Environment Canada

2010–2011 Estimates

Part III – Departmental Performance Report

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Peter Kent
Minister of the Environment
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Minister’s Message

As Canada’s Minister of the Environment, I am pleased to present the 2010–2011 Departmental Performance Report for Environment Canada. This report outlines the Department’s progress in addressing the priorities set out in the 2010–2011 Report on Plans and Priorities.

The Government of Canada remains committed to protecting and conserving Canada’s rich natural heritage. We are working to expand our protected areas and to ensure the sustainable development of our resource wealth.

The Department took major steps at the domestic, continental and international levels to address climate change and advance the clean air agenda. We made progress towards our sector-by-sector regulatory approach to reducing our greenhouse gas emissions 17% from 2005 levels by 2020 by releasing regulations addressing greenhouse gas emissions from passenger and light-duty trucks, and announcing our intention to regulate emissions from coal-fired electricity. These and other federal and provincial initiatives have already brought us one quarter of the way towards our 2020 target. Internationally, Canada continued to be actively engaged in the negotiations aimed at developing a new, fair and effective international post-2012 climate change regime, by adopting the Cancun agreements.

Environment Canada, in partnership with Health Canada, has worked collaboratively with provinces and territories, industries and environmental and health groups to develop a national air quality management system. This system is expected to be fully implemented in 2013, and will include new regulated standards for industries and new air quality standards for the country.

We also continued to take action to protect the environment and the health of Canadians from harmful substances. In 2010-2011, through the Chemicals Management Plan, we assessed hundreds of new and existing substances for potential risk to human health and the environment and added 29 to the list of toxic substances, in addition to proposing regulations to prohibit the manufacture, import and sale of most mercury-containing products in Canada. The Department is also focused on reinforcing Environment Canada’s reputation as a world-class regulator.

We completed and tabled the first Federal Sustainable Development Strategy, providing a government-wide approach to sustainability by improving the transparency of environmental decision making. Environment Canada has also coordinated the development of the first phase of an integrated environmental monitoring plan for the oil sands region.

As Environment Canada continues to work towards a clean, safe and sustainable environment, we are building on these accomplishments to ensure Canada’s continued environmental and economic success.

The Honourable Peter Kent, P.C., M.P.
Minister of the Environment
SECTION I: ORGANIZATIONAL OVERVIEW

Raison d’être

A number of acts and regulations provide the Department with its mandate and allow it to carry out its programs. Under the *Department of the Environment Act*, the powers, duties and functions of the Minister of the Environment extend to and include matters relating to

- the preservation and enhancement of the quality of the natural environment, including water, air and soil quality;
- renewable resources, including migratory birds and other non-domestic flora and fauna;
- water;
- meteorology;
- the enforcement of any rules or regulations made by the International Joint Commission relating to boundary waters; and
- the coordination of the policies and programs of the Government of Canada respecting the preservation and enhancement of the quality of the natural environment.

Beyond the *Department of the Environment Act*, the Minister of the Environment has primary responsibility for other acts, including the *Canadian Environmental Protection Act, 1999* (CEPA 1999), the new *Federal Sustainable Development Act*, and several pieces of legislation relating to the protection of biodiversity and water. These include responsibility for the enforcement of environmental laws and regulations. The Department also has a demanding role under the *Canadian Environmental Assessment Act*, primarily as a department that provides information and analysis to others (a federal authority), but also as a department with decision-making responsibilities (a responsible authority).

Environment Canada is also a key partner with other federal departments, where statutes such as the *Arctic Waters Pollution Prevention Act*, the *Canada Foundation for Sustainable Development Technology Act*, and the *Marine Liability Act* provide Environment Canada with secondary or shared responsibility for the successful execution of the mandates of other federal departments.

Responsibilities

Environment Canada’s role is multi-faceted. The Department is a *regulator*, one of the largest in the federal government, with statutory and program responsibilities relating to biodiversity and environmental protection. This is a complex and challenging role, involving the integration of leading-edge research in many disciplines and proven best practices derived from the experience of stakeholders, as well as existing policy priorities and statutory authorities. The objective is first to generate standards and guides for practices that will enhance Canada’s natural capital and, second, to set out boundaries and barriers to activities that put Canada’s environment at risk.

In carrying out its regulatory responsibilities, Environment Canada also assumes an *enforcement function* necessary to ensure that companies and individuals comply with pollution prevention and wildlife acts and regulations. This effort, which includes compliance promotion, is undertaken in collaboration with provincial and territorial governments, and national and international agencies and organizations. It addresses, for example, the use of toxic substances and their release to air, water or land. Wildlife enforcement officers enforce Canadian wildlife legislation, which protects
plant and animal species from human interventions, including hunting or trade, that could adversely affect long-term wildlife conservation.

The Department is also a service provider. Through its weather and environmental services program, Environment Canada produces accurate and timely weather warnings and forecasts that benefit the economy and individual Canadians alike; supports public security objectives and emergency and crisis management responses to high-impact events such as tornadoes, floods and droughts; and implements programs in direct support of ecosystem sustainability and environmental protection.

Environment Canada is a science-based department and a leader in scientific innovation, including meteorology and many of the life sciences disciplines (see Environment Canada’s Science Plan). Environment Canada is heavily engaged, therefore, in developing and applying scientific approaches to understand naturally occurring environmental processes and their interactions. This knowledge enables the Department to evaluate and assess the effects of known and emerging stressors on the environment, thus supporting the design and evaluation of the protection of biodiversity, policy options for pollution prevention, control, management and adaptation, and the delivery of state-of-the-art weather services.

The Department increasingly pursues its work through effective partnerships. Inside the Government of Canada, Environment Canada’s services, regulations and science combine with the work of other departments to address broad federal priorities such as emergency and pandemic preparedness, ecosystem and water resource management, management of contaminated sites, implementation of land claims, northern development and sovereignty, and energy security. The delivery of Environment Canada’s mandate also gives rise to partnerships with provincial, territorial and Aboriginal governments, and non-governmental organizations. These partnerships directly support a wide range of shared objectives relating to protecting biodiversity, improving water quality, reducing pollution and enforcing various regulatory requirements.
Strategic Outcome(s) and Program Activity Architecture (PAA)

The Program Activity Architecture (PAA) provides an inventory of a department’s programs, and is therefore a basis for performance measurement as appears in the Departmental Performance Report. Environment Canada’s 2010–2011 PAA included three Strategic Outcomes that support our responsibility for providing Canadians with a clean, safe and sustainable environment:

- Threats to Canadians and their environment from pollution are minimized
- Canadians are equipped to make informed decisions on changing weather, water and climate conditions
- Canada’s natural environment is conserved and restored for present and future generations

A fourth Strategic Outcome supports the Government of Canada’s priority of strong economic growth:

- Canadians benefit from the responsible development of the Mackenzie gas resources.¹

The following diagram, which presents the Department’s 2010–2011 Strategic Outcomes and PAA, shows how programs are organized at Environment Canada.

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¹ On February 16, 2011, responsibility for the Mackenzie Gas Project (MGP) and the Federal Public Administration MGP Office was transferred to the Minister of Aboriginal Affairs and Northern Development. Please see the Canada Gazette for more information.
### 2010–2011 Program Activity Architecture (PAA)

<table>
<thead>
<tr>
<th>Threats to Canadians and their environment from pollution are minimized</th>
<th>Canadians are equipped to make informed decisions on changing weather, water and climate conditions</th>
<th>Canada’s natural environment is conserved and restored for present and future generations</th>
<th>Canadians benefit from the responsible development of the Mackenzie gas resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substances and Waste Management</td>
<td>Weather and Environmental Services for Canadians</td>
<td>Biodiversity - Wildlife and Habitat</td>
<td>Mackenzie Gas Project</td>
</tr>
<tr>
<td>Substances Management</td>
<td>Weather Observations, Forecasts and Warnings</td>
<td>Biodiversity Policy and Priorities</td>
<td></td>
</tr>
<tr>
<td>Waste Management*</td>
<td>Health-related Meteorological Information</td>
<td>Species at Risk</td>
<td></td>
</tr>
<tr>
<td>Environmental Emergencies</td>
<td>Climate Information, Predictions and Tools</td>
<td>Migratory Birds</td>
<td></td>
</tr>
<tr>
<td>Contaminated Sites</td>
<td>Weather and Environmental Services for Targeted Users</td>
<td>Wildlife Habitat Conservation*</td>
<td></td>
</tr>
<tr>
<td>Climate Change and Clean Air</td>
<td>Services to Aviation</td>
<td>Water Resources</td>
<td></td>
</tr>
<tr>
<td>Climate Change and Clean Air Regulatory Program*</td>
<td>Services to Marine Transportation</td>
<td>Water Quality and Aquatic Ecosystems Health</td>
<td></td>
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<tr>
<td>Climate Change and Clean Air Partnerships*</td>
<td>Services to the Department of National Defence</td>
<td>Water Resource Management and Use</td>
<td></td>
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<tr>
<td>Environmental Technology*</td>
<td>Services to Economic Sectors</td>
<td>Hydrological Service and Water Survey</td>
<td></td>
</tr>
<tr>
<td>Compliance Promotion and Enforcement - Pollution</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Legend

- **Strategic Outcomes**
- **Program Activities**
- **Program Sub-Activities**

*There are Sub-sub-activities under these programs that have not been identified in this graphic.*
Organizational Priorities

The priority status legend table below provides definitions of the performance ratings for the Department’s priorities.

Priority Status Legend

<table>
<thead>
<tr>
<th>Status</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exceeded:</strong></td>
<td>More than 100% of the expected level of performance for the priority identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td><strong>Met All:</strong></td>
<td>100% of the expected level of performance for the priority identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td><strong>Mostly Met:</strong></td>
<td>80 to 99% of the expected level of performance for the priority identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td><strong>Somewhat Met:</strong></td>
<td>60 to 79% of the expected level of performance for the priority identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td><strong>Not Met:</strong></td>
<td>Less than 60% of the expected level of performance for the priority identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
</tbody>
</table>

In the 2010–2011 Report on Plans and Priorities (2010–2011 RPP), Environment Canada identified three priorities. These priorities fully support ongoing progress towards program results in support of the Department’s Strategic Outcomes.2

The following table identifies the 2010–2011 priorities, provides a rating of performance for 2010–2011, and highlights a few achievements and progress as measured against these priorities and the plans for meeting these priorities as stated in the 2010–2011 RPP.

<table>
<thead>
<tr>
<th>Organizational Priorities for 2010–2011</th>
<th>Type</th>
<th>Linkages to Strategic Outcome(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Realize concrete progress on international, continental and domestic initiatives on climate change and clean air</td>
<td>Ongoing</td>
<td>• Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized.</td>
</tr>
</tbody>
</table>

Status: Mostly Met

Domestically:
- The Government of Canada worked towards its Copenhagen target by continuing to develop and implement a sector-by-sector regulatory approach to reduce greenhouse gas (GHG) emissions, aligning its efforts with the approach being taken by the United States when appropriate for Canadian circumstances. In June 2010, the Government announced its intention to develop regulations addressing GHG emissions from coal-fired electricity generation. Later, in October 2010, the Government released final regulations addressing GHG emissions from passenger vehicles and light-duty trucks.

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2 Please refer to Environment Canada’s 2010–2011 RPP: Section I: Environment Canada’s Operating Context and Priorities.
• The Department worked closely with provinces and territories in the development of its approach to reduce emissions. Environment Canada signed an agreement in principle with British Columbia (April 2010) on efforts to address climate change and initiated discussions on the establishment of an agreement in principle with Quebec on efforts to address climate change. Environment Canada has worked with the provinces of Ontario, British Columbia and Manitoba since mid-2010 to develop memoranda of agreement (MOAs) relating to data sharing.
• In October 2010, the federal, provincial and territorial environment ministers endorsed the final recommendations of the Comprehensive Air Management System (CAMS) developed over the preceding two years. They agreed to move forward in a collaborative effort with stakeholder engagement to finalize a new system for managing air quality. The system will result in improved air quality across Canada through the implementation of new ambient air quality standards, industrial emission requirements, and local air zones and regional airsheds management.

Continently:
• Canada met all its commitments by continuing to collaborate with the United States through the Clean Energy Dialogue on development of clean energy technologies to reduce greenhouse gases and air pollutants.
• The Government adopted a regulatory sector-by-sector approach in 2010 in order to align its efforts with those being undertaken in the United States. Foundational analysis on cap-and-trade design continued.
• Canada engaged the United States in efforts to reduce the transboundary flow of air pollution under the Canada–United States Air Quality Agreement, including discussions on the development of an annex on particulate matter to the Agreement.

Internationally:
• Canada met all its objectives for a post-2012 global agreement on climate change by adopting the Cancun Agreements.
• Canada continued to negotiate revisions to the Gothenburg Protocol to the United Nations Economic Commission for Europe (UNECE) Convention on Long-range Transboundary Air Pollution (LRTAP Convention) that will facilitate our eventual ratification, if desired.
• Canada participated in collaborative work with parties on the issue of black carbon. These parties included the Arctic Council’s Expert Group and the Task Force on Short-Lived Climate Forcers, which finalized its progress report and summary of recommendations, as well as the Expert Group on Black Carbon under the LRTAP Convention.

<table>
<thead>
<tr>
<th>2- Enhance environmental protection through the implementation of key national initiatives</th>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strategic Outcome 1: Canada’s natural environment is conserved and restored for present and future generations.</td>
<td></td>
</tr>
<tr>
<td>• Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions.</td>
<td></td>
</tr>
<tr>
<td>• Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized.</td>
<td></td>
</tr>
</tbody>
</table>

Status: Mostly Met
• A 10-year investment strategy has been developed to support long-term sustainability of the weather and environmental service. Proposals to secure funding for the strategy were developed and submitted with a key focus on addressing critical vulnerabilities in monitoring networks and maintaining access to essential supercomputing capacity.
• A series of innovative and transformative projects were launched to form the foundation for a renewed, modern and efficient Canadian weather and environmental service. An example is the warning re-engineering project, which will provide improved, more impact-based decision support to Canadians and to public authorities in times of high-impact weather.
The implementation of the Environmental Enforcement Act (EEA) continued through 2010–2011 with the coming into force of stage 1 provisions. In addition, a number of supporting activities around the implementation of the EEA were completed in 2010–2011, such as the creation and delivery of training to enforcement officers; the creation of a working group to determine policy and regulation content of administrative monetary penalties; and the development of the Environmental Offenders Registry.

The Department met most of its planned commitments in the implementation of the Species at Risk Act (SARA) to prevent wildlife species from becoming extinct and secure the necessary actions for their recovery. The Department focused on completing recovery strategies, action plans and management plans for species listed under the Act where Environment Canada is the lead. Priority work in this area included ensuring that Aboriginal traditional knowledge informed the Woodland Caribou Boreal population recovery strategy.

Environment Canada worked collaboratively with its partners to reduce pollution and restore ecological integrity of problem waters. Under the Action Plan for Clean Water, Environment Canada pursued research and monitoring activities for Lake Winnipeg, Lake Simcoe and Areas of Concern (AOCs) in the Great Lakes. Activities towards delisting of AOCs are also supported by the Great Lakes Action Plan. Over 130 cleanup, protection and restoration projects received funding under the Lake Winnipeg Basin Stewardship Fund, the Lake Simcoe Clean-up Fund and the Great Lakes Sustainability Fund.

Environment Canada implemented the Chemicals Management Plan and mostly met its deliverables within the established timelines. For example, in 2010–2011, 171 existing substances underwent science-based risk assessments, which led to the issuance of 139 draft screening assessments and 44 final screening assessments. Substances found to pose a risk to human health or to the environment were subject to risk management action. Risk management actions were initiated on 39 substances that may pose a risk to our health and/or the environment.

### 3- Foster capacity of enabling functions to support programs

**Ongoing**

- **Strategic Outcome 1:** Canada’s natural environment is conserved and restored for present and future generations.
- **Strategic Outcome 2:** Canadians are equipped to make informed decisions on changing weather, water and climate conditions.
- **Strategic Outcome 3:** Threats to Canadians and their environment from pollution are minimized.
- **Strategic Outcome 4:** Canadians benefit from the responsible development of the Mackenzie gas resources.

**Status: Mostly Met**

- A focus on learning was reiterated according to Environment Canada’s learning policy, as the Department ensured a minimum of 1.5% of the salary envelope be spent for learning activities. The importance of building a representative and diverse workforce was emphasized with the development and implementation of an employment equity (EE) online session to all employees and managers in order to increase awareness of the four designated groups. EE commitments were included in executive performance agreements to address the identified gaps.

- The Department’s corporate planning effort in 2010–2011 was directed at the budget allocation exercise for 2011–2012.

- Financial forecasting was improved in 2010–2011 to better manage and realign departmental spending. Corporate financial situation reports were produced monthly, the corporate budgeting and allocation process for 2011–2012 was implemented earlier, and the management variance reporting tool for managers was updated as a key instrument for internal departmental reporting, resulting in greater accuracy.

