the program is trust.

“Partners in Resource Excellence contributes to the development of collaborative relationships,” Kulba says. “Stakeholders acknowledge that they cannot do it on their own, and that they need to work together as partners to achieve economic and environmental success.”

Kulba notes that to make changes to promote environmental excellence, government’s role must also change. Rather than just using a command and control approach, government must inspire and motivate industry partners. As such, the department’s role is to enable industry partners to achieve the best possible outcomes. Stakeholders are encouraged not only to meet legislative standards, but to exceed them.

This means that staff use legislative requirements as the starting point, rather than the target of their day-to-day work. Underlying PRE is the knowledge that it can help Alberta achieve the best outcomes for the environment, while expanding social trust and maintaining economic prosperity.

“We can’t expect our stakeholders to change unless we change. We need to take time to listen and understand other perspectives. And we can do this without compromising the environment. After all, we’re all partners in the same community, and we’re all learning together.”

And what about the request for help Kulba received from Devon Canada? Using the PRE model, Alberta Environment worked with the energy company, as well as Stratus Pipelines, landowners and Alberta Sustainable Resources Development to develop a process called Innovative Pipelining Strategies. This is a cheaper, more effective and more environmentally friendly way to construct pipelines than conventional methods. As a result, a third party assessment reported the Devon Canada Jackfish II Interconnecting Pipeline was successful in reducing the environmental footprint compared to traditional pipelining construction. The project also finished ahead of schedule and saved the company \$1.4 million.

Since the successful pilot, the Partners in Resource Excellence Program has expanded to involve other industries, including pesticide advisory groups and co-generation facilities. Kulba and his team are also exploring:

- innovative road solutions for: oil sand exploration sites, well-sites on forested locations and farmland;
- drilling waste solutions; and
- trenchless pipeline systems.

They have also developed a Centre for Resource Excellence and Innovation to demonstrate and educate stakeholders about innovative resource solutions.

Partners in Resource Excellence has given all involved the “freedom to create” innovative solutions. “Ultimately, we are all working towards creating the best place in the world to live,” concludes Kulba. “We do this by working together.”

## Goal 4 Performance Measures

### 4a. Personal Engagement Indicator

Personal Engagement Indicator measures the percentage of Albertans that describe themselves as actively engaged in energy, waste or water conservation.

#### Target

- Energy Conservation: 90 per cent
- Waste Conservation: 90 per cent
- Water Conservation: 90 per cent

**Figure 6**  
Energy Conservation  
(percentage of Albertans  
that describe themselves  
as actively engaged)



**Figure 7**  
Waste Conservation  
(percentage of Albertans  
that describe themselves  
as actively engaged)



**Figure 8**  
Water Conservation  
(percentage of Albertans  
that describe themselves  
as actively engaged)



#### Results Analysis

In 2009, there was an overall increase in Albertans describing themselves as actively engaged in energy, waste and water conservation moving towards the goal of 90 per cent. The percentage of Albertans describing themselves as actively engaged in waste conservation is 90 per cent, which exceeds the 87 per cent achieved in 2008. The percentage of Albertans describing themselves as actively engaged in energy conservation is 87 per cent in 2009, which remains the same as 2008. Finally, the 84 per cent of Albertans that described themselves as actively engaged in water conservation exceeds 83 per cent achieved in 2008.

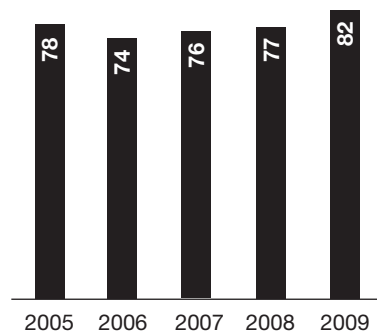
#### 4b. Beverage Container Return Rate

Recycling is an important way for Albertans to take part in caring for the environment. The Beverage Container Return Rate measures the return rate of beverage containers each year based on sales and returns. The Beverage Container Return Rate is the primary measure of performance for the Beverage Container Management Board.

##### **Target**

- 85 per cent

**Figure 9**  
Beverage Container Return Rate  
(percentage)



##### **Results Analysis**

The [Beverage Container Management Board](#) had a year of milestones in 2009. New containers were added to the recycling system, the return rate continued to increase, and a number of significant enhancements to operations and governance resulted in more efficiencies and innovation. The overall return rate for 2009 was 82 per cent, up from 77 per cent in 2008 and not far from the Beverage Container Management Board's goal of 85 per cent by 2011.

Milk and cream containers were added to the deposit-refund system on June 1, 2009, making Alberta the first jurisdiction in North America to do so. With the addition of milk and cream containers, all beverage containers are now accepted at depots for a refund of the deposit paid on them in stores.

Over two billion containers are sold in Alberta each year and about 1.7 billion are being returned. The number of containers returned increased by more than 167 million containers from the year prior. This increase is significant and is clearly representative of the commitment Albertans have to recycle empty beverage containers.

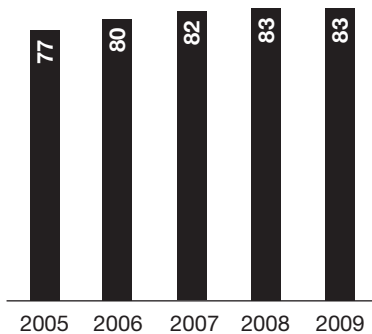
#### 4c. Used Oil Recovery Rate

The Used Oil Recovery Rate measures the amount of used oil recovered each year as a percentage of the estimated volume of recoverable oil. The Used Oil Recovery Rate is a primary measure of performance for the [Alberta Used Oil Management Association](#).

##### Target

- 82 per cent

**Figure 10**  
Used Oil Recovery Rate  
(percentage)



##### Results Analysis

In 2009, 83 per cent of the used oil available for recycling was recovered, which exceeded the target. The largest contributor to this result was the strong provincial network of used oil collectors and processors. There also continues to be an overall increase in awareness of the program.

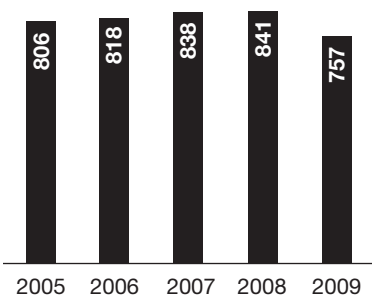
#### 4d. Municipal Solid Waste to Landfills

The amount of municipal solid waste to landfills indicates Alberta's progress toward reducing the amount of municipal solid waste disposed of in landfills as measured in kilograms of waste per capita annually.

##### Target

- 800 kilograms per capita

**Figure 11**  
Municipal Solid Waste to Landfills  
(kilograms per capita)



**Results Analysis**

Municipal solid waste disposed in landfills decreased from 841 kilograms per capita in 2008 to 757 kilograms per capita in 2009, thereby exceeding the target. In 2009, several municipalities implemented new residential recycling programs and Alberta's economy contracted, which may have resulted in less waste being sent for disposal from all sectors, particularly the industrial, commercial and institutional and the construction, renovation and demolition sectors. To further reduce disposal, diversion policies and programs such as the construction and demolition waste program, the packaging and printed materials program and the organic materials program are currently under development and will assist in reaching future targets.

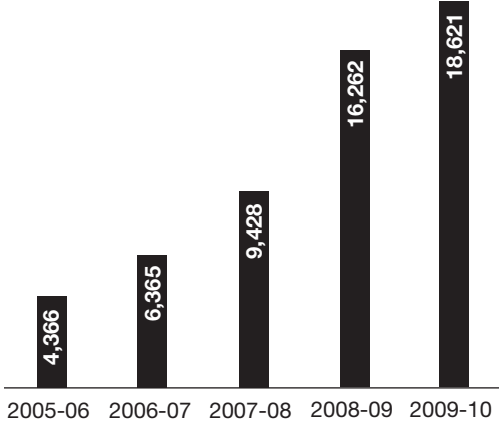
**4e. Electronic Recycling**

The volume of electronics processed is a measure of performance used by [Alberta Recycling](#). [Electronic Recycling](#) measures the total tonnage of electronics collected and processed annually. Targets are set to achieve maximum recoverable volumes.

**Target**

- 18,795 tonnes

**Figure 12**  
Electronics Recycling  
(tonnes)



**Results Analysis**

For the 2009-2010 fiscal year, the actual volume of electronics processed was 18,621 tonnes. The 2009-2010 result shows a 14 per cent growth over the past year, considerably less than the 72 per cent increase last year caused by the processing of the large inventory built up in Edmonton. However, interest continues to grow regarding the expansion of the program, which now includes material such as home entertainment equipment and small kitchen appliances.

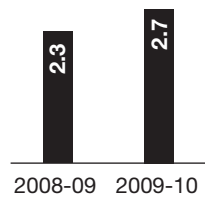
#### 4f. Paint Recycling

The volume of paint processed is a measure of performance used by Alberta Recycling. [Paint recycling](#) measures the total kilograms (in millions) of paint collected and processed annually. Targets are set to achieve maximum recoverable volumes.

##### Target

- 1.8 million kilograms

**Figure 13**  
Paint Recycling  
(million kilograms)



##### Results Analysis

For the 2009-2010 fiscal year, the actual volume of paint material processed was 2.7 million kilograms. The higher than projected volume was due in part to a large municipality shipping their waste paint for processing rather than thermal destruction.

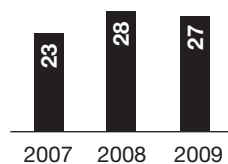
#### 4g. Facilities Recognized as EnviroVista Leaders

[EnviroVista](#) is a voluntary facility-based program which contributes to enhance the environment (air, water and land quality) through excellent emissions performance. The facilities recognized as EnviroVista Leaders measures the number of facilities recognized as EnviroVista Leaders.

##### Target

- 31 facilities

**Figure 14**  
Facilities recognized as EnviroVista Leaders  
(number of facilities)



##### Results Analysis

In the 2009 calendar year, 27 facilities met the EnviroVista Leader criteria. This did not meet target. EnviroVista Leaders operate under the Alberta's *Environmental Protection and Enhancement Act* and meet three qualifying criteria: they have an environmental management system in place, a five-year history without enforcement action and a five-year history of excellent emissions performance.

**GOAL 5** Linked to Core Business 3 – Leading and Supporting the Development and Maintenance of Regulatory Systems and Environmental Infrastructure

## Environmental infrastructure is developed and sustained to meet the Government of Alberta desired outcomes

---

Albertans depend on a variety of environmental infrastructure. Some infrastructure systems, such as drinking water, are critical to public health and safety. Other systems such as water management infrastructure (i.e. dams, canals, weirs, diversions, drains), have important economic significance and are critical to the achievement of *Water for Life: Alberta's Strategy for Sustainability* objectives. Environmental infrastructure also includes monitoring and reporting systems, and operational policies and procedures that are critical to the success of environmental management and stewardship. The ministry monitors and reports on the adequacy of this infrastructure to ensure that it continues to meet evolving standards and requirements as well as the future needs of Albertans. A focus on organizational learning will enhance the ministry's capacity to deal with increasingly complex environmental challenges and risk, and a focus on people will help employees be ready, willing and able to make a difference individually and collectively.

### LINKS TO A HEALTHY ENVIRONMENT

Government ministries typically have their own unique databases. This can make it difficult to provide online access to information across ministries. Sharing information facilitates building common ground.

Over the past year, Alberta Environment, Energy and Sustainable Resource and Development worked to integrate information, knowledge and technology systems across the three departments. In June 2009, they launched the GeoDiscover Alberta Program and a portal to the three departments. GeoDiscover provides a single point for searching geospatial data and services from partnering departments. Importantly, it supports the cumulative effects initiative by linking to other related government initiatives like the *Land-use Framework* and Alberta Energy's Regulatory Review. The program will become a definitive source for geospatial data and information.

The specific objectives of this program are to:

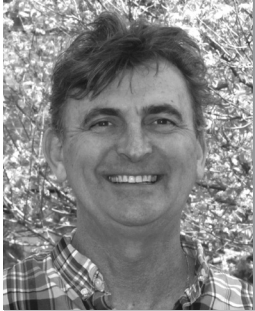
- complete an inventory of land and geographic information
- establish clear standards and best practices to access and maintain the inventory
- enhance the portal for broader shared access to geospatial data and services

In 2010, Alberta Environment, Energy and Sustainable Resource Development plan to expand GeoDiscover to other departments, partners and the public.



Other 2009-2010 accomplishments under Goal 5 include:

- The department updated the Environmental Infrastructure Management System to improve dam and other water management infrastructure, regulation and maintenance.
- The department developed an Air and Water Management Framework for the Industrial Heartland with a review of the monitoring network and flaring practices for the region.
- Alberta Environment worked with Energy, Sustainable Resource Development and the Canadian Environmental Assessment Agency to better align our First Nations consultation delivery.
- On a recent audit, Water Management Operations was rated 97 per cent on their recent Certificate of Recognition external audit. The results clearly show that the branch has developed a commendable culture of workplace safety, which results in safe operations.
- The department supported two key Government of Alberta projects to streamline oil and gas regulations: the Regulatory Alignment Project is examining immediate options to streamline the current delivery system for upstream oil and gas. The Regulatory Enhancement Project is examining long-term system-wide options for regulation.
- The department completed the Oil Sands Disturbance/Reclamation Geodatabase for the years 2007, 1998 and 1980. Following inclusion of industry data, the information will be available on the oil sands information portal.
- The department completed the first draft of a reclamation certification process for the mineable oil sands.



“In the past, we primarily considered water levels in our reservoirs. We would adjust minimum water flows to meet minimum set standards. Now we will look at broader environmental implications.”

**TERRENCE LAZARUS**, MANAGER OF THE OLDMAN BASIN WATER MANAGEMENT OPERATIONS

---

## A Dam is a Dam, but Organizational Infrastructure Must Change

---

“A dam is a dam. We still need to release the water. Just how and why we do it will change.”

Terrence Lazarus is Manager of the Oldman Basin Water Management Operations. Based in Lethbridge, he coordinates all the operations of the government-owned dams and canals in the southern regions. He and his team of 15 ensure water is supplied to all major licence holders in the region and Alberta's international and interprovincial requirements are met. Lazarus has been working with staff to transition to the department's new cumulative effects management system.

Lazarus illustrates the coming changes with an example: “In the past, we primarily considered water levels in our reservoirs. We would adjust minimum water flows to meet minimum set standards. Now we will look at broader environmental implications—it may mean ensuring flows after fish spawning do not go so low as to leave the fish spawning beds dry. Or it may mean operational changes to releases to ensure successful regeneration of cottonwood forests.”

He acknowledges staff have entered a period of discovery about what cumulative effects management means for their operation. “As a result we've taken a look at who we are, what we do and who we serve.” This has culminated in the following vision:

*We are a team of experts who operate our structures responsibly, safely and effectively, to benefit the citizens of Alberta. We manage operations such that drought and flood risks are minimized, and all opportunities are maximized to sustain or improve the environment.*

A broader environmental focus under cumulative effects management also means staff will have to work closely with others, particularly biologists. It may also mean broadening staff knowledge and competence related to the environment. “Our jobs may change or it may just be the perspective behind our jobs that will change.”

Certainly not everything will change. Alberta Environment has a good system in place which will be strengthened with some adjustments to ensure we continue to adapt to our changing environment. Staff will still use conservation, efficiency and productivity as tools to optimize water use. Whether for residential, industrial or agriculture use, our water resources must be managed. It is a critical part of ensuring a high quality of life for Albertans and our environment.

## Goal 5 Performance Measures

### 5a. Effective Water Management Infrastructure

Effective Water Management Infrastructure (EWMI) includes physical assets such as dams, canals and control structures. It measures the three aspects of provincially-owned and operated water management infrastructure as required by the government's Capital Planning Initiative (CPI). Reporting of various levels of infrastructure performance for each measure in EWMI is based on the percentage of the replacement value of the infrastructure being assessed.

Quality infrastructure is a key factor in ensuring a clean and safe environment and is an essential building block to support economic development.

- **Physical Condition**

Assessment of the state of physical fitness or readiness for use, based on established standards for the type of infrastructure asset. The physical condition is a critical factor involved in the decision to maintain, rehabilitate or replace the infrastructure.

- **Functional Adequacy**

Assessment of whether the asset is able to meet program requirements or provide an adequate level of service. While the asset may be in good physical condition with sufficient available capacity to meet demand, poor physical layout, inefficient design or inability to meet code requirements can make it functionally inadequate.

- **Utilization**

Assessment of the ability of an asset to carry out its intended function based on current standards or practices, independent of physical condition. Significant over-utilization or under-utilization may indicate the need to construct, reconstruct, rehabilitate, dispose or reevaluate the need for the asset.

#### **Target**

- Physical Condition: Good – 93.0 per cent, Fair – 7.0 per cent, Poor – 0.0 per cent
- Functional Adequacy: 95.0 per cent
- Utilization: 99.0 per cent

**Table 2**  
**Effective Water Management Infrastructure**

| Physical Condition  | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
|---------------------|---------|---------|---------|---------|---------|
| Good                | 95.5%   | 97.0%   | 96.5%   | 94.9%   | 94.2%   |
| Fair                | 3.6%    | 2.9%    | 3.4%    | 4.8%    | 4.7%    |
| Poor                | 0.9%    | 0.1%    | 0.1%    | 0.3%    | 1.1%    |
| Functional Adequacy | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
| Adequate            | 95.1%   | 95.1%   | 95.1%   | 94.5%   | 93.7%   |
| Inadequate          | 4.9%    | 4.9%    | 4.9%    | 5.5%    | 6.3%    |
| Utilization         | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
| Good                | 99.8%   | 99.8%   | 99.8%   | 99.5%   | 99.2%   |
| Fair                | 0.2%    | 0.2%    | 0.2%    | 0.2%    | 0.2%    |
| Poor                | 0.0%    | 0.0%    | 0.0%    | 0.3%    | 0.6%    |

### **Results Analysis**

The effectiveness of the province's water management infrastructure continued to be high in 2009-2010.

#### *Physical Condition*

In 2009-2010, the percentage of the province's water management infrastructure in 'good' physical condition was 94.2 per cent. This is a decrease of 0.7 per cent from the previous year, but exceeds the target of 93.0 per cent.

#### *Functional Adequacy*

The percentage of assets determined functionally adequate in 2009-2010 is 93.7 per cent, slightly less than the target of 95.0 per cent.

#### *Utilization*

'Good' utilization of water management infrastructure continued to be very high in 2009-2010 at 99.2 per cent. This exceeds our target of 99.0 per cent

### **5b. Drinking Water Safety Indicator**

The Drinking Water Safety Indicator measures the ability of regulated facilities to provide safe drinking water to Albertans. This indicator measures the success of Alberta's drinking water program, ensuring Albertans will continue to enjoy safe drinking water. The indicator is comprised of three sub-measures that measure the performance of the program:

- **Facility Design Standards**

The percentage of facilities meeting the newer standards (1997 or 2006, as applicable).

- **Facility Operational Requirements**

The number of incidents where regulatory requirements have not been met and that could lead to water quality incidents.

- **Water Quality Incidents**

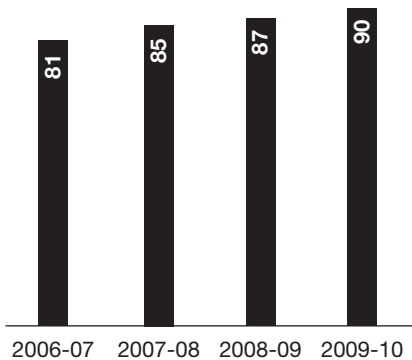
The number of incidents involving drinking water not meeting specified quality requirements.

#### ***Targets***

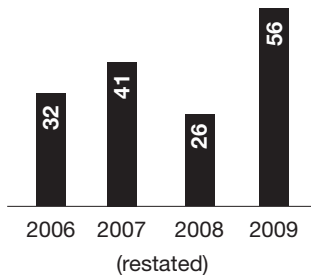
- Facility Design Standards: 90 per cent
- Facility Operational Requirements: 22
- Water Quality: 36

**Figure 15**  
Drinking Water Safety Indicator<sup>1</sup>

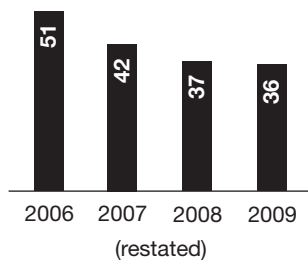
Facility Design Standards  
(percentage of facilities meeting newer standards)



Facility Operational Requirements  
(number of incidents)



Water Quality Incidents  
(number of incidents)



**Note:**

<sup>1</sup> Data does not include waterworks facilities at industrial sites.

### ***Results Analysis***

Results show improvement in the infrastructure of regulated drinking water facilities. The results also indicate an increase in incidents related to meeting operational requirements. This indicates a need to review and reinforce program elements such as abatement, education and enforcement to address challenges related to facility operation and resulting water quality.

#### ***Facility Design Standards***

In 2009-2010, 90 per cent of regulated systems had treatment technology in place meeting newer facility design standards. This is an improvement in water quality technology at three per cent of facilities over the previous year. The remaining facilities meet an older standard and will require upgrading over time.

#### ***Facility Operational Requirements***

Compliance with facility operational requirements saw an increase in the number of incidents in 2009, with 56 incidents in 46 facilities. These results are significantly higher than the target of 22 incidents but are still in the range experienced since the measure was created. Initiatives such as the regional operator consortiums have been developed and implemented to assist facility operators in dealing with operational challenges to reduce the number of incidents.

