

**Environment Canada**

**2011–2012 Estimates**

**Part III – Report on Plans and Priorities**

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Peter Kent  
Minister of the Environment



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## Minister's Message



As Minister of the Environment, I am pleased to present the *2011-2012 Report on Plans and Priorities* for Environment Canada. This report outlines Environment Canada's actions on a wide range of initiatives to address the environmental issues of concern to Canadians and our economy. By moving forward with these initiatives, our government is working to ensure a clean, healthy environment today and well into the future.

Canadians and the international community continue to face the challenge of combating climate change. Our government will maintain its focus on developing and implementing climate change strategies at home and abroad that reflect the interests of Canadians. These efforts will be undertaken through our work with partners to both implement the Copenhagen Accord and complete the negotiations under the United Nations Framework Convention on Climate Change for a comprehensive, legally binding post-2012 agreement, and by developing regulations to reduce greenhouse gas emissions from coal-fired power plants.

We will also deliver on a number of initiatives important to Canadians, including:

- Implementing our regulatory measures to reduce GHG in transportation and electricity generation, two of the largest sources of emissions in Canada.
- Implementing our climate change plan by developing regulatory measures to address GHG emissions as part of the overall effort to achieve the national target for emission by 2020. We will also design and deliver a world-class environmental monitoring system for the oil sands as well as work with provinces and territories on reducing other air pollution emissions across major industries.
- Implementing a new Federal Sustainable Development Strategy to make the Government of Canada's environmental decision making more transparent and accountable to Canadians.
- Delivering on the Action Plan for Clean Water.
- Moving forward on regulations to establish Canada-wide performance standards for municipal wastewater effluent.
- Continuing to protect Canadians from potentially harmful substances through our actions under the Chemicals Management Plan.
- Continuing to deliver first-rate weather services to Canadians.
- Pursuing a collaborative approach with conservation partners and stakeholders to protect and conserve biodiversity at home and abroad.
- Continuing to implement the *Species at Risk Act* (SARA), including fulfilling obligations for recovery planning, action planning and implementation to protect species at risk.

Given the need to control spending and better use existing resources, we will strengthen resource management and deliver our programs at a pace consistent with available resources. As programs are subject to periodic review and approvals, Environment

Canada will seek renewed investments for programs through the appropriate decision-making processes.

The *2011-2012 Report on Plans and Priorities* outlines Environment Canada's upcoming work, including our collaboration with partners, both in Canada and internationally, to protect the environment. Please take the time to read this report and learn more about these efforts.

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The Honourable Peter Kent, P.C., M.P.

Minister of the Environment

## Section I – Departmental Overview

### Raison d'être and Responsibilities

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.

Additional authorities are provided in other acts and regulations administered by the Department, including the *Species at Risk Act*, the *Canadian Environmental Protection Act, 1999*, the *Federal Sustainable Development Act*, the *Canada Water Act* and the *Environmental Enforcement Act*. In addition to the statutes administered by its Minister, Environment Canada has responsibilities under other statutes, including the *Canadian Environmental Assessment Act*, either as a federal or a responsible authority. For details on departmental legislation and regulations, please see the following website:

<http://www.ec.gc.ca/default.asp?lang=En&n=48D356C1-1>.

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

### Contribution to the Federal Sustainable Development Strategy

Environment Canada is the lead department for the Federal Sustainable Development Strategy (FSDS). The FSDS represents a major step forward for the Government of Canada by including environmental sustainability and strategic environmental assessment as an integral part of its decision-making processes. The Department's contributions to the FSDS are further explained in Sections II, III and IV, with additional details provided on the [departmental website](#)<sup>1</sup> and in the [Greening Government Operations](#) supplementary table. For complete details on the FSDS, please see the [FSDS website](#).

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<sup>1</sup> Unless identified directly in the text, please see the endnotes for full website addresses for the links in this document.

## Delivering Our Mandate

Environment Canada is the federal lead department on a wide range of environmental issues important to Canadians. Environment Canada addresses these issues through research, policy development, service delivery to Canadians, regulation and enforcement of environmental laws, and strategic partnerships. The Department's programs are focused on conserving and restoring Canada's natural environment; equipping Canadians to make informed decisions on weather, water and climate conditions; and minimizing threats to Canadians and their environment from pollution. The scope of these programs illustrates how the Department is responding to the interdependence between environmental sustainability and economic well-being.

Environment Canada's role is multi-faceted. First, we are a **science**-based department and a leader in scientific innovation (see [Measuring Environment Canada's Research and Development Performance](#)). Over two thirds of our budget and more than half of our workforce is dedicated to science and technology. The Department conducts science and technology activities across the country, including the application of existing scientific knowledge through related scientific activities such as weather and environmental monitoring and prediction, and the development of new scientific knowledge and expertise through research and development activities. This work also affects the delivery of results across programs and initiatives, and thus is central to the Department's ability to deliver its mandate.

Science and technology form the foundation of our policy and regulatory choices and, in turn, the basis of our reputation with stakeholders and the international community. Environment Canada is committed to improving the understanding of biological, atmospheric and aquatic resources and to reporting on environmental

*With employees located in communities all across Canada, Environment Canada is open for business 24 hours a day, 365 days a year from coast to coast to coast and around the world. Every year,*

- *We issue (on average) more than 1.5 million public forecasts and 15,000 warnings, 500,000 aviation forecasts and 200,000 marine, ice and sea-state forecasts;*
- *Averages over half of a billion individual visits to our comprehensive weather website at [www.weatheroffice.gc.ca](http://www.weatheroffice.gc.ca) and over 55 million calls to our weather information telephone line;*
- *Coordinates, manages and provides advice for over 1,000 significant environmental incidents, including conducting environmental impact assessments;*
- *Processes 7,000 notices for proposed international shipments of hazardous waste permits and more than 43,000 shipment manifests involving hazardous waste;*
- *Conducts more than 8,600 inspections and nearly 340 prosecutions for violations of Canada's environment laws;*
- *Implements and supports hundreds of environmental technology advancement projects in Canada and abroad;*
- *Publishes about 600 peer-reviewed scientific publications;*
- *Offers many programs to enable Canadians, from businesses to local communities, to protect natural areas, species, and their habitat; and,*
- *Establishes hundreds of partnerships with Aboriginal organizations, provinces, other federal departments, the natural resource sector, landowners, trusts and conservation organizations and educational institutions, to conserve and protect Canada's natural spaces and wildlife.*



statuses and trends (see Environment Canada's [Science Plan](#) (2007) and [Environment Canada's Technology Role](#)), so that our science better responds to the most complicated and pressing environmental challenges. This improves our capacity to design and evaluate programs for the protection of biodiversity; assess policy options for pollution prevention; and deliver state-of-the-art weather services.

Environment Canada is one of the federal government's most active *regulators* with statutory and program responsibilities relating to biodiversity and environmental protection. This role is complex, requiring the application of leading-edge research and proven best practices within existing statutory authorities and policy priorities. The objective in supporting this role 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. Environment Canada has set a goal to maintain and enhance its reputation as a world-class regulator.

In discharging 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, municipalities, national and international agencies, organizations and other government departments. Such enforcement addresses, for example, the use of toxic substances and their release to air, water and land. Wildlife enforcement officers enforce Canadian wildlife legislation, which protects plant and animal species from human interventions, such as hunting or trade that could adversely affect long-term wildlife conservation.

The Department is also a *service provider*, producing accurate and timely weather forecasts that benefit the economy and individual Canadians alike. Environment Canada also implements programs in direct support of ecosystem sustainability and environmental protection. Environment Canada's Weather and Environmental Services monitors, produces and delivers weather and environmental services and information to Canadians. Accurate and reliable meteorological and environmental information about the past, present and future states of the environment is essential to sound decision making by Canadians. Access to information on weather, water, air quality and climate conditions also supports public safety objectives and emergency and crisis management responses to high-impact events such as tornadoes, floods and droughts.

Moreover, 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. These priorities include environmental assessment, emergency and pandemic preparedness, ecosystem and water resource management, the 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 Outcomes and Program Activity Architecture (PAA)**

In 2011–2012, Environment Canada’s Strategic Outcomes and Program Activity levels in the Program Activity Architecture (PAA) will remain the same as in 2010–2011. Minor modifications have been made at the lower levels of the 2011–2012 PAA to better reflect the alignment of programs with expected results. Please see on page 12 an updated PAA diagram.

The Strategic Outcomes represent the long-term and enduring benefits to Canadians that Environment Canada expects to realize through its work to conserve Canada's natural environment, to equip Canadians to make informed decisions on changing weather, water and climate conditions, and to minimize threats from pollution. The PAA also includes a Strategic Outcome and a Program Activity for the Mackenzie Gas Project, transferred to the Department from Industry Canada in 2009–2010, and a Program Activity for the Department’s Internal Services.

Environment Canada continues to seek increased clarity in performance reporting. The Department has made several modifications to its Performance Measurement Framework (PMF) as part of its ongoing process of continuous improvement. The PMF enables the Department to supplement qualitative approaches to performance reporting with quantitative measures of progress toward expected results and Strategic Outcomes. Environment Canada regularly assesses the implementation of the PMF and makes adjustments as needed to ensure that indicators are measurable and provide useful information for decision making and accountability. For several program activities, targets have yet to be determined, pending the collection of sufficient data or the completion of discussions with other governments and with stakeholders. Where targets or indicator values are not available, performance ratings will draw on other sources of information, including indicators associated with lower-level programs. In addition, where applicable, interim targets will be identified for inclusion in any forthcoming changes to the PMF. Doing so will better enable the Department to measure where we stand in terms of overall performance against longer-term objectives.

## Linkages to the Federal Sustainable Development Strategy

The Federal Sustainable Development Strategy (FSDS) includes the goals and targets undertaken by the Government of Canada to meet its environmental sustainability priorities. A total of 8 goals and 38 targets have been derived interdepartmentally, with progress toward their achievement being a product of shared efforts among multiple departments and agencies. Performance indicators have also been chosen by Environment Canada for those targets that pertain to the Department. Along with their associated FSDS targets, these indicators are presented in the context of each Program Activity in Section II of this report. The FSDS establishes a transparent system of “plan, do, check, improve,” which will enable the goals, indicators and targets to be reviewed and modified over time as needed. Further information regarding Environment Canada’s contribution to the FSDS can be found on [Environment Canada’s website](#).

The EC Program Activities that contribute to the FSDS are highlighted in the PAA diagram on the next page by icons that represent the four FSDS Themes. These icons are defined below.

### FSDS Theme Legend:



**Theme I: Addressing Climate Change and Air Quality**



**Theme II: Maintaining Water Quality and Availability**

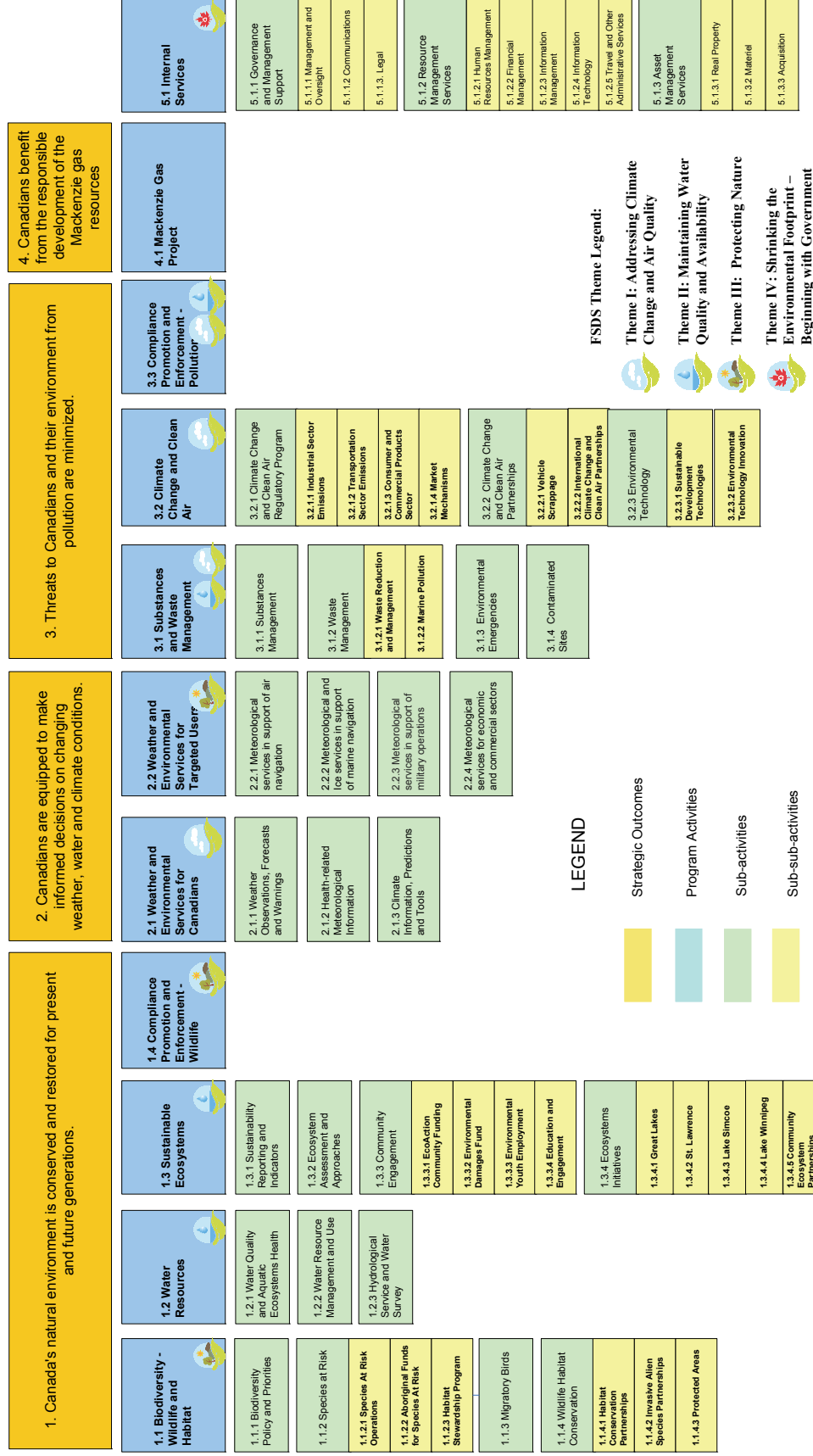


**Theme III: Protecting Nature**







**Theme IV: Shrinking the Environmental Footprint – Beginning with Government**





## 2011–2012 Program Activity Architecture (PAA)



### LEGEND

-  Strategic Outcomes
-  Program Activities
-  Sub-activities
-  Sub-sub-activities

### FSDS Theme Legend:

-  Theme I: Addressing Climate Change and Air Quality
-  Theme II: Maintaining Water Quality and Availability
-  Theme III: Protecting Nature
-  Theme IV: Shrinking the Environmental Footprint – Beginning with Government

## Environment Canada's Operating Context and Priorities

Among the defining characteristics of macro-environmental issues are their global reach and complexity, which affect the interests of multiple stakeholders and jurisdictions. These issues have both long-term implications and local and regional impacts, requiring multilateral cooperation if they are to be addressed meaningfully. It is within this context that Environment Canada operates in support of its Strategic Outcomes.

One of the most prominent issues of broad concern is and will continue to be climate change. Over the course of the planning period, the demanding international agenda on climate change will continue and Environment Canada, leading the Government of Canada at the negotiations, will remain active and constructive in its approach. The focus of the international negotiations in 2011 will be to operationalize the Cancun Agreement reached in December 2010, as well as continue to negotiate on issues that have not yet been concluded, all with a view to implementing the Copenhagen Accord as the basis for a single, legally binding, post-2012 climate change agreement. Environment Canada, on behalf of the Government of Canada, will also continue to honour the Copenhagen Accord's commitment to provide new and additional financial resources between 2010 and 2012 to support developing countries' efforts to reduce greenhouse gas emissions and adapt to the adverse impacts of climate change. Environment Canada will oversee efforts to ensure that the first installment of \$400 million in fast-start financing announced in Budget 2010 is committed by the end of 2010–2011. Details on Canada's fast-start financing can be found at the following website:

<http://www.climatechange.gc.ca/default.asp?lang=En&n=5F50D3E9-1>. This investment represents Canada's largest-ever contribution to support international efforts to address climate change.

Environment Canada will continue to play a leadership role in the international process to respond to climate change. It will be a *negotiator* of, and capable and effective *partner* in multilateral efforts to deal with climate change. It will be a *scientific authority*, sharing scientific expertise and knowledge of Canada's approach to its diverse environmental challenges and experiences. It will also be a *stakeholder*, sharing information on the current impact of climate change on Canada's environment, including its effects on Canada's Arctic and many of Canada's Aboriginal, Inuit and northern communities.

Developing approaches to address climate change to serve the mutual interests of Canada and its domestic, continental and international partners from both environmental and economic perspectives is a particular challenge. Environment Canada will continue to work closely with other federal departments on issues associated with climate change that concern energy security, the environment and the economy to support a whole-of-government approach to climate change.

Environment Canada also operates in a continental context. Addressing air pollution, for instance, depends upon transboundary cooperation and harmonization of policies across jurisdictions. Canada and the United States are working together on several issues of bilateral concern, which creates both opportunities and demands for Environment Canada, given the importance of our countries' economic relationship and shared environmental challenges.