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3 The EEA is being implemented in three stages through 2012–2013.
4 See Program Activity 3.1: Substance and Waste Management for further details on progress against commitments.
Risk Analysis

The purpose of this section is to summarize Environment Canada's response in the context of each of the Department’s six corporate risks as identified in the 2010–2011 Report on Plans and Priorities. These risks and the related mitigation strategies were managed within a broader Government of Canada context that involved both stimulus and restraint.

Although Environment Canada’s budget includes a permanent funding base, its overall budget has fluctuated over time as a result of temporary funding for time-limited initiatives, vote-netted revenue, and flow-through (one-time) funding for a number of foundations and third parties. While Budget 2010 included new measures totalling $190 million to support environmental initiatives, the Department saw a drop in its 2010–2011 planned spending due to a decrease in program funding and the Budget 2010 containment measures. These measures included restraining spending through targeted measures and reviewing government administrative costs to identify opportunities for additional savings and improved service delivery.5

This mix of both stimulus and restraint created challenges for managing the Department, particularly in view of the continuing expectations of Canadians for progress on environmental issues, and for ongoing departmental operations that require a stable funding base.

External Dependencies – Risk: In areas of shared responsibility such as protecting the environment and promoting sustainable development, cooperation and coordination with a broad range of program participants, suppliers, contractors and third parties are essential to meet policy objectives. If not well managed, negative impacts on program or service delivery could result.

The Department engaged with provincial and territorial governments, Aboriginal organizations, stakeholders and citizens to advance the Government’s environmental agenda. A consultation policy was adopted to facilitate effective consultation processes and meet responsibilities to consult with Aboriginal peoples. Provincial and territorial partners were also engaged through the Canadian Council of Ministers of the Environment to address cross-jurisdictional environmental issues such as air emissions, municipal wastewater effluent and biodiversity.

Internationally, Environment Canada maintained relationships with key partner countries and international organizations through existing bilateral, multilateral or regional fora. The Department participated in negotiations for new agreements (e.g. mercury releases, Access to Genetic Resources and Benefit-sharing), concluded a memorandum of understanding on environmental cooperation with China, and implemented bilateral work plans with partners, including Peru and Chile. Under the Commission for Environmental

5 Leading the Way on Jobs and Growth, Budget 2010, Department of Finance, March 2010.
Cooperation, Canada, Mexico and the United States adopted a five-year strategic plan for trilateral projects focusing on new regional environmental priorities. On climate change, the Department continued to support key bilateral relationships using a range of existing programs and delivery of international clean technology partnerships such as the Asia–Pacific Partnership on Clean Development and Climate, the Global Methane Initiative, and the Renewable Energy and Energy Efficiency Partnership.

**Business Continuity – Risk:** Rapidly escalating costs, advances in technology, and hazards such as extreme weather events can present a risk to the provision of mission-critical services.

The Policy on Government Security requires departments to implement a business continuity planning program so that all critical services continue to be available in the event of a major disruption. Environment Canada’s business continuity plans (BCPs) are operationalized at least once a year to ensure their ongoing integrity. In 2010–2011, the Meteorological Service of Canada, the provider of Canada’s weather services, put its BCP into action three times (after the National Capital Region earthquake, after the Microsoft virus attack, and during a scheduled test).

To continue improving the Department’s Information Technology (IT) Security program, an improved and scalable certification and accreditation process was implemented and the new IT Security Policy Renewal Framework was approved. In addition, an IT security awareness program was launched and an enterprise-wide plan to address threats to critical systems was completed.

**Resource Management – Risk:** A period of fiscal restraint can reduce decision-makers’ flexibility to manage departmental resources. Effective resource management is dependent upon relevant and timely financial and risk information to make sound decisions in planning, delivering, monitoring and evaluating programs and services.

In 2010–2011 Environment Canada faced challenges in addressing the Strategic Review decisions as well as the cost containment measures announced as part of Budget 2010. The impact of these reductions, coupled with costs associated with program delivery and administration, constituted a challenge to the Department in delivering results moving forward into 2011–2012 and beyond.

Financial forecasting was improved to better manage and realign departmental spending. Corporate financial situation reports were produced monthly, the corporate budgeting and allocation process for 2011–2012 was implemented earlier, and the management variance reporting tool for managers was updated as a key tool for internal reporting, which resulted in greater accuracy.

**Capital Assets Functionality – Risk:** As a science-based department and the primary provider of weather and environmental services, Environment Canada faces a risk that its capital assets may become unreliable or too costly to maintain.
To mitigate this risk, the second multi-year Departmental Capital Investment Plan 2011–2012 to 2013–2014 was approved. This plan provided the opportunity to strategically shift requirements to ensure that high-priority items were funded in one of the three fiscal years covered by the plan and to provide direction for any possible in-year capital reallocation.

**Information for Decision Making – Risk:** *Environment Canada’s mandate and reputation depends on quality information and data and on rigorous recordkeeping and data management.*

A continued focus on multi-year commitments to improve the information management (IM) and information technology (IT) infrastructure resulted in significant investments for the provision of government-wide mission-critical data, including the modernization of the high-performance computing system and implementation of a standard infrastructure across storm prediction centers and aviation desks. A fully integrated corporate assets management tool was also launched, aimed at providing a single source for assets management information within the Department.

Migration to a newer version of Microsoft SharePoint, known as ECollab, has resulted in the improved management of online documents. This tool enables the Department to better track commitments and to follow through on the achievement of outcomes and results. Currently, with approximately 400 sites and subsites and 6,000 users, ECollab is used throughout the Department for collaboration and document management.

**Human Resources Skills – Risk:** *Given retirements from the federal public service, and the need for specific knowledge- and science-based skill sets, Environment Canada will face a recruiting challenge in the coming years.*

Environment Canada’s Talent Management Framework is focused on deploying talent, retaining and developing employees, empowering managers and engaging employees. Efforts have been focused on reallocating existing resources to ensure departmental capacity to respond to priorities: new development programs were put in place for economists and scientists; over 50% of managers accessed development opportunities through the EC Managers’ Network; and senior managers have sought out the EC Business Literacy Program for Executives.

Environment Canada has undertaken a review of its risk management approach with the objective of developing a process to embed comprehensive and consistent risk analysis into planning and decision making at all levels of the organization.
Summary of Performance

2010–2011 Financial Resources* ($ millions)

<table>
<thead>
<tr>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,094.4</td>
<td>1,171.7</td>
<td>1,088.9</td>
</tr>
</tbody>
</table>

Totals may differ between and within tables due to the rounding of figures.
* Excludes services received without charge and respendable revenues.

The Department’s planned spending represents that amount approved by Parliament through the Main Estimates and increased by other anticipated adjustments for the balance of the year. Throughout the year, new and renewed funding added a total of $77.3 million to planned spending, increasing the total authorities to $1,171.7 million. The main programs contributing to this increase were the Great Lakes Action Plan – phase IV ($7.9 million), the Canadian Environmental Sustainability Indicators initiative ($6.4 million), the Mackenzie Gas Project ($2.5 million), international assistance to support emerging developing countries ($5.0 million), meteorological services and navigational warning services for defined regions of the Arctic Ocean ($2.6 million) and a statutory payment to the Nature Conservancy of Canada ($21.7 million). The actual spending of $1,088.9 million (93% of total authorities) reflects the departmental expenditures as reported in the Public Accounts with a resulting surplus of $82.8 million. Much of this surplus was due to the decision to “reprofile” funds (i.e. transferring 2010-2011 funds) to future fiscal years for Sustainable Development and Technology Canada (SDTC) ($37.5 million), the Federal Contaminated Sites Action Plan ($3.5 million) and the Great Lakes Action Plan ($3.1 million).

2010–2011 Human Resources (Full-time Equivalents (FTEs))

<table>
<thead>
<tr>
<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,973.0</td>
<td>6,775.0</td>
<td>(198.0)</td>
</tr>
</tbody>
</table>

The human resources required to sustain an average level of employment over 12 months are based on a 37.5-hour workweek. Environment Canada used 6,775 full-time equivalents (FTEs) in 2010–2011. This decrease of 198 FTEs or 3% under the initial planned estimate of 6,973 FTEs was caused by the financial pressure associated with the 2010 Budget decision to not provide additional funding to cover the annual increase in wages for the federal public administration.

This FTE utilization represents a decrease of 42 from that of 2009–2010 (6,817 FTEs).
Performance by Strategic Outcome

The following tables present an overview of key achievements and progress towards program results during 2010–2011 and a summary of financial information for each Program Activity. For further information on performance by Program Activity, please refer to Section II.

| Strategic Outcome 1: Canada’s natural environment is conserved and restored for present and future generations |
|----------------------------------------------------|---|---------------------------------|
| Performance Indicators | Targets | 2010–2011 Performance Summary |
| Percentage of Canadian ecosystems where ecosystem health has been assessed as good | To be determined.⁶ | Long-term, standardized, spatially complete and readily accessible monitoring information, complemented by ecosystem research, provides the most useful findings for policy-relevant assessments of status and trends. The lack of this type of information in many areas has hindered development of this assessment. Status and trends have been assessed by piecing together information from disparate sources. *Canadian Biodiversity: Ecosystem Status and Trends 2010* (Canada’s first assessment of the health of its ecosystems) identified and rated 20 key findings⁷ related to the health of Canada’s ecosystems that can be used as a baseline for future assessments. Overall, 18% of ecosystem elements and relevant human activities were rated as healthy, 50% were of concern, 22% were impaired, and 10% were undetermined.⁸ |

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⁶ Environment Canada had the intent to report baseline values in this Departmental Performance Report at the time when the 2010–2011 Report on Plans and Priorities was prepared. However, this proved more difficult than anticipated for the reasons outlined in the 2010–2011 Performance Summary column.

⁷ The key findings of *Canadian Biodiversity: Ecosystem Status and Trends 2010* include a broad range of topics that cover both the status and trends of various aspects of ecosystems themselves (biomes, habitat, wildlife, and ecosystem processes) and the human activities that affect them. The overall health of individual ecosystems was not rated. The percentage of the report’s key findings that are rated as healthy, of concern or impaired is not equivalent to the percentage of Canada’s ecosystems that are rated as healthy, of concern or impaired. Note that 20 of the 22 key findings from the report are reflected here; the science/policy interface themes have been excluded.

⁸ The percentage of key findings in each status category (healthy, of concern, impaired) was calculated by adding the number of status ratings in each category and dividing by 20. In cases where the status of a key finding was given two ratings (e.g. forests are rated as both healthy and of concern), each rating received a weighting of 0.5. All percentages were rounded to two digits. See the synthesis of key findings in the report details.
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual Spending</td>
<td>Main Estimates</td>
</tr>
<tr>
<td>Biodiversity – Wildlife and Habitat</td>
<td>134.7</td>
<td>104.1</td>
</tr>
<tr>
<td>Water Resources</td>
<td>99.4</td>
<td>103.0</td>
</tr>
<tr>
<td>Sustainable Ecosystems</td>
<td>53.8</td>
<td>67.5</td>
</tr>
<tr>
<td>Compliance Promotion and Enforcement – Wildlife</td>
<td>16.9</td>
<td>19.1</td>
</tr>
<tr>
<td><strong>Total (excluding Internal Services)</strong></td>
<td><strong>304.7</strong></td>
<td><strong>293.6</strong></td>
</tr>
</tbody>
</table>

**Alignment with Government of Canada Outcomes**

Clean and healthy environment

Note: Numbers exclude respondable revenues and services received without charge, and totals may differ between and within tables due to the rounding of figures.
### Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions

#### Performance Indicators Targets 2010–2011 Performance Summary

<table>
<thead>
<tr>
<th>Percentage of the population surveyed (adult Canadians) who indicate having received enough notice to properly react to a warning of an approaching winter storm always or most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targets</td>
</tr>
<tr>
<td>85% by 2012</td>
</tr>
<tr>
<td>78% of the respondents believe that warnings give them sufficient notice always or most of the time compared to 84% in 2007 and 81% in 2002.</td>
</tr>
<tr>
<td>Despite this decrease, the demands in terms of need for at least 12 hours advance notice for winter storm warnings have grown significantly over the last decade (26% in 2002 to 39% 2011) and Canadians’ belief in the clarity of information related to winter weather warnings has increased too.</td>
</tr>
<tr>
<td>A large majority of respondents (87%) rate weather warning information as important and the Department has positioned itself to sustain its capacity to provide weather and environmental services. The next survey is planned for fiscal year 2014–2015.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage of municipalities that account for the frequency and severity of weather and related atmospheric hazards in their emergency and/or disaster management plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targets</td>
</tr>
<tr>
<td>70% of Canadian municipalities by 2015</td>
</tr>
<tr>
<td>86% of 440 municipalities in Ontario surveyed reported that they had included atmospheric hazards in their disaster management planning as dictated by the provincial legislation (Bill 148).</td>
</tr>
<tr>
<td>Severe weather was the number one risk facing municipalities and is included in municipal emergency preparedness plans.</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather and Environmental Services for Canadians</td>
<td>155.8</td>
<td>166.2</td>
<td>169.9</td>
<td>191.9</td>
<td>186.8</td>
</tr>
<tr>
<td>Weather and Environmental Services for Targeted Users</td>
<td>15.4</td>
<td>22.7</td>
<td>23.4</td>
<td>23.1</td>
<td>23.0</td>
</tr>
<tr>
<td>Total (excluding Internal Services)</td>
<td>171.2</td>
<td>188.9</td>
<td>193.3</td>
<td>215.0</td>
<td>209.9</td>
</tr>
</tbody>
</table>

Note: Numbers exclude respendable revenues and services received without charge, and totals may differ between and within tables due to the rounding of figures.
### Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Targets</th>
<th>2010–2011 Performance Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canadian emissions of greenhouse gases (GHGs) (carbon dioxide equivalents) in megatonnes (Mt)</strong></td>
<td>Canada’s national target is a 17% reduction from 2005 levels by 2020</td>
<td>National emissions are reported at 690 Mt, current to 2009. GHG emissions are currently 83 Mt above 2020 national target. 2009 national emissions are 5.6% below 2005 levels.</td>
</tr>
<tr>
<td><strong>Canadian ambient air quality (ground-level ozone and fine particulate matter)</strong></td>
<td>To be determined. Targets will be determined with the finalization of the air pollutant regulatory approach</td>
<td>A 3% decrease of the population-weighted national indicators for ground-level ozone and fine particulate matter was observed between 2007 and 2008 during the warm season (April 1 to September 30).</td>
</tr>
<tr>
<td><strong>Percentage decrease of concentrations of selected substances in air, soil, sediment, water and/or biota from baseline data</strong></td>
<td>To be determined.</td>
<td>The following are baseline values of concentrations of key contaminants in fish and in lake sediments for Lake Ontario. In future, concentrations will be compared to environmental quality guidelines as an indicator of the effectiveness of departmental actions to reduce the risk of harmful substances in the environment. Polybrominated diphenyl ethers (PBDEs): Aquatic biota (Lake Trout): 125 ng/g ww Sediments: 23 ng/g Perfluorooctane sulfonate (PFOS): Aquatic biota (Lake Trout): 64 ng/g ww Sediments: 28 ng/g All values are for samples taken in Lake Ontario in 2000 (the baseline year). Values are subject to revision pending completion of quality assurance.</td>
</tr>
</tbody>
</table>

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9 The establishment of baseline values, as identified in the 2010–2011 Performance Summary column, assists in facilitating development of a future target.

10 Concentrations presented are based on small sample size, and one single location in Canada. In addition, PFOS and certain PBDEs are persistent and bioaccumulative, therefore significant changes in concentrations may not be evident from year to year.
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Main Estimates</td>
<td>Planned Spending</td>
</tr>
<tr>
<td>Substances and Waste Management</td>
<td>96.5</td>
<td>120.6</td>
<td>121.9</td>
</tr>
<tr>
<td>Climate Change and Clean Air</td>
<td>128.1</td>
<td>240.1</td>
<td>240.2</td>
</tr>
<tr>
<td>Compliance Promotion and Enforcement – Pollution</td>
<td>39.8</td>
<td>41.1</td>
<td>41.4</td>
</tr>
<tr>
<td><strong>Total (excluding Internal Services)</strong></td>
<td><strong>264.5</strong></td>
<td><strong>401.9</strong></td>
<td><strong>403.4</strong></td>
</tr>
</tbody>
</table>

Note: Numbers exclude respendable revenues and services received without charge, and totals may differ between and within tables due to the rounding of figures.

* The variance between the total authorities and the actual spending under the Program Activity for Climate Change and Clean Air is mainly attributable to the Department transferring 2010–2011 funds to future years for new and ongoing programs such as grants to the Sustainable Development and Technology Canada (SDTC), NextGen Biofuels Fund, and contributions to the National Vehicle Scrappage Program (delivered by the Clean Air Foundation in support of Canada’s Clean Air Agenda). Additional funds were also transferred to the Canadian International Development Agency (CIDA) for emerging developing country priorities as part of Canada’s climate change financing during the Governor General’s Warrant period.
### Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources

#### Performance Indicators

| Decision on whether to proceed with the project is consistent with the recommendations of the Joint Review Panel and the outcome of fiscal discussions with project proponents | To be determined | Subject to progress of discussions | Under authority of the Mackenzie Gas Project Office (MGPO), Environment Canada provided secretariat functions to the federal and Northwest Territories departments involved in the project, coordinating communication with central agencies and the proponent. |

Environment Canada provided timely input towards the completion of the Government’s response to the Mackenzie Gas Project (MGP) panel report.