#### ***Water Quality Incidents***

In 2009, 36 water quality incidents occurred at 33 facilities. Advisories were issued where necessary, and Alberta Environment staff assisted in addressing the problems. The results were on target, which was set at 36. The decrease in the number of incidents is, in part, the result of upgrading facilities to newer standards as well as operators operating in accordance with Facility Operational Requirements. The initiatives to continue upgrading facilities and address the operational challenges are expected to further reduce these incidents in the future.



# **CONTINUING TO BUILD COMMON GROUND**

The ministry will continue its efforts to build common ground to support the cumulative effects management system.

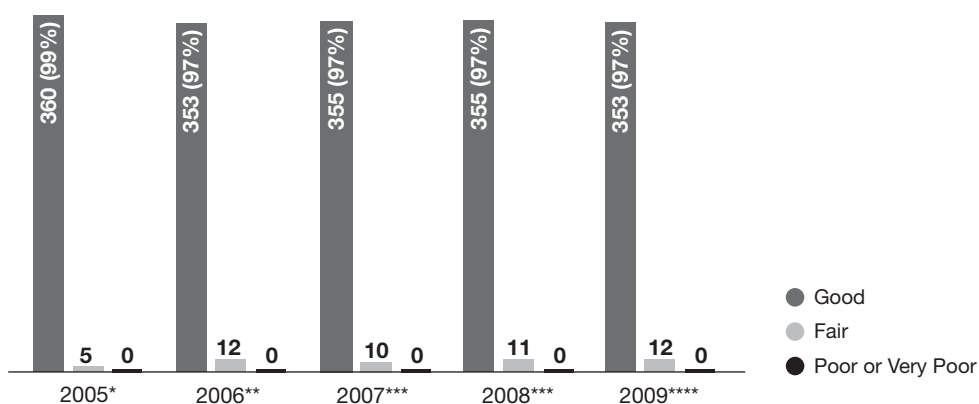
## Performance Measure Data Sources and Methodology

### Goal 1

#### 1a. Air Quality Index

This measure indicates the number of good, fair, poor and very poor air quality days during the calendar year.

**Figure 16**  
(number and percentage of days)



Source: Alberta Environment, Wood Buffalo Environment Association, Peace Airshed Zone Association, Parkland Airshed Management Zone, Fort Air Partnership, Calgary Region Airshed Zone, Lakeland Industry and Community Association and Palliser Airshed Society.

\* Based on data from 12 stations

\*\* Based on data from 13 stations (the Edmonton Northwest station was replaced by the Edmonton South station in 2006)

\*\*\* Based on data from 14 stations (Cold Lake was added in 2007, Calgary Central station location changed in 2008)

\*\*\*\* Based on data from 14 stations (Calgary Central 2 is now in a permanent location and reporting full-time)

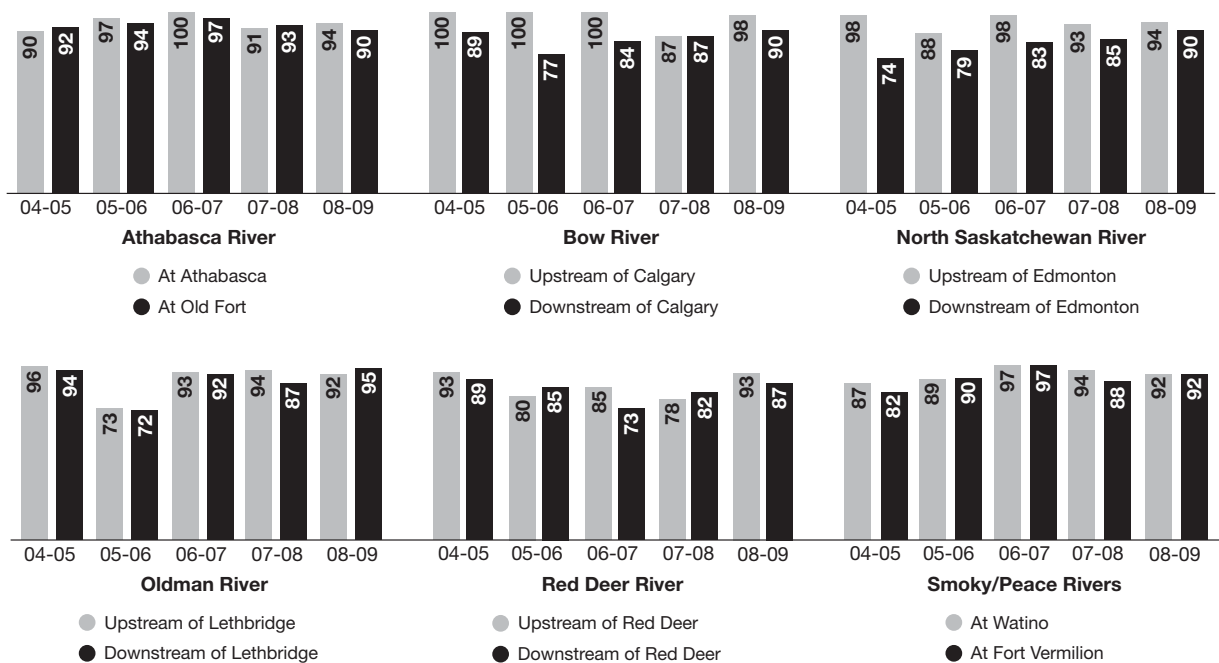
Alberta's air quality index is calculated based on a minimum of four and maximum of five major air pollutants measured hourly at 14 Alberta locations. The monitoring stations are situated in urban centres with consideration given to proximity to industrial and non-industrial sources. The measurements are converted to a standard scale known as the air quality index (AQI), which is calculated for each pollutant every hour. In 2009, the AQI was calculated hourly at 14 continuous monitoring stations, three each in Edmonton and Calgary, two in Fort McMurray, and one each in Fort Saskatchewan, Grande Prairie, Red Deer, Lethbridge, Medicine Hat and Cold Lake. The pollutants used to calculate the AQI are carbon monoxide, fine particulate matter (PM<sub>2.5</sub>), nitrogen dioxide, ozone and sulphur dioxide. Measurements of at least four of the five pollutants must be available to calculate the AQI, and PM<sub>2.5</sub> must be one of the pollutants. The pollutant that gives the highest AQI measure for each hour determines the AQI for that hour. The hourly AQI number is compared to AQI ranges that represent good (0-25), fair (26-50), poor (51-100), and very poor (>100) air quality. The total number of hours of good, fair, poor and very poor air quality for all locations in the year are divided by the number of days in the year and expressed as a percentage. These categories are derived using formulas based on air quality objectives under the *Environmental Protection and Enhancement Act* and the National Ambient Air Quality Objectives.

## 1b. River Water Quality Index

The river water quality index is used to evaluate water quality in Alberta's major river systems with respect to four groups of variables – metals, bacteria, nutrients and pesticides during the fiscal year. Data from these four groups are combined to provide an indication of overall water quality. Alberta Environment has chosen to report on river water quality rather than lake water quality because the effects of human activities are generally more diverse and easier to measure in rivers than in lakes. The index can be used to show relative differences in water quality between rivers, between sites on the same river (e.g., upstream and downstream of developed areas), and over time. Such differences can highlight degradation or improvement that may have a human cause.

The majority of index values show no trends in water quality over time. In 2008-2009, water quality in provincial rivers generally was highly rated. One out of 12 sampling sites scored a rating of 'excellent', while the remaining 11 sites scored 'good'.

**Figure 17**  
(index 0-100)



| Index  | Guidelines  |
|--------|---|
| 96-100 | Almost always met; "Best" Quality (Excellent)   |
| 81-95  | Occasionally exceeded, but usually by small amounts; threat to quality is minimal (Good)  |
| 66-80  | Sometimes exceeded by moderate amounts; quality occasionally departs from desirable levels (Fair)                                     |
| 46-65  | Often exceeded, sometimes by large amounts; quality is threatened, often departing from desirable levels (Marginal)                   |
| 0-45   | Almost always exceeded by large amounts; quality is significantly impaired and is well below desirable levels; "Worst" Quality (Poor) |

Source: Alberta Environment

Note: Various natural and human factors, including flow volume, degree of development in the basin, point source effluent discharges, and non-point source runoff (e.g., from agricultural fields), can influence the Index. In 2008-2009, relatively low precipitation likely reduced the amount of non-point source contaminants entering rivers. This contributed to a reduction in the number and magnitude of water quality guideline exceedances, leading to higher River Water Quality Index ratings.

Data for the river water quality index are collected monthly at numerous monitoring locations throughout the province. These stations comprise the provincial long-term river network. Stations upstream and downstream of agricultural, industrial or municipal areas are compared to examine the overall impact of these developments on river water quality. Index values for a subset of these stations from the province's six major river systems are used to depict changes in water quality that have occurred over the past several years.

Monthly water quality samples are collected at key locations for each of the province's six major river systems. An index value is calculated for each of the four variable groups for data collected between April and March, representing both a fiscal and a water year:

- metals (22 variables measured quarterly);
- nutrients (six variables measured monthly, includes oxygen and pH);
- bacteria (two variables measured monthly); and
- pesticides (17 variables measured four times through the summer).

Index values for the four variable groups are then averaged to produce an overall Index of surface water quality that can be tracked over time.

The formula used to calculate index values for each group is based on three statistical attributes of water quality, relative to desirable levels (defined by water quality guidelines, in most cases):

- Scope – The total number of water quality variables that do not meet guidelines;
- Frequency – The number of individual measurements for all variables combined that do not meet guidelines; and
- Amplitude – The amount by which measurements do not meet guidelines.

Variables in the first three groups (metals, nutrients and bacteria) are compared to guidelines listed in *Surface Water Quality Guidelines for Use in Alberta*. Where a number of guidelines exist for one variable, the guideline for the most sensitive use (recreation, agriculture or the protection of aquatic life) is typically chosen. Drinking water guidelines are not considered, since surface water should not be used for drinking without first being treated. The index calculator is periodically revised to keep current with updates to National Water Quality Guidelines.

Variables in the fourth group (pesticides) are evaluated based on whether they can be detected in a water sample. This conservative approach was adopted because some pesticides do not yet have official guidelines and, unlike metals, nutrients and bacteria, do not occur naturally in the environment.

## Goal 2

### 2a. Environmental Emergencies Response Indicator

Alberta Environment Support and Emergency Response Team (ASERT) Duty Officer receives information on an environmental emergency incident through the Coordination and Information Centre. The ASERT Duty Officer assesses the incident information using the Environmental Classification System contained in the Deployment Protocol. Based on the assessment, ASERT makes a decision whether to deploy a regional responder (Primary) and if required, additional personnel. If deployment is required, the ASERT Duty Officer will notify the Primary and request deployment to the scene.

The Environmental Emergency Response Indicator is calculated by the number of calls that meet the response timelines (50 minutes) divided by the total number of calls received in which a Primary is deployed for an environmental emergency during the fiscal year. The response timelines are measured from the time ASERT receives the information of an environmental emergency incident to the time the ASERT Duty Officer notifies the Primary and requests deployment.

Source: Alberta Environment

### **Goal 3**

#### **3a. Client Satisfaction with Information Provided through Environment's Information Centre**

Alberta Environment's Information Centre conducts an annual survey among clients. Results are based on two forms of information gathering. One is a web-based survey and the second is a phone survey.

Clients are asked to rate their satisfaction on a scale of 1 - 5 where:

1 means 'Excellent'

2 means 'Good'

3 means 'Fair'

4 means 'Poor'

5 means 'Unacceptable'

For reporting purposes, the 'Excellent' and 'Good' rating categories have been combined to represent Clients Satisfied.

In conducting the phone survey, the Information Centre uses services provided by Bell to program the phone system to notify callers they can participate in a phone survey following their call. Information Officers transfer the calls to a pre-recorded system that walks the client through the survey. Callers can press a number to record their response or use voice commands.

When clients send emails to the Information Centre they are asked to complete a web-enabled survey. The completion of the survey is optional.

Source: Alberta Environment

#### **3b. Environmental Awareness Indicator**

An independent consultant conducts an annual telephone survey with a random sample of 800 Albertans aged 18 or older. The "Birthday Method" of selecting respondents, where the interviewer asks to speak to the adult of the household who most recently had a birthday, is used in order to ensure a random selection within households. The interviews are stratified by region, and quotas are established to ensure a reliable sample size for regional analysis. The final data is weighted to ensure the overall sample's regional and age/gender composition reflects that of the actual Alberta population aged 18 or older according to 2006 Census data.

The margin of error for the total sample of 800 is +/- 3.5 percentage points, 19 times out of 20, had the entire population of Albertans 18 or older been polled.

The Environmental Awareness Indicator is calculated by the number of survey respondents who indicated they were aware of one or more of the Government of Alberta's priority environmental initiatives divided by the total number of survey respondents.

Source: Ipsos Reid

## Goal 4

### 4a. Personal Engagement Indicator

An independent consultant conducts an annual telephone survey with a random sample of 800 Albertans aged 18 or older. The “Birthday Method” of selecting respondents, where the interviewer asks to speak to the adult of the household who most recently had a birthday, is used in order to ensure a random selection within households. The interviews are stratified by region, and quotas are established to ensure a reliable sample size for regional analysis. The final data is weighted to ensure the overall sample’s regional and age/gender composition reflects that of the actual Alberta population aged 18 or older according to 2006 Census data.

The margin of error for the total sample of 800 is +/- 3.5 percentage points, 19 times out of 20, had the entire population of Albertans 18 or older been polled.

The Personal Engagement Indicator is calculated by the number of survey respondents who describe themselves as actively engaged in energy, waste or water conservation divided by the total number of survey respondents (800). Survey respondents who describe themselves as actively engaged in energy, waste or water conservation include both “very active” and “somewhat active” survey responses.

Source: Ipsos Reid

### 4b. Beverage Container Return Rate

The Beverage Container Management Board receives monthly sales and empty container return numbers from the Alberta Beverage Container Recycling Corporation, the approved Collection System Agent for empty, non-beer beverage containers, as defined in the Beverage Container Recycling Regulation.

Monthly sales and empty container return numbers for beer containers are received from Brewers Distributor Limited, which is contracted by the Alberta Beer Container Corporation, the approved Collection System Agent as defined in the Beverage Container Recycling Regulation.

The annual return rate is calculated by adding the audited annual empty beverage container returns of beer and non-beer and dividing that total by the manufacturers’ reported beer and non-beer sales, during the calendar year.

Source: Beverage Container Management Board

### 4c. Used Oil Recovery Rate

Volume of oil sold is calculated from remittances of the Environmental Handling Charge. Collectors of used oil calculate the volume of oil recovered from claims for the Return Incentive. The Alberta Used Oil Management Association estimates that 64.5 per cent of all oil sold is recoverable.

Companies provide the total volume sold (recoverable) and collectors are paid based on number of litres collected (recovered). The estimated volume of recoverable oil is calculated by taking the total volume sold multiplied by the current estimate of recoverable oil, during the calendar year.

Source: Alberta Used Oil Management Authority

#### **4d. Municipal Solid Waste to Landfills**

This measure indicates Alberta's progress towards reducing the amount of municipal solid waste disposed in municipal landfills, as measured in kilograms of waste per capita per calendar year. Waste from the residential sector; the industrial, commercial and institutional sector; and the construction, renovation, and demolition sector is included in this measure. The calculation is based on the kilograms of municipal solid waste sent to each landfill, and the population served by each applicable landfill. The measure is calculated using the most up-to-date population statistics from Municipal Affairs' official provincial population list. The information is collected from landfills with weigh scales and is voluntarily provided. Approximately 84 per cent of Alberta's population is served by reporting landfills. Estimates are used for the remaining population, and are derived by multiplying measured urban and measured regional per capita disposal rates with unmeasured urban (if applicable) and unmeasured regional populations.

Source: Alberta Environment

#### **4e. Electronic Recycling**

On a monthly basis, companies report their sales of new electronics in Alberta with their surcharge remittances. Sales data provides the amount of material entering Alberta that will be discarded at some point in the future, which is then used to calculate the amount of old electronics that should be collected and processed through the program. These volumes are used to establish a recovery rate and targets for processed volumes.

Also on a monthly basis, municipal collection sites and processors submit invoices for funding including reports providing the amount of electronic material collected, processed and shipped to an approved use, with acceptable verification of these amounts. The data are aggregated to provide the fiscal year results to be compared to the performance target.

Source: Alberta Recycling Management Authority

#### **4f. Paint Recycling**

On a monthly basis, companies report their sales of new paint in Alberta with their surcharge remittances. Sales data provides the amount of material entering Alberta that will be discarded at some point in the future, which is then used to calculate the amount of waste paint material that should be collected and processed through the program. These volumes are used to establish a recovery rate and targets for processed volumes.

Also on a monthly basis, municipal collection sites and processors submit invoices for funding including reports providing the amount of waste paint material collected, processed and shipped to an approved use, with acceptable verification of these amounts. The data are aggregated to provide the fiscal year results to be compared to the performance target.

Source: Alberta Recycling Management Authority

#### **4g. Facilities recognized as EnviroVista Leaders**

Facilities must apply to become an EnviroVista Leader participant. To be eligible for acceptance into the program, facilities must meet the three criteria. First, facilities must have an Environmental Management System in place. Robust management systems provide the right conditions for excellent performance and continuous improvement. A properly designed and implemented system helps organizations achieve and maintain compliance and improve their environmental performance in both regulated and non-regulated areas.

Secondly, facilities must have sound emissions performance illustrated through greater than 99.5 per cent compliance with each approval limit for hourly and daily source air emissions and daily industrial wastewater emissions averaged over a five-year period.

Finally, a sound record of environmental compliance must be reported by the facility. This includes providing a copy of an Environmental Enforcement Historical Search from the Environment Law Center covering at least five years with no *Environmental Protection and Enhancement Act* or *Water Act* prosecutions, enforcement orders, environmental protection orders, administrative penalties or warning letters.

To remain an EnviroVista Leader, program participants must renew their status every year. Data is collected for this measure during the calendar year.

Source: Alberta Environment

### **Goal 5**

#### **5a. Effective Water Management Infrastructure**

The Effective Water Management Infrastructure (EWTI) measure is an assessment of three aspects of an asset: physical condition, utilization and functional adequacy of provincially-owned water management infrastructure during the fiscal year. Assets include dams, canals and control structures. Reporting of various levels of infrastructure performance for each measure in EWTI is based on the percentage of the replacement value of the infrastructure being assessed.

Data and measures are based upon expert staff assessments using the documented rating systems templates. Initial assessments are subject to review and the approval of management and senior staff at Alberta Environment.

Workflow process and data are managed and housed in Alberta Environment's electronic web-based [Environment Infrastructure Management System \(EIMS\)](#). Asset Inspection Instructions, Deficiency Reporting, a user training program and online help ensures comparable performance ratings are obtained throughout the different regions within the province. Consistent language is used throughout the rating system.

A Consequence of Failure rating is also determined, and numerical values associated with this rating are combined in a matrix format with the Condition, Utilization and Functional Adequacy numerical rating values to determine a Risk Index value for each of the performance measures in EWTI. Performance Measure and Risk Index information prioritizes and ranks projects to aid in the decision to maintain, rehabilitate or replace the infrastructure asset. This information is assessed by management staff at Alberta Environment and Alberta Transportation to provide a basis for good decision-making to help ensure efficient and effective water management infrastructure.

Infrastructure is assessed using the Capital Planning Initiative rating criteria as follows:



**Table 3**  
Capital Planning Initiative Rating Criteria

| Infrastructure Condition Rating | Textual Value | Meaning  | Equivalent CPI/Business Plan Rating |
|---------------------------------|---------------|--|-------------------------------------|
| 2                               | Excellent     | New or like new requiring minimal maintenance.   | Good                                |
| 4                               | Good          | Fully operational and requiring normal maintenance.  | Good                                |
| 6                               | Fair          | Operational but requiring considerable ongoing maintenance.  | Fair                                |
| 8                               | Marginal      | Operational but requiring excessive ongoing maintenance or failure may be possible during a major event. | Poor                                |
| 10                              | Poor          | Not operational or failure may be imminent or occurred.  | Poor                                |

| Infrastructure Functional Rating | Textual Value             | Meaning  | Equivalent CPI/Business Plan Rating |
|----------------------------------|---------------------------|--|-------------------------------------|
| 2                                | Acceptable (Adequate)     | The asset satisfies one of the following criteria, depending on the type of asset: <ul style="list-style-type: none"> <li>• Meets current <i>Dam and Canal Safety Guidelines</i>.</li> <li>• Meets current operational requirements.</li> </ul>                  | Adequate                            |
| 10                               | Unacceptable (Inadequate) | One of the following criteria applies to the asset, depending on the type of asset: <ul style="list-style-type: none"> <li>• Does not meet current <i>Dam and Canal Safety Guidelines</i>.</li> <li>• Does not meet current operational requirements.</li> </ul> | Inadequate                          |

| Infrastructure Utilization Rating | Textual Value       | Meaning   | Equivalent CPI/Business Plan Rating |
|-----------------------------------|---------------------|---|-------------------------------------|
| 2                                 | Significantly Under | Significantly under targeted capacity range.                  | Good                                |
| 4                                 | Within              | Within targeted capacity range.                               | Good                                |
| 6                                 | Somewhat Over       | Somewhat over targeted capacity range.                        | Fair                                |
| 8                                 | Significantly Over  | Significantly over targeted capacity range.                   | Poor                                |
| 10                                | Beyond              | Beyond targeted capacity range and applied factors of safety. | Poor                                |

Source: Alberta Environment

## **5b. Drinking Water Safety Indicator**

The Drinking Water Safety Indicator is comprised of three separate sub-measures that collectively provide an indicator of the performance of regulated waterworks facilities in delivering safe drinking water to Albertans. Under the *Environmental Protection and Enhancement Act*, Alberta Environment regulates waterworks facilities that provide drinking water to Albertans, including campgrounds and rural subdivisions that use surface water sources, and all waterworks in villages, towns and cities. The indicator measures the success of Alberta's drinking water program, ensuring Albertans will continue to enjoy safe drinking water.

