Environment Canada Environnement Canada

Environment Canada

2014–15

Departmental Performance Report

The Honourable Catherine McKenna, P.C., M.P.
Minister of the Environment and Climate Change

Canada

Departmental Performance Report 2014–15

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Minister's Message

As Minister of Environment and Climate Change, I am pleased to present the 2014-15 *Departmental Performance Report*. It outlines the Department's progress in addressing commitments set out for 2014-15. The threat of climate change is a challenge we face as a country, and a challenge around the world.

The Government of Canada will provide national leadership, and join with the provinces and territories to take action on climate change, put a price on carbon, and reduce carbon pollution. Environment and Climate Change Canada will play a key role in this work.

Delivering high quality weather services for Canadians is a critical activity for the Department. Improvements in the quality of weather forecasts and warnings mean that Canadian communities and business sectors across Canada will have access to more timely and accurate weather information, based on the most modern technology available.

The enforcement of Canada's environmental and wildlife protection laws contributes to clean air, clean water, and the protection of species and their habitats for present and future generations. In 2014, a departmental investigation resulted in a conviction that produced a $7.5 million fine, the highest ever imposed in Canada for environmental infractions.

A new five year commitment with the Government of Ontario, through the *Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health*, 2014, will contribute to the protection of one of the world's largest freshwater bodies. Going forward, my officials and I will continue to work to protect Canada's freshwater resources through a variety of actions.

In partnership with Health Canada, my Department continued to implement the Chemicals Management Plan, which assesses environmental and human health risks posed by chemical substances, and develops and implements measures to prevent or manage those risks. For example, new regulations completed in November 2014 will help to control the importation and manufacturing of products that contain mercury.

I invite you to read this report for thorough details about the many activities undertaken by the Department.

We will build on this work as we embark on an ambitious new chapter as Environment and Climate Change Canada. In the coming months, we will move forward to take action on climate change and other key areas through a collaborative, evidence-based approach that is anchored in science. The Department will take the lead in implementing the government's plan for a clean environment and a sustainable economy, and deliver on the many policy priorities set out in my mandate letter from the Prime Minister. To this end, I look forward to working with Public Servants in a strong and productive way to deliver on this shared mission.

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The Honourable Catherine McKenna, P.C., M.P.
Minister of the Environment and Climate Change

Section I: Organizational Expenditure Overview

Organizational Profile

Appropriate Minister: The Honourable Catherine McKenna, P.C., M.P.

Institutional Head: Michael Martin

Ministerial Portfolio: Environment Canada[1]

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]
- *Lac Seul Conservation Act*
- *Fisheries Act*[vii] (administration and enforcement of the Pollution Prevention Provisions)
- *Antarctic Environmental Protection Act*[viii]
- *Migratory Birds Convention Act, 1994*[ix]
- *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*[x]
- *Canada Wildlife Act*[xi]
- *Federal Sustainable Development Act*[xii]
- *Canadian Environmental Assessment Act, 2012*[xiii]
- *Environmental Violations Administrative Monetary Penalties Act*[xiv]
- *National Wildlife Week Act*[xv]
- *Canadian Environmental 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 storm prediction centres.

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

[1] Due to a machinery of government change in November 2015, "Environment Canada" will be referred to as "Environment and Climate Change Canada" in future Estimates documents.

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 2014–15, Environment Canada launched 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, the private sector 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.

Environment Canada supports sustainable development. The concept of sustainable development rests at the core of the Department's mandate and is an intrinsic part of the planning, decision making, and execution of departmental programming and initiatives. Not only is Environment Canada the lead for the Government's Federal Sustainable Development Strategy[xviii] (FSDS), along with other federal government departments and agencies, the Department continues to incorporate environmentally sustainable best practices within its internal policies and operations. Environment Canada is the largest contributor to themes and targets under the FSDS, and its contribution to the federal strategy for 2014–15 can be found in its Departmental Sustainable Development Strategy[xix].

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.

The Minister of the Environment has primary responsibility for and carries out the departmental mandate through a number of other acts and regulations[xx], such as the *Canadian Environmental Protection Act, 1999* (CEPA 1999), the pollution prevention provisions of the *Fisheries Act,* the *Federal Sustainable Development Act*, the *Species at Risk Act,* the *Migratory Birds Convention Act, 1994,* the *Canadian Wildlife Act,* and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act.*

The Department is a key partner to the Canadian Environmental Assessment Agency and Parks Canada, which are its ministerial portfolio partners.

In addition, the Minister of the Environment has secondary or shared responsibility for the successful execution of other federal departments' mandates including the *Arctic Waters Pollution Prevention Act* (Transport Canada, Aboriginal Affairs and Northern Development Canada, and Natural Resources Canada); the *Canada Oil and Gas Operations Act (Natural Resources Canada),* and the *Emergency Management Act* (Public Safety 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 18 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 2014–15 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
  - **1.3.4 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/South-eastern Georgian Bay
    - **1.3.4.4 Sub-Sub-Program:** Lake Winnipeg
    - **1.3.4.5 Sub-Sub-Program:** Community Ecosystem 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 maintained four priorities for 2014–15. 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 and Programs
Priority 1: A Clean Environment Manage substances and waste, and reduce pollution that directly or indirectly harms human health or the environment.	Ongoing[2]	**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:

Managing substances and waste

- Continued to collaborate with Health Canada Under the second phase of the Chemicals Management Plan (CMP), to work closely with health and environmental groups, consumer groups, academics, Aboriginal groups, industry and international partners. Approximately 1,670 substances have been assessed since 2011 and the government is on track to complete the objectives identified in the second phase of the program by 2016 (see programs 3.1 and 3.1.1).
- Published the third issue of the Chemicals Management Plan Progress Report[xxi] (December 2014) which highlights advances and activities in major initiatives under the CMP, including updating the Domestic Substances List[xxii]; this provided a sound basis for setting priorities for the next (third) phase of the CMP (see programs 3.1 and 3.1.1).
- Maintained the National Pollutant Release Inventory (NPRI) as the centre of the federal government's efforts to track releases, disposals and recycling of over 300 substances of concern and make this information available to Canadians. The most recent NPRI report[xxiii] (December 2014) included data from over 7,500 facilities in Canada (see program 3.1.1).
- Published (November 2014) the *Products Containing Mercury Regulations*, the first of their kind in Canada to prohibit the manufacture and import of most mercury-containing products. The regulations build on Canada's record on reducing its mercury emissions by over 90% since the 1970s, as well as its 2013 work under the Minamata Convention to reduce global mercury emissions (see programs 3.1.1 and 3.2.1).
- Continued to respond to environmental emergencies, with a focus on providing the scientific advice and expertise—such as response measures and clean-up techniques—to reduce the consequences of these incidents through a World Class preparedness and response system across sectors (see program 3.1.4).
- Continued to administer regulations that address important sources of pollution to Canadian waters, including from metal mining activity (*Metal Mining Effluent Regulations*), pulp and paper manufacturing (*Pulp and Paper Effluent Regulations*) and wastewater effluent (the *Wastewater Systems Effluent Regulations* that phase out the discharge of untreated/undertreated wastewater across Canada). Over 75% of relevant municipalities and communities in Canada now meet baseline requirements for secondary treatment of wastewater (see program 3.1.2).
- Completed a successful proposal for renewal of the Federal Contaminated Sites Action Plan (FCSAP), which will see a four-year investment beginning in 2016–17 to assess and remediate the highest priority federal contaminated sites to reduce risk to human health and the environment from these sites (see program 3.1.5).

[2] Type is defined as follows: previously committed to—committed to in the first or second fiscal year prior to the subject year of the report; ongoing—committed to at least three fiscal years prior to the subject year of the report; and new—newly committed to in the reporting year of the Report on Plans and Priorities or the Departmental Performance Report.

Action on air quality and climate change

- Pursued the 2020 targets for the reduction of greenhouse gas emissions (GHGs) through a sector-by-sector approach, building on work that put regulations in place for two of the largest sources of emissions in Canada: the transportation and coal-fired electrical generation sectors. The Department continued development of regulations for other major industrial sectors (including oil and gas, natural gas-fired electricity generation and nine emissions-intensive and trade-exposed sectors) (see programs 3.2.1, 3.2.1.1 and 3.2.1.2).
- Made important progress on the development of regulatory and non-regulatory (such as codes of practice) approaches to reduce air pollution from the major industrial sectors, including proposed *Multi-sector Air Pollutants Regulations* (see program 3.2.1.1).
- Took action on short-lived climate pollutants (SLCPs), including black carbon and methane. As chair of the Arctic Council, the Department advanced the development of a framework for action to address these substances in the Arctic. As lead partner in the Climate Change and Clean Air Coalition, the Department led initiatives to reduce emissions from the municipal solid waste, oil and gas, and agriculture sectors (see programs 2.1.3, 3.2 and 3.2.2).
- Participated in key international initiatives, including leading delegations to the United Nations Framework Convention on Climate Change, and met Canada's international reporting commitments, including the submission of Canada's National Greenhouse Gas Inventory Report,[xxiv] its Air Pollutant Emission Inventory[xxv] and its first Black Carbon Emission Inventory.[xxvi] These inventories also support the Department's commitment to report to Canadians (see program 3.2.2).
- In November 2014, (Canada) pledged $300 million to the Green Climate Fund, which supports developing countries in reducing their GHG emissions and adapting to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change (see program 3.2.2).

Enforcing pollution regulations

- Enforced pollution regulations, with 40 successful prosecutions and over $9.4 million in penalties, including the largest penalty every imposed for environmental infractions in Canada ($7.5 million in fines to a Québec company for 45 charges under the *Fisheries Act*) (see program 3.3).

Priority	Type	Strategic Outcome and Programs
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:

- Continued to deliver critical weather and environmental services to equip Canadians and targeted users in making informed decisions on their safety (i.e. issued approximately 1.5 million public forecasts, 15,000 severe weather warnings, 500,000 aviation forecasts and 200,000 marine, ice and sea state forecasts). Environment Canada (EC) provided early notifications, specialized weather forecasts, and worked closely with communities and emergency preparedness organizations during severe weather events, such as during the powerful December pre-winter storms which brought strong winds, drenching rains and heavy snowfall on the West and East coasts (see programs 2.1, 2.1.1, 2.1.2, 2.1.3, 2.2, 2.2.1, 2.2.2, 2.2.3, and 2.2.4).
- Made significant upgrades to the monitoring network and to the warning and forecast system as part of a major ($134 million) initiative for the renewal of its weather and environmental services to ensure their long-term sustainability. The investments improved the reliability of the monitoring network and the Department's ability to forecast major weather systems. Science is a critical component of these improvements (see programs 2.1, 2.1.1, and 2.2).
- As part of the preparations for the Pan American and Para Pam American Games, the Department installed a dozen new weather stations in the Greater Toronto Area, deployed devices that monitor air quality, heat stress loads and predicts lighting and severe weather events. The new technology used for the Games will inform future weather products and our capacity to better respond to future high impact weather events (see programs 2.1.1).

- Through the Meteorological Areas (METAREAs) initiative the Department expanded its existing land and ocean/ice-based observational platforms in the Arctic, in order to provide increased meteorological information to the forecasting process and to mariners and Northern Canadians. This initiative allowed the domestic marine and ice forecasting programs to expand into areas previously unserved by EC, including international waters of the Arctic Ocean. These warning and information services contribute to the efficiency and safety of marine navigation in the North. In addition, the new observational sources enhanced the quality of computer prediction systems operated by EC and by global partners. Collectively, the advancements stemming from this initiative not only improved the marine and ice forecasting, but also the public weather information for northern coastal communities (see program 2.2.2).
- Implemented, in collaboration with eight Arctic Council Members, a new global initiative called Arctic HYCOS, a project designed to collect, manage and share high quality data from a network of hydrological stations in the Arctic basin (see program 1.2.3 and 2.1.1).
- Collaborated with provinces and the wind industry to mitigate the impacts of wind farm development projects on EC a radar network operations. Provincial wind energy projects began to include specific terms and conditions that support uninterrupted network operations and three agreements with industry proponents were negotiated (see program 2.1.1).
- Developed and maintained effective relationships with academia, provinces and territories, international partners and the private sector to leverage the specialized climate and meteorological expertise needed to support Environment Canada's science and technology requirements and to improve service delivery to Canadians and targeted users (see program 2.1.1).

Priority	Type	Strategic Outcome and Programs
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:

- Led the development and early implementation of the National Conservation Plan,[xxvii] aimed at conserving Canada's natural heritage by protecting and enhancing biodiversity and ecosystems through conservation and stewardship actions. This included the establishment of the National Wetland Conservation Fund,[xxviii] a key component of the National Conservation Plan that supports projects to restore, scientifically assess and monitor wetlands. Focus of the National Conservation Plan is on three priority areas: conserving Canada's lands and waters, restoring ecosystems, and connecting Canadians to nature. Federal government investments of $252 million over five years for a variety of conservation measures include both new programs and the enhancement of existing successful initiatives (see programs 1.1, 1.1.1, 1.1.4 and 1.1.5).
- Renewed the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, to continue to coordinate work to restore, protect and conserve the Great Lakes. Through the National Conservation Plan, some 17 projects will take action to restore drained, degraded or lost wetlands in the Great Lakes basin to improve water quality and habit for fish, waterfowl and other wildlife (see programs 1.1, 1.3.4 and 1.3.4.1).
- Continued to advance work on monitoring air, water, biodiversity and wildlife contaminants under the Joint Canada–Alberta Implementation Plan for Oil Sands Monitoring —and making data and information available to Canadians through the Canada-Alberta Oil Sands Environmental Monitoring Information Portal[xxix] (see programs 1.2.1, 1.3.2, 3.2.1 and 3.2.1.1)
- Renewed hydrometric monitoring agreements with provinces and territories: signed a new agreement with the Northwest Territories, renewed an agreement with Nova Scotia and continued negotiations with the remaining provinces to renew or establish new agreements. The Department launched an electronic Data Mart (early 2015) that enables provincial and territorial partners to access hydrometric data directly (see program 1.2.3).

- Continued to acquire, produce and disseminate data and information on critical water levels and flows through a federal, provincial and territorial cost-shared network of approximately 2,750 hydrometric stations[3] on rivers and lakes across Canada. with 70 stations transmitting data in near real time added in 2014–15. This information helps provincial and territorial emergency management organizations keep Canadians safe when flooding is a risk (see program 1.2.3).
- Continued to collaborate with the Province of Québec to implement the St. Lawrence Action Plan (2011–2026), a long-term partnership focusing on biodiversity conservation, sustainable use of water, and improved water quality. The governments worked constructively through three joint programs and about fifty joint projects in order to acquire new scientific knowledge, establish common management tools, and restore and protect the ecosystem. The Department also undertook negotiations on renewal of joint activity programming for 2016–2021 (see programs 1.3.4 and 1.3.4.2).
- Established and maintained agreements with provinces and territories, academic institutions and other countries (including the U.S.) that allow the Department to leverage leading edge knowledge and expertise that enhances its capacity to improve hydrometric services to Canadians (see program 1.2.3).
- Developed *2020 Biodiversity Goals and Targets for Canada*[xxx] in partnership with provincial and territorial governments, and with input from Aboriginal organizations and stakeholders, as part of Canada's participation in the United Nations Convention on Biological Diversity (see program 1.1.1).
- Significantly reduced the backlog of recovery documents for species at risk (see programs 1.1.2 and 1.1.2.1).
- Completed development of a public-private partnership to fund clean-up of Randle Reef (Hamilton Harbour), the largest contaminated site in the Canadian Great Lakes waters. Work on this complex multi-year initiative will begin in 2015 (see programs 1.3.4 and 1.3.4.1).

Priority	Type	Strategic Outcome and Programs
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*:** • Continued work under Transformation@EC, aligning major systems that support the Department's work with key Central Agency (e.g., Clerk of the Privy Council's Blueprint 2020) and departmental changes that affect people and business processes (see program 4.1). • Continued to recruit and retain highly specialized staff to deliver a wide range of environmental monitoring, research and other scientific programming (see program 4.1). • Supported key departmental programs through the development and testing of business continuity plans (see program 4.1).		

[3] The federal government operates approximately 2,200 stations, about 1,000 of which are fully or partially federally funded, and the remainder are operated by the federal government on behalf of provincial, territorial and commercial partners via cost-share agreements. Over 550 additional stations are operated by the partners.

Risk Analysis

This section describes the Department's corporate risks as identified in the 2014–15 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.