Environment Canada provided enhanced hydrometric monitoring at selected locations along the Mackenzie Valley and within the Mackenzie Delta.

Under guidance of the MGPO, Environment Canada developed communications products to ensure the Canadian public understood the Government’s role and how the project was progressing.

<table>
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</thead>
<tbody>
<tr>
<td>Mackenzie Gas Project</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Total (excluding Internal Services)</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Alignment with Government of Canada Outcomes

- **Strong economic growth**

### (S millions)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Internal Services</td>
<td>351.3</td>
<td>209.7</td>
</tr>
</tbody>
</table>

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11 Commencing in the 2009–2010 Estimates cycle, the resources for Program Activity: Internal Service is displayed separately from other program activities; they are no longer distributed among the remaining program activities, as was the case in previous Estimates documents. This has affected the comparability of spending and full-time equivalent information by Program Activity between fiscal years.
Expenditure Profile

Canada’s Economic Action Plan (CEAP)

Environment Canada received CEAP funding in 2010–2011 for the following initiatives:

- **Modernizing Federal Laboratories:** Funding was provided to address deferred maintenance at six Environment Canada laboratories over two years.
- **Accelerating the Federal Contaminated Sites Action Plan:** Funding was provided to accelerate assessment and remediation activities on federal contaminated sites under the Federal Contaminated Sites Action Plan (FCSAP).
- **Arctic Research Infrastructure:** Funding was provided to support the development and expansion of Arctic research field camp facilities at multiple sites in Nunavut and the Northwest Territories.

Please refer to Section II for more information on Environment Canada’s contribution to CEAP.

Departmental Spending Trend

The following chart depicts the Department’s spending trend over a six-year period (three-year actual spending reported in Public Accounts and three-year planned spending as per the 2011–2012 Report on Plans and Priorities).

As seen in the chart above, Environment Canada’s actual spending as per Public Accounts for 2010–2011 was $1.089 billion, a year-over-year decrease of $6.2 million or
0.6% from 2009–2010 spending. This slight decrease is mainly due to reduced payments to foundations. Other minor variations in spending, both increases and decreases, offset one another.

The decrease in actual spending between 2008–2009 and 2009–2010 ($25.3 million) is primarily attributed to reduced payments to foundations such as the Nature Conservancy of Canada and Sustainable Development and Technology Canada (SDTC). During the same period, there was increased spending to implement the National Vehicle Scrappage Program and freshwater initiatives, as well as incremental spending related to Canada’s Economic Action Plan, such as the Modernizing Federal Laboratories Initiatives.

The projected planned spending figures for 2011–2012, 2012–2013 and 2013–2014 reflect the result of sunsetting and reduced funding for initiatives that include the Chemicals Management Plan, the Clear Air Agenda and the Federal Contaminated Sites Action Plan. Sunsetting programs are subject to government decisions to extend or enhance funding. In Budget 2011, the Government of Canada announced that some of these programs will be renewed, and other new investments and funding for Environment Canada will be included in the Supplementary Estimates that will be tabled in Parliament later in 2011–2012.

The spending trend chart illustrates the Department’s Main Estimates, planned spending, total authorities and actual spending for the past three years.

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(1) Actual spending includes Canada’s Economic Action Plan displayed separately for information purposes.
Estimates by Vote

For information on our departmental votes and statutory expenditures, please see the 2010–2011 Public Accounts of Canada (Volume II) publication. An electronic version of the Public Accounts is available at Public Works and Government Services Canada’s Web page, Public Accounts of Canada 2010.12

Strategic Environmental Assessment

In collaboration with key branches at Environment Canada, the Sustainable Development Office drafted the Department’s policy on strategic environmental assessment (SEA). This policy outlines key accountabilities and procedures for completing and reporting on SEAs and was approved by the Executive Management Committee in June 2011.

In line with recommendations made by the Commissioner of the Environment and Sustainable Development, a management system to support SEAs has also been put in place. The management system supports the implementation of the policy and ensures that the Department both complies with the Cabinet Directive and produces quality SEAs that take into consideration the Federal Sustainable Development Strategy goals and targets. Some key elements of the management system include a tracking system, an updated SEA website, and revised guidance and training resources.

SECTION II: ANALYSIS OF PROGRAM ACTIVITIES
BY STRATEGIC OUTCOME

The performance status legend table below provides definitions of the performance ratings for the level of performance for the expected result of each Program Activity.

Performance Status Legend

<table>
<thead>
<tr>
<th>Exceeded:</th>
<th>More than 100% of the expected level of performance (as evidenced by the indicator and target or planned activities and outputs) for the expected result identified in the corresponding Reports on Plans and Priorities (RPP) was achieved during the fiscal year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met All:</td>
<td>100% of the expected level of performance (as evidenced by the indicator and target or planned activities and expected outputs) for the expected result identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td>Mostly Met:</td>
<td>80 to 99% of the expected level of performance (as evidenced by the indicator and target or planned activities and expected outputs) for the expected result identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td>Somewhat Met:</td>
<td>60 to 79% of the expected level of performance (as evidenced by the indicator and target or planned activities and outputs) for the expected result identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
<tr>
<td>Not Met:</td>
<td>Less than 60% of the expected level of performance (as evidenced by the indicator and target or planned activities and outputs) for the expected result identified in the corresponding RPP was achieved during the fiscal year.</td>
</tr>
</tbody>
</table>
Strategic Outcome 1: Canada’s natural environment is conserved and restored for present and future generations

Environment Canada’s work that contributes to this Strategic Outcome is organized into four Program Activities:

- Biodiversity – Wildlife and Habitat
- Water Resources
- Sustainable Ecosystems
- Compliance Promotion and Enforcement – Wildlife

Program Activity 1.1: Biodiversity – Wildlife and Habitat

Program Activity Description

This program aims to prevent biodiversity loss while still enabling sustainable use by protecting and recovering species at risk, conserving, restoring and rehabilitating significant habitats, and conserving and managing migratory birds. It also aims to ensure a coordinated and coherent national assessment, planning and action to protect biodiversity, including viable populations of species, healthy and diverse ecosystems, and genetic resources. The program includes the formation of strategic partnerships for integrated management of Canada’s natural capital, including stewardship and the sustainable management of landscapes. Legal and statutory responsibilities for this program include the *Species at Risk Act*; the *Migratory Birds Convention Act, 1994*; the *Canada Wildlife Act*; and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*. International responsibilities include the United Nations Convention on Biological Diversity (1992), the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the Convention on Wetlands of International Importance, especially as Waterfowl Habitat (known as the Ramsar Convention). Contributions in support of Biodiversity – Wildlife and Habitat are used as a component of this program.

2010–2011 Financial Resources ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>104.5</td>
<td>132.3</td>
<td>129.3</td>
</tr>
</tbody>
</table>

2010–2011 Human Resources (FTEs)

<table>
<thead>
<tr>
<th></th>
<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>578</td>
<td>519</td>
<td>(59)</td>
</tr>
</tbody>
</table>
### Expected Results

Populations of wildlife, in particular migratory birds and species at risk, are maintained or restored to target levels

### Performance Indicators

Proportion of assessed species in General Status Reports whose status is considered to be secure

### Targets

70% Currently Met To be maintained

### Performance Status

Met All

2000: 74%
2005: 70%
2010: 77%

The variability above is because the actual number of species assessed differs every year. Environment Canada is not reporting on an identical set of species from one timeframe to the next.¹³

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### Performance Summary and Analysis of Program Activity

#### Biodiversity

During the reporting period, the Department engaged key sectors (business, municipalities, youth, environmental non-governmental organizations (ENGOs) and Aboriginal communities) to position Canada for 2010, the International Year of Biodiversity. This included the publication of the national report *Caring for Canada’s Biodiversity* and the launch of a new website (BiodivCanada), which provides a portal to collaborative biodiversity work being undertaken in Canada by federal, provincial and territorial governments and their partners. These domestic efforts set the stage for Canadian participation in the successful meeting of the 10th Conference of the Parties to the Convention of Biological Diversity (COP 10) in October 2010. At COP 10, 47 decisions were adopted, including a new 10-year global Strategic Plan for Biodiversity, the Nagoya Protocol on Access to Genetic Resources, and the Fair and Equitable Sharing of Benefits Arising from their Utilization.

Environment Canada managed and led the Canadian negotiating team in the successful negotiation of the Nagoya Protocol, which was adopted on October 30, 2010. Environment Canada, in collaboration with the provinces and territories, led the development of domestic policy guidance for Canada related to access and benefit-sharing of genetic resources. The resulting discussion paper, “Managing Genetic Resources in the 21st Century,” was adopted by Deputy Ministers at the Canadian Council of Ministers of the Environment (CCME) in November 2010.

Working closely with other government departments such as Foreign Affairs and International Trade Canada (DFAIT) and Aboriginal Affairs and Northern Development Canada (AANDC), Environment Canada represented the Government of Canada on the Conservation of Arctic Flora and Fauna (CAFF) working group of the Arctic Council, delivered the Arctic Biodiversity Trends 2010 report and the Arctic Species Trend Index, and completed the Marine Biodiversity Monitoring Plan, which was the first pan-Arctic monitoring plan under the Circumpolar Biodiversity Monitoring Programme (CBMP).

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¹³ Total number of species included in the reports: 2000 = 1,670; 2005 = 7,732; 2010 = 11,950.
The Value of Nature to Canadians Study was launched as a federal-provincial-territorial initiative in early 2009 and generated analysis on the social and economic significance of nature in support of policy and decision making (including regulatory obligations) and public engagement. In 2010–2011, analysis included an assessment of priority information needs, a gap analysis of existing government information holdings, as well as a report on case studies on valuation methodologies and protocols.

*Species at Risk*

Environment Canada met most of its commitments in implementing the *Species at Risk Act* (SARA) related to species assessments, consultations, listing and recovery planning. The implementation of SARA is becoming more efficient through the establishment of governance mechanisms, policies and procedures; however, challenges exist with regard to addressing the backlog of recovery strategies and consultations that are required within the established timelines of the Act.

Over the fiscal year, the Department published responses for 100% of the assessments for species at risk received in September 2010 and undertook consultations for all terrestrial species that were under the competency of the Minister of the Environment and eligible for SARA List amendments.

As of March 31, 2011, there were 486 species listed under SARA. In February 2011, the Minister provided his recommendation to the Governor in Council regarding listing Polar Bears under SARA; a decision is expected by late fall 2011.

The Department has also invested significant efforts into recovery planning for numerous other species—recovery strategies for 153 species had been posted on the SAR registry as of March 31, 2011. Priority work in this area included ensuring that Aboriginal traditional knowledge informed the Woodland Caribou Boreal population recovery strategy.

As part of supporting the implementation of SARA in 2010–2011, the Department provided $17 million to a variety of recipients for on-the-ground projects. Under the Aboriginal Funds for Species at Risk Program, 93 projects increased Aboriginal awareness of species at risk; developed strategies, guidelines and practices; and completed monitoring, surveying and inventorying studies. Similarly, under the Habitat Stewardship Program for Species at Risk, 228 projects supported stewardship activities across Canada that resulted in the securement and protection of 161,368 ha of land and the restoration of 11,486 ha of land. Under the Interdepartmental Recovery Fund, 21 recovery and 9 survey projects contributed to the implementation of recovery strategies on federal lands.

As required under the *Species at Risk Act*, a parliamentary committee was designated to review the Act in 2009. Environment Canada provided support to the committee, which finished its hearings.
**Migratory Birds**

Environment Canada met most of its commitments to monitor and protect migratory birds and their natural habitats. As part of ensuring effective conservation of migratory bird populations while fostering sustainable economic development, the Department is developing best management practices (BMPs) to promote avoidance of the incidental take of migratory birds.

The Department continued to develop all-bird conservation plans for the 32 Bird Conservation Region (BCR)\(^{14}\) areas with plans to complete all BCR plans by the end of 2011–2012. The successful completion of this work will provide the foundation for integrated conservation of migratory birds, species at risk and protected areas, and will support the development of BMPs by industry to manage the incidental take of migratory birds.

The Avian Monitoring Review has been completed and the Department is beginning to implement the recommendations, including those related to program delivery and the alignment of departmental resources with priority areas.

In 2010, the Department continued to work with its national and international partners to secure 65,065 ha of wetlands and associated uplands habitats in Canada under the North American Waterfowl Management Plan (NAWMP).

**Protected Areas**

Environment Canada met most of its commitments to support species at risk, migratory birds and other wildlife by conserving important habitats through a network of protected areas and partnership programs. As part of its plan to continue working on establishing new protected areas, the Department implemented the Inuit Impact and Benefit Agreement, under which three new National Wildlife Areas (NWAs) in Nunavut were listed in the *Canada Gazette* in early June 2010. Six NWA sites under the Northwest Territories Protected Areas Strategy have been identified and designation is proceeding. Candidate protected areas were identified in the Nunavut Land Use Plan and key habitat sites have been identified through the Nunavut Planning Commission. Furthermore, consultations regarding the proposed Scott Islands Marine NWA were initiated and, in 2010, it was announced that Sable Island would be protected as a national park.

The Department continued to process ecological gifts.\(^{15}\) In 2010–2011, 79 ecological gifts valued at over $34 million were donated across Canada, protecting over 4,600 ha of wildlife habitat.

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14 Separate marine plans are being produced in the Atlantic region, so there are now 32 individual plans instead of the 22 reported in the 2010–2011 Report on Plans and Priorities.

15 Canada’s Ecological Gifts Program provides a way for Canadians with ecologically sensitive land to protect nature and leave a legacy for future generations. Made possible by the terms of Canada’s *Income Tax Act* and Quebec’s *Taxation Act*, it offers significant tax benefits to landowners who donate land or a partial interest in land to a qualified recipient. Recipients ensure that the land’s biodiversity and environmental heritage are conserved in perpetuity.
Lessons Learned

Environment Canada conducted a review of avian monitoring programs delivered by the Department and its partners with the objective of ensuring that the monitoring programs effectively contribute to departmental conservation and management priorities and decision making. The analysis identified opportunities for improvement in our ability to deliver comprehensive information on the status and trends of migratory bird populations and provided recommendations for actions to address these gaps. Beyond the requirement to optimize resource allocations to ensure that monitoring gaps are addressed to the greatest extent possible, the national review showed that the Department must continue to effectively engage its partners, as migratory bird monitoring in North America is and will continue to be conducted by highly integrated partnerships of governments and the non-government sector using professionals and volunteers.

In 2010–2011, the Department updated the operational review for all National Wildlife Areas to measure progress in achieving objectives related to visitor and staff health and safety on most sites and ensuring ecological integrity. Improvements were found in every measured category, particularly equipment and visitor safety; however, there was no significant change in the overall ecological integrity of the sites. Environment Canada’s capital investment plan was structured to address shortcomings identified in the operational review.
**Program Activity 1.2: Water Resources**

**Program Activity Description**

This program addresses the risks to water resources from economic growth and climate change through partnerships on an integrated approach to water issues. Conservation, protection and sustainable use of water resources are critical aspects of Canada's economic, social and ecological well being. The program is delivered in collaboration with partners that include other federal departments, provinces and territories, and a range of non governmental organizations. The Program Activity captures Environment Canada's leadership on water issues and its role in determining priorities for water quality, quantity, and aquatic ecosystem monitoring and research, by providing scientific information and advice to decision-makers, and by building best management practices. The program supports the implementation of the *Canada Water Act*, the 1987 Federal Water Policy, the *Canadian Environmental Protection Act*, the *Fisheries Act* and the *International Boundary Waters Treaty Act*. Contributions in support of Water Resources are used as a component of this program.

**2010–2011 Financial Resources ($ millions)**

<table>
<thead>
<tr>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>103.8</td>
<td>119.8</td>
<td>118.0</td>
</tr>
</tbody>
</table>

**2010–2011 Human Resources (FTEs)**

<table>
<thead>
<tr>
<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>770</td>
<td>809</td>
<td>39</td>
</tr>
</tbody>
</table>

**Expected Results**

Threats to Canada’s water resources and aquatic ecosystems are minimized and the sustainability of the resource is maintained

**Performance Indicators**

Percentage of water bodies included in the Canadian Environmental Sustainability Indicators Freshwater Quality Index whose quality was rated as either good or excellent

**Targets**

To be determined.\(^{16}\) A target will be set once two measured values for this indicator are available

**Performance Status**

Somewhat Met

The performance rating is based on an assessment of the degree of progress in meeting the commitments identified in the 2010–2011 Report on Plans and Priorities (RPP), focusing on the Department’s leadership in the development of a world-class environmental monitoring plan for the oil sands, work carried out with other federal departments to improve the delivery of the Canadian Shellfish Sanitation Program, and the advancement of the hydrometric program with the

\(^{16}\) The establishment of baseline values, as identified in the 2010–2011 Performance Summary column, assists in facilitating development of a future target.
design and development of a modern production system with the increased use in hydro-acoustics technology.

