Environment Canada Environnement Canada

Environment Canada

2013–14

Departmental Performance Report

The Honourable Leona Aglukkaq, P.C., M.P.
Minister of the Environment

Canada

Departmental Performance Report 2013-14

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Erratum

Subsequent to tabling in Parliament and online publication of the 2013-14 Departmental Performance Report, Environment Canada determined that the Performance Summary and Lessons Learned section for Program 1.4: Compliance Promotion and Enforcement – Wildlife, in Section II of the report, contained an error in both the English and French versions.

Within Program 1.4: Compliance Promotion and Enforcement – Wildlife, it stated:

"…Of 12,805 **charges laid** as a result of this work, 10,000 involved a sudden influx of illegal small importations of a weight-loss product made from an endangered species—this more than doubled the typical number of annual inspections."

It should have read instead:

"…Of 12,805 **violations identified** as a result of this work, 10,000 involved a sudden influx of illegal small importations of a weight-loss product made from an endangered species—this more than doubled the typical number of annual inspections."

The PDF and HTML online versions of the report have been updated with the correct wording.

Foreword

Departmental Performance Reports are part of the Estimates family of documents. Estimates documents support appropriation acts, which specify the amounts and broad purposes for which funds can be spent by the government. The Estimates document family has three parts.

Part I (Government Expenditure Plan) provides an overview of federal spending.

Part II (Main Estimates) lists the financial resources required by individual departments, agencies and Crown corporations for the upcoming fiscal year.

Part III (Departmental Expenditure Plans) consists of two documents. Reports on Plans and Priorities (RPPs) are expenditure plans for each appropriated department and agency (excluding Crown corporations). They describe departmental priorities, strategic outcomes, programs, expected results and associated resource requirements, covering a three-year period beginning with the year indicated in the title of the report. Departmental Performance Reports (DPRs) are individual department and agency accounts of actual performance, for the most recently completed fiscal year, against the plans, priorities and expected results set out in their respective RPPs. DPRs inform parliamentarians and Canadians of the results achieved by government organizations for Canadians.

Additionally, Supplementary Estimates documents present information on spending requirements that were either not sufficiently developed in time for inclusion in the Main Estimates or were subsequently refined to account for developments in particular programs and services.

The financial information in DPRs is drawn directly from authorities presented in the Main Estimates and the planned spending information in RPPs. The financial information in DPRs is also consistent with information in the Public Accounts of Canada. The Public Accounts of Canada include the Government of Canada Consolidated Statement of Financial Position, the Consolidated Statement of Operations and Accumulated Deficit, the Consolidated Statement of Change in Net Debt, and the Consolidated Statement of Cash Flow, as well as details of financial operations segregated by ministerial portfolio for a given fiscal year. For the DPR, two types of financial information are drawn from the Public Accounts of Canada: authorities available for use by an appropriated organization for the fiscal year, and authorities used for that same fiscal year. The latter corresponds to actual spending as presented in the DPR.

The Treasury Board Policy on Management, Resources and Results Structures further strengthens the alignment of the performance information presented in DPRs, other Estimates documents and the Public Accounts of Canada. The policy establishes the Program Alignment Architecture of appropriated organizations as the structure against which financial and non-financial performance information is provided for Estimates and parliamentary reporting. The same reporting structure applies irrespective of whether the organization is reporting in the Main Estimates, the RPP, the DPR or the Public Accounts of Canada.

A number of changes have been made to DPRs for 2013−14 to better support decisions on appropriations. Where applicable, DPRs now provide financial, human resources and performance information in Section II at the lowest level of the organization’s Program Alignment Architecture.

In addition, the DPR’s format and terminology have been revised to provide greater clarity, consistency and a strengthened emphasis on Estimates and Public Accounts information. As well, departmental reporting on the Federal Sustainable Development Strategy has been consolidated into a new supplementary information table posted on departmental websites. This new table brings together all of the components of the Departmental Sustainable Development Strategy formerly presented in DPRs and on departmental websites, including reporting on the Greening of Government Operations and Strategic Environmental Assessments. Section III of the report provides a link to the new table on the organization’s website. Finally, definitions of terminology are now provided in an appendix.

Minister's Message

As Minister of the Environment, I am pleased to present the 2013–14 Departmental Performance Report. This report outlines Environment Canada's progress in addressing the priorities and commitments set out in the 2013–14 Report on Plans and Priorities.

On the topic of conservation and biodiversity issues, we have made significant progress. As of March 31, 2014 Environment Canada has proposed or finalized recovery documents (recovery strategies and management plans) for 146 species under the *Species at Risk Act*.

Moreover, earlier this year, the government launched the National Conservation Plan (NCP), which will provide a more coordinated approach to conservation efforts across the country with an emphasis on enabling Canadians to conserve and restore lands and waters in and around their communities, and making it easier for citizens living in cities to connect with nature.

The NCP will include significant additional investments over five years to secure ecologically sensitive lands, support voluntary conservation and restoration actions, and strengthen marine and coastal conservation. In addition, it will contain new initiatives designed to restore wetlands and to encourage Canadians to connect with nature close to home through protected areas and green spaces located in or near urban areas.

We continued to make progress in advancing the clean air agenda. Domestically, our approach to reducing greenhouse gases has seen the introduction of new rules to improve fuel efficiency from new on-road heavy-duty vehicles and engines. Working with the provinces and territories, we put in place new, more stringent standards for ambient air quality.

While in New York to participate in a series of international climate change meetings leading up to and including the UN Climate Summit, we announced several bold, new regulatory initiatives showcasing our commitment to address climate change while keeping the Canadian economy strong; including three regulatory initiatives for greenhouse gas and air pollutant emissions reductions from cars and trucks, and Canada's intention to address potent domestic hydrofluorocarbon emissions.

Internationally, we contributed to the development of practical and collaborative initiatives, through the Climate and Clean Air Coalition to reduce greenhouse gas emissions and short-lived climate pollutants. We participated in trade and environmental negotiations, which resulted in the conclusion of the Comprehensive Economic and Trade Agreement with the European Union. We also signed the Minamata Convention on Mercury in an effort to better protect human health and the environment from human sources of emissions and releases of mercury and mercury compounds.

Actions carried out to deliver on the Chemicals Management Plan included twenty research projects that address priority substances. We remain on track to meet our international commitment for the management of 4,200 chemicals in Canada by 2020.

Throughout the year, we provided Canadians with weather forecasts and warnings of severe weather and provided immediate response and support to the Lac-Mégantic railway disaster through weather forecasting, water sampling and air and smoke dispersion modelling.

On water issues, we worked collaboratively with partners to protect ecosystems, made significant investments in cleaning up contaminated sites, and invested in restoring the ecological health of Lake Simcoe and South-eastern Georgian Bay, and Lake Winnipeg.

Environment Canada continued to expand its monitoring efforts in the oil sands region and delivered on its commitment to increase transparency and improve accessibility of monitoring results and data on the departmental website and Government of Canada data portal.

The year also saw the tabling of the second Federal Sustainable Development Strategy (2013-16), which further advanced our commitment to making environmental decision making more transparent and accountable.

I invite you to read the report for details of these and many more activities undertaken to ensure a clean, safe and sustainable environment for today and for generations to come.

(Original signed by)

The Honourable Leona Aglukkaq, P.C., M.P.

Minister of the Environment

Section I: Organizational Expenditure Overview

Organizational Profile

Appropriate Minister: The Honourable Leona Aglukkaq, P.C., M.P.

Institutional Head: Michael Martin

Ministerial Portfolio: Environment Canada

Enabling Instruments:

- *Department of the Environment Act*[i]
- *Canadian Environmental Protection Act, 1999*[ii]
- *Species at Risk Act*[iii]
- *International River Improvements Act*[iv]
- *Canada Water Act*[v]
- *The Lake of the Woods Control Board Act, 1921*[vi]
- *Weather Modification Information Act*[vii]
- *Fisheries Act*[viii] (administration of the Pollution Prevention Provisions)
- *Antarctic Environmental Protection Act*[ix]
- *Migratory Birds Convention Act, 1994*[x]
- *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*[xi]
- *Canada Wildlife Act*[xii]
- *Federal Sustainable Development Act*[xiii]
- *Canadian Environmental Assessment Act, 2012*[xiv]
- *Environmental Violations Administrative Monetary Penalties Act*[xv]
- *National Wildlife Week Act*[xvi]

Year of Incorporation/Commencement: 1971

Other

Environment Canada has a long history. The Department was created in 1971, but some of its component organizations are much older. The Canadian Wildlife Service was founded in 1947, the Water Survey of Canada in 1908, and the Meteorological Service of Canada in 1871.

Environment Canada has a national workforce. About 60% of the Department's workforce is located outside the National Capital Region. Department employees are located across Canada, from Iqaluit to Burlington and Vancouver to St. John's, and they work in field offices, laboratories, National Wildlife Areas and weather stations.

Environment Canada is a science-based department. Science is central to Environment Canada's capacity to achieve its mandate and meet its legislative obligations. The Department conducts a wide range of environmental monitoring, research and other scientific activities in fields such as atmospheric sciences, meteorology, physics, biology, chemistry, toxicology, hydrology, ecology, engineering and informatics. The scientific information and knowledge produced is used to inform departmental programs,

policies and services, and includes the collection and dissemination of knowledge to support sound environmental decision making. In 2013–14, Environment Canada developed the *Environment Canada Science Strategy 2014–2019*[xvii], which tells the Department's science story and provides the direction and guidance needed to help ensure its science continues to be directed toward federal environmental priorities.

Environment Canada works collaboratively with many partners. Environmental issues have wide-ranging implications for social and economic decisions. Environment Canada works in collaboration with many partners, including other federal government departments, provincial and territorial governments, Aboriginal governments and organizations, the governments of other nations, academic institutions, environmental non-governmental organizations, and international organizations. This collaboration enhances the efforts of all partners in working for a clean, safe and sustainable environment and to achieve planned environmental results.

Environment Canada is committed to operating as a world-class regulator. As an important federal regulator, Environment Canada works within the broader federal performance-based regulatory system by developing, promoting compliance with, and enforcing a wide array of regulations to protect Canadians and their environment. The Department is committed to maintaining a regulatory system that is evidence-based, effective, efficient, transparent and adaptable.

Organizational Context

Raison d'être

Environment Canada is the lead federal department for a wide range of environmental issues affecting Canadians. The Department also plays a stewardship role in achieving and maintaining a clean, safe and sustainable environment. Environment Canada addresses issues through monitoring, research, policy development, service delivery to Canadians, regulations, enforcement of environmental laws, advancement of clean technologies and strategic partnerships. The Department's programs focus on ***a clean environment*** by minimizing threats to Canadians and their environment from pollution; ***a safe environment*** by equipping Canadians to make informed decisions on weather, water and climate conditions; and ***a sustainable environment*** by conserving and restoring Canada's natural environment. The Department's program focus reflects the increasingly evident interdependence between environmental sustainability and economic well-being.

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 matters such as:

- the preservation and enhancement of the quality of the natural environment, including water, air and soil quality, and the coordination of the relevant policies and programs of the Government of Canada;
- renewable resources, including migratory birds and other non-domestic flora and fauna;
- meteorology; and
- the enforcement of rules and regulations.

Beyond those authorities conferred under the *Department of the Environment Act*, the Minister of the Environment exercises additional authorities provided under other acts and regulations[xviii] including (but not limited to) the *Canadian Environmental Protection Act, 1999* (CEPA 1999), the *Federal Sustainable Development Act*, and several pieces of legislation relating to the protection of biodiversity and water and the enforcement of environmental laws and regulations (e.g., the *Species at Risk Act*).

The Department is a key partner to other federal departments, including the Canadian Environmental Assessment Agency and Parks Canada, which are its ministerial portfolio partners, where statutes provide Environment Canada with secondary or shared responsibility for the successful execution of other federal departments' mandates. For example, under CEPA 1999, Environment Canada provides information and analysis to others as a federal authority to support robust environmental assessments. Other statutes include the *Arctic Waters Pollution Prevention Act* (Transport Canada, Aboriginal Affairs and Northern Development Canada, and Natural Resources Canada); the *Canada Foundation for Sustainable Development Technology Act* (Natural Resources Canada); and the *Fisheries Act* (Fisheries and Oceans Canada).

Strategic Outcomes and Program Alignment Architecture

Environment Canada fulfills its mandate by promoting three Strategic Outcomes, each contributing to the Government of Canada Outcome of a clean and healthy environment. There are 9 Programs, 26 Sub-Programs, and 19 Sub-Sub-Programs that are aligned to support the achievement of the Department's three Strategic Outcomes. Together, the Strategic Outcomes, Programs, Sub-Programs, and Sub-Sub-Programs support progress against the Department's stewardship mandate of providing a clean, safe and sustainable environment.
The Department's Strategic Outcomes, Programs and Sub-Programs as well as its Internal Services for 2013–14 are shown below.

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

    - **1.1 Program:** Biodiversity – Wildlife and Habitat
        - **1.1.1 Sub-Program:** Biodiversity Policy and Priorities
        - **1.1.2 Sub-Program:** Species at Risk
            - **1.1.2.1 Sub-Sub-Program:** Species at Risk Operations
            - **1.1.2.2 Sub-Sub-Program:** Aboriginal Fund for Species at Risk
            - **1.1.2.3 Sub-Sub-Program:** Habitat Stewardship Program
        - **1.1.3 Sub-Program:** Migratory Birds
        - **1.1.4 Sub-Program:** Wildlife Habitat Conservation
            - **1.1.4.1 Sub-Sub-Program:** Habitat Conservation Partnerships
            - **1.1.4.2 Sub-Sub-Program:** Protected Areas

    - **1.2 Program:** Water Resources
        - **1.2.1 Sub-Program:** Water Quality and Aquatic Ecosystems Health
        - **1.2.2 Sub-Program:** Water Resource Management and Use
        - **1.2.3 Sub-Program:** Hydrological Service and Water Survey

    - **1.3 Program:** Sustainable Ecosystems
        - **1.3.1 Sub-Program:** Sustainability Reporting and Indicators
        - **1.3.2 Sub-Program:** Ecosystem Assessment and Approaches
        - **1.3.3 Sub-Program:** Community Engagement
            - **1.3.3.1 Sub-Sub-Program:** EcoAction Community Funding
            - **1.3.3.2 Sub-Sub-Program:** Environmental Damages Fund
            - **1.3.3.3 Sub-Sub-Program:** Environmental Youth Employment
            - **1.3.3.4 Sub-Sub-Program:** Education and Engagement
        - **1.3.4 Sub-Program:** Ecosystems Initiatives
            - **1.3.4.1 Sub-Sub-Program:** Great Lakes
            - **1.3.4.2 Sub-Sub-Program:** St. Lawrence
            - **1.3.4.3 Sub-Sub-Program:** Lake Simcoe
            - **1.3.4.4 Sub-Sub-Program:** Lake Winnipeg
            - **1.3.4.5 Sub-Sub-Program:** Community Engagement Partnerships

1.4 Program: Compliance Promotion and Enforcement – Wildlife

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

2.1 Program: Weather and Environmental Services for Canadians
- **2.1.1 Sub-Program:** Weather Observations, Forecasts and Warnings
- **2.1.2 Sub-Program:** Health-related Meteorological Information
- **2.1.3 Sub-Program:** Climate Information, Predictions and Tools

2.2 Program: Weather and Environmental Services for Targeted Users
- **2.2.1 Sub-Program:** Meteorological Services in Support of Air Navigation
- **2.2.2 Sub-Program:** Meteorological and Ice Services in Support of Marine Navigation
- **2.2.3 Sub-Program:** Meteorological Services in Support of Military Operations
- **2.2.4 Sub-Program:** Meteorological Services for Economic and Commercial Sectors

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

3.1 Program: Substances and Waste Management
- **3.1.1 Sub-Program:** Substances Management
- **3.1.2 Sub-Program:** Effluent Management
- **3.1.3 Sub-Program:** Marine Pollution
- **3.1.4 Sub-Program:** Environmental Emergencies
- **3.1.5 Sub-Program:** Contaminated Sites

3.2 Program: Climate Change and Clean Air
- **3.2.1 Sub-Program:** Climate Change and Clean Air Regulatory Program
  - **3.2.1.1 Sub-Sub-Program:** Industrial Sector Emissions
  - **3.2.1.2 Sub-Sub-Program:** Transportation Sector Emissions
  - **3.2.1.3 Sub-Sub-Program:** Consumer and Commercial Products Sector
- **3.2.2 Sub-Program:** International Climate Change and Clean Air Partnerships
- **3.2.3 Sub-Program:** Environmental Technology
  - **3.2.3.1 Sub-Sub-Program:** Sustainable Development Technologies
  - **3.2.3.2 Sub-Sub-Program:** Environmental Technology Innovation

3.3 Program: Compliance Promotion and Enforcement – Pollution

Internal Services

Organizational Priorities

Environment Canada is maintaining four priorities for 2013–14. These priorities reflect the Department's stewardship mandate that, in turn, directly supports the Government of Canada's outcome of a clean and healthy environment. The Department has achieved progress in delivering these priorities, as set out in the following tables.

Priority	Type	Strategic Outcome(s) and/or Program(s)
Priority 1: A Clean Environment Manage substances and waste, and reduce pollution that directly or indirectly harms human health or the environment.	Ongoing	**Links to:** **Strategic Outcome 3:** Threats to Canadians and their environment from pollution are minimized. **Programs:** 3.1, 3.2, 3.3

Summary of Progress

Progress Achieved:

On climate change and clean air . . .

- Finalized regulations to improve fuel efficiency and cut greenhouse gas emissions from new on-road heavy-duty vehicles and engines;
- Put in place new Canadian Ambient Air Quality Standards that set more stringent and comprehensive objectives for fine particulate matter and ground level ozone for outdoor air quality than previous standards. Air quality science informed the development of these standards;
- Participated in key international clean air and climate change activities and negotiations, including:
    - The 19th Conference of the Parties of the United Nations Framework Convention on Climate Change by contributing to a clear path forward to an effective post-2020 climate change agreement, delivering on Canada's reporting obligations, and continuing to oversee and track the roll-out of initiatives funded with Canada's $1.2 billion from fast-start financing;
    - The Montreal Protocol, with ongoing efforts to advance international action to reduce the consumption and production of hydrofluorocarbons;
    - The Climate and Clean Air Coalition, by contributing to the development of practical and collaborative initiatives to reduce short-lived climate pollutants;
    - The Intergovernmental Panel on Climate Change, where Environment Canada continued to lead Canada's delegation and contribute scientific knowledge on climate change;
    - The Arctic Council—currently chaired by the Minister—by co-chairing the Task Force for Action on Black Carbon and Methane in its work to reduce these emissions;
    - Other multilateral and regional fora, such as the United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution and the Commission of Environmental Cooperation, and bilateral initiatives, including the United States–Canada Clean Energy Dialogue and the Canada–United States Air Quality Agreement; and
- Continued air quality monitoring in the oil sands, and continued to deliver on its commitment to increase transparency and improve accessibility of monitoring results and data (through the departmental website and Government of Canada data portal).

On managing substances and waste . . .

- Participated on the ground following the Lac-Mégantic railway disaster, providing scientific and technical advice to firefighters, police, response contractors, the Province of Quebec and Transport Canada; and through the Meteorological Service of Canada, used modelling to predict where smoke and pollutants would travel to support the work of firefighters and community evacuation teams;

- Continued to deliver on the Chemicals Management Plan (CMP)—Canada remains on track to meet its international commitment to address nearly 4,300 chemicals in Canada by 2020;
- Continued to provide a strong science foundation for the CMP by carrying out research and monitoring that has addressed about 175 substances and resulted in about 120 scientific papers since 2011 to support the CMP and the *Canadian Environmental Protection Act, 1999*;
- Following four years of participation in global negotiations, signed the Minamata Convention on Mercury to protect human health and the environment from releases of mercury and mercury compounds, and hosted the first technical expert meeting on atmospheric emissions;
- Met Canada's objectives for international management of chemicals and wastes at the first simultaneous meetings of the Conferences of the Parties to the Stockholm, Rotterdam and Basel Conventions.; and
- Chaired the Meetings of the Parties to the London Protocol and Convention. An important amendment to the London Protocol to further regulate ocean fertilization and better protect the world's oceans from pollution was adopted at this year's meetings.

On enforcement of pollution regulations . . .

- Took enforcement measures that resulted in penalties, including one of the largest fines ever levied—a $500,000 fine (under the *Fisheries Act*) for the illegal use of a pesticide in the ocean off southwestern New Brunswick.

Priority	**Type**	**Strategic Outcome(s) and/or Program(s)**
Priority 2: A Safe Environment Provide Canadians with high-quality information on immediate and long-term environmental conditions.	Ongoing	**Links to:** **Strategic Outcome 2:** Canadians are equipped to make informed decisions on changing weather, water and climate conditions**.** **Programs:** 2.1, 2.2
Summary of Progress		

Progress Achieved:

- Delivered critical weather services 24/7 to meet the needs of targeted users and Canadians;
- Provided weather forecasting, water sampling, and air and smoke dispersion modelling in support of the communities and environments hit by severe weather events, including the Calgary flood, the Toronto ice storm and other winter storms and tornados, and supported the response to the Lac-Mégantic railway disaster;
- Expanded weather warning and prediction services in the North through the Arctic Meteorological Areas (METAREAs) initiative to deliver ice and marine forecasts to mariners and northerners;
- Had over 600 million page views on the Weatheroffice website, accounting for over one half of all traffic on the Government of Canada website. The Department's Datamart portal experienced millions of downloads of climate information daily;
- Continued to lead international efforts under the Global Framework for Climate Services in developing the Framework and priorities for action; and
- Upgraded hydrogen generation systems at three Upper Air Monitoring stations to replace aging technology and provide greater reliability and safety.

Priority	Type	Strategic Outcome(s) and/or Program(s)
Priority 3: A Sustainable Environment Ensure that land, water and biodiversity are sustained.	Ongoing	**Links to:** **Strategic Outcome 1:** Canada's natural environment is conserved and restored for present and future generations. **Programs:** 1.1, 1.2, 1.3, 1.4

Summary of Progress

Progress Achieved:

- Advanced the Department's strong record of conservation through further development of the National Conservation Plan[xix]. The Department continues to foster strong and long-term partnerships with various stakeholders, who helped shape the Plan's vision and key themes: conserving Canada's lands and waters, restoring ecosystems, and connecting Canadians to nature;
- Published an Emergency Order under the *Species at Risk Act*, to protect the Greater Sage-Grouse, which faces imminent threats to its survival;
- Continued research and action to address bird mortality from human activity, which will contribute to the dissemination of knowledge on impacts to birds and ultimately to inform management actions;
- Participated in a Ministerial meeting of signatory nations to the 1973 Agreement on the Conservation of Polar Bears. The Minister also chaired the Arctic Council's Conservation of Arctic Flora and Fauna working group on biodiversity;
- Renewed the Canada-Quebec agreement on the protection and recovery of species at risk;
- Celebrated receiving the thousandth ecological gift under the Department's Ecological Gift Program. Since the program's inception in 1995, over 150,000 ha of wildlife habitat have been donated and conserved;
- Awarded $4.5 million over four years to 83 community projects to meet a range of local environmental needs and challenges;
- Provided scientific and technical expertise to decision-makers under multiple environmental assessment regimes in support of the Responsible Resource Development Initiative. The Department also participated in whole-of-government Aboriginal consultation activities in relation to a number of project reviews;
- Through its comprehensive approach to protecting water resources and ecosystems, provided leadership and coordination to major ecosystem initiatives and water boards in support of ecosystem management and water quality and quantity—many of these initiatives involved negotiation and collaboration with numerous partners and stakeholders in Canada and the United States;
- Signed an agreement with partners involved in the $138.9 million Randle Reef sediment remediation project in Hamilton Harbour; invested $29 million to restore ecological health to Lake Simcoe and South-eastern Georgian Bay; and established some 18 contribution agreements aimed at improving water quality in the Lake Winnipeg Basin;
- Monitored and published data and results of water and biodiversity monitoring in the Alberta oil sands; and
- In Parliament, tabled the second Federal Sustainable Development Strategy (2013–16), which updates the whole-of-government view of environmental priorities; added 3 new indicators to the Canadian Environmental Sustainability Indicators and updated another 18 indicators.

On enforcement of wildlife regulations . . .

- Resulted in penalties, including one of the largest fines ever levied—a $385,000 fine (under the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*) for the illegal export of some 250 Narwhal ivory tusks to the United States.

Priority	Type	Strategic Outcome(s) and/or Program(s)
Priority 4: Management Priority Ensuring that activities and resources are aligned to support delivery of programs, services and results to Canadians.	Ongoing	**Links to all Strategic Outcomes and Programs**
Summary of Progress		
Progress Achieved: • Collaborated with Shared Services Canada (SSC) to put in place a governance model between SSC and Environment Canada to ensure that vital services are maintained during the transition to sharing information management/information technology services; and continued to implement the Government of Canada's transformation agenda to modernize the workplace, through improving the departmental website, making greater use of technology to reduce printing and face-to-face meeting costs, and completing the transformation of the Department's library to a virtual library; • Developed Environment Canada's People Management Strategy for 2013–16 based on strategic discussions to identify priorities and to assist in reallocating resources in support of these priorities; and • Supported the Department's international work with organizations such as the United Nations Environment Programme, the Organisation for Economic Co-operation and Development, and the Commission for Environmental Cooperation.		

Risk Analysis

This section describes the Department's corporate risks as identified in the 2013–14 Report on Plans and Priorities, summarizes Environment Canada's response to these corporate risks, and provides the relevant links to the Departmental Program Alignment Architecture and organizational priorities. The mitigation measures (i.e., the risk response strategies) are aimed at minimizing the threats to the Department's capacity to deliver on its mandate and to meet its operational and management priorities.

Risk	Risk Response Strategy	Link to Program Alignment Architecture
Engagement: Risks related to engagement with domestic and international partners and stakeholders to help conserve and protect the environment.	Short-term and longer-term actions include building and strengthening relations with citizens, stakeholders and partners, including through collaborative planning networks/processes to facilitate better sharing of information, understanding of strategic priorities and potential changes, clarity of roles and responsibilities, and more timely mitigating actions as required. Examples of these actions include: work with Interpol and the Commission for Environmental Cooperation; memoranda of understanding for data exchanges; online tools for consultations; establishment of a Liaison Office with Shared Services Canada and creation of interdepartmental committees. In addition, departmental and topic-specific training sessions (e.g., stakeholder relations training, Policy on Public Participation and Aboriginal Consultations) have been provided.	1.1 Biodiversity, 1.2 Water Resources, 1.3 Sustainable Ecosystems, 2.1 Weather and Environmental Services for Canadians, 2.2 Weather and Environmental Services for Targeted Users, 3.1 Substances and Waste Management, 3.2 Climate Change and Clean Air and 4.1 Internal Services

Business Continuity: Risks related to the provision of critical services to support the health and safety of Canadians.	The Department will continue to utilize established channels, protocols and agreements within the Department and with its key stakeholders such as Shared Services Canada, to ensure that the risks associated with the delivery of its services are managed; the viability and readiness of business continuity plans will continue to be tested, both nationally and regionally; training will continue to be provided for stakeholders and staff responsible for responding to emergencies. Technology and system backups are in place, as is an Emergency Preparedness Plan.	2.1 Weather and Environmental Services for Canadians, 2.2 Weather and Environmental Services for Targeted Users and 3.1.4 Environmental Emergencies
Skills: Risks related to the development and retention of employees with essential skills.	Key considerations for building a capable workforce include employee well-being, employee training, ensuring managers are properly equipped to perform their managerial role, and promoting a culture of performance management. The Department will examine, with other science-based departments, options for updating resourcing models for scientists (classifying, recruiting, deploying, compensating). The Department has completed strategies such as Meteorological Service of Canada's People Plan, and is implementing the Public Service Performance Management Program.	Strategic Outcomes 1, 2 and 3.

Risk Narrative

Environment Canada's objectives and Strategic Outcomes, along with the risks the Department faces, are influenced by the environment in which it operates. For the risks included in the 2011–13 Corporate Risk Profile and 2013–14 RPP, key risk considerations external to the Department were as follows:

- Increasing Canadian and international expectations concerning the management of the environment;
- The continuously increasing pace of advances in science and technology;
- The uncertain economic and fiscal climate, resource constraints/limitations on partners and stakeholders;
- Changing, competing and/or conflicting priorities from domestic and international stakeholders;
- Competition for specialized skills and experiences; and
- Potential disruption of services caused by natural or anthropogenic hazards (e.g., severe weather, infrastructure failure).

Risk management continues to be a key activity for the Department. At the management level, risk information is used to inform departmental priority setting, business and resource planning, and decision making. To assist managers to strengthen their risk-based planning and decision making and foster a culture of responsible and informed risk taking, the Department will continue to advance risk management and awareness across all organizational levels.

Actual Expenditure

Budgetary Financial Resources (dollars)*

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	Difference (actual minus planned)
959,359,318	951,598,759	1,059,384,177	978,949,548	27,350,789

*All figures, throughout the document, are net of respendable revenues.

The Department's planned spending reflects approved funding by Treasury Board to support departmental Strategic Outcomes and Programs. Throughout the year, new and renewed funding added $107.8 million to planned spending, increasing the total authorities to $1,059.4 million. The increase was mainly attributed to funding received for a payment made to the Nature Conservancy of Canada, the retroactive payments of salaries and wages for the renewal of collective agreements, and funding provided via the Treasury Board central votes (e.g., operating and capital budget carry-forwards, severance payments and maternity leave).

The actual spending of $978.9 million (92.4% of total authorities) reflects the departmental expenditures as reported in the Public Accounts, and is higher than planned spending mostly due to increased payments in lieu of severance pay, and retroactive salaries and wages for the renewal of collective agreements, which was offset by unused funding for the Sustainable Development Technology Canada Foundation.