Recent years have witnessed growing expectations among Canadians for the federal government to provide and support environmental policy on several fronts. These expectations continue, with all signs pointing to continued demands for leadership from Environment Canada on a wide range of initiatives, including those concerning the North, biodiversity and water, and regulatory and enforcement initiatives on substances, waste and clean air. These demands include responding to and educating Canadians through outreach efforts in the face of growing public interest in issues concerning the weather, climate, ecosystems and species (e.g. Environment Canada provides comprehensive and free educational resources for educators, from primary school to post-secondary, to support actions and learning activities aimed at protecting our environment).

These outreach and regulatory activities need to be built upon a foundation of effective environmental monitoring and sound science. For example, efforts to protect Canada's water resources require robust, timely monitoring and the coordinated action of governments and key stakeholders. Through the Government's comprehensive approach to water and through targeted investments as part of the Action Plan for Clean Water, important measures are being taken to protect this vital resource. National-level research and data collection are complemented by priority initiatives, such as improvements to how water quality is monitored in the oil sands region. In response to recommendations made by an expert advisory panel in December 2010, the Government has committed to working with the Government of Alberta to build a world-class monitoring system in the oil sands.

Pursuant to the *Federal Sustainable Development Act*, Environment Canada has responsibility across the federal government to develop and maintain systems and procedures to monitor progress on implementation of the Federal Sustainable Development Strategy (FSDS). The purpose of the FSDS is to make environmental decision making on the part of the federal government more transparent and accountable to Parliament. Under Environment Canada's leadership, the first Federal Sustainable Development Strategy was tabled in Parliament in October 2010. The Department will continue to lead on the implementation of the FSDS, and regular reports on progress will be issued.

In sum, Environment Canada faces a steady demand for action, working with multiple levels of jurisdiction, domestically, continentally and internationally. These demands pose significant challenges in providing the necessary resources to respond effectively, to set and sequence priorities among initiatives, and to manage key relationships within and across national boundaries.

Over the planning period, the Department expects to deliver a wide range of services, programs and initiatives for Canadians. In particular, the Department will pursue three major priorities, set out in the following tables:

**Operational Priority 1: Realize concrete progress on international, continental and domestic initiatives on climate change and clean air**

**Type:** Ongoing

**Links to Strategic Outcome(s):** SO 3

**Plans for meeting the priority:**

Domestically:

- Develop and implement climate change strategies that are aligned with those of the United States and help meet our 2020 Copenhagen target (*details on p. 59*)
- Develop and implement a new air management system in collaboration with the provinces and territories and deliver measures to reduce air pollutants (*details on p. 60*)

Continentially:

- Continue collaborating with the United States on the development of clean energy technologies to reduce greenhouse gases (*details on p. 60*)
- Continue cooperation with the United States to reduce transboundary air pollution (*details on p. 60*)

Internationally:

- Contribute to the achievement and implementation of a new and effective global agreement on climate change for the post-2012 period based on the Copenhagen Accord and the December 2010 Cancun Agreement (*details on p. 61*)
- Strengthen international cooperation with other major economies, in particular China, on reducing greenhouse gases and air pollution. (*detail on p. 61*)

<b>Operational Priority 2: Enhance environmental conservation, protection and monitoring through the implementation of key national initiatives</b>	
<b>Type:</b> Ongoing	<b>Links to Strategic Outcome(s):</b> SOs 1, 2 and 3
<p><b>Plans for meeting the priority:</b></p> <ul style="list-style-type: none"> <li>▪ Deliver the Action Plan for Clean Water (<i>details on p. 35 and 40</i>)</li> <li>▪ Implement the government’s Chemicals Management Plan (<i>details on p. 52 and 55</i>)</li> <li>▪ Continue implementation of the <i>Species at Risk Act</i> (SARA) (<i>details on p. 31</i>)</li> <li>▪ Advance agreements on the management of wastewater effluents and the development of a wastewater regime for Canada’s North (<i>details on p. 53 and 55</i>)</li> <li>▪ Develop plans to ensure the sustainability and transformation of Environment Canada’s weather and environmental services to improve public safety and security (<i>details on p. 45 and 47</i>)</li> <li>▪ Strengthen environmental enforcement (<i>details on p. 43 and 64</i>)</li> </ul>	
<b>Management Priority : Foster capacity of enabling functions to support programs</b>	
<b>Type:</b> Ongoing	<b>Links to Strategic Outcome(s):</b> SOs 1, 2, 3 and 4
<p><b>Plans for meeting the priority:</b></p> <ul style="list-style-type: none"> <li>▪ Continue to strengthen financial, information management/information technology, and human resources management in concert with the Management Accountability Framework assessments consistent with available resources (<i>details on p. 68 and 69</i>)</li> </ul>	



## Risk Analysis

In addition to the broader international and domestic challenges Environment Canada faces, the Department effectively manages a variety of risks relating to scientific research, program and service delivery and its corporate functions. These risks may ultimately affect the Department's ability to deliver on its priorities and achieve its Strategic Outcomes.

- External dependencies: As a science-based department responsible for contributing to the government priority of addressing climate change and preserving the environment, Environment Canada establishes and maintains domestic, continental and international relationships with other governments, scientific departments and partner organizations. Given this high degree of interaction, there is the risk that there may be failures on the part of third parties or partners on which Environment Canada relies, or that the Department will be unable to create, sustain and effectively manage these relationships. In response, Environment Canada has adopted mitigation measures such as environmental cooperation agreements and initiatives with a number of partners, including the United States, Mexico, the European Union, China, Brazil and India.
- Business continuity: Environment Canada operates in a very complex regulatory and operational environment that includes the provision of Government of Canada-critical services through the operation of a 24/7 infrastructure that supports the Department's Weather and Environmental Services activities and operations. Rapidly escalating costs, advances in technology, and hazards ranging from extreme weather to pandemics provide constant challenges to this service requirement. Consequently, there is a risk that Environment Canada may be unable to continue to provide critical services in a timely, coordinated and effective manner. In terms of mitigation measures, the Department is developing a series of integrated, multi-level business continuity plans and readiness programs, as well as completing the certification and accreditation of mission-critical systems.
- Resource management: Given the challenging fiscal conditions that the government of Canada is facing, more pressure has been put on the Department to perform the already complex task of making optimal allocations of the Department's finite resource envelope. The risk is that the effectiveness of Environment Canada's decision-makers in managing the Department's resources may be negatively impacted. Managing this risk will require innovative, risk-based decision making to optimize programming opportunities and to maximize value for money. Current mitigation activities include the enhancement of departmental integrated planning, performance measurement, and the implementation of a departmental budgetary control framework that includes close monitoring of expenditures, and frequent and regular reporting accompanied by in-depth financial analysis and oversight by senior management.

- Capital assets functionality: The increasingly frequent and severe weather events compounded by the rapid evolution of monitoring, detection and communications technology is placing more pressure than ever before on an aging capital asset infrastructure. Consequently, there is a risk that the Department's capital assets, in particular the atmospheric and hydrologic monitoring infrastructure, weather radars, super-computer and fleet, may become unreliable or costly to maintain due to a lack of timely investment, and a related lack of accurate and timely information about the current status of Environment Canada's assets. To mitigate these challenges, Environment Canada is building on its Integrated Investment Planning process to improve its ability to make strategic investment decisions. In addition, the Department is strengthening its assets management function through the implementation of a comprehensive life-cycle management application, and associated policies and procedures to enhance and standardize assets management within the Department.
- Information for decision making: As a science-based, regulatory and enforcement department, Environment Canada's mandate and reputation are dependent on quality information and data as well as on rigorous record keeping and data management. The ability of the organization to make informed decisions, adapt to change, respond to emergencies and ensure compliance with regulations is dependant on decision-makers receiving timely and accurate information. Given the rapid evolution of science and technology and an aging IM/IT infrastructure, there is a risk that management information may be insufficient, unavailable or not flowing correctly within the Department, which will impact sound decision making. Environment Canada continues to develop and implement strategies and tools to improve the way it stores, accesses, searches and reports financial and non-financial information. These improvements will be undertaken through activities ranging from a complete threat and risk assessment on all systems, to the departmental Enterprise Safeguard Implementation plan, to the establishment of a data management stewardship structure for departmental data.
- Human resources skills: The potential people impacts associated with the current fiscal realities pose significant risks to recruiting, developing and retaining the skills and experience required to continue to deliver on Environment Canada's mandate. In addition, given retirements within the Public Service of Canada and the Department's need for specific knowledge- and science-based skill sets, Environment Canada will face recruiting challenges in the coming years. This poses unique challenges for recruitment efforts, given the demand for these skills across the economy and the current high level of employee mobility in the federal public service. To minimize this risk, senior executives will continue to focus on improving talent through increased recruitment activities, a strong focus on learning and development of employees, building a representative and diverse workforce and succession planning for key positions.

## Planning Summary

The following tables provide a summary of the planned financial and human resources for the next three years.

### Financial Resources (\$ millions)\*

2011–2012	2012–2013	2013–2014
872.1	857.0	820.1

\* All figures are net of spendable revenue. “Spendable revenue” refers to revenue received through offering of products or services that can be “respent” or “used” to help offset the Department’s voted operating funding requirements.

### Human Resources (Full-Time Equivalents – FTEs\*\*)

2011–2012	2012–2013	2013–2014
6,038	5,774	5,762

\*\* FTEs are extracted from the Department's Salary Management System.

The Department’s planned spending will decrease by a total of \$15.1 million in 2012–2013 compared with spending for the previous year, due to the ending of the Species at Risk Program and the Clean Air Agenda temporary funding<sup>2</sup>, which expires in 2011–2012. Also contributing to this decrease is the reduction in funding requirements for such programs as the Action Plan on Clean Water and the Federal Contaminated Sites Action Plan. These decreases are partially offset by a transfer of funds from 2010–2011 to 2012–2013 to support a grant to the Canada Foundation for Sustainable Development and Technology (SDTC). The 2013–2014 planned spending reflects a return to SDTC’s baseline funding level. Any funding extensions for temporary funding programs that are expiring in this current or in future fiscal years will be subject to approval by decision-makers and would be reflected in future RPPs.

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<sup>2</sup> Temporary funding refers to funding that is associated with programs and services that are not permanent, and as such have a defined end date. Sunsetters refer to temporary programs that are ending within the year(s) being reported, and are often referred to as “sunsetting programs”.

**Strategic Outcome 1: Canada's natural environment is conserved and restored for present and future generations**

<b>Performance Indicators</b>	<b>Targets</b>
Percentage of Canadian ecosystems where ecosystem health has been assessed as good	To be determined. A baseline value for this indicator will be reported in the 2010–2011 Departmental Performance Report (DPR).

<b>Program Activity<sup>3</sup></b>	<b>Forecast Spending 2010-2011 (\$ millions)*</b>	<b>Planned Spending (\$ millions)*</b>			<b>Alignment with Government of Canada Outcomes</b>
		<b>2011–2012</b>	<b>2012–2013</b>	<b>2013–2014</b>	
Biodiversity – Wildlife and Habitat	106.9	107.8	95.8	95.3	Clean and Healthy Environment
Water Resources	123.5	109.6	107.1	104.4	
Sustainable Ecosystems	72.1	75.2	66.2	69.7	
Compliance Promotion and Enforcement – Wildlife	19.5	18.3	18.1	19.0	
<b>Subtotal</b>	<b>322.0</b>	<b>310.7</b>	<b>287.1</b>	<b>288.5</b>	
Deduct: Respendable Revenue**	(16.8)	(17.3)	(16.9)	(16.9)	
<b>Total</b>	<b>305.1</b>	<b>293.4</b>	<b>270.2***</b>	<b>271.6</b>	

\* Totals may differ within and between tables due to rounding of figures.

\*\* “Respendable revenue” refers to revenue received through offering of products or services that can be respent or used to help offset the Department’s voted operating funding requirements.

\*\*\* The decrease in 2012–2013 is primarily due to the termination of temporary funding for the Species at Risk program and the reduced funding required for the Action Plan on Clean Water.

<sup>3</sup> Program Activity descriptions are included under each Strategic Outcome in Section II.

<b>Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions</b>	
<b>Performance Indicators</b>	<b>Targets</b>
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	85% by 2012.
Percentage of municipalities that rank atmospheric hazards among the top 10 hazards affecting their community, based on relative risk	70% of Canadian municipalities by 2015.

<b>Program Activity<sup>4</sup></b>	<b>Forecast Spending 2010–2011 (\$ millions)*</b>	<b>Planned Spending (\$ millions)*</b>			<b>Alignment to Government of Canada Outcomes</b>
		<b>2011–2012</b>	<b>2012–2013</b>	<b>2013–2014</b>	
Weather and Environmental Services for Canadians	171.8	158.4	154.7	158.9	Clean and Healthy Environment
Weather and Environmental Services for Targeted Users	64.1	62.1	61.1	60.7	
<b>Subtotal</b>	<b>235.8</b>	<b>220.5</b>	<b>215.8</b>	<b>219.6</b>	
Deduct: Respendable Revenue**	(44.7)	(44.1)	(43.0)	(42.8)	
<b>Total</b>	<b>191.2</b>	<b>176.4***</b>	<b>172.8</b>	<b>176.9</b>	

\*Totals may differ within and between tables due to rounding of figures.

\*\* “Respendable revenue” refers to revenue received through offering of products or services that can be respent or used to help offset the Department’s voted operating funding requirements.

\*\*\* The decrease in 2011–2012 is due to the termination of temporary funding for the Air Quality Health Index and the Adaptation programs in support to the Clean Air Agenda.

<sup>4</sup> Program Activity descriptions are included under each Strategic Outcome in Section II.

<b>Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized</b>	
<b>Performance Indicators</b>	<b>Targets</b>
Canadian emissions of greenhouse gases (carbon dioxide equivalents) in megatonnes	Canada's national target is a 17% reduction from 2005 levels by 2020.
Canadian ambient air quality (ground-level ozone and fine particulate matter)	To be determined. Targets will be determined with the finalization of the air pollutant management approach.
Percentage decrease of concentrations of selected substances in air, soil, sediment, water and/or biota from baseline data	To be determined. Baseline values for this indicator will be reported in the 2010–2011 DPR.

<b>Program Activity<sup>5</sup></b>	<b>Forecast Spending 2010–2011 (\$ millions)*</b>	<b>Planned Spending (\$ millions)*</b>			<b>Alignment to Government of Canada Outcomes</b>
		<b>2011– 2012</b>	<b>2012– 2013</b>	<b>2013– 2014</b>	
Substances and Waste Management	115.2	61.2	59.6	61.0	Clean and Healthy Environment
Climate Change and Clean Air	201.3	100.1	120.4	78.1	
Compliance Promotion and Enforcement – Pollution	41.6	39.7	38.6	39.5	
<b>Subtotal</b>	<b>358.1</b>	<b>201.0</b>	<b>218.6</b>	<b>178.6</b>	
Deduct: Respendable Revenue**	(4.2)	(3.3)	(3.3)	(3.3)	
<b>Total</b>	<b>353.9</b>	<b>197.7***</b>	<b>215.3</b>	<b>175.3</b>	

\*Totals may differ within and between tables due to rounding of figures.

\*\* “Respendable revenue” refers to revenue received through offering of products or services that can be respent or used to help offset the Department’s voted operating funding requirements.

\*\*\* The decrease in planned spending in 2011–2012 is primarily due to reductions of temporarily funded programs such as the Chemicals Management Plan and the Clean Air Agenda, which are scheduled to sunset at the end of 2010–2011. Please note that this amount reflects sunset funding, including the termination of temporary funding, for which the Department may receive program extensions subsequent to the tabling of this RPP.

<sup>5</sup> Program Activity descriptions are included under each Strategic Outcome in Section II.

**Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources**

Program Activity <sup>6</sup>	Forecast Spending 2010–2011 (\$ millions)	Planned Spending (\$ millions)			Alignment Government of Canada Outcomes
		2011–2012	2012–2013	2013–2014	
Mackenzie Gas Project	2.3	(0.0)	(0.0)	(0.0)	Strong Economic Growth
<b>Subtotal</b>	<b>2.3</b>	<b>(0.0)</b>	<b>(0.0)</b>	<b>(0.0)</b>	
Deduct: Respendable Revenue	0.0	0.0	0.0	0.0	
<b>Total</b>	<b>2.3</b>	<b>(0.0)</b>	<b>(0.0)</b>	<b>(0.0)</b>	

Note:

At the time of production of this RPP, the federal government is considering final approval for the proponents to proceed with the Mackenzie Gas Project. However, proponents have indicated that a decision on whether to construct the pipeline will not be made until late 2013. As a result, there is currently no funding planned for the Mackenzie Gas Project Office in 2011–2012 and beyond. Any funding renewals or extensions will be subject to the appropriate decision-making and budgetary processes in the future. Please see page 66 for more details.

<sup>6</sup> Program Activity descriptions are included under each Strategic Outcome in Section II.

## Internal Services (Program Activity)

Program Activity <sup>7</sup>	Forecast Spending 2010–2011 (\$ millions)*	Planned Spending (\$ millions)*			Alignment to Government of Canada Outcomes
		2011–2012	2012–2013	2013–2014	
Internal Services	208	204.5	198.6	196.4	N/A
<b>Subtotal</b>	<b>208</b>	<b>204.5</b>	<b>198.6</b>	<b>196.4</b>	
Deduct: Respendable Revenue	(0.0)	(0.0)	(0.0)	(0.0)	
<b>Total</b>	<b>208</b>	<b>204.5</b>	<b>198.6</b>	<b>196.4</b>	

\*Totals may differ within and between tables due to rounding of figures.