In addition, over three years of data roll-up (2006–2008), 42% (73/176) of core national sites monitored were qualified as either good or excellent (Water Quality Index). 100% (15/15) of monitored major river basins showed some sites with Water Quality Index readings as either good or excellent – and 13% (2/15) basins showed some sites with Water Quality Index readings as poor.

Performance Summary and Analysis of Program Activity

During 2010–2011, Environment Canada continued to work with other federal departments, provinces and territories so that Canadians have access to clean, safe and sufficient water to meet their needs in ways that also maintain the integrity of ecosystems. To this end, the Department provided scientific expertise, resource management leadership and ongoing monitoring activities on water quality, quantity, availability and use. The Department developed and implemented approaches to address domestic and international water issues by providing technical advice and strategic oversight by co-chairing or participating on domestic water boards. It is presently reviewing and revising water quality objectives for nutrients and metals for water quality monitoring sites on interprovincial or territorial sites. Environment Canada continues to produce an annual Canada Water Act report.

Strategic partnerships at different levels are key to the management of the hydrometric program and its planning. In partnership with provincial and territorial governments through the National Administrators Table (NAT), Environment Canada delivered on its commitments under priority domestic and international water-related initiatives on a cost-shared water quantity (hydrometric) information service. The Department also works closely with its international partners through formal memoranda of understanding (MOUs) with both the United States Geological Survey, focusing on hydrometric works, and the National Oceanic and Atmospheric Administration (NOAA), focusing more on hydro meteorological applications.

Under the Lake Winnipeg Basin Initiative (LWBI), as part of the federal government’s Action Plan for Clean Water, Environment Canada delivered a third year of research,

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17 Participation in water boards includes the Prairie Provinces Water Board, the Mackenzie River Basin Board’s advisory committee and the International Rainy River Water Pollution Board and International Rainy Lake Board of Control, International St. Croix River Watershed Board, Souris River Basin Board and the International Lake of the Woods and Rainy River Watershed Task Force (with final report and recommendations scheduled to be submitted to the International Joint Commission in July 2011).
information and monitoring activities in Lake Winnipeg and the Lake of the Woods. Environment Canada published a progress report documenting activities undertaken during the first two years of the LWBI, with a second report, State of Lake Winnipeg: 1999 to 2007, jointly developed through a Canada–Manitoba partnership.

Case studies were conducted on agricultural beneficial management practices and wastewater facilities to determine the benefits of nutrient-loading reduction strategies.

Environment Canada provided water-related science and expertise to support the renegotiation of federal, provincial and international agreements such as the Canada–Ontario and Canada–Quebec agreements, and the Great Lakes Water Quality Agreement (GLWQA) with the United States. Environment Canada also worked on the Atlantic memorandum of understanding (MOU) water annex work plan and other provincial water quality agreements with respect to water activities.

National federal-provincial water quality monitoring continued in 2010–2011, providing information on water quality status and trends for national Canadian Environmental Sustainability Indicators (CESI) and other reporting. The network review that was completed the previous year continued to be implemented. The federal-provincial sites in the Fraser River Basin continued to be of critical interest, and Environment Canada staff provided water quality information from these sites to the Cohen Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River for the ongoing federal hearings into this issue.

Environment Canada continues to provide support for federal treaty obligations under the auspices of the International Joint Commission (IJC) and other treaties. This includes detailed measurements, reporting and studies on water quantity along the Canada–United States border, including the Yukon–Alaska border.

Under a memorandum of understanding (MOU) with the Canadian Food Inspection Agency and Fisheries and Oceans Canada, Environment Canada conducted water quality sampling and analysis by surveying approximately 15,000 km² of marine waters along Canada’s Atlantic and Pacific coastlines, encompassing close to 1,000 shellfish harvesting areas in support of the Canadian Shellfish Sanitation Program. Environment Canada continues to update and maintain an extensive inventory of land-based sources of pollution impacting coastal environments, including approximately 350 wastewater systems discharging into shellfish harvesting areas. Studies of 36 wastewater treatment plans began in 2010–2011 with most now completed. The final reports of the 2009 United States Food and Drug Administration (FDA) and European Union audits of the Canadian Shellfish Sanitation Program were received and Canadian responses were developed.
Environment Canada developed a water demand and availability indicator for the Canada Water Act and has released it on the Department’s website. This indicator will support the development of sustainable water management policies and practices, and communicate regional water availability and variability in Canada and to the international community. The program also established the Water Availability Program Management Committee (WAPMC), which will exercise departmental and federal leadership as appropriate in the broad area of water availability.

The 2010 Canadian Environmental Sustainable Indicators (CESI) Water Quality Indicators (WQI) report has been completed and was released on March 2011. The accompanying data sources and methods report have been completed and are available on Environment Canada’s website.

Over the past year, Environment Canada continued to provide research, monitoring, analyses, and hydrological services on priority areas that are essential to support responsible decision making within all levels of government and the private sector. Some Department priorities included maintaining a national hydrometric monitoring and services program in partnership with the provinces; developing a new hydrometric workstation to modernize analysis and management of hydrometric data; and implementing the Canadian Aquatic Biomonitoring Network (CABIN) nationally with expanded national reference conditions being established in all regions.

Environment Canada continues to provide key support to disaster risk reduction and flood management. The National Hydrometric Program maintained close contact and provided continuous water quantity information to the provinces and territories during multiple extreme flooding events across the country. Investments in the real-time network, which reports hourly on the hydrometric conditions, demonstrated the significant utility of this mode of operation for managing flood situations.

New knowledge and surveillance activities were developed in relation to water quality and quantity threats, including the impacts of contaminants, climate variability and change, land use and resource extraction, as well as emerging threats such as alien species and blue-green algae in priority watersheds, particularly in the Great Lakes and the St. Lawrence. The Freshwater Inventory and Surveillance of Mercury (FISHg) Network was in its third year of implementation and provided an indicator of the effects of mercury emissions on Canada’s bodies of water. The second year of the National Pesticide Surveillance study was successfully implemented for the 2010 field season with the first cycle of reporting being released and the sampling for the second cycle being completed. The third year of the integrated, national multi-media monitoring and surveillance program in support of the Chemicals Management Plan was implemented.

In 2010–2011, Environment Canada developed new approaches for the assessment, conservation and remediation of aquatic ecosystems and enhanced the integration of water quality and quantity data, including the development of integrated decision support models such as the use of automated multi-probes for monitoring optimization.
Lessons Learned

A number of important lessons were learned through the audit of the Department’s long-term water quality and quantity programs by the Commissioner of the Environment and Sustainable Development (CESD). The audit report, published in December 2010, made a series of observations and recommendations for the management of water monitoring programs. In its response, which was published with the report, the Department agreed with all of the CESD recommendations. As a result, the Department developed an action plan, which is already being implemented over a three-year timeframe. Initial steps include developing a risk-based approach for freshwater quality and quantity monitoring; formalizing a national quality assurance (QA) framework to manage water monitoring; and continuously improving reporting on freshwater quality status and trends. The outcome of the Department’s action plan will be improved long-term water quality and quantity monitoring of Canada’s rivers and lakes that provides better information to Parliament and Canadians on Canada’s water resources and aquatic ecosystem health.
Program Activity 1.3: Sustainable Ecosystems

Program Activity Description
This program aims to sustain Canada's ecosystems over the long term. Canadians, their governments and the private sector must incorporate social, economic and environmental considerations in their decision-making and action. The ecosystem approach to environmental management focuses on maintaining the capacity of a whole system to produce ecological goods and services. This program is the focal point for the development and implementation of Environment Canada's sustainability policies and strategies, information to support integrated, ecosystem-scale priority setting, community engagement in remediation of sites, youth engagement, and research and reporting on environmental status and trends. The program facilitates interdisciplinary and cross-sectoral planning and information sharing among partners. Contributions in support of sustainable ecosystems are used as a component of this program.

2010–2011 Financial Resources ($ millions)

<table>
<thead>
<tr>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.5</td>
<td>71.5</td>
<td>65.8</td>
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2010–2011 Human Resources (FTEs)

<table>
<thead>
<tr>
<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
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<tr>
<td>307</td>
<td>312</td>
<td>5</td>
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</table>

<table>
<thead>
<tr>
<th>Expected Results</th>
<th>Performance Indicators</th>
<th>Targets</th>
<th>Performance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadians manage ecosystem resources in a manner consistent with ecosystem sustainability</td>
<td>Percentage of Canadian ecosystems where ecosystem health has been assessed as stable or improving</td>
<td>To be determined</td>
<td>Mostly Met</td>
</tr>
</tbody>
</table>

Long-term, standardized, spatially complete and readily accessible monitoring information, complemented by ecosystem research, provides the most useful findings for policy-relevant assessments of status and trends. The lack of this type of information in many areas has hindered development of this assessment. Status and trends have been assessed by piecing together information from disparate sources. Canadian Biodiversity: Ecosystem Status

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18 At the time of the 2010–2011 Report on Plans and Priorities preparation, the intent was to establish a definition of ecosystem health in 2010–2011 and the baseline value was to be reported in the subsequent year. Only then could we set a target after two measured values for this indicator became available. However, this proved more difficult than anticipated for the reasons explained in the Performance Status column.
and Trends 2010 identified and rated 20 key findings\textsuperscript{19} based on the health of Canada’s ecosystems that could be used as a baseline for future assessments. Overall, 25% of key findings were rated as improving or little change, 58% were getting worse, and 17% were unknown.\textsuperscript{20}

Performance Summary and Analysis of Program Activity
The Department led other federal departments and provincial and territorial governments in developing a sustainable development strategy and reporting framework, assessing the status and trends of Canada’s ecosystems, and facilitating targeted actions in priority ecosystems and hotspots using an ecosystem approach.

Sustainability Reporting
The Federal Sustainable Development Strategy (FSDS) was tabled on October 6, 2010, and follows more than two years of development and consultations. The Strategy renders environmental decision making more transparent and accountable through three key improvements:

- it integrates government-wide actions and results to achieve environmental sustainability;
- it links sustainable development planning and reporting to the Government’s core expenditure planning reporting system; and
- it provides effective measurement, monitoring and reporting tools to track and report on progress.

The monitoring system to track and report on FSDS goals and targets includes 43 environmental indicators and performance measures. Additional measures were also identified to track the progress of departmental FSDS contributions (implementation strategies).

Ecosystem and Environmental Assessment
Canadian Biodiversity: Ecosystem Status and Trends 2010 was published in October 2010 and has been well received. Over 500 experts from all governments and many departments, academia and other non-governmental organizations participated in

\textsuperscript{19} The key findings of Canadian Biodiversity: Ecosystem Status and Trends 2010 include a broad range of topics that cover both the status and trends of various aspects of ecosystems themselves (biomes, habitat, wildlife and ecosystem processes) and the human activities that affect them. Trends of individual ecosystems were not rated. The percentage of the report’s key findings that are rated as healthy, of concern and impaired is not equivalent to the percentage of Canada’s ecosystems that are rated as healthy, of concern and impaired. Note that 20 of the 22 key findings from the report are reflected here; however, the science/policy interface themes have been excluded).

\textsuperscript{20} The percentage of key findings in each trend category (improving, little change, getting worse) was calculated by adding the number of trends in each category and dividing by 20. In cases where a key finding had two trends (e.g. Marine is both improving and getting worse), each trend was given a weighting of 0.5. All percentages were rounded to two digits.
the development of this report and its supporting technical reports. The report is the first of its kind and provides an important baseline to support planning and decision making at all levels.

The Department met its environmental assessment responsibilities under the Canadian Environmental Assessment Act by providing knowledge and information to support the review of proposed projects. Environment Canada’s input on environmental assessment reviews of project proposals ensured that risks to the environment were addressed through a variety of means such as modifications to the projects or implementation of mitigation measures. The Department provided its support to hundreds of environmental assessment reviews of project proposals to address risks to the environment, most notably the Lower Churchill Hydrogeneration Project in Labrador, the Joslyn North Mine Project in Alberta, the Darlington New Nuclear Power Plant in Ontario and the Prosperity Gold-Copper Mine Project. Environment Canada’s contribution to environmental assessment reviews also included input into the Government of Canada response’s to panel reviews, such as the Mackenzie Gas Project and the EnCana Shallow Gas Infill Development Project in the Suffield National Wildlife Area.

The Department also contributed to government-wide efforts to improve the efficiency and effectiveness of federal regulatory decisions for major projects through the Major Projects Management Office (MPMO) Initiative and for resource development and infrastructure projects through the Northern Project Management Office (NPMO) Initiative. Environment Canada’s role included working with the other departments to establish improvements and regulatory efficiencies in the approval process for major projects. Environment Canada also provided input to the early stages of the evaluation process for the MPMO Initiative. For our involvement in improving environmental assessment processes in the North, Environment Canada participated with other departments in developing the memorandum of understanding (“Defining Terms and Scope of Cooperation Between Federal Departments, Agencies and the Northern Projects Management Office for Coordination of Northern Projects”). The Department also participated in territorial project committees and contributed to the development of terms of reference for said committees and northern project agreements.

Ecosystem Initiatives
Environment Canada continues to work to assess and address key ecosystems and hotspots in Canada. In each region, the Department works with other government partners, stakeholders and Aboriginal peoples to assess and address potential impacts on ecosystems and to further ecosystem-based management. Funding was provided for watershed- and ecosystem-scale projects for projects such as those to improve nearshore water quality, prevent habitat and biodiversity loss, or reduce the impacts of climate change.

Negotiations to amend the Great Lakes Water Quality Agreement (GLWQA) were launched in January 2010. While not complete, they were well advanced, with a projected completion date of fall 2011. As the amendment of the GLWQA has not been completed, Canada and Ontario elected not to negotiate a new Canada–Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA). Instead, the current COA, signed in
2007, was successfully amended, being extended to June 2012, and it continues to be implemented by partners to improve Great Lake water quality (92% achievement of near-term results).

Environment Canada and Quebec’s Ministère du Développement durable, de l’Environnement et des Parcs have negotiated the terms of a new agreement on the St. Lawrence that is expected to be signed and implemented in 2011–2012. Eight provincial and 11 federal departments contributed to the development of the new joint action plan. During the transition period, key Environment Canada programs were maintained to ensure the continued protection, conservation and enhancement of the St. Lawrence ecosystem.

Canada’s Great Lakes Action Plan (GLAP) was renewed in Budget 2010, which allowed 43 projects to go forward under the Great Lakes Sustainability Fund (Environment Canada investment of $2,899,500) to protect the Great Lakes by cleaning up areas identified as being the most degraded. Several recommendations from the GLAP IV evaluation were used to improve program delivery. The Wheatley Harbour Area of Concern on Lake Erie was delisted as an Area of Concern (designated in 1987 under the GLWQA). Final engineering design and the Comprehensive Study Report for the Randle Reef Contaminated Sediment project in Hamilton Harbour by the Canadian Environmental Assessment Agency (CEAA) was completed; however, project initiation was delayed pending confirmation of local funding.

Through the Lake Simcoe Clean-Up Fund program, two rounds of funding (5 and 6) were completed, leading to 43 projects being funded totalling $8,286,181. Projects targeted non-point sources and habitat, point sources, or research and monitoring and focused on pollution reduction and restoration of the lake’s ecological integrity and coldwater fishery.

The Lake Winnipeg Basin Stewardship Fund (LWBSF) was successfully managed in 2010–2011. Under the LWBSF, rounds three and four of funding were completed for projects to reduce pollutants, particularly nutrient loads, in priority areas of the basin and round five was approved. Total project funding expended in 2010–2011 was $937,772 for 26 active projects.

**Community Engagement**

In 2010–2011, 17 awards were directed to the Environmental Damages Fund (EDF) and 22 projects received funding across the country. As part of the 2010–2011 commitment to promote and implement a new program management framework, Environment Canada prepared regional management plans that consider priority ecosystem hotspots for timely disbursement of EDF funds. Management and promotion of the EDF was improved through Guidelines for Use of Funds for Administrative Purposes, operational guidelines for program staff, and updates to the EDF website including enforcement notifications, applicant’s brochure, prosecutor fact sheets, performance indicators, and available funding updates.
EcoAction-funded projects led to the engagement of approximately 385,000 individuals and leveraged a ratio of 1:2.04 of federal government funding to partner contribution. Of the 302 proposals received for 2010–2011, 125 projects (41.4%) were funded (funding limitation). Program staff have managed and monitored 196 projects through contribution agreements (125 newly approved projects and 71 previously approved multi-year agreements). A total of $1.84 million was provided to 53 projects in support of Biodiversity 2010.

**Lessons Learned**

The Federal Sustainable Development Strategy (FSDS), tabled in Parliament on October 6, 2010, responds to recommendations from the Commissioner of the Environment and Sustainable Development by rendering environmental decision making more transparent and accountable. The triennial cycle of the FSDS uses an improved whole-of-government framework for the planning and reporting system, links with the Government’s core expenditure planning and reporting, and monitors and reports progress using a system of “plan, do, check, improve,” thus advancing sustainable development over time.