### ***Facility Design Standards***

The sub-measure is an assessment of an approved drinking water facility's design and performance requirement against newer Alberta Environment design standards during the fiscal year. These standards are revised every five to 10 years. In January 2006, new standards were introduced and have been utilized for the facilities to which they apply. The reported results indicate the number of facilities that have been maintained or upgraded to meet newer requirements.

Facilities existing prior to January 1, 2006, will be assessed against 1997 standards until they are transitioned to the 2006 standards over a period of approximately 10 years. All new and modified/upgraded facilities will be compared against 2006 standards. Over time, facilities assessed against the 1997 standard will be assessed against the 2006 standard in accordance with the scheduled transition. Alberta Environment updates these assessments throughout the year and report the results annually to indicate if continuous improvement and upgrading is occurring at the regulated facilities.

### ***Facility Operational Requirements***

Approved drinking water facilities operate under conditions of an approval or registration issued under the *Environmental Protection and Enhancement Act*. This sub-measure shows incidents where required conditions have not been met and could lead to water quality concerns during the calendar year. Facilities are required to self-report non-compliance and in addition, Alberta Environment annually inspects approved facilities and reports the number of non-compliance incidents.

### ***Water Quality Incidents***

Regulated drinking water facilities must report on the quality of the treated water against specified limits.

Alberta adopted the health-related limits of the Guidelines for Canadian Drinking Water Quality published by Health Canada and established treatment performance requirements. Most health-related limits are a concern if the water is consumed over a long period of time whereas performance requirements are of a more immediate concern. Intervention is needed in either case and may range from a public health advisory, preventing consumption of the water, to a requirement to upgrade a waterworks facility.

This sub-measure shows incidents where a water quality parameter exceeded established limits and identifies the total number of these non-compliance incidents on a provincial basis during the calendar year. Facilities are required to self-report non-compliance. In addition, Alberta Environment staff annually inspect approved facilities and report the number of non-compliance incidents.

Source: Alberta Environment

## Changes to Performance Measures Information

As Alberta Environment continues to implement strategies to improve its role as an environmental manager and steward, performance measures are reviewed for effectiveness in charting the ministry's progress toward its goals. Alberta Environment is committed to developing, monitoring and reporting on the best measures available to reflect whether the ministry is having an effect in improving environmental outcomes.

The following changes made since the 2008-2009 Annual Report will ensure the current measures are more appropriate either because they better reflect the ministry's evolving role or because they conform better to standards for business planning and reporting.

- Policy Capacity Indicator and Number of Regulatory and Non-regulatory tools under Review/ Development were discontinued
- Total Greenhouse Gas Emissions (Under Development) results will be reported in 2010-11
- Previously established Air Quality Index and River Water Quality Index are being added in 2009-2010
- Environmental Awareness Indicator, Personal Engagement Indicator and Paint Recycling are new performance measures being added in 2009-2010
- Facilities Implementing Stewardship was renamed to Facilities Recognized as EnviroVista Leaders
- Client Access to Information through Environment's Information Centre was renamed to Client Satisfaction with Information provided through Environment's Information Centre

Several performance measures descriptions were revised or further refined in 2009-2010 in order to better track progress towards achievement of the ministry's goals. These are:

- Client Satisfaction with Information provided through Environment's Information Centre
  - Accessibility:  
Measures the percentage of clients satisfied with accessibility to Environment's Information Centre
  - Knowledge:  
Measures the percentage of clients satisfied with Environment's Information Centre knowledge
- Environmental Emergencies Response Indicator –  
Measures the response by Alberta Environment to environmental emergencies within established timelines
- Facilities Recognized as EnviroVista Leaders –  
Measures the number of regulated facilities recognized as EnviroVista Leaders
- Drinking Water Safety Indicator
  - Facility Design Standards:  
Measures the percentage of facilities meeting newer standards (1997 or 2006, as applicable)
  - Facility Operational Requirements:  
Measures the number of incidents where regulatory requirements have not been met and that could lead to water quality incidents
  - Water Quality Incidents:  
Measures the number of incidents involving drinking water not meeting specified quality requirements

The Drinking Water Safety Indicator's Last Actuals for two sub-measures were updated to reflect the new data collection period of January 1 to December 31:

- Facility Operational Requirements Last Actual was updated to 32 incidents in 2006, 41 incidents in 2007 and 26 incidents in 2008
- Water Quality Incidents Last Actual was updated to 51 incidents in 2006, 42 incidents in 2007 and 37 incidents in 2008

The Environmental Emergencies Response Indicator Last Actual was updated to reflect the percentage of environmental emergency incidents responded to within 50 minutes. For 2008-2009, the Last Actual was updated to 85 per cent.

The Beverage Container Return Rate results for 2009 include milk and cream containers. This represents a change from Environment's 2009-12 Business Plan.

The Effective Water Management Infrastructure results for 2009-2010 are based on point in time data as of November. This represents a change from previous years where March had been the point in time. We anticipate that March will continue to be used as the point in time data collection period after this year. This is the final year that Effective Water Management Infrastructure results will be reported using the current methodology. As is standard, the new methodology will be outlined in next year's Annual Report.

Finally, the following performance measures historical results were corrected:

- Municipal Solid Waste to Landfills
  - Results for 2008 were corrected to 841
- Facilities Recognized as EnviroVista Leaders
  - Results for 2007 were corrected to 23
- Used Oil Recovery Rate
  - Results for 2008 were corrected to 83 per cent

## Integrated Results Analysis

Alberta Environment, through these challenging times, focused its resources on the Government of Alberta's four point plan for economic recovery. The plan included maintaining fiscal responsibility, using savings to protect programs and services, continuing to invest in infrastructure and promoting the environment.

The department continued its key role in implementing the cumulative effects management framework in Alberta's Industrial Heartland to enforce environmental thresholds and build collaborative partnerships with stakeholders. Alberta Environment also implemented the regional cumulative effects management framework developed under Alberta's *Land-use Framework* for the South Saskatchewan and Lower Athabasca Regions.

Alberta Environment worked with a cross-ministry committee to review more than 40 project proposals submitted for funding under the Canada ecoTrust fund that was established in 2007. From this fund, Alberta invested in international clean-energy partnerships aimed at improving oil sands tailings management, advanced reclamation methods, greenhouse gas reduction technologies and renewable energy projects.

In 2009, Alberta residents received more than \$2.5 million for making environmental upgrades to their homes under the province's Energy Efficiency and Conservation rebate program. In addition, Alberta Environment joined forces with the Alberta Urban Municipalities Association and the Alberta Association of Municipal Districts and Counties to establish the first Municipal Climate Change Action Centre in Alberta. This centre will provide technical assistance and expertise to municipalities to increase energy efficiency of operations and improve community-wide conservation.

The Climate Change and Emissions Management Fund reported \$60.4 million in revenue for the 2010 fiscal year, which includes accounting estimates for the period January 1 to March 31. Revenue collected for the 2009 compliance period totalled \$62.9 million and an additional \$1.4 million was collected for previous compliance periods. A total of \$187.8 million has been collected for the Climate Change and Emissions Management Fund. The fund provides grant payments to the Climate Change and Emissions Management Corporation (CCEMC), an independent not-for-profit organization. The grant expense for the 2009-2010 fiscal year was \$59.4 million, which includes accounting estimates for the period January 1 to March 31. The CCEMC will invest in initiatives and projects that support developing and implementing transformative technologies that will reduce greenhouse gas emissions and improve our ability to adapt to climate change.

The ministry continues to move forward with its *Water for Life* strategy by setting our water plans in motion through the release of the *Water for Life* action plan, which outlines in more detail the policies, goals and key directions that government will take to manage our water over the next 10 years.

Alberta Environment continues to be adaptable and resilient in response to changing economic conditions, while ensuring environmental protection of Alberta's air, land and water.

## Comparison of 2009-2010 Budget to 2009-2010 Actuals

The following provides explanations of the major program variances:

### **Ministry Support Services**

The program spending was higher than the budgeted amount by \$4 million due to reallocated funding to support Business Application Development aimed at modernizing and integrating department information for: regulatory business support applications, cross-ministry information and knowledge-sharing systems and departmental business support systems.

### **Climate Change**

The program spending was lower than the budget amount by \$31 million due mainly to a \$20 million deferral of initiatives under Canada ecoTrust for Clean Air and Climate Change. In addition, funding was reallocated to support regional landfill development under the Alberta Waste Management Assistance program.

### **Environmental Relationships, Partnerships and Strategies**

The program spending exceeded the budgeted amount by \$8 million primarily due to grant payments in support of landfill development under the Alberta Waste Management Assistance Program.

### **Resource Management**

The program spending was lower than the budgeted amount by \$3 million due to a greater focus on critical priorities. The program spending in 2009-2010 reflects the ministry's role in leading Alberta's transition to an outcomes-focused cumulative effects management system within Alberta's *Land-use Framework*.

### **Approvals**

The program expenditures are \$6 million lower than the budgeted amount due to dedicated revenue shortfalls; fewer applications were received for reclamation and remediation certificates, resulting in fewer site audits being conducted. In addition, fewer resources were required for review and redesign of the regulatory approvals process, and opportunities that focused on high areas of environmental risk were streamlined.

### **Oil Sands Innovation and Policy**

The program spending was higher than the budgeted amount by \$3 million due to a change in ministry priorities to allow a greater focus on Cumulative Effects Management and regional planning in the Lower Athabasca oil sands area. The established frameworks assure policy directions that facilitate resource development while sustaining the environment. Initiatives undertaken in 2009-2010 include the Contaminant Load Study, progressive reclamation strategy for mineable oil sands and improved tailings management.

### **Climate Change and Emissions Management**

The program spending was lower than the budgeted amount by \$35 million due to lower than expected Climate Change and Emissions Management Fund revenue being received from industry; as a result, the ministry made lower grant payments to the Climate Change and Emissions Management Corporation.

## Comparison of 2009-2010 Actuals to 2008-2009 Actuals

The following provides explanations of the major program variances:

### **Ministry Support Services**

The program spending in 2009-2010 is \$4 million higher than in 2008-2009 due to increased spending to enhance, modernize and integrate department information with business development applications.

### **Monitoring, Reporting and Innovation**

The program expenditures are \$3 million lower than in 2008-2009 due to a greater focus on critical priorities which resulted in scaling back the frequency of monitoring in some low risk areas. The program continues to provide reliable, timely and readily-accessible information to enable and assure Albertans that Alberta Environment and its partners are effective stewards of the environment.

### **Air and Land Policy**

The program expenditures are \$3 million lower than in 2008-2009 due to a greater focus on critical priorities. This surplus funding was used in other program areas to address cumulative effects management, water allocation policy development, Lower Athabasca Regional Plan and the Contaminant Load Study.

### **Climate Change**

Program spending in 2009-2010 is \$37 million higher than in 2008-2009 due to grant payments of \$32 million for research projects approved under Canada ecoTrust for Clean Air and Climate Change. In addition, funding was provided for the Commercial Lighting and Vehicle Efficiency programs and for the establishment of the Municipal Climate Change Action Centre as part of the energy efficiency and conservation program aimed at promoting the reduction of greenhouse gas emissions and air pollutants in Alberta.

### **Intergovernmental Relationships and Partnerships**

The program spending in 2009-2010 is \$8 million higher than in 2008-2009 primarily due to grant payments of \$6 million to the Beaver River Regional Waste Management Commission in support of regional landfill development under the Alberta Waste Management Assistance program.

### **Water For Life**

The program spending is \$3 million lower than in 2008-2009 due primarily to deferred development in areas within the water allocation framework. The *Water for Life* strategy continues to move forward with the release of the *Water for Life* action plan.

### **Climate Change and Emissions Management**

The program spending in 2009-2010 is \$85 million lower than in 2008-2009 due to grant payments made to the Climate Change and Emissions Management Corporation in 2008-2009 covering two fiscal years of revenues. In addition, industry utilized other compliance options, resulting in fewer revenues being collected in 2009-2010.

# Ministry Expense by Function

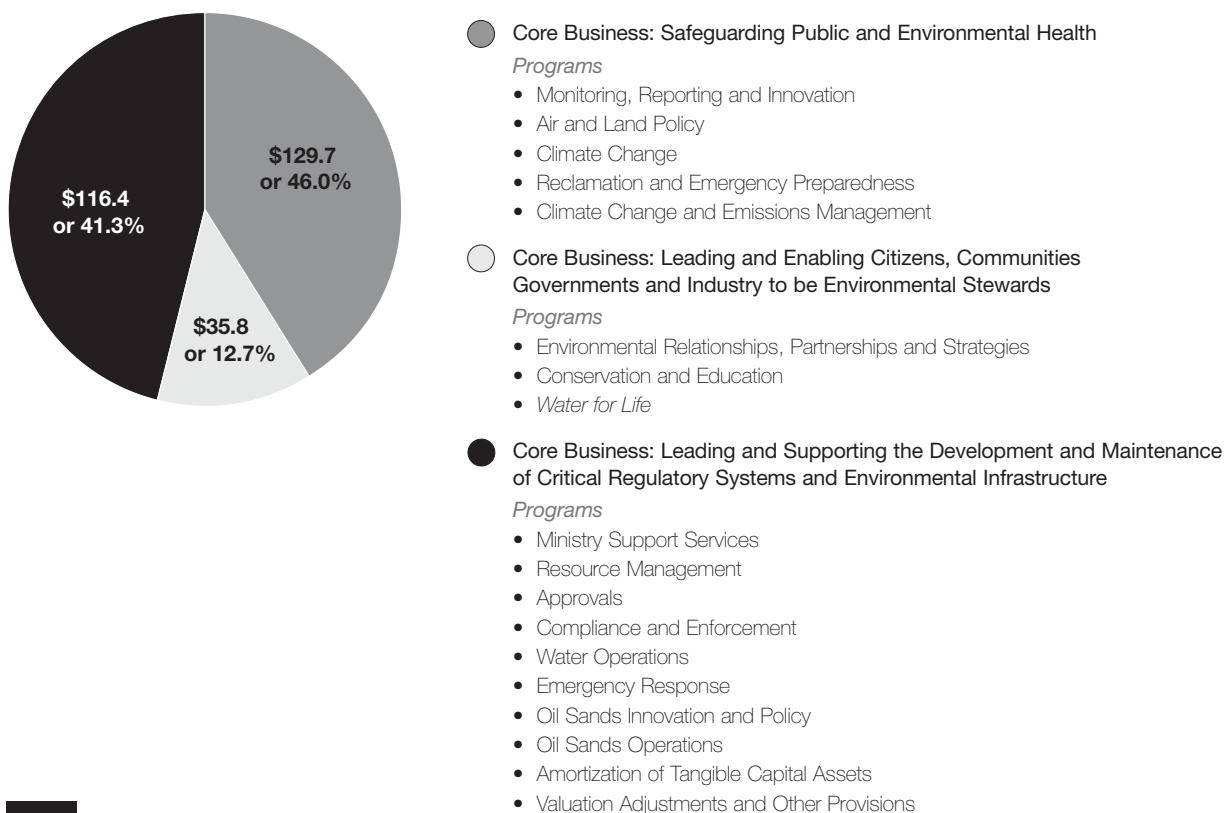
**Table 3**  
Ministry Expense by Core Business

Year ended March 31 (unaudited)  
(in thousands)

|   | 2010       |            | 2009       |
|---|------------|------------|------------|
|   | Budget     | Actual     | Actual     |
| Safeguarding Public and Environmental Health<br>Leading and Enabling Citizens, Communities,<br>Governments and Industry to be<br>Environmental Stewards | \$ 195,120 | \$ 129,675 | \$ 184,067 |
| Leading and Supporting the Development and<br>Maintenance of Critical Regulatory Systems<br>and Environmental Infrastructure                            | 28,457     | 35,756     | 32,160     |
|   | 124,100    | 116,465    | 116,542    |
|   | \$ 347,677 | \$ 281,896 | \$ 332,769 |

Note: The total ministry expense is included in only one function, Environment.

**Figure 18**  
2009-2010 Ministry Expense by Core Business  
(in millions)





---

# Financial Information

---

# **Annual Report Financial Information**

## **2009-2010**

### CONTENTS

- 75 Ministry of Environment Consolidated Financial Statements**
- 97 Department of Environment Financial Statements**
- 119 Climate Change and Emissions Management Fund Financial Statements**

# Ministry of Environment

## CONSOLIDATED FINANCIAL STATEMENTS

---

Year Ended March 31, 2010

## Auditor's Report



To the Members of the Legislative Assembly

I have audited the consolidated statements of financial position of the Ministry of Environment as at March 31, 2010 and 2009, and the consolidated statements of operations and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Ministry's management. My responsibility is to express an opinion on these financial statements based on my audits.

I conducted my audits in accordance with Canadian generally accepted auditing standards. Those standards require that I 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 my opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Ministry as at March 31, 2010 and 2009 and the results of its operations and its cash flows for the years then ended in accordance with Canadian generally accepted accounting principles.

Original signed by Merwan N. Saher, CA  
Auditor General

Edmonton, Alberta  
June 10, 2010

# Consolidated Statements of Operations

Year ended March 31 (in thousands)

|   | 2010                   |              | 2009                           |
|---|------------------------|--------------|--------------------------------|
|   | Budget<br>(Schedule 4) | Actual       | Actual<br>(Restated – Note 11) |
| Revenues (Schedule 1)   |                        |              |                                |
| Internal Government Transfers                                       | \$ 3,175               | \$ 1,401     | \$ 2,108                       |
| Transfers from Government of Canada                                 | 51,967                 | 32,410       | –                              |
| Premiums, Fees and Licenses   | 5,725                  | 2,122        | 2,415                          |
| Climate Change and Emissions Management Fund                        | 95,000                 | 60,449       | 85,261                         |
| Other Revenue   | 3,248                  | 1,437        | 3,420                          |
|   | 159,115                | 97,819       | 93,204                         |
| Expenses – Directly Incurred (Note 2b and Schedule 7)               |                        |              |                                |
| Voted (Schedules 3 and 5)   |                        |              |                                |
| Ministry Support Services   | 21,876                 | 25,800       | 22,283                         |
| Environmental Assurance:  |                        |              |                                |
| Monitoring, Reporting and Innovation                                | 12,256                 | 13,209       | 15,918                         |
| Air and Land Policy   | 7,941                  | 8,398        | 11,009                         |
| Climate Change  | 77,248                 | 46,718       | 9,947                          |
| Environmental Stewardship:  |                        |              |                                |
| Environmental Relationships, Partnerships<br>and Strategies         | 7,664                  | 15,864       | 7,894                          |
| Conservation and Education  | 4,471                  | 5,379        | 6,393                          |
| Water for Life  | 16,322                 | 14,513       | 17,873                         |
| Environmental Management:   |                        |              |                                |
| Resource Management   | 17,962                 | 14,717       | 13,939                         |
| Approvals   | 26,060                 | 19,920       | 20,883                         |
| Compliance and Enforcement  | 11,620                 | 10,918       | 11,447                         |
| Water Operations  | 15,581                 | 15,019       | 16,403                         |
| Emergency Response  | 1,447                  | 1,531        | 1,738                          |
| Amortization of Tangible Capital Assets                             | 22,361                 | 20,089       | 19,902                         |
| Oil Sands Environmental Management:                                 |                        |              |                                |
| Oil Sands Innovation and Policy                                     | 4,594                  | 7,894        | 6,536                          |
| Oil Sands Operations  | 2,500                  | –            | 2,192                          |
|   | 249,903                | 219,969      | 184,357                        |
| Statutory Programs (Schedules 3 and 5)                              |                        |              |                                |
| Land Reclamation Program  | 550                    | 562          | 1,371                          |
| Emergency Spills and Cleanups                                       | 1,525                  | 339          | 147                            |
| Drought and Flood Emergencies                                       | 600                    | –            | 90                             |
| Valuation Adjustments   |                        |              |                                |
| Provision for Doubtful Accounts                                     | –                      | (6)          | (2)                            |
| Provision for Vacation Pay  | 99                     | 607          | 1,261                          |
| Provision for Remediation and Reclamation                           | –                      | (24)         | (40)                           |
| Grant to the Climate Change and Emissions<br>Management Corporation | 95,000                 | 60,449       | 145,585                        |
|   | 97,774                 | 61,927       | 148,412                        |
| Total Expenses  | 347,677                | 281,896      | 332,769                        |
| Gain (Loss) on Disposal of Tangible Capital Assets                  | –                      | –            | 4                              |
| Net Operating Results   | \$ (188,562)           | \$ (184,077) | \$ (239,561)                   |

The accompanying notes and schedules are part of these financial statements.