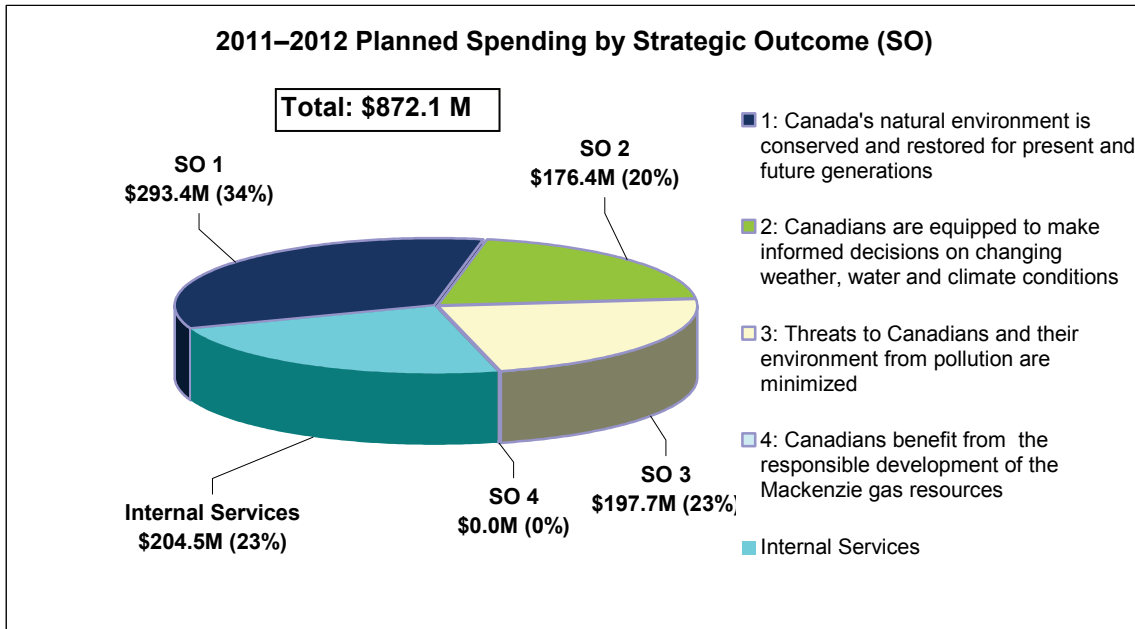
Internal Services reflect the full range of policy, communication, management and administration activities for the Department. These activities include costs related to that portion of real property, laboratories, systems and infrastructure assets that has not been attributed to specific programs. Please see page 67 for a further description of the Department's Internal Services.

<sup>7</sup> Program Activity descriptions are included under each Strategic Outcome in Section II.



## Expenditure Profile

For the 2011–2012 fiscal year, Environment Canada plans to spend \$872.1 million to meet the expected results of its Program Activities and contribute to its Strategic Outcomes. The chart below reflects the allocation of Environment Canada’s planned spending by Strategic Outcome for the 2011–2012 fiscal year. Strategic Outcome 1: *“Canada’s natural environment is conserved and restored for the present and future generations”* makes up the largest portion of the funding, and includes the Species at Risk Program, the Migratory Birds Program, the Great Lake Action Plan, the Action Plan on Clean Water, and water quality and quantity research and monitoring.



Note: Figures included in the chart are net of spendable (vote-netted) revenues.

The following graph illustrates Environment Canada’s funding level trend from 2007–2008 to 2013–2014.



Note: These figures are net of spendable revenues. Forecast Spending includes 2010–2011 Main Estimates, plus 2010–2011 Supplementary Estimates A and B, anticipated C, as well as collective agreement pressures.

For the period of 2007–2008 to 2009–2010, actual spending represents the actual expenditures as reported in the Public Accounts. For the 2010–2011 fiscal year, the forecast spending represents the planned budgetary and statutory expenditures as presented in the Estimates documents (Main Estimates and Supplementary Estimates) and an anticipated lapse. For the period of 2011–2012 to 2013–2014, the planned spending reflects approved funding by Treasury Board to support the departmental strategic outcomes.

For the period from 2007–2008 to 2008–2009, Environment Canada’s spending level increased mainly due to new temporary and sunsetting funding received and spent for the Chemicals Management Plan, the National Vehicle Scrappage Program, the Enforcement Program, the Clean Air Agenda, and the Canada Foundation for Sustainable Development Technology (SDTC). The transfer of responsibility for the Toronto Waterfront Revitalization Initiative and the Harbourfront Centre to the Minister for Environment Canada also contributed to the spending increase during this period.

Environment Canada’s 2009–2010 actual spending was \$1.095 billion, a year-over-year decrease of \$25.3 million or 2% from 2008–2009 spending. This slight net decrease is mainly due to reduced payments to foundations such as the Nature Conservancy of Canada and SDTC. These decreases were offset by increased spending to implement the National Vehicle Scrappage Program and the Action Plan on Clean Water, as well as

incremental spending related to Canada's Economic Action Plan, such as the Modernizing Federal Laboratories Initiatives.

The spending trend graph shows a forecast spending reduction of \$34.5M from 2009–2010 to 2010–2011. This planned spending reduction is due to a decrease in program funding (e.g. the Mackenzie Gas Project, the 2010 Olympic and Paralympic Winter Games, and the International Polar Year), the Strategic Review and the Budget 2010 containment measures.

In addition, the decreased planned spending from 2010–2011 to 2013–2014 is the result of sun-setting programs, which include the Chemicals Management Plan, Species at Risk, Clean Air Agenda and Federal Contaminated Sites Action Plan. The extension or enhanced funding for sun-setting programs are subject to government decisions. The outcomes of these decisions will, therefore, be reflected in the Department's future budget exercises, since this extension had not yet been confirmed at the time of production of this Report on Plans and Priorities (RPP).

### **Estimates by Vote**

Estimates by Vote are presented in the 2011–2012 Main Estimates, which are available at the following link:

<http://www.tbs-sct.gc.ca/est-pre/20112012/me-bpd/toc-tdm-eng.asp>.

## Section II – Analysis of Program Activities by Strategic Outcome<sup>8</sup>

### Strategic Outcome 1: Canada's natural environment is conserved and restored for present and future generations

More than ever, decision-makers are acknowledging the need to protect and conserve our natural environment to ensure sustained economic growth and international competitiveness, and to secure the overall health of Canadians and their environment. Although the value of conservation is recognized in both economic terms and quality of life, there continue to be an increasing number of stressors on Canadian ecosystems. Over the past 40 years, the total area of urban land in Canada has almost doubled; more land is being converted to industrial use and the integrity of ecosystems is being compromised by pollutants, invasive alien species and a changing climate.

Using a variety of policy and legislative tools, the Government of Canada has taken concrete steps to protect our natural environment, including negotiating an agreement with Greenland to protect Polar Bears, providing \$225 million to the Nature Conservancy of Canada (NCC) to establish the Natural Areas Conservation Program, as well as creating three new National Wildlife Areas in Nunavut.

Responsibility for conservation is shared among federal, provincial/territorial and Aboriginal governments, conservation organizations, industry and individual Canadians. Consistent with commitments in the 2010 Speech from the Throne, Environment Canada intends to strengthen existing partnerships and build new ones, while using its full range of program activities to maximize results and identify new approaches to conservation and ecosystem sustainability.

Complementing the priorities and plans of our core national programs, Environment Canada will advance an ecosystem approach to ensure that the Department is making progress against the long-term Strategic Outcome to conserve and restore Canada's natural environment for present and future generations.

#### *Advancing an ecosystem approach*

Until recently, environmental initiatives primarily addressed discrete issues through actions aimed at individual sectors or media. An integrated understanding of the cumulative impact of multiple stressors was difficult to determine and even harder to manage.

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<sup>8</sup> In order to identify linkages between the Department's programming and the Federal Sustainable Development Strategy (FSDS), relevant icons representing FSDS Themes (where applicable) are placed at the margin in the Planning Highlights segment of the Program Activity discussion. Appropriate FSDS goals, targets and indicators associated with each of the FSDS Themes are also aligned with the Program Activity discussion. For additional details on Environment Canada's activities to support sustainable development, please see <http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1>, and for complete details on the FSDS, please see <http://ec.gc.ca/dd-sd/default.asp?lang=En&n=C2844D2D-1>

Applying an ecosystem approach to Environment Canada's work helps maintain the capacity of a whole natural system to produce ecological goods and services by concentrating on the long-term health of ecosystem structure, processes and interactions. In 2011–2012, the Department will continue to advance implementation of an ecosystem approach by aligning priorities among program initiatives at different geographical areas that vary in size, thus strengthening and integrating ecosystem knowledge to inform risk analysis and policy development, and coordinating action in priority ecosystems and hotspots.

#### *Strengthening the use of environmental assessment*

[Environmental assessment](#) is a process to predict and minimize the environmental effects of proposed policies, projects or activities before they are carried out. Historically, environmental assessment has focused on project-by-project assessments that are by nature limited in providing an integrated, long-term picture of the overall sustainability of projects within an ecosystem context.

Project and regional environmental assessments can contribute to the health of ecosystems by providing a platform for Environment Canada to bring its science and policy objectives into processes where development proposals are being planned and approved. Planning and approval processes can lead to reduced pressure on vulnerable ecosystems and their constituent parts over the projects' life, which is often measured in decades.

Environment Canada recognizes the opportunity to use environmental assessments strategically as a planning and decision-making tool at the project and regional level to improve ecosystem health. At the regional level, for example, Environment Canada is currently enhancing its engagement with the Province of Alberta's land use planning regime with a focus on the oil sands and the central and southern regions of Alberta that overlie current priority ecosystem hotspots and mandated areas of interest. For project assessments, Environment Canada will continue to focus its efforts on participating in those projects that have substantial potential environmental effects, such as the New Nuclear Project at Darlington and the Lower Churchill hydroelectric development projects.

In addition to project and regional environmental assessments, Environment Canada is committed to using [Strategic Environmental Assessment](#) (SEA) as an analytical tool to support environmentally sustainable decision making as it relates to government policies, plans and programs.

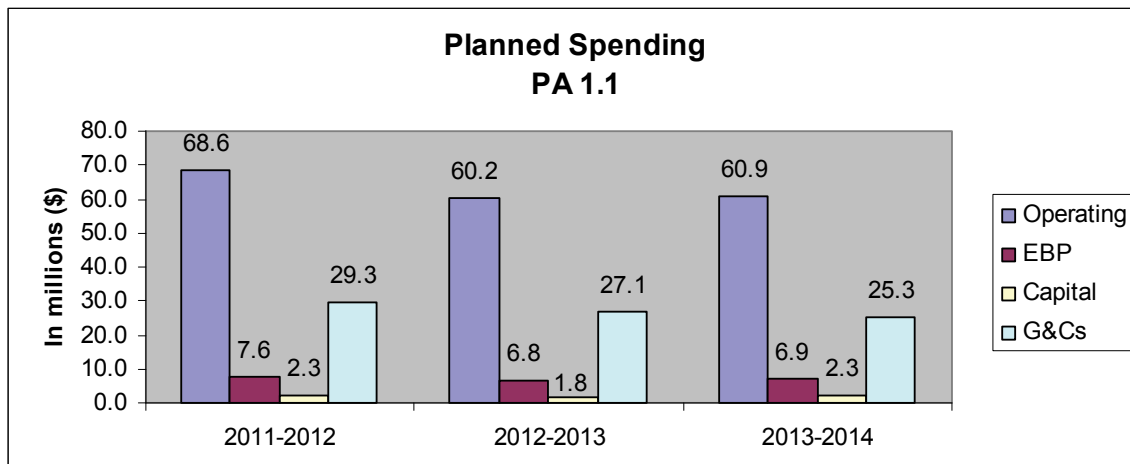
Environment Canada's work that contributes to this Strategic Outcome is organized into four Program Activities:

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

<b>Program Activity 1.1: Biodiversity – Wildlife and Habitat</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
Populations of wildlife, in particular migratory birds and species at risk, are maintained or restored to target levels		Proportion of assessed species in general status reports whose status is considered to be secure		70%. Currently met; to be maintained.	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
574	107.8*	493	95.8*	499	95.3*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

Totals may differ within and between tables due to rounding of figures.



Note: Operating: Operating expenditures  
 EBP: Statutory contributions to employee benefits plans  
 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

### **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 the 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 (CITES), 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.

## Planning Highlights

### *Biodiversity*

Building on the momentum of the [International Year of Biodiversity \(2010\)](#) and the Tenth [Conference of the Parties to the Convention of Biological Diversity](#), Environment Canada will work collaboratively with federal, provincial and territorial partners and key groups, including business, cities and youth to protect and conserve biodiversity domestically and internationally. These efforts will include developing a national approach to conservation by building on current strengths, identifying new innovative approaches to conservation, and strengthening partnerships with a broad range of stakeholders.

To identify the social, cultural and economic values of biodiversity and ecosystem services to Canada, the Department will continue to advance the [Value of Nature to Canadians Study](#) in support of government policy and decision making, and public awareness initiatives. The domestic policy on [Access and Benefit-sharing \(ABS\)](#) of genetic resources will be elaborated, based on agreed upon federal-provincial-territorial policy guidance and will take into consideration the new the international ABS protocol under the Convention on Biological Diversity.

Scientific and analytical support will be provided through active engagement and leadership in the [Circumpolar Biodiversity Monitoring Program](#) and scientific input into the full 2013 Arctic Biodiversity Assessment to gain a better understanding of pressures affecting northern ecosystems.

### *Wildlife and habitat*

The Department will continue to implement the [Species at Risk Act \(SARA\)](#), including fulfilling obligations for [recovery strategies](#), and [action planning](#) and implementation to protect species at risk. National and international work will be undertaken related to the [conservation and protection of Polar Bears](#), including [listing](#), [monitoring](#) and [research](#); clarification of federal-provincial jurisdictional responsibilities; international Memoranda of Understanding (e.g. Canada–Greenland and Canada–United States), and the development of a range-wide [action plan](#). A draft Boreal Woodland Caribou [recovery strategy](#), including critical habitat identification and protection analysis, will be posted on the Species at Risk Public Registry.

The Department will promote the effective conservation of migratory bird populations, while fostering sustainable economic development. Development of guidance on

[incidental take](#) will continue to support the long-term conservation and protection of migratory bird populations, focusing on avoidance guidelines and best management practices.



Bird conservation region (BCR) plans are an essential element of protecting birds while fostering sustainable economic development. Final [bird conservation region \(BCR\) plans](#), incorporating technical and public comments, and implementing recommendations, will be completed. Draft amendments to the [Migratory Birds Convention Act, 1994](#) regulations will be completed to update terminology, and to add provisions to better manage overabundant species. The Department will apply the results of the internal review of its avian monitoring activities, including the establishment of a new governance system and a balance of resources between game and non-game bird species groups.



Conserving important habitats through a network of protected areas and partnership programs supports species at risk, migratory birds and other wildlife. The Department will expand and maintain its [network of protected areas](#), including the establishment of six new [National Wildlife Areas \(NWAs\)](#) through the [Northwest Territories Protected Areas Strategy](#) and one [Marine Wildlife Area](#), Scott Island, British Columbia. It will also improve the management of protected areas (i.e. visitor safety, occupational health and safety, and ecological integrity).



The Department will administer the [Invasive Alien Species Partnership Program \(IASPP\)](#). The IASPP is managed cooperatively with the Canadian Food Inspection Agency, Fisheries and Oceans Canada, and National Resources Canada, and is an integral part of [An Invasive Alien Species Strategy for Canada](#).

Programming in this area contributes to “Theme III: Protecting Nature” of the FSDS:



<b>Supporting the Federal Sustainable Development Strategy</b>		
<b>FSDS Goals</b>	<b>FSDS Performance Indicators</b>	<b>FSDS Targets</b>
Goal 5: Wildlife Conservation – Maintain or restore populations of wildlife to healthy levels	Percentage of listed species for which recovery has been deemed feasible where the population trend (where available) at the time of reassessment is consistent with the recovery strategy	Target 5.1: Terrestrial and Aquatic Wildlife Conservation – Population trend (when available) at the time of reassessment is consistent with the recovery strategy for 100% of listed species at risk (for which recovery has been deemed feasible) by 2020.
	Proportion of migratory bird species whose population varies within acceptable bounds of the population goals	Target 5.2: Terrestrial and Aquatic Wildlife Conservation - Target for proportion of migratory bird species whose population varies within





		acceptable bounds of the population goals will be established in 2011 once the Bird Status Database is complete.
Goal 6: Ecosystem/Habitat Conservation and Protection – Maintain productive and resilient ecosystems with the capacity to recover and adapt; and protect areas in ways that leave them unimpaired for present and future generations	Land conserved as a percentage of the total amount needed to achieve population goals for all priority migratory birds and species at risk	Target 6.1: Terrestrial Ecosystems and Habitat, Non-Park Protected Habitat – Habitat target to support conservation of priority migratory birds and species at risk will be set by 2015.
	Indicator under development	Target 6.4: Managing Threats to Ecosystems – Threats of new alien invasive species entering Canada are understood and reduced by 2015.