Key Risks

Risk	Risk Response Strategy	Link to Program Alignment Architecture
Delivering Environment Canada Services There is a risk that the Department's provision of key services and other information for Canadians, partners and others, may be impeded as a consequence of the Department's reliance on the performance of essential infrastructure and systems.	The Department will utilize established channels, protocols, and agreements within the Department and with its key stakeholders to ensure that risks of not being able to deliver its services are managed; the viability and readiness of business continuity plans will continue to be tested, both nationally and regionally; training will be provided for stakeholders and staff responsible for responding to emergencies.	Strategic Outcomes 2 and 3
Working with Partners/Stakeholders There is a risk that differing priorities or capacity limitations of partners and stakeholders may impact the Department's ability to efficiently deliver programs and services, or advance key environmental initiatives.	In line with the Department's Blueprint 2020 engagement strategy, short term and longer term actions to be considered include building and strengthening relations with citizens, stakeholders and partners. For instance, 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.	Strategic Outcomes 1, 2, and 3
Workforce Readiness As the federal public service evolves and competition for specialized/ science expertise within private sectors and industry increases, there is a risk that it may become increasingly difficult for the Department to attract, develop, retain and motivate a high-performing and innovative workforce in certain areas.	In line with the Department's Blueprint 2020 engagement strategy, short term and longer term actions to be considered include building a capable workforce. Key factors for consideration 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 also examine with other Science-based departments, options for updating resourcing models for scientists (classifying, recruiting, deploying, compensating).	Strategic Outcomes 1, 2 and 3
Managing Information As government drives towards whole of government information management including greater efficiencies and protection of government information, there is a risk that the Department may be	The implementation of protocols and procedures, ongoing communication and provision of relevant training relating to information management, security, file management, privacy, quality assurance and compliance testing, are among the mitigation activities that the Department will continue to undertake or advance.	Strategic Outcomes 1, 2, 3 and Internal Services

challenged to protect and preserve information given the potential of cyber threats and the ever-increasing pace of change related to the collection and storage of information.		
Regulatory/Legislation There is a risk that the Department may be perceived as not generating timely regulations or legislation to respond to emerging priorities for environmental action.	To mitigate this risk, the Department is making concerted efforts to maintain and strengthen its relationships with key partners and stakeholders domestically, internationally and continentally. This is done through participating in key partnerships and fora and engaging in ongoing communication and strategic dialogues with partners and stakeholders to share, and understand regulatory and/or legislative expectations.	Strategic Outcomes 1 and 3

Risk Narrative

When delivering its services, Environment Canada (EC) often needs to rely on the performance of essential infrastructure and systems. There are business continuity risks, such as network failures, power outages, etc., that the Department must take in to account to ensure continuous delivery of services on which Canadians rely, such as weather warnings, forecasts and air quality services. EC continued to support a wide range of initiatives to minimize the impact and likelihood of these consequences materializing. They include establishment of clear governance structures for quick and efficient coordination; Service Level Agreements with key partners to ensure service continuity; and comprehensive and structured Business Continuity Plans.

Complex and interdependent partnerships and stakeholder collaboration shape the way EC delivers its mandate. However, often, partners/stakeholders have competing and conflicting priorities. Despite these challenges, their engagement is pivotal in reaching common objectives. On the international scene, EC's engagement with key partners/stakeholders in various fora is essential, as in the case that led to the negotiation and development of an environment chapter within the recently concluded Canada-European Union Comprehensive Economic and Trade Agreement, and the Canada-Korea Free Trade Agreement.

EC continued actions to build a capable workforce, especially in the area of highly specialized staff to deliver its key scientific outcomes. One strategy is to maintain a close working relationship with universities and the international community to ensure that our future workforce has the science knowledge and expertise and the skills needed to engage in strategic dialogues. To address shorter term key operational management issues, the Department re-directed human resources to address issues such as the backlog of recovery documents for species at risk.

As with many other departments, EC has to deal with threats related to the protection of information, assets and services due to cyber-attacks, theft, loss, emergencies or other threats and hazards. To mitigate this risk, EC developed a Departmental Security Plan and implemented initiatives to monitor and respond to cyber threats, ensure business continuity, and prepare for emergencies. Other ongoing actions are underway in the areas of incident monitoring, travel security, awareness training, and safeguarding of information to further reduce vulnerabilities.

The Department continued to strive to develop timely regulations and legislation as one of the key responses to emerging priorities and to facilitate efforts in meeting regulatory commitments. Furthermore, in the area of regulatory programs to address transportation sector emissions, the involvement of multiple partners with sometimes varying priorities can cause delays in meeting regulatory commitments. To mitigate these challenges, EC continued to promote early, active and sustained stakeholder engagement and maintained continuous communication and collaboration.

Actual Expenditures

Budgetary Financial Resources (dollars)*

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	Difference (actual minus planned)
932,167,330	1,011,506,073	1,058,454,049	976,186,637	-35,319,436

*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 $46.9 million to planned spending, increasing the total authorities to $1,058.5 million. The increase was mainly attributed to funding received for implementation of the National Conservation Plan, the Revitalization of Canada's Weather Services and payment made to the Nature Conservancy of Canada.

The actual spending of $976.2 million (92.2% of total authorities) reflects departmental expenditures as reported in the Public Accounts. It is lower than planned spending, mostly owing to the unspent funding for the Sustainable Development Technology Canada (SDTC) for the Next Generation Biofuels Fund™, offset by payments in lieu of severance, the one-time transition payment as a result of change from pay in advance to pay in arrears, as well as the funding received in 2014–15, mentioned above.

Human Resources (Full-Time Equivalents—FTEs)*

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
6,400	6,461	61

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

One FTE equals one person working a 37.5-hour work week full-time for the entire year, or any number of part-time employees whose combined hours of work equal one FTE. An average salary was used to calculate 2014–15 planned FTEs based on planned salary spending for 2014–15. The actual FTEs were determined using the departmental financial system. Environment Canada used 6,461 FTEs versus planned FTEs of 6,400 in 2014–15, resulting in an increase of 61 FTEs (1.0%). This increase is mostly due to additional in-year salary funding received from Supplementary Estimates.

Budgetary Performance Summary for Strategic Outcomes and Programs (dollars)

Strategic Outcomes and Programs	2014–15 Main Estimates	2014–15 Planned Spending	2015–16 Planned Spending	2016–17 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2013–14 Actual Spending (authorities used)	2012–13 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	91,592,394	91,592,394	122,779,285	124,255,645	143,284,612	140,408,483	120,519,001	124,279,701
Program 1.2 Water Resources	91,196,857	91,196,857	95,770,859	91,053,461	94,498,585	92,453,058	100,322,337	108,552,181
Program 1.3 Sustainable Ecosystems	92,013,642	92,013,642	91,480,613	79,198,765	96,697,210	72,619,888	70,727,194	67,500,282
Program 1.4 Compliance Promotion and Enforcement – Wildlife	15,821,926	15,821,926	16,115,510	15,917,518	17,202,627	17,058,497	18,208,956	16,695,292
Strategic Outcome 1 Subtotal	290,624,819	290,624,819	326,146,267	310,425,389	351,683,034	322,539,926	309,777,488	317,027,456
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	165,962,548	165,962,548	192,103,008	166,752,893	180,986,784	174,493,294	182,818,981	167,695,081
Program 2.2 Weather and Environmental Services for Targeted Users	25,266,280	25,266,280	15,792,293	15,822,293	27,083,480	25,886,657	26,618,144	23,048,760
Strategic Outcome 2 Subtotal	191,228,828	191,228,828	207,895,301	182,575,186	208,070,264	200,379,951	209,437,125	190,743,841
Strategic Outcome 3: Threats to Canadians and their environment from pollution are minimized.								
Program 3.1 Substances and Waste Management	75,747,789	75,747,789	85,149,099	50,311,880	90,048,046	86,779,805	84,616,666	79,295,781
Program 3.2 Climate Change and Clean Air	154,813,450	234,152,193	122,872,074	91,678,186	161,572,084	121,061,134	125,118,027	157,525,949
Program 3.3 Compliance Promotion and Enforcement – Pollution	38,324,642	38,324,642	37,560,222	29,830,876	42,693,720	42,309,866	44,661,876	41,707,206
Strategic Outcome 3 Subtotal	268,885,881	348,224,624	245,581,395	171,820,942	294,313,850	250,150,805	254,396,569	278,528,936
Internal Services Subtotal	181,427,802	181,427,802	181,428,113	168,449,053	204,386,901	203,115,955	205,338,366	203,355,229
Total	932,167,330	1,011,506,073	961,051,076	833,270,570	1,058,454,049	976,186,637	978,949,548	989,655,462

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

Actual spending for 2014–15 is higher than planned spending. This is mainly attributed to funding received for implementation of the National Conservation Plan and funding received for a payment made to the Nature Conservancy of Canada. The increase in actual spending in 2014–15 compared to 2013–14 is mainly due to new grants and contributions for the National Conservation Plan and a one-time transition payment made in 2014–15 as a result of change from pay in advance to pay in arrears. These increases are offset by a reduction in payments in lieu of severance and in statutory payment to the Nature Conservancy of Canada. The reduction in planned spending from 2015–16 to 2016–17 is primarily due to the reduction in funding for the Contaminated Sediment Remediation Projects, West Coast Energy Infrastructure Initiative and the Lake Winnipeg Basin Initiative, as well as the sunsetting of temporary initiatives.

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

Actual spending for 2014–15 is higher than planned spending. This is mainly attributed to funding received for the Revitalization of Canada's Weather Services. The reduction in actual spending in 2014–15 compared to 2013–14 is mainly due to a reduction in payments in lieu of severance offset by a one-time transition payment made in 2014–15 as a result of change from pay in advance to pay in arrears. The reduction in planned spending from 2015–16 to 2016–17 is primarily due to the sunsetting of temporary initiatives.

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

Actual spending for 2014–15 is lower than planned spending. This is mainly due to the unspent funding for the Sustainable Development Technology Canada (SDTC) for the Next Generation Biofuels Fund™, offset by payments in lieu of severance and the one-time transition payment as a result of change from pay in advance to pay in arrears. The reduction in actual spending in 2014–15 compared to 2013–14 is mainly due to lower capital investments and to a reduction in payments in lieu of severance, offset by a one-time transition payment made in 2014–15 as a result of change from pay in advance to pay in arrears. The decrease in planned spending for 2016–17 compared to 2015–16 is primarily attributable to the sunsetting of funding for a number of the Department's air quality and climate change initiatives.

Internal Services

Actual spending for 2014–15 is higher than planned spending. This is mainly due to payments in lieu of severance and the one-time transition payment as a result of change from pay in advance to pay in arrears, as well as increased capital investments. The decrease between 2014–15 and 2013–14 actual spending is primarily due to a reduction in payments in lieu of severance offset by a one-time transition payment made in 2014–15 as a result of change from pay in advance to pay in arrears. The variance between planned spending for 2015–16 compared to 2016–17 is mainly due to the sunsetting of temporary initiatives.

Alignment of Spending with the Whole-of-Government Framework

Alignment of 2014–15 Actual Spending with the Whole-of-Government Spending Areas[xxxi] (dollars)

Strategic Outcome	Program	Spending Area	Government of Canada Outcome	2014–15 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	140,408,483
	Program 1.2 Water Resources	Economic Affairs	A clean and healthy environment	92,453,058
	Program 1.3 Sustainable Ecosystems	Economic Affairs	A clean and healthy environment	72,619,888
	Program 1.4 Compliance Promotion and Enforcement – Wildlife	Economic Affairs	A clean and healthy environment	17,058,497
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	174,493,294
	Program 2.2 Weather and Environmental Services for Targeted Users	Economic Affairs	A clean and healthy environment	25,886,657
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	86,779,805
	Program 3.2 Climate Change and Clean Air	Economic Affairs	A clean and healthy environment	121,061,134
	Program 3.3 Compliance Promotion and Enforcement – Pollution	Economic Affairs	A clean and healthy environment	42,309,866

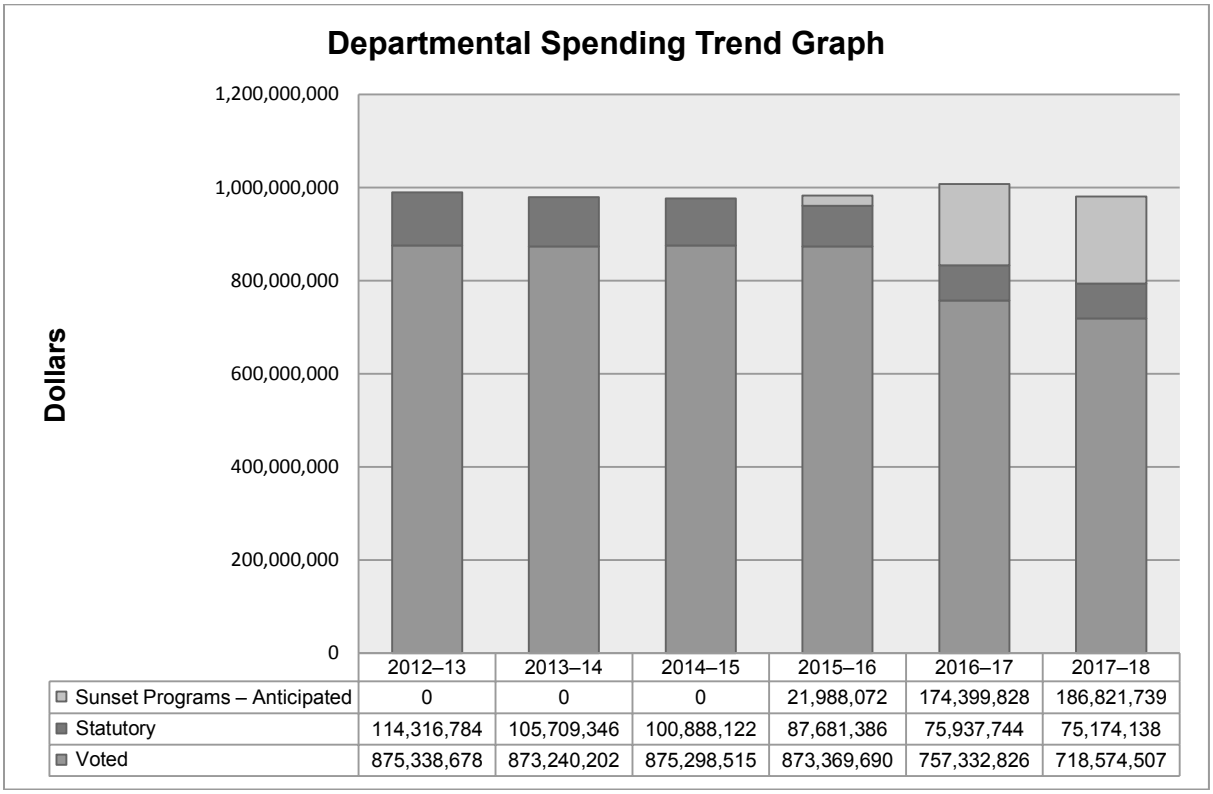
Total Spending by Spending Area (dollars)

Spending Area	Total Planned Spending*	Total Actual Spending*
Economic Affairs	830,078,271	773,070,682
Social Affairs	0	N/A
International Affairs	0	N/A
Government Affairs	0	N/A

* The total planned and actual spending figures in this table are net of the internal services planned spending ($181,427,802) and actual spending ($203,115,955), 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 2012–13 to 2014–15, actual spending represents the actual expenditures as reported in the Public Accounts. For the period from 2015–16 to 2017–18, planned spending represents the planned expenditures as reported in the 2015–16 Report on Plans and Priorities, and reflects funding approved by Treasury Board to support the departmental Strategic Outcomes and Programs.



	2012–13	2013–14	2014–15	2015–16	2016–17	2017–18
Sunset Programs – Anticipated	0	0	0	21,988,072	174,399,828	186,821,739
Statutory	114,316,784	105,709,346	100,888,122	87,681,386	75,937,744	75,174,138
Voted	875,338,678	873,240,202	875,298,515	873,369,690	757,332,826	718,574,507

As indicated in the chart above, Environment Canada's actual spending for 2014–15 was $976.2 million, a year-over-year decrease of $2.8 million (0.3%) from 2013–14 actual spending. This decrease is mainly due to a reduction in payments in lieu of severance and the related Employee Benefit Plan, as well as a reduced statutory payment to the Nature Conservancy of Canada, offset by a one-time transition payment made in 2014–15 as a result of change from pay in advance to pay in arrears and increased funding for the National Conservation Plan.

The decrease of $10.8 million (1.1%) in actual spending from 2012–13 to 2013–14 is mainly due to the completion of the Fast Start Financing under the Copenhagen Accord, and a lower payment made to the 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 $15.1 million (1.6%) between actual spending for 2014–15 and planned spending for 2015–16 is mainly due to the inclusion in 2014–15 of the payment in lieu of severance and the one-time transition payment as a result of change from pay in advance to pay in arrears, offset by sunsetting of temporary initiatives.

The decrease in planned spending from 2015–16 to 2017–18 is $167.3 million (17.4%). The net decrease in planned spending from 2015–16 to 2017–18 is mainly due to the sunsetting of funding for a number of the department's air quality and climate change initiatives, as well as a funding profile decrease over two years for other initiatives. These decreases are partially offset by net additional funding for new initiatives, including for Sustainable Development Technology Canada for the Next Generation Biofuels Fund™ and the National Conservation Plan, as well as adjustments to the Employee Benefit Plan. 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 2015*[xxxii] on the Public Works and Government Services Canada website[xxxiii].

Section II: Analysis of Programs by Strategic Outcomes

DRAFT FINANCIAL INFORMATION

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[4] as a measure of conservation effort	17% by December 2020[5]	10.3% as of December 31, 2014 Canada's terrestrial protected area, as defined under the International Union for Conservation of Nature, has steadily increased from 5.2% (522,182 km^2) in 1990 to 10.3% (1,026,682 km^2) in 2014. Although the 2014 estimate is slightly smaller than the total reported last year (10.4% or 1,037,798 km^2), terrestrial protected area has in fact grown by an estimated 1,913 km^2 in calendar year 2014. The discrepancy is due to improvements in the methods used to estimate the area protected, which has eliminated double-counting of the area of sites with multiple types of protection.

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 monitoring, conserving, restoring and rehabilitating significant habitats. The program works toward these goals by establishing and maintaining 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 forms strategic partnerships for integrated management of Canada's natural capital, including stewardship and the sustainable management of landscapes. This program has responsibilities under 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)*

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	Difference (actual minus planned)
91,592,394	91,592,394	143,284,612	140,408,483	48,816,089

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

[4] 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.

[5] 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)*

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
548	600	52

*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 wildlife, in particular 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	81% in 2015 General Status Report	77% in 2010 Data for this indicator are derived from assessments of the status of species in Canada (General Status Reports) that are prepared every 5 years as required by the *Species at Risk Act*. This indicator focuses only on migratory bird species, to align with Environment Canada's responsibilities. Previous values of the indicator were 81% in 2005 and 80% in 2000. The number of species ranked as “At Risk” is showing a steady increase and has almost doubled since the first report in 2000. Changes in the indicator value may be due to: changes in the population size, distribution of or threats to the species, or a more detailed assessment prepared by the Committee on the Status of Endangered Wildlife in Canada, among other factors. The indicator value will be updated next year based on the 2015 General Status Report, expected to be released in Fall 2016.