## Consolidated Statements of Financial Position

As at March 31 (in thousands)

|   | 2010              | 2009                 |
|---|-------------------|----------------------|
|   |                   | (Restated – Note 11) |
| <b>ASSETS</b>                                     |                   |                      |
| Cash  | \$ 46,932         | \$ 91,582            |
| Accounts Receivable (Note 3)                      | 33,747            | 54,926               |
| Tangible Capital Assets (Note 4)                  | 864,194           | 868,958              |
|   | <b>\$ 944,873</b> | <b>\$ 1,015,466</b>  |
| <b>LIABILITIES</b>                                |                   |                      |
| Accounts Payable and Accrued Liabilities (Note 5) | \$ 103,081        | \$ 174,592           |
| Unearned Revenue (Note 6)                         | 124,454           | 156,522              |
|   | <b>227,535</b>    | <b>331,114</b>       |
| <b>NET ASSETS</b>                                 |                   |                      |
| Net Assets at Beginning of Year                   | 684,352           | 741,253              |
| Net Operating Results                             | (184,077)         | (239,561)            |
| Net Financing Provided from General Revenues      | 217,063           | 182,660              |
| Net Assets at End of Year                         | <b>717,338</b>    | <b>684,352</b>       |
|   | <b>\$ 944,873</b> | <b>\$ 1,015,466</b>  |

The accompanying notes and schedules are part of these financial statements.

## Consolidated Statements of Cash Flows

Year ended March 31 (in thousands)

|  | 2010         | 2009                 |
|--|--------------|----------------------|
|  |              | (Restated – Note 11) |
| Operating Transactions   |              |                      |
| Net Operating Results  | \$ (184,077) | \$ (239,561)         |
| Non-cash items included in Net Operating Results                   |              |                      |
| Amortization (Schedule 3)  | 20,089       | 19,902               |
| Gain (Loss) on Disposal of Tangible Capital Assets                 | –            | (4)                  |
| Valuation Adjustments  | 576          | 1,219                |
|  | (163,412)    | (218,444)            |
| Decrease (Increase) in Accounts Receivable                         | 21,185       | (29,232)             |
| Increase (Decrease) in Accounts Payable and Accrued Liabilities    | (72,093)     | 131,200              |
| Decrease in Unearned Revenue                                       | (32,068)     | (71)                 |
| Cash Applied to Operating Transactions                             | (246,388)    | (116,547)            |
| Capital Transactions   |              |                      |
| Acquisition of Tangible Capital Assets                             | (780)        | (2,180)              |
| Disposals and Write Downs of Tangible Capital Assets               | 39           | 55                   |
| Transfer of Tangible Capital Assets to other Government Entities   | –            | 9                    |
| Transfer of Tangible Capital Assets from other Government Entities | (14,584)     | (8,376)              |
| Cash Applied to Capital Transactions                               | (15,325)     | (10,492)             |
| Investing Transactions   |              |                      |
| Decrease (Increase) in Advances                                    | –            | 14                   |
| Cash Provided by (Applied to) Investing Transactions               | –            | 14                   |
| Financing Transactions   |              |                      |
| Net Financing Provided from General Revenues <sup>(1)</sup>        | 217,063      | 182,660              |
| Increase (Decrease) in Cash  | (44,650)     | 55,635               |
| Cash, Beginning of Year  | 91,582       | 35,947               |
| Cash, End of Year  | \$ 46,932    | \$ 91,582            |

(1) 2009 figure includes \$75 for a non-cash transfer from Infrastructure (Note 11).

The accompanying notes and schedules are part of these financial statements.

# Notes to the Consolidated Financial Statements (in thousands)

## Note 1

### Authority and Purpose

The Ministry of Environment has been designated as responsible for various Acts by the *Government Organization Act* and its regulations. The purpose of the ministry is to ensure that Alberta's environment sustains a high quality of life.

#### **Climate Change and Emissions Management Fund**

The CCEMF operates as follows:

- Revenues in the CCEMF are primarily from facilities' purchase of fund credits (\$15 per tonne) used in meeting net emissions intensity limits. Facilities can also make improvements to their operations, purchase Alberta based offsets, or use emission performance credits. Emissions intensity is the ratio of greenhouse gas emissions to facilities' production for the period.
- Emissions measurement involves the use of different methodologies including estimation techniques and use of emission factors. Such techniques can involve using equipment with varying degrees of precision. Use of different techniques and emission factors will produce different results.
- Management has provided guidance to facilities and verifiers for the calculation and verification of emissions intensity. Every facility submitting a compliance report is required to have a third party verify the report at a limited level of assurance. In a limited level of assurance engagement, verifiers perform procedures with the objective of assessing whether the information reported by facilities is plausible within the framework of the guidance provided by management.

The systems and processes including the offsets purchased by facilities are new and complex. Management believes that as the system evolves, and more guidance is developed, the calculation of emissions intensity will be refined through improved methodologies and data quality.

Management's guidance to the tillage offset verifiers allows the verifiers to rely on the offset project developers' written attestations and records as evidence that the offsets are valid. Management is in the process of revising its guidance to require verifiers to collect corroborating evidence. This guidance is expected to come into effect for the 2010 compliance period.

## Note 2

### Summary of Significant Accounting Policies and Reporting Practices

These financial statements are prepared primarily in accordance with Canadian generally accepted accounting principles for the public sector as recommended by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants. The PSAB financial statements presentation standard for government summary financial statements has been modified to more appropriately reflect the nature of the ministry.

#### **(a) Reporting Entity**

The Ministry of Environment administers the organizations listed below. The authority under which each organization operates is also listed. Together, these organizations form the Ministry of Environment and constitute the reporting entity.

#### **Organization**

Department of Environment  
Climate Change and Emissions Management Fund (CCEMF)

#### **Authority**

*Government Organization Act*  
*Climate Change and Emissions Management Act*



# Notes to the Consolidated Financial Statements (in thousands)

## (b) Basis of Financial Reporting

### *Revenues and Measurement Uncertainty*

#### Department

All revenues under the department are reported on the accrual basis of accounting. Cash received for which goods or services have not been provided by year end is recorded as unearned revenue.

#### Climate Change and Emissions Management Fund – Revenue

All revenues under CCEMF are reported on the accrual basis of accounting.

The revenues are measured from amounts assessed by management and from estimates of amounts not yet assessed. Revenues for the fiscal year also include adjustments between the estimated revenues of previous years and actual amounts.

Management has adopted a regulatory materiality threshold of 5 per cent on emissions or production reported per facility when calculating emissions intensity. This threshold limit requires facilities to correct and re-verify submissions where amounts exceed the 5 per cent limit. Management can require errors below the threshold to be corrected. Uncorrected amounts less than the 5 per cent limit for all facilities have not been quantified.

#### Climate Change and Emissions Management Fund – Measurement Uncertainty

Until assessed by management, revenue is estimated based on the amounts reported by the facilities in their compliance reports. The compliance period for facilities is on a calendar basis. The 2010 accounts receivable and revenues include an estimate of \$16,078 for the revenues owing for the period January 1 to March 31, 2010 (2009 – \$20,834). These estimates are subject to measurement uncertainty and actual results could vary by a material amount.

#### Internal Government Transfers

Internal government transfers are transfers between entities within the government reporting entity where the entity making the transfer does not receive any goods or services directly in return. Internal government transfers are recognized as revenue when received.

#### Transfers from Government of Canada

Transfers from Government of Canada are recognized as revenue when authorized by federal legislation or federal/provincial agreements, eligibility criteria if any are met and a reasonable estimate of amounts can be made.

#### Credit or Recovery

Credit or Recovery initiatives provide a basis for authorizing spending. Credits or Recoveries are shown in the details of the Government Estimates for a supply vote. If budgeted revenues are not fully realized, spending is reduced by an equivalent amount. If actual credit or recovery amounts exceed budget, the ministry may, with the approval of the Treasury Board, use the excess to fund additional expenses of the program. Schedule 2 discloses information on the ministry's credit or recovery initiatives.

## *Expenses*

#### Directly Incurred

Directly incurred expenses are those costs the ministry has primary responsibility and accountability for, as reflected in the Government's budget documents.

In addition to program operating expenses such as salaries, supplies, etc., directly incurred expenses also include:

- Amortization of tangible capital assets.
- Pension costs, which comprise the cost of employer contributions for current service employees during the year.
- Valuation adjustments which include changes in the valuation allowances used to reflect financial assets at their net recoverable or other appropriate value. Valuation adjustments also represent the change in management's estimate of future payments arising from obligations relating to vacation pay.

Grants are recognized as expenses when authorized, eligibility criteria, if any, are met and a reasonable estimate of the amount can be made.

# Notes to the Consolidated Financial Statements (in thousands)

## Note 2

### Summary of Significant Accounting Policies and Reporting Practices

#### (b) Basis of Financial Reporting (continued)

##### Incurred by Others

Services contributed by other entities in support of the ministry operations are not recognized and are disclosed in Schedule 6 and allocated to programs in Schedule 7.

##### **Assets**

Financial assets are assets that could be used to discharge existing liabilities or finance future operations and are not for consumption in the normal course of operations. Financial assets of the ministry are limited to financial claims, such as advances to and receivables from other organizations, employees and other individuals.

Assets acquired by right are not included. Tangible capital assets of the ministry are recorded at historical cost and amortized on a straight-line basis over the estimated useful lives of the assets. The threshold for capitalizing new systems development is \$250 and the threshold for major system enhancements is \$100. The threshold for all other tangible capital assets is \$5. All land is capitalized.

##### **Liabilities**

Liabilities are recorded to the extent that they represent present obligations as a result of events and transactions occurring prior to the end of fiscal year. The settlement of liabilities will result in sacrifice of economic benefits in the future.

Environmental liabilities arise from the obligation to clean up contaminated sites (remediation) or to return disturbed land to an equivalent use (reclamation). A remediation or reclamation liability is recognized when the ministry is obligated to incur such costs and an amount can be reasonably estimated.

##### **Net Assets**

Net assets represent the difference between the carrying value of assets held by the ministry and its liabilities.

##### **Valuation of Financial Assets and Liabilities**

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

The fair values of cash, accounts receivable, advances, and accounts payable and accrued liabilities are estimated to approximate their carrying values because of the short term nature of these instruments.

## Notes to the Consolidated Financial Statements (in thousands)

### Note 3

#### Accounts Receivable

|   | 2010         |                                 |                      | 2009                 |
|---|--------------|---------------------------------|----------------------|----------------------|
|   | Gross Amount | Allowance for Doubtful Accounts | Net Realizable Value | Net Realizable Value |
| Climate Change and Emissions Management Fund                    | \$ 32,972    | \$ –                            | \$ 32,972            | \$ 54,098            |
| Other Sources   | 368          | –                               | 368                  | 494                  |
| Transfer from the Environmental Protection and Enhancement Fund | 407          | –                               | 407                  | 334                  |
|   | \$ 33,747    | \$ –                            | \$ 33,747            | \$ 54,926            |

Accounts receivable are unsecured and non-interest bearing.

# Notes to the Consolidated Financial Statements (in thousands)

## Note 4 Tangible Capital Assets

|   | Buildings | Equipment* | Computer Hardware & Software | Land Improvements | Bridges  | Dam & Water Management Structures** | 2010 Total   | 2009 Total   |
|---|-----------|------------|------------------------------|-------------------|----------|-------------------------------------|--------------|--------------|
| <b>Estimated Useful Life</b>            | 10 years  | 3-10 years | 5-10 Years                   | 40 years          | 50 years | 25-80 years                         |              |              |
| <b>Historical Cost***</b>               |           |            |                              |                   |          |                                     |              |              |
| Beginning of year                       | \$ 4      | \$ 14,362  | \$ 20,424                    | \$ 49             | \$ 469   | \$ 1,168,160                        | \$ 1,203,468 | \$ 1,193,052 |
| Additions                               | –         | 450        | 270                          | 60                | –        | 14,584                              | 15,364       | 10,556       |
| Disposals, including write downs        | –         | (37)       | (2)                          | –                 | –        | –                                   | (39)         | (140)        |
|   | \$ 4      | \$ 14,775  | \$ 20,692                    | \$ 109            | \$ 469   | \$ 1,182,744                        | \$ 1,218,793 | \$ 1,203,468 |
| <b>Accumulated Amortization</b>         |           |            |                              |                   |          |                                     |              |              |
| Beginning of year                       | \$ 1      | \$ 6,592   | \$ 17,266                    | \$ 7              | \$ 94    | \$ 310,550                          | \$ 334,510   | \$ 314,688   |
| Amortization Expense                    | –         | 957        | 795                          | 3                 | 9        | 18,325                              | 20,089       | 19,902       |
| Effect of disposals                     | –         | –          | –                            | –                 | –        | –                                   | –            | (80)         |
|   | \$ 1      | \$ 7,549   | \$ 18,061                    | \$ 10             | \$ 103   | \$ 328,875                          | \$ 354,599   | \$ 334,510   |
| <b>Net Book Value at March 31, 2010</b> | \$ 3      | \$ 7,226   | \$ 2,631                     | \$ 99             | \$ 366   | \$ 853,869                          | \$ 864,194   |              |
| <b>Net Book Value at March 31, 2009</b> | \$ 3      | \$ 7,770   | \$ 3,158                     | \$ 42             | \$ 375   | \$ 857,610                          |              | \$ 868,958   |

\* Equipment includes vehicles, office, laboratory, heavy equipment and mobile equipment.

\*\* Dams and water management structures include dams, reservoirs, weirs, canals, dykes, ditches, channels, diversions, cut-offs, pump houses and erosion protection structures, which are constructed by the Ministry of Transportation and transferred to the Ministry of Environment upon their completion.

\*\*\* Historical cost includes work-in-progress at March 31, 2010 totaling \$11,297 comprised of: equipment \$335 (2009 – \$1,264); computer hardware and software \$1,471 (2009 – \$249); and dam improvements \$9,491 (2009 – \$0).

Changes to tangible capital assets were as follows:

|   | 2010       | 2009       |
|---|------------|------------|
| Net Book Value at Beginning of Year         | \$ 868,958 | \$ 878,364 |
| Purchase of Tangible Capital Assets         | 780        | 2,180      |
| Net Book Value of Disposals and Write Downs | (39)       | (51)       |
| Transfer with Other Government Entities     | 14,584     | 8,367      |
| Amortization of Tangible Capital Assets     | (20,089)   | (19,902)   |
| Net Book Value at End of Year               | \$ 864,194 | \$ 868,958 |

## Notes to the Consolidated Financial Statements (in thousands)

### Note 5

#### Accounts Payable and Accrued Liabilities

As at March 31, 2010 the ministry has the following accounts payable and accrued liabilities:

|  | 2010              | 2009              |
|--|-------------------|-------------------|
| General Accounts Payable                     | \$ 3,766          | \$ 917            |
| Accrued Liabilities                          | 87,899            | 162,469           |
| Site Remediation and Reclamation Obligations | 1,307             | 1,331             |
| Hold Back Liability                          | 152               | 225               |
| Accrued Vacation Pay                         | 9,957             | 9,350             |
| Damage/Security Deposits                     | –                 | 300               |
|  | <b>\$ 103,081</b> | <b>\$ 174,592</b> |

### Note 6

#### Unearned Revenue

As at March 31, 2010 the ministry has the following unearned revenues:

|  | 2010              | 2009              |
|--|-------------------|-------------------|
| Canada ecoTrust for Clean Air and Climate Change         | \$ 123,450        | \$ 155,860        |
| Unearned Lease and Water Power Rental Agreement Revenues | 622               | 662               |
| Unearned Reclamation Certificates                        | 382               | –                 |
|  | <b>\$ 124,454</b> | <b>\$ 156,522</b> |

## Notes to the Consolidated Financial Statements (in thousands)

### Note 7

#### Contractual Obligations

As at March 31, 2010 the ministry has the following contractual obligations:

|  | 2010      | 2009      |
|--|-----------|-----------|
| Service contracts (a) (b) (c)                    | \$ 7,894  | \$ 8,873  |
| Long term leases (d)                             | 1,243     | 2,455     |
| Grants (e) (f)                                   |           |           |
| Waste Management Assistance Program              | 1,065     | 6,029     |
| Canada ecoTrust for Clean Air and Climate Change | 53,900    | –         |
| Various Other Programs                           | 189       | 245       |
|  | \$ 64,291 | \$ 17,602 |

(a) The ministry has a contractual obligation with the Piikani Nation of \$800 in 2010, and \$800 adjusted annually by the Consumer Price Index every year thereafter.

(b) The ministry has a contractual obligation with the Siksika Nation of \$127 based on 1984 constant dollars. This amount is adjusted annually by the preceding year's rate of change calculated from the GDP index every year thereafter.

(c) The ministry has multi-year service contract commitments as follows:

|            |          |
|------------|----------|
| 2010-11    | \$ 5,685 |
| 2011-12    | 1,218    |
| 2012-13    | 622      |
| 2013-14    | 263      |
| 2014-15    | 6        |
| Thereafter | 100      |
| Total      | \$ 7,894 |

(d) The ministry leases certain equipment under operating leases that expire on various dates to 2013.

The aggregate amounts payable for the unexpired terms of these leases are as follows:

|         |          |
|---------|----------|
| 2010-11 | \$ 914   |
| 2011-12 | 207      |
| 2012-13 | 122      |
| Total   | \$ 1,243 |

(e) The ministry has multi-year grant commitments as follows:

|         |           |
|---------|-----------|
| 2010-11 | \$ 31,900 |
| 2011-12 | 17,189    |
| 2012-13 | 6,065     |
| Total   | \$ 55,154 |

(f) The ministry has a contractual grant obligation to pay grants out of the CCEMF to the Climate Change and Emissions Management Corporation until September 1, 2014.

# Notes to the Consolidated Financial Statements (in thousands)

## Note 8 Contingent Liabilities

At March 31, 2010, the ministry is a defendant in twenty two claims (2009 – twenty three legal claims). Fifteen of these claims have specified amounts totaling \$295,985 and the remaining seven have no specified amount (2009 – fifteen claims with specified amounts totaling \$504,407 and the remaining eight have no specified amount). Included in the total legal claims are three claims in which the ministry has been named as the sole defendant (2009 – six legal claims). All three claims have specified amounts totaling \$18,446 (2009 – two claims with specified amounts totaling \$2,341 and the remaining four claims have no specified amount).

In addition, there are seventeen claims in which the ministry has been jointly named with other entities (2009 – fourteen legal claims). Ten of these claims have specified amounts totaling \$277,283 (2009 – ten claims totaling \$501,709) including one claim totaling \$202,150 which is partially covered at 25 per cent by the Alberta Risk Management Fund (2009 – one claim totaling \$404,700). The remaining seven claims have no specified amount (2009 – four claims with no specified amount). Two claims amounting to \$256 are covered fully by the Alberta Risk Management Fund (2009 – three claims with specified amounts totaling \$356).

The resulting loss, if any, from these claims cannot be determined.

## Note 9 Trust Fund Under Administration

The ministry administers a trust fund that is a regulated fund consisting of public money over which the Legislature has no power of appropriation. Because the Province has no equity in the fund and administers it for the purpose of the trust, it is not included in the ministry's financial statements.

At March 31, 2010, the trust fund under administration is as follows:

|  | 2010      | 2009      |
|--|-----------|-----------|
| Environmental Protection Security Fund | \$ 13,630 | \$ 12,793 |

In addition to the above trust fund under administration, the ministry holds bank guarantees in the form of letters of credit and promissory notes in the amount of \$1,260,107 (2009 – \$1,105,340). The majority of these guarantees are held to assure satisfactory reclamation of coal and oil sands operations, sand and gravel pits, landfills, hazardous waste management and hazardous recyclable facilities.

## Notes to the Consolidated Financial Statements (in thousands)

### Note 10 Benefit Plans

The ministry participates in the multi-employer Management Employees Pension Plan and Public Service Pension Plan. The ministry also participates in the multi-employer Supplementary Retirement Plan for Public Service Managers. The expense for these pension plans is equivalent to the annual contributions of \$8,418 for the year ended March 31, 2010 (2009 – \$7,298).

At December 31, 2009, the Management Employees Pension Plan reported a deficiency of \$483,199 (2008 – \$568,574) and the Public Service Pension Plan reported a deficiency of \$1,729,196 (2008 deficiency – \$1,187,538).

At December 31, 2009, the Supplementary Retirement Plan for Public Service Managers had a deficiency of \$39,516 (2008 – deficiency of \$7,111).

The ministry also participates in two multi-employer Long Term Disability Income Continuance Plans. At March 31, 2010, the Bargaining Unit Plan reported an actuarial deficiency of \$8,335 (2009 – deficiency of \$33,540) and the Management, Opted Out and Excluded Plan, an actuarial deficiency of \$7,431 (2009 – deficiency of \$1,051). The expense for these two plans is limited to employer's annual contributions for the year.

### Note 11 Restatement of Prior Years

Ministry Support Services expenses for 2009 have been restated by \$75 to include one FTE transfer from the Ministry of Infrastructure due to the restructuring of Infrastructure's Property Development Branch.

|  |                     |
|--|---------------------|
| Net Operating Results, as previously reported at March 31, 2009    | \$ (239,486)        |
| Less: FTE transfer of expenses from the Ministry of Infrastructure | (75)                |
| Net Operating Results, as restated at April 1, 2009                | <u>\$ (239,561)</u> |

|  |                   |
|--|-------------------|
| Net Financing Provided from General Revenues, as previously reported at March 31, 2009 | \$ 182,585        |
| Plus: FTE transfer of expenses from the Ministry of Infrastructure                     | 75                |
| Net Financing provided from General Revenues, as restated at April 1, 2009             | <u>\$ 182,660</u> |

### Note 12 Comparative Figures

Certain 2009 figures have been reclassified to conform to the 2010 presentation.