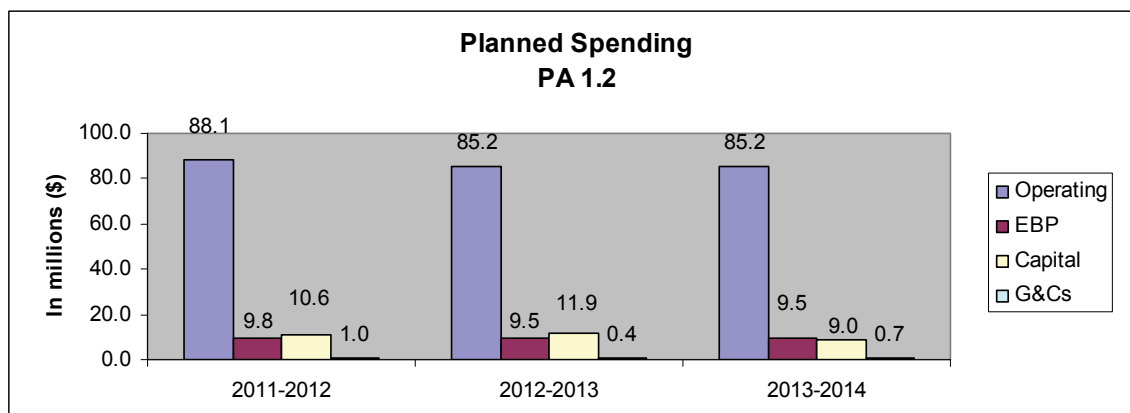
**Benefits to Canadians**

Environment Canada’s work under this Program Activity is aimed at maintaining viable populations of species, habitats and genetic resources, while taking social and economic considerations into account.

<b>Program Activity 1.2: Water Resources</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
Threats to Canada's water resources and aquatic ecosystems are minimized and the sustainability of the resource is maintained		Percentage of water bodies included in the Canadian Environmental Sustainability Indicators Freshwater Quality Index whose quality was rated as either good or excellent		To be determined. A baseline value for this indicator will be reported in the 2010–2011 Departmental Performance Report (DPR). A target will be set once two measured values for this indicator are available.	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
736	109.6*	716	107.1*	716	104.4*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

Totals may differ within and between tables due to rounding of figures.



Note: Operating: Operating expenditures  
 EBP: Statutory contributions to employee benefits plans  
 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

## Program Activity Description

This program addresses the implications to water resources from economic growth, climate change and other factors, ensuring that threats to Canada's water resources and aquatic ecosystems are minimized, and the sustainability of the resource is maintained. 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 encompasses Environment Canada's contribution to addressing water issues and its role in collaborating with other departments to determine 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, 1999*, the *Fisheries Act* and the *International Boundary Waters Treaty Act*. Contributions in support of water resources are used as a component of this program.

## Planning Highlights

### *Science, research and monitoring*

In 2011–2012, Environment Canada will provide leadership on aquatic ecosystem, hydrologic and hydraulic science, and conduct research and monitoring and analytical services on priority areas that are essential to support responsible decision making.

In partnership with provincial and territorial governments through the National Administrators Table (NAT), the Department will implement a strategic plan for the cost-shared [hydrometric information service](#). Work will also be undertaken with the provinces and territories on aspects of hydrometric network design and a re-examination of the existing network, with reference to global (World Meteorological Organization) standards, consistent with the recent audit recommendations of the Commissioner of the Environment and Sustainable Development. The Department will also engage other federal departments to understand their requirements for hydrometric and water quality information; determine federal roles and responsibilities in monitoring water quantity and quality on federal lands; and implement risk-based prioritization.

Work will continue on the development of a water demand and availability indicator in order to provide a clear message on water availability to the Canadian public, support the development of sustainable water management policies and practices and communicate regional water availability and variability in Canada and to the international community.

Science support will be provided to the Government of Canada's [Action Plan for Clean Water](#), including initiatives for the final year of the [Lake Winnipeg Basin Initiative](#) (2011–2012) and preparations for its next phase. The Department will also conduct a science review of the federal-provincial water quality agreements and create the aquatic toxicity knowledge necessary to implement the *Canadian Environmental Protection Act, 1999* (CEPA 1999).





The Department will implement a [national aquatic biomonitoring and assessment network](#) and develop and conduct surveillance activities related to water quality pressures (e.g. land use) and emerging threats (e.g. alien species, blue-green algae) on priority watersheds (e.g. Athabasca River, Mackenzie River, Great Lakes and St. Lawrence).

The Department will also develop a world-class water quality monitoring system for the oil sands region and sustain oil sands-related research activity and monitoring support to fulfill Canada's statutory obligations in this area.

#### *Domestic and international partnerships*

The Department will deliver on commitments under priority domestic and international water-related initiatives. Federally, program enhancements of the [Canadian Shellfish Sanitation Program](#) will be implemented with other government departments.



Strategic collaborative partnerships will be developed with existing and emerging water programs and networks (e.g. University of Saskatchewan's Canada Excellence Research Chair (CERC) program – Water Security; Canadian Water Network; Canadian Rivers Institute, U.S. Geological Survey).





Technical advice and strategic oversight will be provided for federal-provincial-territorial bilateral agreements, task forces, and domestic water boards and [international joint commission boards](#) (e.g. [Prairie Provinces Water Board](#), [Mackenzie River Basin Board](#), [Lake of the Woods Control Board](#), [Ottawa River Regulation Planning Board](#), [International Rainy River Water Pollution Board](#), [International St. Croix River Watershed Board](#), [International Lake of the Woods and Rainy River Watershed Task Force](#)).

Cooperation with the Atlantic provinces and Manitoba on shared water priorities (e.g. water quantity monitoring, water quality monitoring, surveillance and reporting, and sustainable water management) will be advanced through water annexes and the coordination of work plans in support of Memoranda of Understanding (MOUs).

The core commitment to the [United Nations Environment Programme's \(UNEP's\) Global Environmental Monitoring System \(GEMS\)/Water](#) will be delivered. The program is expanding over a 5-year period to enhance data quality management activities, water assessments and capacity building. The Department will also promote WaterSense in Canada, a partnership program sponsored by the U.S. Environmental Protection Agency that seeks to protect the future of the water supply by promoting water efficiency and enhancing the market for water-efficient products, programs and practices.

Programming in this area contributes to “Theme II: Maintaining Water Quality and Availability” of the FSDS:

<b>Supporting the Federal Sustainable Development Strategy</b>		
<b>FSDS Goals</b>	<b>FSDS Performance Indicators</b>	<b>FSDS Targets</b>
 <p>Goal 3: Water Quality – Protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems</p>	<p>Annual changes in recommended classifications of shellfish-growing areas based on historical water quality measures<sup>9</sup></p>	<p>Target 3.8: Marine Water Quality – Reduce the risks to Canadians and impacts on the marine environment posed by pollution from land-based activities.</p>
 <p>Goal 4: Water Availability – Enhance information to ensure that Canadians can manage and use water resources in a manner consistent with the sustainability of the resource</p>	<p>Water use by major sectors from water use surveys</p>	<p>Target 4.1: Water Resource Management and Use – Promote the conservation and wise use of water to affect a 30% reduction or increased efficiency in water use in various<sup>10</sup> sectors by 2025 (based on 2009 water use levels).</p>

### **Benefits to Canadians**

Environment Canada’s work plays an important role in providing the science leadership required by all Canadian jurisdictions to inform the sustainable management of Canada’s aquatic resources. Benefits to Canadians from this program include an improved understanding of the impacts of human activities on water resources and aquatic ecosystem health, actions to restore and preserve Canada’s water resources, wise and efficient water management and use, strengthened interjurisdictional relations and governance structures, and improved water resource management across federal departments.

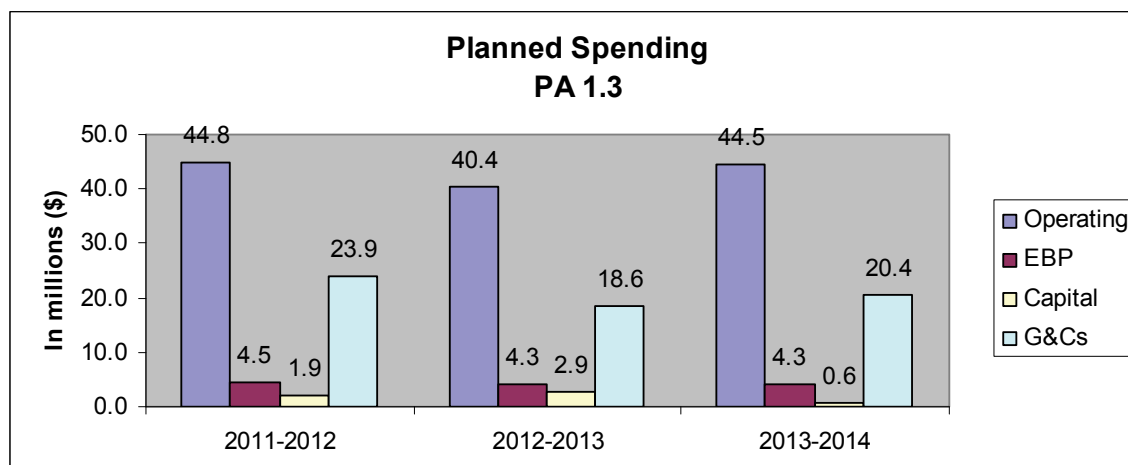
<sup>9</sup> Applies to oceans.

<sup>10</sup> Negotiations are currently underway and will include, among others, the municipal, agricultural and industrial sectors.

<b>Program Activity 1.3: Sustainable Ecosystems</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
Canadians manage ecosystem resources in a manner consistent with ecosystem sustainability		Percentage of Canadian ecosystems where ecosystem health has been assessed as stable or improving		To be determined. A definition of “ecosystem health” will be established in 2010–2011 and the baseline value will be reported in the subsequent year. A target will then be set after 2 measured values for this indicator are available.	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
353	75.2*	346	66.2*	346	69.7*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

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Note: Operating: Operating expenditures  
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 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

## **Program Activity Description**

This program aims to sustain Canada's ecosystems over the long term by working with Canadians, their governments and the private sector on ecosystem initiatives and by providing them with the environmental information and tools required to incorporate social, economic and environmental considerations into 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, such as water resources, air and water quality, and genetic resources, which maintain our economy, security, health and well-being. 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 the remediation of sites, youth engagement, and research and reporting on environmental statuses 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.

## **Planning Highlights**

### *Sustainable development*

In 2011–2012, the Department will work to ensure that Canadian ecosystem resources are managed in a manner consistent with ecosystem sustainability and will pursue additional opportunities for applying an ecosystem approach<sup>11</sup> to its programs and planning.

As the lead for the implementation of the [Federal Sustainable Development Act](#), the Department will coordinate the tabling in Parliament of the Federal Sustainable Development Strategy [Progress Report](#) in June 2011, and maintain systems and procedures to monitor progress on implementation of the [Federal Sustainable Development Strategy \(FSDS\)](#). Opportunities will be identified to utilize the FSDS to communicate the Government of Canada's environmental policy objectives.

### *Strengthening ecosystem knowledge and understanding*

The Department will work to better integrate the measurement, tracking and reporting on the state of the environment, particularly at the ecosystem level. This includes the update and the expansion of environmental indicators to measure progress on the goals and targets of the Federal Sustainable Development Strategy through the [Canadian Environmental Sustainability Indicators \(CESI\)](#) initiative.

With federal, provincial and territorial partners, lessons learned from the [Canadian Biodiversity: Ecosystem Status and Trends 2010](#) (ESTR) process will be reviewed; options for regularly updating ESTR will be assessed; the use and integration of ESTR information by all partners will be promoted; and next steps on CESI and ESTR will be aligned and coordinated.

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<sup>11</sup> An approach that seeks to integrate science, regulatory and outreach activities to improve ecosystem health.

The Department will also quantify trends in, and the risks toxic substances pose at, the wildlife population and ecosystem level, and conduct integrated assessments of the effects of multiple stressors, including wildlife disease and climate change, on wildlife health and ecosystem structure in vulnerable ecosystems.


#### *Supporting decision making*

In addition to meeting its legislated responsibilities, the Department will also strengthen the use of environmental assessment as a tool to avoid and mitigate adverse environmental effects and to improve ecosystem health while encouraging sustainable economic development. This will include meeting legal obligations under the [Canadian Environmental Assessment Act](#), the [Yukon Environmental and Socio-economic Assessment Act](#), the [Mackenzie Valley Resource Management Act](#), and the proposed Nunavut Planning and Project Assessment Act, by acting as either the federal authority, or responsible authority for project environmental assessments and by developing departmental positions for the 2010 legislative review of the [Canadian Environmental Assessment Act](#).

#### *Taking action*

 The Department will advance and support the integrated management of selected priority ecosystems. Revisions to the [Great Lakes Water Quality Agreement \(GLWQA\)](#) will be negotiated with the United States to address key threats to Great Lakes' water quality, and negotiations for a new 2012–2017 [Canada–Ontario Agreement \(COA\) Respecting the Great Lakes Basin](#) will be initiated. The amended 2007–2012 COA will be implemented and the delivery of the Great Lakes Ecosystem Initiative (including the [Great Lakes Action Plan 2010–2015](#)) will continue. The Canada–Quebec Framework Agreement on the St. Lawrence and the signed annexes will be implemented in order to deliver on commitments and results identified for the next 5 years (2011–2016). Commitments to clean up and restore the [Great Lakes](#), [Lake Simcoe](#) and [Lake Winnipeg](#) under the Action Plan for Clean Water will be delivered.

The implementation of an ecosystem approach in selected vulnerable ecosystems and hotspots (e.g. Atlantic coast, oil sands, Okanagan) will be advanced. Coordinated planning and targeted actions will take place through multi-stakeholder working groups and the delivery of joint work plans where appropriate.

 Engaging Canadians and communities through behaviour changes, capacity building, community-based funding programs and engagement activities is important to protecting and restoring the environment. The Department will implement Year 2 of Environment Canada's action plan for grants and contributions reform with a focus on refining and improving new tools and processes introduced in 2010–2011. External promotion activities for the [Environmental Damages Fund](#) and the impact of changes under the [Environmental Enforcement Act](#) will be increased. Delivery of the [EcoAction Community Funding Program](#) will be enhanced to support projects that improve the health of vulnerable ecosystems.



Programming in this area contributes to “Theme II: Maintaining Water Quality and Availability” of the FSDS:



<b>Supporting the Federal Sustainable Development Strategy</b>		
<b>FSDS Goals</b>	<b>FSDS Performance Indicators</b>	<b>FSDS Targets</b>
Goal 3: Water Quality – Protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems	For Areas of Concern in the Great Lakes, track change in beneficial use status from “impaired” or “requires further assessment” to “not impaired” or “restored”	Target 3.1: Fresh Water Quality – Complete federal actions to restore beneficial uses in Canadian Areas of Concern in the Great Lakes by 2020.
	Ecosystem indicators aligned to the general and specific objectives of the Canada–U.S. Great Lakes Water Quality Agreement	Target 3.2: Fresh Water Quality – Contribute to the restoration and protection of the Great Lakes by developing and gaining binational acceptance of objectives and strategies for the management of nutrients in the Great Lakes by 2015.
	Ecosystem indicators aligned to objectives of the Canada-Quebec Agreement on the St. Lawrence River	Target 3.3: Fresh Water Quality – Complete federal actions to reduce pollutants and restore beneficial uses in hot spots in the St. Lawrence River by 2016.
	Estimated nutrient reductions	Target 3.4: Fresh Water Quality – Reduce nutrient inputs into Lake Simcoe by 2012.
	Indicator under development	Target 3.5: Fresh Water Quality – By 2012, through strategic collaborations and by increasing scientific knowledge, contribute to the establishment of targets to reduce nutrients in Lake Winnipeg and its basin to support the sustainability of the lake.

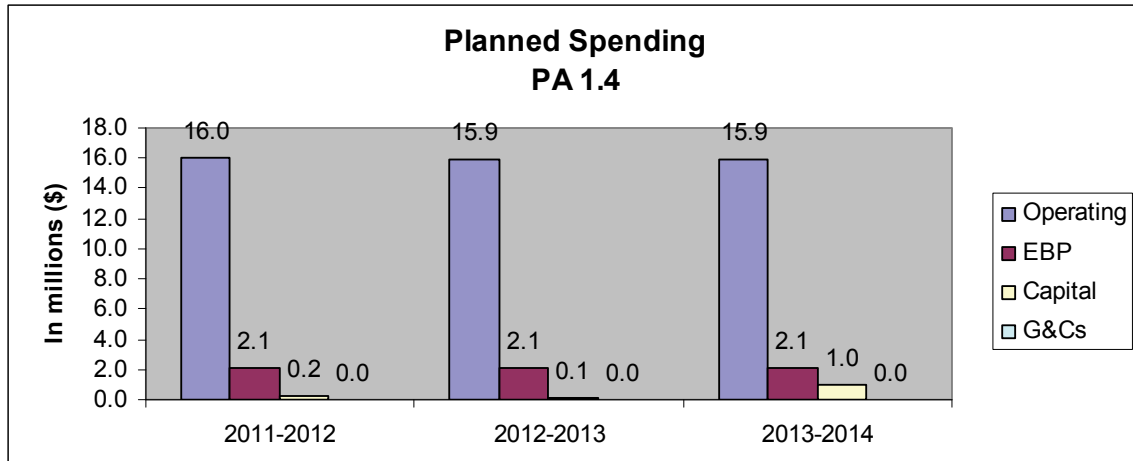
## Benefits to Canadians

In working with partners at the federal, provincial/territorial and local levels, Environment Canada's work provides strategies, information, tools and funding through partnership arrangements to Canadians, their governments and the private sector. As a result, environmental considerations are integrated into decision making and actions that help sustain Canada's ecosystems over the long term.