Performance Analysis and Lessons Learned

In 2014–15, Environment Canada started to implement the National Conservation Plan, which includes investments in three priority areas:

Conserving Canada’s lands and waters - investments include:

- $100 million to secure ecologically sensitive lands in Canada through the Natural Areas Conservation Program, administered by the Nature Conservancy of Canada;
- $37 million to strengthen marine and coastal conservation and advance collaborative work to conserve Canada’s oceans; For example, work is underway to expand, strengthen and renew national and international partnerships to conserve the Gulf of Maine ecosystem (see also Program 1.2 and 1.3, specifically Sub-Sub-Program 1.3.4.5); and
- $3.2 million to support the development of a complete national inventory of conserved areas in Canada, including private conservation lands.

Restoring Canada’s ecosystems - investments include:

- $50 million to take action to restore drained, degraded or lost wetlands through the new National Wetland Conservation Fund; and
- $50 million to support voluntary actions to restore and conserve species and their habitats.

Connecting Canadians to nature - investments include:

- $9.2 million to connect urban Canadians to nature, which will help Canada's urban and suburban population to directly experience nature and help build a "community of stewards" among Canadians; and
- $3 million over three years to the Earth Rangers[xxxiv], the "Kids' Conservation Organization," to expand its educational program for children and their families.

The Department also continued development of integrated geospatial datasets and maps that identify zones of interest for species at risk and migratory birds, with regional data. When completed, this information will support and inform conservation planning and activities and improve delivery of departmental programs by integrating and focusing conservation priorities.

Environment Canada continued to support polar bear conservation in Canada and internationally. Domestic highlights included supporting the establishment of a voluntary agreement on harvest levels for the Southern Hudson Bay subpopulation of polar bears. Internationally, conservation work focused on leadership of the range states Circumpolar Action Plan to be published in 2015.

Sub-Program 1.1.1: Biodiversity Policy and Priorities

Sub-Program Description

This program enables Environment Canada to play a national leading role in engaging stakeholders, provincial and territorial governments, and other federal government departments in Canada's implementation of the United Nations Convention on Biological Diversity. The program provides scientific expertise, guidance and advice to decision-makers, and develops and applies models for social, cultural and economic valuation of ecosystem services to support sustainable development decision making. This work enables information about the ecosystem and the environmental effects of development proposals to be factored into decisions across different levels of government, environmental and non-governmental organizations, the industrial sector, research community and the general public. Strategies used in Canada include the Canadian Biodiversity Strategy, Biodiversity Outcomes Framework, and Access and Benefit Sharing of Genetic Resources. Canada also participates internationally in the Convention on Biological Diversity; the Nagoya Protocol on Access and Benefit Sharing of Genetic Resources; the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress under the Cartagena Protocol on Biosafety; and Conservation of Arctic Flora and Fauna under the Arctic Council. The program also serves as the Canadian lead and national focal point for the United Nations-sponsored Intergovernmental Panel on Biodiversity and Ecosystem Services. 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,454,400	2,976,245	521,845

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
14	15	1

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 with natural resource or environmental mandates, provinces and territories that have identified and are implementing measures to enhance biodiversity	100% by September 2014	100% as of March 2015 Environment Canada invited all federal departments with natural resource or environmental mandates, and all provinces and territories, to identify the plans, strategies and major actions underway related to biodiversity conservation and sustainable use. This information was collected in late 2013 and early 2014 as part of the process to develop Canada's Fifth National Report to the Convention on Biological Diversity. The National Report includes recent examples from every jurisdiction of measures being implemented in support of the (then draft) 2020 biodiversity targets for Canada. The target is therefore considered to have been met.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Promoted Canada's viewpoint and positions at United Nations Convention on Biological Diversity[xxxv] meetings, including the Twelfth Conference of the Parties and intersessional meetings, and at a first Meeting of the Parties to the Nagoya Protocol. The Department continued to engage with Canadians to further develop the domestic access and benefit-sharing policy and on whether Canada should accede to the Nagoya Protocol.
- Ensured Canada's perspective was included in decisions of the Conservation of Arctic Flora and Fauna Working Group of the Arctic Council; under Canada's chairmanship, led the development of the *Arctic Migratory Bird Initiative*[xxxvi], the *Actions for Arctic Biodiversity 2013–2021*[xxxvii]*: Implementation Plan for the Arctic Biodiversity Assessment,* and the *Arctic Biodiversity Congress*[xxxviii].
- Coordinated Canada's participation with the U.S. and Mexico in the Trilateral Committee for Wildlife and Ecosystem Conservation and Management and helped establish a North American trilateral working group to ensure the conservation of the Monarch butterfly migratory phenomenon, as per the 2014 North American Leaders Summit commitment.
- Released the *2012 Canadian Nature Survey*[xxxix] results, part of the Value of Nature to Canadians Study. Results support better understanding of the importance of nature and biodiversity to Canadians by measuring awareness of nature-related concepts (including biodiversity, species at risk, and ecosystem services), and participation and investments in nature-based activities.
- Led development of the *2020 Biodiversity Goals and Targets for Canada*[xl] in collaboration with federal, provincial and territorial governments, and with input from Aboriginal organizations and other stakeholders.
- Hosted the Federal-Provincial-Territorial Ministers' Meeting on Conservation, Wildlife and Biodiversity[xli], during which Ministers issued a joint statement[xlii] confirming their commitment to work together to advance shared priorities related to biodiversity conservation, species at risk and invasive alien species. The statement included a commitment to work towards the strategic goals of *An Invasive Alien Species Strategy for Canada (2004)*[xliii].

- Continued to lead and coordinate national efforts under the Intergovernmental Panel on Biodiversity and Ecosystem Services[xliv] by chairing an interdepartmental committee to develop Canadian positions, provide reviews of assessments and nominate experts from Canada.
- Continued to develop an Ecosystem Services Assessment Toolkit to support project partners undertaking social, cultural, and economic valuation, and ecological assessment of ecosystem services. The Department also completed research on approaches to assessment of ecosystem services using ecological process models and Earth observation data sources.

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 publication of recovery documents, legal protection of wildlife species, and reporting on progress. This is achieved in part through funding programs such as the Habitat Stewardship Program, Aboriginal Fund for Species at Risk and Interdepartmental Recovery Fund. The program relies on partnerships with provincial, territorial and other governments, as well as Aboriginal peoples and other organizations (e.g., environmental organizations, industry associations, etc.). A number of advisory bodies and committees have been established to enable key partners to engage in this program. Authority for the program is based on 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
45,681,501	56,338,092	10,656,591

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
220	265	45

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	To be determined	36% as of May 2014 (most recently available data) Of the 133 species at risk for which Environment Canada has federal responsibility and that have final recovery strategies or management plans, 33 have population-oriented goals and have had a reassessment since final documents were released, allowing for the evaluation of whether trends in population numbers and distribution are consistent with recovery goals. Of these 33 species, 12 (36%) have current population trends that are

			consistent with the goals laid out in the recovery strategies, and 11 (33%) show trends that are inconsistent with goals. Another 4 (12%) have both some indication of improvement and some indication of decline. For the remaining 6 species (18%), there are insufficient data to determine trends. The previous year's indicator value was slightly lower (33%) but there are not enough data to determine whether the situation is improving. A target has been established for 2015–16.
Critical habitat is protected	Percentage of Threatened and Endangered species at risk for which Environment Canada is responsible: (i) whose critical habitat occurs wholly or in part within federal protected areas with that critical habitat described in the Canada Gazette; (ii) whose critical habitat occurs wholly or in part on other federal lands with that habitat legally protected; (iii) whose critical habitat occurs wholly or in part on non-federal lands with an assessment that the habitat is protected.	To be determined	(i) 53%, (ii) 12%, (iii) 0%, as of March 31, 2015 This indicator tracks the implementation of legal protection of critical habitat for species at risk for which Environment Canada has primary federal responsibility. The three parts of the indicator correspond to different legal mechanisms for protection, depending on the ownership of the land where critical habitat was identified. For critical habitat that occurs wholly or in part in federal protected areas, 53% (9 of 17 species) have had that habitat identified and thereby protected, including 3 in 2014–15. For critical habitat on other federal lands, legal protection has been provided for 12% (3 of 25 species), of which one was in 2014–15. For critical habitat that occurs wholly or in part on non-federal lands, no assessments on whether the habitat is protected have been completed since the *Species at Risk Act* was proclaimed. This is the first year of reporting on this indicator. Targets have been established for 2015–16.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Held the fifth *Species at Risk Act* Ministerial Round Table to identify areas where federal government action can increase collective success in conserving species at risk and implementing the *Species at Risk Act* (SARA).
- Led discussions on species at risk during the Federal-Provincial-Territorial Ministers' Meeting on Conservation, Wildlife and Biodiversity[xiv], resulting in the development of a joint work plan that outlines measures to advance stewardship and protection of species at risk with appropriate regard to social, economic, and cultural considerations.

- Significantly reduced the number of overdue recovery documents through a redirection of human resources to streamline the process. The Department published proposed recovery strategies and management plans (Species at Risk Public Registry[xlvi]; Three-year Recovery Document Posting Plan[xlvii]) for 63 species (compared to six in 2013–14), final recovery strategies and management plans for 16 species (32 in 2013–14), and proposed action plans for five species (two in 2013–14) and final action plans for four species.
- Supported the Committee on the Status of Endangered Wildlife in Canada[xlviii] (COSEWIC), which assessed the status of 64 wildlife species in 2014–15. This support included contracts for COSEWIC status reports and Aboriginal Traditional Knowledge reports, translation of COSEWIC status reports, meetings and general operations of the COSEWIC Secretariat.
- The Department also continued to:
    - support development of range plans and continuing collaborative research for the Boreal population of the Woodland Caribou (a threatened species under SARA);
    - collaborate with provinces, territories and others on research in support of recovery of species (including Polar bear), and to partner with the Government of Alberta to fund the establishment (at the Calgary Zoo) of a captive population of Sage Grouse (an endangered species) for possible reintroduction; and
    - lead and participate in recovery projects in support of the Piping Plover in Atlantic Canada, including supporting international organizations to build capacity and develop programs in important wintering areas (e.g., Bahamas and Cuba).
- Completed all four recommendations stemming from the Evaluation of Programs and Activities in Support of the *Species at Risk Act*[xlix] (released in September 2012), including the development and implementation of a three-year plan to address the Department's backlog of overdue recovery strategies and management plans, as well as the development of SARA internal and external policies related to the identification of critical habitat.

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. It supports decisions by the Minister to add, reclassify or remove species listed under the *Species at Risk Act*. For species for which Environment Canada is responsible and that are listed as extirpated, endangered or threatened, the program prepares recovery strategies and action plans (including the identification of critical habitat). It also completes management plans for species of special concern and evaluates populations and threats to listed species. The program supports other federal departments, such as Fisheries and Oceans Canada, in implementing priority recovery strategies, management, and action plans in federal lands and waters, and for federal species as identified in recovery documents. It also supports cooperative arrangements with provinces and territories to implement recovery actions consistent with the Accord for the Protection of Species at Risk and bilateral agreements resulting from the Act. The program is also responsible for general administration of the Act (including an annual report to Parliament, issuance of permits under the Act, support for the National Aboriginal Council on Species at Risk and the Committee on the Status of Endangered Wildlife in Canada, and maintenance of a public registry). The program fulfills Canada's obligations under the Convention on International Trade in Endangered Species of Wild Fauna and Flora by effective implementation of the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*, which controls the import, export and movement within Canada of endangered species, ensuring no species are threatened by international trade.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2015–15 Actual Spending	2014–15 Difference (actual minus planned)
30,679,153	36,374,004	5,694,851

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
208	250	42

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 within legislative timeframes	100% by March 2018	61% as of March 31, 2015 Environment Canada is responsible for 334 listed species. Of these, 205 (61%) have proposed or final recovery strategies or management plans posted on the Species at Risk Public Registry. This is an increase from 145 (44%) at the end of 2013–14 and progress is considered to be on track for meeting the target.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Amended the list of species under the *Species at Risk Act* and added three bat species to the list: Little Brown Myotis, Tri-colored Bat, and Northern Myotis (the three species imminently threatened by White-nose Syndrome, a deadly and highly contagious disease that has been confirmed in five provinces).
- Significantly accelerated and streamlined the preparation of recovery strategies and management plans for species at risk, resulting in publication of proposed and final recovery strategies and management plans for 63 and 16 species respectively, proposed action plans for five species, and final action plans for four species in the Species at Risk Public Registry.
- Reviewed and issued 33 permits under SARA[I], and 73 SARA-compliant permits affecting threatened and endangered migratory bird species under the *Migratory Bird Convention Act, 1994*, and continued to streamline permit issuance using a risk assessment framework in the scientific review of applications to ensure national consistency. The 90-day service standard for permit issuance improved to 97% in 2014–15 (from 79% in 2013–14).
- Provided expertise and advice to coordinate federal, provincial and territorial efforts and to advance recovery programs under the National Recovery program, and continued to support the National Aboriginal Council on Species at Risk, including through the development of revised terms of reference for the Council (ratified in March 2015).
- Continued participation to advance Canadian interests through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The Department's strategic approach has resulted in Canada maintaining a positive reputation with CITES forums and as a leader in CITES work. This included work related to species with clear conservation risks. Canada continued to chair the CITES Animals Committee.

- Issued, with partners, over 5,000 permits authorizing exports and 190 permits authorizing imports of products regulated under CITES, meeting its 2013 published service standard targets for the issuance of CITES permits.

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* by funding projects led by Aboriginal organizations and Aboriginal communities across Canada. 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. The funded projects build Aboriginal knowledge and expertise in dealing with species at risk. This enables Aboriginal peoples to actively participate in the conservation and recovery of listed species under the Act, and to 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,412,023	3,645,012	1,232,989

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
4	5	1

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 March 2015	Species at Risk Stream: 75 in 2014–15 Prevention Stream: 17 in 2014–15 This 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 Prevention Stream was established in 2014, under the National Conservation Plan, to foster stewardship projects aimed at preventing wildlife species, other than species at risk, from becoming a conservation concern on Aboriginal lands across Canada. In comparing to previous years, only the Species at Risk Stream is applicable. The number of organizations receiving funding has remained relatively stable in recent years (66 in 2013–14; 72 in 2012–13). Values for previous years reflect the most recent available data and thus may not be identical to those reported in prior Departmental Performance Reports. In 2014–15, the target was met.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Funded 75 Aboriginal organizations to carry out initiatives that contribute to the conservation and protection of Canada's biodiversity through species recovery planning, habitat protection, and overall conservation and capacity-building initiatives.
- Funded 17 Aboriginal organizations to take actions to reduce the risk of priority species from becoming a conservation concern under a new prevention stream of the Aboriginal Species at Risk Fund.

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 funding projects aimed at the protection or conservation of habitats for species listed under the Act as "at risk" (endangered, threatened or of special concern), mainly on non-Aboriginal land. This program engages Canadians in conservation activities to conserve biodiversity, promote the participation of local communities with the recovery of species at risk, and prevent other species from becoming a conservation concern. It allocates 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
12,590,325	16,319,076	3,728,751

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
8	10	2

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 March 15 (ii) 300 by March 2015	(i) 10,956 ha in 2013–14 (ii) 136 km in 2013–14 Reported values are for 2013–14 because not all final reports from 2014–15 projects have been submitted by project proponents. Preliminary results for 2014–15 are 23,576 ha and 116 km of shoreline. Results are subject to change as final project reports are being reviewed. The target has not been met. The program is application-based so the projects and subsequently the results are dependent on what activities the recipients

			have proposed to undertake and, which are completed within the scope of the approved project. Previous values of the indicator are: 16,183 ha and 66 km of shoreline in 2012–13 and 14,902 ha and 48 km of shoreline in 2011–12. These values are based on the most recent data and may differ from those previously reported.
	Total land area (in hectares) that has been: (i) secured; (ii) protected (new); or (iii) protected (renewed)	(i) 5,000 by March 15 (ii) 20,000 by March 2015 (iii) 150,000 by March 2015	(i) 9,142 ha in 2013–14 (ii) 10,386 ha in 2013–14 (iii) 128,765 ha in 2013–14 Reported values are for 2013–14 because not all final reports from 2014–15 projects have been submitted by project proponents. Preliminary results for 2014–15 are 3,221 ha secured; 19,967 ha protected (new); and 23,687 protected (renewed). Results are subject to change as final project reports are reviewed. The total land area secured exceeded the target, while the total land area protected (new or renewed) did not. Results achieved are dependent on activities recipients have proposed to undertake and those activities which are completed within the scope of the approved project. Additionally, starting in 2012–13, the program began to shift to multi-year, rather than single-year, agreements. This has led to results being dispersed over multiple years.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Provided funding for 104 new projects and 72 previously approved multi-year projects under the Species at Risk Stream, involving 150 funding recipients. The Department awarded a total of $12.6 million, with recipients leveraging an additional $52.6 million from partners, for a total investment of $65.2 million. These financial investments/contributions resulted in some 46,875 hectares of land being secured and/or protected, and the improvement or restoration of 23,576 hectares of land and 116 km of shoreline.
- Provided over $2.5 million for 81 new projects under the new Prevention Stream, involving 74 recipients, to reduce the risk of other priority species becoming a conservation concern.
- Completed work to address all five recommendations stemming from the evaluation of the Habitat Stewardship Program[ii] (released in September 2009) including the development of a performance measurement strategy that will guide the collection and reporting of performance and outcome data by funding recipients.
- Completed activities for 2014–15 in support of the performance measurement strategy, including an analysis of projects funded against recovery strategy objectives; and a special impact study to assess effectiveness of funded targeted activities to support the recovery of species at risk and their habitat.