Human Resources (Full-Time Equivalents—FTEs)*

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
6,518	6,307	-211

*Totals may differ within and between tables due to the rounding of figures. The FTE numbers, throughout the document, include students.

The human resources required to sustain an average level of employment for one full-time equivalent (FTE) over a 12-month period is based on a 37.5-hour work week. Environment Canada used 6,307 FTEs versus the planned FTEs of 6,518 in 2013–14, a decrease of 211 FTEs (3.2%). Planned and actual FTEs should be read in relation to planned and actual spending, respectively, in the 2013–14 Financial Resources table above.

Budgetary Performance Summary for Strategic Outcomes and Programs (dollars)

Strategic Outcomes and Programs	2013–14 Main Estimates	2013–14 Planned Spending	2014–15 Planned Spending	2015–16 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2012–13 Actual Spending (authorities used)	2011–12 Actual Spending (authorities used)
Strategic Outcome 1: Canada's natural environment is conserved and restored for present and future generations.								
Program 1.1 Biodiversity – Wildlife and Habitat	99,530,109	99,756,179	91,592,394	77,524,130	122,992,217	120,519,001	124,279,701	138,780,378
Program 1.2 Water Resources	96,788,965	96,788,964	91,196,857	88,228,013	104,913,126	100,322,337	108,552,181	107,643,683
Program 1.3 Sustainable Ecosystems	66,589,903	71,635,870	92,013,642	82,871,755	70,851,606	70,727,194	67,500,282	66,180,594
Program 1.4 Compliance Promotion and Enforcement – Wildlife	16,623,597	16,849,667	15,821,926	15,321,593	18,545,835	18,208,956	16,695,292	17,467,430
Strategic Outcome 1 Subtotal	279,532,574	285,030,680	290,624,819	263,945,491	317,302,784	309,777,488	317,027,456	330,072,085
Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions.								
Program 2.1 Weather and Environmental Services for Canadians	158,545,334	153,545,334	165,962,548	170,289,173	189,462,286	182,818,981	167,695,081	172,435,665
Program 2.2 Weather and Environmental Services for Targeted Users	25,547,830	25,547,829	25,266,280	20,608,912	28,557,210	26,618,144	23,048,760	24,057,561
Strategic Outcome 2 Subtotal	184,093,164	179,093,163	191,228,828	190,898,085	218,019,496	209,437,125	190,743,841	196,493,226
Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized.								
Program 3.1 Substances and Waste Management	73,874,896	74,553,108	75,747,789	73,834,432	86,290,566	84,616,666	79,295,781	83,291,322
Program 3.2 Climate Change and Clean Air	179,283,757	179,509,827	234,152,193	117,621,925	186,131,979	125,118,027	157,525,949	118,255,660
Program 3.3 Compliance Promotion and Enforcement – Pollution	43,773,701	43,999,770	38,324,642	37,797,194	46,216,846	44,661,876	41,707,206	43,266,981
Strategic Outcome 3 Subtotal	296,932,354	298,062,705	348,224,624	229,253,551	318,639,391	254,396,569	278,528,936	244,813,963
Internal Services Subtotal	198,801,226	189,412,211	181,427,802	177,365,530	205,422,506	205,338,366	203,355,229	237,096,982
Total	959,359,318	951,598,759	1,011,506,073	861,462,657	1,059,384,177	978,949,548	989,655,462	1,008,476,256

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

The actual spending for 2013–14 is higher than planned spending, mainly attributed to funding received for a payment made to the Nature Conservancy of Canada (NCC) as well as increased payments in lieu of severance pay, and retroactive payments of salaries and wages for the renewal of collective agreements. Actual spending reduction in 2013–14 compared to 2012–13 is due to a lower payment made to the NCC. The reduction in planned spending from 2014–15 to 2015–16 is primarily due to the sunsetting of funds provided in Budget 2012 for the Species at Risk program as well as decreased funding for the Action Plan on Clean Water initiative.

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

The actual spending for 2013–14 is higher than planned spending, mainly due to increased payments in lieu of severance pay, and retroactive payments of salaries and wages for the renewal of collective agreements. These two factors also explain the actual spending increase in 2013–14 compared to 2012–13. The increase between planned spending from 2013–14 to 2014–15 is mainly due to a realignment of funds associated with the transfer to Shared Services Canada (SSC).

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

The planned spending for 2013–14 is higher than actual spending, mainly due to the unspent funding for the Sustainable Development Technology Canada (SDTC) Foundation, offset by the increase in payments in lieu of severance pay for the renewal of collective agreements. Actual spending reduction in 2013–14 compared to 2012–13 is due to the completion of the Fast Start Financing under the Copenhagen Accord. The increase in planned spending from 2013–14 to 2014–15 is mainly due to funding for the SDTC Foundation.

Internal Services

The actual spending for 2013–14 is higher than planned spending, mainly due to a realignment of funds associated with the transfer to SSC as well as increase in payments in lieu of severance pay for the renewal of collective agreements. The decrease between planned spending from 2013–14 to 2014–15 is mainly due to savings measures.

Alignment of Spending with the Whole-of-Government Framework

Alignment of 2013–14 Actual Spending with the Whole-of-Government Spending Areas[xx] (dollars)

Strategic Outcome	Program	Spending Area	Government of Canada Outcome	2013–14 Actual Spending
Strategic Outcome 1: Canada's natural environment is conserved and restored for present and future generations.	**Program 1.1 Biodiversity – Wildlife and Habitat**	Economic Affairs	A clean and healthy environment	120,519,001
	Program 1.2 Water Resources	Economic Affairs	A clean and healthy environment	100,322,337
	Program 1.3 Sustainable Ecosystems	Economic Affairs	A clean and healthy environment	70,727,194
	Program 1.4 Compliance Promotion and Enforcement – Wildlife	Economic Affairs	A clean and healthy environment	18,208,956
Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions.	**Program 2.1 Weather and Environmental Services for Canadians**	Economic Affairs	A clean and healthy environment	182,818,981
	Program 2.2 Weather and Environmental Services for Targeted Users	Economic Affairs	A clean and healthy environment	26,618,144
Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized.	**Program 3.1 Substances and Waste Management**	Economic Affairs	A clean and healthy environment	84,616,666
	Program 3.2 Climate Change and Clean Air	Economic Affairs	A clean and healthy environment	125,118,027
	Program 3.3 Compliance Promotion and Enforcement – Pollution	Economic Affairs	A clean and healthy environment	44,661,876

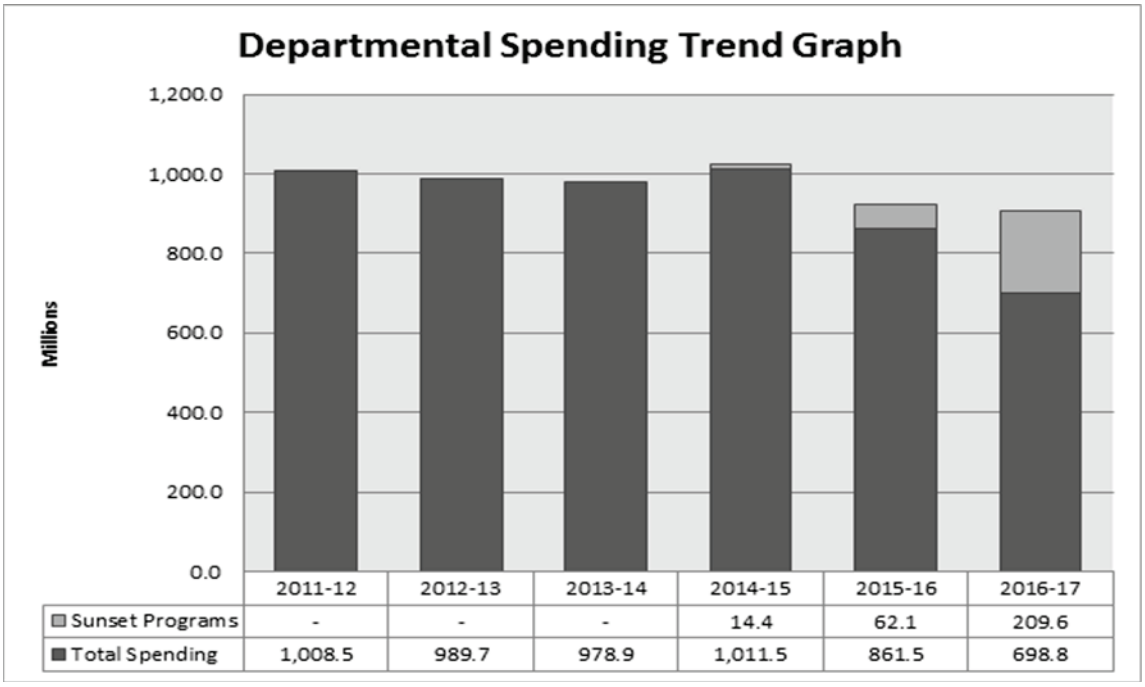
Total Spending by Spending Area (dollars)*

Spending Area	Total Planned Spending*	Total Actual Spending*
Economic Affairs	762,186,548	773,611,182
Social Affairs	0	0
International Affairs	0	0
Government Affairs	0	0

*The total planned and actual spending figures in this table are net of the internal services planned spending ($189,412,211) and actual spending (205,338,366), as they appeared in the Budgetary Performance Summary for Strategic Outcomes and Programs section.

Departmental Spending Trend

The following chart depicts the Departmental Spending Trend over a six-year period. For the period from 2011–12 to 2013–14, actual spending represents the actual expenditures as reported in the Public Accounts. For the period from 2014–15 to 2016–17, the planned spending represents the planned expenditures as reported in the 2014–15 Report on Plans and Priorities, and reflects approved funding by Treasury Board to support the departmental Strategic Outcomes and Programs.



	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Sunset Programs	-	-	-	14.4	62.1	209.6
Total Spending	1,008.5	989.7	978.9	1,011.5	861.5	698.8

As indicated in the chart above, Environment Canada's actual spending for 2013–14 was $978.9 million, a year-over-year decrease of $10.8 million (1.1%) from the 2012–13 actual spending. This decrease is mainly due to the completion of the Fast Start Financing under the Copenhagen Accord, and a lower payment made to the Nature Conservancy of Canada (NCC), offset by increased payments in lieu of severance and retroactive payments of salaries and wages for the renewal of collective agreements.

The decrease of $18.8 million (1.9%) in actual spending from 2011–12 to 2012–13 is mainly due to reductions attributable to implementing new streamlining and efficiency measures, a lower payment made to the NCC, and the transfer for a full year of funding and responsibilities to Shared Services Canada. These reductions were offset by increased spending to support Fast Start Financing under the Copenhagen Accord.

The increase of $32.6 million (3.3%) between actual spending for 2013–14 and planned spending for 2014–15 is mainly due to increased planned spending for the Sustainable Development Technology Canada (SDTC) Foundation and the Action Plan on Clean Water initiative, offset by decreases in planned spending for the NCC and the Clean Air Agenda.

The decrease of $312.7 million (30.9%) in planned spending from 2014–15 to 2016–17 is mainly due to the reduction in funding for the SDTC Foundation and the sunsetting of programs. Sunsetting programs are subject to government decisions to extend, reduce or enhance funding. Outcomes of such decisions will be reflected in the Department's future budget exercises and Estimates documents.

Estimates by Vote

For information on Environment Canada's organizational Votes and/or statutory expenditures, please consult the *Public Accounts of Canada 2014* on the Public Works and Government Services Canada website[xxi].

Section II: Analysis of Programs by Strategic Outcomes

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

Performance Measurement

Performance Indicator	Target	Actual Results
Percentage of terrestrial area protected[1] as a measure of conservation effort	17% by 2020[2]	10.4% (1,037,798 km^2) by December 31, 2013, which is roughly the size of Ontario. Canada's terrestrial protected area, as recognized under the International Union for Conservation Nature definition of protected area, has steadily increased from 5.2% (522,182 km^2) in 1990. Almost half (46%) of the current total has been protected by federal jurisdictions. An additional 4,984 km^2 (0.05%) has been conserved in Other Effective Area-Based Conservation Measures.

Program 1.1: Biodiversity – Wildlife and Habitat

Program Description

This program aims to prevent biodiversity loss while still enabling sustainable use by conserving and managing migratory birds; protecting and recovering species at risk; and conserving, restoring and rehabilitating significant habitats, including via the establishment and maintenance of a network of protected areas and stewardship programs. It also aims to ensure coordinated and coherent national assessment, planning and action to protect biodiversity, including viable populations of species, healthy and diverse ecosystems, and genetic resources. The program includes the formation of strategic partnerships for integrated management of Canada's natural capital, including stewardship and the sustainable management of landscapes. Legal and statutory responsibilities for this program include the *Species at Risk Act*; the *Migratory Birds Convention Act, 1994*; the *Canada Wildlife Act*; and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*. International responsibilities include the United Nations Convention on Biological Diversity (1992), the Migratory Birds Convention, the Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Conservation of Arctic Flora and Fauna Working Group of the Arctic Council, 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.

Budgetary Financial Resources (dollars)*

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	Difference (actual minus planned)
99,530,109	99,756,179	122,992,217	120,519,001	20,762,822

*All figures, throughout the document, are net of respendable revenues.

[1] A "protected" area is a clearly defined geographical space that is recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. "Terrestrial area" includes freshwater for the purposes of this indicator.

[2] The parties to the Convention on Biological Diversity set an aspirational target in October 2010, namely to set aside, by 2020, 17% of terrestrial areas and inland waters and at least 10% of marine areas. As a signatory to the Convention, Canada is contributing to this global target. A specific domestic target for Canada has been developed through consultation with provinces, territories and stakeholders, in recognition of this being a Canada-wide, rather than a federal government target.

Human Resources (Full-Time Equivalents—FTEs)*

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
536	562	26

*Totals may differ within and between tables due to the rounding of figures. The FTE numbers, throughout the document, include students.

Performance Results

Program 1.1: Biodiversity – Wildlife and Habitat			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Populations of migratory birds and federally listed species at risk are maintained or restored	Proportion of assessed migratory bird species in General Status Reports whose status is considered to be secure	2% increase over previous reported value in each five-year General Status Report	2000: 80% 2005: 81% 2010: 77% The number of species ranked as "At Risk" is showing a steady increase and has almost doubled since the first report in 2000. Between reporting years, some species had an increased level of risk, a reduced level of risk, or have been added or deleted from the species list. There are many possible explanations for these variations, including changes in the population size, distribution of or threats to the species, a more detailed assessment prepared by the Committee on the Status of Endangered Wildlife in Canada, an error in previous rankings, improved knowledge of the species, a procedural change or a taxonomic change.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

National Conservation Plan

The Department continued work to meet the commitment made in the 2013 Speech from the Throne to develop the National Conservation Plan[xxii], contributing to the federal government's strong record of conservation. The Plan addresses three priorities: conserving Canada's lands and waters; restoring ecosystems; and connecting Canadians to nature, and further encourages action in terrestrial, freshwater and marine areas—both in protected areas and across working landscapes and seascapes. In addition, the Plan includes funding over a five-year period to restore wetlands and to support voluntary actions to restore and conserve species and their habitats. Furthermore, it builds on the conservation-related announcements made in the 2014 Economic Action Plan, including measures to invest in national parks, conserve recreational fisheries, encourage donations of ecologically sensitive lands, support family-oriented conservation activities and expand recreational trails. Over the past few years, the Plan's vision and priorities were shaped by input from key partners and stakeholders, including comments from the Hunting and Angling Advisory Panel and the House of Commons Standing Committee on Environment and Sustainable Development (April 2013 report on urban conservation and February 2014 report on habitat conservation).

Protecting the Greater Sage-Grouse under the Species at Risk Act

The Department continued to implement the *Species at Risk Act* (SARA), a tool for protecting wildlife species, maintaining healthy ecosystems and preserving Canada's natural heritage. Under SARA, Environment Canada published an Emergency Order to protect the Greater Sage-Grouse from the imminent threats to its survival.

Action on avian mortality

Determining some of the key causes of avian mortality continued to be a priority. Building on several years of extensive scientific assessment to estimate the magnitude of annual bird mortality (approximately 269 million birds) from a range of human-related sources and sectors, the Department published 10 scientific papers in the Canadian scientific journal *Avian Conservation and Ecology*[xxiii]. The Department continued to administer the *Migratory Birds Convention Act, 1994* and SARA to maintain, protect and conserve migratory bird populations.

International collaboration on conservation

Environment Canada remained active internationally on multiple fronts. The Department continued to chair and participate in the Arctic Council's Conservation of Arctic Flora and Fauna Working Group on biodiversity. The Department was also active on polar bear conservation, as Canada is one of five signatory nations to the 1973 Agreement on the Conservation of Polar Bears and also home to two thirds of the world's polar bear population. Canada has been working to incorporate Aboriginal traditional knowledge into conservation efforts.

Sub-Program 1.1.1: Biodiversity Policy and Priorities

Sub-Program Description

This program enables Environment Canada to play a coordinating role at the national level in engaging stakeholders, provincial governments and other federal government departments in Canada's implementation of the United Nations Convention on Biological Diversity, and to represent Canada's domestic interests in international fora. This program uses a mix of science, policy tools, research and partnerships to develop and implement national policy frameworks and strategies (e.g., Canadian Biodiversity Strategy, Biodiversity Outcomes Framework, Access and Benefit Sharing of Genetic Resources), and to advance Canada's biodiversity objectives internationally (e.g., Convention on Biological Diversity; Nagoya Protocol on Access and Benefit-Sharing, Liability and Redress under the Biosafety Protocol; Conservation of Arctic Flora and Fauna under the Arctic Council). Program funding includes Canada's annual contribution to the Secretariat of the Convention on Biological Diversity and support for international working groups.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,228,812	2,759,510	530,698

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
19	14	-5

Performance Results

Sub-Program 1.1.1: Biodiversity Policy and Priorities			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Biodiversity goals and targets are integrated into federal, provincial and territorial strategies and plans that have an impact on biodiversity	Percentage of federal departments, provinces and territories that have accounted for biodiversity in conservation and/or natural resource plans or strategies	100% by summer 2014	The program gathered information on the integration of biodiversity within federal departments and provincial and territorial governments in 2013–14, but the value of the indicator has only been calculated for the federal portion at this time. Federal progress on this indicator has been strong. Among departments with conservation or natural resource mandates, the target of 100% has been met. In many cases this is reflected in the Federal Sustainable Development Strategy (FSDS) targets and implementation strategies, many of which mirror the proposed 2020 Biodiversity Goals and Targets for Canada. Furthermore, the 2013–16 FSDS broadened its scope by bringing more federal departments and agencies on board, as some organizations that are not bound by the *Federal Sustainable Development Act* (e.g., Canadian Food Inspection Agency) have identified FSDS implementation strategies voluntarily. Analysis to confirm coverage among provinces and territories is under way. An initial scan indicates that some provinces and territories have integrated biodiversity into more specific strategies and plans, and some have developed discrete biodiversity strategies or plans.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- In collaboration with a wide range of stakeholders, continued to lead Canada's implementation of the United Nations Convention on Biological Diversity (CBD) by:
    - Coordinating cross-cutting biodiversity policy and the federal/provincial/territorial implementation of the Canadian Biodiversity Strategy (including conducting a second round of engagement with Aboriginal and other stakeholders);
    - Promoting departmental work on conservation and sustainable use at the 17th meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) and acting as regional representative to the SBSTTA Bureau;
    - Contributing, at the 8th Ad Hoc Working Group on Article 8(j) (of the CBD) and Related Provisions (concerned with Aboriginal issues), to progress on a number of fronts: incorporating traditional knowledge into the work of the CBD; improving the participation of indigenous and local communities; advancing a new major component of work related to customary use of biological diversity (i.e., sustainable use by Aboriginal people); identifying best practices to facilitate repatriation of traditional knowledge, and connecting traditional knowledge and science; and
    - Continuing to advocate for the CBD and to encourage its Parties to focus on mobilizing additional financial resources for biodiversity in developing countries through innovative and creative financial mechanisms and domestic public budgets, as well as by increasing the role of the private sector;

- Continued to chair the Conservation of Arctic Flora and Fauna[xxiv] Working Group on biodiversity and, in partnership with other members, completed the first comprehensive Arctic Biodiversity Assessment as well as contributing to a paper to support policy makers involved in arctic biodiversity assessment[xxv] and to the report *Life Linked to Ice*[xxvi], including its policy recommendations. The Department also advanced the Circumpolar Biodiversity Monitoring Program[xxvii], led the Circumpolar Seabird Expert Group[xxviii], developed the Arctic Migratory Bird Initiative, and coordinated the development of an invasive alien species target (and associated indicators) for the Federal Sustainable Development Strategy;
- Continued to serve as lead for the United Nations–sponsored Intergovernmental Platform on Biodiversity and Ecosystem Services[xxix] (IPBES), including by participating in the second plenary session of IPBES, which is part of the preliminary implementation of the organization's 2014–18 program;
- Provided scientific expertise and advice to federal departments and others with environment-related mandates, and completed and published results of the Measuring Ecosystem Goods and Services initiative; and
- Continued work under the Commission for Environmental Cooperation to develop the North American Grasslands Alliance, which supports biodiversity conservation through promotion of sustainable ranching practices. Work included publishing documents on the effects of fire, grazing and distance to wetlands on grassland bird abundance, and funding demonstration projects in Canada, the U.S. and Mexico.

Sub-Program 1.1.2: Species at Risk

Sub-Program Description

The purpose of this program is to ensure implementation of the *Species at Risk Act* (SARA). SARA is a key federal government commitment to prevent wildlife species from becoming extinct and to secure the necessary actions for their recovery. It provides for the legal protection of wildlife species and the conservation of their biological diversity. This is achieved in part through funding programs such as Habitat Stewardship Program (HSP), Aboriginal Fund (AFSAR), and Interdepartmental Recovery Fund. The program relies on partnerships with provincial, territorial and other governments, as well as Aboriginal people and other organizations (e.g., environmental non-governmental organizations, industry associations, etc.). A number of advisory bodies and committees have been established to enable key partners to be engaged in this program. This program is a result of the implementation of the Canadian Biodiversity Strategy, which is in response to the United Nations Convention on Biological Diversity. Authority for the program is based on the SARA and Canada's obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
63,290,305	51,208,098	-12,082,207*

**Species at Risk Act* funds were re-allocated to other programs, notably Migratory Birds and Wildlife Habitat Conservation, which are in direct support of species at risk.

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
267	230	-37

Performance Results

Sub-Program 1.1.2: Species at Risk			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Status of listed species shows improvement upon reassessment	Proportion of federally-listed species at risk, for which recovery is feasible, that exhibit, at the time of reassessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), population and distribution trends consistent with achieving the objectives of recovery strategies	100%	33% as of May 2013 Of the 79 species at risk for which Environment Canada has federal responsibility and that have final recovery strategies, 21 have both population-oriented goals and have had a reassessment since final recovery strategies were released, allowing for the evaluation of whether trends in population numbers and distribution are consistent with recovery goals. Of these 21 species, 7 (33%) have current population trends that are consistent with the goals laid out in the recovery strategies, and 6 (29%) show trends that are inconsistent with goals. Another 2 (10%) have both some indication of improvement and some indication of decline. For the remaining 6 species (29%), there are insufficient data to determine trends. This indicator was revised to align with Target 4.1 of the 2013–16 Federal Sustainable Development Strategy, although the values reported here exclude species for which other federal organizations have primary responsibility.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Issued an emergency protection order for the Greater Sage-Grouse under the *Species at Risk Act* (SARA). The order came into force on February 18, 2014. This marks the first time that the federal government has issued such an order to protect a species facing imminent threats to its survival;
- Met the requirements for consultation and cooperation under SARA for all priority species for which a recovery strategy, action plan or management plan was posted on the SARA Public Registry in 2013–14;
- Posted, on the Species at Risk Public Registry, the recovery strategy for Woodland Caribou (boreal population) and continued collaborative work to implement the strategy; and
- Worked with other circumpolar nations to establish a multi-national Polar Bear management plan, and, domestically, drafted a SARA management plan for Polar Bears in Canada, with consultations planned in 2014.

Sub-Sub-Program 1.1.2.1: Species at Risk Operations

Sub-Sub-Program Description

This program provides the basic components of Environment Canada's Species at Risk program. Through its support for the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), an independent body of experts responsible for assessing and identifying species at risk, the program supports decisions by the Minister on whether to add, reclassify or remove species listed under the *Species at Risk Act*. For those species for which Environment Canada is responsible and that are listed as extirpated, endangered or threatened, recovery strategies and action plans are prepared (including the identification of critical habitat); for species of special concern, management plans are completed. The program supports actions of other federal departments in implementing priority recovery actions on

federal lands and for federal species as identified in recovery documents, as well as cooperative arrangements with provinces and territories to implement recovery actions, in accordance with the federal/provincial/territorial Accord for the Protection of Species at Risk and bilateral agreements resulting from the Act. Monitoring and evaluation of populations and threats to listed species is also a key part of this sub-sub-activity, as is general administration of the Act (including an annual report to Parliament, issuance of permits under the Act, provision of support to the National Aboriginal Council on Species at Risk (NACOSAR), and maintenance of a public registry). The program further ensures that Canada's obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (i.e., control of the import, export and movement within Canada of endangered species listed under CITES) are met through effective implementation of the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*. Program delivery includes the assessed Contribution to the CITES.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
44,163,775	35,482,241	-8,681,534

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
254	216	-38

Performance Results

Sub-Sub-Program 1.1.2.1: Species at Risk Operations			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Publicly available recovery strategies or management plans are in place for all listed species for which Environment Canada is responsible	Percentage of listed wildlife species for which Environment Canada is responsible with a recovery strategy or management plan that is posted as proposed or final on the Species at Risk public registry	100% by the end of fiscal year 2017–18	44% as of March 31, 2014 Environment Canada is the lead for 331 *Species at Risk Act* (SARA)-listed species, of which 145 had posted a Recovery Strategy or Management Plan.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued its ongoing collaboration with partners, including provinces and territories to administer SARA; the Department also collaborated with and provided support to the National Aboriginal Council on Species at Risk, National Aboriginal Organizations and the Committee on the Status of Endangered Wildlife in Canada;
- Continued to streamline permit issuance by refining the SARA ePermitting system, commencing the development of a similar system for Migratory Bird Hunting, and progressing with ePermitting under CITES;
- With the Government of Alberta, the Alberta Biodiversity Monitoring Institute and other partners, continued to build the understanding of the distribution and abundance of forest birds (species at risk) in the oil sands region—specifically for the Canada Warbler and Olive-sided Flycatcher. Predictive models of the habitat for these species were developed, and information was collected on Whooping Crane migration through the oil sands region; and

- Continued to provide to responsible authorities timely, science-based advice on wildlife issues in support of 13 major projects undergoing environmental assessments under the Canadian Environmental Assessment Act, 2012, as well as to other federal departments required to make environmental effect determinations for projects on federal lands.
- Continued to co-chair the Recovery of Nationally Endangered Wildlife – National Recovery program, in addition to leading one of its main initiatives towards more standardized terminology and structure for recovery planning across jurisdictions.

During 2013–14, 43 SARA permits, 3,754 CITES permits and approximately 3,935 *Migratory Birds Convention Act, 1994* permits were reviewed and issued, and service standards[xxx] were established for all permit types.

Sub-Sub-Program 1.1.2.2: Aboriginal Fund for Species at Risk

Sub-Sub-Program Description

This program supports the delivery of Environment Canada's obligations under the *Species at Risk Act*. As collaboration with Aboriginal peoples is key to the protection of species at risk, to the Species at Risk Program results and to meeting the Department's core obligations, this program funds projects led by Aboriginal organizations and Aboriginal communities across Canada. Funded projects build Aboriginal knowledge and expertise in dealing with species at risk, so that Aboriginal peoples can actively participate in the conservation and recovery of species protected under the Act, and protect and recover critical habitat or habitat important for species at risk on First Nations reserves or on land and waters traditionally used by Aboriginal peoples.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,361,839	2,709,747	347,908

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
3	5	2

Performance Results

Sub-Sub-Program 1.1.2.2: Aboriginal Fund for Species at Risk			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Participation in programs to conserve and protect species at risk on Aboriginal lands	Number of organizations receiving project funding	75 by the end of fiscal year 2014–15	76 during fiscal year 2013–14 Of these, 69 were Aboriginal organizations or communities. Non-Aboriginal organizations receiving funding must have letters of support from Aboriginal communities where the projects occur. The indicator is a measure of Aboriginal engagement in activities that protect or conserve habitats for species at risk, one of the main objectives of the program. The number of organizations receiving funding has remained relatively stable in recent years (75 in 2012–13; 79 in 2011–12).

Performance Analysis and Lessons Learned

In 2013–14, through the Aboriginal Fund for Species at Risk Program, Environment Canada provided funding to 80 stewardship projects for species at risk on Aboriginal lands and in associated waters. Together, the funds benefited some 208 species at risk, including 103 listed under the *Species at Risk Act* (SARA).

Funding to Aboriginal organizations and communities supports their active participation in the implementation of SARA, including through development of Aboriginal traditional knowledge and expertise in dealing with species at risk through the development of strategies, guidelines and practices, and the completion of monitoring studies, surveys and inventories.

The 2013–14 call for funding proposals under the Aboriginal Fund for Species at Risk Program confirmed that projects on agricultural lands were a program priority. Tracking these projects will begin in 2014–15, using newly updated tracking tools.