### Note 13 Approval of Financial Statements

The financial statements were approved by the Senior Financial Officer and the Deputy Minister.



## Schedules to Financial Statements

### Schedule 1 – Revenues

Year ended March 31 (in thousands)

|   | 2010              |                  | 2009             |
|---|-------------------|------------------|------------------|
|   | Budget            | Actual           | Actual           |
| Internal Government Transfers                               |                   |                  |                  |
| Transfer from Environmental Protection and Enhancement Fund | \$ 2,675          | \$ 901           | \$ 1,608         |
| Transfer from the Lottery Fund                              | 500               | 500              | 500              |
| Transfers from Government of Canada                         |                   |                  |                  |
| Canada ecoTrust for Clean Air and Climate Change            | 51,967            | 32,410           | –                |
|   | 55,142            | 33,811           | 2,108            |
| Premiums, Fees and Licenses                                 |                   |                  |                  |
| Land and Grazing  | 55                | 65               | 49               |
| Reclamation Certificates                                    | 3,500             | 690              | 900              |
| Water Power Rentals   | 650               | 777              | 853              |
| Other   | 1,520             | 590              | 613              |
|   | 5,725             | 2,122            | 2,415            |
| Other Revenue   |                   |                  |                  |
| Industry Purchase of CCEMF Credits                          | 95,000            | 60,449           | 85,261           |
| Refunds of Expenditure                                      | –                 | 296              | 417              |
| Water Resources   | 2,900             | 977              | 2,762            |
| Other   | 348               | 164              | 241              |
|   | 98,248            | 61,886           | 88,681           |
| <b>Total Revenues</b>                                       | <b>\$ 159,115</b> | <b>\$ 97,819</b> | <b>\$ 93,204</b> |

## Schedule to Financial Statements

### Schedule 2 – Credit or Recovery

Year ended March 31 (in thousands)

|                                 | 2010       |          |                           |
|---------------------------------|------------|----------|---------------------------|
|                                 | Authorized | Actual   | (Shortfall) /<br>Excess   |
| Reclamation Certificate         | \$ 3,500   | \$ 661   | \$ (2,839)                |
| Remediation Certificate         | 660        | 7        | (653)                     |
| Water Management Infrastructure | 2,900      | 674      | (2,226)                   |
|                                 | \$ 7,060   | \$ 1,342 | \$ (5,718) <sup>(1)</sup> |

(1) Shortfall is deducted from current year's authorized budget, as disclosed in Schedules 4 and 5 to the financial statements.

The Reclamation Certificate credit or recovery initiative refers to the costs of conducting audits at sites that are certified under the upstream oil and gas reclamation program. Revenues are received through a reclamation certificate application fee.

The Remediation Certificate credit or recovery initiative refers to the costs of conducting site audits that are certified under Alberta Environment's new Remediation Certificate Regulation. Revenues are received through a remediation site certificate application fee.

The Water Management Infrastructure credit or recovery initiative refers to the maintenance and upgrading of the provincial water management infrastructure system. Revenues are received through the Use of Works Agreements whereby developers pay an annual fee to the Province.

The credits or recoveries presented in this schedule are included in the ministry's Statements of Operations.

## Schedules to Financial Statements

### Schedule 3 – Expenses – Directly Incurred Detailed by Object

Year ended March 31 (in thousands)

|   | 2010       |           | 2009       |
|---|------------|-----------|------------|
|   | Budget     | Actual    | Actual     |
| Voted:                                    |            |           |            |
| Salaries, Wages and Employee Benefits     | \$ 101,625 | \$ 96,592 | \$ 91,337  |
| Supplies and Services                     | 52,309     | 41,501    | 54,812     |
| Grants                                    | 73,467     | 61,549    | 18,047     |
| Financial Transactions and Other          | 141        | 238       | 259        |
| Amortization of Tangible Capital Assets   | 22,361     | 20,089    | 19,902     |
|   | 249,903    | 219,969   | 184,357    |
| Statutory:                                |            |           |            |
| Salaries, Wages and Employee Benefits     | \$ –       | \$ 26     | \$ –       |
| Supplies and Services                     | 2,675      | 875       | 1,518      |
| Grants                                    | 95,000     | 60,449    | 145,675    |
| Valuation Adjustments                     |            |           |            |
| Provision for Doubtful Accounts           | –          | (6)       | (2)        |
| Provision for Vacation Pay                | 99         | 607       | 1,261      |
| Provision for Remediation and Reclamation | –          | (24)      | (40)       |
|   | \$ 97,774  | \$ 61,927 | \$ 148,412 |

# Schedule to Financial Statements

## Schedule 4 – Budget

Year ended March 31 (in thousands)

|  | 2009-2010<br>Estimates | Adjustment<br>(a) | 2009-2010<br>Budget | 2009-2010<br>Authorized<br>Budget |
|--|------------------------|-------------------|---------------------|-----------------------------------|
| <b>Revenues</b>  |                        |                   |                     |                                   |
| Internal Government Transfers                            | \$ 3,175               | \$ –              | \$ 3,175            | \$ 3,175                          |
| Transfers from Government of Canada                      | 51,967                 | –                 | 51,967              | 51,967                            |
| Premiums, Fees and Licenses                              | 5,725                  | –                 | 5,725               | 5,725                             |
| Climate Change and Emissions Management Fund             | 95,000                 | –                 | 95,000              | 95,000                            |
| Other Revenue  | 3,248                  | –                 | 3,248               | 3,248                             |
|  | 159,115                | –                 | 159,115             | 159,115                           |
| <b>Expenses – Directly Incurred</b>                      |                        |                   |                     |                                   |
| <b>Voted Expenses</b>                                    |                        |                   |                     |                                   |
| Ministry Support Services                                | 21,876                 | –                 | 21,876              | 21,876                            |
| Environmental Assurance:                                 |                        |                   |                     |                                   |
| Monitoring, Reporting and Innovation                     | 12,256                 | –                 | 12,256              | 12,256                            |
| Air and Land Policy                                      | 7,941                  | –                 | 7,941               | 7,941                             |
| Climate Change   | 77,248                 | –                 | 77,248              | 77,248                            |
| Environmental Stewardship:                               |                        |                   |                     |                                   |
| Environmental Relationships, Partnerships and Strategies | 7,664                  | –                 | 7,664               | 7,664                             |
| Conservation and Education                               | 4,471                  | –                 | 4,471               | 4,471                             |
| Water for Life   | 16,322                 | –                 | 16,322              | 16,322                            |
| Environmental Management:                                |                        |                   |                     |                                   |
| Resource Management                                      | 17,962                 | –                 | 17,962              | 17,962                            |
| Approvals  | 26,060                 | –                 | 26,060              | 26,060                            |
| Compliance and Enforcement                               | 11,620                 | –                 | 11,620              | 11,620                            |
| Water Operations   | 15,581                 | –                 | 15,581              | 15,581                            |
| Emergency Response                                       | 1,447                  | –                 | 1,447               | 1,447                             |
| Amortization of Tangible Capital Assets                  | 22,361                 | –                 | 22,361              | 22,361                            |
| Oil Sands Environmental Management:                      |                        |                   |                     |                                   |
| Oil Sands Innovation and Policy                          | 4,594                  | –                 | 4,594               | 4,594                             |
| Oil Sands Operations                                     | 2,500                  | –                 | 2,500               | 2,500                             |
| Credit or Recovery Shortfall (Schedule 2)                | –                      | (5,718)           | (5,718)             | (5,718)                           |
|  | 249,903                | (5,718)           | 244,185             | 244,185                           |
| Land Reclamation Program                                 | 550                    | –                 | 550                 | 550                               |
| Emergency Spills and Cleanups                            | 1,525                  | –                 | 1,525               | 1,525                             |
| Drought and Flood Emergencies                            | 600                    | –                 | 600                 | 600                               |
| Valuation Adjustments                                    |                        |                   |                     |                                   |
| Provision for Vacation Pay                               | 99                     | –                 | 99                  | 99                                |
| Climate Change and Emissions Management Corporation      | 95,000                 | –                 | 95,000              | 95,000                            |
|  | 97,774                 | –                 | 97,774              | 97,774                            |
|  | 347,677                | (5,718)           | 341,959             | 341,959                           |
| <b>Net Operating Results</b>                             | \$ (188,562)           | \$ (5,718)        | \$ (182,844)        | \$ (182,844)                      |
| Equipment/Inventory Purchases                            | \$ 1,844               | \$ –              | \$ 1,844            | \$ 1,844                          |
| Non-Budgetary Disbursements                              | \$ 1,100               | \$ –              | \$ 1,100            | \$ 1,100                          |

(a) Adjustment includes Credit or Recovery Shortfall.

## Schedule to Financial Statements

### Schedule 5 – Comparison of Expenses – Directly Incurred, Equipment/Inventory Purchases, Statutory Expenses and Non-Budgetary Disbursements by Element to Authorized Budget

Year ended March 31 (in thousands)

|  | 2009-2010<br>Estimates | Adjustments<br>(a) | 2009-2010<br>Budget | 2009-2010<br>Authorized<br>Budget | 2009-2010<br>Actual<br>Expense | Unexpended<br>(Over<br>Expended) |
|--|------------------------|--------------------|---------------------|-----------------------------------|--------------------------------|----------------------------------|
| <b>Voted Expenses and<br/>Equipment/Inventory Purchases</b>        |                        |                    |                     |                                   |                                |                                  |
| <b>Ministry Support Services</b>                                   |                        |                    |                     |                                   |                                |                                  |
| 1.0.1 Minister's Office  | \$ 498                 | \$ –               | \$ 498              | \$ 498                            | \$ 553                         | \$ (55)                          |
| 1.0.2 Cabinet Policy Committee on<br>Resources and the Environment | 135                    | –                  | 135                 | 135                               | 208                            | (73)                             |
| 1.0.3 Deputy Minister's Office                                     | 767                    | –                  | 767                 | 767                               | 804                            | (37)                             |
| 1.0.4 Communications   | 1,567                  | –                  | 1,567               | 1,567                             | 1,393                          | 174                              |
| 1.0.5 People Services  | 2,163                  | –                  | 2,163               | 2,163                             | 2,049                          | 114                              |
| 1.0.6 Legal Services   | 322                    | –                  | 322                 | 322                               | 163                            | 159                              |
| 1.0.7 Finance and Administration                                   | 4,333                  | –                  | 4,333               | 4,333                             | 4,731                          | (398)                            |
| 1.0.8 Strategic Support and Integration                            |                        |                    |                     |                                   |                                |                                  |
| - Expense  | 10,941                 | –                  | 10,941              | 10,941                            | 13,945                         | (3,004)                          |
| - Equipment/Inventory Purchases                                    | 385                    | –                  | 385                 | 385                               | 245                            | 140                              |
| 1.0.9 Corporate Costs  | 1,150                  | –                  | 1,150               | 1,150                             | 1,954                          | (804)                            |
| <b>TOTAL PROGRAM 1</b>   | <b>22,261</b>          | <b>–</b>           | <b>22,261</b>       | <b>22,261</b>                     | <b>26,045</b>                  | <b>(3,784)</b>                   |
| <b>Environmental Assurance</b>                                     |                        |                    |                     |                                   |                                |                                  |
| 2.0.1 Monitoring, Reporting and Innovation                         | 12,256                 | –                  | 12,256              | 12,256                            | 13,209                         | (953)                            |
| 2.0.2 Air and Land Policy  | 7,941                  | –                  | 7,941               | 7,941                             | 8,398                          | (457)                            |
| 2.0.3 Climate Change   | 77,248                 | –                  | 77,248              | 77,248                            | 46,718                         | 30,530                           |
| <b>TOTAL PROGRAM 2</b>   | <b>97,445</b>          | <b>–</b>           | <b>97,445</b>       | <b>97,445</b>                     | <b>68,325</b>                  | <b>29,120</b>                    |
| <b>Environmental Stewardship</b>                                   |                        |                    |                     |                                   |                                |                                  |
| 3.0.1 Environmental Relationships,<br>Partnerships and Strategies  | 7,664                  | –                  | 7,664               | 7,664                             | 15,864                         | (8,200)                          |
| 3.0.2 Conservation and Education                                   |                        |                    |                     |                                   |                                |                                  |
| - Expense  | 3,971                  | –                  | 3,971               | 3,971                             | 4,879                          | (908)                            |
| - Expense funded by Lotteries                                      | 500                    | –                  | 500                 | 500                               | 500                            | –                                |
| - Equipment/Inventory Purchases                                    | –                      | –                  | –                   | –                                 | 16                             | (16)                             |
| 3.0.3 Water For Life   |                        |                    |                     |                                   |                                |                                  |
| - Expense  | 16,322                 | –                  | 16,322              | 16,322                            | 14,513                         | 1,809                            |
| - Equipment/Inventory Purchases                                    | 1,459                  | –                  | 1,459               | 1,459                             | 502                            | 957                              |
| <b>TOTAL PROGRAM 3</b>   | <b>29,916</b>          | <b>–</b>           | <b>29,916</b>       | <b>29,916</b>                     | <b>36,274</b>                  | <b>(6,358)</b>                   |
| <b>Environmental Management</b>                                    |                        |                    |                     |                                   |                                |                                  |
| 4.0.1 Resource Management  | 17,962                 | –                  | 17,962              | 17,962                            | 14,717                         | 3,245                            |
| 4.0.2 Approvals  | 26,060                 | –                  | 26,060              | 26,060                            | 19,920                         | 6,140                            |
| 4.0.3 Compliance and Enforcement                                   | 11,620                 | –                  | 11,620              | 11,620                            | 10,918                         | 702                              |
| 4.0.4 Water Operations   | 15,581                 | –                  | 15,581              | 15,581                            | 15,019                         | 562                              |
| 4.0.5 Emergency Response   | 1,447                  | –                  | 1,447               | 1,447                             | 1,531                          | (84)                             |
| 4.0.6 Amortization of Tangible Capital Assets                      | 22,361                 | –                  | 22,361              | 22,361                            | 20,089                         | 2,272                            |
| <b>TOTAL PROGRAM 4</b>   | <b>95,031</b>          | <b>–</b>           | <b>95,031</b>       | <b>95,031</b>                     | <b>82,194</b>                  | <b>12,837</b>                    |

(a) Adjustments include Credit or Recovery shortfall.

## Schedule to Financial Statements

### Schedule 5 – Comparison of Expenses – Directly Incurred, Equipment/Inventory Purchases, Statutory Expenses and Non-Budgetary Disbursements by Element to Authorized Budget

Year ended March 31 (in thousands)

|   | 2009-2010<br>Estimates | Adjustments<br>(a) | 2009-2010<br>Budget | 2009-2010<br>Authorized<br>Budget | 2009-2010<br>Actual<br>Expense | Unexpended<br>(Over<br>Expended) |
|---|------------------------|--------------------|---------------------|-----------------------------------|--------------------------------|----------------------------------|
| <b>Voted Expenses and<br/>Equipment/Inventory Purchases (continued)</b> |                        |                    |                     |                                   |                                |                                  |
| <b>Oil Sands Environmental Management</b>                               |                        |                    |                     |                                   |                                |                                  |
| 5.0.1 Oil Sands Innovation and Policy                                   |                        |                    |                     |                                   |                                |                                  |
| - Expense   | \$ 4,594               | \$ -               | \$ 4,594            | \$ 4,594                          | \$ 7,894                       | \$ (3,300)                       |
| - Equipment/Inventory Purchases   | -                      | -                  | -                   | -                                 | 17                             | (17)                             |
| 5.0.2 Oil Sands Operations  | 2,500                  | -                  | 2,500               | 2,500                             | -                              | 2,500                            |
| <b>TOTAL PROGRAM 5</b>  | <b>7,094</b>           | <b>-</b>           | <b>7,094</b>        | <b>7,094</b>                      | <b>7,911</b>                   | <b>(817)</b>                     |
| Credit or Recovery Shortfall (Schedule 2)                               | \$ -                   | \$ (5,718)         | \$ (5,718)          | \$ (5,718)                        | \$ -                           | \$ (5,718)                       |
|   | \$ -                   | \$ (5,718)         | \$ (5,718)          | \$ (5,718)                        | \$ -                           | \$ (5,718)                       |
| Operating Expense   | 249,903                | (5,718)            | 244,185             | 244,185                           | 219,969                        | 24,216                           |
| Equipment/Inventory Purchases   | 1,844                  | -                  | 1,844               | 1,844                             | 780                            | 1,064                            |
|   | \$251,747              | \$ (5,718)         | \$246,029           | \$246,029                         | \$220,749                      | \$ 25,280                        |
| <b>Statutory Expenses</b>   |                        |                    |                     |                                   |                                |                                  |
| Land Reclamation Program  | \$ 550                 | \$ -               | \$ 550              | \$ 550                            | \$ 562                         | \$ (12)                          |
| Emergency Spills and Cleanups   | 1,525                  | -                  | 1,525               | 1,525                             | 339                            | 1,186                            |
| Drought and Flood Emergencies   | 600                    | -                  | 600                 | 600                               | -                              | 600                              |
| Valuation Adjustments   | 99                     | -                  | 99                  | 99                                | 577                            | (478)                            |
| Climate Change and Emissions Management Corporation                     | 95,000                 | -                  | 95,000              | 95,000                            | 60,449                         | 34,551                           |
|   | \$ 97,774              | \$ -               | \$ 97,774           | \$ 97,774                         | \$ 61,927                      | \$ 35,847                        |
| <b>Non-Budgetary Disbursements</b>                                      |                        |                    |                     |                                   |                                |                                  |
| Environmental Relationships,<br>Partnerships and Strategies             | 1,000                  | -                  | 1,000               | 1,000                             | 1,000                          | -                                |
| Approvals   | 100                    | -                  | 100                 | 100                               | -                              | 100                              |
|   | \$ 1,100               | \$ -               | \$ 1,100            | \$ 1,100                          | \$ 1,000                       | \$ 100                           |

(a) Adjustments include Credit or Recovery Shortfall.

## Schedules to Financial Statements

### Schedule 6 – Related Party Transactions

Year ended March 31 (in thousands)

Related parties are those entities consolidated or accounted for on a modified equity basis in the Province of Alberta's financial statements. Related parties also include management in the ministry.

The ministry and its employees paid or collected certain taxes and fees by regulation for permits, licences and other charges. These amounts were incurred in the normal course of business, reflect charges applicable to all users, and have been excluded from this Schedule.