<b>Program Activity 1.4: Compliance Promotion and Enforcement – Wildlife</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
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		Volume of current and future losses of migratory birds, species at risk and protected habitat prevented		To be determined. A baseline value for this indicator will be reported in the 2011–2012 Departmental Performance Report (DPR). A target will be set in the National Enforcement Plan for the 2011–2012 fiscal year.	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
152	18.3*	151	18.1*	151	19.0*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

Totals may differ within and between tables due to rounding of figures.



Note: Operating: Operating expenditures

EBP: Statutory contributions to employee benefits plans

Capital: Capital expenditures

G&Cs: Grants and Contributions expenditures

### 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.

### Planning Highlights

The Department will continue to fulfill the government's commitment to strong environmental enforcement. This will include strengthening the identification of priority work and optimizing the integrated delivery of compliance and enforcement services under the *Species at Risk Act*, *Canada Wildlife Act*, *Migratory Birds Convention Act, 1994*, and *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act, 1994*. Additionally, wildlife enforcement will be conducting a pilot project to develop indicators based on the *Migratory Bird Regulations* that will help to demonstrate the effects of wildlife enforcement and compliance promotion activities.



Compliance promotion and enforcement for wildlife will be enhanced as the multi-staged implementation of the new *Environmental Enforcement Act* continues. The amendments provide stronger penalties for offenders, and introduce minimum fines for serious offences and higher maximums, and also grant courts new sentencing authorities that ensure penalties reflect the seriousness of pollution and wildlife offences. The Department will also develop regulations to operationalize the *Environmental Violations Administrative Monetary Penalties Act* and the penalty scheme for wildlife acts coming into force in coming years.

To allow improved assessment and demonstrate environmental results, the Department will bolster science-based forensic analytical capacity to support enforcement actions, and will also develop an investment plan for the renewal of business systems and the associated data capture and business processes, particularly in the area of case management. Reporting capacity will be developed to clearly demonstrate the environmental results achieved by the Compliance Promotion and Enforcement Program. Measures will be taken to effectively develop and retain compliance promotion, enforcement, and science staff, including investments in supporting tools and infrastructure.

### **Benefits to Canadians**

Environment Canada's compliance promotion and enforcement initiatives are directed at ensuring compliance with wildlife legislation that protects plant and animal species in Canada, including migratory birds. This legislation is also aimed at conserving threatened or potentially threatened species nationally and internationally. These laws regulate human interventions, such as hunting or trade that could adversely affect long-term wildlife conservation, and are enforced throughout Canada in collaboration with other federal departments, and provincial and territorial governments, and national and international agencies and organizations.

## **Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions**

Every day, Canadians are affected by changes in environmental and weather conditions, such as variability and extremes in climate, temperature, precipitation, winter storms, hurricanes, tornadoes, droughts, floods, air quality, sea ice, road icing and aircraft turbulence. Weather and environmental services enable Canadians, businesses, institutions and governments to make informed decisions to improve economic and other outcomes in areas such as agriculture, construction, forestry, transportation and tourism. Canadians consistently rate weather forecasts as one of the top pieces of information that they look for daily to help plan their activities.

To assist Canadians in making informed decisions, Environment Canada provides accurate and reliable information about the past, present and future states of the environment. The Department provides data to targeted users within Canada and leverages information with stakeholders around the world, which in turn provides benefits to our services. The data, models and research produced under this Strategic Outcome also provide the scientific basis for key government and departmental policy priorities related to clean air, climate change, water availability, clean energy, chemicals management, northern sovereignty and economic development.

Access to reliable short- and long-term information on changes in weather, water, snow, ice, air quality and climate conditions is essential for public safety and security, as well as improved health, especially as incidents of high-impact events, such as tornadoes, floods and droughts, are expected to become more frequent in the coming years due to a changing climate. To collect the data, produce the warnings and forecasts and deliver this information to Canadians and targeted sectors, Environment Canada maintains a comprehensive infrastructure of monitoring networks across Canada; a strong science capability; high-performance supercomputing capacity; weather, air quality and climate models; and a variety of systems to generate and disseminate this information.

Notwithstanding our ability to deliver 24/7 weather prediction services to all Canadians, Environment Canada continues to face challenges in maintaining the systems and capacity (scientific, technical, human and financial) required to sustain this capability and, concurrently, to keep pace with rapidly evolving science and technology. We are developing a Reinvestment Strategy and its implementation will be the first priority of this Strategic Outcome for 2011–2012. This effort will be undertaken within the scope of available resources, while also implementing the new directives of the Clean Air Regulatory Agenda and Climate Change Adaptation Initiative.

The second priority of this Strategic Outcome remains the fulfillment of Environment Canada's core mission to monitor, produce and provide environmental science and services to Canadians, clients and partners, 24 hours a day, 7 days a week. This ongoing and continuous activity includes providing science, observations, forecasts, scenarios and warnings related to weather, water, climate and air quality to Canadians, clients and partners. This priority supports the safety and security of Canadians and enhances sustainable economic development for decision-makers.

The third priority is focused on implementing an effective and integrated quality management system to ensure Environment Canada's Weather and Environmental Services continuously improve and deliver results for Canadians.

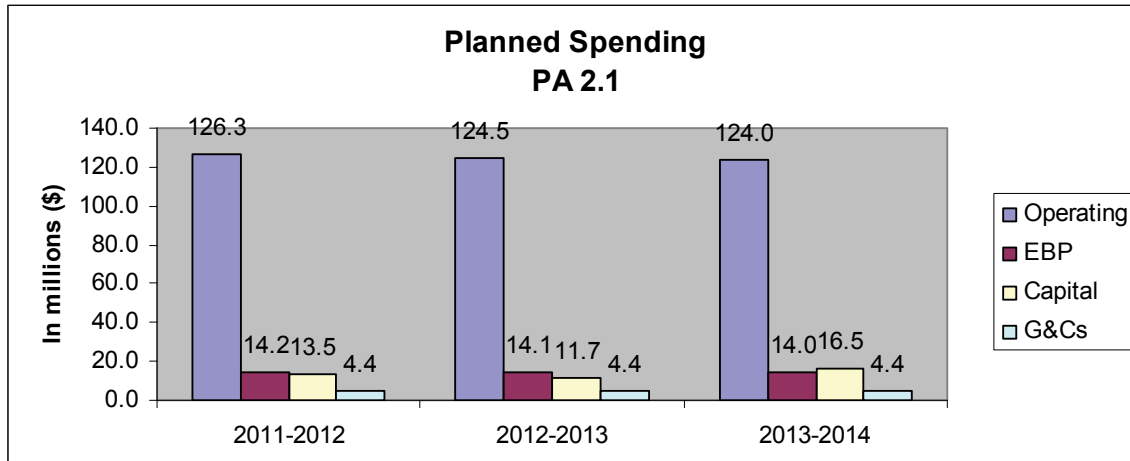
Environment Canada's work that contributes to this Strategic Outcome is organized into two Program Activities:

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

<b>Program Activity 2.1: Weather and Environmental Services for Canadians</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
Canadians understand information on the changing weather, water and climate conditions and know how to use it		Percentage of the population indicating that they understand the differences between severe weather watches and warnings and the implications for their safety		To be determined. A target will be set once 2 measured values for this indicator are available (April 2015).	
Canadians, communities and policy-makers understand the potential health and safety risks from the changing climate and air quality conditions		Percentage of municipalities that have taken climate change impacts (present and/or future) into account in the development of emergency plans		80% of Canadian municipalities by 2015.	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
923	158.4*	913	154.7*	908	158.9*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

Totals may differ within and between tables due to rounding of figures.



Note: Operating: Operating expenditures  
 EBP: Statutory contributions to employee benefits plans  
 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

### Program Activity Description

This program 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, production and service delivery to help Canadians make informed decisions in the face of changing weather, water and climate conditions. 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 in Canada. The program supports the Department in meeting obligations and responsibilities conferred by the *Department of the Environment Act*, the *Weather Modification Information Act*, the *Emergency Management Act (2007)* and memoranda of agreement with national meteorological and space agencies. This Government of Canada program is the only one with such a national mandate, and has the infrastructure and skills to deliver this service. Grants in support of Weather and Environmental Services for Canadians and Contributions in support of Weather and Environmental Services for Canadians are used as components of this program.

### Planning Highlights

The Department will continue the implementation of a strategic plan for the monitoring infrastructure, which will improve the risk management of equipment and enable better management of key assets across Canada. Improvements will be made to the prediction systems, products and tools, such as a new forecaster workstation, which will allow seamless dissemination methods to ensure Canadians are warned of approaching severe weather. The Department will engage local communities and work with other government departments and agencies, as well as other levels of government in Canada to

prepare for emergencies (e.g. severe weather events, floods), share weather and climate data, and manage short- and long-term risks (e.g. air quality or climate change).

The Department will develop a comprehensive approach to present options for securing long-term access to essential high-performance computing, and will re-examine IM/IT architecture to maximize efficiencies and cost savings and exploit partnerships for the benefit of public weather and environmental services, such as partnering with multilateral environmental organizations, other government departments and agencies, national governments, universities and the private sector.

A strategy to re-engineer the weather warning and service delivery system will be developed to enable achievement of performance goals to ensure that Canadians understand and receive information on the changing weather, water and climate conditions, and know how to use it.



The Department will continue to provide Canadians, policy-makers, provincial/territorial and municipal governments, and institutions with the information needed to help them develop comprehensive emergency and/or disaster management plans to deal with changes in weather and climatic conditions and create more resilient communities.



The Department will continue to provide the scientific expertise, information and tools needed to help Canadians and their institutions make informed decisions and to reduce their risks related to climate change impacts. This information, generated by Environment Canada's climate models and climate change scenarios at national and regional scales, contributes to the awareness and understanding of the risks of climate change; aids in the development of climate policy at the global and regional levels; and feeds into the development of tools and information related to climate extremes that assist in disaster management planning.

Success in meeting these performance targets and expected results will strengthen the basic foundations of the monitoring, forecast and warning production, computing, research and service delivery systems and infrastructure. To this end, we are developing a reinvestment strategy to help address the needs of the weather and environmental services and infrastructure.

### **Benefits to Canadians**

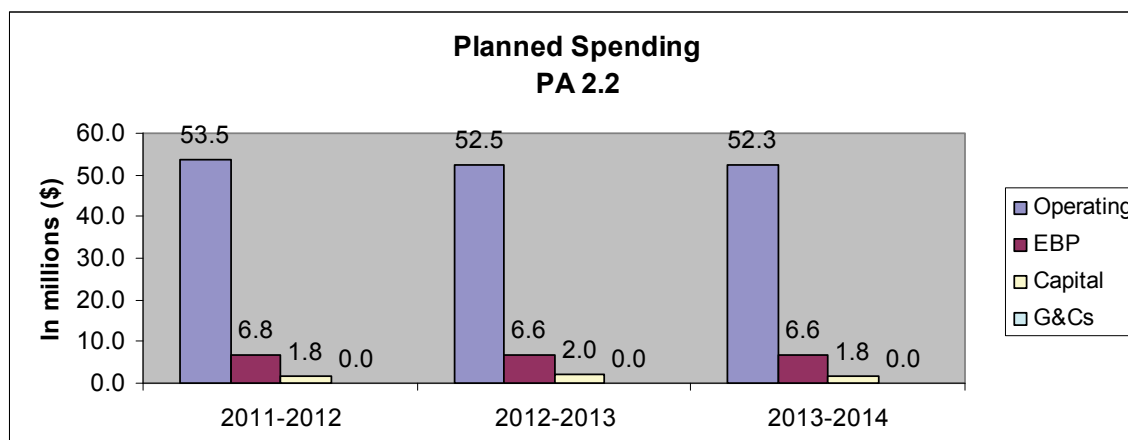
The maintenance and provision of quality weather, climate and environmental predictions help Canadians better adapt to and manage the risks they face from changes in the environment, as well as allowing them to make optimal decisions to support their businesses. Monitoring, predicting and delivering weather and environmental science and services to Canadians will improve safety for Canadians and strengthen decision making by giving internationally competitive accuracy and lead times for warnings of severe weather, as well as a constant watch of hazards to alert Canadians regarding potentially life-threatening circumstances. These services will continue to provide a strong scientific basis for policy development and decision making on key environmental issues such as water, clean air and climate change adaptation, including providing information needed to develop economic resilience.



<b>Program Activity 2.2: Weather and Environmental Services for Targeted Users</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
Targeted sectors <sup>12</sup> have the meteorological and environmental information and services they need to operate efficiently and safely		Level of satisfaction from targeted clients with respect to weather and environmental information and services received from Environment Canada		To be determined. A target will be set once 2 measured values for this indicator are available.	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
430	62.1*	424	61.1*	425	60.7*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

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## Program Activity Description

<sup>12</sup> E.g. air, marine and defence.

This program provides essential decision-making tools and information on the changing weather 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. It involves monitoring, research, production and service delivery in order to support sustainable decision making by targeted sectors in the face of changing weather, water and climate conditions. It provides observations, forecasts and warnings 24 hours a day, 365 days a year, along with 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, the United States Coast Guard and the International Civil Aviation Organization. This program supports the Department in meeting obligations and responsibilities conferred by the *Department of the Environment Act*; helps other government departments meet their obligations under the *Aeronautics Act*, the *Oceans Act* and the *Fisheries Act*; and supports memoranda of agreement with Transport Canada, National Defence and various provincial agencies. This Government of Canada program is the only one with such a national mandate, and has the infrastructure and skills to deliver this service.

### **Planning Highlights**

Over the next few years, the Department will seek to improve relations with partners and clients by working with them to redefine their needs, increase the focus on client satisfaction, and transform services to optimize service delivery for clients. By doing so, this program will improve how Canadian public-sector and private organizations integrate weather and environmental information into their decisions and plans.

The Department will develop a forward-looking service strategy to meet the emerging and changing needs of public and private organizations. The Canadian aviation industry will be supported through the provision of high-quality and timely weather forecasts and services, under the terms of a new service agreement with NAV CANADA. The Department will work collaboratively with NAV CANADA to enhance our products and services to address evolving needs. We will continue to work with NAV CANADA as it transitions its monitoring networks to new automated observing technologies to ensure that Environment Canada continues to receive the quality data it needs to support our weather and environmental services.

The delivery of weather services to National Defence will continue in support of missions in Canada and abroad through the renewal of the Memorandum of Understanding (MOU) on Meteorological and Associated Services and contributions to the implementation of the Joint Meteorological Centre. In collaboration with National Defence, Environment Canada will reconfigure the service delivery such that its forecasting services will begin to be co-located with National Defence resources in Gagetown, New Brunswick.

The Department's marine weather and ice forecasts and services will continue to support safe marine transportation and Canadian Coast Guard activities, particularly in the North. In addition to this, the expansion of our domestic marine and ice services to provide a full



suite of meteorological information to the newly defined Arctic areas will take place over the next five years. As a sovereign and environmentally responsible polar nation, Canada has committed to the International Maritime Organization to provide meteorological and navigational safety information to facilitate the safe management of marine traffic in these areas. This program will provide co-benefits for northern Canadians through expanded monitoring and awareness of changes in weather and climate over northern Canada.

The Ice Information Services Partnership Agreement (IISPA) with the Canadian Coast Guard for ice and specialized marine weather services will be renewed and the availability and delivery of marine and ice services to the marine transportation sector, as well as to northerners travelling and working on and around sea ice, will be improved to enhance safety and efficiency. The implementation of the Integrated Marine Ice Analysis & Forecast System (Polaris), carried out jointly with the United States as part of the North American Ice Service, will begin this fiscal year.

The need to keep pace with rapidly evolving science and technology and to meet ever-increasing client demands presents an ongoing challenge in delivering the expected results and in achieving performance targets. Support to key economic sectors, such as energy and agriculture, will focus on understanding specific sector needs and matching these with the Department's capacity to deliver products, thereby better defining the role of the private sector in developing and offering new services, as well as exploring alternate costing mechanisms for targeted service provision. Service commitments are established in formal agreements with clients, and performance indicators are used to ensure the continuous improvement of services. Environment Canada will consult with its targeted users on their level of satisfaction with the services received, using this information to improve relationships and to meet expectations.

### **Benefits to Canadians**

Canada's economy is highly sensitive to weather and climate change (agriculture, transportation, energy, tourism, construction, etc.). Access to timely, accurate and relevant science-based weather, climate and environmental prediction, information and services helps businesses and Canadians to improve their resilience to high-impact weather events, reduce economic and infrastructure vulnerability, and optimize spending by incorporating the right information in decision making.

### **Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized**

Environment Canada makes a significant contribution to the Government of Canada's ability to protect the health and safety of Canadians and the quality of their environment. The Department is now one of the largest federal regulators, with increasing intervention on a wide range of issues directed at minimizing the impact of toxic substances, pollution, waste and greenhouse gas emissions on Canadians and their environment.

Environment Canada will advance the following priorities to make progress towards this Strategic Outcome to minimize threats to Canadians and their environment from pollution.