Sub-Sub-Program 1.1.2.3: Habitat Stewardship Program

Sub-Sub-Program Description

This program supports the delivery of Environment Canada's obligations under the *Species at Risk Act* by engaging Canadians in conservation actions aimed at preserving biodiversity through protecting or conserving habitats for species listed under the Act as "at risk" (endangered, threatened or of special concern), mainly on non-Aboriginal land. Further, this program promotes the participation of local communities to help with the recovery of species at risk, and it prevents other species from becoming a conservation concern by allocating funds to a variety of partners (non-governmental organizations, community groups, Aboriginal organizations and communities, private corporations, educational institutions, provincial, territorial and municipal governments, and Crown corporations) to meet regional and national priorities.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
16,764,691	13,016,110	-3,748,581

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
10	10	0

Performance Results

Sub-Sub-Program 1.1.2.3: Habitat Stewardship Program			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Important habitat is secured, protected, improved and/or restored to enhance the recovery of species at risk	Total land area that has been improved or restored to benefit wildlife in: (i) hectares; and (ii) kilometres of shoreline	(i) 30,000 by 2014–15 (ii) 300 by 2014–15	(i) 14,731 ha in 2012–13 (ii) 66 km in 2012–13 Preliminary results for 2013–14 are 10,868 ha and 139 km of shoreline, Results are subject to change as final project reports are reviewed by program staff. The land area improved or restored has fluctuated over time (14,902 ha and 48 km in 2011–12; 12,177 ha and 49 km in 2010–11) due

			to changes in types of recovery activities undertaken by projects. The targets had been established based on the experience of the first 10 years of the program; the indicators have gone down recently due to the introduction of strategically focused priority areas, species and threats, which restrict the eligible landscapes available for program activities to only key habitats for species at risk. The targets will be adjusted to reflect current program directions.
	Total land area (in hectares) that has been: (i) secured; (ii) protected (new); or (iii) protected (renewed)	(i) 5,000 by 2014–15 (ii) 20,000 by 2014–15 (iii) 150,000 by 2014–15	(i) 7,249 ha in 2013–14 (ii) 10,666 ha in 2013–14 (iii) 125,326 ha in 2013–14 Preliminary results for 2013–14 are subject to change as final project reports are reviewed by program staff. The target for land area protected through new written conservation agreements (20,000 ha) was based on the 2011–12 result (20,639 ha). As above, the introduction of priority areas, species and threats has impacted the area secured or protected. The target will be adjusted to reflect this change in program direction. The 2012–13 values for land area protected (new and renewed) included both written and verbal agreements. Starting in 2013–14, only written agreements have been used, which may have also contributed to the declines.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Provided funding to 163 stewardship projects with community-based conservation organizations, Aboriginal communities, provinces and municipalities, individual landowners and landowner associations, and the private sector. Together, these projects engaged Canadians in activities to conserve biodiversity, and supported the recovery of over 300 species listed under the *Species at Risk Act* (SARA).
- Identified in its call for funding proposals that it would give priority, across the country, to projects on agricultural lands and on Aboriginal lands and in their associated waters. The Department also collaborated on the application process for 2014–15 with Fisheries and Oceans Canada and Parks Canada. Through this process, strategic alignments were identified that enhanced the role of the Habitat Stewardship Program in meeting recovery needs, including:
    - Restricting target species to SARA-listed species, with a greater emphasis placed on endangered and threatened species; and
    - Establishing a requirement that proposals demonstrate how outreach activities in proposed projects focus on achievement of the recovery goals for target species at risk.

Sub-Program 1.1.3: Migratory Birds

Sub-Program Description

This program protects and conserves populations of migratory bird species. It is responsible for implementing the Migratory Birds Convention signed with the United States in 1916, via the *Migratory Birds Convention Act, 1994*. Successful implementation includes the following activities: conserving populations, individual birds and their nests and habitats through continued conservation actions, stewardship, policy development and enforcement of the Act and its regulations; protecting important bird habitats; minimizing other stressors that affect population status; and managing emergencies regarding health and safety issues associated with migratory birds. This program is delivered in partnership with other governments and non-governmental organizations. Client groups for the program include the Canadian public, game bird hunters, Aboriginal people (subsistence harvesting), natural resource economic sectors and natural resource users, and other governments (provincial/territorial and foreign).

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
17,590,825	30,267,579	12,676,754*

**Species at Risk Act* funds were reallocated to other programs, notably Migratory Birds and Wildlife Habitat Conservation, which are in direct support of species at risk.

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
152	188	36

Performance Results

Sub-Program 1.1.3: Migratory Birds			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Migratory bird populations maintained at population goals	Proportion of migratory bird species meeting population goals	To be determined once bird population goals are agreed upon	Population goals are still being developed, in collaboration with the North American Bird Conservation Initiative. As a value for the indicator is not yet available, bird population trend information will be used in the interim. On average, Canadian breeding bird populations declined by 12% between 1970 and 2010. Trends vary among species, depending, in part, on where they winter. The populations of bird species spending the entire year in Canada have increased on average by 68% since 1970. The populations of bird species migrating farther from home have generally declined, and birds migrating the farthest—to South America—have showed the most severe declines, with populations declining by 53%. Birds migrating to the U.S. declined by 10% on average, while birds migrating to Central America declined by 14%.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to modernize the *Migratory Birds Regulations* under the *Migratory Birds Convention Act, 1994* (MBCA) to improve their clarity, incorporate new technology and address a number of issues that have arisen since the Regulations were first created. Highlights of accomplishments include:
    - Posting—for public comment on Environment Canada's website—proposed changes to the *Migratory Birds Regulations*[xxxi] aimed at improving management of hunting for migratory birds;
    - Distributing materials in support of hunting management to all wildlife management boards and some Aboriginal organizations; and
    - Presenting or providing materials to all wildlife management boards and some Métis organizations.

In 2013–14, the Department also:

- Completed and posted 18 bird conservation region strategies[xxxii] on the Department's website and continued discussions with the North American Bird Conservation Initiative Canada Council on the implementation of these strategies;
- Implemented the second year of a program to understand the response of migratory birds to human activity in the oil sands (see also Sub-sub-program 1.1.2.1);
- Continued to conduct and evaluate major monitoring programs, including waterfowl aerial and ground surveys, the Breeding Bird Survey, shorebird migration monitoring surveys, marsh bird surveys, Arctic shorebird breeding surveys, and the identification and addressing of high-risk gaps in monitoring programs. Most surveys are implemented in conjunction with governmental and non-governmental organizations (e.g., U.S. Fish and Wildlife Service and the U.S. Geological Survey, and Bird Studies Canada);
- Continued to collaborate with the United States and other partners to fulfill legislative and regulatory responsibilities for protecting and conserving migratory birds under the MBCA;
- Published a series of research papers identifying main sources of human-induced mortality to birds (see also Program 1.1), and developed extensive compliance promotion tools to support mitigation of incidental take of migratory birds;
- Conducted research to assess the potential impacts of resource development projects on abundance and distribution of marine birds in Foxe Basin in Nunavut and off the coast of Newfoundland and Labrador. This informed decision makers and industry on the potential impacts of increased shipping, and oil and gas extraction activities on marine birds;
- Through participation in the Fifth International Partners in Flight Conference, began development of conservation business plans that will focus action on key aspects of bird life cycles; and
- Through the Commission for Environmental Cooperation, developed a framework[xxxiii] that lays the foundational principles, objectives and priorities for a continentally integrated planning and management approach to support the sustainability of the North American grasslands.

Sub-Program 1.1.4: Wildlife Habitat Conservation

Sub-Program Description

This program secures, conserves and protects habitats that support species at risk and migratory birds by establishing Protected Areas and fostering and enabling habitat stewardship by landowners and managers. Some of this is done by acquiring and/or managing land through Environment Canada legislation. Much more is done by working with partners to protect and conserve wildlife habitat. Environment Canada administers several programs that foster and encourage actions by non-governmental organizations and Canadians to conserve and protect wildlife habitat and habitat for species at risk. Enabling acts include the *Migratory Birds Convention Act, 1994*; the *Canada Wildlife Act*; the *Species at Risk Act*; and the Convention on Wetlands of International Importance (known as the Ramsar Convention).

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
16,646,237	36,283,814	19,637,577

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
98	131	33

Performance Results

Sub-Program 1.1.4: Wildlife Habitat Conservation			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Habitats are secured that are needed to achieve waterfowl population goals	Land secured by Environment Canada and partners as a percentage of the total amount needed to achieve population goals for all priority migratory birds	9.99 million ha by December 2017	8.03 million ha (80.4%) as of December 2013 This number represents the cumulative land area that has been secured in the four Canadian Habitat Joint Ventures (Eastern, Prairie, Canadian Intermountain and Pacific Coast) and the Western Boreal Forest Program Area under the North American Waterfowl Management Plan from January 1986 to December 2013.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued its collaboration with numerous partners, each with unique objectives that needed to be accommodated, to plan for and adaptively manage habitats important to the conservation of migratory birds, the recovery of species at risk, wetlands of federal concern, and priority ecosystems—all while taking into account changing ecological conditions and a variety of stakeholders' demands on land use.

The Department focused efforts on:

- Effectively protecting priority wildlife habitat through its network of protected areas and enabling protection through other governmental and non-governmental organizations;
- Enabling the stewardship of wildlife habitat in working landscapes through the provision of science-based advice, planning and support programs; and

- Planning and managing habitat conservation in harmony with others so as to build ecosystem resilience and augment capacity to adapt in the face of future ecological change.

Other activities and accomplishments include contributing to the protection of ecologically sensitive land, expanding and developing national wildlife areas, implementing the North American Waterfowl Management Plan (in Canada), and implementing the Inuit Impact and Benefit Agreement (see also Sub-sub programs 1.1.4.1 and 1.1.4.2).

Sub-Sub-program 1.1.4.1: Habitat Conservation Partnerships

Sub-Sub-Program Description

This program supports the delivery of Environment Canada's obligations under the *Species at Risk Act*, the *Migratory Birds Convention Act, 1994* and the *Canada Wildlife Act* by funding projects to secure, protect, improve and/or restore important and ecologically sensitive habitat to enhance the survival of wildlife, in particular species at risk and migratory birds. The program provides mechanisms that engage with organizations and individuals on the ground, including landowners, environmental non-governmental organizations and others, including creating incentives for voluntary action on the part of other levels of government and non-government, Aboriginal groups and private sector partners through the delivery of tax incentives such as the Ecological Gifts Program. The program also includes Environment Canada's participation in the North American Waterfowl Management Plan, a Canada–United States–Mexico partnership of federal, provincial/state and non-governmental organizations that aims to conserve wetland in North America. Program delivery includes the assessed contribution to the Convention on Wetlands of International Importance (Ramsar Convention).

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,392,885	18,433,684	16,040,799

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
17	17	0

Performance Results

Sub-Sub-Program 1.1.4.1: Habitat Conservation Partnerships			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Important and ecologically-sensitive habitat is secured, protected, improved and/or restored to enhance the survival of wildlife, in particular species at risk and migratory birds	Total important and ecologically-sensitive land area (in hectares) secured and protected annually (Ecological Gifts Program)	30,000 ha by December 2014 (cumulative total for three years)	24,599 ha from April 1, 2011 to March 31, 2014 Annual amounts during this period were: 2011–12: 3,813 ha 2012–13: 3,922 ha 2013–14: 16,864 ha The land area secured and protected varies from year to year, as it is dependent on decisions by individual Canadian citizens to donate land. The reported value for 2013–14 was higher than previous years due to a single donation of 12,000 ha.

	Total land area (in hectares) identified as needed for the maintenance of target populations of waterfowl, that has been secured, protected, improved and/or restored annually by all partners in the North American Waterfowl Management Plan	300,000 ha by December 2015 (cumulative total for five years)	93,106 ha from January 1, 2011 to December 31, 2013 The reported value includes hectares improved or restored in Canada under the North American Waterfowl Management Plan, including those in the four Canadian Habitat Joint Ventures (Eastern, Prairie, Canadian Intermountain and Pacific Coast) and the Western Boreal Forest Program Area. The target that appears here is for the period from January 2011 to December 2015. It has been revised in response to the 2012 North American Waterfowl Management Plan Revision.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to work with partners to protect priority habitats, including protecting lands under the Ecological Gifts Program, and to further protect habitat under the North American Waterfowl Management Plan.

More specifically, through the Habitat Conservation Partnerships Program:

- Completed the donation process for 56 Ecological Gifts under the Ecological Gifts Program, protecting 16,864 ha of ecologically sensitive land, nationwide, with a cumulative fair market value of over $60 million. Work included completion of the largest-ever Ecological Gift Program Conservation Easement of more than 12,000 ha of land in the Southern Foothills Natural Area of Alberta;
- Collaborated with partners to actively implement the North American Waterfowl Management Plan in Canada by securing, restoring and enhancing wetlands and associated uplands for waterfowl. Between 1986 and 2013, over 8 million hectares in Canada were secured by Canadian partners under the Plan; and
- Continued work with managers of the areas designated under the Ramsar Convention as "Wetlands of International Importance," to promote the wise use of wetlands and to assess possible impacts to the ecological characteristics of these sites. Since joining the Ramsar Convention in 1981, Canada has designated 37 Ramsar sites covering over 13 million hectares.

In 2007, as part of the federal government's commitment to conserve and protect Canada's natural environment, the Government of Canada invested $225 million in the Natural Areas Conservation Program (NACP), administered by the Nature Conservancy of Canada (NCC). An additional $20 million was provided to the NCC in 2013–14 to continue to secure ecologically sensitive lands. The NACP is an important on-the-ground initiative that takes real action to preserve our environment. Since its inception in 2007, the NCC has acquired more than 388,000 hectares of ecologically important habitats, which includes habitat for 164 species at risk.

Sub-Sub-Program 1.1.4.2: Protected Areas

Sub-Sub-Program Description

This program carries out the strategic planning, establishment, coordination and management of Protected Areas for migratory birds, species at risk, wildlife of national interest and their associated habitats, and coordinates national and international activities related to the protection of priority areas. Program success involves the support of the public and close collaboration with Aboriginal groups, other

wildlife management agencies, other natural resource agencies, non-governmental organizations and private property owners. The program operates under the authority of the *Canada Wildlife Act* and the *Migratory Birds Convention Act, 1994*. The program is part of a broader network of protected areas that includes sites of other federal departments (notably Parks Canada and Fisheries and Oceans Canada), provincial and territorial agencies, and conservation properties that are owned and/or managed by non-governmental organizations.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
14,253,352	17,850,130	3,596,778

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
81	114	33

Performance Results

Sub-Sub-Program 1.1.4.2: Protected Areas			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Habitat for the conservation of migratory birds, species at risk and rare or unique species is protected	Total area identified that is key to the conservation of migratory birds, species at risk and other nationally important wildlife	Covering 50% of Canada by 2018	20% of Canada as of March 31, 2014 This indicator is a measure of Environment Canada's contribution to conservation of federal species outside of federal lands. The reported results stem from habitat identification undertaken in support of the Nunavut Land Use Plan.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to manage its network of 92 migratory bird sanctuaries and 54 national wildlife areas, including posting 3 final national wildlife area management plans and 5 plans for consultation, and issuing 321 national wildlife area permits;
- Collected data on 1,821,404 ha of protected areas (public and private) from various land managers. Regional offices enable the identification and collection of data held by land trusts (private and public). Highlights include:
    - Created a single private conservation lands database (data from Alberta, Saskatchewan and British Columbia, covering a total area of 674,956 ha of private conservation lands). These results do not reflect all private lands—some of the over 200 land trusts in Canada are very small and without geospatial data analysis capacity; and
    - Updated the Conservation Areas Reporting and Tracking System dataset to reflect data collected in 2013–14 for 1,146,448 ha of provincial government protected areas. The total area measured under the Department's Geospatial Knowledge Management Initiative now represents 11% of Canada.
- Continued to implement the Inuit Impact and Benefit Agreement, in collaboration with Nunavut Tunngavik Inc. Accomplishments to date include establishment of Area Co-Management Committees to co-manage conservation areas in Nunavut, hiring Inuit field staff, completing cultural resource inventories, and the completion of three major ecotourism projects by Nunavut Tunngavik Inc. This Agreement offers an excellent example of how protected areas can be managed collaboratively with First Nations;

- Continued to work with the Government of Northwest Territories (NWT) on the establishment of Edéhzhíe National Wildlife Area. The devolution process in NWT introduced significant complexity to this work; lands necessary to the establishment of the wildlife area have been withheld from devolution and are being transferred to Environment Canada; and
- Drafted instructions to enable the creation of specific regulations for the proposed Scott Islands Marine National Wildlife Area, with support from the Department of Justice, and collaborated with several federal departments to negotiate management agreements to support conservation of wildlife and the efficient regulation of this proposed Marine National Wildlife Area.

An evaluation of the relevance and performance of the Protected Areas program, covering the five-year period 2008–09 to 2012–13, concluded that the program continues to be relevant and is progressing toward achievement of many of its intended outcomes in an efficient manner, although less progress was made toward a number of other outcomes, due in part to the length of certain management functions (e.g., site management plan development) or factors beyond the program's control (e.g., land acquisition). Two recommendations were included, including for the Department to engage more actively with stakeholders and to refine its existing performance management strategy. The Department accepted both recommendations and has developed a management response to address them.

Program 1.2: Water Resources

Program Description

This program addresses the risks to and impacts on water resources from industrial activities, agriculture, climate change and other factors, ensuring 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 to 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 is the focus of Environment Canada's contribution to monitoring water quality and conducting water-related research and analysis, as well as 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 encouraging best management practices. The program supports the implementation of the *Canada Water Act*, the Clean Water Action Plan, the *Canadian Environmental Protection Act, 1999*, the *Fisheries Act*, the *International Boundary Waters Treaty Act*, and the *International River Improvements Act*. Contributions in support of Water Resources are used as a component of this program.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	Difference (actual minus planned)
96,788,965	96,788,964	104,913,126	100,322,337	3,533,373

Human Resources (Full-Time Equivalents—FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
795	748	-47

Performance Results

Program 1.2: Water Resources			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Threats to Canada's water resources and aquatic ecosystems are minimized and the sustainability of the resource is maintained	Percentage of core national monitoring sites included in the Canadian Environmental Sustainability Indicators Freshwater Quality Indicator whose water quality is rated as good or excellent	50% of core national monitoring sites in the 2010–2012 data set are rated as good or excellent	46% in the 2009–11 data set[3] Freshwater quality was assessed on selected rivers throughout Canada where freshwater quality is at risk of being impaired by human activity. Freshwater quality in rivers was excellent or good at 46% of monitoring sites, fair at 35% of sites, marginal at 17% of sites and poor at 2% of sites. Overall, existing freshwater quality in the majority of Canadian rivers is sufficient to maintain healthy river ecosystems. Previous values of the indicator were: 44% in the 2008–10 data set and 41% in the 2007–09 data set.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

Continued to implement a comprehensive approach to water and ecosystems, including by:

- Adopting a risk-based approach to water quality and quantity monitoring, adjusting monitoring activities to meet needs;
- Collaborating with Canadian and American partners on the development of important ecosystem targets, including phosphorus-loading targets for Lake Erie and nutrient objectives for Lake Winnipeg; and
- Delivering on its commitment to data management and sharing. The Department completed the groundwork for making water quantity and quality monitoring data available through an open data forum.

Other highlights of the water resources work include:

- Providing on-site monitoring support during and following the 2013 Calgary flood, thereby contributing to public safety in the flooded areas; and
- Contributing engineering and science expertise to the International Joint Commission, including through participation on close to a dozen water management boards, in support of water quality objectives and water levels and flows regulation in both Canada and the United States. Collaborating with many partners and stakeholders and working within varied governance structures is an important element of Environment Canada's water resources work, which often involves multi-year projects.

In the second year (2013–14) of a three-year plan to increase monitoring efforts in the oil sands region through the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring (JOSM), efforts focused on:

- Continuing to make progress on implementation, which involves adding more monitoring sites, expanding the parameters monitored and increasing monitoring frequency; and
- Delivering on the commitment to increased transparency and accessibility. Data are more frequently and more quickly uploaded onto the JOSM information portal, and are more easily accessible, including for specific monitoring sites.

For more information, see Sub-program 1.2.1.

[3] Data are obtained from many individual monitoring programs operated by federal, provincial and territorial authorities and are the most recent available.

Sub-Program 1.2.1: Water Quality and Aquatic Ecosystems Health

Sub-Program Description

This program provides Canadians, policy and decision makers, water resource managers, sectors, federal/provincial/territorial governments, industry, and municipalities with knowledge and understanding of human activities' impacts on, and risks posed to, water quality and the health of aquatic ecosystems. It supports the water-quality-related obligations under the *Canadian Environmental Protection Act, 1999*, the *Canada Water Act*, the *Fisheries Act*, the *International Boundary Waters Treaty Act*, and federal/provincial/territorial and Canada–United States water quality agreements. Through this program, Environment Canada leads in the provision of water quality monitoring and reporting through annual reports on the Freshwater Quality Index and the status and trends reports on aquatic ecosystem health. The program produces and disseminates scientific knowledge and information that identifies human activities that are having significant impacts on ecosystems (aquatic and others), vulnerable and priority areas, and opportunities to minimize these impacts. The program includes Environment Canada responsibilities under the Science and Governance components of the Lake Winnipeg Basin Initiative (Action Plan for Clean Water) as well as responsibilities to monitor Canadian shellfish areas in accordance with the monitoring protocol under the Canadian Shellfish Sanitation Program, which is administered jointly through a Memorandum of Understanding between the Canadian Food Inspection Agency, Environment Canada and Fisheries and Oceans Canada.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
68,463,834	72,634,940	4,171,106

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
498	479	-19

Performance Results

Sub-Program 1.2.1: Water Quality and Aquatic Ecosystems Health			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Canada's water resource policies and programs are informed by water quality and aquatic ecosystem health data and information from ongoing monitoring of waters under federal jurisdiction or responsibility	Percentage of sites within Environment Canada's national core water quality monitoring network at which water quality monitoring was performed	100% of sites monitored annually by 2013–14	Monitoring was performed at 100% of 312 federal core water quality sites, including 52 sites across the North.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Collaborated on research to better understand the relationship between the sources and concentrations of phosphorus and the formation of algal bloom and algal toxins on Lake Erie and Lake Winnipeg. Results will support the development and implementation of nutrient targets and objectives for the lakes;
- Continued to strengthen fresh water quality monitoring (WQM) in four national watersheds through the development, testing and implementation of new, innovative and leading-edge tools and approaches for risk-based WQM, in response to the 2010 Fall Report of the Commissioner of the Environment and Sustainable Development; and

- Continued a monitoring program for the transboundary Abbotsford-Sumas Aquifer, which showed that 70% of samples exceeded Canadian Drinking Water Quality Guidelines for Nitrate—and an agreement to collaborate with Agriculture and Agri-Food Canada on nitrate-related research.

Highlights of the Department's accomplishments under the enhanced Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring program (JOSM) (see also Sub-program 1.2) include: expanded monitoring, with more sites, more parameters and an increase in monitoring frequency; and increased sampling of sediment quality, and fish and invertebrates as broader indicators of water quality and ecosystem health.

The Canada-Alberta Oil Sands Environmental Monitoring Information Portal[xxxiv] includes maps of the monitoring region, details of the monitoring sites, and data and results. This enables interested parties to conduct their own analyses. The JOSM continued to support stakeholder engagement through semi-annual multi-stakeholder fora (including three levels of government, the oil sands industry, First Nations, Métis organizations, non-governmental organizations and academia).

Sub-Program 1.2.2: Water Resources Management and Use

Sub-Program Description

The Water Resource Management and Use program aims to promote the conservation and management of Canada's water resources. It promotes and enables the application of science-based information to inform decision making in an integrated and coherent manner consistent with the *Canada Water Act*. The program serves to coordinate across the spectrum of water quality and water quantity science and monitoring, and ensure that such knowledge is strategically positioned to inform decisions, policy development and management approaches. The program promotes cooperative and integrated approaches to sustainable water management through partnerships with other governments and with water managers. The program emphasizes the key federal role on transboundary water issues and governance, and engagement in domestic and international water boards is a priority mechanism, including those constituted under the *Canada Water Act* and the International Joint Commission.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
4,773,683	4,076,806	-696,877

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
51	32	-19

Performance Results

Sub-Program 1.2.2: Water Resources Management and Use			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Water resource decision makers have the necessary information and stakeholder perspectives to make responsible and appropriate shared resource decisions	Client satisfaction index, on a scale of 1 (unsatisfactory) to 10 (excellent)	Target will be set once a baseline value is measured	Results are not yet available. The survey has been developed and will be distributed to Water Board clients for feedback at the next annual meeting in autumn of 2014.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Provided groundwater and aquatic ecosystem indicators expertise to the Council of Canadian Ministers of the Environment (CCME) in support of its preliminary Groundwater Sustainability Assessment Approach. The transboundary Abbotsford-Sumas Aquifer (British Columbia/ Washington) was used as a pilot project; the application was shown to be successful and will lead to further engagement on development of CCME guidance. Results revealed the interdependencies between groundwater, surface water and aquatic ecosystem health in an integrated indicators context;
- Provided engineering and other expertise to a number of water boards across Canada, as well as to most of the dozen Canada–U.S. boards under the International Joint Commission (IJC). Continuous communication and collaboration with American federal and state and Canadian provincial partners are critical to advancing water management and the adaptive management approach to water regulation in the Great Lakes and across Canada and particularly along the border between the two countries; and
- Established a Memorandum of Understanding (MOU) with the IJC, and updated the MOU with the Lake of the Woods Control Board.

Sub-Program 1.2.3: Hydrological Service and Water Survey

Sub-Program Description

Information on the water cycle within Canada is critical to health and safety (e.g., flood forecasting and prevention) and to economic efficiency (e.g., agriculture, hydroelectricity and international shipping). This program provides hydrological data, information and knowledge that Canadian jurisdictions need to make water management decisions. This program supports the goals and mandates of all levels of government involved in managing water supplies. The hydrological data, meteorological information and ancillary information provided by Environment Canada are used by international, federal, provincial, territorial and municipal agencies to regulate and respond to changing water levels and flows within Canada and in bodies of water that cross international boundaries. Under the *Canada Water Act*, monitoring activities of this program are carried out through cost-shared bilateral agreements between Environment Canada and each of the provinces and territories (Aboriginal Affairs and Northern Development Canada represents Nunavut and the Northwest Territories). These agreements create the national framework within which Environment Canada collects, interprets and provides level and flow information and supports scientific investigations. Delivery of the program involves staff in Environment Canada headquarters and each Environment Canada region. Program delivery may include Contributions in support of Water Resources.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
23,551,447	23,610,591	59,144

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
246	237	-9

Performance Results

Sub-Program 1.2.3: Hydrological Service and Water Survey			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Canadians and their institutions have the hydrological data, information and knowledge they need to make water management decisions	Client satisfaction index, on a scale of 1 (unsatisfactory) to 10 (excellent)	Target will be set in the 2015–16 Report on Plans and Priorities now that a baseline value has been measured	8 out of 10, based on the first baseline survey of provincial and territorial government clients on the National Administrators Table conducted in October 2013 during a program evaluation process undertaken by Environment Canada.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Reported on water levels and basin supply in the Great Lakes, in collaboration with counterparts from the United States Geological Survey (USGS). The relevant information informed operational requirements, as well as options for future control and improvement strategies;
- Continued the operation of the federal/provincial/territorial national advisory table, which is a forum for management and coordination of water quantity monitoring and services in support of participating jurisdictions' goals;
- Continued partnerships with provinces and territories—accomplishments include signing new hydrometric agreements with British Columbia and Yukon, which formalizes a long-standing and successful collaboration that supports decision making to protect the health and safety of Canadians;
- Collaborated with the university sector on scientific methods for improved network design as part of the risk-based approach to hydrometric network management, in response to the fall 2010 audit of the Commissioner of the Environment and Sustainable Development;
- Signed the first annex under the Environment Canada–USGS agreement to formalize collaboration on scientific and technical training related to hydrometric monitoring, and advanced negotiations on three other annexes to the agreement; and
- Contributed to hydrological monitoring and understanding of freshwater inflows into the Arctic Ocean through involvement with the international Arctic Hydrological Cycle Observing System (Arctic-HYCOS).

The Department also updated its database on fresh water indicators and reference hydrometric basin information. This work included close collaboration with the USGS to determine North American basins of interest. Also on the international front, departmental engineers participated in expert panels of the World Meteorological Organization for hydro-acoustic and uncertainty analysis in hydrometry. This work will go a long way to establishing a more rigorous assessment of water flows in support of the management of water resources.

An evaluation of this program was carried out to assess its relevance and performance during the period 2008–09 to 2012–13. Findings indicate that the program continues to be relevant and that its design is appropriate for achieving its intended outcomes. Although the Program took steps to improve its efficiency and economy during the evaluation time frame, some areas in need of attention were identified. The evaluation's three recommendations focus on improving performance measurement and reporting, improving the program's understanding of user needs and demand trends, and reviewing its approach to human resource planning and staffing for professional and management positions. The Department accepts these recommendations and has developed a management response to address them.

Program 1.3: Sustainable Ecosystems

Program Description

This program aims to sustain Canada's ecosystems over the long term by working with Canadians, their governments and the private sector by providing them with the environmental information and tools required to incorporate social, economic and environmental considerations into their decision making and action, including through environmental assessments. 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 planning, community engagement in remediation of sites, youth engagement, and research and reporting on environmental status and trends. The program facilitates interdisciplinary and cross-sectoral planning and information sharing among partners. Contributions in support of Sustainable Ecosystems are used as a component of this program.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
66,589,903	71,635,870	70,851,606	70,727,194	-908,676

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
346	324	-22

Performance Results

Program 1.3: Sustainable Ecosystems			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
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	No target has been set. The indicator has been replaced for 2014–15.	Canadian Biodiversity: Ecosystem Status and Trends 2010 assessed ecosystem health in 20 areas, including major Canadian biomes; human-ecosystem interactions; and habitat, wildlife and ecosystem processes. Overall, 25% of key findings were rated as improving or as showing little change. The full report can be accessed at the Canadian Biodiversity website[xxxv].