Strong governance and the funding structure are important for enabling and supporting the delivery of programs in multi-jurisdictional situations. To enhance these features within the Great Lakes Action Plan (GLAP), five-year work plans have been created, along with a GLAP work planning and reporting template. A GLAP Work Plan Review Team has also been established. These mechanisms not only allow the aggregate of program-related activities to be more easily reviewed, but also make it possible to identify gaps and opportunities. In this way, strategic planning is facilitated, and overall program delivery is improved.

Centralized management of project-level financial reporting and performance information facilitates accountability, reporting and evaluation. In order to promote the effective centralized management of GLAP information, a GLAP-specific authority code has been established in the Financial Information System to accurately track program expenditures. Program-specific authority codes have been also been established for GLAP salary, operating and maintenance, and grants and contributions expenditures. In addition to improving accountability, these codes make it possible to see how expenditures correspond to specific program activities and outcomes. This provides an opportunity to re-examine the allocation of expenditures, and make adjustments as needed.
Program Activity 1.4: Compliance Promotion and Enforcement - Wildlife

Program Activity Description

This program serves to conserve and protect the natural environment through compliance promotion and enforcement of the following wildlife-related legislation administered by Environment Canada: the Species at Risk Act, the Migratory Birds Convention Act, 1994, the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act, and the Canada Wildlife Act. Measures to promote compliance include communication and publication of information, education, and consultation with parties affected by these statutes. The program maintains a contingent of enforcement officers, whose actions focus on ensuring and verifying conformity with laws, regulations and permits pertaining to wildlife, through several activities—which include gathering intelligence, conducting inspections and pursuing investigations to take appropriate enforcement measures against alleged offenders. These actions ensure that damages and threats to biodiversity are reduced for the benefit of Canadians and the international community.

2010–2011 Financial Resources ($ millions)

<table>
<thead>
<tr>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
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</thead>
<tbody>
<tr>
<td>19.1</td>
<td>18.2</td>
<td>16.9</td>
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2010–2011 Human Resources (FTEs)

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<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
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<tr>
<td>148</td>
<td>129</td>
<td>(19)</td>
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</table>

<table>
<thead>
<tr>
<th>Expected Results</th>
<th>Performance Indicators</th>
<th>Targets</th>
<th>Performance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damages and/or threats to migratory birds, protected habitats and species at risk are prevented or minimized through enforcement of Environment Canada-administered laws and regulations</td>
<td>Volume of current and future losses of migratory birds, species at risk and protected habitat prevented</td>
<td>To be determined.(^{21})</td>
<td>Mostly Met</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>The rating is based on success with several large enforcement operations as detailed below as well as on general improvements in enforcement and compliance promotion operations.</td>
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<tr>
<td></td>
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<td></td>
<td>A baseline value for the indicator cannot be reported due to unanticipated difficulties encountered in implementing data collection.</td>
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\(^{21}\) The 2010–2011 Report on Plans and Priorities reflected the intent at the time to report baseline values in this Departmental Performance Report and to set a target in the National Enforcement Plan for the 2010–2011 fiscal year. However, this proved more challenging than anticipated for reasons cited in the Performance Status column.
In place of the original indicator, the number of violations of Environment Canada-administered wildlife laws and regulations that have been disclosed through enforcement actions will be reported. For fiscal year 2010–2011, there were 1,031 total violations: 533 under the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*; 424 under the *Migratory Birds Convention Act, 1999*; and 74 under the *Species At Risk Act* and *Canada Wildlife Act*. This indicator will continue to be reported in future DPRs.

Performance Summary and Analysis of Program Activity

Wildlife compliance promotion and enforcement activities resulted in numerous actions across Canada, most notably the high-profile prosecution of Syncrude Canada Ltd. for violations under the *Migratory Birds Convention Act, 1999* (MBCA).

Wildlife officers across Canada conducted over 7,300 inspections under each of the four wildlife acts: the MBCA, the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA), the *Species at Risk Act*, and the *Canada Wildlife Act*, covering activities from illegal hunting to complex international wildlife trade networks. Two major international operations took place in 2010: one dealing with illegal trade activity and the possession of turtles, crocodiles, lizards, frogs and snakes, as well as their derivatives; the other resulting in a series of international arrests and the seizure of thousands of restricted medicines valued at more than 10 million euros. In total under WAPPRIITA, nearly 3,200 inspections found over 530 violations. Enforcing the regulations on commercial activities and protecting migratory bird sanctuaries were also key priorities in 2010–2011; Wildlife Enforcement conducted over 3,700 inspections under the *Migratory Birds Convention Act, 1994* and took action against over 400 offences. Other actions included 86 inspections under the *Species at Risk Act*, and over 400 inspections of Canada’s National Wildlife Areas and other protected areas.

In order to strengthen the identification of priorities that focus on the most serious risks and threats to wildlife, the 2011–2012 National Enforcement Plan was developed to address compliance and conservation risks under each of Canada’s wildlife acts. The result of an extensive cross-country consultation and evaluation, the National Enforcement Plan identifies five operational priorities that target and aim to prevent potential non-compliance under each of the acts. Subsequently, sets of performance measures have been identified for each national enforcement priority and targets set at regional and district levels under each priority.
Lessons Learned

The program had intended to quantify and measure the volume of current and future losses of migratory birds, species at risk and protected habitat prevented through enforcement actions. Measuring this value, however, has proved much more difficult than originally conceived. Many factors that are not within the control of law enforcement contribute to this difficulty, including weather, species reproduction and social inputs, in addition to methodological and information capture challenges.

This experience has demonstrated that we must revise our method of measuring overall program performance to include a blend of environmental information, and the effectiveness of enforcement actions taken. The program is thus revising its performance indicators and targets for future years to better demonstrate its outcomes. Moreover, the program is also in the process of renewing its information management processes and systems to better capture and report on data reflective of its performance.
Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions

Environment Canada’s work that contributes to this Strategic Outcome is organized into two Program Activities:

- Weather and Environmental Services for Canadians
- Weather and Environmental Services for Targeted Users

Program Activity 2.1: Weather and Environmental Services for Canadians

Program Activity Description

The program activity provides weather warnings, forecasts and information to anticipate, manage and adapt to the risks and opportunities of changing weather, water and climate conditions. It involves monitoring, research and development, supercomputing, production and service delivery. Because a global effort is needed to monitor, understand and predict constantly changing weather, water and climate conditions, this program relies on various collaborators, in Canada and around the world; key ones include the World Meteorological Organization of the United Nations, as well as the media, academia and all levels of government within Canada. The program supports the Department of the Environment Act, the Canadian Weather Modification Information Act, the Emergency Management Act (2007) and Memoranda of Agreement with national meteorological and space agencies. This program activity is unique, having the only national mandate, infrastructure or skills to deliver this service.

2010–2011 Financial Resources ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
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<td></td>
<td>169.9</td>
<td>191.9</td>
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2010–2011 Human Resources (FTEs)

<table>
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<th></th>
<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
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<tbody>
<tr>
<td>FTEs</td>
<td>1,069</td>
<td>1,113</td>
<td>44</td>
</tr>
<tr>
<td>Expected Results</td>
<td>Performance Indicators</td>
<td>Targets</td>
<td>Performance Status</td>
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<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
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<tr>
<td>Canadians understand information on the changing weather, water and climate conditions and know how to use it</td>
<td>Percentage of the population indicating that they understand the differences between severe weather watches and warnings and the implications for their safety</td>
<td>To be determined(^\text{22})</td>
<td>Mostly Met</td>
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<td>10% of respondents correctly stated the differences between severe weather watches and warnings, which are timing and likelihood of an event. More than 60% of the respondents recalled seeing or hearing warning messages in the past 2 or 3 weeks about hazardous weather in their area and, of these respondents, 96% indicated that the warning messages provided all the information or some of the information to make a decision or take precautions.</td>
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<td>A target will be established after the next survey planned for 2015.</td>
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<tr>
<td>Canadians, communities and policy-makers understand the potential health and safety risks from the changing climate and air quality conditions</td>
<td>Percentage of municipalities that are aware of and understand the need to develop comprehensive emergency and/or disaster management plans due to changing climate</td>
<td>80% of Canadian municipalities by 2015.</td>
<td>Somewhat Met</td>
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<td></td>
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<td>Ongoing interactions with provinces, territories and municipalities indicate that awareness of atmospheric hazards, severe weather and climate change is growing, based on requests for weather and climate information, data and presentations. The program had intended to quantify the uptake of information by local planning activities; however, measuring this has proved more difficult than anticipated due to methodological challenges and extenuating factors beyond the control of those making the information accessible. For 2012–2013, the indicator and approach is being revised.</td>
</tr>
</tbody>
</table>

\(^{22}\) The establishment of baseline values, as identified in the 2010–2011 Performance Summary column, assists in facilitating development of a future target.
Canadian institutions integrate information on the changing weather, water and climate conditions into their plans, codes and standards

<table>
<thead>
<tr>
<th>Expected Results</th>
<th>Performance Indicators</th>
<th>Targets</th>
<th>Performance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of updated and revised climate design values adopted into the National Building Code of Canada (NBCC) and subsequently by the provinces/territories into their building codes.</td>
<td>1) 100% by NBCC by 2015; 2) 50% by provinces and territories by 2018; and 3) 90% by provinces and territories by 2020.</td>
<td>Met All</td>
<td></td>
</tr>
<tr>
<td>60% of climatic design values were updated for the 2010 NBCC whereby most values will be adopted.</td>
<td>Climate change and adaptation information has helped the development of new Canadian Standards Association standards/guides on foundations in permafrost regions and on stormwater infrastructure designs.</td>
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</table>

**Performance Summary and Analysis of Program Activity**

The Department has continued to play an important role in the provision of weather and related services 24/7. For instance, some 14,500 warnings were issued and the Weatheroffice website was visited about 566 million times in 2010–2011. To sustain and transform the hydrometeorological monitoring program, a new initiative was launched to sustain its core monitoring systems; create collaborative, multi-participant observing networks; and improve the discoverability, accessibility and usefulness of data.

The Department has continued to play an important role in supporting domestic and national emergencies. Its advanced airflow modelling capabilities were called upon several times this past year to assist in planning and emergency efforts, including support for the G8 and G20 summits in June to model the hypothetical dispersion of hazardous material in support of national security incident scenarios. The Department was involved, in collaboration with multiple Canadian and international organizations, in critical activities confirming its world stage leadership role in the modelling capabilities. Activities included tracking and forecasting the movement of the ash cloud that emanated from the Iceland volcano and modelling of the airflow around the Fukushima nuclear power plant and over the Pacific, as the emissions made their way towards Canada’s west coast after the March 2011 earthquake.

The Department continued to provide information to Canadians, clients and users on past, present and future climate states. Departmental researchers are contributing to the Intergovernmental Panel on Climate Change’s (IPCC’s) 5th Assessment Report, scheduled for completion in 2014, to assess current science and climate change impacts to support adaptation and mitigation planning. Researchers are also contributing to an IPCC special report on climate extremes.

The Air Quality Health Index (AQHI) has been fully implemented in 6 of 10 provinces. The collaborative nature of the AQHI implementation process is considered a strength, as identified in last year’s program report, and it has been identified as a model in terms of stakeholder consultation.
Performance measurement and quality management continue to be a top priority of this program. Since its first registration in 2007 to ISO 9001, an internationally known standard for quality management, the Department has leveraged the use of its quality management system to support the identification of business risks, such as business continuity planning issues, so that they are addressed in a timely manner, thus contributing to the achievements of the programs. This increased level of risk management maturity has contributed to this year’s establishment of a formal business continuity plan (BCP) process within the Weather and Environmental Services (WES) Quality Management System. The Department’s registration was renewed in June 2010, ensuring Canada remains aligned with other national weather services.

**Lessons Learned**

As a critical government service, the Department developed a business continuity plan (BCP) to ensure operations during an emergency. The plan was successfully tested and further refined through tabletop exercises and post-event reviews (summer 2010 earthquake in Ottawa and software virus attack). The Department learned that, despite many advances, there remain areas for improvement. Effort is still required to improve the governance structure, the processes for crisis management and internal communication to fortify the integrity, reliability and availability of weather and environmental critical services during prolonged disruption events. The Department will develop action plans to address the issues.
Program Activity 2.2: Weather and Environmental Services for Targeted Users

Program Activity Description

The program activity provides essential decision-making tools and information to targeted sectors and their regulatory agencies to help them anticipate, manage and adapt to the risks and opportunities created by changing weather and climate conditions. This program activity involves monitoring, research, production and service delivery. It provides observations, forecasts and warnings 24 hours per day, 365 days per year and other tools tailored to users' specific needs. It requires various collaborations, within Canada (including other government departments and provincial agencies), and internationally with the World Meteorological Organization, United States Coast Guard and the International Civil Aviation Organization. This program supports the Department of the Environment Act; it helps other government departments meet their obligations under the Aeronautics Act, Oceans Act and the Fisheries Act; and supports Memoranda of Agreement with Transport Canada, National Defence and various provincial agencies. This program activity is unique, having the only national mandate, infrastructure or skills to deliver this service.

2010–2011 Financial Resources ($ millions)

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2010–2011 Human Resources (FTEs)

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Expected Results

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<th>Expected Results</th>
<th>Performance Indicators</th>
<th>Targets</th>
<th>Performance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted sectors routinely integrate weather and</td>
<td>Percentage of clients</td>
<td>To be determined</td>
<td>Mostly Met</td>
</tr>
<tr>
<td>climate information into their operations</td>
<td>within targeted sectors that have access to specialized meteorological services or information</td>
<td>23</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Percentage of businesses</td>
<td>To be determined</td>
<td>Mostly Met</td>
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23 Providing a baseline value for this indicator, as per the commitment made in the 2010–2011 Report on Plans and Priorities, proved more difficult than anticipated. Considering that no exhaustive list of clients is available and that no mechanisms are currently in place to assess this indicator, an alternative reporting approach has been taken to demonstrate how these users are increasingly using the information. For 2012–2013 and beyond, the indicator will be based on a specific client satisfaction question asked of Environment Canada’s three main clients: NAV CANADA, National Defence and the Canadian Coast Guard.

24 Providing a baseline value for this indicator.
and organizations within targeted sectors that report that they have factored weather- and climate-related information into their decisions

86% of the main users of data from the Canadian Lightning Detection Network, which represent the vast majority of the paying clients, report that clients access its information every day.

**Performance Summary and Analysis of Program Activity**

Enhancing client satisfaction on the part of targeted users of weather information is a departmental priority and is a guiding principle in a new draft weather services strategy. This strategy was prepared following extensive internal input and will be finalized in 2011–2012 following consultations with external stakeholders. It includes specific goals to help Environment Canada meet the needs of both governmental and non-governmental organizations when undertaking weather-sensitive activities that impact the safety of Canadians and potentially impact the country’s economy. In addition, the Department works collaboratively with the private meteorological and oceanographic sector to address the needs of even the most specialized users, including, for example, those from the energy and transportation sectors.

A new 10-year agreement for delivering services to the aviation sector was implemented with NAV CANADA. Environment Canada’s positive performance in providing reliable, high-quality forecast products and responsive service as a weather information provider was reported in NAV CANADA’s supplier reviews.

Weather services to the marine sector made a significant step forward with the July 2010 implementation of an initial operational capability for delivering services to domestic and international mariners in the Arctic. This initiative, which reflects a Canadian commitment to the International Maritime Organization, provides marine weather information over dedicated channels (satellite and VHF radio) across international and Canadian waters in the High Arctic. To meet the Government’s commitments, this service will become fully operational in 2011 and will expand in completeness and coverage over the coming four years. The weather and sea ice information will contribute to safer navigation in these ecologically sensitive waters where marine traffic is expected to grow substantially as the Arctic Ocean responds to climate change and as economic activities expand.

The Canadian Forces is a major client of Environment Canada as missions at home and abroad depend on accurate and timely weather intelligence. To improve the operational weather capability of the Canadian Forces, National Defence (DND) began consolidation of its meteorological support in the Joint Meteorological Centre (JMC) at Canadian Forces base (CFB) Gagetown. Environment Canada has commenced relocating staff to

24 Reporting a baseline value in this Departmental Performance Report proved more difficult than anticipated. Considering that no exhaustive list of clients is available and that no mechanisms are currently in place to collect the data for this indicator, an alternative reporting approach has been taken.
Gagetown to build operational capacity following the anticipated final project approval by the Minister of National Defence to establish the JMC.

Environment Canada’s unique skill sets in oil spill detection and monitoring were also put to use with the deployment of staff last summer from the Marine Aerial Reconnaissance Team to the Gulf of Mexico, in partnership with Transport Canada.

**Lessons Learned**

Planning for the Joint Meteorological Centre and the relocation of the work units has been underway for several years. Environment Canada has learned and benefited from early consultations with, and engagement of staff, union and human resources representatives in the design of the transition plan and of the concept of operations of the new office. This approach facilitated acceptance of this important initiative by all parties.