The ministry had the following transactions with related parties recorded on the Statements of Operations and the Statements of Financial Position at the amount of consideration agreed upon between the related parties:

|  | Other Entities |          |
|--|----------------|----------|
|  | 2010           | 2009     |
| Revenue                                |                |          |
| Internal Government Transfers          | \$ 1,401       | \$ 2,108 |
|  | \$ 1,401       | \$ 2,108 |
| Expenses – Directly Incurred           |                |          |
| Grants                                 | \$ 5,065       | \$ 1,500 |
| Other Services                         | 3,730          | 5,968    |
|  | \$ 8,795       | \$ 7,468 |
| Tangible Capital Assets Transferred In | \$ 14,583      | \$ 8,367 |
| Payable to                             | \$ 393         | \$ 3,963 |
| Receivable from                        | \$ 407         | \$ 335   |
| Contractual Obligations                | \$ 493         | \$ 352   |

The ministry also had the following transactions with related parties for which no consideration was exchanged. The amounts for these related party transactions are estimated based on the costs incurred by the service provider to provide the service. These amounts are not recorded in the financial statements.

|   | Other Entities |           |
|---|----------------|-----------|
|   | 2010           | 2009      |
| Expenses – Incurred by Others               |                |           |
| Accommodation                               | \$ 9,623       | \$ 7,779  |
| Legal                                       | 2,076          | 2,587     |
| Water Management Infrastructure Maintenance | 5,750          | 5,828     |
| Other Services                              | 215            | 303       |
| Service Alberta                             | 5,896          | 5,825     |
|   | \$ 23,560      | \$ 22,322 |

# Schedules to Financial Statements

## Schedule 7 – Allocated Costs

Year ended March 31 (in thousands)

| Program  | 2010                          |                                    |                               |   |                               |                 |                             |                   |                             |            | 2009       |          |
|--|-------------------------------|------------------------------------|-------------------------------|---|-------------------------------|-----------------|-----------------------------|-------------------|-----------------------------|------------|------------|----------|
|  | Expenses – Incurred by Others |                                    |                               |   |                               |                 | Valuation Adjustments       |                   |                             |            | Expenses   | Expenses |
|  | Expenses <sup>(1)</sup>       | Accommodation Costs <sup>(2)</sup> | Legal Services <sup>(3)</sup> | Water Management Infrastructure Maintenance | Other Services <sup>(4)</sup> | Service Alberta | Vacation Pay <sup>(5)</sup> | Doubtful Accounts | Remediation and Reclamation | Expenses   |            |          |
| Ministry Support Services                                | \$ 25,800                     | \$ 1,437                           | \$ 526                        | \$ –  | \$ 215                        | \$ 5,896        | \$ 214                      | \$ (6)            | \$ –                        | \$ 34,082  | \$ 30,311  |          |
| Monitoring, Reporting and Innovation                     | 13,209                        | 918                                | 31                            | –   | –                             | –               | (7)                         | –                 | –                           | 14,151     | 16,702     |          |
| Air and Land Policy                                      | 8,398                         | 594                                | 20                            | –   | –                             | –               | (20)                        | –                 | –                           | 8,993      | 11,610     |          |
| Climate Change   | 46,718                        | 97                                 | 144                           | –   | –                             | –               | 57                          | –                 | –                           | 47,016     | 10,270     |          |
| Reclamation and Emergency Preparedness                   | 901                           | –                                  | –                             | –   | –                             | –               | –                           | –                 | –                           | 901        | 1,608      |          |
| Environmental Relationships, Partnerships and Strategies | 15,864                        | 518                                | 43                            | –   | –                             | –               | 261                         | –                 | –                           | 16,686     | 8,136      |          |
| Conservation and Education                               | 5,379                         | 238                                | 25                            | –   | –                             | –               | (8)                         | –                 | –                           | 5,635      | 6,704      |          |
| Water for Life   | 14,513                        | 205                                | 92                            | –   | –                             | –               | (194)                       | –                 | –                           | 14,616     | 18,461     |          |
| Resource Management Approvals                            | 14,717                        | 1,177                              | 292                           | –   | –                             | –               | 94                          | –                 | –                           | 16,280     | 15,151     |          |
| Compliance and Enforcement                               | 19,920                        | 1,879                              | 423                           | –   | –                             | –               | 29                          | –                 | (24)                        | 22,226     | 23,076     |          |
| Water Operations   | 10,918                        | 1,069                              | 188                           | –   | –                             | –               | 95                          | –                 | –                           | 12,269     | 12,696     |          |
| Emergency Response                                       | 15,019                        | 1,005                              | 253                           | 5,750                                       | –                             | –               | 76                          | –                 | –                           | 22,104     | 23,544     |          |
| Amortization of Tangible Capital Assets                  | 1,531                         | 119                                | 23                            | –   | –                             | –               | (6)                         | –                 | –                           | 1,667      | 1,906      |          |
| Oil Sands Innovation and Policy                          | 20,089                        | –                                  | –                             | –   | –                             | –               | –                           | –                 | –                           | 20,089     | 19,902     |          |
| Oil Sands Operations                                     | 7,894                         | 367                                | 16                            | –   | –                             | –               | 16                          | –                 | –                           | 8,293      | 6,930      |          |
|  | –                             | –                                  | –                             | –   | –                             | –               | –                           | –                 | –                           | –          | 2,196      |          |
|  | \$ 220,870                    | \$ 9,623                           | \$ 2,076                      | \$ 5,750                                    | \$ 215                        | \$ 5,896        | \$ 607                      | \$ (6)            | \$ (24)                     | \$ 245,008 | \$ 209,203 |          |

(1) Expenses – Directly incurred as per Statements of Operations, excluding valuation adjustments.

(2) Costs shown for Accommodation on Schedule 6, allocated by budgeted Full-Time Equivalent Employment.

(3) Costs shown for Legal Services on Schedule 6, allocated by estimated costs by each program.

(4) Costs shown for Other Services on Schedule 6 include charges for Air Transportation, Executive Vehicle Operations, GOA Learning Centre, and Corporate Internal Audit Services.

(5) Valuation Adjustments as per Statements of Operations. Vacation Pay is allocated by employee.



# Department of Environment

## FINANCIAL STATEMENTS

---

Year Ended March 31, 2010

## Auditor's Report



To the Members of the Legislative Assembly

I have audited the statements of financial position of the Department of Environment as at March 31, 2010 and 2009, and the statements of operations and cash flows for the years then ended. These financial statements are the responsibility of the Department's management. My responsibility is to express an opinion on these financial statements based on my audits.

I conducted my audits in accordance with Canadian generally accepted auditing standards. Those standards require that I 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 my opinion, these financial statements present fairly, in all material respects, the financial position of the Department as at March 31, 2010 and 2009 and the results of its operations and its cash flows for the years then ended in accordance with Canadian generally accepted accounting principles.

Original signed by Merwan N. Saher, CA  
Auditor General

Edmonton, Alberta  
June 10, 2010

# Statements of Operations

Year ended March 31 (in thousands)

|   | 2010                   |              | 2009                           |
|---|------------------------|--------------|--------------------------------|
|   | Budget<br>(Schedule 4) | Actual       | Actual<br>(Restated – Note 11) |
| Revenues (Schedule 1)                                       |                        |              |                                |
| Internal Government Transfers                               | \$ 3,175               | \$ 1,401     | \$ 2,108                       |
| Transfers from Government of Canada                         | 51,967                 | 32,410       | –                              |
| Premiums, Fees and Licenses                                 | 5,725                  | 2,122        | 2,415                          |
| Other Revenue   | 3,248                  | 1,437        | 3,420                          |
|   | 64,115                 | 37,370       | 7,943                          |
| Expenses – Directly Incurred (Note 2b and Schedule 8)       |                        |              |                                |
| Voted (Schedules 3 and 5)                                   |                        |              |                                |
| Ministry Support Services                                   | 21,876                 | 25,800       | 22,283                         |
| Environmental Assurance:                                    |                        |              |                                |
| Monitoring, Reporting and Innovation                        | 12,256                 | 13,209       | 15,918                         |
| Air and Land Policy   | 7,941                  | 8,398        | 11,009                         |
| Climate Change  | 77,248                 | 46,718       | 9,947                          |
| Environmental Stewardship:                                  |                        |              |                                |
| Environmental Relationships, Partnerships<br>and Strategies | 7,664                  | 15,864       | 7,894                          |
| Conservation and Education                                  | 4,471                  | 5,379        | 6,393                          |
| Water for Life  | 16,322                 | 14,513       | 17,873                         |
| Environmental Management:                                   |                        |              |                                |
| Resource Management   | 17,962                 | 14,717       | 13,939                         |
| Approvals   | 26,060                 | 19,920       | 20,883                         |
| Compliance and Enforcement                                  | 11,620                 | 10,918       | 11,447                         |
| Water Operations  | 15,581                 | 15,019       | 16,403                         |
| Emergency Response  | 1,447                  | 1,531        | 1,738                          |
| Amortization of Tangible Capital Assets                     | 22,361                 | 20,089       | 19,902                         |
| Oil Sands Environmental Management:                         |                        |              |                                |
| Oil Sands Innovation and Policy                             | 4,594                  | 7,894        | 6,536                          |
| Oil Sands Operations  | 2,500                  | –            | 2,192                          |
|   | 249,903                | 219,969      | 184,357                        |
| Statutory Programs (Schedules 3 and 5)                      |                        |              |                                |
| Land Reclamation Program                                    | 550                    | 562          | 1,371                          |
| Emergency Spills and Cleanups                               | 1,525                  | 339          | 147                            |
| Drought and Flood Emergencies                               | 600                    | –            | 90                             |
| Valuation Adjustments                                       |                        |              |                                |
| Provision for Doubtful Accounts                             | –                      | (6)          | (2)                            |
| Provision for Vacation Pay                                  | 99                     | 607          | 1,261                          |
| Provision for Remediation and Reclamation                   | –                      | (24)         | (40)                           |
|   | 2,774                  | 1,478        | 2,827                          |
| Total Expenses  | 252,677                | 221,447      | 187,184                        |
| Gain (Loss) on Disposal of Tangible Capital Assets          | –                      | –            | 4                              |
| Net Operating Results                                       | \$ (188,562)           | \$ (184,077) | \$ (179,237)                   |

The accompanying notes and schedules are part of these financial statements.

## Statements of Financial Position

As at March 31 (in thousands)

|   | 2010              | 2009                 |
|---|-------------------|----------------------|
|   |                   | (Restated – Note 11) |
| <b>ASSETS</b>                                     |                   |                      |
| Cash  | \$ 27             | \$ 67                |
| Accounts Receivable (Note 3)                      | 1,793             | 828                  |
| Tangible Capital Assets (Note 4)                  | 864,194           | 868,958              |
|   | <b>\$ 866,014</b> | <b>\$ 869,853</b>    |
| <b>LIABILITIES</b>                                |                   |                      |
| Accounts Payable and Accrued Liabilities (Note 5) | \$ 24,222         | \$ 28,979            |
| Unearned Revenue (Note 6)                         | 124,454           | 156,522              |
|   | <b>148,676</b>    | <b>185,501</b>       |
| <b>NET ASSETS</b>                                 |                   |                      |
| Net Assets at Beginning of Year                   | 684,352           | 680,929              |
| Net Operating Results                             | (184,077)         | (179,237)            |
| Net Financing Provided from General Revenues      | 217,063           | 182,660              |
| Net Assets at End of Year                         | <b>717,338</b>    | <b>684,352</b>       |
|   | <b>\$ 866,014</b> | <b>\$ 869,853</b>    |

The accompanying notes and schedules are part of these financial statements.

## Statements of Cash Flows

Year ended March 31 (in thousands)

|  | 2010         | 2009<br>(Restated – Note 11) |
|--|--------------|------------------------------|
| <b>Operating Transactions</b>                                      |              |                              |
| Net Operating Results  | \$ (184,077) | \$ (179,237)                 |
| Non-cash items included in Net Operating Results                   |              |                              |
| Amortization (Schedule 3)  | 20,089       | 19,902                       |
| Gain (Loss) on Disposal of Tangible Capital Assets                 | –            | (4)                          |
| Valuation Adjustments  | 576          | 1,219                        |
|  | (163,412)    | (158,120)                    |
| Decrease (Increase) in Accounts Receivable                         | (959)        | 118                          |
| Decrease in Accounts Payable and Accrued Liabilities               | (5,339)      | (14,413)                     |
| Decrease in Unearned Revenue                                       | (32,068)     | (71)                         |
| Cash Applied to Operating Transactions                             | (201,778)    | (172,486)                    |
| <b>Capital Transactions</b>  |              |                              |
| Acquisition of Tangible Capital Assets                             | (780)        | (2,180)                      |
| Disposals and Write Downs of Tangible Capital Assets               | 39           | 55                           |
| Transfer of Tangible Capital Assets to other Government Entities   | –            | 9                            |
| Transfer of Tangible Capital Assets from other Government Entities | (14,584)     | (8,376)                      |
| Cash Applied to Capital Transactions                               | (15,325)     | (10,492)                     |
| <b>Investing Transactions</b>                                      |              |                              |
| Decrease (Increase) in Advances                                    | –            | 14                           |
| Cash Provided by (Applied to) Investing Transactions               | –            | 14                           |
| <b>Financing Transactions</b>                                      |              |                              |
| Net Financing Provided from General Revenues <sup>(1)</sup>        | 217,063      | 182,660                      |
| Decrease in Cash   | (40)         | (304)                        |
| Cash, Beginning of Year  | 67           | 371                          |
| Cash, End of Year  | \$ 27        | \$ 67                        |

(1) 2009 figure includes \$75 for a non-cash transfer from Infrastructure (Note 11).

The accompanying notes and schedules are part of these financial statements.

## Notes to the Financial Statements (in thousands)

### Note 1

#### Authority and Purpose

The Department of Environment operates under the authority of the *Government Organization Act*, Chapter G-10, Revised Statutes of Alberta 2000.

The purpose of the department is to ensure that Alberta's environment sustains a high quality of life.

### Note 2

#### Summary of Significant Accounting Policies and Reporting Practices

These financial statements are prepared primarily in accordance with Canadian generally accepted accounting principles for the public sector as recommended by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants. The PSAB financial statements presentation standard for government summary financial statements has been modified to more appropriately reflect the nature of the department.

#### **(a) Reporting Entity**

The reporting entity is the Department of Environment, which is part of the Ministry of Environment and for which the Minister of Environment is accountable. All departments of the Government of Alberta operate within the General Revenue Fund (the Fund). The Fund is administered by the Minister of Finance and Enterprise. All cash receipts of departments are deposited into the Fund and all cash disbursements made by departments are paid from the Fund. Net Financing provided from General Revenues is the difference between all cash receipts and all cash disbursements made.

#### **(b) Basis of Financial Reporting**

##### ***Revenues***

All revenues are reported on the accrual basis of accounting. Cash received for which goods or services have not been provided by year end is recorded as unearned revenue.

##### **Internal Government Transfers**

Internal government transfers are transfers between entities within the government reporting entity where the entity making the transfer does not receive any goods or services directly in return. Internal government transfers are recognized as revenue when received.

##### **Transfers from Government of Canada**

Transfers from Government of Canada are recognized as revenue when authorized by federal legislation or federal/provincial agreements, eligibility criteria if any are met and a reasonable estimate of amounts can be made.

##### **Credit or Recovery**

Credit or Recovery initiatives provide a basis for authorizing spending. Credits or Recoveries are shown in the details of the Government Estimates for a supply vote. If budgeted revenues are not fully realized, spending is reduced by an equivalent amount. If actual credit or recovery amounts exceed budget, the department may, with the approval of the Treasury Board, use the excess to fund additional expenses of the program. Schedule 2 discloses information on the department's credit or recovery initiatives.

## Notes to the Financial Statements (in thousands)

### **Expenses**

#### **Directly Incurred**

Directly incurred expenses are those costs the department has primary responsibility and accountability for, as reflected in the Government's budget documents.

In addition to program operating expenses such as salaries, supplies, etc., directly incurred expenses also include:

- Amortization of tangible capital assets.
- Pension costs, which comprise the cost of employer contributions for current service employees during the year.
- Valuation adjustments which include changes in the valuation allowances used to reflect financial assets at their net recoverable or other appropriate value. Valuation adjustments also represent the change in management's estimate of future payments arising from obligations relating to vacation pay.

Grants are recognized as expenses when authorized, eligibility criteria, if any, are met and a reasonable estimate of the amount can be made.

#### **Incurred by Others**

Services contributed by other entities in support of the department operations are disclosed in Schedule 7 and allocated to programs in Schedule 8.

### **Assets**

Financial assets are assets that could be used to discharge existing liabilities or finance future operations and are not for consumption in the normal course of operations. Financial assets of the Department are limited to financial claims, such as advances to and receivables from other organizations, employees and other individuals.

Assets acquired by right are not included. Tangible capital assets of the department are recorded at historical cost and amortized on a straight-line basis over the estimated useful lives of the assets. The threshold for capitalizing new systems development is \$250 and the threshold for major system enhancements is \$100. The threshold for all other tangible capital assets is \$5. All land is capitalized.

### **Liabilities**

Liabilities are recorded to the extent that they represent present obligations as a result of events and transactions occurring prior to the end of the fiscal year. The settlement of liabilities will result in sacrifice of economic benefits in the future.

Environmental liabilities arise from the obligation to clean up contaminated sites (remediation) or to return disturbed land to an equivalent use (reclamation). A remediation or reclamation liability is recognized when the department is obligated to incur such costs and an amount can be reasonably estimated.

### **Net Assets**

Net assets represents the difference between the carrying value of assets held by the department and its liabilities.

### **Valuation of Financial Assets and Liabilities**

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

The fair values of cash, accounts receivable, advances, and accounts payable and accrued liabilities are estimated to approximate their carrying values because of the short term nature of these instruments.

## Notes to the Financial Statements (in thousands)

### Note 3

#### Accounts Receivable

|   | 2010         |                                 |                      | 2009                 |
|---|--------------|---------------------------------|----------------------|----------------------|
|   | Gross Amount | Allowance for Doubtful Accounts | Net Realizable Value | Net Realizable Value |
| Other Sources   | \$ 1,386     | \$ –                            | \$ 1,386             | \$ 494               |
| Transfer from the Environmental Protection and Enhancement Fund | 407          | –                               | 407                  | 334                  |
|   | \$ 1,793     | \$ –                            | \$ 1,793             | \$ 828               |

Accounts receivable are unsecured and non-interest bearing.



## Notes to the Financial Statements (in thousands)

### Note 4 Tangible Capital Assets

|   | Buildings | Equipment* | Computer Hardware & Software | Land Improvements | Bridges  | Dam & Water Management Structures** | 2010 Total   | 2009 Total   |
|---|-----------|------------|------------------------------|-------------------|----------|-------------------------------------|--------------|--------------|
| <b>Estimated Useful Life</b>            | 10 years  | 3-10 years | 5-10 Years                   | 40 years          | 50 years | 25-80 years                         |              |              |
| <b>Historical Cost***</b>               |           |            |                              |                   |          |                                     |              |              |
| Beginning of year                       | \$ 4      | \$ 14,362  | \$ 20,424                    | \$ 49             | \$ 469   | \$ 1,168,160                        | \$ 1,203,468 | \$ 1,193,052 |
| Additions                               | –         | 450        | 270                          | 60                | –        | 14,584                              | 15,364       | 10,556       |
| Disposals, including write downs        | –         | (37)       | (2)                          | –                 | –        | –                                   | (39)         | (140)        |
|   | \$ 4      | \$ 14,775  | \$ 20,692                    | \$ 109            | \$ 469   | \$ 1,182,744                        | \$ 1,218,793 | \$ 1,203,468 |
| <b>Accumulated Amortization</b>         |           |            |                              |                   |          |                                     |              |              |
| Beginning of year                       | \$ 1      | \$ 6,592   | \$ 17,266                    | \$ 7              | \$ 94    | \$ 310,550                          | \$ 334,510   | \$ 314,688   |
| Amortization Expense                    | –         | 957        | 795                          | 3                 | 9        | 18,325                              | 20,089       | 19,902       |
| Effect of disposals                     | –         | –          | –                            | –                 | –        | –                                   | –            | (80)         |
|   | \$ 1      | \$ 7,549   | \$ 18,061                    | \$ 10             | \$ 103   | \$ 328,875                          | \$ 354,599   | \$ 334,510   |
| <b>Net Book Value at March 31, 2010</b> | \$ 3      | \$ 7,226   | \$ 2,631                     | \$ 99             | \$ 366   | \$ 853,869                          | \$ 864,194   |              |
| <b>Net Book Value at March 31, 2009</b> | \$ 3      | \$ 7,770   | \$ 3,158                     | \$ 42             | \$ 375   | \$ 857,610                          |              | \$ 868,958   |

\* Equipment includes vehicles, office, laboratory, heavy equipment and mobile equipment.

\*\* Dams and water management structures include dams, reservoirs, weirs, canals, dykes, ditches, channels, diversions, cut-offs, pump houses and erosion protection structures, which are constructed by the Ministry of Transportation and transferred to the Ministry of Environment upon their completion.

\*\*\* Historical cost includes work-in-progress at March 31, 2010 totaling \$11,297 comprised of: equipment \$335 (2009 – \$1,264); computer hardware and software \$1,471 (2009 – \$249); and dam improvements \$9,491 (2009 – \$0).

Changes to tangible capital assets were as follows:

|   | 2010       | 2009       |
|---|------------|------------|
| Net Book Value at Beginning of Year         | \$ 868,958 | \$ 878,364 |
| Purchase of Tangible Capital Assets         | 780        | 2,180      |
| Net Book Value of Disposals and Write Downs | (39)       | (51)       |
| Transfer with Other Government Entities     | 14,584     | 8,367      |
| Amortization of Tangible Capital Assets     | (20,089)   | (19,902)   |
| Net Book Value at End of Year               | \$ 864,194 | \$ 868,958 |

## Notes to the Financial Statements (in thousands)

### Note 5

#### Accounts Payable and Accrued Liabilities

As at March 31, 2010 the department has the following accounts payable and accrued liabilities:

|  | 2010             | 2009             |
|--|------------------|------------------|
| General Accounts Payable                     | \$ 3,766         | \$ 917           |
| Accrued Liabilities                          | 9,040            | 16,856           |
| Site Remediation and Reclamation Obligations | 1,307            | 1,331            |
| Hold Back Liability                          | 152              | 225              |
| Accrued Vacation Pay                         | 9,957            | 9,350            |
| Damage/Security Deposits                     | –                | 300              |
|  | <b>\$ 24,222</b> | <b>\$ 28,979</b> |

### Note 6

#### Unearned Revenue

As at March 31, 2010 the department has the following unearned revenues:

|  | 2010              | 2009              |
|--|-------------------|-------------------|
| Canada ecoTrust for Clean Air and Climate Change         | \$ 123,450        | \$ 155,860        |
| Unearned Lease and Water Power Rental Agreement Revenues | 622               | 662               |
| Unearned Reclamation Certificates                        | 382               | –                 |
|  | <b>\$ 124,454</b> | <b>\$ 156,522</b> |

## Notes to the Financial Statements (in thousands)

### Note 7

#### Contractual Obligations

As at March 31, 2010 the department has the following contractual obligations:

|  | 2010      | 2009      |
|--|-----------|-----------|
| Service contracts (a) (b) (c)                    | \$ 7,894  | \$ 8,873  |
| Long term leases (d)                             | 1,243     | 2,455     |
| Grants (e)                                       |           |           |
| Waste Management Assistance Program              | 1,065     | 6,029     |
| Canada ecoTrust for Clean Air and Climate Change | 53,900    | –         |
| Various Other Programs                           | 189       | 245       |
|  | \$ 64,291 | \$ 17,602 |

(a) The department has a contractual obligation with the Piikani Nation of \$800 in 2010, and \$800 adjusted annually by the Consumer Price Index every year thereafter.

(b) The department has a contractual obligation with the Siksika Nation of \$127 based on 1984 constant dollars. This amount is adjusted annually by the preceding year's rate of change calculated from the GDP index every year thereafter.