Performance Analysis and Lessons Learned

Highlights of performance in 2013–14 include the following:

Continued its work to support an ecosystems approach to environmental management. The Department:

- Was actively engaged in environmental assessment in 2013–14, as evidenced by its participation in 10 environmental assessment panels and over 30 standard environmental assessments under the *Canadian Environmental Assessment Act, 2012*, including projects subject to review under northern environmental assessment processes. The Department provided scientific and technical advice to decision makers in relation to over 100 mining, oil and gas, energy and infrastructure projects;
- Through its participation in Crown consultation activities in relation to major resource projects, contributed to whole-of-government efforts to fulfill the legal duty to consult and, where necessary, accommodate Aboriginal group interests and rights;

- Continued to participate actively in leadership, management and coordination of science, monitoring and other activities in key major ecosystems, including the Great Lakes, St. Lawrence River, Lake Simcoe, Lake Winnipeg, Okanagan and Salish Sea, and Atlantic ecosystems. Management and coordination involve agreements with many Canadian and international partners, and most activities are multi-year endeavours for which results are released as they become available (see also Sub-sub-programs 1.3.4.1–1.3.4.5);
- Continued to monitor biodiversity in the oil sands region, and to make results and data more quickly and easily accessible (see also Sub-program 1.3.2); and
- Contributed to transparent and accessible whole-of-government view of environmental priorities by developing and tabling in Parliament the second Federal Sustainable Development Strategy (FSDS), for the 2013–16 period. The Department also expanded the scope and nature of environmental indicators that provide evidence of progress on the FSDS.

Sub-Program 1.3.1: Sustainability Reporting and Indicators

Sub-Program Description

Through this program, Environment Canada works collaboratively with other government departments to report, through the Canadian Environmental Sustainability Indicators initiative, on environmental indicators that track issues of concern to Canadians: air quality, water quality and availability, protecting nature, and greenhouse gas emissions. This program is also responsible for implementing the *Federal Sustainable Development Act*, which gives Environment Canada the legislated mandate to lead the implementation, tracking and reporting of the Federal Sustainable Development Strategy. The Act requires that the Minister of the Environment table a federal sustainable development strategy in Parliament, complete with goals, targets and implementation strategies. In accordance with the Act, federal departments and agencies are to table individual strategies (through their Report on Plans and Priorities) to reflect how their program activities will support the Federal Sustainable Development Strategy within one year of its being tabled in the House of Commons. These strategies will support and foster greater transparency and accountability both to the public and Parliament.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
7,693,879	7,310,721	-383,158

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
56	47	-9

Performance Results

Sub-Program 1.3.1: Sustainability Reporting and Indicators			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Increased use of Canadian Environmental Sustainability Indicators in sustainable development policy and reporting	Annual number of print and Internet-based publications and policies that adopt as measures in publications or analyses the Canadian Environmental Sustainability Indicators	70 publications by 2013	84 publications in 2012 The study is conducted every two years. The next measurement will occur in 2014.

Policies and plans of federal government departments reflect the goals and targets in the Federal Sustainable Development Strategy	Percentage of goals, targets and implementation strategies from the Federal Sustainable Development Strategy reported in the Expenditure Management System (Reports on Plans and Priorities, Departmental Performance Reports)	100% by 2013	94% by March 31, 2014 This value remains relatively stable from the 95% reported in 2012-13.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Completed the second Federal Sustainable Development Strategy (FSDS). The report, which covers 2013–16, was tabled in Parliament in November 2013. This FSDS updates the whole-of-government view of environmental priorities for 33 departments and agencies and includes input from public consultations on a draft 2013–16 Strategy. It introduces 2 new targets for climate change adaptation and agriculture, improves the coverage of socio-economic information, and makes environmental decision making more transparent and accountable.
- Developed a strategy for more frequent stakeholder engagement (i.e., not only in preparation for its three-year FSDS), in response to stakeholder feedback; and
- Added 3 new indicators and updated 18 indicators included in the Canadian Environmental Sustainability Indicators (CESI). The primary vehicle used to measure progress on the FSDS, CESI is an authoritative source of evidence to demonstrate progress on the government's agenda in the form of objective and comprehensive information on environmental trends. High-level engagement for the creation of new indicators and the development of existing ones has been strengthened.

Sub-Program 1.3.2: Ecosystem Assessment and Approaches

Sub-Program Description

This program contributes to a consolidated activity that ensures the assessment, evaluation and management of Canada's ecosystems in a sustainable manner. These diverse components, individually or combined, contribute to Environment Canada's mandate fulfilment by providing scientific expertise, guidance and advice to decision makers across different levels of government, environmental and non-governmental organizations, the industrial sector, the research community, and the general public, so that ecosystem information and environmental effects of development proposals can be factored into their decisions. To this end, the activity conducts research, monitoring assessment and reporting on the health of ecosystems and biodiversity. Environment Canada (EC) participates in federal environmental assessments, including those in the North and also contributes scientific expertise in provincial environmental assessments. EC's involvement in strategic regional and project assessment provides a platform for the Department to contribute to the health of ecosystems in Canada.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
17,906,456	26,460,580	8,554,124

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
149	169	20

Performance Results

Sub-Program 1.3.2: Ecosystem Assessment and Approaches			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Potential significant adverse environmental effects of projects, plans, programs or policies subject to federal environmental assessment legislation and Cabinet Directives are avoided or mitigated	Proportion of Environment Canada recommendations that are incorporated into final environmental assessment decisions	60% by fiscal year 2012–13	65% in 2013–14 This number is based on two projects approved under the *Canadian Environmental Assessment Act* (CEAA) (the Kami Iron Ore Project and the Renard Diamond Mine Project), and one project approved under the *CEAA, 2012* (the Jackpine Mine Expansion Project). Approximately 35 out of 54 of Environment Canada's recommendations were reflected in the final environmental assessment reports for these projects.
	Proportion of environmental assessment follow-up requests made by Environment Canada which perform as anticipated	100% by fiscal year 2016–17	100% in 2013–14. This number is based on all projects considered to be active in the follow-up phase, all of which are "performing as anticipated."[4]

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Completed its first full year of meeting legislated timelines for environmental assessments conducted pursuant to the *Canadian Environmental Assessment Act, 2012* (CEAA 2012);
- Participated in 10 panels and 34 transitional comprehensive studies or standard environmental assessments under CEAA 2012 and dozens of other reviews under provincial and northern environmental assessment regimes;
- Contributed expertise to review panels for the projects for which environmental assessment decisions were made, including the New Prosperity Gold-Copper Mine Project and the Jackpine Mine Expansion Project;
- Contributed to environmental assessments under the four main northern regimes: the *Mackenzie Valley Resource Management Act*, the *Yukon Environmental Socio-Economic Assessment Act*, the Inuvialuit Final Agreement, and Nunavut Land Claims Agreement. Several key projects attained federal approval (one in Nunavut and two in the Northwest Territories);
- Began to implement a Quality Management System for delivering the Department's environmental assessment obligations;
- Participated in the interdepartmental Major Projects Management Office initiative to support the government's ongoing commitment to implementing the Responsible Resource Development program; and
- Continued to conduct biodiversity monitoring under the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring program. Data on monitoring biodiversity and disturbance[xxxvi], as well as other components (air, water, wildlife contaminants) are posted on the Canada-Alberta Oil Sands Environmental Monitoring Information Portal.

[4] Performing as anticipated is defined as a request for follow-up accepted into a decision or, as far as Environment Canada is aware, the proponent is working on addressing the follow-up request. Not "performing as anticipated" applies to specific cases where it is known that the proponent does not intend to provide follow-up information related to Environment Canada's request.

Sub-Program 1.3.3: Community Engagement

Sub-Program Description

This program engages Canadians and communities in protecting and restoring the environment through behaviour changes, capacity building, community-based funding programs and engagement activities. Key activities within this program include funding programs such as the Environmental Damages Fund and EcoAction, which empower Canadians to take action on priority environmental issues, and the management of the Biosphere Environment Museum, an exclusive venue to better understand major environmental issues, including those related to water, air, climate change, sustainable development and responsible consumption.[5]

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
13,419,994	10,905,233	-2,514,761

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
59	32	-27

Performance Results

Sub-Program 1.3.3: Community Engagement			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Increased engagement of Canadians in individual and collective activities to protect, conserve or restore the natural environment	Number of Canadians engaged in individual and collective actions to protect, conserve or restore the natural environment	400,000 by March 2015	214,063 in 2012–13 (the most recent period where full information is available) Preliminary results for 2013–14 are 183,792. Results are subject to change as final project reports are reviewed by program staff. The way the indicator is calculated has been revised to improve reliability and eliminate double-counting across time periods for multi-year projects. The value for 2012–13 is restated using the new methods. Increases in the numbers engaged through EcoAction from 2012–13 to 2013–14 were offset by decreases in the Biosphere and in the Environmental Damages Fund. The target will be adjusted for 2015–16 to reflect changes in the program.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to engage individuals and communities in a range of community-based activities aimed at protecting and restoring the environment. Activity continued to focus on funding, including through several key programs:
    - EcoAction: funds community projects that engage community members and demonstrate measurable environmental results (see also Sub-sub-program 1.3.3.1);

[5] Program descriptions were developed in 2012 and do not reflect cost savings measures as announced in Federal Budget 2012.

- Environmental Damages Fund: manages funds received as compensation for environmental damages, including distribution of funds to restoration and environmental improvement projects (see also Sub-sub-program 1.3.3.2);
- Environmental Youth Employment: enables youth to gain work experience in the environmental sector (see also Sub-sub-program 1.3.3.3); and
- Education and Engagement: promotes environmental education (see also Sub-sub-program 1.3.3.4).

Sub-Sub-Program 1.3.3.1: EcoAction Community Funding

Sub-Sub-Program Description

This is an Environment Canada community funding program established to provide financial support to not-for-profit and non-governmental organizations for projects that have measurable, positive impacts on the environment. Projects funded by EcoAction protect, rehabilitate or enhance the environment, and build the capacity of communities and individuals to sustain these activities into the future. Projects are funded in one of four priority areas: clean air, climate change, clean water or nature. EcoAction projects require the involvement of members of the community, including volunteers, to ensure that projects are successful.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
6,810,225	5,560,372	-1,249,853

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
24	13	-11

Performance Results

Sub-Sub-Program 1.3.3.1: EcoAction Community Funding			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Funded projects achieve their planned goals for nature conservation, clean water and/or climate change	Percentage of aggregate project environmental goals achieved	100% Ongoing	115% for 2012–13 (the most recent period where full information is available) For comparison, the value of the indicator over the five-year period of 2009–13 is 198%, as determined by an analysis that reviewed 545 projects, conducted as part of a 2013 evaluation of the program. Results were strongest in the areas of reductions in emissions of air contaminants; shoreline protection/improvement; habitat protection; and plant/tree planting. Results were near expectations for composting/recycling, and below project expectations in a few areas, including water consumption reduction and greenhouse gas emissions reductions. Actual results achieved by projects may exceed original goals for various reasons including proponents obtaining additional funding from other partners, or environmental stewardship activities being greater than expected.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to provide funding to Canadians to protect, rehabilitate and enhance the natural environment in their communities. Non-profit groups and organizations are eligible for up to $100,000, spread over a maximum of 36 months; 50% matching funding from non-federal sources is required.
- Approved 83 new projects across Canada for funding valued at a total of $4.5 million over 4 years. EcoAction projects vary widely to meet community needs; examples of projects include:
  - A wetland restoration project in Stanley Park, Vancouver;
  - A waste vehicle scrappage pilot project in Nunavut; and
  - A project to address the negative effects of an urban heat island in Montreal.

An evaluation report[xxxvii] of the EcoAction Community Funding Program released in September 2013 concluded that the Program continues to be relevant, and that the Program's design is appropriate and contributes to the achievement of outcomes related to increasing environmental benefits from community-based action and engaging Canadians in sustainable activities to protect, conserve or restore the natural environment. In addition, both design and delivery of the Program are both economical and efficient, although some opportunities to further improve efficiency were identified. The evaluation included four recommendations, aimed at adding clarity for certain aspects of program delivery under its new governance and resource model, leveraging technology to support performance reporting, and continuing to improve the timeliness of notification of funding. Environment Canada accepted all four recommendations and has developed management responses to address them.

Sub-Sub-Program 1.3.3.2: Environmental Damages Fund

Sub-Sub-Program Description

The Environmental Damages Fund (EDF) was created in 1995 to manage funds received as compensation for environmental damages. These funds may come from fines, court-ordered payments, out-of-court settlements and voluntary payments. The goal of the EDF is to improve the quality of Canada's natural environment. Funds are disbursed in the geographic region where the original incident occurred, if possible. Monetary awards are used to finance projects that focus on environmental restoration, including research, development, education and awareness, environmental quality improvement, and compliance with environmental regulations. Eligible recipients include non-governmental organizations, universities and academic institutions, Aboriginal groups, and provincial, territorial and municipal governments. Partners include Transport Canada, Fisheries and Oceans Canada, and Parks Canada.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
497,586	515,742	18,156

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
4	4	0

Performance Results

Sub-Sub-Program 1.3.3.2: Environmental Damages Fund			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Recognition by judges of the value of the Environmental Damages Fund (EDF) to restore environmental damage or harm to wildlife	Annual number of court awards directing payment to the Environmental Damages Fund via non-directed legislation	10 annually Ongoing	In 2013–14, 15 court awards/fines directed payments to the EDF via non-directed legislation Values for this indicator have fluctuated over time, reflecting the unpredictable nature of incoming awards, which are dependent on the number of infractions, successful prosecutions and particular legislation violated in any given year. The target of 10 awards was based on previous years and the program's best estimate of level of activity. The value of the indicator in 2013–14 was the highest to date.
Natural environments affected by pollution releases are restored	Proportion of the area affected that is restored	Target will be set once a baseline value is measured (2013)	60% in 2013–14 The indicator will be revised in future reporting due to difficulties in measuring the affected area and because most restoration projects funded by the program are not focused narrowly on the area damaged in the incident that led to the court order.

Performance Analysis and Lessons Learned

In 2013–14, a total of 31 awards were directed to the Department's Environmental Damages Fund (EDF), including 15 from non-directed legislation.[6] The total value of the awards was $2.1 million, which will be deposited into the EDF according to the schedule stipulated by the court. In 2013–14, $1.8 million was deposited into EDF accounts. Awards from non-directed legislation included 8 awards/fines under the *Fisheries Act* ($952,000), 4 awards/fines under the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* ($440,630), 2 small fines under the *Canada Wildlife Act* ($15), and 1 voluntary payment ($16,500).

In addition, 15 new projects were negotiated in 2013–14, with a total contribution from the EDF of $773,000. Of this amount, 61% supports restoration and environmental quality improvement projects, 27% is devoted to research and development projects, and the remaining 12% supports education and awareness projects.

Sub-Sub-Program 1.3.3.3: Environmental Youth Employment

Sub-Sub-Program Description

Environment Canada manages two youth employment initiatives, International Environmental Youth Corps (IEYC), and Science Horizons under the Careers Focus stream of the federal Youth Employment Strategy led by Human Resources and Skills Development Canada.[7] Consistent with Environment Canada's mandate to promote the integration of the economic, social and environmental aspects of sustainable development, the youth employment initiatives offer opportunities to unemployed and underemployed Canadian youth to gain work experience in the environmental sector. The IEYC offers approximately 130 intern placements in the environment sector per year, which last 6–12 months. IEYC funding is allocated equitably across Canada. Care is taken to ensure all regions of the country benefit from IEYC funding. In collaboration with universities, non-governmental organizations and industry, Science Horizons offers approximately 100 internships, lasting from 6–12 months, to youth working on environmental science projects allocated across Canada each year.

[6] Legislation without a mandatory requirement to send penalty monies to the EDF. The courts may direct penalty monies to EDF at their own discretion.
[7] This federal department was renamed Employment and Social Development Canada in 2014.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
3,285,906	2,985,873	-300,033

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
0	0	0

Performance Results

Sub-Sub-Program 1.3.3.3: Environmental Youth Employment			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Experienced youth are employed in the environmental sector or seek higher education	Percentage of youth participants that either obtain full-time employment in their field or that return to continue education following completion of their internship or placement	80% annually Ongoing	81% in 2013–14 260 internships were funded under the Science Horizons Youth Internship Program and the International Environmental Youth Corps Program. The 81% includes 74% of interns who became employed at the end of their internships and 7% who returned to school for advanced studies.

Performance Analysis and Lessons Learned

Targets have been met for each of the last three years, although the value of the indicator has fluctuated from year to year (88% in 2012–13 and 80% in 2011–12). The value of the indicator tends to be higher among International Environmental Youth Corps participants than for those in the Science Horizons Youth Internship Program, since the former tends to provide more internship support to the private sector (e.g., small and medium-sized enterprises) while Science Horizons tends to focus on non-governmental organizations and universities.

In 2013–14, the terms and conditions of the youth environmental employment programs were renewed by the Minister to enable the two programs to continue to provide wage subsidy funding for environmental internships as part of the federal Youth Employment Strategy[xxxviii].

Sub-Sub-Program 1.3.3.4: Education and Engagement

Sub-Sub-Program Description

This program consists of numerous initiatives focused on educating Canadians about a broad range of environmental issues, and encouraging them to change their lifestyles to be more environmentally friendly. These initiatives promote environmental education in the formal education system and through non-formal education, such as through the Biosphere, an environment museum. The Education and Engagement program's overall activities support the requirement under the *Department of the Environment Act* that the Minister of Environment provide Canadians with environmental information in the public interest, and promote and encourage the institution of practices and conduct leading to the better preservation and enhancement of environmental quality.[8]

[8] Program descriptions were developed in 2012 and do not reflect cost savings measures as announced in Federal Budget 2012.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,826,277	1,843,246	-983,031

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
31	14	-17

Performance Results

Sub-Sub-Program 1.3.3.4: Education and Engagement			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Individual Canadians understand the importance of environmental conservation and are willing to become engaged personally	Annual number of participants in Biosphere outreach activities	To be determined	45,493 people either visited the Biosphere or directly participated in outreach activities during 2013–14.

Performance Analysis and Lessons Learned

Numerous Canadians visited or participated in activities at the Biosphere Environment Museum in 2013–14. These activities not only engaged Canadians to better understand environmental issues such as those related to water, air, climate change and sustainable development, but they also promoted and encouraged practices that helped to improve environmental quality and enabled Canadians to become more environmentally friendly.

Sub-Program 1.3.4: Ecosystems Initiatives

Sub-Program Description

This program advances implementation of an ecosystem approach by providing the coordination and oversight functions for ecosystem initiatives, which have emerged as a way to achieve results in response to growing interest in achieving measurable environmental progress by developing non-regulatory tools and moving beyond jurisdictional concerns. The program seeks to establish and provide support to shared governance mechanisms as well as to implement Grants and Contributions programs for cleanup and community projects. It also seeks to manage administrative or other types of funding arrangements as well as partnerships with provinces, the United States government, Aboriginal groups or regional stakeholders.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
32,615,541	26,050,660	-6,564,881

Human Resources (FTEs)*

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
83	76	-7

Performance Results

Sub-Program 1.3.4: Ecosystems Initiatives			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Increased application of ecosystem-based management in Canada	Estimated progress achieved against near-term goals identified in the federal-provincial agreements respecting ecosystem initiatives	Great Lakes: 100% by March 2019 St. Lawrence: 100% by March 2016	Great Lakes: Results are not available as a new Canada-Ontario Agreement (COA) was not in place in 2013–14. Negotiations continued in 2013–14 but were not finalized between the Government of Canada and the Province of Ontario on a COA on Great Lakes Water Quality and Ecosystem Health, which supports implementation of the 2012 Canada–U.S. Great Lakes Water Quality Agreement. A new five-year COA will be in place in 2014–15, and progress towards meeting relevant goals will be tracked once it enters into force. The target for Great Lakes has been revised due to the delay in launching the new COA. St. Lawrence: 77% as of March 2014 57 projects in the Joint Action program: 44 (77%) are proceeding as planned, 9 (16%) are facing difficulties and 4 (7%) are delayed or have been dropped.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to engage with water governance bodies, other jurisdictions and non-governmental organizations to collaboratively implement ecosystem initiatives in the Great Lakes, Lake Winnipeg Basin, Lake Simcoe/South-eastern Georgian Bay and St. Lawrence systems;
- Maintained its close working relationship with communities by supporting environmental action and projects in priority ecosystems and hot spots in the Salish Sea, Okanagan Valley and Atlantic Coast;
- Negotiated a new Canada–Ontario Agreement on Great Lakes Water Quality and Ecosystem Health; and
- Established a formal agreement (with Ontario, City of Hamilton, Hamilton Port Authority, U.S. Steel Canada and City of Burlington) to protect water quality and improve fish habitat in the Hamilton Harbour Area of Concern (Randle Reef) through safe management of contaminated sediments.

Environment Canada continued to participate in ongoing work to address debris resulting from the 2011 earthquake and tsunami in Japan. The Department participated in an exercise, led by Public Safety Canada, to confirm roles and responsibilities of the various organizations involved in the cleanup in coastal communities, as well as to identify gaps and challenges to be addressed. Close to $650,000 has been awarded of the $1 million provided to Canada from Japan to support the cleanup.

For information about the work carried out in major ecosystems, see Sub-sub-programs 1.3.4.1–1.3.4.5.

Sub-Sub-Program 1.3.4.1: Great Lakes

Sub-Sub-Program Description

This program provides leadership, oversight, coordination and governance mechanisms for the Great Lakes Basin Ecosystem Initiative. This includes policy development, issues management, planning, and implementation of agreements and initiatives such as the Canada–United States Great Lakes Water Quality Agreement, the Canada–Ontario Agreement (Great Lakes Basin Ecosystem), the Great Lakes Action Plan, implementation of sediment remediation under the Action Plan for Clean Water, and State of the Great Lakes Reports. The program also supports Environment Canada's efforts on International Joint Commission–related Great Lakes water quality issues. In collaboration with other federal departments and agencies, provincial governments and agencies, conservation authorities, municipalities, not-for-profit non-governmental environmental groups/organizations and stewardship networks, this program implements Remedial Action Plans and Lakewide Management Plans and ensures the environmental quality of the Great Lakes Ecosystem is maintained and improved.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
17,988,242	15,594,014	-2,394,228

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
63	52	-11

Performance Results

Sub-Sub-Program 1.3.4.1: Great Lakes			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Environment Canada and partners achieve near-term objectives for improvements in beneficial use impairments and environmental quality of the Great Lakes Basin ecosystem	Phosphorus levels in the Great Lakes	Interim Phosphorus Concentrations Objectives[9] in Open Waters – 2012 Great Lakes Water Quality Agreement (GLWQA) (ug/l): • Lakes Superior and Huron: 5 • Lake Erie (Western Basin): 15 • Lake Erie (Central and Eastern basins): 10 • Lake Ontario: 10	Based on the 2011 State of the Great Lakes report, overall status is fair, and the trend is deteriorating. Specifically: • Lake Erie is assessed as poor (above target), and the trend is deteriorating; • Lake Huron is assessed as fair (well below target), and the trend is deteriorating; • Lake Ontario is assessed as fair (below target), and the trend is deteriorating; and • Lake Superior is assessed as good, and the trend is unchanging. Through the Great Lakes Nutrient Initiative, the Government of Canada is investing $16 million over four years (2012-16) in research and monitoring activities. Results will inform the development of policy options and strategies to meet phosphorous reduction targets.

[9] The interim targets for phosphorus loads and concentrations in open waters in the 2012 GLWQA will be reviewed and revised as necessary, and supplemented, by 2016, by phosphorus loading and concentration targets for the nearshore waters of Lake Erie.

	Progress on restoring the Great Lakes Areas of Concern (AOC)[10]	Zero Great Lakes Areas of Concern beneficial uses listed as "impaired" or "requires further assessment" by 2030	By February 2014, 104 beneficial uses were listed as impaired or requiring further assessment across all 17 AOCs in the region. To date, 54 beneficial uses have been restored to “not impaired” status. Efforts continue to confirm the impairment status of 24 beneficial uses identified as “requiring further assessment” and to restore the current 80 beneficial use impairments. Overall, environmental quality in the 17 Great Lakes AOCs has improved since the restoration program began in 1987. Between 1987 and 2012, the Collingwood Harbour, Severn Sound and Wheatley Harbour AOCs have had their environmental conditions fully restored, and the Spanish Harbour and Jackfish Bay AOCs are in recovery.

Performance Analysis and Lessons Learned

Highlights of the Department’s performance in 2013–14 include the following:

- Negotiated with Ontario on a new, draft Canada–Ontario Agreement on Great Lakes Water Quality and Ecosystem Health;
- Advanced both science and policy analysis for the Great Lakes Nutrient Initiative. Results will help establish revised phosphorus reduction targets for Lake Erie;
- Reached formal agreement on funding and implementation of the Randle Reef clean-up project (safe management of contaminated sediments);
- Through the Great Lakes Executive Committee (formally established in 2013–14), participated in key areas:
  - Nutrients – developed inventories and baseline program information, defined metrics to evaluate effectiveness, and identified opportunities to optimize programs;
  - Habitat and species – took part in Canada–U.S. discussions on biodiversity conservation strategies and net habitat gain;
  - Legacy chemicals – reached agreement (Canada–U.S.) on a process for identifying chemicals of mutual concern and identified the first set of chemicals to follow the process; and
  - Climate change – participated in preliminary work to conduct a gap analysis on knowledge concerning the Great Lakes;
- Progressed with the implementation of Lakewide Action and Management Plans in a number of areas and on a number of issues, including management plans (Grand River, Thames River); biodiversity conservation (Lake Superior); advancement of Healthy Lake Huron: Clean Water, Clean Beaches and the Southern Georgian Bay Coastal Initiative (Lake Huron); and nearshore water quality monitoring and reporting, and biodiversity strategy implementation (Lake Ontario). Summary reports for each of the five Great Lakes and the State of the Great Lakes Technical and Highlights reports[xxxix] were released;

[10] Areas of Concern are geographic areas where severe water quality degradation has impaired beneficial uses of the environment from an economic, human health or ecological perspective. Progress towards the restoration of an AOC is reflected in the decreased number of Impaired Beneficial Uses measured in the AOC. Fourteen beneficial uses are defined in the Canada–U.S. Great Lakes Water Quality Agreement, including restrictions on fish and wildlife consumption (human health), tainting of fish and wildlife flavour (economic), and loss of fish and wildlife habitat (ecological).

- Through the Great Lakes Sustainability Fund, provided $1.9 million to support 31 new projects to restore environmental quality in Canadian Areas of Concern. The funds leveraged $5.2 million from non-federal sources for a total investment of $7.1 million for restoration projects in several Areas of Concern; and
- Conducted preliminary work related to chemicals, nutrients and aquatic habitat in preparation for publishing the first groundwater science report in February 2015.

Sub-Sub-Program 1.3.4.2: St. Lawrence

Sub-Sub-Program Description

This program, implemented through a Canada–Quebec Agreement, commits the parties (both federal and provincial departments) to the conservation, protection and restoration of the St. Lawrence ecosystem while allowing the alignment of science for decision making and on-the-ground environmental actions. This program provides leadership, oversight and coordination to the overall governance of the St. Lawrence Action Plan. This includes support for the Agreement Management Committee, issues management, planning and coordination, evaluation and reporting, and leadership in the development of new agreements. The program also oversees the implementation of the Area of Prime Concern Program and the Community Interactions Program. Activities also include establishing management processes to coordinate and manage the St. Lawrence program within Environment Canada.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,901,839	3,216,745	314,906

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
8	8	0

Performance Results

Sub-Sub-Program 1.3.4.2: St. Lawrence			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Environment Canada and partners achieve near-term objectives for improvements in water quality, biodiversity conservation and beneficial uses in the St. Lawrence ecosystem	Percentage of projects or activities set out in the Canada–Quebec Agreement that are proceeding as planned	100% by March 2016	77% as of March 2014 57 projects in the joint action program: 77% (44) are proceeding as planned, 16% (9) are facing difficulties and 7% (4) are delayed or dropped.
	Phosphorus levels in the St. Lawrence River	To be determined	Phosphorus levels at the majority of water quality monitoring stations along the St. Lawrence River are above water quality guidelines for the period from 2008 to 2012. Higher phosphorus levels were found in agricultural areas on the south shore of the river between Richelieu and Bécancour rivers.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to implement the Canada–Quebec Agreement on the St. Lawrence 2011–26. The 18 partners to the Agreement consider and revise implementation plans annually; and
- Eighty-three (83) projects have been delivered. Of these, almost all (92%) were on track. All projects and activities of the Department's Numerical Environmental Prediction and the State of the St. Lawrence Monitoring Programs were on track. These projects address the coupling of atmospheric and hydrologic data to improve the modelling and prediction in the St. Lawrence watershed and modelling of the hydrodynamics, particularly around the Montreal Archipelago and in the Richelieu River basin.

All products included under the State of the St. Lawrence program were delivered as planned. Federal and provincial partners updated fact sheets on several indicators—including on invasive species, phytoplankton and zooplankton communities in the Gulf, and toxic microalgae. The next Overview of the State of the St. Lawrence is underway and will be published in 2014.

A total of 28 Grants and Contributions agreements were signed under two programs:

- Community Interaction Program – 14 agreements to support projects on public awareness, site restoration, and study and action plans to address key environmental issues; and
- Priority Intervention Zones Program – 14 agreements to fund projects to support citizens and interest groups in working toward the integrated management of the St. Lawrence River.