Environment Canada is working collaboratively with a number of key stakeholders, such as National Defence, NAV CANADA and the Canadian Coast Guard, which can be beneficial to all parties by leveraging access to data and contributing to increasing observations and predictive capacities. Collaborative arrangements can pose interdependency risks, however, when parties change their business models or withdraw from the partnerships. Over the last year, the Department learned to mitigate the risk in part through the use of formal agreements with partners, and by putting emphasis on assessing long-term risks on an ongoing basis to inform program-related decision making.
Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized

Environment Canada’s work that contributes to this Strategic Outcome is organized into three Program Activities:

- Substances and Waste Management
- Climate Change and Clean Air
- Compliance Promotion and Enforcement – Pollution

Program Activity 3.1: Substances and Waste Management

Program Activity Description

Activities in this program reduce threats to the environment posed by pollutant and toxic releases and waste from human activities. Pollutant and toxic releases and waste may exert a direct harmful effect on plants, animals, humans and the environment due to their nature, volume or manner of release. The program assesses environmental threats posed by toxic substances and other substances of concern in terms of their fate and effects, and develops and implements prevention, reduction, elimination and management measures to deal with these substances.

2010–2011 Financial Resources ($ millions)

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<th>Planned Spending</th>
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2010–2011 Human Resources (FTEs)

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</table>

Expected Results | Performance Indicators | Targets | Performance Status

Threats to Canadians and impacts on the environment posed by harmful substances and waste are reduced

Canadian releases of selected controlled substances

To be determined

Mostly Met

The rating is based on completion (in partnership with Health Canada) of most of the deliverables within the established timelines of the Chemicals Management Plan, thereby addressing risks posed by both new and existing substances

25 The establishment of baseline values, as identified in the 2010–2011 Performance Summary column, assists in facilitating development of a future target.
with the exception of some delays in the completion of the petroleum sector stream deliverables.

Baseline values for the specific substances monitored:
Mercury: 6,577 kg releases to air and 254 kg to water in 2007.
Hexavalent chromium: 3,276 kg in air and 1,656 kg in water 2005.
Polychlorinated biphenyls (PCBs): 789 kg in air in 2007.26

Performance Summary and Analysis of Program Activity

Substances that are new to Canada may not be manufactured in or imported into Canada unless Environment Canada has been notified with certain prescribed information, and the potential risk to the environment and human health has been assessed. In 2010–2011, 461 new substances notifications, including chemicals, living organisms and nanomaterials, were received and 100% of these files were triaged and assessed for their potential risk to human health or the environment. When Environment Canada and Health Canada suspect that a new substance may pose a risk, they either ban the use of the substance or issue restrictions to ensure that these substances are used in a manner that minimizes the risks posed to human health and the environment. Of the 461 new substances notifications, the program imposed ministerial conditions on 3 substances and required significant new activity notices for 16.27 Furthermore, 173 substances were added to the Domestic Substances List, which is regularly amended to include additional substances that have been assessed under the Canadian Environmental Protection Act, 1999 and have been allowed into Canada, or to indicate that the new activity provisions of the Act apply to some existing substances.

The Chemicals Management Plan is also in the process of assessing the risks associated with all of the substances that extend to commercial use in Canada before the new substance notification requirements came into force in the early 1990s. Environment Canada continued to address high-priority substances by publishing risk assessment reports covering a total of 171 substances. Amendments to the Domestic Substances List were initiated and/or completed for a total of 30 non-toxic substances to indicate that the Significant New Activity provisions of the Act apply to these substances. This ensures that any proposed new manufacture, import or use of these substances are subject to further assessment and risk management consideration. The department added 29 toxic substances to the List of Toxic substances in Schedule 1 of the Act and initiated work to add an additional 12 substances. Furthermore, 16 proposed risk management instruments were published to address substances assessed as posing a risk. The Department also initiated work to control an additional 13 toxic substances.

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26 Note that the actual baseline year for PCBs is 2009; however, data do not yet exist for that year. Data for 2007 have been provided in their place for the time being.
27 For further information on the assessment and management of new substances, please see this website.
The Department proposed two sector-based pollution prevention (P2) planning notices for two sectors. Both of the sector-based P2 planning notices will allow for the addition of other toxic substances, as may be required in the future, with substance-specific risk management objectives and requirements.

Environment Canada conducted research and maintained monitoring and surveillance programs that allowed the Department to better understand the exposure and effects of a variety of newer and emerging chemicals of concern that are identified as priorities under the Chemicals Management Plan (CMP). For CMP priorities such as inorganics, flame retardants and perfluorocarbon compounds, research has been focused to address three main themes: effects, exposure and method development. In addition, Environment Canada conducted research related to pesticides, biotechnology and nanotechnology.

The complexity of the mixtures involved in the petroleum sector stream substances and the range of uses associated with these substances (largely compared to the review of individual substances in the majority of CMP assessments), has resulted in more complex evaluations, and has necessitated additional research and market surveys to better understand the specific uses and compositions. Accordingly, the start of the risk assessment process (and by extension risk management if necessary) has delayed the overall completion of the work. The Government remains nonetheless committed to completion of the work as presented in the timelines on the CMP website.

Environment Canada addressed the recommendation of the Commissioner of the Environment and Sustainable Development (CESD) that the Department and Health Canada prepare and implement risk management strategies for mercury and lead. These strategies were to provide a comprehensive and consolidated description of the federal government’s progress to date. Accordingly, the Government published a risk management strategy for mercury in October 2010. The strategy provides a comprehensive description of the Government of Canada’s progress to date in managing mercury and outlines current and planned mercury management activities. The Government of Canada will publish a comprehensive risk management strategy for lead in 2011.

The Department also addresses chemicals management priorities through regional activities such as the Great Lakes Water Quality Agreement and the Commission for Environmental Cooperation. Globally, Environment Canada worked with partners such as the European Chemicals Agency, the Organisation for Economic Co-operation and Development and, through the Stockholm Convention, the Convention on Long-range Transboundary Air Pollution. The Department also participated in negotiation sessions on a global, legally binding treaty on mercury under the United Nations Environment Programme.

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28 Pollution prevention planning notices legally require persons subject to the notice to prepare and implement a pollution prevention plan.
Environment Canada provided input to Fisheries and Oceans Canada (DFO) on the development of aquaculture-related regulations (proposed Fish Pathogen and Pest Treatment Regulations). The Department, together with DFO, delivered on commitments made to Parliament in the May 2009 Commissioner of the Environment and Sustainable Development’s (CESD’s) report by initiating the development of the *Fisheries Act* Results-based Management and Accountability Framework (RMAF) to improve the risk-based management, priority setting and coordination of *Fisheries Act* pollution prevention provisions.

Following the publication of the proposed Wastewater Systems Effluent Regulations (WSER) in the *Canada Gazette*, Part I, in March 2010, stakeholders submitted 190 written submissions. Departmental officials are engaging provinces, territories, municipalities and others to discuss the technical issues raised in these submissions. The target to publish the final Wastewater Systems Effluent Regulations is by the end of 2011.

Finally, in its role in managing the Federal Contaminated Sites Action Plan (FCSAP), Environment Canada continued to provide program oversight and administration, training, guidance and project review to help federal custodians address contaminated sites for which they are responsible. In 2010–2011, the Department coordinated and participated in the implementation of the second year of accelerated FCSAP activities under Canada’s Economic Action Plan (CEAP).

**Lessons Learned**

Lessons learned from the first phase of the CMP, and particularly the Challenge, are being incorporated into the next phase of the CMP. For example, Environment Canada and Health Canada will ensure that risk assessment and management requirements and timelines are clearly communicated to ensure public trust and provide predictability to stakeholders. When appropriate, substances will be assessed and managed in groups to help maximize efficiency, support informed substitution decisions by industry, and build on data from other jurisdictions. The Department will leverage the work of other jurisdictions and strengthen relations with international and domestic partners to address common objectives and enhance effectiveness and efficiency. Finally, the continued engagement of stakeholders will be necessary to share the burden with industry and ensure that information on threats to the environment and human health is available to enable the public to avoid risks.

Environment Canada also took steps to address lessons learned from the 2009 Commissioner of the Environment and Sustainable Development’s (CESD’s) audit of National Pollutant Release Inventory (NPRI) data quality. Work in the area is ongoing. The CESD recommended that Environment Canada provide users with clear information to help them understand NPRI data; key progress included the publication of additional documentation to facilitate the use and interpretation of the NPRI data.
Environment Canada took steps to address lessons learned from the 2008 Formative Evaluation of the Federal Contaminated Sites Action Plan (FCSAP) in 2010–2011. To assist custodian departments in making more informed decisions about the assessment and remediation of their sites, a decision-making framework was developed. To ensure that remediation activities on their sites have been effective, a tool for risk assessment validation and project closure was developed and will be completed in 2011–2012. Finally, an Information Management and Technology strategy was developed and will be implemented in 2011–2012 to address quality and timing issues related to program reporting.
Program Activity 3.2: Climate Change and Clean Air

Program Activity Description:
This program activity is critical to protect the health of Canadians and the environment from the harmful effects of air pollutants and the impacts of greenhouse gas emissions. This will be achieved through developing an integrated sector-based approach to regulating air pollutants and controlling greenhouse gas emissions; collaboration and partnerships with other levels of government and non-governmental organizations; awareness and promotion activities and programs for Canadians to reduce emissions and pollutants from vehicles and consumer products; strengthening international cooperation (particularly with the United States), including implementation of international agreements related greenhouse gas emissions and air pollutants; and advancing science-based approaches and innovative technologies in support of investment decisions, policy making and regulations.

2010–2011 Financial Resources ($ millions)

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2010–2011 Human Resources (FTEs)

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Expected Results

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<th>Expected Results</th>
<th>Performance Indicators</th>
<th>Targets</th>
<th>Performance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threats to Canadians, their health and their environment from air pollutants and greenhouse gas emissions are minimized</td>
<td>Canadian emissions of greenhouse gases (GHGs) from targeted and/or regulated sources</td>
<td>Canada’s national target is a 17% reduction from 2005 levels by 2020.</td>
<td>Mostly Met</td>
</tr>
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</table>

The rating is based on meeting commitments towards the development and implementation of regulatory approaches to managing air pollution and greenhouse gas emissions in support of the Government of Canada’s Clean Air Agenda. Additional measures to reduce emissions are necessary to achieve the target of 607 Mt by 2020.

An estimate of emissions of greenhouse gases by sector in Canada is not provided this year. Though these numbers were provided in Canada’s 2010 National Inventory Report on a pilot basis, the Department is now in the process of refining and
Canadian emissions of air pollutants from targeted sources

To be determined. Targets will be determined with the finalization of the air pollutant regulatory approach

Environment Canada made significant progress in addressing greenhouse gas emissions and air pollutants from fuels and new vehicles and engines, through the publication of three new emissions regulations aligned with United States Environmental Protection Agency standards: the Marine Spark-Ignition Engine, Vessel and Off-Road Recreational Vehicle Emission Regulations; the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations; and the Renewable Fuels Regulations. Environment Canada continued to administer its 14 regulations for vehicles, engines and fuels that are currently in effect. In addition, regulations are being developed for coal-fired electricity that will reduce greenhouse gas (GHG) emissions from this sector.

Policy and technical work was also undertaken towards moving forward to address GHG emissions from other major-emitting industrial sectors and to support the development of recommendations related to the issue of short-lived climate forcers, including black carbon and the development of a first inventory of black carbon emissions in Canada.
To support policy development, extensive consultations were held with a range of stakeholders (provinces, industry, environmental non-governmental organizations (NGOs) on climate change. A key mechanism for consultation with the provinces and territories on policies to address GHG emissions was the Federal-Provincial-Territorial Working Group on Domestic Climate Change, which met twice this past year. The Department also had ongoing engagement with the provincial members (Ontario, Quebec and British Columbia) of the Western Climate Initiative (WCI) by participating in meetings on the development of the WCI cap-and-trade system. In addition, numerous ad hoc meetings were held with representatives from a range of stakeholders, including industry representatives and non-governmental organizations.

A discussion document outlining proposed measures to be implemented over the 2010–2020 period to further reduce emissions from volatile organic compounds (VOC) from consumer and commercial products was published in 2010–2011 for public comments. Comments received are being considered for a notice of intent that is expected to be published in 2011–2012.

Environment Canada developed and signed bilateral agreements with the provinces of Alberta and British Columbia and has incorporated their GHG reporting requirements into the Single-Window Reporting system. Discussions also began with other provinces interested in collecting GHG and toxics emissions data through Environment Canada’s Single-window Reporting system. Environment Canada has also worked with the provinces of Ontario, British Columbia and Manitoba since the mid-2010s to develop memoranda of agreement (MOAs) relating to data sharing, and the Department signed an agreement in principle with British Columbia (April 2010) on efforts to address climate change. The Department also initiated discussions on the establishment of an agreement in principle with Quebec on efforts to address climate change.

Environment Canada worked closely with other federal departments, provinces, industry, and non-governmental organizations over several months to finalize a proposed framework for an air management system. This entailed an unprecedented level of collaboration with other levels of government and stakeholders to develop an integrated approach to improving air quality. The proposed framework includes the implementation of industrial air pollutant emission requirements and ambient air quality standards that will be established under the Canadian Environmental Protection Act, 1999.

In October 2010, the Canadian Council of Ministers of the Environment (CCME) reviewed the proposal, produced over two years through a multi-stakeholder process, for the Comprehensive Air Management System (CAMS). Ministers agreed to move forward on the proposal and implement a new Air Quality Management System (AQMS) and asked officials to finalize the key elements of the system in 2011, including the Canadian Ambient Air Quality Standards (CAAQS) for particulate matter (PM) and ozone and associated trigger levels, airsheds and air zones delineation, and base-level industrial emissions requirements for key sectors. Implementation of the system will begin in 2013.
The Vehicle Scrappage program retired over 70,000 vehicles in 2010–2011, resulting in an estimated reduction of 2,550 t of smog-forming emissions. An audit was done of 348 vehicle recyclers for adherence with the code of practice for vehicle recycling; only 3% of these recyclers failed the audit and had to leave the program.

In 2010–2011, Environment Canada provided expert clean technology advice to support the development of public policy, regulations and federal investments. Areas of expertise include renewable fuels and bioenergy; renewable energy such as solar, marine and wind; carbon capture and storage; and hydrogen and fuel cells. The Department also continued to develop technology assessments, oversee and advise programs29 that advance clean technologies, and manage Canada’s Environmental Technology Verification (ETV) program, including efforts to explore opportunities for joint ETV projects with the United States.

Environment Canada’s observatory in Alert, Nunavut continued to provide new information on Canada’s rapidly changing climate, atmospheric long-range transport of pollutants and ecosystem impacts to Canadians and international partners.

Continental
Environment Canada focused work towards the development of sector-by-sector regulations in 2010–2011, following the United States’ approach and aligning its efforts with those of the United States. As a result of the sector-by-sector approach to climate change mitigation, the implementation of Canada’s Offset System for Greenhouse Gases is currently on hold.

Through the United States–Canada Clean Energy Dialogue (CED), progress was made on enhancing bilateral collaboration to advance clean energy technology solutions to reduce greenhouse gas emissions and address climate change. Twenty joint projects are on schedule to be completed under the CED Action Plan. A Second Report to the President of the United States of America and the Prime Minister of Canada on the progress under the CED was released in February 2011.

Environment Canada shared scientific advice and knowledge through the Subcommittee on Scientific Co-operation of the Canada–United States Air Quality Agreement. Discussions on a particulate matter (PM) annex to the Canada–United States Air Quality Agreement are planned to continue once both countries have refined their domestic regulatory approaches to managing emissions of PM and its precursors. Preliminary analysis of the proposed United States approach to reducing emissions of particulate matter precursors on Canada’s air quality were completed and Canada continued to engage Canadian stakeholders to help finalize elements of Canada’s proposed Air Quality Management System.

29 Programs: Sustainable Development Technology Canada (SDTC); the Federation of Canadian Municipalities’ Green Municipal Fund (GMF); Canadian Environmental Technology Advancement Centres (CETACs); the Program of Energy Research and Development (PERD); ecoENERGY Technology (ecoETI); and the Clean Energy Fund (CEF).
**International**

Environment Canada, Foreign Affairs and International Trade Canada (DFAIT) and Natural Resources Canada (NRCan) constructively engaged in five negotiating meetings concerning the United Nations Framework Convention on Climate Change (UNFCCC) to advance Canada’s objectives. Furthermore, these departments advocated Canada’s objectives at other multilateral processes such as the G8 and G20 summits, the Major Economies Forum, La Francophonie, the Clean Energy Ministerial meetings and the Arctic Council. Environment Canada strengthened bilateral policy and project-based cooperation with key countries (in particular China and Mexico), and engaged with key domestic constituencies (provincial, territorial, national Aboriginal organizations and civil society) to raise their awareness and knowledge about Canada’s United Nations negotiation objectives and positions. In December 2010, Canada adopted the UNFCCC’s Cancun Agreements, meeting Canada’s objectives for a comprehensive range of issues. Canada’s payments to international climate change organizations were on time.