(c) The department has multi-year service contract commitments as follows:

|            |          |
|------------|----------|
| 2010-11    | \$ 5,685 |
| 2011-12    | 1,218    |
| 2012-13    | 622      |
| 2013-14    | 263      |
| 2014-15    | 6        |
| Thereafter | 100      |
| Total      | \$ 7,894 |

(d) The department leases certain equipment under operating leases that expire on various dates to 2013. The aggregate amounts payable for the unexpired terms of these leases are as follows:

|         |          |
|---------|----------|
| 2010-11 | \$ 914   |
| 2011-12 | 207      |
| 2012-13 | 122      |
| Total   | \$ 1,243 |

(e) The department has multi-year grant commitments as follows:

|         |           |
|---------|-----------|
| 2010-11 | \$ 31,900 |
| 2011-12 | 17,189    |
| 2012-13 | 6,065     |
| Total   | \$ 55,154 |

## Notes to the Financial Statements (in thousands)

### Note 8 Contingent Liabilities

At March 31, 2010, the department is a defendant in twenty-two legal claims (2009 – twenty three legal claims). Fifteen of these claims have specified amounts totaling \$295,985 and the remaining seven have no specified amount (2009 – fifteen claims with specified amounts totaling \$504,407 and the remaining eight have no specified amount). Included in the total legal claims are three claims in which the department has been named as the sole defendant (2009 – six legal claims). All three claims have specified amounts totaling \$18,446 (2009 – two claims with specified amounts totaling \$2,341 and the remaining four claims have no specified amount).

In addition, there are seventeen claims in which the department has been jointly named with other entities (2009 – fourteen legal claims). Ten of these claims have specified amounts totaling \$277,283 (2009 – ten claims totaling \$501,709) including one claim totaling \$202,150 which is partially covered at 25 per cent by the Alberta Risk Management Fund (2009 – one claim totaling \$404,700). The remaining seven claims have no specified amount (2009 – four claims with no specified amount). Two claims amounting to \$256 are covered fully by the Alberta Risk Management Fund (2009 – three claims with specified amounts totaling \$356).

The resulting loss, if any, from these claims cannot be determined.

### Note 9 Trust Fund Under Administration

The department administers a trust fund that is a regulated fund consisting of public money over which the Legislature has no power of appropriation. Because the Province has no equity in the fund and administers it for the purpose of the trust, it is not included in the department's financial statements.

At March 31, 2010, the trust fund under administration is as follows:

|  | 2010      | 2009      |
|--|-----------|-----------|
| Environmental Protection Security Fund | \$ 13,630 | \$ 12,793 |

In addition to the above trust fund under administration, the department holds bank guarantees in the form of letters of credit and promissory notes in the amount of \$1,260,107 (2009 – \$1,105,340). The majority of these guarantees are held to assure satisfactory reclamation of coal and oil sands operations, sand and gravel pits, landfills, hazardous waste management and hazardous recyclable facilities.

## Notes to the Financial Statements (in thousands)

### Note 10 Benefit Plans

The department participates in the multi-employer Management Employees Pension Plan and Public Service Pension Plan. The department also participates in the multi-employer Supplementary Retirement Plan for Public Service Managers. The expense for these pension plans is equivalent to the annual contributions of \$8,418 for the year ended March 31, 2010 (2009 – \$7,298).

At December 31, 2009, the Management Employees Pension Plan reported a deficiency of \$483,199 (2008 – \$568,574) and the Public Service Pension Plan reported a deficiency of \$1,729,196 (2008 deficiency – \$1,187,538).

At December 31, 2009, the Supplementary Retirement Plan for Public Service Managers had a deficiency of \$39,516 (2008 – deficiency of \$7,111).

The department also participates in two multi-employer Long Term Disability Income Continuance Plans. At March 31, 2010, the Bargaining Unit Plan reported an actuarial deficiency of \$8,335 (2009 – deficiency of \$33,540) and the Management, Opted Out and Excluded Plan, an actuarial deficiency of \$7,341 (2009 – deficiency of \$1,051). The expense for these two plans is limited to employer's annual contributions for the year.

### Note 11 Restatement of Prior Years

Ministry Support Services expenses for 2009 have been restated by \$75 to include one FTE transfer from the Ministry of Infrastructure due to the restructuring of Infrastructure's Property Development Branch.

|  |                     |
|--|---------------------|
| Net Operating Results, as previously reported at March 31, 2009    | \$ (179,162)        |
| Less: FTE transfer of expenses from the Ministry of Infrastructure | (75)                |
| Net Operating Results, as restated at April 1, 2009                | <u>\$ (179,237)</u> |

|  |                   |
|--|-------------------|
| Net Financing Provided from General Revenues, as previously reported at March 31, 2009 | \$ 182,585        |
| Plus: FTE transfer of expenses from the Ministry of Infrastructure                     | 75                |
| Net Financing provided from General Revenues, as restated at April 1, 2009             | <u>\$ 182,660</u> |

### Note 12 Comparative Figures

Certain 2009 figures have been reclassified to conform to the 2010 presentation.

### Note 13 Approval of Financial Statements

The financial statements were approved by the Senior Financial Officer and the Deputy Minister.

## Schedules to Financial Statements

### Schedule 1 – Revenues

Year ended March 31 (in thousands)

|   | 2010             |                  | 2009            |
|---|------------------|------------------|-----------------|
|   | Budget           | Actual           | Actual          |
| Internal Government Transfers                               |                  |                  |                 |
| Transfer from Environmental Protection and Enhancement Fund | \$ 2,675         | \$ 901           | \$ 1,608        |
| Transfer from the Lottery Fund                              | 500              | 500              | 500             |
| Transfers from Government of Canada                         |                  |                  |                 |
| Canada ecoTrust for Clean Air and Climate Change            | 51,967           | 32,410           | –               |
|   | 55,142           | 33,811           | 2,108           |
| Premiums, Fees and Licenses                                 |                  |                  |                 |
| Land and Grazing  | 55               | 65               | 49              |
| Reclamation Certificates                                    | 3,500            | 690              | 900             |
| Water Power Rentals   | 650              | 777              | 853             |
| Other   | 1,520            | 590              | 613             |
|   | 5,725            | 2,122            | 2,415           |
| Other Revenue   |                  |                  |                 |
| Refunds of Expenditure                                      | –                | 296              | 417             |
| Water Resources   | 2,900            | 977              | 2,762           |
| Other   | 348              | 164              | 241             |
|   | 3,248            | 1,437            | 3,420           |
| <b>Total Revenues</b>                                       | <b>\$ 64,115</b> | <b>\$ 37,370</b> | <b>\$ 7,943</b> |

## Schedule to Financial Statements

### Schedule 2 – Credit or Recovery

Year ended March 31 (in thousands)

|                                 | 2010       |          |                           |
|---------------------------------|------------|----------|---------------------------|
|                                 | Authorized | Actual   | (Shortfall) /<br>Excess   |
| Reclamation Certificate         | \$ 3,500   | \$ 661   | \$ (2,839)                |
| Remediation Certificate         | 660        | 7        | (653)                     |
| Water Management Infrastructure | 2,900      | 674      | (2,226)                   |
|                                 | \$ 7,060   | \$ 1,342 | \$ (5,718) <sup>(1)</sup> |

<sup>(1)</sup> Shortfall is deducted from current year's authorized budget, as disclosed in Schedules 4 and 5 to the financial statements.

The Reclamation Certificate credit or recovery initiative refers to the costs of conducting audits at sites that are certified under the upstream oil and gas reclamation program. Revenues are received through a reclamation certificate application fee.

The Remediation Certificate credit or recovery initiative refers to the costs of conducting site audits that are certified under Alberta Environment's new Remediation Certificate Regulation. Revenues are received through a remediation site certificate application fee.

The Water Management Infrastructure credit or recovery initiative refers to the maintenance and upgrading of the provincial water management infrastructure system. Revenues are received through the Use of Works Agreements whereby developers pay an annual fee to the Province.

The credits or recoveries presented in this schedule are included in the department's Statements of Operations.

## Schedules to Financial Statements

### Schedule 3 – Expenses – Directly Incurred Detailed by Object

Year ended March 31 (in thousands)

|   | 2010       |           | 2009      |
|---|------------|-----------|-----------|
|   | Budget     | Actual    | Actual    |
| Voted:                                    |            |           |           |
| Salaries, Wages and Employee Benefits     | \$ 101,625 | \$ 96,592 | \$ 91,337 |
| Supplies and Services                     | 52,309     | 41,501    | 54,812    |
| Grants                                    | 73,467     | 61,549    | 18,047    |
| Financial Transactions and Other          | 141        | 238       | 259       |
| Amortization of Tangible Capital Assets   | 22,361     | 20,089    | 19,902    |
|   | 249,903    | 219,969   | 184,357   |
| Statutory:                                |            |           |           |
| Salaries, Wages and Employee Benefits     | \$ –       | \$ 26     | \$ –      |
| Supplies and Services                     | 2,675      | 875       | 1,518     |
| Grants                                    | –          | –         | 90        |
| Valuation Adjustments                     |            |           |           |
| Provision for Doubtful Accounts           | –          | (6)       | (2)       |
| Provision for Vacation Pay                | 99         | 607       | 1,261     |
| Provision for Remediation and Reclamation | –          | (24)      | (40)      |
|   | \$ 2,774   | \$ 1,478  | \$ 2,827  |



# Schedule to Financial Statements

## Schedule 4 – Budget

Year ended March 31 (in thousands)

|  | 2009-2010<br>Estimates | Adjustment<br>(a) | 2009-2010<br>Budget | 2009-2010<br>Authorized<br>Budget |
|--|------------------------|-------------------|---------------------|-----------------------------------|
| <b>Revenues</b>  |                        |                   |                     |                                   |
| Internal Government Transfers                            | \$ 3,175               | \$ –              | \$ 3,175            | \$ 3,175                          |
| Transfers from Government of Canada                      | 51,967                 | –                 | 51,967              | 51,967                            |
| Premiums, Fees and Licenses                              | 5,725                  | –                 | 5,725               | 5,725                             |
| Other Revenue  | 3,248                  | –                 | 3,248               | 3,248                             |
|  | 64,115                 | –                 | 64,115              | 64,115                            |
| <b>Expenses – Directly Incurred</b>                      |                        |                   |                     |                                   |
| <b>Voted Expenses</b>                                    |                        |                   |                     |                                   |
| Ministry Support Services                                | 21,876                 | –                 | 21,876              | 21,876                            |
| Environmental Assurance:                                 |                        |                   |                     |                                   |
| Monitoring, Reporting and Innovation                     | 12,256                 | –                 | 12,256              | 12,256                            |
| Air and Land Policy                                      | 7,941                  | –                 | 7,941               | 7,941                             |
| Climate Change   | 77,248                 | –                 | 77,248              | 77,248                            |
| Environmental Stewardship:                               |                        |                   |                     |                                   |
| Environmental Relationships, Partnerships and Strategies | 7,664                  | –                 | 7,664               | 7,664                             |
| Conservation and Education                               | 4,471                  | –                 | 4,471               | 4,471                             |
| Water for Life   | 16,322                 | –                 | 16,322              | 16,322                            |
| Environmental Management:                                |                        |                   |                     |                                   |
| Resource Management                                      | 17,962                 | –                 | 17,962              | 17,962                            |
| Approvals  | 26,060                 | –                 | 26,060              | 26,060                            |
| Compliance and Enforcement                               | 11,620                 | –                 | 11,620              | 11,620                            |
| Water Operations   | 15,581                 | –                 | 15,581              | 15,581                            |
| Emergency Response                                       | 1,447                  | –                 | 1,447               | 1,447                             |
| Amortization of Tangible Capital Assets                  | 22,361                 | –                 | 22,361              | 22,361                            |
| Oil Sands Environmental Management:                      |                        |                   |                     |                                   |
| Oil Sands Innovation and Policy                          | 4,594                  | –                 | 4,594               | 4,594                             |
| Oil Sands Operations                                     | 2,500                  | –                 | 2,500               | 2,500                             |
| Credit or Recovery Shortfall (Schedule 2)                | –                      | (5,718)           | (5,718)             | (5,718)                           |
|  | 249,903                | (5,718)           | 244,185             | 244,185                           |
| <b>Non-Voted Expenses</b>                                |                        |                   |                     |                                   |
| Land Reclamation Program                                 | 550                    | –                 | 550                 | 550                               |
| Emergency Spills and Cleanups                            | 1,525                  | –                 | 1,525               | 1,525                             |
| Drought and Flood Emergencies                            | 600                    | –                 | 600                 | 600                               |
| Valuation Adjustments                                    |                        |                   |                     |                                   |
| Provision for Vacation Pay                               | 99                     | –                 | 99                  | 99                                |
|  | 2,774                  | –                 | 2,774               | 2,774                             |
|  | 252,677                | (5,718)           | 246,959             | 246,959                           |
| <b>Net Operating Results</b>                             | <b>\$ (188,562)</b>    | <b>\$ (5,718)</b> | <b>\$ (182,844)</b> | <b>\$ (182,844)</b>               |
| Equipment/Inventory Purchases                            | \$ 1,844               | \$ –              | \$ 1,844            | \$ 1,844                          |
| Non-Budgetary Disbursements                              | \$ 1,100               | \$ –              | \$ 1,100            | \$ 1,100                          |

(a) Adjustment includes Credit or Recovery Shortfall.

## Schedule to Financial Statements

### Schedule 5 – Comparison of Expenses – Directly Incurred, Equipment/Inventory Purchases, Statutory Expenses and Non-Budgetary Disbursements by Element to Authorized Budget

Year ended March 31 (in thousands)

|  | 2009-2010<br>Estimates | Adjustments<br>(a) | 2009-2010<br>Budget | 2009-2010<br>Authorized<br>Budget | 2009-2010<br>Actual<br>Expense | Unexpended<br>(Over<br>Expended) |
|--|------------------------|--------------------|---------------------|-----------------------------------|--------------------------------|----------------------------------|
| <b>Voted Expenses and<br/>Equipment/Inventory Purchases</b>        |                        |                    |                     |                                   |                                |                                  |
| <b>Ministry Support Services</b>                                   |                        |                    |                     |                                   |                                |                                  |
| 1.0.1 Minister's Office  | \$ 498                 | \$ –               | \$ 498              | \$ 498                            | \$ 553                         | \$ (55)                          |
| 1.0.2 Cabinet Policy Committee on<br>Resources and the Environment | 135                    | –                  | 135                 | 135                               | 208                            | (73)                             |
| 1.0.3 Deputy Minister's Office                                     | 767                    | –                  | 767                 | 767                               | 804                            | (37)                             |
| 1.0.4 Communications   | 1,567                  | –                  | 1,567               | 1,567                             | 1,393                          | 174                              |
| 1.0.5 People Services  | 2,163                  | –                  | 2,163               | 2,163                             | 2,049                          | 114                              |
| 1.0.6 Legal Services   | 322                    | –                  | 322                 | 322                               | 163                            | 159                              |
| 1.0.7 Finance and Administration                                   | 4,333                  | –                  | 4,333               | 4,333                             | 4,731                          | (398)                            |
| 1.0.8 Strategic Support and Integration                            |                        |                    |                     |                                   |                                |                                  |
| - Expense  | 10,941                 | –                  | 10,941              | 10,941                            | 13,945                         | (3,004)                          |
| - Equipment/Inventory Purchases                                    | 385                    | –                  | 385                 | 385                               | 245                            | 140                              |
| 1.0.9 Corporate Costs  | 1,150                  | –                  | 1,150               | 1,150                             | 1,954                          | (804)                            |
| <b>TOTAL PROGRAM 1</b>   | <b>22,261</b>          | <b>–</b>           | <b>22,261</b>       | <b>22,261</b>                     | <b>26,045</b>                  | <b>(3,784)</b>                   |
| <b>Environmental Assurance</b>                                     |                        |                    |                     |                                   |                                |                                  |
| 2.0.1 Monitoring, Reporting and Innovation                         | 12,256                 | –                  | 12,256              | 12,256                            | 13,209                         | (953)                            |
| 2.0.2 Air and Land Policy  | 7,941                  | –                  | 7,941               | 7,941                             | 8,398                          | (457)                            |
| 2.0.3 Climate Change   | 77,248                 | –                  | 77,248              | 77,248                            | 46,718                         | 30,530                           |
| <b>TOTAL PROGRAM 2</b>   | <b>97,445</b>          | <b>–</b>           | <b>97,445</b>       | <b>97,445</b>                     | <b>68,325</b>                  | <b>29,120</b>                    |
| <b>Environmental Stewardship</b>                                   |                        |                    |                     |                                   |                                |                                  |
| 3.0.1 Environmental Relationships,<br>Partnerships and Strategies  | 7,664                  | –                  | 7,664               | 7,664                             | 15,864                         | (8,200)                          |
| 3.0.2 Conservation and Education                                   |                        |                    |                     |                                   |                                |                                  |
| - Expense  | 3,971                  | –                  | 3,971               | 3,971                             | 4,879                          | (908)                            |
| - Expense funded by Lotteries                                      | 500                    | –                  | 500                 | 500                               | 500                            | –                                |
| - Equipment/Inventory Purchases                                    | –                      | –                  | –                   | –                                 | 16                             | (16)                             |
| 3.0.3 Water For Life   |                        |                    |                     |                                   |                                |                                  |
| - Expense  | 16,322                 | –                  | 16,322              | 16,322                            | 14,513                         | 1,809                            |
| - Equipment/Inventory Purchases                                    | 1,459                  | –                  | 1,459               | 1,459                             | 502                            | 957                              |
| <b>TOTAL PROGRAM 3</b>   | <b>29,916</b>          | <b>–</b>           | <b>29,916</b>       | <b>29,916</b>                     | <b>36,274</b>                  | <b>(6,358)</b>                   |
| <b>Environmental Management</b>                                    |                        |                    |                     |                                   |                                |                                  |
| 4.0.1 Resource Management  | 17,962                 | –                  | 17,962              | 17,962                            | 14,717                         | 3,245                            |
| 4.0.2 Approvals  | 26,060                 | –                  | 26,060              | 26,060                            | 19,920                         | 6,140                            |
| 4.0.3 Compliance and Enforcement                                   | 11,620                 | –                  | 11,620              | 11,620                            | 10,918                         | 702                              |
| 4.0.4 Water Operations   | 15,581                 | –                  | 15,581              | 15,581                            | 15,019                         | 562                              |
| 4.0.5 Emergency Response   | 1,447                  | –                  | 1,447               | 1,447                             | 1,531                          | (84)                             |
| 4.0.6 Amortization of Tangible Capital Assets                      | 22,361                 | –                  | 22,361              | 22,361                            | 20,089                         | 2,272                            |
| <b>TOTAL PROGRAM 4</b>   | <b>95,031</b>          | <b>–</b>           | <b>95,031</b>       | <b>95,031</b>                     | <b>82,194</b>                  | <b>12,837</b>                    |

(a) Adjustments include Credit or Recovery shortfall.

## Schedule to Financial Statements

### Schedule 5 – Comparison of Expenses – Directly Incurred, Equipment/Inventory Purchases, Statutory Expenses and Non-Budgetary Disbursements by Element to Authorized Budget

Year ended March 31 (in thousands)

|   | 2009-2010<br>Estimates | Adjustments<br>(a) | 2009-2010<br>Budget | 2009-2010<br>Authorized<br>Budget | 2009-2010<br>Actual<br>Expense | Unexpended<br>(Over<br>Expended) |
|---|------------------------|--------------------|---------------------|-----------------------------------|--------------------------------|----------------------------------|
| <b>Voted Expenses and<br/>Equipment/Inventory Purchases (continued)</b> |                        |                    |                     |                                   |                                |                                  |
| <b>Oil Sands Environmental Management</b>                               |                        |                    |                     |                                   |                                |                                  |
| 5.0.1 Oil Sands Innovation and Policy                                   |                        |                    |                     |                                   |                                |                                  |
| - Expense   | \$ 4,594               | \$ –               | \$ 4,594            | \$ 4,594                          | \$ 7,894                       | \$ (3,300)                       |
| - Equipment/Inventory Purchases   | –                      | –                  | –                   | –                                 | 17                             | (17)                             |
| 5.0.2 Oil Sands Operations  | 2,500                  | –                  | 2,500               | 2,500                             | –                              | 2,500                            |
| <b>TOTAL PROGRAM 5</b>  | <b>7,094</b>           | <b>–</b>           | <b>7,094</b>        | <b>7,094</b>                      | <b>7,911</b>                   | <b>(817)</b>                     |
| Credit or Recovery Shortfall (Schedule 2)                               | \$ –                   | \$ (5,718)         | \$ (5,718)          | \$ (5,718)                        | \$ –                           | \$ (5,718)                       |
|   | \$ –                   | \$ (5,718)         | \$ (5,718)          | \$ (5,718)                        | \$ –                           | \$ (5,718)                       |
| Operating Expense   | 249,903                | (5,718)            | 244,185             | 244,185                           | 219,969                        | 24,216                           |
| Equipment/Inventory Purchases   | 1,844                  | –                  | 1,844               | 1,844                             | 780                            | 1,064                            |
|   | \$251,747              | \$ (5,718)         | \$246,029           | \$246,029                         | \$220,749                      | \$ 25,280                        |
| <b>Statutory Expenses</b>   |                        |                    |                     |                                   |                                |                                  |
| Land Reclamation Program  | \$ 550                 | \$ –               | \$ 550              | \$ 550                            | \$ 562                         | \$ (12)                          |
| Emergency Spills and Cleanups   | 1,525                  | –                  | 1,525               | 1,525                             | 339                            | 1,186                            |
| Drought and Flood Emergencies   | 600                    | –                  | 600                 | 600                               | –                              | 600                              |
| Valuation Adjustments   | 99                     | –                  | 99                  | 99                                | 577                            | (478)                            |
|   | \$ 2,774               | \$ –               | \$ 2,774            | \$ 2,774                          | \$ 1,478                       | \$ 1,296                         |
| <b>Non-Budgetary Disbursements</b>                                      |                        |                    |                     |                                   |                                |                                  |
| Environmental Relationships,<br>Partnerships and Strategies             | 1,000                  | –                  | 1,000               | 1,000                             | 1,000                          | –                                |
| Approvals   | 100                    | –                  | 100                 | 100                               | –                              | 100                              |
|   | \$ 1,100               | \$ –               | \$ 1,100            | \$ 1,100                          | \$ 1,000                       | \$ 100                           |

(a) Adjustments include Credit or Recovery shortfall.