#### *Developing and implementing climate change and air pollution strategies*

Environment Canada will continue to support the Government of Canada's commitment to reduce Canada's total greenhouse gas emissions by 17% from 2005 levels by 2020, and to be a world leader in clean electricity generation. In 2011–2012, addressing the challenge of climate change will continue along three pathways: contributing to the development of an effective, inclusive and fair new international agreement based on the Copenhagen Accord and the 2010 Cancun Agreement; working with the United States to align our domestic and international approaches, including continued collaboration under the Clean Energy Dialogue; and taking action domestically through regulatory action based on sound science and economic analysis, and engagement with the provinces and territories in the development of climate change strategies.

Environment Canada works with the provinces and territories, municipalities, industry, non-governmental organizations, and the Canadian public to reduce the [impacts of air pollution](#). In 2011–2012, Environment Canada will continue to develop and implement a new air quality management system and to develop and implement regulatory approaches to reduce air pollution from vehicles and fuels. Continentally, the Department will cooperate with the United States to reduce transboundary air pollution under the Canada–US Air Quality Agreement and to decrease ship-source air pollution under the International Maritime Organization (IMO). Internationally, the Department will cooperate with Parties to the Convention on Long-range Transboundary Air Pollution (LRTAP) to reduce the impacts and risks of transboundary air pollution to Canadians and the environment.<sup>13</sup>

#### *Moving forward with the Chemicals Management Plan*

The Chemicals Management Plan (CMP) gives Canada a science-based, efficient and consistent government-wide approach to protecting Canadians' health and the environment from the risks from new and existing substances, in a way that provides predictability for business and generates public confidence. In 2011–2012, Environment Canada, in partnership with Health Canada, will continue to implement the CMP with

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<sup>13</sup> Environment Canada will ratify an amendment to add five substances to the Protocol on Persistent Organic Pollutants under the LRTAP.

increasing emphasis on developing, implementing and enforcing risk management instruments.

Environment Canada will engage its international partners to collaborate on the assessment and research of chemicals, thereby building efficiencies and cost savings into the science component of the CMP, so that chemicals and waste-related issues are effectively managed through international agreements, such as the Stockholm Convention on Persistent Organic Pollutants (POPs)<sup>14</sup>; the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Planning highlights for 2011–2012 include continuing global negotiations to develop a legally binding agreement on mercury under the United Nations Environment Programme (UNEP).

*Developing and implementing regulatory and non-regulatory measures to manage pollution and waste*

The responsibility for managing and reducing pollution and waste is shared among the federal, provincial, territorial and municipal governments. Environment Canada exercises responsibilities with respect to international and interprovincial movements of hazardous waste, releases of toxic substances to the air, land and water, and activities on federal lands. In 2011–2012, Environment Canada will finalize regulations for wastewater effluent and initiate the establishment of agreements with provinces and Yukon. Work will also continue on the development of a wastewater regime for Canada's North. Other waste reduction initiatives include protection against marine pollution and renewal of the Federal Contaminated Sites Action Plan.

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

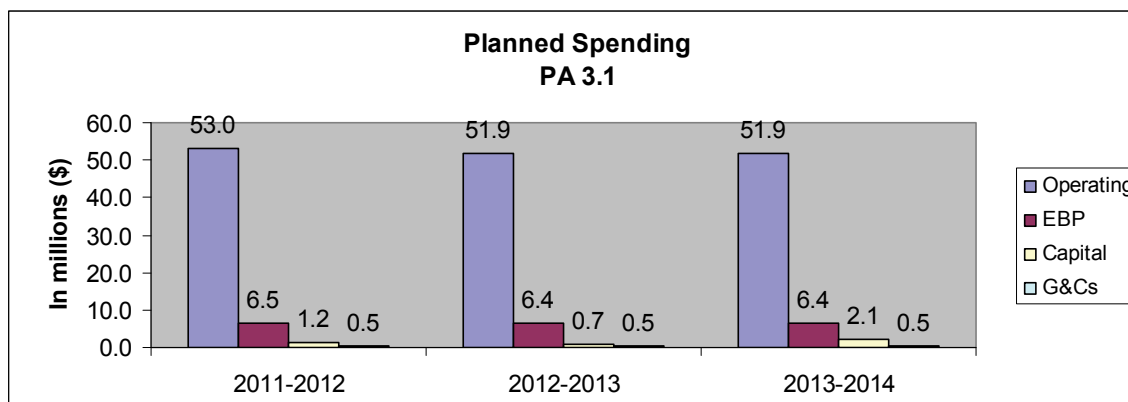
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<sup>14</sup> Environment Canada will ratify an amendment to add nine substances to the Stockholm Convention.

Program Activity 3.1: Substances and Waste Management					
Expected Results		Performance Indicators		Targets	
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. Baseline values for this indicator will be reported in the 2010–2011 Departmental Performance Report (DPR).	
Human Resources (FTEs) and Planned Spending (\$ millions)					
2011–2012		2012–2013		2013–2014	
FTEs	Planned Spending	FTEs	Planned Spending	FTEs	Planned Spending
502	61.2*	490	59.6*	490	61.0*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

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### 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 harmful 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. Contributions in support of Substances and Waste Management are used as a component of this program.

## Planning Highlights

### *Chemicals management*




The Department, in partnership with Health Canada, will continue the implementation of the government's [Chemicals Management Plan](#) to strengthen the degree of protection of human health and the environment against harmful chemicals. In 2011–2012, the Department will [assess](#) and [manage](#) the risks posed by the highest-priority substances, according to established timelines, and advance the implementation of a program of work for medium priorities. The collection and integration of information and activities to support the assessment and management of substances will continue, including [monitoring and surveillance](#) and research of substances, inventory updates and releases to the environment. Sectors will be engaged in information collection and analysis.




Cooperation with international partners will be enhanced and the negotiation of effective agreements to address substances of concern will continue. This will include negotiations to develop a global legally binding agreement on mercury under the United Nations Environment Programme (UNEP) and participation in the fifth meeting of the Conference of the Parties to the Rotterdam Convention.<sup>15</sup>

The Department will implement the recommendation to periodically assess all risk management strategies, including developing and implementing performance measurement strategies, made in the [2009 Fall Report of the Commissioner of the Environment and Sustainable Development](#).

### *Pollution, waste management and reduction*



Under the authority of the [Canadian Environmental Protection Act, 1999 \(CEPA 1999\)](#) and [Fisheries Act](#), the Department will implement regulatory programs for waste, mining, pulp and paper, and marine sectors. The development of a wastewater regime for the North will continue. Environment Canada will continuously improve the administration of [Fisheries Act](#) regulations for mining, and pulp and paper, including environmental effects monitoring, and review older regulations for other sectors to ensure they are up to date and effective. It will also improve risk-based management, priority-setting and coordination of [Fisheries Act pollution prevention provisions](#), driven by commitments made to Parliament in response to the [2009 Spring Report of the Commissioner of the Environment and Sustainable Development](#).



The Department will continue to improve its national delivery of CEPA 1999 [disposal at sea](#) obligations through the development and update of operational policy and guidance, including harmony between the [Canadian Environmental Protection Act, 1999 \(CEPA 1999\)](#) and the [Species at Risk Act](#) where these laws overlap.

Environment Canada will work with other jurisdictions and the private sector to reduce the frequency and consequences of environmental emergencies in Canada. Specifically, the Department will seek to amend and implement the *Environmental Emergency*

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<sup>15</sup> Environment Canada will also complete negotiations of the “Toxics” annex to the Great Lakes Water Quality Agreement (GLWQA), and continue to participate in negotiations of persistent organic pollutants (POPs) under the Stockholm Convention and the Long-Range Transboundary Air Pollution (LRTAP).

*Regulations* to add 41 substances to its schedule, and publish environmental emergency notification agreements with participating provinces and territories and associated notification regulations under CEPA 1999 and the *Fisheries Act*. Environment Canada will also respond to the 2010 audit from the Commission of the Environment and Sustainable Development on ship-based marine pollution, and implement the recommendations from an internal mandate and capacity review of the Environmental Emergencies Program.





Delivery of the [Federal Contaminated Sites Action Plan \(FCSAP\)](#) will continue with other federal government departments, agencies and consolidated Crown corporations.





Assessment and remediation of Environment Canada’s custodial sites will continue in accordance with the Department’s Contaminated Sites Management Plan.

Programming in this area contributes to “Theme I: Addressing Climate Change and Air Quality” and “Theme II: Maintaining Water Quality and Availability” of the FSDS:

<b>Supporting the Federal Sustainable Development Strategy</b>		
<b>FSDS Goals</b>	<b>FSDS Performance Indicators</b>	<b>FSDS Targets</b>
 Goal 3: Water Quality – Protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems	Change in percentage of wastewater systems achieving national effluent quality standards	Target 3.7: Fresh Water Quality – Reduce risks associated with wastewater effluent by 2020 in collaboration with provinces and territories.
	Reduction in loading of the biological oxygen demand matter and suspended solids	
	Percentage of disposal site monitoring events that do not trigger site management action	Target 3.9: Marine Water Quality – Prevent marine pollution from uncontrolled dumping at sea. Ensure that permitted disposal at sea is sustainable such that 85% of disposal site monitoring events do not identify the need for site management action (such as site closure).
 Goal 2: Air Pollution – Minimize the threats to air quality so that the air Canadians breathe is clean	Canadian releases of selected controlled substances	Targets 2.3 and 3.12: Chemicals Management – Reduce risks to Canadians and impacts on the



 <p>and supports healthy ecosystems</p> <p>Goal 3: Water Quality – Protect and enhance the quality of water so that it is clean, safe and secure for all Canadians and supports healthy ecosystems</p>	<p>Percentage decrease of concentrations of selected substances— perfluorooctane sulfonate (PFOS) and polybrominated diphenyl ethers (PBDEs)—in water from baseline data</p>	<p>environment posed by harmful substances as a result of decreased environmental concentrations and human exposure to such substances.</p>
 <p>Goal 6: Ecosystem/Habitat Conservation and Protection – Maintain productive and resilient ecosystems with the capacity to recover and adapt; and protect areas in ways that leave them unimpaired for present and future generations</p>	<p>Indicator under development</p>	<p>Target 6.5: Managing Threats to Ecosystems – Reduce the frequency and consequences of environmental emergencies that affect Canada.</p>

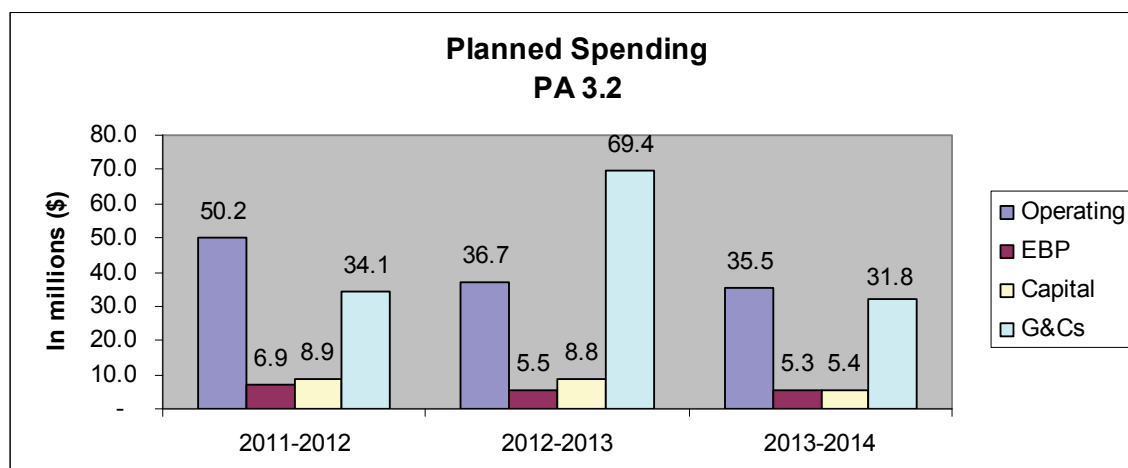
### Benefits to Canadians

As a result of Environment Canada’s work to reduce threats to Canadians and impacts on the environment posed by pollution and waste, the government is able to take early action on harmful substances so that they are managed before they enter the environment and become a problem for current or future generations. Canadians are also provided with information to make better-informed decisions and thereby lower their exposure to harmful substances and waste.

Program Activity 3.2: Climate Change and Clean Air					
Expected Results		Performance Indicators		Targets	
Threats to Canadians, their health and their environment from air pollutants and greenhouse gas emissions are minimized		Canadian emissions of greenhouse gases from targeted and/or regulated sources		Canada's national target is a 17% reduction from 2005 levels by 2020.	
		Canadian emissions of air pollutants from targeted sources		To be determined. Targets will be determined with the finalization of the air pollutant management approach.	
Human Resources (FTEs) and Planned Spending (\$ millions)					
2011–2012		2012–2013		2013–2014	
FTEs	Planned Spending	FTEs	Planned Spending	FTEs	Planned Spending
433	100.1*	336	120.4**	325	78.1*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table. Totals may differ within and between tables due to rounding of figures.

\*\* The increase in planned spending in 2012–2013 is due to a transfer of funds from 2010–2011 to 2012–2013 to support a grant to the Canada Foundation for Sustainable Development and Technology (SDTC), which does not affect the FTEs. However, the temporary Clean Air Agenda funding is scheduled to sunset at the end of 2011–2012, which partially offsets the increase in planned spending and contributes to the FTE decrease.



Note: Operating: Operating expenditures  
 EBP: Statutory contributions to employee benefits plans  
 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

## Program Activity Description

This program 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 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 to greenhouse gas emissions and air pollutants; and advancing science-based approaches and innovative technologies in support of investment decisions, policy making, and regulations. Contributions in support of Climate Change and Clean Air are used as a component of this program.

## Planning Highlights

### *Domestic approaches*



In 2011–2012, the Department will develop and implement domestic [climate change strategies](#) that are aligned with those of the United States, while [engaging with the provinces and territories](#). More specifically, Environment Canada will conduct foundational analysis in support of regulatory performance standards appropriately aligned by engaging with the United States, permitting provisions addressing greenhouse gases under Canada's Clean Air Act.

With regard to our regulatory approach, [regulations to reduce greenhouse gas emissions from light-duty vehicles](#) for 2011–2016 model years will continue to be implemented, and the Department will begin a regulatory process to reduce greenhouse gas emissions from light-duty vehicles of 2017 and later model years. [Greenhouse gas emission regulations for heavy-duty vehicles](#) will also be developed. Regulations for renewable fuel mandating an average 5% renewable fuel content in gasoline will continue to be implemented, and steps will be taken to include a requirement for a 2% renewable content in diesel fuel and heating oil. Environment Canada will continue supporting Transport Canada in reducing air pollutants and greenhouse gases from marine shipping, rail and aviation. Burning of coal is a large source of greenhouse gas emissions. Environment Canada is developing regulations to reduce greenhouse gas emissions from [coal-fired electricity generation](#) in the electricity sector.



Environment Canada will deliver [expert advice](#), assessment and [program management](#) to advance clean technologies aimed at reducing greenhouse gas emissions,<sup>16</sup> including oversight to programs<sup>17</sup> for managing Canada's [Environmental Technology Verification](#)



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<sup>16</sup> This contributes to Environment Canada's efforts to address air pollution as well.

<sup>17</sup> E.g. Sustainable Development Technology Canada (SDTC), Canadian Environmental Technology Advancement Centres (CETACs), the Green Municipal Fund (GMF), and Strategic Technology Applications of Genomics in the Environment (STAGE).

(ETV).<sup>18</sup> The Department will continue to collect information on greenhouse gases and air pollutants through integrating information collection initiatives via a single-window approach to inform policy and regulatory development.



With respect to [air pollutants](#), the Department will develop and implement regulatory approaches to reducing emissions and new ambient air quality standards drawing on [atmospheric science](#), science advice and assessment in the context of the development and implementation of a new air quality management system in collaboration with the provinces and territories, as was announced by the Canadian Council of Ministers of the Environment (CCME).



Our domestic air pollutant approach will include the development of ambient air quality standards for particulate matter and ozone and the implementation of measures to reduce air pollutants from industrial sources. Air pollutant emission regulations aligned with the U.S. EPA standards for [various classes of on-road and off-road vehicles for large and small engines and fuels](#) will continue to be developed and implemented in 2011–2012. The [Renewable Fuels Regulations](#) will be amended and implemented to require a 2% renewable fuel content by volume of diesel fuel and heating oil. The accelerated phase-out of [hydrochlorofluorocarbons \(HCFCs\)](#) will be implemented as agreed to under the [Montreal Protocol on Substances that Deplete the Ozone Layer](#),<sup>19</sup> and the Department will explore “no-regrets”<sup>20</sup> opportunities for reducing air pollutants that also have climate effects, in particular for black carbon. Finally, the economic and scientific models will be upgraded or developed to measure the impacts and benefits of proposed mitigation options, to improve the network to monitor air pollutants and track effectiveness of regulations, and to continue critical research instrumental for model development and decision making.

#### *Continental approaches*



In the *continental* context, work will continue with the United States to align our domestic and international approaches to climate change and air pollution. This will include the development of greenhouse gas approaches on a sector-by-sector basis, including through regulatory alignment for key sectors and the development of clean energy technologies to reduce greenhouse gases. Cooperation with the United States will also continue to reduce transboundary air pollution under the [Canada–U.S. Air Quality Agreement](#) (including conducting coordinated science activities under Sub-committee 2), the Commission for Environmental Cooperation (CEC), and North American Air Working Group (NAAWG).