Environment Canada, working with Foreign Affairs and International Trade Canada (DFAIT), Industry Canada (IC) and Natural Resources Canada (NRCan), invested nearly $8 million in Canadian public-private partnership clean technology projects under the Asia–Pacific Partnership on Clean Development and Climate (APP), the Global Methane Initiative (GMI), and the Renewable Energy and Energy Efficiency Partnership (REEEP). This resulted in a total 4-year investment of nearly $16 million, which leveraged over $115 million in investments from the private sector and other governments. The projects delivered environmental benefits (in particular addressing greenhouse gas reductions), economic benefits to Canadian companies. The projects also accelerated clean technology development and deployment across a range of industrial sectors, including zero-energy buildings, renewable energy, landfill gas, power generation, and oil and gas.

Environment Canada continued to support Transport Canada by contributing to key meetings with the International Maritime Organization, the International Civil Aviation Organization and the Rail Association of Canada to reduce air pollutants and greenhouse gases from marine shipping, rail and aviation. Environment Canada worked with Transport Canada and the Rail Association of Canada to publish the annual 2008 Locomotive Emissions Monitoring report, and initiated the development of a Canada-wide emissions inventory of ships in support of Transport Canada’s and Environment Canada’s work to implement emissions regulations of the International Maritime Organization. Data and information from Environment Canada’s emissions research and measurement programs continued to inform these discussions.

In 2010, Canada, Mexico and the United States submitted the North American Proposal to amend the Montreal Protocol to phase down the consumption and production of hydrofluorocarbons (HFCs). Interest and support for controlling HFCs under the Montreal Protocol has grown since the matter was first considered by the Parties to the Montreal Protocol in 2009. In November 2010 at the Meeting of the Parties to the Montreal Protocol, 91 parties signaled their interest in continuing to pursue the issue of phasing down HFCs under the Protocol. Canada, Mexico and the United States will submit a revised proposal in 2011.
Canada continued to participate in the negotiation of amendments to the Gothenburg Protocol in a way that ensures the outcome is consistent with our domestic and bilateral approaches to reducing air pollution. Canada was successful in preserving flexibility to allow for future tabling of commitments in line with Canada’s domestic approach, once this becomes finalized. In December 2010, a decision was taken to include black carbon as a component of particulate matter in the revisions of the Gothenburg Protocol. This was the first international treaty to formally address black carbon, or other short-lived climate forcers (SLCFs). Canada played an active role in this decision through its participation in the Ad Hoc Expert Group on Black Carbon.

In addition, Canada continued to actively participate on the Arctic Council’s Expert Group and Task Force on SLCFs. The Task Force recommendations for non-binding actions to reduce black carbon emissions were endorsed at the Arctic Council Ministerial Meeting in May 2011. Canada will continue to participate in the ongoing work of the Task Force to further work on black carbon and develop recommendations on other SLCFs (methane and ozone).

**Lessons Learned**

A key lesson for Environment Canada has been the importance of maintaining the flexibility to redirect resources to respond to changing priorities and circumstances. With respect to climate change policy, the Government made a commitment to align its approach with that of the United States, given the highly integrated North American economy. Despite significant shifts in United States climate policy, which moved from a cap-and-trade to a regulatory approach, Environment Canada was successfully able to undertake the work necessary to develop the policy to align with either approach. The Federal-Provincial-Territorial Working Group on Domestic Climate Change provided a useful forum to work with our provincial and territorial partners in developing federal policy, and will be a useful venue for consultation going forward.

Furthermore, the collaborative process for developing the Single-window Reporting System was valuable and will facilitate the eventual implementation of the regulatory approach for air pollutant emissions. The framework for managing air quality is being developed through a collaborative process with stakeholder involvement. Both the processes and the work to finalize the system were resource-intensive and it was difficult to forecast the necessary resource allocations to match changes in policy direction and the requirement to increase the engagement of stakeholders in the regulatory development. While time-consuming and resource-intensive, such processes can work if clear timelines, roles, responsibilities and decision-making procedures are established and clearly understood.
Program Activity 3.3: Compliance Promotion and Enforcement - Pollution

Program Activity Description

This program contributes to minimizing damages and threats to the natural environment and biodiversity through promotion and enforcement of Environment Canada-administered legislation. Program actions focus on pollution, including toxic substances, their release to air, water or land, and the import and export of hazardous waste that present a risk to the environment and/or human health. Compliance promotion initiatives provide information to regulatees on legislative requirements, the environmental benefits of compliance and the potential penalties of non-compliance. The program maintains a contingent of enforcement officers, whose activities include gathering intelligence, conducting inspections to verify compliance with acts and regulations, and pursuing investigations to take appropriate enforcement measures against offenders. The program includes compliance analysis and planning to integrate data from all available sources to provide continuous feedback on program activities and results. Funding includes support through class contributions to support environmental research and development.

2010–2011 Financial Resources ($ millions)

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<th>Planned Spending</th>
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2010–2011 Human Resources (FTEs)

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<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>345</td>
<td>339</td>
<td>(6)</td>
</tr>
</tbody>
</table>

Expected Results

Unlawful releases of harmful substances into the environment are prevented or minimized through enforcement and promotion of Environment Canada-administered laws and regulations.

Performance Indicators

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Targets</th>
<th>Performance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of unlawful harmful substances controlled or removed from the environment as a result of enforcement activities</td>
<td>To be determined&lt;sup&gt;30&lt;/sup&gt;</td>
<td>Mostly Met</td>
</tr>
</tbody>
</table>

The rating is based on success with several large enforcement operations (detailed in the Performance Summary and Analysis of Program Activity: section below), as well as on general improvements in enforcement and compliance promotion operations.

A baseline value for the indicator cannot be reported due to unanticipated difficulties.

<sup>30</sup> The 2010–2011 Report on Plans and Priorities reflected the intent at the time to report baseline values in this Departmental Performance Report and to set a target in the National Enforcement Plan for the 2010–2011 fiscal year. However, this proved more challenging than anticipated for reasons cited in the Performance Status column.
In place of the original indicator, the number of violations of Environment Canada-administered laws and regulations that have been disclosed through enforcement actions will be reported. For fiscal year 2010–2011, there were 3,084 enforcement actions taken against violations under the *Canadian Environmental Protection Act, 1999* and 253 under the *Fisheries Act*. This indicator will continue to be reported in future DPRs.

**Performance Summary and Analysis of Program Activity**

The program conducted over 9,000 inspections at sites across Canada to verify and restore compliance through the use of various enforcement actions. Using tools ranging from warning letters to environmental protection compliance orders, Environment Canada enforcement officers addressed violations and brought offenders into compliance. Prosecutions are a last resort, when other tools fail and, in 2010–2011, enforcement activity led to a number of convictions under the *Canadian Environmental Protection Act, 1999* (CEPA 1999) and the *Fisheries Act*, resulting in over $500,000 in fines, most of which was directed to fund investments in repairing harm to the environment. 2010–2011 saw expanded enforcement activity in the oil sands to proactively monitor compliance in that area, work that will continue over the coming years. A baseline value has not been determined for the exact quantity of unlawful harmful substances controlled or removed from the environment as a result of enforcement activities (see Lessons Learned below).

In addition, the program further enhanced its identification of priorities that focus on the most serious risks and threats to the environment, through a systematic consultative approach to priority-setting. This process informed both the annual National Enforcement Plan and National Compliance Promotion Plan, which identify high-priority regulations and targets. Both compliance promotion and enforcement activities were then focused on these priorities.

In order to increase the awareness and understanding of the law and regulations relating to environmental protection regulations and other risk management instruments, compliance promotion activities were delivered in accordance with priorities in the National Compliance Promotion Plan. Of the activities tracked for 7 high-priority instruments in 2010–2011, the compliance promotion program contacted 16,808 regulatees, representing 33% of regulatees within the known regulated community. Through these activities, information was provided on what was required to comply with the law, the benefits of compliance and the consequences of non-compliance.
Multiple approaches were used to reach the regulated communities, such as mailouts and information sessions; these were carried out as required in collaboration with other federal departments, provinces and territories as well as non-governmental organizations (e.g. the Canadian Fertilizer Institute and other manufacturers’ associations). Promoting voluntary compliance is a critical part of the compliance continuum and obviates the need for more resource-intensive enforcement action.

**Lessons Learned**

The program had intended to quantify and measure the volume and relative toxicity of unlawful substances removed from the environment through enforcement actions. Measuring this value, however, has proved much more difficult than originally conceived. Many factors beyond the control of environmental law enforcement—natural chemical life cycles, social and environmental inputs, and voluntary compliance on the part of industry, in addition to challenges with methodology and information capture—contributed to this difficulty.

This experience has demonstrated that we must revise our method of measuring overall program performance to include a blend of environmental information, compliance rates amongst regulated communities (where possible), and an indication of the effectiveness of enforcement actions taken. The program is thus revising its performance indicators and targets for future years to better demonstrate its outcomes. Moreover, the program is also in the process of renewing its information management processes and systems to better capture and report on data reflective of its performance.
Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources

Environment Canada’s work under the Strategic Outcome is organized into a single Program Activity:

- Mackenzie Gas Project

Program Activity 4.1: Mackenzie Gas Project

Program Activity Description

This program supports the activities of the Mackenzie Gas Project Office (MGPO), which is responsible for facilitating the legal, operational and regulatory coordination of federal government input to the Mackenzie Gas Project (MGP), which aims to construct a 1220-km pipeline through the Northwest Territories and Alberta to connect gas resources in Canada's North to markets in North America.

Key activities under this program are the following: coordinating federal government input to the Joint Review Panel (JRP), which is a seven-member, independent body responsible for evaluating potential impacts on the environment and the lives of people in the project area; leading federal government interaction and supporting consultations with the project proponents, Aboriginal groups and the governments of the Northwest Territories and Alberta; preparing a Government of Canada response to the forthcoming report from the JRP; facilitating the National Energy Board regulatory process for a timely and accountable regulatory regime for the MGP; developing a fiscal framework to assess areas where the federal government may participate in the MGP; and implementing the Mackenzie Gas Project Impacts Act to administer up to $500 million to support mitigation strategies related to the socio-economic impacts from the Mackenzie Gas Project.

Other federal legislation relevant to this program includes the Canadian Environmental Assessment Act; the Mackenzie Valley Resource Management Act (MVRMA); and the Western Arctic Claims (Inuvialuit) Settlement Act and other similar acts and agreements with Aboriginal governments.

2010–2011 Financial Resources ($ millions)

<table>
<thead>
<tr>
<th>Planned Spending</th>
<th>Total Authorities</th>
<th>Actual Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>1.9</td>
<td>1.8</td>
</tr>
</tbody>
</table>

2010–2011 Human Resources (FTEs)

<table>
<thead>
<tr>
<th>Planned</th>
<th>Actual</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Expected Results</td>
<td>Performance Indicators</td>
<td>Targets</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Progressing to regulatory phase of the project</td>
<td>Subject to decision to proceed, implementation plan in place</td>
<td>To be determined (see Performance Summary and Analysis of Program Activity discussion below)</td>
</tr>
</tbody>
</table>

Environment Canada provided timely input towards the completion of the Government’s response to the Mackenzie Gas Project (MGP) panel report.

The decision to proceed with the project now rests with the proponents. The National Energy Board certificates for the project give proponents until 2013 to decide. The Government response establishes the obligations of the departments towards the implementation of the project.

In addition, up to $500 million is also available to support regional projects that help to alleviate the socio-economic impacts on Northwest Territories communities affected by the proposed project.

**Performance Summary and Analysis of Program Activity**

In May 2010, the governments of Canada and the Northwest Territories (NWT) completed the Interim Response to the Joint Review Panel’s 176 recommendations and publicly released the Overview to the Interim Response. Final consultation with the affected Aboriginal communities was undertaken during the summer of 2010 and the final response report was approved by order in council and made public in November 2010.

On February 16, 2011, responsibility for the Mackenzie Gas Project (MGP) and the Federal Public Administration MGP Office was transferred to the Minister of Aboriginal Affairs and Northern Development. Please see the *Canada Gazette* for more information.

In March 2011, order-in-Council approval was provided to the National Energy Board to issue a certificate of public convenience and necessity authorizing the Mackenzie Gas Project. The MGP is a private-sector project and a decision regarding whether to proceed will be based upon the proponents’ assessment of the risks and rewards associated with this project.
In Budget 2006, the Government of Canada established a corporation that may administer up to $500 million to support regional projects that help to alleviate the socio-economic impacts on NWT communities affected by the proposed project, during the planning, construction and operation of the MGP. The release of funding is contingent on the MGP proceeding.

Lessons Learned
In March 2011 the Department conducted a lessons-learned workshop in Edmonton, Alberta. The workshop participants included environmental assessment coordinators, technical experts and management from the Prairie and Northern, Pacific and Yukon, and National Capital regions. As a result, the following three areas of improvement were identified: 1) setting a clearer definition of roles and responsibilities, 2) strengthening the approval process; and 3) having a policy framework in place on key issues. Based on these lessons, Environment Canada is in the process of developing a document that will serve as a best practices guidance in conducting future large-scale reviews.
Program Activity 5.1: Internal Services

Program Activity Description

Internal Services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. These groups are Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; Acquisition Services; and Travel and Other Administrative Services. Internal Services include only those activities and resources that apply across an organization and not to those provided specifically to a program.

<table>
<thead>
<tr>
<th>2010–2011 Financial Resources ($ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Spending</td>
</tr>
<tr>
<td>209.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2010–2011 Human Resources (FTEs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
</tr>
<tr>
<td>1,633</td>
</tr>
</tbody>
</table>

Performance Summary and Analysis of Program Activity

The Internal Services policy priorities for 2010–2011 supported the policy agenda of Environment Canada and the Government of Canada, while management priorities enabled programs to pursue Environment Canada’s mandate to meet the stewardship and performance requirements of the Management, Resources and Results Structure Policy, the Management Accountability Framework and specific program priorities.

Performance in support of Policy Priorities for 2010–2011:

Analysis and coordination continued to play a strong role in supporting policy development and program implementation. For example, Environment Canada has undertaken regulatory impact assessment statements. These statements include cost-benefit analyses in support of both the Renewable Fuels Regulations (through the reduction of greenhouse gas (GHG) emissions by requiring an average of 5% renewable content in gasoline) and the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations, (through the establishment of progressively more stringent GHG emission standards for new passenger automobiles and light trucks for the 2011–2016 model years, aligned with the United States).

Canada presented coherent, mutually supportive positions across international fora on its environmental priorities, including biodiversity, chemicals management and the protection of the Arctic. Environment Canada also delivered multi-faceted cooperation programs tailored to the interests of Canada and its key partners, including the United States, China and Latin America.
The Department made progress against commitments in its Science Plan by advancing leadership development and succession planning, and developing a performance measurement framework for related scientific activities. Policy support was provided for the Canada–United States Clean Energy Dialogue to advance bilateral research and development. Support continued for the Intergovernmental Panel on Climate Change through coordination of Canada’s secretariat and the provision of scientific advice.

Environment Canada engaged with provincial and territorial governments, Aboriginal organizations, stakeholders and citizens to advance the Government’s environmental agenda. A departmental consultation policy was adopted. Provincial and territorial partners were engaged through the Canadian Council of Ministers of the Environment and the Canadian Council of Resource Ministers to advance cross-jurisdictional environmental issues, such as air emissions, municipal wastewater and biodiversity.

**Performance in support of Management Priorities for 2010–2011:**

The Department made progress in refining its financial planning and reporting framework. Enhanced information was made available in the Management Variance Report—a tool that provides managers with a snapshot of their financial situation and is generally updated weekly. The Department proceeded with two budget reviews (6 and 9 months), which is consistent with good financial management practices. A tracking tool was developed to support budget planning and allocation for multi-year purposes.

The review of the Department’s governance structure was part of a process of continuous management improvement. As a result of this review, it is anticipated that options will be available in the coming year to modify the structure, both to make it more responsive to the needs of senior management and to realign the responsibilities of key governance entities.

Departmental staffing policies were updated and service delivery was monitored. Staffing service standards were developed. An online employment equity session was implemented to increase awareness of the four designated groups. A workforce analysis was conducted to measure progress and to identify employment equity gaps within the Department. Commitments to address the gaps were included in executive performance agreements.

The Department ensured a minimum equivalent of 1.5% of the salary envelope be spent on learning activities, as per its learning policy. Branches identified critical positions and developed succession plans, and implemented engagement strategies in response to Public Survey Employment Survey results.

Environment Canada advanced the Portfolio and Client Relationship Management program, resulting in an improved understanding of departmental programs and projects that require technology, enabling the Department to make the most effective use of Information Management (IM) and Information Technology (IT) investments. The Department supported government-wide mission-critical systems within the
Meteorological Service of Canada by investing in the renewal of the high-performance computing infrastructure. For the third year in a row, the Department succeeded in maintaining its international (ISO) certification for the quality management systems of the Supercomputing Infrastructure. This benchmark enables the organization to identify measure, control and improve core internal processes.

Improvements were made to the security of information, systems and associated processes. For example, the certification and accreditation process was refined, and a new standard for Information Management (IM) and Information Technology (IT)-enabled projects was implemented to ensure that security requirements are assessed before a project is approved. The Department now has an improved directive on sharing sensitive and confidential information with outside organizations. The Department provided leadership in innovation by delivering on the Open Data initiative to improve the ability of the public to find, download and use Government of Canada data.