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 U.S. in 1916, via the *Migratory Birds Convention Act, 1994*. Activities include conserving populations, individual birds, and their nests and habitats through continued conservation actions, stewardship, policy development, and enforcement of the Act and its regulations. It also protects important bird habitats, minimizes other stressors that affect population status, and manages emergencies regarding health and safety issues associated with migratory birds. The program implements recommendations of the review of migratory bird monitoring programs. It is responsible, as a signatory to the North American Bird Conservation Initiative, for ensuring that all conservation plans for North America's 12 Bird Conservation Regions, and similarly the 25 Bird Conservation Region Strategies are publicly available, in addition to carrying out actions for priority migratory bird species as indicated by the Bird Conservation Regions plans. The Migratory Birds program is delivered in partnership with other governments and inter-governmental and non-governmental organizations. Client groups 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
22,338,409	29,055,547	6,717,138

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
189	193	4

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 for which data is available meeting population goals	Performance Measurement Framework target to be determined once bird population goals are agreed upon	57% as of January 2015 This indicator is a measure of Environment Canada's success in meeting its responsibility for the conservation of migratory birds. Population goals and their acceptable bounds are based on either population size or trend, depending on the data available for each species. Populations were assessed against those goals using the best available data for each species. The first goals and assessments were completed in 2014 and the assessment was published in January 2015. Additional details on the current status of individual species and the data sources used to assess the status of those species are provided on the Status of Birds in Canada website[iii]. An updated version of this website is scheduled for release in 2015.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Conducted pre-consultations with and briefings to key stakeholders (e.g., Hunting and Angling Advisory Panel) regarding proposed amendments to the *Migratory Birds Regulations* related to harvest management; consultations also led to the development of more detailed instructions to support the regulatory process.
- 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.
- Conducted surveys and research to address particular groups of declining species (especially several species of aerial insectivorous birds and migratory shorebirds) to understand and identify potential causes of declines that could be addressed through conservation actions.
- Collected population and habitat data to determine the location, scale and magnitude of the damage that light geese are causing on breeding grounds in the Arctic. These data informed the decision to expand spring conservation hunts for light geese to reduce numbers in areas such as Alberta and Northwest Territories (in addition to Québec, Ontario, Saskatchewan and Manitoba).
- Completed and posted on the Environment Canada website all 25 Bird Conservation Region Strategies,[liii] used to identify zones of importance for conservation and to integrate the conservation needs of migratory birds with those of species at risk.
- Published the Beaufort Coastal Sensitivity Atlas, depicting spatially referenced information based on scientific and Aboriginal traditional knowledge on coastal ecosystem sensitivity, high priority wildlife and traditional use sites. The Department also published information on the general nesting periods of migratory birds[liv] on the Environment Canada website to help Canadians plan their activities in a way that avoids harming the nests and eggs of migratory birds.
- Provided funding for Nature Canada to identify mitigation measures that address bird mortality from domestic cats and collisions with buildings.
- Undertook international action for the conservation of migratory birds. Activities included developing projects in the ranching communities of Canada, the U.S. and Mexico to achieve improved grassland conditions for migratory birds (under the auspices of the Commission for Environmental Cooperation), delivering projects for seabird conservation in Chile (under the Canada-Chile Agreement on Environmental Cooperation), as well as shorebird monitoring in Panama (under the Canada-Panama Environment Agreement).

Sub-Program 1.1.4: Wildlife Habitat Conservation

Sub-Program Description

The program provides for the protection of priority, unique and rare habitats required for the conservation of migratory birds and species at risk. It provides mechanisms to enter into partnership arrangements with a wide variety of stakeholders and through initiatives to encourage actions by non-governmental organizations and Canadians that conserve and protect wildlife habitat and habitat for species at risk. The program also coordinates the federal government's response to the Invasive Alien Species Strategy for Canada. 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). Program delivery includes the assessed contribution to the Convention on Wetlands of International Importance (Ramsar Convention).

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
21,118,084	52,038,599	30,920,515

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
126	127	1

Performance Results

Sub-Program 1.1.4: Wildlife Habitat Conservation			
Expected Result	**Performance Indicator**	**Target**	**Actual Results**
Habitats that are needed to achieve waterfowl population goals are secured	Land secured by Environment Canada, provinces and territories, and land conservation non-governmental organizations under the North American Waterfowl Management Plan to achieve population goals for all priority waterfowl	9.99 million ha by December 2017	8.07 million ha as of March 2015 The indicator measures 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 (NAWMP) from January 1986 to March 2015. Over 165,000 ha of new habitat (55,000 ha/year) was secured by Canadian NAWMP partners over the 2012 to March 2015 period. The current target is based on the historical patterns of average yearly securement and is influenced by activities in the Western Boreal Forest Region. During the 2012 to March 2015 reporting period there has not been any land securement in this region and the current rate of growth is not anticipated to be sufficient to meet the December 2017 target.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to support its commitment to conserving wetlands in Canada with the recent establishment of the National Wetland Conservation Fund,[iv] a key component of the National Conservation Plan. Through the Fund, Environment Canada provides $50 million over five years for projects that restore or enhance degraded wetlands, scientifically assess and monitor wetlands and encourage wetland stewardship by partners (see also 1.1.4.1, below.)
- Continued progress towards making management plans publicly available for its National Wildlife Areas and Migratory Bird Sanctuaries, and progressed with planning and implementing critical capital investments in facilities and equipment (see also 1.1.4.2, below).
- Developed and implemented management plans for all Environment Canada managed Protected Areas, consistent with the recommendations of the Commissioner of the Environment and Sustainable Development. The Department also made plans publicly available in support of greater transparency and to build community support for this effort.

- Progressed with development and advancement of new protected areas initiatives—including completion of the Department's work in support of establishment of the Edéhzhie National Wildlife Area, and progress with consultations in support of the Scott Islands Marine National Wildlife Area (see also 1.1.4.2, below).
- Continued to collaborate with international, federal, provincial, Aboriginal and non-governmental organizations, as well as individuals, to secure priority habitat for migratory birds and species at risk, particularly in the southern Ontario, south central Saskatchewan, and western Alberta areas (see also 1.1.4.1, below).
- Continued to administer gifts of ecologically sensitive land through its Ecological Gifts Program (see also 1.1.4.1, below).

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.* It does this by funding projects and encouraging activities that secure, protect, improve and/or restore important and ecologically sensitive habitat to enhance the survival of wildlife, and, in particular, species at risk and migratory birds. The program provides mechanisms to engage organizations and individuals, including property owners, environmental organizations and others. It also encourages voluntary action by other levels of government and non-government, Aboriginal groups and private-sector partners through mechanisms such as tax incentives (the Ecological Gifts Program) and funding initiatives. This program also includes Environment Canada's participation in the implementation of the North American Waterfowl Management Plan, a Canada–U.S.–Mexico partnership of federal, provincial/state and non-governmental organizations that aims to conserve wetlands in North America, and the implementation of the Ramsar Convention. The program also coordinates the federal government's response to the 2004 Invasive Alien Species Strategy for Canada, which is implemented by federal science-based and regulatory departments and agencies, including the Canadian Food Inspection Agency, Agriculture and Agri-Food Canada, Natural Resources Canada, and Fisheries and Oceans Canada. Program delivery includes contributions in support of Biodiversity – Wildlife and Habitat, and those to the Convention on Wetlands of International Importance (Ramsar Convention).

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
6,349,148	32,095,420	25,746,272

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
17	18	1

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,	Cumulative total ecologically-sensitive land area (in hectares) secured and protected	159,225 ha by March 2015	170,554 ha as of March 2015 This indicator is a measure of the success of the program in encouraging Canadians to donate land for

protected, improved and/or restored to enhance the survival of wildlife, in particular species at risk and migratory birds	(Ecological Gifts Program)		conservation purposes. "Ecologically sensitive" habitat is identified according to a set of national and provincial/territorial criteria when assessing the validity of a donated gift. The reported value represents the cumulative habitat secured from the inception of the program in 1996 to March 2015. The land area secured and protected varies from year to year, as it is dependent on decisions by individual Canadian citizens to donate land. Annual amounts for recent years were: 5,572 ha in 2014–15; 16,926 ha in 2013-14; and 3,922 ha in 2012–13. Several large donations in 2013–14 enabled the program to exceed the target, although this is not considered to be indicative of future trends.
Habitats that are needed to achieve waterfowl population goals are enhanced	Total land area by Environment Canada and its partners under the North American Waterfowl Management Plan (NAWMP) to achieve population goals for all priority waterfowl	1,660,867 ha by December 2017	1,439,553 ha as of March 2015 This indicator measures the cumulative land area where enhancement actions were carried out on secured habitats in Canada to increase their carrying capacity for wetland-associated migratory birds and other wildlife, from January 1986 to March 2015. Included in the cumulative total is over 78,000 ha of habitat (26,000 ha/year) that was enhanced by Canadian NAWMP partners over the 2012 to March 2015 period. The current target is based on historical patterns plus a 15% increase. The cost of enhancement activities is significantly lower in some regions, such as the Western Boreal Forest Region, allowing for more land area to be enhanced each year and accelerating progress towards the target. It is not anticipated there will be enough enhancement activity opportunities in areas like the Western Boreal Forest Region to meet the December 2017 target.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued implementation of the North American Waterfowl Management Plan[lvi] (NAWMP) in Canada, with strong collaborative partnerships among international, federal, provincial and non-governmental organizations focused on retaining and enhancing priority habitat. Since NAWMP's inception in 1986, Canada has secured over eight million hectares, and enhanced over 1.4 million hectares of wetlands and associated uplands habitat for waterfowl.
- Under NAWMP, secured some 15,000 hectares and enhanced over 4,000 hectares through four Canadian Habitat Joint Ventures. New federal funding for Environment Canada ($3.4 million over five years, announced in August 2014), supports 16 new NAWMP projects across Canada that will contribute to conserving important wetlands and related habitat for the benefit of waterfowl and other wildlife. Continued collaboration with and engagement of the many and diverse partners in NAWMP, each with different objectives, is vital to retaining priority habitats.

- Maintained its role as co-chair and secretariat of the North American Wetlands Conservation Council, which implements NAMWP in Canada. This work is key to conserving wetlands of international importance.
- Coordinated Canada's National Report[lvii], outlining the implementation of the Ramsar Convention in Canada over the past three years and Canada's monitoring and maintenance of the ecological character of its Ramsar sites. The report was developed in preparation for the Twelfth Meeting of the Conference of the Contracting Parties to the Ramsar Convention on Wetlands (Ramsar CoP 12).
- Continued to administer the Ecological Gifts program to protect priority habitats across Canada; this year, the Program completed 73 Ecological Gifts, protecting 5,572 hectares of ecologically sensitive land nationwide, with a cumulative fair market value of over $50 million. Ongoing education and promotion of the program to current and potential donors and recipients across the country is critical for continued success.

Sub-Sub-Program 1.1.4.2: Protected Areas

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.* This entails managing a network of protected areas (National Wildlife Areas, Migratory Bird Sanctuaries and Marine Wildlife Areas) to protect priority habitats required for the conservation of Canada's migratory birds and species at risk. The program also manages rare or unique habitats planned to adapt to ecological change, in conjunction with others; facilitates understanding of ecological processes; and promotes public awareness and understanding of nature conservation and Environment Canada's role in conservation. The program also carries out the strategic planning, coordination and management of protected areas. Program success involves the support of the public and close collaboration with provincial and territorial governments, Aboriginal groups, other wildlife management agencies, other natural resource agencies, non-governmental organizations and property owners in initiatives such as the Inuit Impact and Benefits Agreement, and the Northwest Territories Protected Areas Strategy (to contribute to the further establishment of National Wildlife Areas in Nunavut and the Northwest Territories). The program operates as 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 owned and/or managed by non-governmental organizations. The Department also undertakes research and provides advice to decision makers on marine ecosystems, including impacts of environmental stressors on migratory birds, species at risk and ecological risks associated with specific high-priority ocean activities.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
14,768,936	19,943,179	5,174,243

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
109	109	0

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 that is under legally-binding protection as National Wildlife Areas Migratory Bird Sanctuaries and Marine Wildlife	12,448,961 ha by March 2015	12,457,748 ha as of December 31, 2014 This indicator is a measure of the total area of marine and terrestrial National Wildlife Areas and Migratory Bird Sanctuaries managed by Environment Canada that are recognized by the International Union for the Conservation of Nature (IUCN) as protected areas. Sixteen Migratory Bird Sanctuaries in mostly urban areas do not meet the IUCN definition, and therefore 5,134 hectares are not included. Compared to the 2005 value of 11,768,892 ha, the area protected has increased by 5.8% and the target has been exceeded. The total area protected represents an area twice the size of Nova Scotia.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to progress towards gathering data on private conservation lands in Canada. Currently held in preliminary databases at the regional level, the data will be integrated into a national database.
- Following up on recommendations from the Commission of Environment and Sustainable Development, continued to make publically available completed Site Management Plans for national wildlife areas and migratory bird sanctuaries in order to enhance a broader understanding and support for the role and importance of Protected Areas in conserving and protecting wildlife. Environment Canada posted 12 plans as final (compared to three plans in 2013–14), with 27 more plans in the process of being drafted. The Department continued progress with planning and implementing critical capital investments in facilities and equipment.
- Progressed with establishing Scott Islands Marine National Wildlife Area to the regulatory drafting stage and completed most planned consultations.
- Completed its work to allow for the establishment of Edéhzhie National Wildlife Area (expected to be established in 2017); local First Nations are negotiating agreement with the Government of Northwest Territories on a number of related issues before establishment can be completed.
- Continued to implement the Inuit Impact and Benefit Agreement (IIBA) to meet commitments in the Nunavut Land Claim Agreement. Work included ongoing negotiations with Nunavut Tunngavik Incorporated on the establishment of a new IIBA, as well as collaboration with the Government of Northwest Territories on the establishment of new protected areas in Northwest Territories, and finalization of the NWA designation for the Edéhzhie National Wildlife Area.

Results of an evaluation of the Protected Areas program[lviii] confirmed its ongoing relevance and indicated that the program is making progress toward the achievement of many of its intended outcomes. In response to a recommendation of the evaluation, the Department began development of an approach to engage more actively with its stakeholders.

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. Its goal is to ensure threats to Canada's water resources and aquatic ecosystems are minimized, and the sustainability of the resource is maintained. 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 focuses on Environment Canada's contribution to monitoring water quality and conducting water-related research and analysis, and its role in collaborating with other departments to determine priorities for water quality, quantity, and aquatic ecosystem monitoring and research. It provides scientific information and advice to decision-makers. The program supports the implementation of the *Canada Water Act*, the Action Plan for Clean Water, 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)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	Difference (actual minus planned)
91,196,857	91,196,857	94,498,585	92,453,058	1,256,201

Human Resources (Full-Time Equivalents—FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
743	701	-42

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 whose water quality is rated as good or excellent	50% of core national monitoring sites in the 2010–12 data set are rated as good or excellent	45% for the period 2010–12 This indicator provides an overall measure of the ability of select rivers across Canada to support aquatic life. Data are collected at a subset of monitoring sites across Canada (core national sites) in 16 drainage regions where human activities result in a high potential for impaired water quality. Freshwater quality in rivers was excellent or good at 45% of monitoring sites, fair at 37% of sites, marginal at 16% of sites and poor at 2% of sites. Reported values were calculated using the most recent available data. The delay in reporting is due to the time required to obtain data from provincial and territorial monitoring programs and to complete quality assurance/quality control procedures. For 10 sites, data from late December 2009 or early January 2013 were used to meet requirements for minimum number of samples. Owing to changes in the specific stations and monitoring parameters used, care must be taken in comparing indicator values between time periods. An

			analysis of changes between 2003 and 2012 shows that quality scores improved at 11 monitoring sites, 85 monitoring sites showed no change, and only 4 sites showed a decline in score. The direction of change is thus positive, although the target has not yet been met.

Performance Analysis and Lessons Learned

Through water quality and quantity monitoring, Environment Canada continued to support third party water resource managers with data and analysis on water level and flow to help with decision-making for flood prevention and mitigation. The Department also continued to develop a hydrological model to estimate possible river flow scenarios to support both preparation for and response to a flood.

The Department continued to engage with Water Boards on trans-boundary water issues to help inform water resource decision makers meet their inter-jurisdictional obligations. EC undertook a special project in support of the *International Joint Commission* (IJC) and the International Rainy-Lake of the Woods Watershed Board, supported IJC work on regulating Lake Superior and Lake Ontario, and provided technical expertise on the observed and projected impacts of climate change in the Great Lakes Basin.

Work continued on development of the Department's climate watch capacity and expansion of seasonal climate outlook forums working with key stakeholders (including emergency measures organizations) for improved and integrated climate-related guidance across the country. Investments in innovations in environmental monitoring were made to support the watershed science community in achieving accurate and cost-effective field methods.

Environment Canada became the lead for development of the binational Canada-U.S. Quarterly Climate Impacts and Outlook Bulletins for the Great Lakes[lix] and the Gulf of Maine[lx] Regions. The Bulletins summarize the latest season's weather and water level conditions and related impacts, and provide an outlook for the upcoming season.