Environment Canada will continue to support the [U.S.-Canada Clean Energy Dialogue](#) on the development of a joint clean energy research, development and demonstration roadmap to help plan how to achieve long-term greenhouse gas reductions. Collaboration

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<sup>18</sup> This includes continental action through joint verification initiatives with the United States and international action through the coordination of the International Working Group (IWG-ETV).

<sup>19</sup> This will provide a dual benefit for both climate and ozone layer protection.

<sup>20</sup> “No-regrets” measures are those which provide a net benefit to the environment, society and the economy and would be justified under all plausible future scenarios.

with the United States will continue on policies and processes to develop a new, legally binding international climate change agreement. Work will also continue with the United States and Mexico, through the Commission for Environmental Cooperation, to improve comparability of greenhouse gas reporting, among other things.

*International approaches*



Internationally, the Department will participate in and contribute to international negotiations to address climate change and air pollution, including working towards the development of a new legally binding international agreement based on the Copenhagen Accord and its 2010 Cancun Agreement. The Department will support the continued implementation of the Copenhagen Accord by meeting [commitments](#) to provide fast-start financing to assist developing countries with climate change adaptation and mitigation.



The Department will lead the development of Canadian positions on [transboundary air pollutants](#) (based on Canada’s domestic program and bilateral activities with the United States) and participate in negotiations to revise the Gothenburg Protocol under the [United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution](#). Environment Canada will also strengthen international cooperation with key international players, in particular China, to address air pollution, especially contaminants subject to long-range transport. The Department will continue to promote the amendment of the Montreal Protocol to include a phase-down of hydrofluorocarbons (HFCs). The Department will also lead and advance Canadian positions in international negotiations, through the [United Nations Framework Convention on Climate Change](#) (UNFCCC) and other complementary processes.<sup>21</sup> Environment Canada will lead or coordinate Canadian involvement in international science assessments of atmospheric issues, and continue contributing to the development of global technical regulations with respect to vehicles and engines through participation in the World Forum for Harmonization of Vehicle Regulations.

Programming in this area contributes to “Theme I: Addressing Climate Change and Air Quality” of the FSDS:

<b>Supporting the Federal Sustainable Development Strategy</b>		
<b>FSDS Goals</b>	<b>FSDS Performance Indicators</b>	<b>FSDS Targets</b>
Goal 1: Climate Change – Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change	National greenhouse gas emissions relative to targets and compared internationally	Target 1.1: Climate Change Mitigation – Relative to 2005 emission levels, reduce Canada’s total greenhouse gas (GHG) emissions 17% by 2020.



<sup>21</sup> E.g. support South Africa in its role as President of CoP 17 2011 United Nations Climate Change Conference; participate in discussions to revise the UNECE Gothenburg Protocol on the long-range transport of air pollutants; continue bilateral partnerships in key countries (China, Mexico, India), including clean technology projects; and address marine and aviation greenhouse gas emissions under the International Marine Organization and International Civil Aviation Organization.



Goal 2: Air Pollution – Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems	Air emissions indicators of sulphur oxides, nitrogen oxides, volatile organic compounds, particulate matter, carbon monoxide, and ammonia	Target 2.1: Air Pollutants – Reduce air pollutants in order to maintain or improve air quality across the country and achieve the emission targets which are currently under development in consultations with provinces and stakeholders.
	Trends in air quality related health outcomes	

### Benefits to Canadians

The health of Canadians and the environment will be protected through regulatory action to address greenhouse gases emissions and improve air quality, and through collaboration with domestic, continental and international partners. Policy-makers at all levels of government and decision-makers in the public and private sectors also benefit from timely information about air emissions that allows them to make informed decisions.<sup>22</sup>

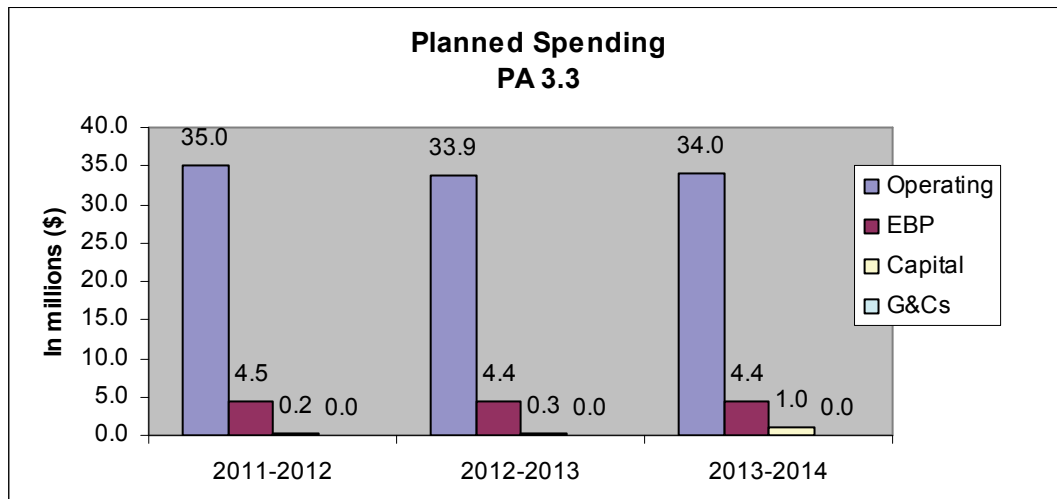
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<sup>22</sup> For instance, the [National Pollutant Release Inventory \(http://www.ec.gc.ca/inrp-npri/default.asp?lang=en\)](http://www.ec.gc.ca/inrp-npri/default.asp?lang=en) (NPRI) collects and provides information on air pollutant emissions that helps inform policy development and decision making.

<b>Program Activity 3.3: Compliance Promotion and Enforcement – Pollution</b>					
<b>Expected Results</b>		<b>Performance Indicators</b>		<b>Targets</b>	
Unlawful releases of harmful substances into the environment are prevented or minimized through enforcement and promotion of Environment Canada-administered laws and regulations		Quantity of unlawful harmful substances controlled or removed from the environment as a result of enforcement activities		To be determined. A baseline value for this indicator will be reported in the 2011–2012 Departmental Performance Report (DPR). A target will be set in the National Enforcement Plan for the 2011–2012 fiscal year (June 2011).	
<b>Human Resources (FTEs) and Planned Spending (\$ millions)</b>					
2011–2012		2012–2013		2013–2014	
<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>	<b>FTEs</b>	<b>Planned Spending</b>
359	39.7*	348	38.6*	348	39.5*

\*Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

Totals may differ within and between tables due to the rounding of figures.



Note: Operating: Operating expenditures  
 EBP: Statutory contributions to employee benefits plans  
 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

## Program Activity Description

This program contributes to minimizing damages and threats to the natural environment and biodiversity, through the 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 wastes 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 laws 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 in order to provide continuous feedback on program activities and results.

## Planning Highlights



The Department will continue to fulfill the government's commitment to strong environmental enforcement by strengthening the identification of priorities that focus on the most serious environmental risks and threats, and optimizing the integrated delivery of compliance and enforcement services. Additionally, pollution enforcement will develop a methodology to assess the feasibility of compliance rate indicators, to better demonstrate the results of pollution enforcement and compliance promotion activities.



In 2011–2012, pollution compliance promotion and enforcement will be strengthened through the multi-staged implementation of the *Environmental Enforcement Act*. The Act amends fine provisions, sentencing authorities and enforcement tools of six Environment Canada statutes, including the *Canadian Environmental Protection Act, 1999*. The amendments provide stronger penalties for offenders and introduce minimum fines for serious offences and higher maximums, and also grant courts new sentencing authorities that ensure penalties reflect the seriousness of pollution and wildlife offences. The Department will also develop regulations to operationalize the *Environmental Violations Administrative Monetary Penalties Act* and the penalty scheme for pollution acts coming into force in the following years.

In support of the enforcement activities planned under the new *Environmental Enforcement Act*, the Department will further develop laboratory science and technology to provide the pollution compliance scientific information required for enforcement actions. Additionally, business processes will be streamlined and information management improved to allow improved assessment and demonstration of environmental results. The Department will develop an investment plan for the renewal of business systems and the associated data capture and business processes, particularly in the area of case management. Targeted development and investments in supporting tools and infrastructure will also help to bolster and maintain capacity of compliance promotion, enforcement and science staff.



### **Benefits to Canadians**

Compliance promotion and enforcement initiatives ensure that federal legislation dealing with pollution-related threats and risks to the environment are respected. For example, these laws regulate the use of harmful substances, their release to air, water or land, as well as the import and export of substances that present a risk to human health or the environment. Environment Canada enforcement officers apply these laws throughout Canada in collaboration with provincial/territorial governments and national and international agencies and organizations.

#### **Strategic Outcome 4: Canadians benefit from the responsible development of the Mackenzie gas resources**

Environment Canada's work that contributes to this Strategic Outcome is organized into a single Program Activity:

- Mackenzie Gas Project (MGP)

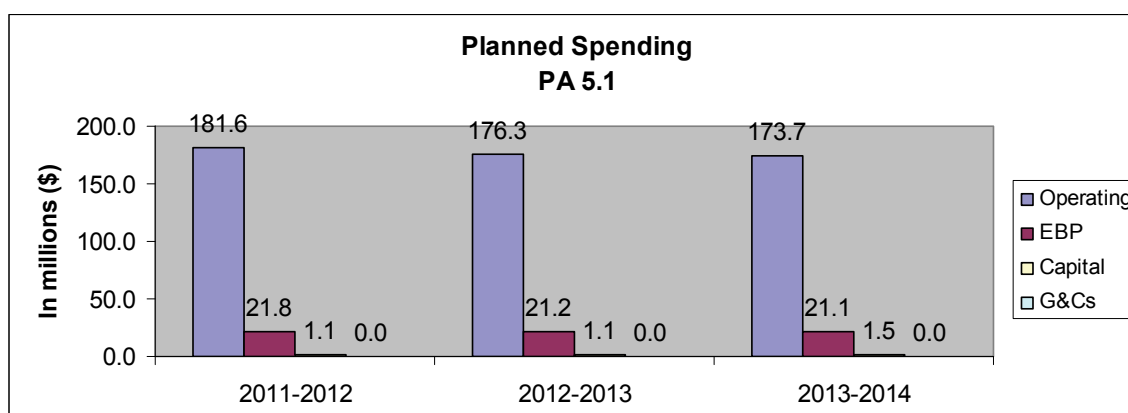
Funding for this Strategic Outcome (and its associated Program Activity) beyond 2010–2011 had not been secured at the time of the 2011–2012 Report on Plans and Priorities (RPP) production. In March 2010, the proponents of the MGP informed the National Energy Board that a decision to construct the pipeline would be pushed out to late 2013 and that the in-service date would be 2018 at the earliest. To reflect the delayed status of the MGP, the Mackenzie Gas Project Office was closed in late 2010; however, the Minister for the Environment retains responsibility for the MGP.

## Internal Services

Human Resources (FTEs) and Planned Spending (\$ millions)					
2011–2012		2012–2013		2013–2014	
FTEs	Planned Spending	FTEs	Planned Spending	FTEs	Planned Spending
1,575	204.5*	1,556	198.6*	1,554	196.4*

\* Please refer to the discussion of the departmental spending trend in the Expenditure Profile subsection (pages 26 and 27) for an explanation of the annual variation in spending displayed in this table.

Totals may differ within and between tables due to rounding of figures.



Note: Operating: Operating expenditures  
 EBP: Statutory contributions to employee benefits plans  
 Capital: Capital expenditures  
 G&Cs: Grants and Contributions expenditures

### 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 the following: 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.

The Internal Services Program Activity includes activities and services that enable Environment Canada to deliver its programs in accordance with both internal and external policy direction, and management and administrative guidelines and expectations.

## Planning Highlights

During the planning period, Environment Canada plans to focus on several department-wide *policy* objectives. This includes plans to strengthen policy analysis and coordination capacity to support Departmental priorities and the Government of Canada's overall environmental agenda. This would be achieved, for example, by enhancing inter-departmental coordination on climate change adaptation through the development of best practices and tools to improve how the government integrates climate considerations into its planning and decision making. Sound economic advice and support for policy development and program implementation will continue to be provided for both new policy and existing regulatory authorities, such as the development of sector-based greenhouse gas regulations.

As a science-based department, Environment Canada strives to be a leader in scientific innovation, thus contributing to a better understanding of our changing environment. Scientific knowledge has and will continue to provide the foundation upon which to develop, implement and assess policies, programs, regulations and services. As such, science management activities will focus on facilitating and strengthening the connections between scientific experts and policy-makers, particularly on government priorities such as climate change and the Arctic. In addition, a number of new web-based tools will be launched to provide timely research results to policy and decision-making communities.

In view of the importance it accords to partnerships, the Department will provide strategic advice and analysis to foster positive, long-term relationships with key constituencies, including provincial and territorial governments, Aboriginal organizations, stakeholders and citizens. For example, relationships with provincial and territorial partners will be fostered through bilateral agreements as well as through participation in the Canadian Council of Ministers of the Environment and other multilateral fora dealing with specific issues such as domestic and international climate change, wildlife, species at risk and ecological areas, water and environmental protection. Additionally, the recent adoption of new departmental guidelines on public participation and consultations will help build internal capacity to foster more effective collaboration with Aboriginal organizations and stakeholders.

Effective solutions to environmental problems benefit from international cooperation. The Department will collaborate closely with the United States through regulatory cooperation and participation in bilateral and multilateral institutions, as well as regional initiatives. Environment Canada will continue the implementation of environmental cooperation agreements and initiatives with a number of partners, including the United States, Mexico, the European Union, China and India. The Department will support Canada's strategic engagement on multilateral discussions in many areas, including International Environmental Governance, the control of mercury emissions and the 2012 UN Conference on Sustainable Development in Rio. In support of Canada's Global Commerce Strategy, Environment Canada will pursue negotiations of environmental considerations within trade agreements with the European Union and India.

The Department will also address several key *management* objectives. This includes the strengthening of its financial management by building on the improvements started last year in our budget allocation process. An example of such an improvement is a move to provide capital budgets on a 3-year rather than the traditional 1-year basis, enabling managers to better plan, prioritize and manage multi-year projects. The government's Accountability Agenda will be further implemented through a focus on the management priorities identified within the Management Accountability Framework (financial management and control, and the management of information technology security). Efforts will be taken to further improve the integration of program planning with both Internal Services and financial resources planning.

Improving people management and sustaining a healthy and productive workforce requires that managers have access to more effective and efficient staffing and recruitment processes. These processes enable the Department's workforce, policies and programs to be reflective of the diverse population it serves. To make certain that both the necessary technical and leadership skills are available, Environment Canada will continue, as part of its Talent Management Strategy, to implement the Building People Management Capacity project. This initiative offers managers a variety of guides, tips, assessment tools and orientation documents, as well as a learning curriculum. It will support the newly established EC Managers' Network, delivering strategic training and tools to over 800 members. However, given the government-wide fiscal restraint over the next few years, any future change of priorities, services and programs will have an impact on our work environment, and might therefore require the development of change management strategies and work plans for any employees affected by the change. In addition, the concept of employee engagement is a priority under Environment Canada's Talent Management Framework. We recognize that employees who are engaged feel that they are valued by their organizations and are more likely to be involved in improving the current and future work environment. The Department has committed to increasing senior management visibility and to communicating a shared vision through Employee Engagement Strategies for all branches.

By refining and upgrading departmental information management systems and their supporting processes, the Department will increase the accuracy and availability of information for decision making and performance reporting. Key areas have been identified that will strengthen the capacity of IM/IT enabling functions to support programs, including continued commitment to strategic initiatives such as the improvement of systems, information security, data protection, efficiency and service delivery, as well as increasing the ease of data sharing and dissemination, which will be particularly relevant for scientific data.

The Department will strengthen its management of assets by focusing on key risk mitigation practices, including the implementation of a comprehensive process for life-cycle management and associated policies and procedures to enhance and standardize assets management. The departmental Business Continuity Plan will be finalized to identify risk and ensure readiness to respond to events such as natural hazards, technical failures and human-induced threats.

Environment Canada will maintain strong and independent internal audit and evaluation functions that, along with the External Audit Advisory Committee (EAAC) and the

Departmental Evaluation Committee (DEC), support the Deputy Minister in his role as Accounting Officer and in results management. Environment Canada has committed to management actions in 2011–2012 arising from 5 internal audits, 6 external audits and 12 program evaluations conducted in previous years. These commitments will contribute to

- Improving financial management and controls for delegation of financial signing authorities;
- Improving the process for life-cycle management of departmental assets, including a comprehensive count and valuation of all departmental assets;
- Improving efficiencies for the contracting process;
- Improving the national hydrometric program;
- Improving the staffing process;
- General good governance, such as effective performance measurement and financial reporting;
- Continuous improvement of the enforcement and compliance promotion strategies for the regulations that fall under Environment Canada's jurisdiction; and
- Improving horizontal and interdepartmental program management.

Follow-up on audit and evaluation recommendations are conducted on an ongoing basis to ascertain the degree to which the management actions in response to recommendations made are implemented. Progress reports on follow-ups are provided on a regular basis to the External Audit Advisory Committee (EAAC) and Departmental Evaluation Committee (DEC).