Environment Canada completed the second year of a multi-year project to implement a comprehensive life-cycle asset management regime. The associated policies and procedures were drafted and the consultation and review process began.

The annual publication planning process was improved by developing an integrated Department-wide approach, better portfolio management and an updated process and service guide that provided the tools and products to increase timely delivery of information to the public.

The Audit and Evaluation Branch has contributed to improving the effectiveness and efficiency of departmental policies, programs and management through the completion of 6 internal audits, 11 evaluations and 5 external audit reports. Follow-up was conducted on 158 management action plans, 52 of which were fully completed and closed. Of the remaining 106, progress has been noted, with implicated managers remaining committed to the implementation. We will continue to monitor progress. Monitoring and reporting on management action plans were strengthened, and program managers implemented a number of improvements, such as:

- progress made in IT Security (e.g. with respect to certification and accreditation);
- development of a results-based management and accountability framework pertaining to Environment Canada’s Fisheries Act responsibilities; and
- development of performance measurement strategies and frameworks for invasive alien species, clean air regulations and the science that supports weather predictions and climate change models.

The External Audit Advisory Committee and the departmental evaluation committees were actively engaged during the year, with advice provided to the Deputy Minister on matters such as risk management, control and governance frameworks and processes. The internal audit and evaluation functions have steadily demonstrated continuous progress as reflected in the strong rating in Round VIII of the Management Accountability Framework assessment.
Canada’s Economic Action Plan (CEAP) Initiatives

Announced in Budget 2009, Canada’s Economic Action Plan (CEAP)\(^{31}\) provided funding to Environment Canada over two fiscal years. In 2010–2011, the Department spent $17 million on the following distinct initiatives:

- **Modernizing Federal Laboratories:**

  2010–2011 Planned Spending (Total Authorities) – $7.3 million  
  2010–2011 Total Actual Expenditure – $6.6 million

  The Modernizing Federal Laboratories initiative provided Environment Canada with $13.7 million over two years ($7.3 million in 2010–2011) to address deferred maintenance at four laboratories located at
  
  - the Canada Centre for Inland Waters (CCIW) in Burlington, Ontario;
  - the National Wildlife Research Centre (NWRC) in Ottawa, Ontario;
  - the Environmental Science and Technology Centre (ESTC) in Ottawa, Ontario;
  - and;
  - the Global Atmosphere Watch (GAW) Observatory in Alert, Nunavut.

  Environment Canada’s six projects in these four laboratories were in keeping with the objectives of the CEAP and were aimed at providing economic stimulus in the construction, architectural and engineering sectors, as well as helping maintain and further the excellence of Environment Canada’s world-class scientific activities.

  Environment Canada mostly met (performance status: Mostly Met) the objectives of five of its six planned project activities for the 2010–2011 fiscal year, which were delivered on time and within budget allocation. The work included the replacement of outdated infrastructure, upgrades to existing laboratories and facilities, and the fit-up of unproductive space to meet increased program demand for analytical and research capacity. One of the projects at the Canada Centre for Inland Waters (CCIW) in Burlington, Ontario experienced delays in the design process, which resulted in unspent CEAP funds. This project has been carried forward into 2011–2012 and will be funded internally. The project is expected to be completed by the end of October, 2011.

- **Accelerating Federal Contaminated Sites Action Plan:**

  2010–2011 Planned Spending (Total Authorities) – $9.8 million  
  2010–2011 Total Actual Expenditure – $9.8 million

  This CEAP initiative provides custodians of federal contaminated sites (including Environment Canada) with funding to accelerate an assessment of whether human health and ecological risks exist and to accelerate remediation activities needed to

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\(^{31}\) CEAP figures include contributions to employee benefits plans (EBPs).
manage these risks. Environment Canada has a dual role not only in housing the Secretariat and providing expert support to other government departments and consolidated Crown corporations, but also in managing 973 sites, which includes 348 suspected or active sites as part of the Department's custodial responsibilities.

In 2010–2011, the CEAP funding received was used by Environment Canada to administer and oversee the Federal Contaminated Sites Action Plan (FCSAP) program; to provide expert support to other government organizations; and to complete 34 assessments and 4 remediation projects across the country, in 9 provinces and 3 territories. Environment Canada has met all (performance status: Met All) of the expected results as these projects were delivered on time and within budget.

- **Arctic Research Infrastructure:**

  2010–2011 Planned Spending (Total Authorities) – $0.47 million
  2010–2011 Total Actual Expenditure – $0.47 million

  Funding was provided in 2010–2011 to complete the development and upgrading of Environment Canada’s Arctic wildlife research field camp facilities, with the objective of ensuring compliance with health and safety objectives, and reducing their impact on the local environment. Environment Canada has met all (performance status: Met All) of the expected results as the development and upgrading of field camp facilities were completed in time and within budget. About 30% of funds went to purchase supplies for the construction of new field research labs, including $100,000 for solar power systems to power these facilities. About 36% of funds was spent to transport building materials, plumbing equipment and solar-electrical systems from where they were purchased, to the remote field sites at 7 locations in Canada’s Arctic. About 15% was spent on contracts for skilled labour, primarily from local communities within the Arctic, to construct the facilities and to install the plumbing and energy systems. These investments helped provide a near-term economic stimulus while strengthening the foundation for Environment Canada's Arctic research capacity, thus providing a platform to help improve our understanding of the northern environment and allow the monitoring of climate change.
SECTION III: SUPPLEMENTARY INFORMATION

Financial Highlights

The financial highlights presented on the following pages offer an overview of Environment Canada’s financial position and operations. The detailed unaudited departmental financial statements can be found on Environment Canada’s website.

Condensed Statement of Financial Position
As at March 31, 2011 ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>% Change</th>
<th>2010-11</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>(3.0%)</td>
<td>606.2</td>
<td>625.2</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>(7.2%)</td>
<td>458.0</td>
<td>493.6</td>
</tr>
<tr>
<td>Equity of Canada</td>
<td>12.6%</td>
<td>148.2</td>
<td>131.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>(3.0%)</td>
<td>606.2</td>
<td>625.2</td>
</tr>
</tbody>
</table>

Condensed Statement of Operations
For the year ended March 31, 2011 ($ millions)

<table>
<thead>
<tr>
<th></th>
<th>% Change</th>
<th>2010-11</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenses</td>
<td>0.5%</td>
<td>1,231.7</td>
<td>1,225.3</td>
</tr>
<tr>
<td>Total revenues</td>
<td>(9%)</td>
<td>(79.6)</td>
<td>(87.4)</td>
</tr>
<tr>
<td><strong>Net cost of operations</strong></td>
<td>1.3%</td>
<td>1,152.1</td>
<td>1,137.9</td>
</tr>
</tbody>
</table>

Financial Statements

Environment Canada’s unaudited financial statements are prepared in accordance with accrual accounting principles and, therefore, are different from appropriation-based reporting, which is reflected in Sections I and II of this report. Sections I and II are prepared on a modified cash basis rather than an accrual basis. A reconciliation between the parliamentary appropriations used (modified cash basis) and the net cost of operations (accrual basis) is set out in notes 2 and 3 of Environment Canada’s Unaudited Financial Statement at this website.
Financial Highlights Charts/Graphs

Total departmental expenses by Program Activity have increased by $6.4 million or 0.5%, increasing from $1,225.3 million in 2009–2010 to $1,231.7 million in the current year. To comply with the Policy on Management, Resources and Results Structures, the 2009–2010 expenditures were realigned with the revised 2010–2011 Program Activity Architecture (PAA).

See note 13 of the Departmental Financial Statements – Segmented Information at the following website for a further breakdown of expenditures by PAA and Standard Objects.
Total revenues amounted to $79.6 million for 2010–2011. The majority of the revenue in 2010–2011 is derived from Environment Canada’s meteorological services under Weather and Environmental Services for Targeted Users.

Major revenue items include ocean disposal permit applications, meteorological services, the hydraulics laboratory, and ocean disposal monitoring fees. The decrease of $7.9 million in Environment Canada’s revenues in 2010–2011 is due to a modification of the invoicing and revenue recognition policy in 2009–2010.

Revenues by Program Activity

<table>
<thead>
<tr>
<th>Program Activity</th>
<th>Revenues</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather and Environmental Services for Targeted Users</td>
<td>$39.6M</td>
<td>49%</td>
</tr>
<tr>
<td>Biodiversity - Wildlife and Habitat</td>
<td>$3.7M</td>
<td>5%</td>
</tr>
<tr>
<td>Weather and Environmental Services for Canadians</td>
<td>$6.2M</td>
<td>8%</td>
</tr>
<tr>
<td>Substances and Waste Management</td>
<td>$2.7M</td>
<td>3%</td>
</tr>
<tr>
<td>Climate Change and Clean Air</td>
<td>$2.4M</td>
<td>3%</td>
</tr>
<tr>
<td>Water Resources</td>
<td>$22.0M</td>
<td>28%</td>
</tr>
<tr>
<td>Compliance Promotion and Enforcement - Wildlife</td>
<td>$0.1M</td>
<td>Less than 1%</td>
</tr>
<tr>
<td>Compliance Promotion and Enforcement - Pollution</td>
<td>$0.1M</td>
<td>Less than 1%</td>
</tr>
<tr>
<td>Internal Services</td>
<td>$1.4M</td>
<td>2%</td>
</tr>
<tr>
<td>Sustainable Ecosystems</td>
<td>$1.4M</td>
<td>2%</td>
</tr>
<tr>
<td>Mackenzie Gas Project</td>
<td>$0M</td>
<td>Less than 1%</td>
</tr>
<tr>
<td>Compliance Promotion and Enforcement - Pollution</td>
<td>$0.1M</td>
<td>Less than 1%</td>
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</tr>
<tr>
<td>Internal Services</td>
<td>$1.4M</td>
<td>2%</td>
</tr>
</tbody>
</table>

See note 13 of the Departmental Financial Statements – Segmented Information at the following website.
Total assets, valued at $606 million, have decreased by $19.0 million. This decrease in Environment Canada’s total asset valuation is mainly attributable to

- a decrease of $40.5 million in the due from the Consolidated Revenue Fund;
- an increase in accounts receivable and advances of $17.4 million; and
- an increase in tangible capital assets of $5.1 million.

See notes 4 and 5 of the Departmental Financial Statements – Accounts Receivable and Advances; Tangible Capital Assets at the following [website](https://example.com) for more details.
Total liabilities were $458 million at the end of 2010–2011. This represents a decrease of $35.6 million (7.2%) from the previous year’s total liabilities of $493.6 million. The Accounts Payable and Accrued Liabilities continue to represent the largest component of liabilities at $185.6 million (41%) of total liabilities in 2010–2011. The accounts payable and accrued liabilities have decreased due to a reduction in a liability with the Nature Conservancy of Canada.

See notes 6 to 11 of the Departmental Financial Statements – Accounts Payable and Accrued Liabilities, Deferred Revenue; Lease Obligation for Tangible Capital Assets; Employee Future Benefits; Environmental and Contingent Liabilities; Contractual Obligations at the following website for more details.
List of Supplementary Information Tables

All electronic supplementary information tables found in the 2010–2011 Departmental Performance Report can be found on the Treasury Board of Canada Secretariat’s website.

- Sources of Respondable and Non-Respondable Revenue
- User Fees Reporting
- Status Report on Projects Operating with Specific Treasury Board Approval
- Details on Transfer Payment Programs (TPPs)
- Up-front Multi-year Funding
- Horizontal Initiatives
- Green Procurement
- Response to Parliamentary Committees and External Audits
- Internal Audits and Evaluations
SECTION IV: OTHER ITEMS OF INTEREST

Organizational Contact Information

For questions or comments on Environment Canada’s Departmental Performance Report, please contact:

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Corporate Management Directorate, Finance Branch
Environment Canada
Tel.: 819-953-3922  Fax: 819-953-3388
Gordon.Clifford@ec.gc.ca

Additional Information

The following information on official languages, the Management Accountability Framework, and indicators of environmental sustainability is part of Environment Canada’s Other Items of Interest in the 2010–2011 Departmental Performance Report.

Official Languages

Under the *Official Languages Act* (OLA), Environment Canada is fully committed to continue providing bilingual services to the public (Part IV) and to ensure that the language of work provision (Part V) is respected at all times.

Following the revised guidelines on the provision of bilingual service and active offer, Environment Canada assessed the Department’s compliance with Part IV via a monitoring toll developed internally. The assessors reported back to the branch heads on the positive results and on some suggested minor corrective measures. This assessment will be conducted once a year to ensure that Environment Canada continues to provide bilingual services and active offer to the public at all times. With respect to language of work, covered by Part V of the OLA, Environment Canada is finalizing a new internal tool of language of work that will give all employees tips on how to create and maintain a work environment that is conductive to the use of both official languages. Furthermore, all employees who were appointed to a bilingual position on a non-imperative basis under a public service official languages exclusion approval order are closely monitored in order to ensure that they meet the language requirements of their position within the two-year time frame allocated. The Department also encourages employees to acquire or improve second-language skills by adding language training to their learning plans.
Management Accountability Framework

In the Round VIII (2010–2011) Management Accountability Framework (MAF) assessment, Environment Canada built upon the significant performance improvements from the previous year, receiving three strong, nine acceptable, three opportunity for improvement and no attention required ratings. The Department’s overall performance can be considered stable; the rating improved in one area (values-based leadership and organizational culture), declined in one area (integrated risk management), while all other ratings remained the same as they were in the previous round.

In its ongoing search for continuous performance improvement, the Department developed a renewed MAF Action Plan for 2011–2012. Produced annually, the Action Plan is based on departmental priorities as well as those identified by the Treasury Board of Canada Secretariat (TBS). The Action Plan outlines actions to maintain or improve management performance. TBS has identified three priority areas for Environment Canada in 2011–2012: financial management and control; management of security; and integrated risk management. Progress will be monitored periodically against the Action Plan to help ensure that management performance meets expectations in MAF Round IX.

Canadian Environmental Sustainability Indicators

Environment Canada develops and communicates national environmental indicators in the areas of air quality, greenhouse gas emissions, water quality and nature. These indicators are reported through the Canadian Environmental Sustainability Indicators (CESI) program.

CESI provides a high-level snapshot of key environmental sustainability issues and, as such, do not necessarily portray the complexity and details surrounding those issues. The indicators are continually being refined, updated and expanded to ensure that they best measure Canada’s environmental performance.

Designed to be relevant to the Government’s policy, the indicators are built on rigorous methodology and the best available data from surveys and monitoring network. As such, CESI brings together environmental information from federal, provincial and territorial governments, which share responsibility for environmental management in Canada. Consequently, the trends and values of these indicators are not solely attributable to Environment Canada's actions, but indicative of the environmental results achieved collectively by various levels of government in accordance with their responsibilities for the environment.
The table below provides an overview of observed trends and results for key high-level environmental sustainability indicators reported in CESI:

<table>
<thead>
<tr>
<th>Trend</th>
<th>Indicator*</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>No trend</td>
<td><strong>Air Quality (PM$_{2.5}$)</strong></td>
<td>Fine particulate matter (PM$<em>{2.5}$) can be emitted directly into the atmosphere by anthropogenic and natural sources or formed by the transformation of gaseous emissions. It is also a key component of smog and can affect human health and the environment. The population-weighted air quality indicator shows that the PM$</em>{2.5}$ level for 2009 was of 7.2 µg (micrograms) per cubic metre. The national indicator did not show any statistically significant increasing or decreasing trend between 2000 and 2009, but a 14% decrease was registered between 2008 and 2009. This parallels a similar decrease measured across the Eastern United States. The likely factors contributing to this decrease include the implementation of emissions reduction regulations, the North American economic slowdown and a cool wet summer in eastern Canada during this period.</td>
</tr>
<tr>
<td>No trend</td>
<td><strong>Water Quality</strong></td>
<td>The freshwater quality indicator (WQI) is a measure of the ability of water bodies to support aquatic life. Of the 176 representative sites monitored across Canada from 2006 to 2008, freshwater quality was rated excellent at 5% of the sites. It was rated good at 37%, fair at 40%, marginal at 15% and poor at 3% of sites.</td>
</tr>
<tr>
<td>No trend</td>
<td><strong>Greenhouse Gas Emissions Reduction Levels</strong></td>
<td>Under the Copenhagen Accord, Canada is committed to reducing its greenhouse gas emissions to 607 Mt (megatonnes) by 2020, or 17% below 2005 levels. Total emissions in 2008 were 734 Mt. Current Government actions are expected to reduce emissions by 65 Mt. A further 178 Mt reduction is required to meet this target. The Government of Canada’s climate change plan is to regulate all major sources of emissions to generate additional reductions.</td>
</tr>
<tr>
<td>Improving performance</td>
<td><strong>Biodiversity: Protected Areas</strong></td>
<td>Protected areas include lands where development and use is restricted. Total protected area in Canada has grown to 977 621 km$^2$, or 9.8% of its land area as of 2010. Since 1990, the overall protected area in Canada has nearly doubled. As a signatory to the Convention on Biological Diversity, Canada has committed to protecting 17% of its terrestrial area by 2020.</td>
</tr>
</tbody>
</table>

*A severe weather events indicator is under development, with anticipated inclusion in CESI.*