## Schedules to Financial Statements

### Schedule 6 – Salary and Benefits Disclosure

Year ended March 31

|  | 2010                       |                                    |  |                | 2009           |
|--|----------------------------|------------------------------------|--|----------------|----------------|
|  | Base Salary <sup>(1)</sup> | Other Cash Benefits <sup>(2)</sup> | Other Non-cash Benefits <sup>(3)</sup> | Year-End Total | Year-End Total |
| Deputy Minister <sup>(4)</sup>                                 | \$ 279,275                 | \$ –                               | \$ 64,956                              | \$ 344,231     | \$ 373,617     |
| Assistant Deputy Ministers                                     |                            |                                    |  |                |                |
| Environmental Assurance Division <sup>(5)</sup>                | 178,283                    | –                                  | 42,978                                 | 221,261        | 319,326        |
| Environmental Stewardship Division                             | 195,776                    | –                                  | 46,247                                 | 242,023        | 240,738        |
| Environmental Management Division                              | 190,324                    | 40,488                             | 49,274                                 | 280,086        | 230,082        |
| Strategic Support and Integration Division <sup>(6)</sup>      | 179,944                    | –                                  | 45,011                                 | 224,956        | 242,253        |
| Executive Directors  |                            |                                    |  |                |                |
| Finance and Administration Division                            | 158,295                    | –                                  | 39,858                                 | 198,153        | 218,979        |
| People Services  | 160,271                    | –                                  | 39,553                                 | 199,825        | 196,969        |
| Performance Leadership <sup>(7)</sup>                          | 43,049                     | –                                  | 12,334                                 | 55,383         | –              |
| Chief Information Officer and Integrated Information Solutions | 158,295                    | –                                  | 65,038                                 | 223,333        | 182,577        |

**Prepared in accordance with Treasury Board Directive 12/98 as amended.**

- (1) Base salary includes pensionable base pay.
- (2) Other cash benefits include vacation payouts, overtime and lump sum payments. There were no bonuses paid in 2010.
- (3) Other non-cash benefits include government's share of all employee benefits and contributions or payments made on behalf of employees including pension, supplementary retirement plans, health care, dental coverage, group life insurance, short and long term disability plans, WCB premiums, professional memberships and tuition fees.
- (4) Automobile provided, no dollar amount included in other non-cash benefits.
- (5) The incumbent is also the Assistant Deputy Minister of Oil Sands Environmental Management Division. Hence, the 2009 year-end total amounts for Oil Sands Environmental Management Division have been included under Environmental Assurance Division.
- (6) The Executive Director of Strategic Planning Secretariat became vacant in June of 2008, and the position has not been terminated. The 2009 year-end total amounts have been included under Strategic Support and Integration Division, as the duties of that director are now a part of the Assistant Deputy Minister's role.
- (7) The incumbent became a part of the Executive Team on December 14, 2009.

## Schedules to Financial Statements

### Schedule 7 – Related Party Transactions

Year ended March 31 (in thousands)

Related parties are those entities consolidated or accounted for on a modified equity basis in the Province of Alberta's financial statements. Related parties also include management in the department.

The department and its employees paid or collected certain taxes and fees by regulation for permits, licences and other charges. These amounts were incurred in the normal course of business, reflect charges applicable to all users, and have been excluded from this Schedule.

The department had the following transactions with related parties recorded on the Statements of Operations and the Statements of Financial Position at the amount of consideration agreed upon between the related parties:

|  | Other Entities |          |
|--|----------------|----------|
|  | 2010           | 2009     |
| Revenue                                |                |          |
| Internal Government Transfers          | \$ 1,401       | \$ 2,108 |
|  | \$ 1,401       | \$ 2,108 |
| Expenses – Directly Incurred           |                |          |
| Grants                                 | \$ 5,065       | \$ 1,500 |
| Other Services                         | 3,730          | 5,968    |
|  | \$ 8,795       | \$ 7,468 |
| Tangible Capital Assets Transferred In | \$ 14,583      | \$ 8,367 |
| Payable to                             | \$ 393         | \$ 3,963 |
| Receivable from                        | \$ 407         | \$ 335   |
| Contractual Obligations                | \$ 493         | \$ 352   |

The department also had the following transactions with related parties for which no consideration was exchanged. The amounts for these related party transactions are estimated based on the costs incurred by the service provider to provide the service. These amounts are not recorded in the financial statements.

|   | Other Entities |           |
|---|----------------|-----------|
|   | 2010           | 2009      |
| Expenses – Incurred by Others               |                |           |
| Accommodation                               | \$ 9,623       | \$ 7,779  |
| Legal                                       | 2,076          | 2,587     |
| Water Management Infrastructure Maintenance | 5,750          | 5,828     |
| Other Services                              | 215            | 303       |
| Service Alberta                             | 5,896          | 5,825     |
|   | \$ 23,560      | \$ 22,322 |

# Schedules to Financial Statements

## Schedule 8 – Allocated Costs

Year ended March 31 (in thousands)

| Program  | 2010                          |                                    |                               |   |                               |                 |                             |                   |                             |            |            | 2009     |          |
|--|-------------------------------|------------------------------------|-------------------------------|---|-------------------------------|-----------------|-----------------------------|-------------------|-----------------------------|------------|------------|----------|----------|
|  | Expenses – Incurred by Others |                                    |                               |   |                               |                 | Valuation Adjustments       |                   |                             |            |            | Expenses | Expenses |
|  | Expenses <sup>(1)</sup>       | Accommodation Costs <sup>(2)</sup> | Legal Services <sup>(3)</sup> | Water Management Infrastructure Maintenance | Other Services <sup>(4)</sup> | Service Alberta | Vacation Pay <sup>(5)</sup> | Doubtful Accounts | Remediation and Reclamation | Expenses   |            |          |          |
| Ministry Support Services                                | \$ 25,800                     | \$ 1,437                           | \$ 526                        | \$ –  | \$ 215                        | \$ 5,896        | \$ 214                      | \$ (6)            | \$ –                        | \$ 34,082  | \$ 30,311  |          |          |
| Monitoring, Reporting and Innovation                     | 13,209                        | 918                                | 31                            | –   | –                             | –               | (7)                         | –                 | –                           | 14,151     | 16,702     |          |          |
| Air and Land Policy                                      | 8,398                         | 594                                | 20                            | –   | –                             | –               | (20)                        | –                 | –                           | 8,993      | 11,610     |          |          |
| Climate Change   | 46,718                        | 97                                 | 144                           | –   | –                             | –               | 57                          | –                 | –                           | 47,016     | 10,270     |          |          |
| Reclamation and Emergency Preparedness                   | 901                           | –                                  | –                             | –   | –                             | –               | –                           | –                 | –                           | 901        | 1,608      |          |          |
| Environmental Relationships, Partnerships and Strategies | 15,864                        | 518                                | 43                            | –   | –                             | –               | 261                         | –                 | –                           | 16,686     | 8,136      |          |          |
| Conservation and Education                               | 5,379                         | 238                                | 25                            | –   | –                             | –               | (8)                         | –                 | –                           | 5,635      | 6,704      |          |          |
| Water for Life   | 14,513                        | 205                                | 92                            | –   | –                             | –               | (194)                       | –                 | –                           | 14,616     | 18,461     |          |          |
| Resource Management                                      | 14,717                        | 1,177                              | 292                           | –   | –                             | –               | 94                          | –                 | –                           | 16,280     | 15,151     |          |          |
| Approvals  | 19,920                        | 1,879                              | 423                           | –   | –                             | –               | 29                          | –                 | (24)                        | 22,226     | 23,076     |          |          |
| Compliance and Enforcement                               | 10,918                        | 1,069                              | 188                           | –   | –                             | –               | 95                          | –                 | –                           | 12,269     | 12,696     |          |          |
| Water Operations   | 15,019                        | 1,005                              | 253                           | 5,750                                       | –                             | –               | 76                          | –                 | –                           | 22,104     | 23,544     |          |          |
| Emergency Response                                       | 1,531                         | 119                                | 23                            | –   | –                             | –               | (6)                         | –                 | –                           | 1,667      | 1,906      |          |          |
| Amortization of Tangible Capital Assets                  | 20,089                        | –                                  | –                             | –   | –                             | –               | –                           | –                 | –                           | 20,089     | 19,902     |          |          |
| Oil Sands Innovation and Policy                          | 7,894                         | 367                                | 16                            | –   | –                             | –               | 16                          | –                 | –                           | 8,293      | 6,930      |          |          |
| Oil Sands Operations                                     | –                             | –                                  | –                             | –   | –                             | –               | –                           | –                 | –                           | –          | 2,196      |          |          |
|  | \$ 220,870                    | \$ 9,623                           | \$ 2,076                      | \$ 5,750                                    | \$ 215                        | \$ 5,896        | \$ 607                      | \$ (6)            | \$ (24)                     | \$ 245,008 | \$ 209,203 |          |          |

(1) Expenses – Directly incurred as per Statements of Operations, excluding valuation adjustments.

(2) Costs shown for Accommodation on Schedule 7, allocated by budgeted Full-Time Equivalent Employment.

(3) Costs shown for Legal Services on Schedule 7, allocated by estimated costs by each program.

(4) Costs shown for Other Services on Schedule 7 include charges for Air Transportation, Executive Vehicle Operations, GOA Learning Centre, and Corporate Internal Audit Services.

(5) Valuation Adjustments as per Statements of Operations. Vacation Pay is allocated by employee.

# Climate Change and Emissions Management Fund

## FINANCIAL STATEMENTS

---

Year Ended March 31, 2010

## Auditor's Report



To the Minister of Environment

I have audited the statements of financial position of the Climate Change and Emissions Management Fund as at March 31, 2010 and 2009, and the statements of operations and cash flows for the years then ended. These financial statements are the responsibility of the Fund's management. My responsibility is to express an opinion on these financial statements based on my audits.

I conducted my audits in accordance with Canadian generally accepted auditing standards. Those standards require that I 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 my opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Fund as at March 31, 2010 and 2009 and the results of its operations and its cash flows for the years then ended in accordance with Canadian generally accepted accounting principles.

Original signed by Merwan N. Saher, CA  
Auditor General

Edmonton, Alberta  
June 10, 2010



## Statements of Operations

Year ended March 31 (in thousands)

|  | 2010          |               | 2009               |
|--|---------------|---------------|--------------------|
|  | Budget        | Actual        | Actual             |
| Revenues (Note 2b)   |               |               |                    |
| Industry Purchase of CCEMF Credits by Sector                     |               |               |                    |
| Mining, Oil and Gas Extraction                                   | \$ 47,190     | \$ 29,651     | \$ 35,997          |
| Utilities  | 34,807        | 21,870        | 34,929             |
| Manufacturing  | 6,158         | 3,869         | 7,755              |
| Transportation and Warehousing                                   | 6,845         | 4,301         | 5,107              |
| Waste Management and Remediation                                 | –             | (134)         | 274                |
| Investment Income  | –             | 892           | 1,199              |
| <b>Total Revenues</b>  | <b>95,000</b> | <b>60,449</b> | <b>85,261</b>      |
| Expenses (Note 2b)   |               |               |                    |
| Administration   | –             | 1,018         | –                  |
| Grant to the Climate Change and Emissions Management Corporation | 95,000        | 59,431        | 145,585            |
| <b>Total Expenses</b>  | <b>95,000</b> | <b>60,449</b> | <b>145,585</b>     |
| <b>Net Operating Results</b>                                     | <b>\$ –</b>   | <b>\$ –</b>   | <b>\$ (60,324)</b> |

The accompanying notes are part of these financial statements.

## Statements of Financial Position

Year ended March 31 (in thousands)

|  | 2010      | 2009       |
|--|-----------|------------|
| <b>ASSETS</b>                            |           |            |
| Cash (Note 3)                            | \$ 45,887 | \$ 91,515  |
| Accounts Receivable (Note 4)             | 32,972    | 54,098     |
|  | \$ 78,859 | \$ 145,613 |
| <b>LIABILITIES</b>                       |           |            |
| Accounts Payable and Accrued Liabilities | \$ 78,859 | \$ 145,613 |
|  | 78,859    | 145,613    |
| <b>NET ASSETS</b>                        |           |            |
| Net Assets at Beginning of Year          | –         | 60,324     |
| Net Operating Results                    | –         | (60,324)   |
| Net Assets at End of Year                | –         | –          |
|  | \$ 78,859 | \$ 145,613 |

The accompanying notes are part of these financial statements.

## Statements of Cash Flows

Year ended March 31 (in thousands)

|   | 2010      | 2009        |
|---|-----------|-------------|
| Operating Transactions  |           |             |
| Net Operating Results   | \$ —      | \$ (60,324) |
|   | —         | (60,324)    |
| Decrease (Increase) in Accounts Receivable                      | 21,126    | (29,350)    |
| Increase (Decrease) in Accounts Payable and Accrued Liabilities | (66,754)  | 145,613     |
| Cash Provided by (Applied to) Operating Transactions            | (45,628)  | 55,939      |
| Increase (Decrease) in Cash                                     | (45,628)  | 55,939      |
| Cash, Beginning of Year   | 91,515    | 35,576      |
| Cash, End of Year   | \$ 45,887 | \$ 91,515   |

The accompanying notes are part of these financial statements.

## Notes to the Financial Statements (in thousands)

### Note 1

#### Authority and Purpose

The Climate Change and Emissions Management Fund (CCEMF) operates under the authority of the *Climate Change and Emissions Management Act*, Chapter C-16.7.

The CCEMF may be used only for purposes related to reducing emissions of specified gases or improving Alberta's ability to adapt to climate change.

The CCEMF operates as follows:

- Revenues in the CCEMF are primarily from facilities' purchase of fund credits (\$15 per tonne) used in meeting net emissions intensity limits. Facilities can also make improvements to their operations, purchase Alberta based offsets, or use emission performance credits. Emissions intensity is the ratio of greenhouse gas emissions to facilities' production for the period.
- Emissions measurement involves the use of different methodologies including estimation techniques and use of emission factors. Such techniques can involve using equipment with varying degrees of precision. Use of different techniques and emission factors will produce different results.
- Management has provided guidance to facilities and verifiers for the calculation and verification of emissions intensity. Every facility submitting a compliance report is required to have a third party verify the report at a limited level of assurance. In a limited level of assurance engagement, verifiers perform procedures with the objective of assessing whether the information reported by facilities is plausible within the framework of the guidance provided by management.

The systems and processes including the offsets purchased by facilities are new and complex. Management believes that as the system evolves, and more guidance is developed, the calculation of emissions intensity will be refined through improved methodologies and data quality.

Management's guidance to the tillage offset verifiers allows the verifiers to rely on the offset project developers' written attestations and records as evidence that the offsets are valid. Management is in the process of revising its guidance to require verifiers to collect corroborating evidence. This guidance is expected to come into effect for the 2010 compliance period.

### Note 2

#### Summary of Significant Accounting Policies and Reporting Practices

These financial statements are prepared primarily in accordance with Canadian generally accepted accounting principles for the public sector as recommended by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants. The PSAB financial statements presentation standard for government summary financial statements has been modified to more appropriately reflect the nature of CCEMF's activities.

#### (a) Reporting Entity

The reporting entity is the CCEMF for which the Minister of Environment is accountable.

## Notes to the Financial Statements (in thousands)

### **(b) Basis of Financial Reporting**

#### **Revenues**

All revenues are reported on the accrual basis of accounting.

The revenues are measured from amounts assessed by management and from estimates of amounts not yet assessed. Revenues for the fiscal year also include adjustments between the estimated revenues of previous years and actual amounts.

Management has adopted a regulatory materiality threshold of 5 per cent on emissions or production reported per facility when calculating emissions intensity. This threshold requires facilities to correct and re-verify submissions where errors exceed the 5 per cent limit. Management can require errors below the threshold to be corrected. Uncorrected errors less than the 5 per cent threshold have not been quantified.

#### **Measurement Uncertainty**

Until assessed by management, revenue is estimated based on the amounts reported by the facilities in their compliance reports. The compliance period for facilities is on a calendar basis. The 2010 accounts receivable and revenues include an estimate of \$16,078 for the revenues owing for the period January 1 to March 31, 2010 (2009 – \$20,834). These estimates are subject to measurement uncertainty and actual results could vary by a material amount.

#### **Expenses**

Expenses are those costs the CCEMF has primary responsibility and accountability for, as reflected in the Government's budget documents.

Grants are recognized as expenses when authorized, eligibility criteria are met and a reasonable estimate of the amount can be made.

Expenses include grant payments of \$59,431 made to the Climate Change and Emissions Management Corporation. In 2009, the grant amount of \$145,585 included payment for two fiscal years 2007-08 and 2008-09.

#### **Assets**

Financial assets of the CCEMF are comprised of cash, receivables and interest receivable.

#### **Liabilities**

Liabilities are recorded to the extent that they represent present obligations as a result of events and transactions occurring prior to the end of fiscal year. The settlement of liabilities will result in sacrifice of economic benefits in the future.

#### **Net Assets**

Net assets represent the difference between the carrying value of assets held by the CCEMF and its liabilities.

#### **Valuation of Financial Assets and Liabilities**

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

The fair values of cash, and accounts receivable, are estimated to approximate their carrying values because of the short term nature of these instruments.

### **Note 3 Cash**

Cash consists of a deposit in the Consolidated Cash Investment Trust Fund which is managed by the Province of Alberta to provide competitive interest income while maintaining maximum security and liquidity.

## Notes to the Financial Statements (in thousands)

### Note 4

#### Accounts Receivable

|                                  | 2010         |                                 |                      | 2009                 |
|----------------------------------|--------------|---------------------------------|----------------------|----------------------|
|                                  | Gross Amount | Allowance for Doubtful Accounts | Net Realizable Value | Net Realizable Value |
| Mining, Oil and Gas Extraction   | \$ 15,145    | \$ –                            | \$ 15,145            | \$ 15,673            |
| Utilities                        | 15,484       | –                               | 15,484               | 32,490               |
| Manufacturing                    | 1,231        | –                               | 1,231                | 2,132                |
| Transportation and Warehousing   | 1,112        | –                               | 1,112                | 3,463                |
| Waste Management and Remediation | –            | –                               | –                    | 340                  |
|                                  | \$ 32,972    | \$ –                            | \$ 32,972            | \$ 54,098            |

### Note 5

#### Contractual Obligations

The CCEMF has a contractual grant obligation to the Climate Change and Emissions Management Corporation until September 1, 2014.

### Note 6

#### Approval of Financial Statements

The financial statements were approved by the Senior Financial Officer and the Deputy Minister.

## Other Information

Legislative amendments included:

- The *Climate Change Fund Administration Regulation* delegates responsibility for administering and allocating monies of the Climate Change and Emissions Management Fund to the Climate Change and Emissions Management Corporation, an arms-length, not-for-profit organization;
- The *Remediation Certificate Regulation* enables issuance of remediation certificates to encourage cleanup of contaminated sites. A remediation certificate provides assurance that additional remediation is not required if guidelines are amended or updated provided the site was not altered or land use changed;
- The *Paint and Paint Container Designation Amendment Regulation* increases the maximum advance disposal surcharge from \$0.50 to \$0.75 on containers between 1.01 litres and five litres, and from \$1.00 to \$2.00 on containers between 5.01 and 23 litres to ensure the financial viability of the paint and paint container program;
- The *Designated Material Recycling and Management Amendment Regulation* allows the Alberta Recycling Management Authority to make repayable advances among industry operated recycling funds to ensure financial stability of recycling programs;
- The *Pesticide Sales, Handling, Use and Application Regulation* bans the sale and use of herbicide/fertilizer combination products, commonly known as Weed n'Feed, to reduce the amount of chemical run-off entering into our waterways and protect the quality of water downstream of urban areas.

This annual report is printed on FSC certified chlorine-free paper made from 100 per cent post-consumer fibre. In choosing this paper, Alberta Environment saved 8,538 litres of water, conserved 5 trees and diverted 113 kilograms of waste from Alberta landfills. This paper was produced using wind power, which prevented 223 kilograms of air emissions and saved the use of 59 cubic metres of natural gas.

ISSN No. 1492-9910



**FSC**

**Recycled**  
Supporting responsible  
use of forest resources

Cert no. SW-COC-003506  
[www.fsc.org](http://www.fsc.org)  
© 1996 Forest Stewardship Council