Sub-Program 1.2.1: Water Quality and Aquatic Ecosystems Health

Sub-Program Description

The program 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— U.S. water quality agreements. The program provides water quality monitoring and reporting, including through annual reports on the Freshwater Quality Index. The program delivers on Environment Canada's responsibilities under the Lake Winnipeg Basin Initiative, such as scientific monitoring activities and support for initiatives to increase information-sharing and analysis among partners and networks. The program also coordinates with the United States several research and monitoring activities in the Great Lakes under the Canada-U.S. Great Lakes Water Quality Agreement. The program collaborates with the Government of Alberta and stakeholders to implement the three-year Joint Canada–Alberta Implementation Plan for Oil Sands Monitoring. The Plan is an industry-funded integrated approach to monitoring, evaluation, and reporting on the significance of environmental contaminant pathways in air and water, biological effects, and impacts of habitat disturbance from the oil sands. The program also monitors water quality in Canadian shellfish growing areas for the Canadian Shellfish Sanitation Program, which is administered jointly by the Canadian Food Inspection Agency, Environment Canada, and Fisheries and Oceans Canada.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
68,355,625	63,739,651	-4,615,974

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
506	428	-78

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 March 2015	100% in 2014 This indicator is a measure of the program's performance in fulfilling its monitoring mandate under the *Canada Water Act.* Environment Canada's 2014 network of core monitoring sites consists of 215 river sites plus 147 sites from the two Great Lakes under shared Canada-U.S. jurisdiction. Federal-provincial sites are included in the core network and are monitored in accordance with formal agreements with the respective provinces. In 2014, monitoring was performed at all 362 core sites. The number of sites in the network varies slightly from year to year, as sites are adjusted according to a risk-based analysis. The Great Lakes are sampled on a rotating basis and not all sites are sampled every year. Sites not scheduled for monitoring for a given year are not included in the indicator calculation. The target was met in 2014 and also in 2013.

Performance Analysis and Lessons Learned

Highlights of the Department’s performance in 2014–15 include the following:

- Completed sanitary pollution assessments and water quality monitoring in support of the Canadian Shellfish Sanitation Program. An analysis (completed in 2014–15) will result in proposals to modify some shellfish harvest area classifications, with related program efficiencies for the Department.
- Collected over 31,500 bacteriological samples from 7,493 sites located in commercial shellfish harvest areas (i.e., south of 55° latitude), thereby meeting U.S. Food and Drug Administration standards for export.
- Implemented a risk-based approach to optimize the substances monitored and the frequency of monitoring and to better evaluate the risks of contaminants in Canadian watersheds.
- Through the Joint Canada-Alberta Oil Sands Monitoring Plan, significantly improved the ability to track low-level contaminants by increasing geographic coverage of monitoring efforts (nearly doubling the number of sites monitored) and the frequency of sampling, to sample for more compounds using more sensitive detection methods, and to integrate results. Environment Canada continued to work with Alberta, Aboriginal peoples and stakeholders to support the reliable and robust environmental monitoring of oil sands development.

- Supported the work of the University of New Brunswick's Canadian Rivers Institute on development of a new gene-based environmental monitoring method that is both more cost-effective and more accurate than other observation techniques, by providing access to environmental samples and training and advice from Environment Canada's research scientists.
- Successfully completed implementation of the National Laboratory Information Management System (NLIMS) at four of eight departmental laboratories, with full implementation scheduled for 2016–17. A harmonized data system across the laboratories will ensure efficient and secure centralized data management, facilitate sample transfer within the laboratory network, and allow for the generation of multi-laboratory reports for clients and/or management staff.
- Conducted research in regions vulnerable to climate impacts (including western Canadian mountain headwaters, permafrost regions and the Great Lakes) to support the domestic environmental assessment and priorities set by the Arctic Council, focusing on the increasing risk of drought linked to diminishing mountain snowpacks, field studies in permafrost regions, and Great Lakes ice-lake temperature-evaporation-water levels.
- Completed the *Guidance Manual for Developing Nutrient Guidelines for Rivers and Streams* for decision-makers across provinces and territories; formal approvals through the Canadian Council of Ministers of the Environment will start in summer 2015.

Sub-Program 1.2.2: Water Resources Management and Use

Sub-Program Description

This program conducts research and monitoring, and advances knowledge on the state of watersheds through the Canadian Council of Ministers on the Environment, in order to support integrated water management decisions at the federal/provincial/territorial levels. 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 coordinates water quality and water quantity science and monitoring to inform decisions, policy development and management approaches. The program coordinates with Canadian and U.S. government agencies (e.g., International Joint Commission), and lends expertise to domestic and international water boards on domestic and transboundary issues such as protecting ecosystems, avoiding flooding and providing sufficient flow of water to support economic activities in waterways from Lake Ontario to the St. Lawrence River, Lake Superior to Lake Huron, and in other transboundary rivers.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,555,621	3,201,892	646,271

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
29	29	0

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	70% in 2013–14 The indicator is a measure of client satisfaction with the engineering and science support provided by Environment Canada for domestic and international water management boards. The reported value was measured in the context of an evaluation of the program in 2013–14. The final indicator value is calculated as the percentage of respondents rating their satisfaction as 8 out of 10 or higher. The survey was not administered in 2014–15.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Progressed with a hydrological model to estimate possible scenarios of river flow up to ten days out, and developed a hydrological forecasting model for Lake of the Woods that will support preparation and response during a flood event. Results were shared, as the model may be applicable to other water management boards. Environment Canada also continued a project to review apportionment methods for the Prairie Provinces Water Board (PPWB).
- Contributed (through the Canadian Council of Ministers of the Environment) expert review and advice to a guidance document to assist with implementation of the 2013–14 Groundwater Sustainability Assessment Approach.
- Continued work to engage water boards on trans-boundary water issues, including by: providing in-kind contributions and operational funding for domestic and international water management boards (including International Joint Commission (IJC) led boards); undertaking special projects in support of the IJC and the International Rainy-Lake of the Woods Watershed Board; supporting IJC work on regulating Lake Superior and Lake Ontario; providing technical expertise on the observed and projected impacts of climate change in the Great Lakes Basin; tracking the implementation of bilateral water management negotiations between Mackenzie River Basin Board jurisdictions; and developing a proposal to gather and communicate water-related Traditional Knowledge from around the Mackenzie River Basin.
- Results of an evaluation of Water Resources Management and Use[lxi] confirmed the program's ongoing relevance and effectiveness, and the quality of technical information provided and the advice in support of decision-making. In response to an evaluation recommendation, the Department initiated a review to enhance program effectiveness and efficiency through increased information sharing, consistency and program-wide collaboration.
- Helped to ensure that Canada's water resources are developed and utilized in the best national interest, through ongoing implementation of the *International River Improvements Act*. The Department neared completion of the re-licensing of four dams and associated water storages for two-year terms and initiated the licensing process for a proposed new dam.

Sub-Program 1.2.3: Hydrological Service and Water Survey

Sub-Program Description

Information on the water cycle is critical to Canada's health and safety (e.g., flood forecasting and prevention) and to economic efficiency (e.g., agriculture, hydroelectricity and international shipping), by collecting and disseminating hydrological data and information to support water management decisions. The hydrological data, meteorological and ancillary information provided through this program 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 region. Program delivery may include contributions in support of Water Resources.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
20,285,611	25,511,515	5,225,904

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
208	244	36

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)	A target has been established for 2017	79% in 2014–15 This program collects, produces and disseminates hydrometric data through cost-shared bilateral agreements between Environment Canada and the provinces and territories. The indicator provides a measure of the satisfaction of provincial and territorial partners with the performance of Water Survey of Canada. Satisfaction is gauged annually (each spring) through the Water Survey of Canada Partner Survey. Performance is on track to meet the target in 2017. The reported value is not comparable to that reported in the 2013–14 Departmental Performance Report due to changes in the indicator calculation methods. As the survey is limited to provincial and territorial partners/clients, the indicator value may not represent the views of other data users.

Performance Analysis and Lessons Learned

In 2014–15, Environment Canada highlights of the Department's performance in 2014–15 include the following:

- Developed an internet access mechanism for real-time hydrometric data in support of the federal government's Open Data initiative.
- Continued to acquire, produce and disseminate data and information on water levels and flows for 2,200 active federally operated hydrometric stations on rivers and lakes across Canada, with the number of stations transmitting data in near real-time increasing by about 70 stations per year.
- Continued to support provincial and territorial decision-making for flood prevention and mitigation by providing near real-time water level and flow data (including analysis) for rivers and lakes across Canada, and through expertise and the delivery of critical services during flood events in Manitoba, Saskatchewan and Northwestern Ontario.
- In response to a recommendation of a 2013–14 evaluation of the Hydrological Service and Water Survey program[lxii], surveyed partners to improve the Department's understanding of user data and information needs; results indicated a high level of satisfaction among major partners and that grading of data (as provisional or approved) would further enhance use of data.
- Signed a hydrometric monitoring agreement with Northwest Territories and renewed an agreement with Nova Scotia, in the context of devolution.
- Signed two memoranda of understanding (MOUs) with the Canadian Space Agency (to advance remote sensing of water from space); and continued work with the U.S. Geological Survey—signing four annexes within the MOU which address data and information systems, hydrometric instrument testing, monitoring of technological developments and training for common hydrometric operations between the two countries.
- Led Canada's contribution to the World Meteorological Organization (WMO) Commission for Hydrology's four-year plan and led advances in the WMO Arctic HYCOS (Hydrological Cycle Observing System) program which, among other activities, collects, manages and shares high quality data from a defined basic network of hydrological stations in the Arctic basin to evaluate freshwater flux to the Arctic Ocean and Seas. The Department chaired the first steering committee meeting of the HYCOS in March 2015.

Program 1.3: Sustainable Ecosystems

Program Description

This program aims to sustain Canada's ecosystems over the long term by providing Canadians, their governments and the private sector with the environmental information and tools required to incorporate social, economic and environmental considerations into decision-making and action. Environmental assessments are a large part of this program. 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 to support our economy, security, health and well-being. This program focuses on 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 inter-disciplinary 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)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
92,013,642	92,013,642	96,697,210	72,619,888	-19,393,754

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
350	359	9

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	Aggregated score of selected ecosystem indicators across ecosystem initiatives	Target to be determined	53 based on Great Lakes data from 1968 to 2010 and St. Lawrence River data from 2002 to 2012. This indicator is a summary measure of overall condition and health of selected Canadian ecosystems in which the program is directly involved. The reported value is a score between 0 and 100 based on assessments of the status and trends of major ecosystem indicators. At present, it focuses on the four Canadian Great Lakes and the St. Lawrence River, although the intention is to add other ecosystems as indicators become available. Overall, ecosystem indicators are tending to fair status. Individual ecosystem scores are: Lake Superior 66 Lake Huron 59 Lake Ontario 50 St. Lawrence River 49 Lake Erie 42 This is the first time this indicator has been reported. It will be updated periodically as new environmental indicator data are available for the ecosystems.

Performance Analysis and Lessons Learned

In 2014–15, the Department continued to provide an ecosystem approach to environmental management, participating in approximately 150 project assessments over the year, in support of a range of projects across Canada. Environment Canada also continued to work to invest in improving and restoring key Canadian ecosystems (including the Great Lakes, St. Lawrence River, Lake Simcoe/South-east Georgian Bay, Lake Winnipeg and the Okanagan, Salish Sea and Atlantic ecosystems) through monitoring activities, research with partners in Canada and internationally and through funding of projects and activities at the local level. (See also 1.3.4.1 – 1.3.4.5 below).

The Department improved coverage of the goals and targets of the Federal Sustainable Development Strategy, to make the Strategy and related reporting more relevant to federal and external decision-makers. In support of sustainability reporting, four new indicators were added and many others were updated in the Canadian Environmental Sustainability Indicators to provide a more comprehensive picture of progress toward environmental targets.

Environment Canada played leadership roles and/or participated in a number of initiatives to ensure that environmental considerations are reflected in Canada's free trade negotiations and agreements. The Department also continued to advance Canada's international environmental objectives through engagement in international organizations, and through bilateral and regional cooperation agreements.

The Department led the negotiation and development of environment commitments within the recently concluded Canada-European Union Comprehensive Economic and Trade Agreement, and the Canada-Korea Free Trade Agreement. Environment Canada has continued its activities under additional bilateral environment commitments arising from Canada's free trade agreements with Chile, Costa Rica, Peru, Colombia, Panama, Jordan, and Honduras.

Environment Canada's engagement in in the United Nations Environment Programme secured the nomination of Canadian experts for the development of the 6th Global Environmental Outlook (GEO-6) Report. As well, strategic engagement at the Organization for Economic Co-operation and Development has continued to provide tools, information, policy and economic analysis in support of the Department's environmental policy and regulatory agenda.

Through its engagement in the China Council for International Cooperation, the Department provided advice for the Chinese government on environmental matters such as wildlife crime and short-lived climate pollutants. Effective engagement with China and action by China is important for effective global action and important to avoid adverse environmental outcomes in Canada.

Sub-Program 1.3.1: Sustainability Reporting and Indicators

Sub-Program Description

The program works with other government departments, through the Sustainable Development Office to implement the *Federal Sustainable Development Act*, which mandates Environment Canada to lead the implementation, tracking and reporting of the Federal Sustainable Development Strategy (FSDS). The Act requires the Minister of the Environment to develop and implement a federal sustainable development strategy that will make environmental decision-making more transparent and accountable to Parliament. In accordance with the Act, every three years the Strategy is tabled in Parliament setting out the federal sustainable development goals, targets and implementation strategies. In addition, the Sustainable Development Office provides, at least once every three years, a report on the federal government's progress in implementing the FSDS. Finally, this program supports the responsible federal departments and agencies in developing and tabling their individual strategies to reflect how their program activities will support the FSDS within one year of the tabling of the FSDS in the House of Commons. These strategies support and foster greater transparency and accountability both to the public and Parliament. This program also works with other government departments, through the Canadian Environmental Sustainability Indicators initiative, to report on environmental indicators that track the progress of the FSDS and issues of concern to Canadians including air quality and climate, water quality and availability, and protecting nature.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
7,844,185	7,294,934	-549,251

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
58	53	-5

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 external research, policy or media-related publications that adopt as measures in publications or analyses the Canadian Environmental Sustainability Indicators	70 publications by December 2014	111 in 2014 This indicator measures the use of Canadian Environmental Sustainability Indicators (CESI) in published analyses. It does not include use of the indicators that is not published or that does not include proper citations. A comparison of 2013 and 2014 results to previous years indicates a general rise in citations over time, with 2014 showing the largest number of annual citations since 2005, exceeding the target by nearly 60%. This result can be attributed, in part, to the release of three reports from non-governmental organizations that used CESI data in their findings, reports which were further publicized online.
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 integrated into annual departmental reporting (e.g., Reports on Plans and Priorities, Departmental Performance Reports)	100% by March 2015	95% in 2014–15 The reported value is based on a review of 2015–16 Reports on Plans and Priorities and 2013–14 Departmental Performance Reports. The review assesses only whether the required information is contained in the reports and does not include consideration of the quality or clarity of the information reported. The indicator value remains relatively stable from the 94% reported in 2013–14. As the actual value is within 5% of the target it may be considered to have been substantively met.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Adopted information technologies that resulted in a number of benefits, including reduced workload for the 33 federal departments and agencies contributing to the FSDS, improved internal review and approval processes, reduced paper burden, streamlined decision-making, improved record keeping and support for the work and professional development of departmental experts.
- Enhanced the policy relevance and utility of the FSDS to government and external decision-makers, including by establishing a cross-cutting thematic database of FSDS activities that allows analysts to more precisely tailor and group FSDS-related programs and activities that cut across the FSDS core policy themes (Climate Change and Clean Air, Water, and Nature).

- Added four new indicators and updated 25 indicators on the Canadian Environmental Sustainability Indicators (CESI) website[lxiii] as part of ongoing efforts to enhance the provision of indicators related to environmental sustainability issues of concern and to inform progress towards the goals and targets of the FSDS.
- Directed a review of CESI to validate the current scope and identify potential gaps and opportunities. Work is ongoing to enhance the indicators suite based on suggestions provided through the peer review; the review also showed that there is a very positive impression of the CESI program among international peers and other organizations.
- Continued groundwork for creating a web-based "E-Strategy" for the 2016–2019 FSDS. The E-Strategy will enhance public and stakeholder ability to access and tailor information from the FSDS relevant to particular priorities, while permitting the Department to address key recommendations from reviews of the 2010–2013 and 2013–2016 FSDS by the Commissioner on the Environment and Sustainable Development.
- Based on an interdepartmental lessons learned workshop on the 2013–2016 FSDS and the 2012 FSDS Progress Report, developed a plan for improvements on several fronts: enhancing the whole-of-government view; communicating the FSDS as a shared responsibility; providing greater transparency about progress, fairness and balance; and maximizing use and impact of the FSDS.

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 provide scientific expertise, guidance and advice to decision-makers across different levels of government, environmental and non-governmental organizations, industry, the research community and the general public. The goal is to ensure that ecosystem information and environmental effects of development proposals can be factored into their decisions. The program conducts research, monitoring, assessment and reporting on the health of ecosystems and biodiversity. It also monitors biodiversity contaminants as part of the Joint Oil Sands Monitoring Implementation Plan in order to provide an improved understanding of the long-term cumulative effects of oil sands development. Environment Canada (EC) participates in federal environmental assessments, including those in the North, and also contributes scientific expertise in territorial and provincial environmental assessments. EC contributes to the health of Canada's ecosystems through its involvement in these strategic assessments.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
20,906,910	24,029,372	3,122,462

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
184	168	-16

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 March 2015	74% in 2014–15 The reported value for 2014–15 is based on two projects–Northern Gateway Pipeline and Site C Clean Energy–that were approved under the *Canadian Environmental Assessment Act* in 2014–15. The indicator does not take into account recommendations that were agreed upon by the proponent during the environmental assessment review process. An estimated 40 out of 54 recommendations were reflected in the final environmental assessment, either fully or partially. Performance on this indicator has therefore exceeded the target. The indicator was reported only once previously, in 2013–14, where the program achieved 65% based on 3 projects.
	Proportion of environmental assessment follow-up requests made by Environment Canada which perform as anticipated	100% by fiscal year 2016–17	100% in 2014–15 This indicator is a measure of the extent to which project proponents are responding adequately to address follow-up requests as stated in environment assessment decisions. The reported value is based on all projects that are considered to be active in the follow-up phase and for which the Department has received or anticipates receiving follow-up reports from the proponent. The value of the indicator in 2012–13 and in 2013–14 was also 100% and thus the target has been met for three consecutive years.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Participated in some 150 project assessments under Canadian Environmental Assessment Agency (CEAA), National Energy Board, Canadian Nuclear Safety Commission, and Northern environmental assessment processes, providing science-based expertise to assess the anticipated impacts of proposed projects on water, biodiversity, air and greenhouse gases.
- Continued to work with CEAA to streamline the timing and contents of guidance to proponents to help focus the content of their environmental impact statement.
- Continued to participate in the federal government's Major Projects Management Office Initiative (MPMO) cycle of Deputy Minister meetings, including through support to MPMO policy initiatives, such as resource tracking and Aboriginal engagement, as well as by providing policy leadership on the interaction of environmental assessment, *Species at Risk Act* and environmental monitoring.
- Continued to explore issues regarding the monitoring, assessment and management of the cumulative environmental effects of natural resource development. The long-term goal is to improve protection of ecosystems, given that the cumulative effects of multiple projects can challenge regional ecosystem health.