Programming in this area contributes to FSDS “Theme IV: Shrinking the Environmental Footprint – Beginning with Government.” Environment Canada is a participant in the FSDS and contributes to the Greening Government Operations (GGO) targets through the Internal Services Program Activity. The Department contributes to the following target areas of Theme IV of the FSDS:

- Green Buildings;
- Green Procurement;
- E-Waste, Managed Print, Paper Consumption and Green Meetings; and
- Greenhouse Gas Emissions.

For additional details on Environment Canada's GGO activities, please see the [GGO table](#).

## Section III - Supplementary Information

### Financial Highlights

The financial highlights presented here offer an overview of Environment Canada's future-oriented financial statements. The Statement of Management Responsibility, the future-oriented statement of operations, and all accompanying notes can be found at the following website: <http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1>.

### Future-oriented Condensed Statement of Operations\*

For the Year (Ended March 31)  
(\$ thousands)

	% change	Future-oriented 2011–12	Future-oriented 2010–11
Expenses	(13%)	1,082,397	1,245,177
Total Expenses		1,082,397	1,245,177
Revenues	(2%)	(75,938)	(77,121)
Total Revenues		(75,938)	(77,121)
<b>Net Cost of Operations</b>	<b>(14%)</b>	<b>1,006,459</b>	<b>1,168,056</b>

\*Beginning in the 2011–2012 RPP, all departments are required to present future-oriented financial statements. As departments are encouraged to prepare the full set of financial statements, the minimum requirement for Environment Canada (being one of the departments implementing these statements for the first time) is to produce a Statement of Operations and accompanying notes that will be posted on EC's website and linked to the RPP.

Total departmental expenses are expected to decrease by \$162.8M or 13%, from \$1,245 million in 2010–2011 to \$1,082 million in 2011–2012. The overall decrease is explained by \$185 million of sunseting programs that include the Chemicals Management Plan, a portion of the Clean Air Agenda and a considerable reduction in funding to the Federal Contaminated Sites Action Plan and National Vehicle Scrappage Program. This major decrease is partially offset mainly by an augmentation of \$21 million of the amortization of tangible capital assets.

## Supplementary Information Tables

*All electronic supplementary information tables found in the 2011–2012 Report on Plans and Priorities can be found on the Treasury Board of Canada Secretariat's website at <http://www.tbs-sct.gc.ca/rpp/2011-2012/info/info-eng.asp>.*

- Details of Transfer Payment Programs (TPP)
- Up-Front Multi-Year Funding
- Greening Government Operations
- Horizontal Initiatives
- Upcoming Internal Audits and Evaluations over the Next Three Fiscal Years
- Sources of Respendable and Non-Respendable Revenue
- Summary of Capital Spending by Program Activity
- User Fees

### Services received without charge

A table detailing the information on Services Received Without Charge by the Department during the planning period is available electronically on the Department's website at [www.ec.gc.ca/dpr-rpp/index\\_e.htm](http://www.ec.gc.ca/dpr-rpp/index_e.htm).



## Section IV – Other Items of Interest

### *Sustainable development*

Based on the FSDS, Environment Canada commits to

- Providing more specific information on departmental sustainable development activities appropriate to the Department's mandate;
- Strengthening the application of Strategic Environmental Assessments (SEAs) by ensuring that the government's environmental goals are taken into account when pursuing social and economic goals; and
- Pursuing best practices on reporting on summary information on the results of SEAs linked to the FSDS goals and targets, in order to ensure that environmental decision making is more transparent.

For additional details on the Department's activities to support sustainable development, please see the [departmental website](#), and for complete details on the FSDS please see the [FSDS website](#).

### *Official languages*

Environment Canada is fully committed to embracing the spirit, intent and provisions of the *Official Languages Act* and its regulations. The departmental Official Languages (OL) Action Plan identifies the priorities at the departmental level and guidance to all branches and services in the Department with regard to improving the quality of service rendered to clients and to fostering an exemplary work environment where the rights and entitlements of all employees are respected. The following priorities from the action plan were identified for 2011–2012:

- Develop and communicate a tool to help managers identify the language requirements and linguistic profiles of positions to ensure they are done in a more consistent manner; and
- Finalize and communicate the tool on language of work at Environment Canada to promote and facilitate a workplace that is conducive to the use of both official languages.

Furthermore, other ongoing initiatives are planned for 2011–2012, including the monitoring of services to the public offered by Environment Canada, the monitoring of the use of non-imperative staffing and the coordination and monitoring of statutory cases (employees appointed non-imperatively). A draft of the action plan for 2012–2015 will also be developed, based on the main challenges and priorities related to official languages at Environment Canada.

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Departmental website: <http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1>

Greening Government Operations: <http://www.tbs-sct.gc.ca/rpp/2011-2012/info/info-eng.asp>

FSDS website: <http://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=C2844D2D-1>

Measuring Environment Canada's Research and Development Performance: [http://www.ec.gc.ca/doc/scitech/mecrdp\\_e.html](http://www.ec.gc.ca/doc/scitech/mecrdp_e.html)

Science Plan: <http://www.ec.gc.ca/scitech/default.asp?lang=En&n=9FA49B9A-1>

Environment Canada's Technology Role: <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=483683D7-CAAF-4E06-A2B2-EFDCA22A028B>

Environment Canada's website: <http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1>

Environmental assessment: <http://www.ec.gc.ca/ee-ea/default.asp?lang=En&n=0C6445E6-1>

Strategic Environmental Assessment: <http://www.ec.gc.ca/ee-ea/default.asp?lang=En&n=A01CABBD-1>

International Year of Biodiversity (2010): <http://www.ec.gc.ca/EnviroZine/default.asp?lang=En&n=5EC385CB-1>

Conference of the Parties to the Convention of Biological Diversity: <http://www.cbd.int/convention/cops.shtml>

Value of Nature to Canadians Study: <http://www.cbin.ec.gc.ca/nature/valeur-value.cfm?lang=eng>

Access and Benefit-sharing (ABS): <http://www.biodivcanada.ca/default.asp?lang=En&n=A9326342-1>

Circumpolar Biodiversity Monitoring Program: <http://cbmp.arcticportal.org/>

*Species at Risk Act* (SARA): <http://laws.justice.gc.ca/eng/S-15.3/index.html>

Recovery strategies: [http://www.sararegistry.gc.ca/sar/recovery/recovery2\\_e.cfm](http://www.sararegistry.gc.ca/sar/recovery/recovery2_e.cfm)

Action planning: [http://www.sararegistry.gc.ca/sar/recovery/action\\_e.cfm](http://www.sararegistry.gc.ca/sar/recovery/action_e.cfm)

Conservation and protection of Polar Bears: <http://www.ec.gc.ca/default.asp?lang=En&xml=9FAB1921-CE0F-4B9A-90CE-B4ED209842DF>

Listing: [http://www.sararegistry.gc.ca/sar/listing/default\\_e.cfm](http://www.sararegistry.gc.ca/sar/listing/default_e.cfm)

Monitoring: <http://www.ec.gc.ca/faunescience-wildlifescience/default.asp?lang=En&n=9D21231D-1>

Research: <http://www.ec.gc.ca/faunescience-wildlifescience/default.asp?lang=En&n=7F1BD44F-1>

Action plan: [http://www.sararegistry.gc.ca/sar/recovery/action\\_e.cfm](http://www.sararegistry.gc.ca/sar/recovery/action_e.cfm)

Recovery strategy: [http://www.sararegistry.gc.ca/sar/recovery/recovery\\_e.cfm](http://www.sararegistry.gc.ca/sar/recovery/recovery_e.cfm)

Incidental take: <http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=FA4AC736-1>

Bird conservation region plans: <http://www.ec.gc.ca/mbc-com/default.asp?lang=En&n=1D15657A-1>

*Migratory Birds Convention Act, 199*: <http://laws.justice.gc.ca/eng/M-7.01/index.html>

Network of protected area: <http://www.ec.gc.ca/ap-pa/default.asp?lang=En&n=7FC45404-1>

National Wildlife Areas (NWAs): <http://www.ec.gc.ca/ap-pa/default.asp?lang=En&n=29B27C83-1>

Northwest Territories Protected Areas Strategy: <http://www.nwtpas.ca/index.asp>

Marine Wildlife Area: <http://www.ec.gc.ca/ap-pa/default.asp?lang=En&n=738B8BCA-1>

Invasive Alien Species Partnership Program (IASPP): <http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=A49893BC-1>

An Invasive Alien Species Strategy for Canada: <http://www.ec.gc.ca/eee-ias/default.asp?lang=En&n=98DB3ACF-1>

Hydrometric information service: <http://www.ec.gc.ca/rhc-wsc/default.asp?lang=En&n=EC164002-1>

Action Plan for Clean Water: <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=B1128A3D-1>

Lake Winnipeg Basin Initiative: [http://www.ec.gc.ca/doc/eau-water/winnipeg\\_e.html](http://www.ec.gc.ca/doc/eau-water/winnipeg_e.html)

National aquatic biomonitoring and assessment network: <http://www.ec.gc.ca/rcba-cabin/default.asp?lang=En&n=72AD8D96-1>

Canadian Shellfish Sanitation Program: <http://www.inspection.gc.ca/english/fssa/fispoi/csspccsme.shtml>

International joint commission boards: [http://www.ijc.org/en/boards/boards\\_conseils.htm](http://www.ijc.org/en/boards/boards_conseils.htm)

Prairie Provinces Water Board: <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=BAB691E4-1>

Mackenzie River Basin Board: <http://www.mrbba.ca/>

Lake of the Woods Control Board: <http://www.lwcb.ca/>

Ottawa River Regulation Planning Board: <http://www.ottawariver.ca/>

International Rainy River Water Pollution Board:  
[http://www.ijc.org/conseil\\_board/rainy\\_river/en/rainy\\_home\\_accueil.htm](http://www.ijc.org/conseil_board/rainy_river/en/rainy_home_accueil.htm)

International St. Croix River Watershed Board:  
[http://www.ijc.org/conseil\\_board/st\\_croix\\_river/en/stcroix\\_home\\_accueil.htm](http://www.ijc.org/conseil_board/st_croix_river/en/stcroix_home_accueil.htm)

International Lake of the Woods and Rainy River Watershed Task Force:  
[http://www.ijc.org/conseil\\_board/rainy\\_river\\_watershed/](http://www.ijc.org/conseil_board/rainy_river_watershed/)

United Nations Environment Programme's (UNEP's) Global Environmental Monitoring System (GEMS)/Water: <http://www.ec.gc.ca/qualitedeleau-waterquality/default.asp?lang=En&n=4E469266-1>

*Federal Sustainable Development Act*: <http://laws.justice.gc.ca/en/showtdm/cs/F-8.6>

Progress Report: <http://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=4C1AB33B-1#s1>

Federal Sustainable Development Strategy (FSDS): <http://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=F93CD795-1>

Canadian Environmental Sustainability Indicators (CESI): <http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=A073189E-1>

Canadian Biodiversity: Ecosystem Status and Trends 2010:  
<http://www.biodivcanada.ca/default.asp?lang=En&n=83A35E06-1>

*Canadian Environmental Assessment Act*: <http://laws-lois.justice.gc.ca/eng/C-15.2/index.html>

*Yukon Environmental and Socio-economic Assessment Act*: <http://laws-lois.justice.gc.ca/eng/Y-2.2/index.html>

*Mackenzie Valley Resource Management Act*: <http://laws-lois.justice.gc.ca/eng/M-0.2/index.html>

Great Lakes Water Quality Agreement (GLWQA): <http://www.ec.gc.ca/grandslacs-greatlakes/default.asp?lang=En&n=88A2F0E3-1>

Canada–Ontario Agreement (COA) Respecting the Great Lakes Basin: <http://www.ec.gc.ca/grandslacs-greatlakes/default.asp?lang=En&n=B903EE0D-1>

Great Lakes Action Plan 2010–2015: <http://www.ec.gc.ca/grandslacs-greatlakes/default.asp?lang=En&n=DF30B51A-1>

Great Lakes: [http://www.ec.gc.ca/doc/eau-water/grandslacs-greatlakes\\_e.htm](http://www.ec.gc.ca/doc/eau-water/grandslacs-greatlakes_e.htm)

Lake Simcoe: [http://www.ec.gc.ca/doc/eau-water/simcoe\\_e.html](http://www.ec.gc.ca/doc/eau-water/simcoe_e.html)

Lake Winnipeg: [http://www.ec.gc.ca/doc/eau-water/winnipeg\\_e.html](http://www.ec.gc.ca/doc/eau-water/winnipeg_e.html)

Environmental Damages Fund: <http://www.ec.gc.ca/edf-fde/default.asp?lang=En&n=C5BAD261-1>

EcoAction Community Funding Program: <http://www.ec.gc.ca/pace-cape/default.asp?lang=En&n=1C1BEFF3-1#ecoaction>

Impacts of air pollution: <http://www.ec.gc.ca/Air/default.asp?lang=En&n=D61E229E-1>

Chemicals Management Plan: <http://www.chemicalsubstanceschimiques.gc.ca/plan/index-eng.php>

Assess: <http://www.chemicalsubstanceschimiques.gc.ca/about-apropos/assess-eval/index-eng.php>

Manage: <http://www.chemicalsubstanceschimiques.gc.ca/about-apropos/manage-gestion/index-eng.php>

Monitoring and surveillance: <http://www.chemicalsubstanceschimiques.gc.ca/plan/surveil/index-eng.php>

2009 Fall Report of the Commissioner of the Environment and Sustainable Development: [http://www.oag-bvg.gc.ca/internet/English/parl\\_cesd\\_200911\\_02\\_e\\_33197.html](http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200911_02_e_33197.html)

*Canadian Environmental Protection Act, 1999 (CEPA 1999)*: <http://laws-lois.justice.gc.ca/eng/C-15.31/index.html>

*Fisheries Act*: <http://laws-lois.justice.gc.ca/eng/F-14/index.html>

*Fisheries Act* pollution prevention provisions: <http://www.ec.gc.ca/alef-ewe/default.asp?lang=En&n=9ABFA22F-1>

2009 Spring Report of the Commissioner of the Environment and Sustainable Development: [http://www.oag-bvg.gc.ca/internet/English/parl\\_cesd\\_200905\\_01\\_e\\_32511.htm](http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200905_01_e_32511.htm)

Disposal at sea: <http://ec.gc.ca/iem-das/default.asp?lang=En&n=0047B595-1>

Federal Contaminated Sites Action Plan (FCSAP): [http://www.federalcontaminatedsites.gc.ca/fcsap\\_pascf/index-eng.aspx](http://www.federalcontaminatedsites.gc.ca/fcsap_pascf/index-eng.aspx)

Climate change strategies: <http://www.climatechange.gc.ca/default.asp?lang=En&n=72F16A84-1>

Engaging with the provinces and territories: <http://www.climatechange.gc.ca/default.asp?lang=En&n=5D25C573-1>

Regulations to reduce greenhouse gas emissions from light-duty vehicles: <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=3C7732ED-B2B7-4E45-8A54-A495500E58DB>

Greenhouse gas emission regulations for heavy-duty vehicles: <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=E607BAF7-5253-499B-A86E-2FDA64112412>

Coal-fired electricity generation: <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=E5B59675-BE60-4759-8FC3-D3513EAA841C>

Expert advice: <http://www.ec.gc.ca/scitech/default.asp?lang=En&n=9D4E3F0C-1>

Program management: <http://www.ec.gc.ca/scitech/default.asp?lang=En&n=0F70EC10-1>

Environmental Technology Verification: <http://www.ec.gc.ca/scitech/default.asp?lang=En&n=9682E240-1>

Air pollutants: <http://www.ec.gc.ca/Air/default.asp?lang=En&n=BCC0B44A-1>

Atmospheric science: <http://www.ec.gc.ca/scitech/default.asp?lang=En&n=1038C9BB-1>

Various classes of on-road and off-road vehicles for large and small engines and fuels: <http://www.ec.gc.ca/air/default.asp?lang=En&n=AE4ECEC1-1>

*Renewable Fuels Regulations*: <http://www.ec.gc.ca/energie-energy/default.asp?lang=En&n=BDB8F633-1>

Hydrochlorofluorocarbons (HCFCs): <http://www.ec.gc.ca/toxiques-toxics/Default.asp?lang=En&n=98E80CC6-1&xml=03C24D85-E0AA-45BC-BB5F-C8EF8B16E3FC>

Montreal Protocol on Substances that Deplete the Ozone Layer: <http://ec.gc.ca/ozone/default.asp?lang=En&n=D11D2440-1#Montreal>

Canada–U.S. Air Quality Agreement: <http://www.ec.gc.ca/air/default.asp?lang=En&n=83930AC3-1>

U.S.-Canada Clean Energy Dialogue: <http://www.pm.gc.ca/eng/media.asp?id=2822>

Commitments: <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=FD27D97E-5582-4D93-8ECE-6CB4578171A9>

Transboundary air pollutants: <http://www.ec.gc.ca/air/default.asp?lang=En&n=587B56F8-1>

United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution: <http://www.unece.org/env/lrtap/>

United Nations Framework Convention on Climate Change: <http://unfccc.int/2860.php>  
<http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

GGO table: <http://www.tbs-sct.gc.ca/rpp/2011-2012/info/info-eng.asp>

Departmental website: <http://www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1>

FSDS website: <http://www.ec.gc.ca/dd-sd/default.asp?lang=En&n=C2844D2D-1>