Sub-Sub-Program 1.3.4.3: Lake Simcoe

Sub-Sub-Program Description

The Government of Canada has committed funding over five years to establish a Lake Simcoe Clean-Up Fund to provide financial and technical support to implement high-impact, priority projects aimed at reducing phosphorus inputs, rehabilitating habitats to achieve nutrient reductions, restoring the cold-water fishery in Lake Simcoe, and enhancing research and monitoring capacity deemed essential for the restoration of Lake Simcoe and its watershed. The Fund is administered by Environment Canada in consultation with Fisheries and Oceans Canada, Agriculture and Agri-Food Canada, the Province of Ontario, the Lake Simcoe Conservation Authority, and other key stakeholders. The initiative is expected to improve water quality for recreational use, substantially reduce phosphorus loads from urban and rural sources, and advance the restoration of a sustainable cold-water fishery and the ecological integrity of Lake Simcoe. The Fund is a key component of the Government's Action Plan for Clean Water.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
7,140,670	2,829,783	-4,310,887

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
0	7	7

Performance Results

Sub-Sub-Program 1.3.4.3: Lake Simcoe			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Environment Canada and partners achieve reductions in phosphorus loads and restoration and protection of fish and aquatic dependent wildlife populations of Lake Simcoe and South-eastern Georgian Bay	Estimated annual reductions in phosphorus inputs to the Lake Simcoe and South-eastern Georgian Bay watersheds due to projects supported by the program	4,000 kg by March 2017	The actual results for Round 1 projects are not yet available, as many of the projects are multi-year and are not yet completed. In Round 1, 26 projects were initiated to directly reduce phosphorus through on-the-ground action and/or indirectly reduce phosphorus through research and identification of areas of impairment. Estimates indicate that as of March 2012, stewardship projects supported by the Lake Simcoe Clean-Up Fund were preventing the release of around 2900 kg of phosphorus per year.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Completed the first year of full funding to Round 1 projects (26 projects, totalling $8.6 million). The projects demonstrate, test and communicate the effectiveness of on-the-ground action to reduce phosphorus discharges to Lake Simcoe/South-eastern Georgian Bay. Many of these projects are implemented over several years, and results will be reported as they become available;
- Initiated the call for proposals, review and approvals for projects to be funded in Round 2 of the initiative; and
- Brought together stakeholders in South-eastern Georgian Bay to discuss and address current and emerging issues, including holding a stakeholder workshop to identify gaps in knowledge about the area, and to validate and expand on a 2012–13 departmental science synthesis report. Results will help the Department prioritize projects to be supported in subsequent funding rounds.

Sub-Sub-Program 1.3.4.4: Lake Winnipeg

Sub-Sub-Program Description

The Lake Winnipeg Basin Initiative focuses on three key areas: science (research, information and monitoring), facilitating watershed governance across the basin, and Environment Canada's establishment and administration of a Lake Winnipeg Basin Stewardship Fund to help improve the water quality of Lake Winnipeg by identifying, assessing and addressing key water quality issues within the Lake and its contributing watershed. National science and governance initiatives aligned to the Water Quality and Aquatic Ecosystems Health program (1.2.1) also support the Lake Winnipeg Basin Initiative.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,265,427	2,270,865	5,438

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
6	6	0

Performance Results

Sub-Sub-Program 1.3.4.4: Lake Winnipeg			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Reduced nutrient loading in the Lake Winnipeg basin	Estimated reduction of phosphorus load in the Lake Winnipeg basin resulting from projects funded by the Lake Winnipeg Basin Stewardship Fund	10,800 kg by 2017	The results of phosphorus reductions for Round 6 projects will be calculated at the program mid- and end-points in 2015 and 2017 respectively. During Round 6, 18 projects were implemented to reduce pollutants, in particular to reduce nutrient loads and improve the ecological sustainability of the lake and watershed.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued its work on the Lake Winnipeg Basin Initiative, delivering science, and addressing transboundary and stewardship issues;
- Explored (with water governance bodies, other jurisdictions and non-governmental organizations) opportunities to cooperatively develop and support a basin-wide nutrient management strategy. For example, the Department participated in the International Red River Board's Water Quality Committee, water quality forums in Minnesota and North Dakota, the Lake of the Woods annual Water Quality Summit, and Lake Winnipeg Research Consortium's Annual Science Workshop. Increased collaboration has enhanced Environment Canada's water quality and science profile at water quality fora;
- Continued to work with Manitoba to implement the Canada–Manitoba Memorandum of Understanding (MOU) Respecting Lake Winnipeg, including initiating a management review of the MOU to help determine if it should be extended for five years (past 2015);
- Through the Science Subsidiary Arrangement (2012) of the Canada–Manitoba MOU, facilitated the joint planning and delivery of a workshop on eutrophication indicators and the development of a preliminary set of eutrophication-related indicators for the Lake Winnipeg basin;
- Continued to implement 13 scientific research and monitoring projects in Lake Winnipeg and its watershed, and to conduct monitoring, surveillance and modelling activities to fill knowledge gaps (for example, the relationship between ecology and nutrient cycling, and between nutrient sources and transport mechanisms). This work supports Manitoba's efforts to develop transboundary nutrient objectives and performance indicators for Lake Winnipeg; and
- Negotiated 18 contribution agreements for the Lake Winnipeg Basin Stewardship Fund, which allocated $2.8 million to successful applicants and leveraged $6.4 million from other stakeholders ($2.32 for every dollar from the Fund). New stakeholders were engaged due to the increased program profile and increased visibility of Lake Winnipeg water quality issues.

Sub-Sub-Program 1.3.4.5: Community Ecosystem Partnerships

Sub-Sub-Program Description

This program maintains and restores the beneficial uses and environmental quality of targeted ecosystems of federal interest (such as northern Canada, Georgia and Okanagan basins, and coastal ecosystems in Atlantic Canada). Through increased coordination and improved collaboration, these initiatives use strategic partnerships, research, science and funding programs to improve knowledge bases, increase stakeholder capacity and involvement, improve decision making, and increase use of best practices in order to address complex environmental issues. The program provides the coordination and oversight functions for targeted ecosystem initiatives that encompass multiple levels of government (federal, provincial/territorial, municipal, Aboriginal). Funding includes support for ecosystem and community projects and partnerships. This program targets stakeholders, including several levels of government, communities, businesses, industry, Aboriginal communities, non-governmental organizations and academia.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,319,363	2,139,253	-180,110

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
6	3	-3

Performance Results

Sub-Sub-Program 1.3.4.5: Community Ecosystem Partnerships			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Achievement of objectives for improvements in beneficial uses and environmental quality in priority ecosystems set by Environment Canada and collaborating organizations	Percentage of environmental issues identified by Environment Canada for the targeted coastal ecosystems in Atlantic Canada for which a near-term objective has been agreed to by all participating organizations	60% by 2015	95% as of March 31, 2014 Through the Atlantic Ecosystem Initiatives, and in collaboration with 20 non-governmental organizations, 95% of priority environmental issues for targeted ecosystems have near-term objectives articulated in their management plans and have been agreed to by stakeholders.
	Percentage of near-term objectives for identified priority ecosystems which are measurable and time-bound	100% by 2015	100% as of March 31, 2014 Of the near-term objectives articulated in management plans for priority ecosystems, 100% are measurable and time-bound.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

Okanagan and Salish Sea ecosystems

- Invested over $200,000 in several collaborative projects with local groups to advance science relating to water balance modelling and water quality monitoring, developed strategies for conservation of wetlands and ecosystem biodiversity, and supported the integration of science and policy through the 2014 Salish Sea Ecosystem Conference;

- Engaged with Canadian provincial and American state agencies, regional agencies and academia, to assess the effect of landscape conversions on water quality; and
- Published transboundary indicators on the health of the Salish Sea ecosystem and traditional knowledge on the significance of these indicators to Coast Salish Tribes and First Nations. Collaboration increased both the tools and experience available to understand threats.

Atlantic ecosystem

- Provided $1.2 million in Grants and Contributions to support 36 stakeholder projects aimed at conserving and restoring important habitat, improving water quality and addressing impacts of climate change. Projects benefited from collaboration with diverse partners, including academic institutions, various levels of government (Canada and U.S.), First Nations and others;
- Initiated the development of a new arrangement for environmental cooperation in Atlantic Canada, following the expiration of the 2008 Memorandum of Understanding on Environmental Cooperation in Atlantic Canada (and the related Water Annex); and
- In collaboration with provincial and federal partners, funded 11 projects in the Gulf of Maine (total of $290,000) through the Health of the Oceans Initiative. These projects will advance long-term coordinated approaches to transboundary water management and address water priorities of common concern in Atlantic Canada.

Program 1.4: Compliance Promotion and Enforcement – Wildlife

Program Description

This program serves to conserve and protect the natural environment through compliance promotion and enforcement, supported by sound scientific analysis and advice, 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.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
16,623,597	16,849,667	18,545,835	18,208,956	1,359,289

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
139	140	1

Performance Results

Program Activity 1.4: Compliance Promotion and Enforcement – Wildlife			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Compliance with wildlife laws and regulations administered by Environment Canada	Percentage of inspected regulated community compliant with regulatory requirements under the *Migratory Birds Convention Act, 1994*	90% by March 2015	87% in 2013–14 Compliance with regulations under *Migratory Birds Convention Act, 1994* was verified by conducting 896 inspections and 208 investigations. Compliance in 2013–14 (87%) was close to the 90% target but lower than in 2012–13 (93%) because of more targeted strategies focusing on commercial outfitters rather than on individual hunters.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Conducted and reported on over 13,700 inspections and over 500 investigations under the *Species at Risk Act*, the *Canada Wildlife Act*, the *Migratory Birds Convention Act, 1994* and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA). Of 12,805 violations identified as a result of this work, 10,000 involved a sudden influx of illegal small importations of a weight-loss product made from an endangered species—this more than doubled the typical number of annual inspections; and
- Completed and reported approximately 300 inspections and 35 investigations related to protected areas. The majority of these inspections focused on high-risk areas and the conservation of species, as well as on illegal activities (e.g., illegal hunting). Investigations resulted in a dozen convictions.

One case led to the most important penalty ever levied in Canada under WAPPRIITA: an individual was sentenced to a penalty of $385,000 for offences related to the illegal export of about 250 Narwhal ivory tusks[xl] to the United States. Other successful prosecutions are published in the Enforcement Notifications[xli].

The Department also:

- Identified priority areas and issues requiring attention through the National Enforcement Plan based on risks, environmental impact, compliance history and consultations with internal departmental partners, INTERPOL and the Commission for Environmental Cooperation. Priorities include Canadian and foreign species at high risk of requiring conservation and/or high level of non-compliance, their habitats and protected areas;
- Continued to develop the *Administrative Monetary Penalties Regulations*, as well as internal policies to support an administrative monetary penalties system; and
- Continued to learn from its compliance promotion and enforcement efforts through participation in Operation Nanook (led by the Department of National Defence), which demonstrates how sharing resources and information strengthened Environment Canada's ability to conduct enforcement activities in the difficult northern terrain and conditions.

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

Performance Measurement

Performance Indicator	Target	Actual Results
Weather Warning Index (a weighted index of weather warning timeliness and accuracy)	7.6 on a scale of 0 to 10 by 2015	The Weather Warning Index was 8.3, covering 2011 to 2013. The index rose by 0.4 from the previously reported value of 7.9 for the 2010–12 period. The increase is largely due to improvements in the accuracy and timeliness of snowfall and freezing rain warnings. Despite the fact that the index is calculated over a three-year period, it is still sensitive to year-to-year changes in the predominant weather patterns. For example, the unusually harsh winter of 2013–14 for much of Canada was accompanied by large-scale weather systems that tend to be well predicted. As a result, this unusual weather pattern may have had a positive influence on the index result.

Program 2.1: Weather and Environmental Services for Canadians

Program Description

This program provides reliable, accurate, and timely forecasts and warnings, as well as weather and environmental intelligence, to anticipate, manage and adapt to the risks and opportunities of changing weather, water, air quality and climate conditions. It involves monitoring, research, production and service delivery, based on sound science, to help Canadians make informed decisions to protect their health, safety, security and economic prosperity. Because a global effort is needed to monitor, understand and predict constantly changing weather, water, air quality, ocean ice and climate conditions, this program provides support to and relies on various collaborators in Canada and around the world. Key partners include the World Meteorological Organization of the United Nations and its Intergovernmental Panel on Climate Change, 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),* the Convention of the World Meteorological Organization*,* and memoranda of agreement with national meteorological and space agencies. This program also provides forecasts and information in case of environmental emergencies associated with the release of toxic and radioactive material in the atmosphere. Grants and Contributions in support of Weather and Environmental Services for Canadians are used as components of this program.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
158,545,334	153,545,334	189,462,286	182,818,981	29,273,647

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
979	1,038	59

Performance Results

Program 2.1: Weather and Environmental Services for Canadians			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Canadians use Environment Canada's weather and environmental services	Percentage of the population of a warned area who report having seen or heard a recent weather warning and who took actions in response	30% ongoing	43% in the national Weather and Environmental Services survey conducted in May 2012 This was the first time this question has been asked in the national survey. The next survey is expected in 2016.
Canadians understand information on the changing weather, water and climate conditions and the associated health and safety risks	Percentage of the population who understand wind chill information	To be determined	Results are not available as data collection for this indicator has not begun.
	Percentage of targeted sensitive populations[11] within selected regions receiving information on the Air Quality Health Index (AQHI) who: a) identify potential behaviour changes in response to current and/or forecast AQHI levels that are consistent with health messaging; and/or b) identify actual behaviour changed in response to current and/or forecast AQHI levels that are consistent with health messaging	10% to 20% of sensitive population (range is due to regional variation) by 2016	42% based on a post-smog event survey conducted in Windsor, Ontario, in July 2012 The reported value is based on a single location and may not be representative of the indicator across all regions. The next national survey of users is scheduled for 2016.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued with the internal transformation of weather warning and prediction services, including air quality and health-related services to provide Canadians with more timely, accessible and accurate weather information. The Department also strengthened and modernized weather monitoring infrastructure, including creating new weather stations or upgrading existing ones;
- Expanded the Air Quality Health Index (AQHI)—the first index of its kind in the world—to seven provinces and the Northwest Terrotories (in partnership with provincial and territorial governments), improved AQHI numerical forecasting models and implemented new techniques for monitoring air pollution;
- Published several popular meteorological data sets to Data.gc.ca[xlii] in support of open government principles;
- Environment Canada's weather warnings became the first and only Canadian alerts to be adopted for use by Google Alert: an online mapping system that displays warning information when users employ Google to search for products or services in a location where a weather alert is in effect;
- Participated in the development of the federal response to the Space Volume of the Aerospace Review of November 2012, which aimed to produce recommendations on how federal policies and programs can help maximize the competitiveness of Canada's aerospace and space programs; also contributed to development of a new governance structure for Canada's space program;
- Relaunched the climate data online website[xliii]; this site provides historic weather data and received 4.4 million visits in 2013–14. The Department also designed and implemented new website architecture for Canadian climate change scenarios[xliv] to support informed decisions on adaptation;

[11] Sensitive populations for the AQHI are defined as those people with existing respiratory or cardiovascular conditions, young children, the elderly and those who are active outdoors.

- Contributed climate data to the departmental and Government of Canada portals and international databases (World Meteorological Organization World Data Centres[xlv]); and
- Led and/or participated in numerous international initiatives, and published its science data and results extensively.

For additional information on these and related initiatives, see Sub-programs 2.1.1 to 2.1.3.

Sub-Program 2.1.1: Weather Observations, Forecasts and Warnings

Sub-Program Description

This program provides 24 hours/day, 365 days/year weather warnings, forecasts and information with lead times of minutes to weeks. Above all, it allows Canadians to anticipate dangerous meteorological events so they have the time needed to protect themselves and their property. Its activities combine research functions in science and modelling with regional monitoring, prediction and service delivery. These activities are highly dependent on the supercomputing capacity managed by Shared Services Canada. The program is delivered through collaborations involving data, science and information distribution in Canada and internationally. Key collaborators include the media, all levels of government and academia in Canada, other national meteorological services, research and space agencies, and the United Nations World Meteorological Organization to which this program annually contributes about $2 million to support Canada's international commitments in meteorology and hydrology. Legal and statutory responsibilities for this program include the *Department of the Environment Act* and *Weather Modification Information Act*. In addition, support is provided to other departments acting under the *Emergency Management Act (2007)*. Program delivery includes Assessed contribution to the World Meteorological Organization (WMO) and may include Grants and Contributions in support of Weather and Environmental Services for Canadians.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
124,774,554	152,658,387	27,883,833

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
752	837	85

Performance Results

Sub-Program 2.1.1: Weather Observations, Forecasts and Warnings			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Canadians have the information they need on current and changing weather conditions	Percentage of the population who report that they are somewhat or very likely to access weather information during a typical day	90%	90% in the Weather and Environmental Services Quality of Services Survey conducted in February 2011
	Percentage of the population who indicate that weather forecasts are "always" or "usually" useful	85% by 2015	82% in the Weather and Environmental Services Quality of Services Survey conducted in February 2011

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to progress with key upgrades and repairs to the radar network, including:
  - Installing or upgrading 28 surface weather and climate monitoring stations, and addressing stabilization through a series of projects that have been or continue to be installed in the radar network;
  - Commissioning modern HOGEN (Hydrogen Generation) systems at three upper air stations, in support of greater reliability and safety; and
  - Continued improvements to the Surface Weather, Radar, Upper Air and Canadian Lightning Detection Network;
- Progressed with ongoing improvements to services for Canadians. For example, the Department launched the Ninjo Warning Layer, a new tool for producing forecasts of thunderstorms and tornados; relaunched the weather-information website Weatheroffice[xlvi] to conform to the Government of Canada's new standards; and introduced the Alert Me email service for emergency measures organizations, media, municipalities and other specialized users; and
- Continued to be active internationally. For example, the Department:
  - Led the Canadian Delegation to the Group on Earth Observations (GEO) Ministerial Summit, and continued to coordinate Canada's federal participation in GEO through the Federal Committee on Geomatics and Earth Observations, and to lead the development of the next GEO ten-year plan;
  - Continued to leverage engagement with international partners, particularly with the National Oceanic and Atmospheric Administration on initiatives such as northern monitoring and marine forecast systems, as well as with the U.S. Department of Defense on a proposed polar and weather communication satellite mission; and
  - Continued to advance domestic priorities by leveraging international engagement in various fora, including the Commission of Atmospheric Science and the World Meteorological Organization.

In preparation for its role in the 2015 Pan-American Games, the Department made improvements in monitoring, prediction and air quality to protect the health, safety and security of athletes, citizens and spectators from hazardous weather. Work included testing cutting-edge technology being developed for the Games, including a new lightning alerting system that will cover all venues.

Sub-Program 2.1.2: Health-related Meteorological Information

Sub-Program Description

This program provides forecasts, tools and information on atmospheric conditions that affect health, such as UV (ultraviolet) radiation, extreme temperatures and air quality. The program's services assist Canadians in making decisions about their short- and long-term health, and enable health agencies to help vulnerable populations respond to changing atmospheric conditions. It supports the mandates of Environment Canada, Health Canada, and many public and non-governmental health agencies. This program is delivered across Canada through collaborations involving data and information distribution. Collaborators include the media, public health agencies at all levels of government, provincial environment agencies and non-governmental agencies. This program also includes conducting systematic observations and monitoring of ozone in the atmosphere, and hosting the World Ozone and UV Data Centre, operated on behalf of the World Meteorological Organization and used by over 75 government agencies around the world. Program delivery may include Grants and Contributions in support of Weather and Environmental Services for Canadians.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
11,382,316	10,282,448	-1,099,868

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
86	62	-24

Performance Results

Sub-Program 2.1.2: Health-related Meteorological Information			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Canadians have the information they need to protect their health against risks related to air quality and other atmospheric conditions	Percentage of targeted sensitive populations within selected regions receiving information on the Air Quality Health Index (AQHI) who report that they recall seeing or hearing AQHI information	15 to 25% of sensitive population (range is due to regional variation) by 2016	17% in the 2011 AQHI National Survey
	Percentage of the general population within selected regions receiving AQHI who report that they recall seeing or hearing AQHI information	15 to 20% of general population (range is due to regional variation) by 2016	15% in the 2011 AQHI National Survey

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to expand the Air Quality Health Index (AQHI), including piloting it in Quebec, New Brunswick and Ontario, while continuing to deliver the program in the other 7 provinces and in 1 territory. AQHI is now available in 79 communities across Canada, including in some northern locations;
- Collaborated closely with the provinces, territories and some municipalities to deliver the AQHI service—a national program that also meets regional needs. The AQHI is adopted voluntarily; maintaining active engagement with all partners continues to be a cornerstone for the successful national implementation of the program;
- Strengthened models used to forecast AQHI and initiated development of new techniques for monitoring air pollution using satellite-based instruments. Multi-hazard alerts (e.g., for pollution and UV) will play an increasingly important role in meeting partners' needs and protecting the health of Canadians;
- Through the Stratospheric Ozone Monitoring program, provided unique data sets for long-term trend analysis, to track changes to the ozone layer and enable UV Index forecasting. The data informed messages to the public to promote protective action against sun and UV radiation exposure and, along with departmental scientific expertise, supported the 2014 World Meteorological Organization–United Nations Environment Programme Scientific Assessment of the depletion of ozone;
- Continued to collaborate with global science counterparts in health-related solar UV radiation applications, efforts aimed at ensuring global conformity in UV radiation exposure reporting—as well as with the U.S. National Oceanic and Atmospheric Administration to assess differences in the performance of each country's UV Index forecasting models; and
- Continued to host the World Meteorological Organization (WMO) World Brewer Calibration Centre, participated in inter-comparison activity with the Regional Brewer Calibration Centre in Europe, and continued to support global stratospheric ozone monitoring in developing countries through the WMO Brewer Trust Fund. Maintaining the World Brewer Calibration Centre standards and the regular calibration of Brewer spectrophotometers is key to long-term monitoring of stratospheric ozone on a global basis.

Sub-Program 2.1.3: Climate Information, Predictions and Tools

Sub-Program Description

This program generates new knowledge and information on past and present states of the climate system, changing composition of the atmosphere and how the climate system functions, future state of the climate, and impacts of atmospheric change. This includes global and regional climate model and scenarios development, detection of human influence on climate change in Canada, including extremes, understanding the North and Canadian cryosphere, and tracking atmospheric levels of greenhouse gases and aerosols across Canada, including remote locations, and understanding the impacts of climate change on economic sectors and ecosystems. The results and knowledge produced from these activities provide the scientific basis for policy development, mitigation and adaptation planning and decision making, and products, services and tools to Canadians. In particular, climate services inform and assist users in adapting to both present-day climate variability and medium- to long-term changes in climate. This program is delivered nationally through data, science and information sharing and distribution. Key partners include all levels of government, academia, industry, consortia, standards councils, and the national and international scientific community, including organizations such as the World Meteorological Organization and the Intergovernmental Panel on Climate Change, the Canadian Meteorological and Oceanographic Society, and various national climate agencies. Legal and statutory responsibilities for this program include the *Department of the Environment Act*, *Canadian Environmental Protection Act (CEPA, 1999)*, *Emergency Management Act (2007)* and the *National Research Council Act* (Canadian Commission on Building and Fire Codes). Program delivery may include Grants and Contributions in support of Weather and Environmental Services for Canadians.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
17,388,464	19,878,146	2,489,682

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
141	139	-2

Performance Results

Sub-Program 2.1.3: Climate Information, Predictions and Tools			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Clients and users have the information they require on climate projections and climate data sets on various time and spatial scales	Five-year running average of the number of downloads of climate datasets	9,000 by March 2014	15,666 downloads for the period ending March 31, 2014 The indicator value is the number of instances of data downloaded directly from the Climate Research Division website. Over time, it will track changes in the level of awareness and capacity of the Canadian climate services, impacts and adaptation communities to integrate quantitative information in their planning. A five-year average is used to reduce the effect of a fluctuating profile due to timing of the release of major international climate-related reports.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to engage with stakeholders including other federal government departments, provinces and territories, and the private sector, on the provision and use of updated climate data and information to support adaptation decisions;
- Generated and disseminated results of its work under this program in over 75 peer-reviewed publications and held lead roles in development of the Intergovernmental Panel on Climate Change Fifth Assessment Report[xlvii], and in Technical Reports from the Arctic Council Expert Groups on Methane and Black Carbon;
- Enhanced climate models to better reflect processes related to snow, aerosols and methane emissions from wetlands, and upgraded the Earth system climate model;
- Performed new climate model experiments to address climate policy questions related to aerosols (black carbon) and methane, Arctic temperature change, carbon-climate interactions, and the recent slowdown in the rate of global surface temperature increase;
- Produced the first long-term analysis of sea ice movement in the Canadian Arctic and developed cryosphere (snow and ice) data records and analyses on various time scales for climate model experiments and evaluations;
- Added two new monitoring sites in Canada's North for baseline monitoring of greenhouse gases (GHGs) and aerosols, and advanced methods to estimate GHG sources using surface and satellite observations;
- Worked with territorial governments to develop a new standard for managing the risk of changing snow loads in northern Canada;
- Released an updated 1981 to 2010 Climate Normal data set, which reflects changes in average temperature and precipitation across Canada to support planning and design-related decision making; and
- Responded to over 2,000 requests for site-specific wind pressure analyses in support of cellular tower construction, as well as more than 200 other requests for climatic design data in support of the *National Building Code of Canada* and other infrastructure standards.

On the international front, the Department continued to participate in the Global Framework for Climate Services Intergovernmental Board, and initiated and co-led work to assess and improve climate services in North America and the Caribbean under the World Meteorological Organization Regional Association.

Program 2.2: Weather and Environmental Services for Targeted Users

Program Description

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 reliable, accurate and timely observations, forecasts and warnings 24 hours/day, 365 days/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 International Civil Aviation Organization, as well as U.S. Government institutions. This program supports the Department in meeting obligations and responsibilities conferred by the *Department of the Environment Act* and the Convention of the World Meteorological Organization; helps other government departments meet their obligations under the *Aeronautics Act* and the Treaty in Support of International Civil Aviation, the *Oceans Act* and the *Fisheries Act*; and supports memoranda of agreement with Transport Canada, National Defence and various provincial agencies.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
25,547,830	25,547,829	28,557,210	26,618,144	1,070,315

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
474	393	-81

Performance Results

Program 2.2: Weather and Environmental Services for Targeted Users			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Targeted sectors have the meteorological and environmental information and services they need to operate efficiently and safely	Combined level of satisfaction of the main clients of the Meteorological Service of Canada (MSC) based on the statement "The services provided by the MSC meet our needs"	7.5 out of 10 Ongoing	8.0 out of 10 in 2013–14 The value is based on an averaging of the formal surveys administered to NAV CANADA, Department of National Defence and the Canadian Coast Guard.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Remained on track for full implementation of its Arctic Meteorological Areas (METAREAs)[12] initiative with the expansion of forecast coverage over international waters in the Arctic, the installation of surface weather stations in the Arctic and the deployment of monitoring buoys;
- Continued to provide services on a 24/7 basis to support the Canadian Coast Guard, Department of National Defence and other clients, including provincial and national emergency management organizations, with ice products and other weather services;
- Signed a Memorandum of Understanding with Agriculture and Agri-Food Canada to deliver specialized weather and environmental services;
- Continued with a number of projects to modernize the production of forecasts for airports;
- Continued to provide services through the Canadian Lightning Detection Network. The Network maintains over 80 sensors capable of detecting up to 45,000 strikes in an hour; and
- Expanded its pilot Integrated Seasonal Vigilance Bulletin project beyond Quebec to three other provinces (Ontario, New Brunswick and British Columbia). The Bulletin focuses on the integration of available and pertinent information, such as recent climate and hydrological conditions, as well as directly or indirectly associated impacts.

[12] METAREAs are geographical sea regions defined for the purpose of coordinating the transmission of meteorological maritime safety information, in the form of marine weather forecasts and warnings, to mariners navigating international and territorial waters. Weather, ice and sea-state forecasts are delivered for the METAREA marine forecast zones based on navigable waters, which are based on marine activity within those zones.

Sub-Program 2.2.1: Meteorological Services in Support of Air Navigation

Sub-Program Description

This program provides the aviation industry and its regulatory agency with meteorological services (observations, forecasts, warnings) 24 hours/day, 365 days/year. It supports the goals and missions of NAV CANADA and Transport Canada, and supports the domestic and international airlines that operate in Canadian territory in making the tactical decisions needed to maximize their efficiency, effectiveness and safety. This program also includes the Volcanic Ash Advisory Centre (VAAC), one of nine such centres around the world operating under the authority of the International Civil Aviation Organization. The VAAC forecasts the transport of airborne volcanic ash to reduce the risk of aircraft disasters, and provides operational support and backup to other VAACs worldwide. This program is delivered under a contract between Environment Canada and NAV CANADA.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
4,997,178	6,371,134	1,373,956

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
170	154	-16

Performance Results

Sub-Program 2.2.1: Meteorological Services in Support of Air Navigation			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
NAV CANADA and the aviation industry have the meteorological information and services they need to maximize their efficiency and aviation safety	Overall client satisfaction index, on a scale of 1 (unsatisfactory) to 10 (excellent)	Equal or above 7.5 Ongoing	7.1 out of 10 based on the 2013 survey The 2013 survey results may have been influenced by technological change transitions under way at the time that generated additional workload for survey recipients in the client organization. The next survey will be in 2015 and may generate improved results after adjustments have been made within the client organization.

Performance Analysis and Lessons Learned

In 2013–14, the Department continued to provide high-quality meteorological services to NAV CANADA. Under the terms of its agreement with NAV CANADA, the Department provided a range of aviation forecasts and data services. Highlights include:

- Results of a client satisfaction survey undertaken by the Department in 2013 were favourable, and demonstrate that NAV CANADA clients believe that their needs are understood and that they are valued as clients. Feedback on areas for improvement is being incorporated into planned future activities, including for inspection reports from meteorological stations; and
- Commenced a multi-year initiative to modernize airport forecasts, which will provide the foundation for future services to NAV CANADA and reflect results of the 2013 client satisfaction survey. The project will see improved forecasts provided to airports, through the use of new forecasting tools.