- Completed the internal process for implementing the Department's legislative responsibilities under sections 66 to 72 of the *Canadian Environmental Assessment Act, 2012* (for projects on federal lands and outside Canada). A reporting tool and policy guidance were distributed Department-wide to support this work.
- Continued to conduct terrestrial biodiversity and habitat disturbance monitoring under the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring. Data on all components (air, water, biodiversity, wildlife contaminants) are posted on the Canada-Alberta Oil Sands Environmental Monitoring Portal.
- Continued to strengthen engagement processes among groups with interests in development of the oil sands resources, including with First Nations, Métis groups, industry, monitoring organizations and non-governmental stakeholders.

Sub-Program 1.3.3: Community Engagement

Sub-Program Description

This program engages Canadians and communities in protecting and restoring the environment through behavioural change, capacity building, community-based funding programs and engagement activities.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
9,803,400	9,354,751	-448,649

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
27	18	-9

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	198,376 in 2014–15 This indicator is a measure of engagement of Canadians through the EcoAction Community Funding program, the Environmental Damages Fund and the Environmental Youth Employment program. Previous reported values for this indicator were 214,063 in 2012–13 and 183,792 in 2013–14. Increases in the numbers engaged through EcoAction in 2014–15 were offset by decreases elsewhere. The target has been adjusted for 2015–16 to reflect changes in the program.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Engaged communities and individual Canadians across the country in local initiatives to protect and restore the environment through three key programs: EcoAction (funds community initiatives), Environmental Damages Fund (receives funds as compensation for environmental damages and distributes funds for environmental restoration and improvement), and Environmental Youth Employment (funds internships for science-related employment).
- Received the largest award ($6.83 million) in the 20-year history of the Environmental Damages Fund, and made available $2.6 million for new restoration and improvement projects.
- Ceased delivering the International Environmental Youth Corps initiative, and evaluated the expansion of the Science Horizons Youth Internship program to align with changes announced in Economic Action Plan 2014 and to increase the number of youth hired on completion of their internship.

See also sub-sub programs 1.3.3.1 to 1.3.3.3 for more information.

Sub-Sub-Program 1.3.3.1: EcoAction Community Funding

Sub-Sub-Program Description

This community funding program was 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 in 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
6,427,239	5,944,661	-482,578

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
21	14	-7

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% by March 2015	128% in 2014–15 The reported value represents forecasted results based on incomplete reporting from projects, so final results may differ. The value for 2012–13 was 115%. Actual results achieved by projects may exceed original goals for various reasons, including proponents obtaining additional funding from other partners or uncertainties in identifying planned goals.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Approved 85 funded projects across Canada for funding totalling $4.3 million over four fiscal years (announced in May 2014). Since 2006, EcoAction has approved almost $39 million in funding for over 1,000 projects. EcoAction projects support the key priorities of the National Conservation Plan (see program 1.1), aimed at providing a shared and coherent vision to advance conservation efforts across the country. Funded projects vary widely to meet community needs; for example:
    - "Let's Clear the Air" with the Fraser Basin Council is an air quality project with First Nations communities in British Columbia's Fraser Valley;
    - The Waste Reduction Road project through the Green Action Centre raises awareness in Manitoba schools (including six Northern schools) of the need to minimize waste; and
    - Leeds Grenville Stewardship Council in Ontario is working to reduce excessive nutrient supply to the Gananoque River watershed in support of improved water quality and riparian habitat.
- Addressed recommendations of an evaluation of the EcoAction Community Funding program[lxiv] (released in September 2013) through a review and implementation of best practices, such as improved information management systems, increased communication of the program to community organizations, and more comprehensive site visits to better assist funding recipients.

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. Funds may come from fines, court-ordered payments, out-of-court settlements and voluntary payments. This program's goal is to improve the quality of Canada's natural environment. Funds are disbursed in the geographic region where the original incident occurred if possible and are used to finance projects that focus on environmental restoration. The latter includes 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
222,420	272,107	49,687

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
4	2	-2

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 EDF via non-directed legislation	10 by March 2015	5 in 2014–15 This indicator is a measure of the recognition by the legal community of the value of the EDF, due in part to targeted promotion of the program. The indicator is limited to non-directed legislation, that is, legislation where awards are at the discretion of judges and are not automatically directed to the EDF. The number of awards from non-directed legislation has been fluctuating due to increased use of the EDF, but is now trending downward because of the increased number of statutes that automatically direct funds to the EDF.
Natural environments affected by environmental damage are restored	Proportion of the area affected that is restored	100% by March 2015	100% in 2014–15 This indicator compares the percentage of area proposed for restoration in project proposals with the area reported to have been restored in the project final reports. The reported value for 2014–15 is based on one project, which was the only project funded during the year which used this indicator to report on results. Beginning in 2015–16, the indicator will be revised to report on the total area restored.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Provided funding that engaged close to 1,000 Canadians in projects and activities that restored or enhanced over 3,000 hectares of degraded environments.
- Received $8.3 million in funding from 29 fines and awards across the country, with over one third (37%) from the western and northern regions. For example, two companies agreed to make a voluntary payment of $75,000 each, in response to charges laid in 2013 after inspection of drills rigs revealed release of drilling materials that could be harmful to fish into a Nunavut river.
- Received the largest award in its 20-year history: $6.83 million for 45 counts under the *Fisheries Act*, at Bloom Lake, Québec. This case has raised the profile of the Environmental Damages Fund (EDF); the program strategically and consistently seeks ways to invest funds in the projects that will deliver the strongest results for Canada's natural environment.
- Posted $2.6 million in available funds on the EDF website[lxv] to solicit proposals. The Department funded 13 new projects in 2014–15 for a total Environmental Damages Fund contribution of $591,631; seven in the Atlantic and Quebec regions, one in Ontario and six in the western and northern regions.

- An evaluation of the EDF program[lxvi] determined that the program continues to be relevant, is progressing toward intended outcomes, and is aligned with federal priorities for sustainable ecosystems and environmental protection. In response to evaluation recommendations, the Department completed work to refine the program logic model and performance indicators and initiated improvements to national consistency in program delivery, which are intended to lead to increased effectiveness and efficiencies. For example a streamlined awards assessment process has allowed a greater number of funds to be made available for the most suitable projects yielding the best environmental results.

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.[6] 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 under-employed 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 six to 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 six to 12 months, to youths working on environmental science projects allocated across Canada each year.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
3,153,741	3,137,983	-15,758

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
2	2	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% by March 2015	80% in 2014–15 Previous values of the indicator were 81% in 2013–14 and 88% in 2012–13. The target has thus been met for the past three consecutive years.

[6] Now Employment and Social Development Canada.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Provided environmental internship opportunities to host recipients across Canada within a wide range of sectors including academia, industry and non-governmental organizations. Additional outreach activities and recipient incentives are being explored to further expand the distribution of the internships and to increase the employment rate of the interns.
- Funded 224 host recipients, resulting in 243 paid internships under the IEYC and Science Horizons programs. The total number of internships exceeded the Department's target number of internships (223). The internships resulted in 80% of youth participants either obtaining employment at the end of their internships or returning to school for advanced studies.

Sub-Program 1.3.4: Ecosystems Initiatives

Sub-Program Description

This program advances implementation of an ecosystem approach by providing coordination and oversight for ecosystem initiatives. It responds to growing interest in achieving measurable environmental progress by developing non-regulatory tools and moving beyond jurisdictional concerns. The program seeks to establish and support shared governance mechanisms, as well as to implement grants and contributions programs for clean-up and community projects. It also seeks to manage administrative or other types of funding arrangements as well as partnerships with provinces, the U.S. government, Aboriginal groups or regional stakeholders.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
53,459,147	31,940,831	-21,518,316

Human Resources (FTEs)*

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
81	120	39

Performance Results

Sub-Program 1.3.4: Ecosystems Initiatives			
Expected Result	**Performance Indicators**	**Targets**	**Actual Results**
Environment Canada and partners achieve near-term objectives for environmental improvements in ecosystems of national significance	Estimated progress achieved against near-term goals identified in the federal-provincial agreements respecting ecosystem initiatives	Great Lakes: 100% by March 2018 St. Lawrence: 100% by March 2016	Great Lakes: Results are not available at this time. Negotiations were finalized in 2014 and the new Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health became effective December 18, 2014. Reporting on the Great Lakes portion of the indicator will resume once the Canada-Ontario Agreement work plan is finalized. St. Lawrence: 89% as of March 2015 Of the 47 planned projects in the Joint Action Program for 2014–15, 89% are proceeding as planned, while 11% are experiencing minor

			difficulties. No projects are facing major difficulties which would place implementation of the project at risk. In comparison, at the end of 2013–14, 76% of projects were proceeding as planned, 16% were experiencing minor difficulties and 8% were facing major difficulties. If the current trends continue, the target is expected to be achieved in 2016.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to provide coordination and oversight for initiatives in key ecosystems, including in the Great Lakes (see 1.3.4.1), Lake Winnipeg Basin (1.3.4.2), Lake Simcoe/South-east Georgian Bay (1.3.4.3) and the St. Lawrence (1.3.4.4).
- Concluded work to establish a new five-year Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, which came into force in December 2014.
- Maintained strategic partnerships and supported initiatives in priority ecosystems including the Salish Sea, the Okanagan Valley and the Atlantic ecosystems (see also 1.3.4.5).
- Continued to collaborate with local organizations and communities, including funding a wide range of projects and initiatives across major ecosystems aimed at improving ecosystem health, water quality, biodiversity and wetlands conservation, and at reducing phosphorus levels and inputs in targeted areas.
- In collaboration with the Ontario government and local partners, completed preparations for remediation of the largest contaminated site in Canadian waters of the Great Lakes: Randle Reef in Hamilton Harbour. The clean-up will start next year, with completion of this complex sediment remediation project set for 2023.
- Continued to work in collaboration with federal and provincial departments and agencies to contribute to the advancement of scientific knowledge on the St. Lawrence ecosystem.

For more information about the work carried out in major ecosystems, see sub-programs 1.3.4.1 to 1.3.4.5, below.

Sub-Sub-Program 1.3.4.1: Great Lakes

Sub-Sub-Program Description

This program provides leadership, oversight, coordination, funding and governance mechanisms for the Great Lakes Basin Ecosystem Initiative by managing, delivering and reporting on the Canada-U.S. Great Lakes Water Quality Agreement (GLWQA), the Canada-Ontario Agreement (COA), the Great Lakes Nutrient Initiative, the Great Lakes Action Plan (GLAP) and Action Plan for Clean Water (Great Lakes sediment remediation implementation). Work encompasses policy development, issues management, work planning, reporting, co-ordination of science and monitoring, and the development, implementation and analysis of agreements, plans and initiatives. The program achieves results in collaboration with other federal departments and other levels of government in both Canada and the U.S., Aboriginal groups, conservation authorities and watershed management agencies, municipalities, environmental organizations and stewardship networks. Specifically, this program implements Remedial Action Plans and Lakewide Action and Management Plans to improve environmental quality and achieve the vision of a healthy, and prosperous Great Lakes ecosystem. It uses targeted funding from the GLAP to restore beneficial use impairments in Areas of Concern, and implements contaminated sediment remediation projects with funding from the Action Plan for Clean Water. Funding from the Great Lakes Nutrient Initiative is used to determine phosphorus targets and identify possible actions to reduce levels that contribute to harmful algae. The program also develops action plans and strategies to address evolving

and historic issues of emerging concern in the Great Lakes. These issues include species and habitat protection, chemicals of concern to Canada and the U.S., and the identification of climate change impacts on Great Lakes water quality. The program also regularly reports federally and provincially through the COA and bi-nationally through the Canada–U.S. GLWQA. Reporting includes the State of the Great Lakes reports on environmental indicators, the Progress Report of the Parties (Canada–U.S.), updates on Lakewide Action and Management Plans, COA Progress Reports, and a report on Groundwater science.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
38,758,943	16,916,951	-21,841,992

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
60	92	32

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	Number of beneficial uses whose status is listed as “impaired” or “requires further assessment” for Canada’s 17 Areas of Concern in the Great Lakes	Zero Great Lakes Areas of Concern beneficial uses listed as "impaired" or "requires further assessment" by 2030	103 as of March 2015 To date, 55 beneficial use impairments have been restored to "not impaired" status. Efforts continue to confirm the impairment status of 23 beneficial uses identified as "requiring further assessment" and to restore the current 80 beneficial use impairments. Overall, environmental quality in the 17 Great Lakes Areas of Concern (AOCs) has improved since the restoration program began in 1987. To date, three Canadian AOCs have been officially delisted: Collingwood Harbour, Severn Sound, and Wheatley Harbour. All remedial actions have been completed in an additional two Canadian AOCs: Spanish Harbour and Jackfish Bay, although additional time is required for the environment in these AOCs to recover.

Performance Analysis and Lessons Learned

In 2014–15, the Department continued its long-standing collaboration with the U.S. and Ontario to restore, protect and conserve the Great Lakes. Environment Canada:

- Finalized negotiations and began implementation of a new five-year COA to coordinate joint actions. The Agreement came into force in December 2014.
- Jointly prepared, with the Province of Ontario, a report on the status of previous Canada-Ontario Agreement Tier I and II substances, and established the Canada-Ontario Chemicals Management Committee.
- Continued to lead implementation of the Canada-U.S. GLWQA, 2012.
- Prepared 2014 Lakewide Management and Action Plans reports and advanced implementation through discussions on governance, lake ecosystem objectives, outreach and engagement.

- With respect to nutrients, co-led the development of recommended binational phosphorus load reduction targets for Lake Erie, in preparation for public consultation and future adoption, and launched a Canada-Ontario Inter-Agency Committee to analyze policy options to achieve phosphorus targets.
- With respect to habitat and species, finalized a Canada-U.S. Biodiversity Conservation Strategy for Lake Superior.
- With respect to chemicals, co-led the identification of the first set of proposed Canada-U.S. Chemicals of Mutual Concern, and drafted a Canada-Ontario status report on legacy chemicals.
- With respect to climate change, completed an analysis on the state of climate change knowledge in the Great Lakes; results will be used to identify science priorities.
- Reached formal funding agreement on ($138.9 million is funded equally by the federal and Ontario governments and the local community) and implementation of the contaminated sediment remediation of Randle Reef (Hamilton Harbour), the largest contaminated site in the Canadian Great Lakes waters.
- Through the Great Lakes Sustainability Fund, contributed $1.5 million to support 27 new projects to restore environmental quality (through, for example, restoring fish and wildlife habitat and populations, cleaning up contaminated sediment, and controlling pollution from municipal wastewater, urban storm water and rural run-off) in Great Lakes Areas of Concern. The funds leveraged nearly $4.8 million from non-federal sources for a total investment of $6.3 million for projects in several Areas of Concern, such as the Bay of Quinte, Detroit River and Nipigon Bay.
- Contributed $435,310 to 10 projects to support: biodiversity conservation; assessments of watersheds, wetlands, and the nearshore; engagement of First Nations and stakeholders; habitat restoration; and promotion of best management practices for nutrient management.

Sub-Sub-Program 1.3.4.2: St. Lawrence

Sub-Sub-Program Description

This program provides leadership, oversight and coordination to the overall governance of the St. Lawrence Action Plan, and reports results achieved between the Government of Canada and the Government of Quebec. It works to establish cooperative partnerships between the federal and provincial governments to address biodiversity conservation, water quality improvement and sustainability of beneficial uses. It also supports stakeholder participation in collaboration processes and communities in improving environmental quality through grants and contribution agreements. The program conducts and coordinates prediction and monitoring activities in the St. Lawrence with other federal and provincial departments, and releases reports regularly on the State of the St. Lawrence and factsheets on 21 environmental indicators, as well as results of the St. Lawrence Action Plan.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,759,827	2,981,842	222,015

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
6	8	2

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	Average number of participating external organizations per project funded by Environment Canada under the St. Lawrence Action Plan	3 by March 2016	3.9 in 2014–15 Within the 21 projects funded under the Community Interaction Program, the number of partners contributing varies between 2 and 12. This is similar to previous years. In the Areas of Prime Concern (ZIP – Zones d'intervention prioritaire) program, the 15 signed contribution agreements involve a total of 215 partners. This shows an increase over time from 140 in 2012–13 and 213 in 2013–14. Contributions from the Government of Quebec via the Ministry of Sustainable Development, Environment and the Fight against Climate Change have allowed for the implementation of 23 projects, in collaboration with four provincial ministries and some 67 organizations.
	Funds contributed by non-federal government organizations per dollar contributed by Environment Canada to projects under the St. Lawrence Action Plan	3.5 by March 2016	$3.76 in 2014–15 This indicator is a measure of the success in attracting contributions from external organizations to projects under the Community Interaction Program. The target has been exceeded.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued, as the federal lead to implement the St. Lawrence Action Plan 2011–2026 with federal and provincial partners through some 50 joint projects and activities to address three priority issues: biodiversity conservation, sustainable use and improved water quality.
- Developed, through the St. Lawrence Action Plan, a solid foundation for Canada-Québec collaboration in such areas as the use of the St. Lawrence River as an economic lever, and developing measures to strengthen Canada's marine oil spill system.
- Under the Action Plan, the Department also:
    - organized the fourth St. Lawrence Forum under the theme "Adapting to Climate Change" which resulted in the development of common directions to guide stakeholders toward implementation of consistent integrated management initiatives. Participants identified collaborative projects as well as potential partnerships and concrete actions to take in their respective areas;
    - continued to provide financial support for the 13 committees of the Priority Intervention Zones program and Stratégie Saint-Laurent that support local groups and individuals in efforts to improve water quality in the St. Lawrence;
    - funded 21 community projects aimed at conserving and improving the St. Lawrence ecosystem under the Community Interaction Program[lxvii]; and
- Through its Action Plan working groups, developed tools to support management of waters in the St. Lawrence and its basin, and continued to monitor the state of the river, providing regular State of the St. Lawrence reports and updates (factsheets) to inform decision-makers and local communities of the status of and changes in environmental indicators. Monitoring sheets published in 2014–15[lxviii] address changes in water levels and flows, biological resources and sediments.

Sub-Sub-Program 1.3.4.3: Lake Simcoe/South-eastern Georgian Bay

Sub-Sub-Program Description

This program provides financial and technical support through the Lake Simcoe/South-eastern Georgian Bay Clean-Up Fund to implement priority projects through contributions to citizens, non-governmental organizations, provincial ministries, conservation authorities, landowners, universities and industry. The Fund also supports key research within federal departments. Priority objectives of the Fund are to support projects which improve monitoring, assessment and information required to improve decision-making for phosphorus reduction strategies; conserve critical aquatic habitat and associated species through targeted aquatic habitat protection, restoration and creation; reduce rural and urban non-point sources of nutrients including implementation of Best Management Practices for the management of soil, crops, livestock, etc. and creating and rehabilitating wetlands and naturalizing watercourses; and, reduce discharges of phosphorus from point sources including sewage, combined sewer overflows and urban storm water systems including support to development and testing of innovative approaches to manage urban storm water and wastewater. The initiative is administered by Environment Canada's Lake Simcoe/South-Eastern Georgian Bay office in consultation with Fisheries and Oceans Canada, Agriculture and Agri-Food Canada, the Province of Ontario, Lake Simcoe Conservation Authority and other key stakeholders. Program investments are 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, as well as ecological integrity. This initiative is a key component of the Government's Action Plan for Clean Water and supports commitments of the federal government related to the Canada-United States Great Lakes Water Quality Agreement.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
7,510,838	7,617,225	106,387

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
5	10	5

Performance Results

Sub-Sub-Program 1.3.4.3: Lake Simcoe/South-eastern Georgian Bay			
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	1,325 kg as of March 31, 2015 The reported value represents Round 1 projects approved in 2013–14 and Round 2 projects approved in 2014–15 that were completed or partially completed (multi-year) during those fiscal years. Results from Round 1 and Round 2 multi-year projects are not yet available, as many of the projects are completing end-of-year reports or are multi-year projects with final reports due in future years.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Committed $8 million to 32 new (Round 2) projects[lxix] in its second year of funding; together, these projects will leverage an additional $10.2 million from non-federal partners to undertake priority actions to reduce phosphorus inputs, conserve aquatic habitat and carry out research and monitoring to improve information for decision-making.
- Initiated the call for proposals, review and approvals for projects to be funded in Round 3 of the initiative. The program identified need for increased promotion of program goals to ensure a high quality of applications/project proposals.

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); transboundary partnerships; and the implementation and administration of the Lake Winnipeg Basin Stewardship Fund. This Fund supports projects to improve water quality by identifying, assessing, and addressing key issues such as pollutants and nutrient loads in 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. The Lake Winnipeg Basin Office coordinates and manages the activities of the Lake Winnipeg Basin Initiative. It works with existing water governance bodies; explores options and opportunities to cooperatively develop, and support implementation of a basin-wide nutrient strategy; and provides a forum for communication. This includes working with the Province of Manitoba to continue implementation of the Canada–Manitoba Memorandum of Understanding (MOU) Respecting Lake Winnipeg, which provides for a long-term collaborative and coordinated approach between the two governments to ensure the sustainability and health of the Lake Winnipeg Basin. The program also financially supports the ongoing development and expansion of the single-window Web information portal, housed at the University of Manitoba, to better promote and enable data sharing and analysis with partners and other networks, in order to support research on Lake Winnipeg.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,162,272	2,165,426	3,154

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 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 March 2017	8,316 kg as of March 31, 2015 The reported value is the sum of reductions reported by Phase II projects in their final reports, as estimated using standard, scientifically-derived formulas.

			In addition to the reported amount, projects still underway are expected to reduce phosphorus by another 35,024 kg, including a one-time reduction of 21,345 kg. In comparison, stewardship projects funded in Phase I achieved a total four-year reduction of 6,492 kg of phosphorus. The current estimated phosphorus reduction for Phase II is expected to exceed the program target. Outcomes associated with funded scientific research projects or outreach activities are reported through the Lake Winnipeg Basin Initiative Progress and Final reports.

Performance Analysis and Lessons Learned

In 2014–15, in Phase II (2012–17) of the Lake Winnipeg Basin Initiative, the Department:

- Continued its collaboration with Manitoba to implement the Canada–Manitoba MOU Respecting Lake Winnipeg and the Lake Winnipeg Basin, which included completing a management review of the MOU to extend it for an additional five years (to 2020).
- Developed Environment Canada's Annex for the Lake Friendly Accord, which details specific actions the Department will take to improve water quality and reduce nutrient pollution in the Lake Winnipeg Basin
- Completed and published the Progress Report on the Lake Winnipeg Basin Initiative (2012–2014)[lxx].
- Negotiated contribution agreements under the Lake Winnipeg Basin Stewardship Fund for action that will reduce nutrient loading in Lake Winnipeg and its basin. In total, $890,000 was allocated to successful applicants and $2.7 million was leveraged from other stakeholders ($3.06 for every dollar from the Fund).
- Provided financial support for the Lake Winnipeg Research Consortium for the operation of the MV Namao, the only research and monitoring vessel operating in Lake Winnipeg, and the University of Manitoba's Lake Winnipeg Basin Information Network, a web-based information-sharing portal for lake-related science.
- Continued implementation of 13 scientific research, modelling and monitoring projects in Lake Winnipeg and its watershed to fill knowledge gaps and support nutrient management policy and program development.
- Conducted water quality and biotic monitoring at transboundary and other sites to track spatial and temporal flux of nutrients transported from the watershed to Lake Winnipeg. This work will contribute to the sound science that informs nutrient management policy in the basin.

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, the Georgia and Okanagan Basins, and coastal ecosystems in Atlantic Canada (through the Atlantic Ecosystem Initiative). The program coordinates and oversees initiatives in these targeted ecosystems. The initiatives use strategic partnerships, research, science, and funding programs to support community ecosystem projects and partnerships. It works collaboratively with other regional partners in Atlantic Canada to advance efforts to conserve and restore important habitat, improve water quality, and better address the impacts of climate change. The program uses mechanisms such as the Canada-U.S. Gulf of Maine Council on the Marine Environment 2012–2017 Action Plan. The goal is to expand knowledge, increase stakeholder capacity and

involvement, improve decision-making and increase use of best practices to address complex environmental issues regarding water resources. The program is aimed at several levels of government, communities, businesses, industry, Aboriginal groups, non-governmental organizations and academia. It works to cooperate on opportunities to move forward on issues such as lake evaporation in the Okanagan Basin ecosystem and sustainability indicators that incorporate First Nations traditional knowledge in the Okanagan and Salish Sea ecosystems.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,267,267	2,259,387	-7,880

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
5	4	-1

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	Number of collaborative projects that address priority issues within the Atlantic ecozone are initiated or completed.	15 projects or more by April 2016	21 in 2014–15 This indicator tracks the number of collaborative, community-based projects supported by the program. This is the first year this indicator has been reported. In 2014–15, the target was exceeded by 40%. Each of the projects addressed at least one of three priority issues for the Atlantic Ecosystem Initiatives: water quality, habitat and biodiversity, and impacts of climate change. Recipient organizations that have completed their projects have submitted final reports which track success against indicators developed for the respective priority issues addressed.
	Number of partnerships or collaborative arrangements established or maintained to implement an ecosystem based approach to environmental management in the Atlantic ecozone.	5 partnerships or more by April 2016	3 as of March 2015 Three key collaborative arrangements were maintained or developed: the Gulf of Maine Council on the Marine Environment, the Regional Committee on Coastal and Oceans Management, and Bras d'Or Lakes Collaborative Environmental Planning Initiative. These partnerships increased information exchange and/or supported collaborative activities with federal and provincial governments and non-governmental organizations. This is the first year of reporting on this indicator. Performance is considered to be on track to meeting the target in 2016.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Provided $1.2 million in grants and contributions to support projects aimed at water quality, habitat and biodiversity, and the impacts of climate change in Atlantic Canada. Funded projects benefited from collaboration with diverse partners, including academic institutions, various levels of government (in Canada and the U.S.) and First Nations.
- An evaluation of the Community Ecosystem Partnerships Program[lxxi] (completed in March 2015) indicated that the program continues to be relevant. In response to evaluation recommendations, the Department transformed the funding process of the Atlantic Ecosystem Initiative. The process is now open and competitive, which is intended to enable Environment Canada to have greater Atlantic-wide impact on its priorities, to achieve greater transparency of funding, to better address departmental priorities on a broader scale, and to strengthen external partnerships including engaging provincial governments in identifying priorities for investment.
- Through the National Conservation Plan's Gulf of Maine Initiative (GMI), awarded funding of $600,000 over two fiscal years to eight projects that focus on improving scientific understanding and monitoring of the interaction between human activities and ecosystem health in the area, and on the generation of information to better inform conservation and sustainable development decisions. The effort included collaboration with other federal and provincial partners to identify opportunities to collaborate, share information and exchange expertise on issues of common interest.
- In support of work in the Okanagan, invested over $200,000 in contributions awarded to groups across British Columbia and Yukon. To conserve wetlands and ecosystem biodiversity in the Okanagan, the Department undertook watershed mapping and modeling in the Cowichan Valley, developed and implemented watershed health indicators in the Nechako, and engaged local First Nations in Yukon in citizen science to support priority water quality monitoring activities.

Program 1.4: Compliance Promotion and Enforcement – Wildlife

Program Description

This program works to conserve and protect the natural environment through compliance promotion and enforcement of 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*. The program promotes compliance through the communication of information, education and consultation with parties affected by the statutes. It maintains a contingent of enforcement officers, whose activities include verifying conformity and bringing back conformity with laws, regulations and permits pertaining to wildlife and Environment Canada Protected Areas, as well as gathering intelligence, conducting inspections and pursuing investigations regarding alleged offenders. The program also works with the U.S. and Mexico under the auspices of the Commission for Environmental Cooperation to strengthen wildlife enforcement. These actions ensure that damages and threats to biodiversity are reduced for the benefit of Canadians and the international community.

Budgetary Financial Resources (dollars)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
15,821,926	15,821,926	17,202,627	17,058,497	1,236,571

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
122	133	11

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 communities compliant with regulatory requirements under the *Migratory Birds Convention Act, 1994*	90% by March 2015	93% in 2014–15 Based on the inspections completed last year, the percentage of inspected regulated communities compliant with regulatory requirements under the *Migratory Birds Convention Act, 1994* is very high. Compliance in 2014–15 surpassed the 90% target and reflects an increase from 87% in 2013–14.

Performance Analysis and Lessons Learned

In 2014–15, the Department conducted and reported on over 4,400 inspections and over 360 investigations under the *Species at Risk Act* (SARA), the *Canada Wildlife Act*, the *Migratory Birds Convention Act, 1994* (MBCA, 1994), and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA) resulting in 2,191 identified violations. The number of inspections was significantly lower than in 2013–14 (13,700 inspections, of which 10,000 were related to shipments of an illegal weight-loss product made from *Aloe ferox*, an endangered species).

The Department completed and reported on approximately 190 inspections and 36 investigations related to protected areas; the majority focused on high-risk areas and the conservation of species, as well as on illegal activities (e.g., illegal hunting). Investigations resulted in six convictions and successful prosecutions were published in the Enforcement Notifications[lxxii].

Key enforcement achievements in 2014–15 to protect at-risk species included: seizure and fines for unlawfully held elephant tusks; the arrest, in collaboration with the U.S. Fish and Wildlife Service, of an illegal importer and seller of endangered black rhinoceros horn and other wildlife products (which led to incarceration in the U.S.); and seizure and fines for sea containers holding illegally imported protected species of turtles and tortoises under WAPPRIITA. Another important initiative, “Operation Qiniq,” focused on increasing monitoring and patrols of Protected Areas in the Canadian North. The Department monitored compliance with regulations under the MBCA, 1994, among migratory bird hunter communities by conducting 1,751 inspections and 182 investigations. Compliance in 2014–15 was 93%, which surpassed the 90% target and reflects an increase from 87% in 2013–14.

Collaboration with international partners continued, including under the auspices of the Commission for Environmental Cooperation’s Enforcement Working Group. Environment Canada engaged in cooperative activities (such as training on making greater use of technological advancements in enforcement) and intelligence and information-sharing with its counterpart organizations in the U.S. and Mexico. Trilateral cooperation on environmental enforcement in North America has fostered collaboration and helped each country prevent, detect and deter transboundary violations of environmental law.

Work to develop intelligence and operational capacity continued, in support the Department’s capacity to identify high risk non-compliance in the North (e.g., illegal entry into protected areas).

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 July 2015	8.3 in 2012 to 2014 This indicator is a three-year moving average, calculated based on the timeliness and accuracy of six warning types: severe thunderstorm, rainfall, freezing rain, wind, snowfall, and marine gale. Previous values were 7.9 for 2010 to 2012 and 8.3 for 2011 to 2013. The target has been exceeded for the third consecutive reporting period. The 2012–14 reporting period saw a small increase in accuracy and timeliness performance for predicting freezing rain and wind events. This improvement was offset by the slight drop in performance for the remaining warning types, leaving the index virtually unchanged compared with the 2011–13 period.

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, prediction 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, sea ice and climate conditions, the program works with 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 news media, academia and all levels of government in Canada. The program meets the Department's responsibilities under 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. It 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)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
165,962,548	165,962,548	180,986,784	174,493,294	8,530,746

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
1,077	1,086	9

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% by July 2016	43% in May 2012 This indicator measures use of Environment Canada's weather and environmental services, specifically its weather warnings. 2012 was the first time the question was asked in a 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 for this indicator are not available. The indicator has been replaced for 2015–16.
	Percentage of targeted sensitive populations[7] 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 March 2016	42% in July 2013 This indicator tracks whether sensitive Canadian populations are using the Air Quality Heath Index to make decisions to protect their health by limiting their exposure to air pollution and adjusting their activity levels. The reported value is based on one post-smog event survey conducted in Windsor, Ontario and should not be compared to the target, which is based on a national average. Post-event surveys are used to supplement national surveys for program management purposes, but their results show greater variability from region to region.

Performance Analysis and Lessons Learned

Environment Canada continued to ensure the delivery of 24/7 mission critical weather services to Canadians. The Department also continued to modernize its weather monitoring infrastructure with a federal government investment of $107.5 million for significant monitoring network upgrades and $26.5 million for major upgrades to weather warning and forecast systems (announced in January 2015 as part of a $348 million investment in core weather monitoring networks). These investments allowed monitoring infrastructure to be more resilient, and weather forecasts and warnings to be more accurate, detailed and timely, in order to support the health and safety of Canadians. The upgrades are part of a multi-year, major initiative aligned with the principles set out in Environment Canada’s Science Strategy 2014–2019 and demonstrate that the Department is keeping pace with evolving technology and has in place the required skills needed to deliver the Department’s mission critical services.

In 2014–15, Environment Canada continued to collaborate with the meteorological community in Canada and internationally in sharing the latest scientific knowledge and data to improve the accuracy of weather, climate and air quality information available to Canadians. Through its work with the World Meteorological Organization (WMO), the Department exerted influence to leverage international science and technology expertise to enable Canada to remain at the forefront of knowledge and technology with respect to meteorology, climatology and hydrology.

[7] 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.

The Department also continued to expand and improve the Air Quality Health Index (AQHI), making it accessible to over two-thirds (69%) of Canadians.

Environment Canada continued to collaborate with its North American counterparts to increase the availability of weather prediction for monthly and seasonal forecasts and to improve meteorologists' ability to deliver quality forecasts. In collaboration with Shared Services Canada and private sector partners, the Department also continued to ensure that current and future technologies to support warning re-engineering and next generation prediction system are maintained and developed. Maintaining and/or upgrading critical systems and infrastructure to provide services that Canadians rely on helps to reduce the risk of disruption as a result of potential natural or human-made hazards. In addition, the active maintenance and exercise of business continuity plans and leveraging a rigorous management system that is certified to the internationally recognized ISO 9001 standard helps to manage the risk of service disruption.