Sub-Program 2.2.2: Meteorological and Ice Services in Support of Marine Navigation

Sub-Program Description

This program provides marine industries and regulatory agencies with forecasts of the sea state, ice conditions and weather, 24 hours/day, 365 days/year. It supports the International Maritime Organization (IMO) by providing meteorological information for Canadian and international Arctic waters. Services under this program support the goals and mandates of the Canadian Coast Guard (CCG) of Fisheries and Oceans Canada, and support marine industries and other interests operating in Canadian waters, such as organizations involved in shipping, fisheries and resource extraction, in making tactical decisions (e.g., on ship routing) needed to maximize their safety and efficiency. As a key collaborator, the CCG broadcasts Environment Canada information related to this program to marine interests and provides in-situ weather, sea-state and ice information to Environment Canada. It is operated in part through a Memorandum of Understanding with Fisheries and Oceans Canada for services related to current and forecast ice conditions over Canadian navigable waters. Legal and statutory responsibilities for this program include the *Department of the Environment Act*, the *Oceans Act* and the *Fisheries Act*. It also supports international commitments to the International Convention on Safety of Life at Sea, 1974; (SOLAS), the Global Maritime Distress and Safety System (GMDSS) and the North American Ice Service.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
12,195,136	12,637,258	442,122

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
147	128	-19

Performance Results

Sub-Program 2.2.2: Meteorological and Ice Services in Support of Marine Navigation			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Marine communities have the weather, wave and ice information they need to operate safely and efficiently in Canadian waters	Percentage of mariners who indicate satisfaction with ability to access information	90%	94% based on a survey of marine weather information users, which was administrated in November to December 2012 Environment Canada's marine clients reported their satisfaction regarding accessibility to the Department's marine weather, wave and ice information through a variety of dissemination systems. *Note: The value reported in the 2012–13 Departmental Performance Report was incorrect. The correct value is the one reported here.*
	Number of requests from users for additional (ad hoc/on demand) information	Zero requests Ongoing	In 2013–14, mariners sent eight requests for additional information The indicator is a measure of how well the standard information products meet the needs of users. A low number of requests suggest that the standard products are found to be satisfactory by most users. The Canadian Ice Service (CIS) responded to most information requests by pointing users to where the data requested would be found on their website, engaging directly with them to clarify needs or informing clients when a request cannot be answered by CIS.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- The Department continued to implement the Arctic Meteorological Areas (METAREAs) initiative. Environment Canada delivers forecast information and data for two METAREAs, comprising the waters of the Canadian Arctic (including the Northwest Passage), a portion of international waters in the High Arctic, and waters north of Alaska and along parts of the western coast of Greenland. Most of the marine areas are now being served, with the remaining areas expected to be completed in 2014. The plan also now includes Hudson Bay and Approaches, which will add service in areas beyond what was originally planned.
- Environment Canada, with the Department of National Defence support, deployed 13 buoys over the course of the year. A total of 40 on-ice and in-water buoys have been deployed since the project began in 2011. The addition of buoys increases availability of real-time weather observation data for mariners and supports the Department's work in making timely and accurate forecasts.
- The Department continued negotiations on the renewal of its agreement with the Canadian Coast Guard (CCG) for the delivery of ice information and services (such as analysis of ice conditions in chart format, and briefings to and consultations with CCG officers, as required).

Sub-Program 2.2.3: Meteorological Services in Support of Military Operations

Sub-Program Description

This program provides the Department of National Defence (DND) with meteorological and oceanographic information, predictions and tools needed for operations of the Canadian Armed Forces (CAF) in Canada and abroad. It is a collaborative program, operating under a formal Memorandum of Understanding with DND, responding to CAF-specific needs and recovering its incremental costs from DND. This program is critical to CAF operations, contributing to the effectiveness and safety of tactical, operational and strategic manoeuvres within Canada and in various active military areas around the world. It also supports DND's legal and statutory responsibilities under the *Aeronautics Act*, which is the legal foundation for military aviation safety.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
2,919,885	4,066,294	1,146,409

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
106	84	-22

Performance Results

Sub-Program 2.2.3: Meteorological Services in Support of Military Operations			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
The Department of National Defence has the meteorological and oceanographic information and knowledge it needs to optimize its operations in Canada and abroad	Client satisfaction index, on a scale of 1 (unsatisfactory) to 10 (excellent), that combines input from survey data and DND management feedback	7.0 out of 10 Ongoing	8.4 out of 10 based on averaged results of three client satisfaction questions posed to DND in 2013 1) I feel the services provided by EC Defence Weather Services (DWS) meet my needs (8.0) 2) overall level of satisfaction with the quality of EC DWS products received in the past year (8.5) 3) overall level of satisfaction with the consultations received in the past year (8.7) The target of 7.0 was set in recognition of major organizational changes under way that could temporarily have had a negative impact on client satisfaction. Given that the targets were exceeded, consideration will be given to establishing a higher target in the future.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued to work at the fully operational Joint Meteorological Centre (Gagetown), where Environment Canada meteorologists and informatics specialists work collaboratively with CAF personnel to provide meteorological support to domestic and deployed operations; and
- Provided timely and accurate weather prediction services to military missions and exercises both at home and abroad, including to Operation Nunalivut, a major, annual multi-departmental sovereignty operation led by the CAF.

The North is an area of significant importance for the federal government in general—in particular, for DND. Environment Canada has been providing comprehensive meteorological support to DND personnel and further developing its expertise in forecasting for this vast, data-sparse and challenging territory.

Sub-Program 2.2.4: Meteorological Services for Economic and Commercial Sectors

Sub-Program Description

This program provides a variety of economic and commercial sectors (such as media, natural resources sectors and specialized users) with climate and meteorological services, including data from the Canadian Lightning Detection Network. This information and tools are used to make tactical and strategic decisions and maximizing economic and commercial efficiency, competitiveness, environmental performance and safety in the short and longer term. In doing so, it supports the mandates of Natural Resources Canada, Agriculture and Agri-Food Canada, and others (such as provincial agencies). Many economic sectors are sensitive to changing weather and climate with respect to the safety and cost-effectiveness of their operations (e.g., just-in-time delivery, pest management), the demand for their services (e.g., hydroelectrical generation) and the future of their industry. Specialized data services allow users to obtain pertinent information through such mechanisms as specialized data links or one-on-one consultations. This program is delivered across Canada through collaborations involving data and science, often on a cost-shared or cost-recovered basis.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
5,435,630	3,543,458	-1,892,172

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
52	27	-25

Performance Results

Sub-Program 2.2.4: Meteorological Services for Economic and Commercial Sectors			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Targeted Canadian economic sectors have the meteorological information they need for their decision making	Satisfaction level of the media with respect to the services provided by Environment Canada, on a scale of 1 (unsatisfactory) to 10 (excellent)	7.5 out of 10 by 2012	7.42 out of 10 based on averaged results from four client satisfaction questions posed in 2012 1) Satisfaction with accessibility and delivery of Environment Canada (EC) weather services (7.79) 2) I feel that EC is responsive to my needs (7.13) 3) I feel EC understands my needs (7.34) 4) I feel the services provided by EC meet my needs (7.41)

Performance Analysis and Lessons Learned

In 2013–14, Environment Canada continued to provide specialized users in a range of economic and commercial sectors with expanded access to weather, climate and air quality data, critical to business decision making for weather-sensitive industries, through the Environment Canada Datamart, and with enhanced access through the Government of Canada Open Data Portal[xlviii]. The expanded availability of data is widely and frequently used; there were 10 million downloads of data from Datamart in 2013–14. Several meteorological data sets were selected as featured data sets for the Canadian Open Data Experience hackathon in 2014. During the event, innovators across Canada competed to solve problems and increase productivity by developing consumer-friendly applications using Government of Canada Open Data.

The experience of the Department in 2013–14 indicates that Canadian businesses are increasingly requiring access to meteorological data in georeferenced formats (i.e., data associated with geographical location) that are ready to use in decision support processes and systems.

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

Performance Measurement

Performance Indicators	Targets	Actual Results
Canadian emissions of greenhouse gases (carbon dioxide equivalents) in megatonnes	Canada's national target is a 17% reduction from 2005 levels by 2020	Canada's total greenhouse gas (GHG) emissions in 2012 were 699 megatonnes (Mt) of carbon dioxide equivalent (CO2 eq), or 5% (37 Mt) below the 2005 emissions of 736 Mt. Canada's Emissions Trends report (2013) indicates that Canada's annual GHG emissions are projected to reach 734 Mt in 2020. As a result of the combined efforts of provincial, territorial and federal governments, consumers and businesses, this amount is 128 Mt lower than the level emissions would have been at in 2020 if no action had been taken to reduce GHGs since 2005.
Canadians ambient air quality: Percentage of reporting communities in which the 24-hour Canada-Wide Standard for fine particulate matter ($PM_{2.5}$) of 30 µg/m^3 was achieved	100%	91% for the period 2010–12 (83 out of 91 communities) As part of the Air Quality Management System implementation, new 2015 Canadian Ambient Air Quality Standards (CAAQS) for $PM_{2.5}$ for 24-hour and annual average were published. The 2015 targets for these CAAQS are: 28 µg/m^3 for the three-year average of the annual 98th percentile of the daily 24-hour average concentrations; and 10 µg/m^3 for the three-year average of the annual average concentrations respectively.

Program 3.1: Substances and Waste Management

Program Description

Activities in this program reduce threats to health and the environment posed by pollution and waste from human activities. The program assesses risks to health and the environment from substances that are already in commercial use (existing substances) and substances proposed for introduction into use in Canada (new substances). It also develops and implements measures to prevent or manage the risks from these substances and waste. Contributions in support of Substances and Waste Management are used as a component of this program.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
73,874,896	74,553,108	86,290,566	84,616,666	10,063,558

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
590	586	-4

Performance Results

Program 3.1: Substances and Waste Management			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Threats to Canadians and impacts on the environment posed by harmful substances and waste are reduced	Percentage of drainage regions where Canadian or Federal Environmental Quality Guidelines (FEQGs) are not exceeded for selected substances in sediment, water and/or biota Substances currently reported under this indicator: • perfluorooctane sulfonate (PFOS) • polybrominated diphenyl ethers (PBDEs)	PFOS: 80% in 2013–14 PBDEs: 80% in 2014–15	100% of drainage regions sampled were found not to exceed FEQGs for fish tissue (fish health) and surface water PFOS concentrations. However, PFOS concentrations in fish tissue exceeded Wildlife Diet FEQGs in 40% of drainage regions sampled. PBDEs indicator value will be reported in 2014–15.

Performance Analysis and Lessons Learned

In 2013–14, in collaboration with Health Canada, Environment Canada made progress on a number of fronts. The Department:

- With the United States Environmental Protection Agency, completed the two-year Nanotechnology Work Plan under the Canada–United States Regulatory Cooperation Council. This resulted in a consistent and transparent policy approach for the regulation and oversight of nanomaterials, within Canada and between the two countries;
- Continued to build and maintain a strong science foundation for the Chemicals Management Plan (CMP), including through the creation of a joint (Environment Canada/Health Canada) Chemicals Management Plan Science Committee[xlix] to support the CMP going forward;
- Developed the first Chemicals Management Plan Progress Report[l], a plain-language summary of activities to keep stakeholders and other interested parties up to date. The report will be published twice a year;
- Building on the successful completion of Phase 1 of the Domestic Substances List Inventory Update, updated use and volume information on the remaining 2,700 priority substances identified through categorization. Analysis of the data received from stakeholders has also been initiated;
- Held two Stakeholder Advisory Council meetings (May and November 2013) to discuss issues such as coming amendments to the environmental emergencies regulations, monitoring and surveillance in Aboriginal communities, nationally representative biomonitoring results for Canadians, and how the CMP uses information obtained through biomonitoring and environmental monitoring. Summary reports[li] are available on the CMP website[lii]; and
- Held regular stakeholder information sessions and consultations on specific topics throughout the year, including 12 Web-based information sessions. These sessions reached over 1,500 people across Canada about notices issued under section 71 of the *Canadian Environmental Protection Act, 1999* for several initiatives (e.g., Selenium-containing Substance Grouping and Phthalate Substance Grouping).

Sub-Program 3.1.1: Substances Management

Sub-Program Description

This program is a jointly implemented by Health Canada and Environment Canada and is aimed at reducing threats from substances released to the environment and harmful to human health or the environment. The program intends to achieve efficient and effective management of the risks posed by substances through setting priorities and taking effective regulatory actions (or other measures where appropriate) based on science-based risk assessment. Adaptive substance management and improvements are pursued through new findings in both research and monitoring, as well as international collaboration. Transparency with stakeholders is maintained by providing the opportunity to offer advice and input on the implementation of the program through both regulatory and institutional/issue-specific consultation processes. Risk management actions are taken by Environment Canada under the authority of the *Canadian Environmental Protection Act, 1999*, while Health Canada may take action under the *Food and Drugs Act*, the *Pest Control Products Act* and the *Hazardous Products Act*. International obligations include the Basel Convention, the Rotterdam Convention, the Stockholm Convention, the Convention on Long-Range Transboundary Air Pollution and the Montreal Protocol. Program delivery includes the assessed contribution to the Organisation for Economic Co-operation and Development (OECD). This program also addresses the risks posed by end-of-life substances of concern by developing, implementing and administering regulations and other control instruments. The regulations and control instruments are developed under the *Canadian Environmental Protection Act, 1999* in order to address international and interprovincial movement of waste and hazardous recyclable material, reduce the releases of PCBs in the environment, and to reduce the risk from spills and leaks from petroleum products and allied petroleum products from storage tank systems.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
47,086,420	55,915,992	8,829,572

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
362	390	28

Performance Results

Sub-Program 3.1.1: Substances Management			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Reduced releases to the environment of toxic and other substances of concern	Canadian releases of selected controlled substances Substances reported under this indicator: (i) Hexavalent chromium (ii) Polychlorinated biphenyls (PCBs) (iii) Isoprene	(i) Hexavalent chromium: 1900 kg releases (to air and water) by 2015 (ii) PCBs: 10 kg by 2014 (iii) Isoprene: 80% reduction in industrial releases from the rubber manufacturing sector below the base year of 2009 by 2016	(i) Hexavalent chromium: 1680 kg of releases in 2012 (to air and water) This number is based upon the total releases reported to National Pollutant Release Inventory for 2012 (from all reporting sources). The total hexavalent chromium release target has been achieved. (ii) PCBs: The equivalent of 1.99 kg of pure PCBs was released in 2013 This amount is calculated based on quantities and concentration data reported to Environment Canada under section 40 (Release Reporting) of the *PCB Regulations*. (iii) Isoprene: a 15% reduction of industrial releases from the rubber manufacturing sector in 2012 from base year 2009

			Based on submitted information, 17,401 kg of isoprene were released to air in the Base Year (2009), and 14,791 kg were released to air in the Preparation Year (2012). Once the Pollution Prevention Plan is implemented, isoprene releases are expected to be reduced by 80% to approximately 3,480 kg.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Following four years of global negotiations, signed the Minamata Convention on Mercury[liii] to protect human health and the environment from anthropogenic emission releases of mercury and mercury compounds, and hosted the first technical expert group meeting on atmospheric emissions to develop technical guidance required for the first meeting of the Parties under the Convention;
- Met the objectives[liv] at the first simultaneous meetings of the Conferences of the Parties of the Stockholm, Basel and Rotterdam conventions. As a Party to the three conventions, Canada participated in negotiations to add chemicals to these agreements,[13] and to adopt technical guidelines on various chemicals and amend Annex 9 of the Basel Convention. Canada also participated in decisions regarding the reorganization of the Joint Secretariat for all three conventions as well as those regarding the promotion of cooperation within the chemicals and waste cluster. Canada was commended (Basel) for leading intercessional work on the development of technical guidelines for persistent organic pollutants waste and confirmed its continued chairing of this work;
- Continued to implement the Chemicals Management Plan (CMP) in partnership with Health Canada, and remained on track with Canada's international commitment to address 4,300 chemicals in Canada by 2020 (38% addressed since 2006). The Department:
    - Has considered 610 substances for risk assessment since 2011–12 (41% of the 1,500 targeted existing commercial substances identified under the CMP to be assessed by 2016);
    - Assessed 34 existing micro-organisms and progressed with 9 regulatory packages (all at various stages of approval);
    - Published risk management measures for 16 harmful substances, including publication of Guidelines for the Reduction of Dyes Released from Pulp and Paper Mills for MAPBAP acetate;[14] and
    - Addressed all 506 notifications of new substances received; of these, 8 were suspected of posing a risk (and subject to ministerial conditions), and 25 were identified as having potential concerns associated with other activities (and subject to the provisions of the *Canadian Environmental Protection Act*, *1999*); and
- Under the National Pollutant Release Inventory[lv], continued to collect and publish 2012 data from over 7,500 facilities across Canada on their releases, disposals and recycling of over 300 listed substances; and
- Conducted 22 research projects that addressed identified priority substances and issues under the CMP and the *Canadian Environmental Protection Act, 1999*, and undertook integrated environmental monitoring and surveillance, sampling for and analysis of identified priority chemicals.

[13] Specifically, chemicals added to the agreements are hexabromocyclododecane (HBCD) (Stockholm); azinphos-methyl, commercial penta- and octa-BDE (Brominated Diphenyl Ether); and PFOS (Perfluorooctane Sulfonate) (Rotterdam).
[14] The substance Methylium, [4-(dimethylamino)phenyl]bis[4-(ethylamino)-3-methylphenyl]-, acetate, Chemical Abstracts Service Registry Number (CAS RN) 72102-55-7, is commonly known as MAPBAP acetate.

Sub-Program 3.1.2: Effluent Management

Sub-Program Description

This program manages the risks to the environment and human health from the discharge and deposit of waste residues (e.g., effluent) by developing, implementing and administering strategies, instruments and programs pursuant to authorities and obligations. The program is responsible for developing and implementing regulations and other control instruments (e.g., pollution prevention plans, codes of practice, guidelines and environmental performance agreements) under the *Canadian Environmental Protection Act, 1999* and the *Fisheries Act*, in order to address waste discharges and substances of concern from industrial and public sectors, including but not limited to the mining and processing, forestry, wastewater and other sectors. Key activities include: conducting research and risk analysis; developing and implementing regulations and other control instruments; assessing the results of environmental effects monitoring of regulated facilities; and providing technical advice to environmental assessments; and acting as the *Fisheries Act* Pollution Prevention Provisions focal point for the Department. The program collaborates with partners (including other federal government departments, other levels of government and associations) and in consultation with industry, Aboriginal groups and other stakeholders.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
8,573,040	8,732,831	159,791

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
91	62	-29

Performance Results

Sub-Program 3.1.2: Effluent Management			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Prevention of effluent pollution from sectors regulated under the *Fisheries Act*	Percentage of facilities whose releases are within regulated limits and meet effluent non-lethality requirement	95% ongoing	*Pulp and Paper Effluent Regulations*: 99.8% for total suspended solids (TSS) 99.8% for biochemical oxygen demand 98.3% for effluent non-lethality requirements All results are for calendar year 2012. These results are similar to those from 2011, with the exception of the rate for non-acute lethality, for which compliance increased slightly. *Metal Mining Effluent Regulations*: Over 99% compliance for metals and pH 98.6% compliance for cyanide 96.3% for TSS 98.8 % for acute lethality testing All results are for calendar year 2012. These results are similar to those from 2011, with the exception of rates for copper and cyanide limits, which decreased slightly, and for TSS and non-acute lethality targets, for which compliance increased slightly. *Wastewater Systems Effluent Regulations*: To be determined. Regulated limits come into force on January 1, 2015.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Began administering the *Wastewater Systems Effluent Regulations* (WSER) that came into effect in 2012. Activities and initiatives included:
  - Putting in place a Web-based reporting system to collect data and reports required under the Regulations;
  - Promoting compliance by developing and disseminating information on regulatory requirements to regional, provincial and national wastewater associations and organizations, municipal officials, and First Nations organizations and representatives; and
  - Continuing bilateral negotiations with provinces and Yukon to reduce duplication, and publishing the proposed Canada–New Brunswick Administrative Agreement for public comment;
- Continued to administer the *Metal Mining Effluent Regulations* (MMER) to manage the deposit of specific deleterious substances into water by the metal mining sector. Work included continuing the 10-year review of the MMER, including expansion of the Regulations to include diamond and coal mines, by initiating consultations with industry, environmental and Aboriginal organizations (to continue through 2014). Many provinces and territories rely on and use the MMER effluent limits as the basis for limits in regional legislation and permitting systems;
- Continued to administer the *Pulp and Paper Effluent Regulations* (PPER), including promoting compliance. Environment Canada provided advice to the pulp and paper sector on the requirements of the Regulations, including its environmental effects monitoring requirements; and
- Collected and analyzed annual Environmental Effects Monitoring reports from industries regulated by the PPER and the MMER. The results of these annual reports help Environment Canada identify effects on fish and fish habitat that may be caused by effluents.

A *Fisheries Act* Designation Order, published in March 2014, designates the Minister of the Environment as responsible for the overall administration and enforcement of the pollution prevention provisions of the Act. In collaboration with Fisheries and Oceans Canada, the Department developed, and consulted the public on, proposals for two new regulations (*Regulations Establishing Conditions for Making Regulations under Subsection 36(5.2) of the Fisheries* Act, and proposed *Experimental Lakes Area Research Activities Regulations*).

Sub-Program 3.1.3: Marine Pollution

Sub-Program Description

This program assesses, controls and monitors the disposal of wastes and other matter at sea, and addresses impacts to coasts and oceans from land-based activities. Since 2010, and as a result of a transfer of responsibility, the program is also responsible for assessing and controlling the risk of impacts to the marine environment as a result of Canadians or Canadian maritime traffic in the Antarctic. The program uses a mix of regulatory and non-regulatory instruments to prevent marine pollution. The program addresses waste impacts on sediments and its management; administers prohibitions, controls, assesses and issues permits for disposal at sea and Antarctic expeditions; and researches into development of decision making tools, monitoring tools and standards. At the national level, the program contributes to federal coordination of marine pollution-prevention (ship-sourced) and plays a co-leading role in the federal coordination for prevention of marine pollution from land-based activities, which supports key international commitments. Relevant legislation for the program includes the *Canadian Environmental Protection Act, 1999*, including Part 7, Division 3 (Disposal at Sea) and guidance under Part 7, Division 2 (Land-Based Activities) and *Antarctic Environmental Protection Act, 2003*. International obligations include the London Convention and Protocol, the Antarctic Treaty and Madrid Protocol. Two cost recovery fees are applicable to disposal at sea permits: an application fee assessed on all permits and a permit fee assessed on dredged and excavated material.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
1,240,154	2,469,614	1,229,460

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
13	27	14

Performance Results

Sub-Program 3.1.3: Marine Pollution			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Reduced marine pollution from uncontrolled dumping at sea	Percentage of disposal site monitoring events that do not require site management action	85% annually until 2015	89% in 2013–14 This number is based on 2 management actions taken on 18 sites monitored in 2012–13. These management actions were site closures in Quebec, the first due to the presence of sensitive species at the site and the second to protect navigation in the area. Management action ensures that sites are used sustainably overall. Results demonstrate that Canada's ocean disposal sites are being used in a sustainable manner and that impacts to the sites are occurring as expected.

Performance Analysis and Lessons Learned

Through its Marine Pollution Program, Environment Canada continued its work to address disposal at sea of waste and other matter, and the impacts on coasts and oceans of land-based activities. In 2013–14, the Department:

- Continued its active involvement in the London Protocol. Canada chaired the Meetings of Parties and supported the adoption of a global mechanism to further control ocean fertilization and other possible marine geo-engineering. As chair, Canada successfully steered the Parties to adopt the new ocean fertilization controls by consensus, without forcing a vote;
- Initiated the process to update the *Disposal at Sea Regulations* to introduce service timelines and the ability to renew permits and update applicant guidance to reflect changes to both the *Canadian Environmental Protection Act, 1999* (CEPA 1999) and the *Canadian Environmental Assessment Act, 2012*. Achievements included meeting service standards for permit issuance (84 permits delivered, with 96% issued in less than 120 days), as well as meeting the Federal Sustainable Development Strategy standards for sustainable use of disposal sites under CEPA 1999 permits (89% of sites not requiring management action); and
- Continued to administer the *Antarctic Environmental Protection Act* and associated permitting system, including reviewing and issuing three permits in conformity with the regulated timeline; creating new guidance for permit assessment that streamlines and clarifies permit review; participating in the Antarctic Treaty System; and engaging with Transport Canada on the development of the Polar Code for Ships Operating in Ice-Covered Waters.

Sub-Program 3.1.4: Environmental Emergencies

Sub-Program Description

This program aims to reduce the frequency and consequences of spills and related environmental emergencies involving toxic and other hazardous substances. The program conducts five major activities: Prevention – regulating chemical facilities to develop and implement environmental emergency plans; Preparedness – coordinating and planning international, national and regional environmental emergency preparedness capabilities; Response – monitoring of actions taken by the responsible party(ies), providing scientific and technical advice on weather and sea state and on behaviour and effects of chemicals, providing sensitivity mapping and trajectory modelling; attending significant incidents; and operating the 24/7 National Environmental Emergencies Centre in Montreal; Recovery – assessing the damage and providing advice to polluters on repairing an environment damaged by an environmental emergency; Research and Development – the development of spill models, analysis methods, fate and behaviour algorithms, measurement and remote-sensing capabilities, decontamination protocols, and countermeasures used during incidents. Authority for the program is derived from the *Environmental Emergency Regulations*, as well as sections 34–38 of the *Fisheries Act*. The Program's responsibilities during the response to an emergency are described in the Federal Emergency Response Plan's Emergency Support Function Annex #6 – Environment (2009).

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
6,427,634	9,990,200	3,562,566

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
66	67	1

Performance Results

Sub-Program 3.1.4: Environmental Emergencies			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Regulatees comply with the requirements and obligations of the *Environmental Emergency Regulations*	Percentage of facilities requiring environmental emergency plans that have them in place as required by the *Environmental Emergency Regulations*	100% by the end of 2013–14	As of March 31, 2014, 93% of regulated facilities submitted notices indicating that they have developed and implemented environmental emergency (E2) plans.
Stable or reduced frequency of environmental emergencies in facilities subject to the *Environmental Emergency Regulations*	Percentage of regulated facilities subject to the *Environmental Emergency Regulations* and that have an E2 plan that have environmental emergencies	Maintain at 1% Ongoing	0.4% for 2013–14 Of the 2,585 facilities that have implemented emergency plans, 11 had environmental emergencies. The value of the indicator has remained stable in comparison to 2012–13.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Implemented amendments to the *Environmental Emergencies (E2) Regulations* that came into force in 2011. Of the more than 4,700 registered facilities in Canada, 2,585 require E2 plans—of which the vast majority (93%) have developed and implemented those plans. However, results of 109 inspections conducted in 2013–14 showed that 20% of the plans were non-compliant. To improve compliance, the Department implemented a pilot project involving site visits by compliance promotion officers and enhanced its guidance document for E2 plans;
- Conducted compliance promotion by responding to over 2,000 inquiries from E2 regulatees, attending some 35 compliance promotion events, and updating approximately 25% of regulatee records (by directly contacting regulatees);
- Drafted instructions to amend the *Notification Regulations* under the *Canadian Environmental Protection Act, 1999* and the *Fisheries Act*; and
- Collaborated with Yukon partners to implement the Canada–Yukon Notification Agreement—which included conducting the inaugural Management Committee meeting and developing terms of reference and standard operating procedures for the committee.

Environment Canada's Environmental Emergencies Program (EEP) was involved on-site in the Lac-Mégantic incident from its outset, providing scientific and technical advice to firefighters, police, response contractors, the Province of Quebec and Transport Canada, in order to protect citizens and the environment from this incident.

In addition, the Canadian Meteorological Centre at Dorval provided air distribution modelling to predict where smoke and air pollutants would travel. This information informed firefighting and community evacuation actions and the Department's EEP. Once fires were extinguished, departmental staff remained on the scene to take oil samples from the rail cars for Environment Canada, Transport Canada and the Sureté du Québec investigation purposes.

Sub-Program 3.1.5: Contaminated Sites

Sub-Program Description

This program activity is primarily directed to Environment Canada's responsibilities in supporting the Federal Contaminated Sites Action Plan (FCSAP), a 15-year Government of Canada horizontal initiative that commenced in 2005 to address legacy contaminated sites owned by or the responsibility of the federal government (16 federal organizations are currently involved in this program, including Environment Canada as a custodian of sites for which it is responsible). Environment Canada's responsibilities include hosting the FCSAP Secretariat and providing expert advice to other federal custodians on the issue of ecological risk reduction. The Environment Canada FCSAP Secretariat also coordinates implementation of the Shared Sites Policy Framework. Also falling under this program are Environment Canada's responsibilities with respect to the Sydney Tar Ponds project, which include providing technical and scientific advice on environmental matters and enforcing legislation and regulations.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
11,225,860	7,508,029	-3,717,831

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
58	40	-18

Performance Results

Sub-Program 3.1.5: Contaminated Sites			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Reduced liability at higher-risk federal contaminated sites	Reduction in liability at all Class 1 and Class 2 FCSAP funded sites during Phase II of FCSAP[15]	$1.17 billion by fiscal year 2015–16	Reduction of $370 million in federal financial liability in 2011–12 to 2012–13 The reported indicator value represents 30% of the five-year target of $1.17 billion. Federal custodians are planning to continue reducing liability over the three years of the FCSAP Phase II (2013–14 to 2015–16) to achieve this target.
Reduced risk to the environment and human health from federal contaminated sites	Number of Class 1 and Class 2 FCSAP funded sites where risk reduction activities have been completed	368 sites by fiscal year 2015–16	Risk reduction was completed for 77 sites in 2011–12 to 2012–13 The indicator value represents 20% of the five-year target of 368 sites.

Performance Analysis and Lessons Learned

Through its Contaminated Sites Program, in 2013–14, Environment Canada carried out 11 remediation projects—4 more than originally planned—and completed 10 assessment projects.

As the FSCAP Secretariat, Environment Canada continued to provide overall program oversight, support and administration, including planning and analysis, reporting on program performance, coordination of governance committees, and leading program communication with stakeholders. In addition, Environment Canada provided technical advice, guidance and training to federal custodians on issues related to federal contaminated sites management, including the consideration of climate change impacts, incorporating sustainability into decision making, and the management of specific contaminants (e.g., light non-aqueous phase liquids and perfluoroalkylated compounds).

The Department has increasingly offered its training through remote access (rather than in person), an approach that has been well received for certain types of training. Not only does this approach increase access to training for participants who could not attend in person, it also reduces travel costs.

Through the Program, the Department will continue to collaborate with Quebec's Ministère du Développement durable, Environnement et Lutte contre les changements climatiques (Ministry of Sustainable Development, Environment and the Fight against Climate Change) and to identify the most cost-effective and efficient remediation objectives and options for the cleanup of the Lac-Mégantic site.

An evaluation report[lvi] of the FCSAP released in February 2014 concluded that the Program continues to be relevant, and it is on target to achieve immediate outcomes concerning development of risk reduction plans and reduction of uncertainty associated with risk. The evaluation recommended that the Program analyze how best to deploy remaining program funds, promote awareness and understanding of procurement tools among custodian departments, review opportunities to support custodian decision making on how to address contaminated sites, and provide additional guidance on remediation liability estimates. The Department accepted all recommendations pertinent to Environment Canada, and has developed management responses to address these recommendations.

[15] Sites are classified using assessment results and the Canadian Council of Ministers of the Environment National Contaminated Sites Classification System for terrestrial sites or the Aquatic Site Classification System for aquatic sites. These scoring systems evaluate adverse effects on human health or the environment by categorizing the hazard (contaminant), its location (soil, sediment, ground water), exposure pathways (digestion, inhalation, ingestion) and receptors (humans, wildlife). Sites scored as Class 1 sites are a high priority for action, while Class 2 sites are a medium priority for action.

Program 3.2: Climate Change and Clean Air

Program Description

Emissions of greenhouse gases and air pollutants threaten to adversely affect the health of Canadians, degrade the environment, exacerbate climate change and adversely affect the economy. This program aims to protect the health of Canadians, the state of the environment and the economy from the harmful effects of air pollutants and the impacts of greenhouse gas emissions through the development of regulations and other control measures to address greenhouse gas emissions and improve air quality. Actions are based on sound scientific and economic analysis, and emissions monitoring and reporting. It will involve continued collaboration with other governments and stakeholders; expert environmental science and technology advice, assessment, and program management in support of technology investment decisions, policy making and regulations; and cooperation with the U.S. to align greenhouse gas regulations as appropriate, reduce transboundary air pollution and advance the development of clean technologies. It will also involve continued participation in and contribution to international negotiations to address climate change and transboundary air pollution, as well as bilateral and multilateral processes that complement international negotiations or support Canada's positions and objectives in international negotiations. Contributions in support of Climate Change and Clean Air, Contribution for the Multilateral Fund of the Montreal Protocol, and Grants for the Implementation of the Montreal Protocol on substances that deplete the ozone layer are used as a component of this program.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
179,283,757	179,509,827	186,131,979	125,118,027	-54,391,800

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
729	681	-48

Performance Results

Program 3.2: Climate Change and Clean Air			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
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[16]	502 megatonnes (Mt) in 2012 (6.4% decrease) Canada's Emissions Trends 2013 indicates that Canada's annual GHG emissions will be 734 Mt in 2020. In part due to announced federal and provincial measures, Canada is projected to reduce its emissions by 128 Mt in 2020 when compared to its initial projected business-as-usual GHG emissions in 2020. Reported value is the sum of emissions from the transportation, electricity, oil and gas, and emissions-intensive and trade-exposed sectors.[17] Percentage change is in comparison to 2005.

[16] This is an economy-wide target that includes all sectors.
[17] Emissions from the three industrial sectors are reported separately under Sub-Program 3.2.1.

	Canadian emissions of air pollutants from targeted sources	Annual decline in the three-year moving average for all tracked substances for both sectors	Particulate matter (PM_{10}): 244,758 tonnes (3.6% increase) Nitrogen oxides (NO_x): 1,878,040 tonnes (3.7% increase) Volatile organic compounds (VOC): 1,188,561 tonnes (1.5% increase) Reported values are the combined three-year average emissions from industrial sectors (including electricity generation) and mobile sources for the period 2010–12. Percentage changes are in comparison to 2009–11.
	Canadian ambient air quality: Percentage of reporting communities in which the 24-hour Canada-Wide Standard for ground-level ozone of 65 parts per billion (ppb) was achieved	100%	76% in the 2010–12 period (64 of 84 reporting communities) As part of the Air Quality Management System implementation, a new 2015 Canadian Ambient Air Quality Standard of 63 ppb for ground-level ozone based on the three-year average of the annual fourth highest daily maximum 8-hour average concentrations was published.

Performance Analysis and Lessons Learned

Through its Climate Change and Clean Air Program, Environment Canada continued to address greenhouse gas (GHG) emissions and air pollution. In 2013–14, the Department:

- Continued to develop, in consultation with provincial, territorial and industry stakeholders, performance standards to reduce greenhouse gas emissions in key industrial sectors;
- Built upon the agreement of provincial and territorial Ministers of the Environment to move forward with the implementation of the new Air Quality Management System by developing and finalizing draft regulations, in consultation with provincial, territorial and industry stakeholders, for Base-Level Industrial Emission Requirements for certain industrial sectors and types of equipment used in industrial facilities;
- Provided support to Canada's Climate Change negotiating team on greenhouse gas inventory reporting and review, and to Canadian representatives at the Arctic Council Task Force on Methane and Black Carbon. Climate model simulations contributed to the Arctic Council Methane Expert Group Technical Report and Black Carbon Report;
- Continued to streamline and improve collection and reporting of GHG and air pollution emissions through Environment Canada's Single Window[lvii] system. Through this system, Environment Canada collected and published 2012 National Pollutant Release Inventory[lviii] (NPRI) data from over 7,500 facilities across Canada on their releases, disposals and recycling of over 300 listed substances, and responded to helpdesk requests (by phone and email) from the reporting community regarding NPRI and Single Window. The Department continued to prepare and publish annually Canada's national inventories of emissions of greenhouse gases[lix] and air pollutants. This authoritative information is available nationally, for each Canadian province and territory, by facility and by Canadian economic sectors. Inventories inform policy and regulatory initiatives, allow tracking progress in economy-wide emission reductions and are submitted to the United Nations in compliance with Canada's international reporting requirements. This work also supports several Canadian Environmental Sustainability Indicators;
- Led the organization of an interdepartmental meeting on federal initiatives on hydraulic fracturing, providing 75 scientists and policy analysts from 6 departments with the opportunity to exchange information about the current collective of federal science, research, policy and regulatory work on this important issue; and
- Developed and published GHG projections to 2020 in the third annual Canada's Emissions Trends report[lx]. In addition, for the first time, projections to 2030 were developed and published in Canada's Sixth National Communication and First Biennial Report[lxi] to the United Nations Framework Convention on Climate Change. The Energy, Emissions and Economy Model for Canada model was

used to develop these projections. As well, the Department's suite of cash-flow, computable general equilibrium and integrated assessment models were also used to support economic analysis of the government's domestic and international clean air initiatives.

The Department continued to ensure that the NPRI remains a reliable and relevant means to track pollutant releases in Canada by reviewing the list to identify where additions, deletions and threshold changes would better support departmental programs (e.g., Chemicals Management Plan), and by hosting a workshop with NPRI data users.

Sub-Program 3.2.1: Climate Change and Clean Air Regulatory Program

Sub-Program Description

This program is in place to develop sector-based approaches to regulating air pollutants and controlling greenhouse gas emissions and to promote science-based approaches to inform the development of new standards and regulations. Program activities focus on the reduction of emissions from the industrial, transportation, and consumer and commercial products sectors. Air pollutants and greenhouse gas emissions pose considerable threats to the health and well-being of Canadians and have significant negative impacts on the environment, economy and quality of life. Consultations with industry, provincial governments, other federal departments and other stakeholders are part of the continuous process to develop, update and implement effective standards and regulations.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
106,392,912	99,335,539	-7,057,373

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
644	593	-51

Performance Results

Sub-Program 3.2.1: Climate Change and Clean Air Regulatory Program			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Reduced emissions of air pollutants and greenhouse gases from regulated and/or targeted sectors	Canadian industrial emissions of: particulate matter 10 (PM_{10}); sulphur dioxide (SO_2); nitrogen oxides (NO_x); volatile organic compounds (VOC) and mercury (Hg)	To be determined with the finalization of the air pollutant regulatory approach	PM_{10}: 179,433 tonnes (6% increase) SO_x: 1,173,019 tonnes (6% decrease) NO_x: 815,478 tonnes (3% decrease) VOC: 721,213 tonnes (1% increase) Hg: 2,717 kg (19% decrease) Reported values are the three-year average emissions from industrial sectors (including electricity generation) for the period 2010–12. Percentage changes are in comparison to 2009–11.
	Canadian transportation emissions of: particulate matter 10 (PM_{10}); nitrogen oxides (NO_x); volatile organic compounds (VOC) and carbon monoxide (CO)	To be determined with the finalization of the air pollutant regulatory approach	PM_{10}: 65,325 tonnes (3% decrease) NOx: 1,062,562 tonnes (4% decrease) VOC: 467,348 tonnes (5% decrease) CO: 6,285,183 tonnes (3% decrease) Reported values are the three-year average emissions from all mobile sources for the period 2010–12. Percentage changes are in comparison to 2009–11.

	Canadian industrial emissions of greenhouse gases (carbon dioxide equivalents) in megatonnes (Mt)	To be determined by sector-specific approach to addressing climate change	Electricity: 86 Mt (29% decrease) Oil and gas: 173 Mt (8.8% increase) Emissions-intensive and trade-exposed (EITE) industries: 78 Mt (12% decrease) Reported emissions are for 2012 for sectors covered by Environment Canada's sector-by-sector approach. Percentage changes are in comparison to 2005.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

Addressing greenhouse gas emissions

- Made progress on its sector-by-sector regulatory approach to reducing greenhouse gas (GHG) emissions towards meeting the national 2020 reduction target.
- Developed and finalized regulations to reduce GHG emissions from heavy-duty vehicles, and progressed with regulatory work for other major-emitting industrial sectors. Once implemented, these regulations will contribute to not only reduce GHG emissions but also provide the co-benefits of improving air quality. This work was informed by development of a number of regulatory impact analysis statements on transportation, energy and industrial sectors.
- Benefited from active and sustained engagement with other federal agencies, provinces, territories and stakeholders in the development of GHG regulatory approaches, on a sector-specific basis. Ten stakeholder working groups met regularly during 2013–14, including representatives from the nitrogen and potash fertilizers, chemicals, aluminum, cement, pulp and paper, lime, base metal smelting, iron ore pellets, and iron and steel industrial sectors. A coordinated and efficient approach was essential during the development of these regulatory approaches, as often the same organizations and people are consulted on multiple and related issues.

Addressing air quality

The Department undertook research and monitoring, and the development of regulatory instruments and new standards in support of the implementation of the Air Quality Management System (AQMS) and other efforts to address air quality. The Department:

- Developed the draft *Multi-Sector Air Pollutants Regulations*, which will implement air pollutant performance standards for non-utility boilers and heaters, stationary reciprocating engines, and kilns used in cement manufacturing;
- Continued to collaborate with the provinces, territories and stakeholders to develop additional regulatory and other instruments;
- Developed Canadian Ambient Air Quality Standards (CAAQS) for fine particulate matter and ground-level ozone; the new standards were published in the *Canada Gazette*, Part I (May 2013);
- Contributed monitoring data, information, maps, expertise as well as estimates from the air quality model to the Department's environment status review of Sulphur Dioxide (SO_2) and Nitrogen Dioxide (NO_2) in Canada. Ongoing assessment of both substances supports the development of new CAAQS for NO_2 and SO_2; and
- Developed a comprehensive ecosystem modelling framework for mercury that enables the Department to forecast the impact of changes in mercury emissions on levels of mercury in key ecosystem components. Results informed Canada's position in negotiations of the United Nations Environment Programme Mercury Convention and will be published in the first comprehensive mercury assessment: the Canadian Mercury Science Assessment (2014). The Department led the Global Assessment of Precipitation Chemistry and Deposition for the World Meteorological Organization; the Assessment was published in 2013.

Sub-Sub-Program 3.2.1.1: Industrial Sector Emissions

Sub-Sub-Program Description

This program aims to reduce emissions of air pollutants and greenhouse gases from industrial sectors (including energy). This program's key activities include monitoring, reporting, verification, research, modelling and scientific assessments of current and future levels of air pollutants and greenhouse gas emissions to improve risk management and support standards, regulations and other risk management instruments; meeting domestic reporting requirements under the *Canadian Environmental Protection Act, 1999* and international reporting requirements under the United Nations Framework Convention on Climate Change; providing information to Canadians and decision makers about the environmental impacts and the potential health risks associated with air pollutants; development of an Annex to the Canada–United States Air Quality Agreement to reduce transboundary flows of particulate matter; and developing, designing and implementing standards, regulations and other risk management instruments to manage air pollutants and greenhouse gas emissions, which may include the design and implementation of compliance mechanisms. Consultations with industry representatives, provincial governments, other federal departments and other stakeholders are part of the continuous process to develop, update and implement effective regulations. Also included in this program is the interdepartmental coordination of the Horizontal Management, Accountability and Reporting Framework in support of clean air.[18]

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
85,794,455	76,012,061	-9,782,394

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
482	410	-72

Performance Results

Sub-Sub-Program 3.2.1.1: Industrial Sector Emissions			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Industrial sectors meet emission levels of greenhouse gases to comply with new or amended regulations by required dates	Percentage of targeted industrial facilities meeting their greenhouse gas emissions performance target	To be determined	*Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations* were published in the *Canada Gazette*, Part II in 2012. Performance standards will come into force on July 1, 2015. GHG regulations for other industrial sectors are currently under development. Reporting information will be available once regulations are in force.
Industrial sectors meet emission levels of air pollutants to comply with new or amended regulations by required dates	Percentage of targeted industrial facilities meeting their regulated air pollutant emissions reduction requirement	To be determined	Air pollutant regulations for industrial sectors and equipment were under development in 2013–14. There are currently none in force. Reporting information will be available once the regulations are in force.

[18] Program descriptions were developed in 2012 and do not reflect cost savings measures as announced in Federal Budget 2012.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Continued ongoing development of greenhouse gas (GHG) regulatory approaches for the oil and gas, natural gas electricity, and emissions-intensive and trade-exposed industrial sectors, and implemented the *coal-fired electricity generation regulations*;
- Continued collaboration with the provinces and territories to implement a framework to manage air quality through local air zones and regional airsheds and achieve the Canadian Ambient Air Quality Standards, under Canada's Air Quality Management System;
- Developed regulations for the proposed *Multi-Sector Air Pollutants Regulations* to implement requirements for boilers and heaters, stationary engines, and the cement manufacturing sector – in addition to drafting regulations to reduce air pollutant emissions for other sectors;
- Continued to draft instruments to implement the Base-Level Industrial Emission Requirements for various sectors and finalized draft codes of practice for the aluminum and alumina, and iron and steel sectors, which recommend best practices for reducing air pollutant emissions;
- Established new monitoring sites for GHGs and aerosols to improve baseline monitoring and understanding of source influences, in support of a number of Canadian and international obligations;
- Enhanced Canada's Earth system climate model by adding new carbon cycle processes and better representation of Short-Lived Climate Pollutants;
- Developed Canada's Greenhouse Gas National Inventory Report to meet domestic and international reporting requirements and submitted Canada's Air Pollutant Emission Inventory to the United Nations Economic Commission for Europe and posted it on the departmental website[lxii]; and
- Continued implementing the air component of the Joint Canada–Alberta Implementation Plan for Oil Sand Monitoring, including installing and operating the long-term ambient air monitoring sites, and undertook a short-term summer intensive measurement campaign to enhance understanding of the regional airshed.

Sub-Sub-Program 3.2.1.2: Transportation Sector Emissions

Sub-Sub-Program Description

This program aims to reduce emissions from transportation sources (vehicles, engines and fuels, including biofuels). This will be achieved through the development, implementation and administration of regulations under the *Canadian Environmental Protection Act, 1999*. The program's key activities include development of greenhouse gas regulations for light-duty and heavy-duty vehicles; development of air pollutant regulations for various vehicles, engines and fuels, including biofuels; administration of those regulations, including testing and emissions verification to ensure compliance to the standards; emissions research and test method development and working with partners to reduce emissions from marine sources.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
18,773,553	22,427,873	3,654,320

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
145	177	32

Performance Results

Sub-Sub-Program 3.2.1.2: Transportation Sector Emissions			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Reduced greenhouse gas emissions from new motor vehicles, engines and fuels sold in Canada	Rate of compliance with the standards set out in the *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations*, for: (i) submission of end-of-model year reports; and (ii) fleet average emission standards	100% for each model year	(i) 100% for the 2011 model year (most recent data available) (ii) Analysis of fleet average emissions standards data for the 2011 model year has not yet been completed
Reduced air pollutant emissions from new motor vehicles, engines and fuels sold in Canada	Average nitrogen oxides (NO_x) emissions in grams/mile for new light-duty, on-road vehicles offered for sale in Canada (by model year)	0.07 grams/mile annually from 2011 until the coming into force of the new Tier 3 standards	The 2011 model year (most recent data available) light-duty vehicle fleet average NO_x level was ~0.065 grams/mile, nearly 8% below the standard.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Began implementation of the final *Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations* for 2014 and later model years. These were achieved through consultations with stakeholders;
- Continued implementation of the *Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* for the 2011–16 model years, and continued to develop an online electronic reporting system to support compliance;
- Continued work on *Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* for model years 2017 and beyond (expected to be published in 2014), including ongoing stakeholder engagement;
- Published a Notice of Intent (*Canada Gazette*, Part I) of planned regulations to further limit emissions of smog-forming air pollutants from new cars and light trucks and to reduce the sulphur content in gasoline, in alignment with proposed United States Tier 3 standards;
- Collaborated with the United States Environmental Protection Agency to inform the development of common emissions standards for light- and heavy-duty vehicles and engines, in order to further reduce greenhouse gas emissions. The Department measured black carbon emissions from marine vessels (to support International Maritime Organization (IMO) activities), light-duty vehicles and aircraft engines to enhance the black carbon inventory for the transportation sector;
- Continued to support reduction of air pollutants from the marine sector, including by contributing science and policy research and advice to Canada's IMO delegation; and
- Collaborated with provinces/territories under the Canadian Council of Ministers of the Environment (CCME) Mobile Sources Working Group to improve information sharing on transportation emissions. CCME Ministers approved a three-year action plan on transportation that builds on existing policy and regulatory initiatives.

Sub-Sub-Program 3.2.1.3: Consumer and Commercial Products Sector

Sub-Sub-Program Description

The Consumer and Commercial Products Sector program aims to reduce emissions of air pollutants from consumer and commercial products. This will be achieved through the development and administration of regulations and other measures under the *Canadian Environmental Protection Act, 1999* (Part 5 – Controlling Toxic Substances). Key activities in the program include developing and implementing regulatory and voluntary instruments to control the emissions of air pollutants and harmful substances (volatile organic compounds), and developing a strategic plan to guide action in other consumer and commercial product sectors for the next phase of regulatory and non-regulatory measures. Program delivery may include Contributions in support of Climate Change and Clean Air.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
1,824,904	895,605	-929,299

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
17	6	-11

Performance Results

Sub-Sub-Program 3.2.1.3: Consumer and Commercials Products Sector			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Reduced emissions of volatile organic compounds from regulated consumer and commercial products	Percentage of volatile organic compound emissions reduction from regulated sectors: (i) automotive refinishing; and (ii) architectural coatings	(i) 40% by 2013 (ii) 28% by 2014	Automotive refinishing: Survey results in 2012 indicated that targets were met (at 61% reduction compared to 2003 levels). However, follow-up laboratory testing on a limited number of products revealed that few of the products tested in 2013–14 met the regulated concentration limits. This points to the need to supplement the theoretical calculations with implementation measures to ensure that targets are reached. Results for architectural coatings will be reported in the 2014–15 Departmental Performance Report.

Performance Analysis and Lessons Learned

In 2013–14, the Department continued to target control measures on volatile organic compounds (VOC) in some consumer and commercial products. Solvents (excluding emissions from oil and gas) represent approximately 33% of all VOC emissions. Existing architectural and automotive regulations address 20% of these emissions; the proposed *VOC Concentration Limits for Certain Products Regulations* will address an additional 30%.

Highlights of the Department's work in key areas included the following:

Revision of the proposed Volatile Organic Compound Concentration Limits for Certain Products Regulations

The Department issued a voluntary survey to collect data on 130 categories of VOC products in the Canadian market. Responses will be analyzed and used to inform development of revised regulations.

Cutback Asphalt

The development of a proposed Code of Practice for the Reduction of Volatile Organic Compounds Emissions from the Use of Cutback and Emulsified Asphalt (Code) was discussed with the Transportation Association of Canada's Environmental Advisory and Legislation Standing Committee in 2013. The Code will provide guidance to the asphalt sector on actions that can contribute to the reduction of VOC emissions from the cutback and emulsified asphalt (potentially a reduction of up to 5,000 tonnes annually) in order to reduce health and environmental concerns in Canada.

VOC Definition under the Canadian Environmental Protection Act, 1999 (CEPA 1999)

In 2013, the Department published a consultation document on a proposed order for the addition of compounds to the CEPA 1999 exclusion list of the VOC definition to align with the United States Environmental Protection Act. The proposal will ensure a level playing field for manufacturers and importers of products containing these compounds, avoid varying requirements across jurisdictions and offer greater choice to industry of compounds that meet VOC regulations. Alignment with risk management measures in other jurisdictions (where possible) is important, given the integrated market in North America.

Sub-Program 3.2.2: International Climate Change and Clean Air Partnerships

Sub-Program Description

This program leads the development and implementation of bilateral and international agreements to address air pollutants and global greenhouse gas emissions, and coordinates Canada's policy, negotiating positions and participation in relevant international fora of global significance. Activities within this program include implementation of the United States–Canada Clean Energy Dialogue, a mechanism to support bilateral collaboration on clean energy technologies and that seeks solutions for reducing greenhouse gas emissions to accelerate the transition to a low-carbon economy; cooperative work and ongoing implementation under the North American Commission for Environmental Cooperation to support a priority related to climate change and a low-carbon economy; participation and ongoing implementation of the Montreal Protocol and the Convention on Long-range Transboundary Air Pollution in order to leverage global/transboundary action to reduce emissions of ozone-depleting substances, smog and acid rain; improved alignment, in cooperation with other departments, of international programs with domestic priorities; the North American Leaders' Summit; participation in the United Nations Framework Convention on Climate Change (UNFCCC) process and complementary international processes to negotiate a comprehensive, binding international climate change agreement; and participation in international processes and partnerships to further Canada's negotiating positions and objectives in the UNFCCC, including participation in the Climate and Clean Air Coalition to reduce short-lived climate pollutants.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
16,462,444	16,947,698	485,254

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
47	35	-12

Performance Results

Sub-Program 3.2.2: International Climate Change and Clean Air Partnerships			
Expected Result	**Performance Indicator**	**Targets**	**Actual Results**
International negotiations and agreements on air pollutants and greenhouse gases are proceeding in a direction consistent with Canadian priorities and interests	Percentage of stated objectives to be achieved in international negotiations and/or agreements which were met or mostly met	Negotiations: 50% by 2013-14 Agreements: 50% by 2013-14	Negotiations: 71% Agreements: No agreements were completed in 2013–14 Canadian negotiating objectives related to the 2015 climate change agreement were fully achieved. Some objectives for the year were not realized due to procedural issues–outside of Canada's control–affecting one meeting. These issues are not expected to impede progress toward an agreement to conclude in 2015.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Promoted Canada's international climate change objectives within the United Nations Framework Convention on Climate Change[lxiii] (UNFCCC) by:
  - Participating in the 19th Conference of the Parties in Poland, creating momentum for a way forward towards a new and ambitious global climate change agreement that includes all major emitters;
  - Delivering on Canada's UNFCCC reporting obligations by submitting the Greenhouse Gas National Inventory Report and supporting preparation of Canada's Sixth National Communication and First Biennial Report[lxiv];
  - Overseeing and tracking initiatives under Canada's $1.2 billion investment in Fast-Start Financing[lxv];
- Collaborated with the United States and Mexico to submit an amendment proposal to include a gradual phase-down of hydrofluorocarbons under the Montreal Protocol and conducted domestic consultations on revising the *Ozone-depleting Substances Regulations,1988*;
- Actively engaged in the governance of the Climate and Clean Air Coalition, including overseeing the Trust Fund to which Canada is a major contributor;
- Contributed to the work of the International Panel on Climate Change and to the Inter-American Institute for Global Change Research, including to the Fifth Assessment Report[lxvi];
- Engaged in the Arctic Council's Task Force for Action on Black Carbon and Methane to advance a priority initiative to reduce these short-lived climate pollutants in the Arctic;
- Actively engaged in the United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution by participating in the 51st session of the Working Group on Strategies and Review, and in the 32nd session of the Executive Body meetings, ensuring Canada's interests are protected; and
- Provided Canada's annual contribution to the Commission for Environmental Cooperation (US$2.55 million for 2013–14) to support the efforts to address black carbon, to understand the role of coastal ecosystems and forests as carbon sinks, to further green building construction in North America, to improve indoor air quality for indigenous communities, and to create an online inventory of national emissions. (See the 2013–2014 Operational Plan[lxvii].)

The Department also continued bilateral collaboration with its international partners, including the U.S., Mexico and other key countries through concrete and ongoing mechanisms, including:

- The United States–Canada Clean Energy Dialogue[lxviii] – to support government collaboration in over 30 clean energy technology initiatives outlined in its Action Plan II[lxix];
- The Canada–United States Air Quality Agreement – to reduce the transboundary movement of air pollutants, particularly those that contribute to acid rain and smog;

- The 2004 Canada–United States Transboundary Particulate Matter Science Assessment – to provide the scientific foundation for continued bilateral discussions; and
- The Environment Working Group of the Canada–Mexico Partnership.

Sub-Program 3.2.3: Environmental Technology

Sub-Program Description

This program delivers expert environmental science and technology analysis and assessment, and program management, in support of the Government of Canada's clean air and greenhouse gas (GHG) technology investment decisions, policy making and regulations. Key activities include overseeing the operations of Sustainable Development Technology Canada (SDTC) and a range of other science and technology programs related to clean technology, and providing expert analysis and assessment to advance clean technologies to help ensure government priorities such as clean air, climate change and green infrastructure are addressed.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
56,654,471	8,834,790	-47,819,681*

*The decrease from planned spending to actual spending is mainly due to unused appropriations for SDTC, returned to the Consolidated Revenue Fund by Environment Canada.

Human Resources (FTEs)*

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
39	53	14

Performance Results

Sub-Program 3.2.3: Environmental Technology			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Reduced emissions from the implementation of new environmental technologies	Annual reduction of emissions of greenhouse gases (carbon dioxide equivalents) resulting from environmental technologies supported	12.5 Mt by 2015	3.15 Mt in 2013 This value represents the combined annual reductions reported as achieved for all projects supported by SDTC and the Green Municipal Fund from their inception up to the most recent annual reports.
	Annual reduction of emissions of air pollutants (criteria air contaminants) resulting from environmental technologies supported	21.8 kt nitrogen oxides (NO_x) by 2025 0.8 kt sulphur oxides (SO_x) by 2025 1.36 kt particulate matter (PM) by 2025 2.3 kt volatile organic compounds (VOC) by 2025 0.9 kt carbon monoxide (CO) by 2025	Annual reductions for 2013 are estimated to be: 3.3 kt for NO_x 6.2 kt for SO_x 0.5 kt for PM 0.1 kt for VOC These values are mostly due to reductions reported by SDTC. The Green Municipal Fund also reported combined annual reductions of 0.45 kt of Criteria Air Contaminants, but separate values for specific substances are not available.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Focused its approach to environmental technology, including streamlining engagement to complement the existing roles of other jurisdictions and the private sector. Promoting and tracking the environmental performance of technologies remain key to Environment Canada; and
- Realigned its financial management practices to improve the consistency and rigour with which it oversees environmental technology programs (e.g., by strengthening financial reporting requirements in contribution agreements with major funding recipients, and requiring mandatory reporting on environmental indicators).

For more information, see Sub-sub-programs 3.2.3.1 and 3.2.3.2.

Sub-Sub-Program 3.2.3.1: Sustainable Development Technologies

Sub-Sub-Program Description

Environment Canada and Natural Resources Canada, as sponsoring departments for the federal government, provide oversight of the operations of Sustainable Development Technology Canada (SDTC) to ensure it complies with the four funding agreements and the founding legislation. SDTC is a not-for-profit foundation, created by the Government of Canada, that finances and supports the development and demonstration of clean technologies. SDTC operates two funds aimed at the development and demonstration of innovative technological solutions: the $590-million[19] SD Tech Fund™, which supports projects that address climate change, air quality, clean water and clean soil; and the $500-million NextGen Biofuels Fund™, which supports the establishment of first-of-kind large demonstration-scale facilities for the production of next-generation renewable fuels. The SDTC Foundation reports to Parliament through the Minister of Natural Resources. Federal funding flows to the Foundation from Environment Canada (50%) and Natural Resources Canada (50%).

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
50,156,743	85,439	-50,071,304*

*The decrease from planned spending to actual spending is mainly due to unused appropriations for SDTC, returned to the Consolidated Revenue Fund by Environment Canada.

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
2	1	-1

[19] The dollar amounts for the SD Tech Fund™ and NextGen Biofuels Fund™ have been revised to $915 million and $225 million respectively.

Performance Results

Sub-Sub-Program 3.2.3.1: Sustainable Development Technologies			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Reduced emissions from the implementation of environmental technologies funded under the SD Tech Fund™	Annual reduction of emissions of greenhouse gases (carbon dioxide equivalents) resulting from environmental technologies funded under the SD Tech Fund™	12 Mt by 2015	2.8 Mt annually, as reported in the SDTC 2013 Annual Report
	Annual reduction of emissions of air pollutants (criteria air contaminants) resulting from environmental technologies funded under the SD Tech Fund™	20 kt nitrogen oxides (NO_x) by 2025 0.2 kt sulphur oxides (SO_x) by 2025 1.3 kt particulate matter (PM) by 2025	By 2015, for 87 projects, SDTC projects annual reductions of: 3.3 kt for NO_x 6.2 kt for SO_x 0.5 kt for PM 0.1 kt for volatile organic compounds
Private sector and other non-federal government investment in environmental technologies	Ratio of project funding leveraged from other sources to funding provided by the SD Tech Fund™	Greater than 2:1 for the overall portfolio Ongoing	2.14:1 in 2013 SDTC allocated $102 million in funding to projects that were allocated $219 million in leveraged capital.

Performance Analysis and Lessons Learned

In 2013–14, through its Sustainable Development Technologies Program, the Department collaborated with Natural Resources Canada to develop a new funding agreement governing the SD Tech Fund™. The agreement reflects the Budget 2013 announcement of $325 million in new funding over eight years to continue support for the development and demonstration of clean technologies that create efficiencies for businesses and contribute to sustainable economic development. SDTC-funded projects deliver economic, environmental and health benefits to Canadians in the areas of clean air, clean water, clean soil and climate change. The new funding will provide an effective policy instrument for the federal government in the development and demonstration of clean technologies.

SDTC's 2013 Annual Report[lxx] indicates that the estimated total annual greenhouse gas emissions reduction projected in 2015 (and attributable to projects funded by SDTC since its inception) has been revised to between 6 and 12 megatonnes. Of the 98 projects completed prior to 2014, 65 projects have reported actual annual emissions reductions of approximately 2.8 megatonnes.

Sub-Sub-Program 3.2.3.2: Environmental Technology Innovation

Sub-Sub-Program Description

This program delivers expert environmental science and technology analysis, assessment, and program management. Key activities include providing advice on and conducting assessments of the environmental performance (benefits and impacts) of clean technologies on a life-cycle basis and supporting interdepartmental steering committees in prioritizing and governing the activities of funds aimed at supporting clean technologies. The latter involves providing expert advice, establishing criteria to guide funding decisions and evaluating environmental outcomes of funded projects. Oversight and support is provided to a range of S&T programs including: Program of Energy Research and Development (PERD), Clean Energy Fund (CEF), ecoENERGY Innovation Initiative (ecoEII), Green Municipal Fund (GMF), Strategic Technology Applications of Genomics in the Environment (STAGE), and the Canadian Environmental Technology Advancement Centres (CETACs). The program also manages the Canadian Environmental Technology Verification (ETV) Program, which provides validation and independent verification of clean technologies.[20]

[20] Program descriptions were developed in 2012 and do not reflect cost savings measures as announced in Federal Budget 2012.

Budgetary Financial Resources (dollars)

2013–14 Planned Spending	2013–14 Actual Spending	2013–14 Difference (actual minus planned)
6,497,728	8,749,351	2,251,623

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
37	52	15

Performance Results

Sub-Sub-Program 3.2.3.2: Environmental Technology Innovation			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Reduced emissions from implementation of environmental technologies receiving certification under the Canadian Environmental Technology Verification (ETV) program	Annual reduction of emissions of greenhouse gases (carbon dioxide equivalents) and air pollutants (criteria air contaminants [CACs]) resulting from technologies receiving certification under the Canadian ETV program	To be determined in collaboration with ETV delivery agent in 2014–15	Data are not available at this time as the data collection methodology is under development.
Reduced emissions from municipal projects supported by the Green Municipal Fund (GMF)	Annual reduction of emissions of greenhouse gases (carbon dioxide equivalents) and air pollutants (CACs) resulting from municipal projects supported by the Green Municipal Fund	100,000 t greenhouse gases (GHGs) by 2013–14 100 t CACs by 2013–14	13,621 t in 2012–13 The difference between expected and actual GHG emissions reductions can be mainly attributed to an incorrect baseline assumption for one energy project and a GMF methodology error resulting in an inflated figure for the expected level of reductions. 3.3 t in 2013 The difference between expected and actual CAC emissions reductions is due to the fact that CAC emissions reductions were not reported for all projects.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- On behalf of Canada, led the development of an International Organization for the Standardization–Organization-Environmental Technology Verification program (ISO-ETV) standard (ISO 14034) and initiated the process through the Standards Council of Canada (approved in February 2014). Environment Canada was appointed Convener and Chair of the ISO 14034 expert working group for the duration of the project (to 2016).
- Globe Performance Solutions (Environment Canada's third-party delivery agent of the ETV Program) completed two environmental technology verifications and initiated 10 other technologies verifications (expected to be finalized in 2014–15).
- Facilitated the reciprocity agreement that was signed between Globe Performance Solutions and the Bureau de normalisation du Québec on the harmonized use of verification results of water and waste water environmental technologies.

Program 3.3: Compliance Promotion and Enforcement – Pollution

Program Description

This program contributes to minimizing damages and threats to the natural environment and biodiversity through the promotion and enforcement of legislation administered by Environment Canada. Program actions focus on pollution, including toxic substances, their release to air, water or land, and the import and export of hazardous waste that presents a risk to the environment and/or human health. The program maintains a contingent of compliance promotion and enforcement officers. Compliance promotion officers provide information to regulatees on legislative requirements, the economic and environmental benefits of compliance, and the potential penalties of non-compliance. Enforcement officers' 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 also performs compliance analysis in order to provide continuous feedback on program planning and results.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
43,773,701	43,999,770	46,216,846	44,661,876	662,106

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
392	352	-40

Performance Results

Program 3.3: Compliance Promotion and Enforcement – Pollution			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Compliance with pollution laws and regulations administered by Environment Canada	Compliance with regulatory requirements for selected regulations	*Pulp and Paper Effluent Regulations* (PPER) 10% increase in compliance in 2016–17 relative to 2013–14 baseline	98% in 2013-14 This compliance rate is based on inspections conducted by Environment Canada enforcement officers on a random sample of mills subject to PPER. Since the compliance rate is above 90%, a second measurement for this sector will not be conducted. Enforcement efforts related to PPER will continue but will be targeted toward suspected non-compliance.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

- Conducted and reported on 7,900 inspections and 121 investigations to enforce regulations under the *Canadian Environmental Protection Act, 1999* (CEPA 1999) and the *Fisheries Act*. These activities resulted in 4,646 enforcement measures taken in cases of non-compliance—measures that included prosecutions, written warnings and Environment Protection Compliance Orders.
- Successful prosecutions totalled 26 and resulted in over $2.2 million in penalties. In one important case (*Fisheries Act*), a company was fined a total of $500,000 for illegal use of a pesticide[lxxi] that contributed to lobster kills in New Brunswick. Other successful prosecutions are published in the Enforcement Notifications[lxxii].

- Prepared for the implementation of upcoming regulations and delivered activities on 60 regulations, with a focus on 12 priority regulations related to CEPA, 1999 and the *Fisheries Act.* The Department reached more than 27,300 regulatees through its compliance promotion activities;
- Continued to focus compliance promotion efforts on small and medium-sized enterprises and First Nations as they generally have less capacity than larger enterprises to understand and comply with environmental regulations;
- Developed a harmonized approach to increase the compliance rate amongst dry cleaners under the *Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations*;
- Identified priority areas and issues requiring attention through the National Enforcement Plan, based on risks, environmental impact, compliance history and consultations with internal departmental partners, and with Interpol and the Commission for Environmental Cooperation. Priorities include:
    - establishing a baseline compliance rate for *Pulp and Paper Effluent Regulations;*
    - targeting high risk sites and storage tanks (*Storage Tanks Systems for Petroleum Products and Allied Petroleum Products Regulations*, *Polychlorinated Biphenyls Regulations*); and
- Continued to develop the *Administrative Monetary Penalties Regulations* as well as internal policies to support an administrative monetary penalties system.

Internal Services

Description

Internal Services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. These groups are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; Acquisition Services; and 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.

Budgetary Financial Resources (dollars)

2013–14 Main Estimates	2013–14 Planned Spending	2013–14 Total Authorities Available for Use	2013–14 Actual Spending (authorities used)	2013–14 Difference (actual minus planned)
198,801,226	189,412,211	205,422,506	205,338,366	15,926,155

Human Resources (FTEs)

2013–14 Planned	2013–14 Actual	2013–14 Difference (actual minus planned)
1,537	1,483	-54

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2013–14 include the following:

Strengthening Relations with Governments and Stakeholders

- Engaged with provinces and territories to advance shared environmental priorities, including through the Canadian Council of Ministers of the Environment; and
- Developed and maintained partnerships with Aboriginal communities through consultations, accommodation, cultural awareness and work on regional land claims.

Innovative Approaches to Human Resources Management and Financial Stewardship

- Developed a new People Management Strategy (2013–16) to support the Department's mandate, human resources management needs and evolving resource levels;
- Conducted departmental asset and inventory counts to ensure stewardship of assets, facilitate life-cycle management and create better integration with the departmental investment plan;
- Implemented a standardized and streamlined Grants and Contributions planning process that has expedited the project approval process; and
- Established planning processes and tools to support the consistent application of the new Departmental Directive on Travel, Hospitality, Conference and Event Expenditures.

Improving Communications Strategies, Products and Tools

- Contributed to back-office efficiencies and cost reductions through increased Web-based communication (and reduced printing), increased use of videoconferencing, and a strategy to maximize use of existing facilities;
- Enhanced availability and accessibility of the departmental website—including by reducing old/redundant content; and
- Completed the transformation of library services into a virtual library, providing a full range of services to all employees across Canada.

Supporting Technology Operations

- Established a governance model for Environment Canada–Shared Services Canada (SSC) to address departmental priorities and SSC's capacity to deliver; and
- Collaborated with SSC on key transformation projects.

Meeting Requirements for Business Continuity

- Continued to develop business continuity plans at the branch, regional and site levels to support the delivery of critical services and critical support functions. Published standardized emergency procedures for all staff.

Delivering on International Commitments

- Supported the Global Commerce Strategy to ensure that trade and environment are mutually supportive, contributed to Canada's chairing of the Arctic Council on issues of sustainable development and environmental protection, and as International Executive Vice-Chair to the China Council for International Cooperation on Environment and Development; and
- Delivered on Canada's implementation of the North American Agreement on Environmental Cooperation as Chair of the Commission for Environmental Cooperation (CEC), overseeing 16 projects under the cooperative work program, and supporting the CEC in awarding $1.2 million to 18 community-based projects.

Support Management Oversight

- As part of its efforts to maintain strong and independent internal audit and evaluation functions, Environment Canada conducted an external third party inspection of its internal audit practice and a neutral assessment of the evaluation function.

Section III: Supplementary Information

Financial Statements Highlights

The financial highlights presented on the following pages offer an overview of Environment Canada's Statement of Operations, Departmental Net Financial Position, and Statement of Financial Position.

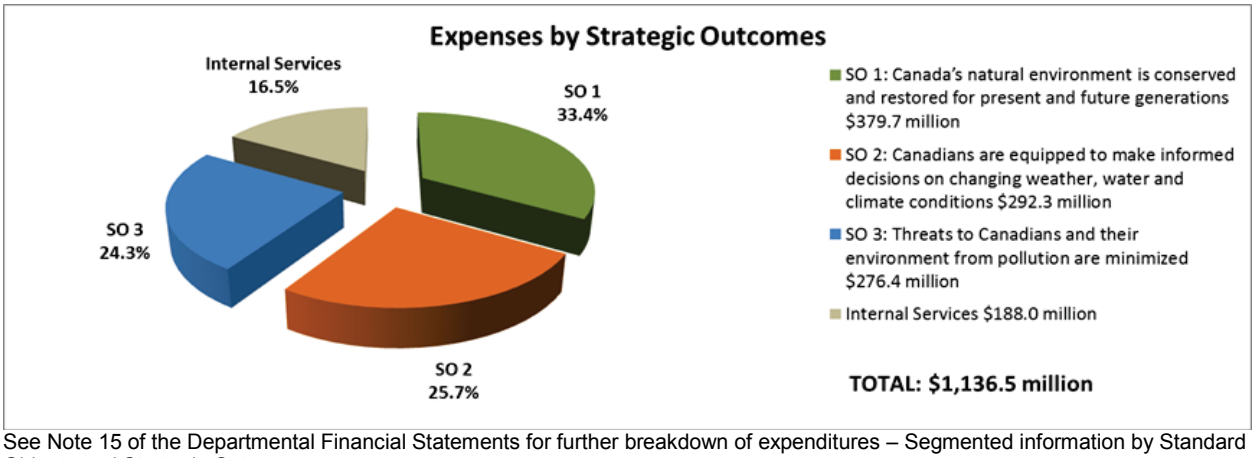
The detailed Unaudited Departmental Financial Statements can be found on Environment Canada's website[lxxiii].

Environment Canada **Condensed Statement of Operations and Departmental Net Financial Position (unaudited)** **For the Year Ended March 31, 2014** **(dollars)**					
	2013–14 Planned Results	**2013–14 Actual**	**2012–13 Actual**	**Difference (2013–14 actual minus 2013–14 planned)**	**Difference (2013–14 actual minus 2012–13 actual)**
Total expenses	1,117,123,012	1,136,478,168	1,099,229,288	19,355,156	37,248,880
Total revenues	65,548,695	90,284,519	84,947,059	24,735,824	5,337,460
Net cost of operations before government funding and transfers*	1,051,574,317	1,046,193,649	1,015,397,939	(5,380,668)	30,795,710
Departmental net financial position	218,922,000	175,438,300	143,642,114	(43,483,700)	31,796,186

*In 2012–13, the net cost of operations before government funding and transfers includes $1,115,710 in expenses deemed to have been recorded by Shared Services Canada.

Expenses by Strategic Outcomes

Total departmental expenses by Strategic Outcomes amounted to $1,136.5 million for 2013–14 ($1,099.2 million for 2012–13). The increase of $37.2 million or 3.4% is mostly due to increased payments in lieu of severance, and retroactive salaries and wages for the renewal of collective agreements. This increase has been offset by the completion of the Fast Start Financing Initiative under the Copenhagen Accord and Species at Risk Program.

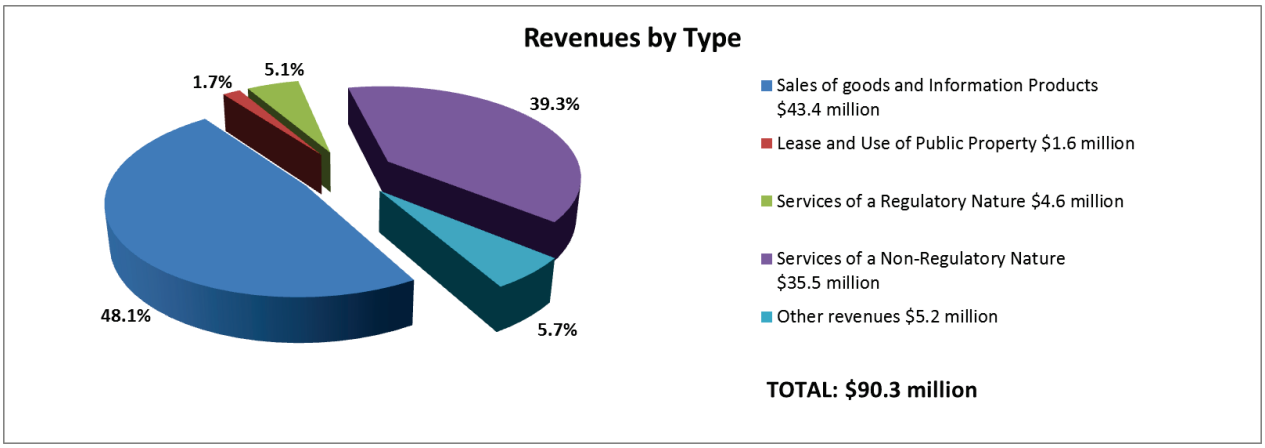


See Note 15 of the Departmental Financial Statements for further breakdown of expenditures – Segmented information by Standard Objects and Strategic Outcomes.

Revenues by Type

Total revenues amounted to $90.3 million for 2013–14 ($84.9 million for 2012–13). This amount excludes $14.5 million of revenues earned on behalf of government. The majority of the revenue in 2013–14 is derived from Environment Canada's Strategic Outcome 2: Canadians are equipped to make informed decisions on changing weather, water and climate conditions, and comprises items such as ocean disposal permit applications, meteorological services, hydraulics laboratory and ocean disposal monitoring fees.

The increase of $5.3 million or 6.4% in Environment Canada's net revenues in 2013–14 is due to oil sands monitoring activities.



See Note 15 of the Departmental Financial Statements for further breakdown of revenues – Segmented information by type and Strategic Outcomes.

Environment Canada
Condensed Statement of Financial Position (unaudited)
As at March 31, 2014
(dollars)

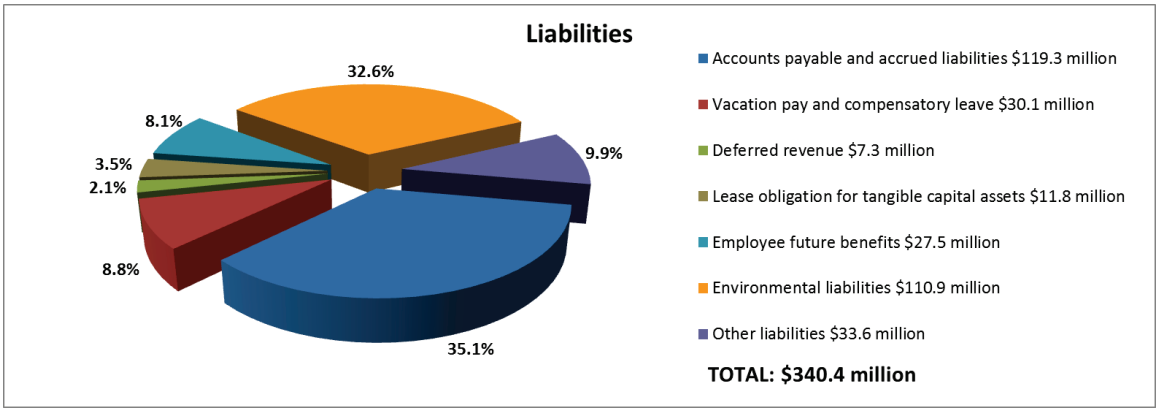
	2013–14	2012–13	Difference (2013–14 minus 2012–13)
Total net liabilities	340,429,458	419,224,819	(78,795,361)
Total net financial assets	130,434,381	163,722,250	(33,287,869)
Departmental net debt	209,995,077	255,502,569	(45,507,492)
Total non-financial assets	385,433,577	399,144,013	(13,710,436)
Departmental net financial position	175,438,500	143,641,444	31,797,056

Liabilities by Type

Total liabilities were $340.4 million at the end of 2013–14. This represents a decrease of $78.8 million or 18.8% from the previous year's total liabilities of $419.2 million. The accounts payable and accrued liabilities and environmental liabilities represent the largest component of liabilities at $230.2 million (67.6% of total liabilities) in 2013–14.

The decrease in Environment Canada's total net liabilities valuation is mainly attributable to:

- A decrease of $23.8 million in accounts payable and accrued liabilities, attributed mostly to a reduction of the payables at year-end;
- A decrease of $46.8 million in liabilities related to employee future benefits, explained by the abolition of severance pay in some classifications;
- A decrease of $9.8 million in environmental liabilities due to new reporting requirements to disclose discounted amounts.



See Notes 4 to 7 and Notes 11 and 12 of the Departmental Financial Statements for more details – Accounts payable and accrued liabilities; Deferred revenue; Lease obligation for tangible capital assets; Employee future benefits; Contractual obligations; Contingent liabilities.

Assets by Type

Total net financial assets ($130.4 million) and non-financial assets ($385.4 million), together valued/totalled at $515.9 million, have decreased by $47 million or 8.3% in 2013–14. The tangible capital assets continue to represent the largest component of assets at $375.8 million (72.8% of total assets) in 2013–14.

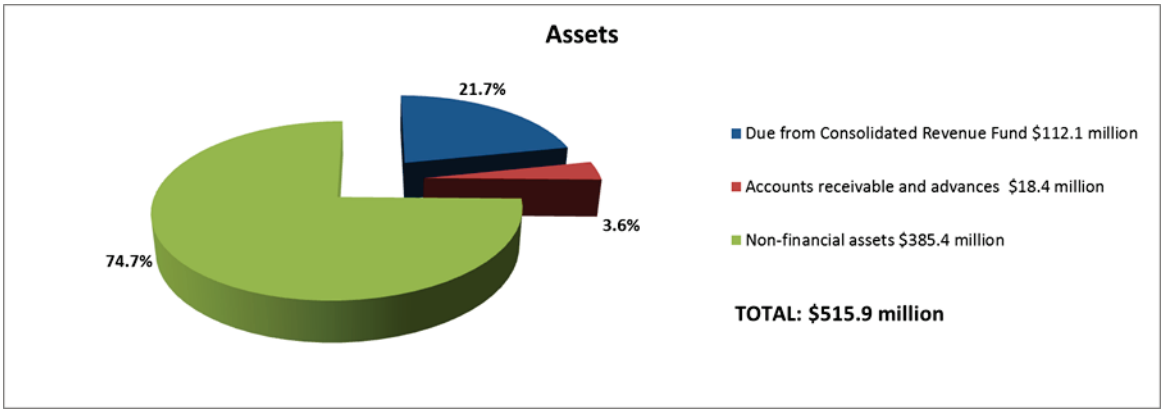
The decrease in Environment Canada's total net assets valuation is mainly attributable to:

Financial Assets

- A decrease of $23 million due from the Consolidated Revenue Fund; and
- A decrease of $10.6 million in accounts receivable and advances mainly due to the invoicing for the Oil Sands Monitoring Plan.

Non-Financial Assets

- A decrease of $13.8 million in tangible capital assets.



See Notes 8 to 10 of the Departmental Financial Statements for more details – Accounts receivable and advances; Inventory; Tangible Capital Assets.

Financial Statements

Environment Canada's unaudited financial statements are prepared in accordance with Treasury Board Secretariat policies that are based on Canadian public sector accounting standards and, therefore, are different from appropriation-based reporting, which is reflected in Sections I and II of this report. Sections I and II are prepared on a modified cash basis, not an accrual basis. A reconciliation between Parliamentary Appropriations used (modified cash basis) and the Net Cost of Operations (accrual basis) is set out in Notes 2 and 3 of Environment Canada's Unaudited Financial Statements on Environment Canada's website[lxxiv].

Supplementary Information Tables

The following tables are provided electronically at Environment Canada's website[lxxv] as part of the Department's 2013–14 DPR[lxxvi]:

- Departmental Sustainable Development Strategy;
- Details on Transfer Payment Programs;
- Horizontal Initiatives;
- Internal Audits and Evaluations;
- Response to Parliamentary Committees and External Audits;
- Sources of Respendable and Non-Respendable Revenue;
- Status Report on Transformational and Major Crown Projects;
- Status Report on Projects Operating with Specific Treasury Board Approval;
- Up-front Multi-year Funding; and
- User Fees Reporting.

Tax Expenditures and Evaluations

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance publishes cost estimates and projections for these measures annually in the *Tax Expenditures and Evaluations*[lxxvii] publication. The tax measures presented in the Tax Expenditures and Evaluations publication are the sole responsibility of the Minister of Finance.

Section IV: Organizational Contact Information

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Appendix: Definitions

appropriation: Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures: Include operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Departmental Performance Report: Reports on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding Reports on Plans and Priorities. These reports are tabled in Parliament in the fall.

full-time equivalent: Is a measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

Government of Canada outcomes: A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

Management, Resources and Results Structure: A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the Strategic Outcome(s) to which they contribute. The Management, Resources and Results Structure is developed from the Program Alignment Architecture.

non-budgetary expenditures: Include net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance: What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve and how well lessons learned have been identified.

performance indicator: A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

performance reporting: The process of communicating evidence-based performance information. Performance reporting supports decision making, accountability and transparency.

planned spending: For Reports on Plans and Priorities (RPPs) and Departmental Performance Reports (DPRs), planned spending refers to those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

plans: The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

priorities: Plans or projects that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome(s).

program: A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results and that are treated as a budgetary unit.

results: An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

Program Alignment Architecture: A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome(s) to which they contribute.

Report on Plans and Priorities: Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

Strategic Outcome: A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

sunset program: A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target: A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

whole-of-government framework: Maps the financial contributions of federal organizations receiving appropriations by aligning their Programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.

Endnotes

[i] *Department of the Environment Act*: www.laws-lois.justice.gc.ca/eng/acts/E-10/index.html
[ii] *Canadian Environmental Protection Act, 1999*: www.laws-lois.justice.gc.ca/eng/acts/C-15.31/page-1.html#s-1.
[iii] *Species at Risk Act*: www.laws-lois.justice.gc.ca/eng/acts/S-15.3/page-1.html#preamble
[iv] *International River Improvements Act*: www.laws.justice.gc.ca/eng/acts/I-20/index.html
[v] *Canada Water Act*: www.laws-lois.justice.gc.ca/eng/acts/C-11/index.html
[vi] *Lake of the Woods Control Board Act, 1921*: www.laws-lois.justice.gc.ca/eng/acts/T-10.4/page-1.html
[vii] *Weather Modification Information Act*: www.laws-lois.justice.gc.ca/eng/acts/W-5/index.html
[viii] *Fisheries Act*: www.ec.gc.ca/pollution/default.asp?lang=En&n=072416B9-1
[ix] *Antarctic Environmental Protection Act*: www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=56303427-1
[x] *Migratory Birds Convention Act, 1994*: www.ec.gc.ca/nature/default.asp?lang=En&n=496E2702-1
[xi] *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*: www.ec.gc.ca/cites/default.asp?lang=En&n=18F4A0BC-1
[xii] *Canada Wildlife Act*: www.ec.gc.ca/alef-ewe/default.asp?lang=En&n=E8EA5606-1
[xiii] *Federal Sustainable Development Act*: www.ec.gc.ca/dd-sd/default.asp?lang=En&n=C2844D2D-1
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[xv] *Environmental Violations Administrative Monetary Penalties Act*: www.laws-lois.justice.gc.ca/eng/acts/E-12.5/page-1.html
[xvi] *National Wildlife Week Act*: www.laws-lois.justice.gc.ca/eng/acts/W-10/index.html
[xvii] Environment Canada Science Strategy 2014–2019: www.ec.gc.ca/scitech/default.asp?lang=En&n=72C52D55-1
[xviii] Acts and regulations: www.ec.gc.ca/default.asp?lang=En&n=48D356C1-1
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[xxii] National Conservation Plan: www.canada.ca/en/services/environment/ncp/index.html?utm_medium=offline&utm_campaign=National+Conservation+Plan&utm_source=vanity+URL&utm_content=eng_May+15,+2014&utm_term=Canada.ca/NationalConservationPlan
[xxiii] Avian Conservation and Ecology: www.ace-eco.org/vol8/iss2/
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[xxv] Paper to support policy makers involved in arctic biodiversity assessment: www.arcticbiodiversity.is/the-report
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[xxx] Service standards: www.ec.gc.ca/default.asp?lang=En&n=85530A85-1
[xxxi] Proposed changes to the *Migratory Birds Regulations*: www.ec.gc.ca/rcom-mbhr/default.asp?lang=En&n=4D5FBFF2-1
[xxxii] Eighteen bird conservation region strategies: www.ec.gc.ca/mbc-com/default.asp?lang=En&n=1D15657A-1
[xxxiii] Framework: www3.cec.org/islandora/en/item/11362-north-american-grasslands-alliance-framework-change
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[xxxvi] Monitoring biodiversity and disturbance: www.jointoilsandsmonitoring.ca/default.asp?lang=En&n=D0C8C3D7-1
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[xlii] Data.gc.ca: www.data.gc.ca/eng
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[xliv] New website architecture for Canadian climate change scenarios: www.cccsn.ec.gc.ca/?page=main&lang=en
[xlv] World Meteorological Organization World Data Centres: www.wmo.int/pages/prog/arep/gaw/world_data_ctres.html
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[xlix] Chemicals Management Plan Science Committee: www.chemicalsubstanceschimiques.gc.ca/plan/sc-cs/index-eng.php
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[li] Summary reports: www.chemicalsubstanceschimiques.gc.ca/plan/council-conseil/meet-reunion-eng.php
[lii] Chemicals Management Plan website: http://www.chemicalsubstanceschimiques.gc.ca/plan/index-eng.php
[liii] Minamata Convention on Mercury: www.mercuryconvention.org/
[liv] Objectives: www.synergies.pops.int/Decisionmaking/2013COPsExCOPs/Background/tabid/2747/language/en-US/Default.aspx
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[lxxii] Enforcement Notifications: www.ec.gc.ca/alef-ewe/default.asp?lang=En&n=8F711F37-1
[lxxiii] Environment Canada's website: www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1
[lxxiv] Environment Canada's website: www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1
[lxxv] Environment Canada's website: www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1
[lxxvi] Environment Canada's 2013–2014 Departmental Performance Report: www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1
[lxxvii] Government of Canada Tax Expenditures: www.fin.gc.ca/purl/taxexp-eng.asp

www.ec.gc.ca

Additional information can be obtained at:

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10 Wellington Street, 23rd Floor
Gatineau QC K1A 0H3
Telephone: 1-800-668-6767 (in Canada only) or 819-997-2800
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