Sub-Program 2.1.1: Weather Observations, Forecasts and Warnings

Sub-Program Description

This program provides all-day, every-day weather warnings, forecasts and information with lead times of minutes to weeks. Its purpose is to help Canadians anticipate dangerous meteorological events so they have enough time to protect themselves and their property. Program activities combine research in science and modelling with regional monitoring, prediction and service delivery. These activities depend 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 partners are the news media, all levels of government and academia in Canada, other national meteorological services, research and space agencies, and the United Nations World Meteorological Organization (WMO). The program contributes about $2 million annually to WMO to support Canada's international commitments in meteorology and hydrology. It meets responsibilities under the *Department of the Environment Act* and *Weather Modification Information Act* and supports other departments acting under the *Emergency Management Act (2007)*. Program delivery includes assessed contribution to the WMO and may include Grants and Contributions in support of Weather and Environmental Services for Canadians.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
134,203,251	145,489,405	11,286,154

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
811	876	65

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% by July 2016	90% in February 2011 The most recent value for this indicator is based on data collected in the 2011 Weather and Environmental Services Quality of Services Survey. The 90% is composed of the 70% of respondents who answered that they were "very likely" to access weather information daily and the 20% who answered "somewhat likely". Previous values were 92% in 2007; 93% in 2002 and 95% in 1997. The target value was set following the 2011 survey and so is not applicable to the 2011 value. The next survey is expected in 2016.
	Percentage of the population who indicate that weather forecasts are "always" or "usually" useful	85% by March 2015	82% in February 2011 The most recent value for this indicator is based on data collected in the 2011 Weather and Environmental Services Quality of Services Survey. The 82% is composed of the 26% of respondents who answered that they "always" found that weather forecasts provided enough information and the 56% who answered "usually". Previous values were 80% in 2007 and 76% in 2002, suggesting an improving trend. The next survey is expected in 2016 at which time a comparison to the target value can be made.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to modernize its weather monitoring infrastructure by improving reliability and reducing unscheduled outages at eight radar sites through on-going maintenance and upgrades to equipment, and commissioning two new hydrogen generations systems at upper air stations. In addition, the Department upgraded or installed 23 surface weather stations, installed eight new land stations and deployed buoys in the Arctic, increasing capacity by more than one million observations.
- Advanced new technologies and innovative products for the purposes of the 2015 Pan American and Para Pan American Games. These products will also form the basis of future weather products.
- Continued to play international leadership and collaboration roles, and engaged with multilateral and bilateral partners to support the advancement of meteorological and hydrographic expertise and to share data.
- Some key leadership roles include:
    - Organizing the first World Weather Open Science Conference, jointly led by the Department and WMO, which brought together participants from approximately 50 countries to examine the status of scientific advances, identify challenges, and collectively set priorities and develop joint programs;

- Federal lead and active international role in the leadership and funding of implementation of the Global Framework for Climate Services, aimed at enhancing access to atmospheric and other Earth observation information internationally and at improving global climate information services for decision-making;
- Federal lead for the International Group on Earth Observations, which seeks to implement the Global Earth Observation System of Systems to allow free and open access to Earth observations for decision- and policy-makers in all countries;
- Interdepartmental lead within the Federal Committee on Geomatics and Earth Observation to identify priority data sets to populate the Federal Geospatial Platform;
- Initiation of cooperation activities with space partners such as the U.S. National Oceanographic and Atmospheric Administration, European Organisation for the Exploitation of Meteorological Satellites, and the Japan Meteorological Agency, for access to current and future atmospheric and other observations; and
- In the Solid Precipitation Intercomparison Experiment (SPICE), organizing and supporting an international initiative with 20 sites in 15 countries dedicated to measuring, understanding and documenting the differences between automatic and manual measurements of precipitation in cold climates.

- Generated and disseminated to the science community the results of the Department's meteorological research to improve weather and environmental prediction work in close to 50 peer-reviewed publications. Eight technological scientific advances were implemented by the Department.

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 air quality, extreme temperatures and ultraviolet (UV) radiation. It supports the mandates of Environment Canada, Health Canada and many public and non-governmental health agencies. The program includes work on the Air Quality Health Index (AQHI) and other projects that assist Canadians in making informed decisions to protect their health and reduce pollution, and enable health agencies to help vulnerable populations to respond to changing atmospheric conditions. It is delivered across Canada through collaborations promoting data and information dissemination. 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 background air pollutant monitoring (CAPMon Network) and 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
11,462,677	9,217,893	-2,244,784

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
86	64	-22

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 March 2016	17% in October 2011 This indicator measures the extent to which the AQHI is reaching the targeted audience. The most recent value was collected through the AQHI National Survey in 2011 and represents an initial baseline. The timing of the next survey has yet to be determined.
	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 March 2016	15% in October 2011 This indicator measures the extent to which the AQHI is well disseminated to the general Canadian population. The most recent value was collected through the AQHI National Survey in 2011 and represents an initial baseline. The timing of the next survey has yet to be determined.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Expanded access to the Air Quality Health Index (AQHI), which identifies the level of health risk associated with local air quality, and provides information to help Canadians make decisions about outdoor activities. As of March 2015, the AQHI was available to 23.1 million Canadians (69% of the population), in 10 provinces and one territory, representing an increase of 4% over 2013–14. The service expanded to five additional locations and is now available at 84 locations across Canada.
- In response to strong interest in multi-hazard alerts by AQHI health partners, continued to build and maintain partnerships with provinces, territories and some municipalities to deliver the AQHI service to meet regional needs, and worked with partners through the National Air Pollution Surveillance network to improve data collection and delivery for expanding AQHI into remote areas and the North.
- Created a new tool for combining model predictions and air quality measurements for nitrogen dioxide, sulphur dioxide and coarse particulate matter that will produce the best possible spatial and temporal representations of air quality levels. The product will support AQHI forecasts.
- Piloted a new system called Firework that resulted in an improved air quality particulate matter forecast, including capturing the long distance transport of wildfire plumes.
- Continued to generate high quality and unique data sets for long-term trend analysis to allow for and validate Ultraviolet radiation (UV) Index forecasting and to track changes to the stratospheric ozone layer. The Department contributed to domestic and global ozone monitoring data by:
    - hosting the WMO World Brewer Calibration Centre and calibrating instruments worldwide through the World Brewer travelling standard;
    - supporting ozone monitoring in developing countries through the Brewer Trust Fund; and
    - supporting completion of the World Meteorological Organization–United Nations Environment Programme *Scientific Assessment of Ozone Depletion: 2014.*

Sub-Program 2.1.3: Climate Information, Predictions and Tools

Sub-Program Description

This program generates new knowledge and information about past, present and future states of the climate system and how it functions, as well as the changing composition of the atmosphere and its impacts. Its work includes developing global and regional climate models and scenarios; detecting 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 in remote locations. These activities increase understanding of the impacts of climate change on economic sectors and ecosystems. Results from the program's analysis and research activities provide the scientific basis for policy development, mitigation, adaptation planning and decision-making to programs such as the Federal Adaptation Policy Framework, as well as products, services and tools to Canadians. In particular, climate services inform and assist users in adapting to both present climate variability and medium- to long-term changes in climate. The program shares data, science and information with all levels of government in Canada, academia, industry, consortia, standards councils, and the national and international scientific community, including organizations such as the World Meteorological Organization, the Intergovernmental Panel on Climate Change, and the Canadian Meteorological and Oceanographic Society. The program meets responsibilities under the *Department of the Environment Act*, *Canadian Environmental Protection Act (1999)*, *Emergency Management Act (2007)* and the *National Research Council Act* (Canadian Commission on Building and Fire Codes), and the *United Nations Framework Convention on Climate Change* (Articles 4 and 5: monitoring and research). Program delivery may include grants and contributions in support of Weather and Environmental Services for Canadians.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
20,296,620	19,785,996	-510,624

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
180	146	-34

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	Annual number of downloads of climate datasets	25,000 downloads by March 2015	22,935 in the period April 1, 2012 to March 31, 2015 The indicator is a measure of use of climate information produced by the program. The value is reported as an annual average over three years to reduce the effects of year to year variability. Downloads of individual climate data products (e.g., climate models, historic climate data records) tends to be higher following scheduled updates. Timing of national and international climate assessments may also affect the indicator. Results are within 10% of target.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- To inform adaptation and mitigation actions by the private sector, academia, and all levels of government in Canada, enhanced existing climate models (by incorporating better representation of oceans, snow, short-lived climate pollutants and carbon cycle processes) and created new/updated existing climate data records (in the Department's Data Catalogue and in the Government of Canada's Open Data portal).
- Performed new climate model experiments to inform the understanding of climate change and the provision of climate scenarios to address policy-relevant climate questions (for example, the influence of short-lived climate pollutants) and completed planned enhancements to the regional atmospheric monitoring network for greenhouse gases.
- Continued, through the Department's online presence, to engage with stakeholders in the provision and use of updated climate data and information to support adaptation decisions. Work included updating the Canadian Climate Data and Scenarios[lxxiii] website to provide the latest multi-model climate change scenario information and to align with new web accessibility requirements.
- Responded to over 3,000 requests for site-specific wind pressure analyses in support of cellular tower construction, as well as more than 200 requests for other climatic design data in support of the *National Building Code of Canada* and other infrastructure standards.
- Generated and disseminated results of its work under the Climate Information, Prediction and Tools Program in 133 peer-reviewed publications and held lead roles with the responsibility of providing expert advice for development of the Intergovernmental Panel on Climate Change Fifth Assessment Report, the Arctic Report Card, the World Metrological Organization, and to Technical Reports from the Arctic Council Expert Groups on Methane and Black Carbon.

Program 2.2: Weather and Environmental Services for Targeted Users

Program Description

Environment Canada provides specific predictions and services for targeted, weather sensitive sectors through formal arrangements and revenue contracts. Building on the core capabilities described under Program 2.1, this program provides reliable, accurate and timely weather, water, climate, air quality and ice observations, predictions and services to support the specific decision-making needs of the aviation, marine transportation, military, commercial and other sectors. The program delivers its services using various collaborations within Canada (including with other government departments), and internationally with the World Meteorological Organization, as well as other countries and international bodies such as the International Civil Aviation Organization. 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. It also 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 it supports memoranda of agreement with Transport Canada, National Defence and various provincial and territorial agencies.

Budgetary Financial Resources (dollars)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
25,266,280	25,266,280	27,083,480	25,886,657	620,377

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
464	409	-55

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 by March 2015	8.3 based on surveys conducted from 2013 to 2015 This indicator is a measure of the extent to which the services provided by the program met the needs of its three main clients. Data for this indicator were collected through three different surveys: NAV CANADA Questionnaire in 2014, Canadian Coast Guard Commanding Officer Survey in 2013 and Department of National Defence Questionnaire in 2015. Previous values of the indicator were 8.0 in 2013–14 and 7.79 in 2012–13. The target has been exceeded.

Performance Analysis and Lessons Learned

In 2014–15, Environment Canada continued to provide ice products and other weather services on a 24/7 basis to support the Canadian Coast Guard, Department of National Defence, NAV CANADA and other clients.

In collaboration with its clients, the Department completed or progressed with a number of key initiatives, including deploying weather buoys in the Arctic (see 2.2.1 and 2.2.3, below), developing, improving or implementing key prediction systems, and completing commitments to the International Maritime Organization for service delivery (see 2.2.2, below). The success of these and other collaborative initiatives reinforce the importance and value of leveraging relationships for effective and efficient service delivery.

The Department continued to modernize its weather monitoring infrastructure with a federal government investment of $107.5 million for significant monitoring network upgrades and $26.5 million for major upgrades to weather warning and forecast systems (announced in January 2015 as part of a $348 million investment in core weather monitoring networks). These investments maintain the weather, water and climate data that are used by Environment Canada to produce warnings and forecasts. The data are provided by a set of observing networks across the country that includes: weather radars; land-based and marine surface weather and climate stations; upper air stations (balloon-borne instruments called radiosondes); the Canadian Lightning Detection Network; and satellite ground receiving stations that receive Canadian and international satellite data. The new investments enable Environment Canada to further tailor weather forecasts and warnings to users' needs, with increased accuracy, detail and timeliness.

Environment Canada continued to collaborate at home and internationally on products and service enhancements, including work with domestic partners to ensure smooth dissemination of the Department's marine and ice products. For example, work is ongoing with the Safe at Sea Alliance of Nova Scotia to improve safety at sea for fishers.

An audit performed by the Commissioner of the Environmental Sustainable Development concluded that "Environment Canada has been improving weather and ice information in the Arctic." The audit also identified emerging challenges such as the cost and availability of radar satellite imagery for the purpose of ice information; in response, the Department initiated (in collaboration with the Canadian Coast Guard) an assessment of the use and cost of a variety of radar satellites.

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 and warnings) all day and every day of the year. It supports the goals and missions of NAV CANADA and Transport Canada, and supports the domestic and international airlines operating in Canadian territory to make tactical decisions to maximize their efficiency, effectiveness and safety. The 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. The program is delivered under a contract between Environment Canada and NAV CANADA.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
4,695,243	4,914,255	219,012

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
163	148	-15

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 by March 2015	7.2 in 2014 This indicator is a measure of the overall satisfaction with the products and services provided by the program for NAV CANADA and their clients. Data for the indicator were obtained through the NAV CANADA Questionnaire, administered online in the summer of 2014. The indicator value is an average of the individual respondent ratings. Previous reported values were 7.1 in 2013–14 and 8.0 in 2012–13. The target was substantively met (within 5%). The decrease in satisfaction over the past two years may be due to transitional changes during NAV CANADA's modernization of their aviation weather surface observations. Next year's results are expected to meet or exceed the target.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to provide high-quality meteorological services for NAV CANADA, including a range of aviation forecasts, observation monitoring and other data services. The results of a 2014 client satisfaction survey indicated that NAV CANADA's needs are understood and being met by the Department—it is valued as a client. A significant transition continued to near conclusion in 2014–15, which saw NAV CANADA assume responsibility for almost all of the aviation weather observing programs.
- Continued with a multi-year initiative to modernize airport forecasts. This initiative is expected to lay the foundation for future aviation weather forecast services. The project will see improved forecasts provided for 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 all day and every day of the year. It supports the International Maritime Organization by providing meteorological information for Canadian and international Arctic waters. It also supports the goals and mandates of the Canadian Coast Guard (CCG) of Fisheries and Oceans Canada. The program also helps marine industries and other interests operating in Canadian waters, including organizations involved in shipping, fisheries and resource extraction, make tactical decisions, such as ship routing, to maximize their safety and efficiency. As a key collaborator, the CCG broadcasts information related to this program to marine interests, as well as providing in-situ weather, sea-state and ice information to Environment Canada. This program is operated in part through a memorandum of understanding with Fisheries and Oceans for services related to current and forecast ice conditions over Canadian navigable waters. The program meets responsibilities under the *Department of the Environment Act*, the *Oceans Act* and the *Fisheries Act*. It also supports commitments to the International Convention on Safety of Life at Sea, 1974, the Global Maritime Distress and Safety System, and the North American Ice Service.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
12,309,715	14,218,609	1,908,894

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
157	144	-13

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 available products, including ability to access information	Target has been set for 2016	98.5% in 2012 and 2013 The data for this indicator were collected through two surveys:

			Canadian Coast Guard Commanding Officers Survey, conducted in May to July 2013 and the Marine Weather Services Survey, conducted in November to December 2012.
	Percentage of clients and organizations within the targeted sector who report that they have factored ice information into their decisions	Target to be determined once a baseline value is measured (in 2014)	Results for this indicator are not available.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to provide satellite-based oil spill monitoring in Canada's navigable waters, including in the Canadian Arctic Archipelago, 18 hours a day. Environment Canada took part in preparing a response to the report and recommendations on Phase II of the World Class Tanker Safety Panel[lxxiv], on Canada's oil spill preparedness in the Arctic.
- Deployed weather buoys in the Arctic, with the support of the Department of National Defence, to increase availability of real-time weather observation data for mariners and to support the Department's work in making timely and accurate forecasts. Forty on-ice and in-water buoys have been deployed in the Arctic since 2011.
- Coordinated with the Canadian Coast Guard (NAVAREA Coordinator) to update input to the international manual on the Global Maritime Distress and Safety System to include the Arctic Meteorological Area (METAREA) services available.
- Signed a letter of agreement with the Canadian Coast Guard for the delivery of ice information and services for 2014–15.
- Completed all commitments under the METAREAs initiative, with services delivered in accordance with Canada's commitment to the International Maritime Organization. Environment Canada now delivers weather and ice 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.
- On the research front, progressed with development of the Regional Ice-Ocean Prediction System (a full 3-D ice-forecasting system scheduled to begin experimental implementation in 2015); saw the Global Ocean Ice Prediction System approved for experimental mode; made significant improvements to the Regional Ice Prediction System; and put in operation (at the Canadian Ice Service) the Automated Sea Ice Tracking System.

An evaluation of the METAREAs initiative[lxxv] concluded that the program is relevant, well managed and delivered, and is making progress toward intended outcomes. In response to the evaluation's recommendations, the program has initiated a review of service standards as part of continuing efforts to engage users to better determine and prioritize their needs and options for disseminating information in the future, and has initiated a review of the program's logic model and performance measurement strategy.

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 Forces (CF) in Canada and abroad. It is a collaborative program, operating under a formal memorandum of understanding with DND, responding to CF-specific needs and recovering its incremental costs from DND. This program is critical to CF operations, contributing to the effectiveness and safety of tactical, operational and strategic manoeuvres within Canada and in various active military areas globally. 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
2,935,200	3,193,267	258,067

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
105	90	-15

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 by March 2015	8.5 in 2015 Data for this indicator were obtained from the Department of National Defence Questionnaire, administered between April 13 and May 12 of 2015. The results are reported here as they pertain to satisfaction with the products and consultation services provided during 2014–15. The reported value is an average of individual responses to three questions regarding the clarity and usefulness of consultations; the accuracy and quality of products and services; and the extent to which products and services met client needs overall. In 2013–14, the value reported was 8.2. The target has been exceeded for the second consecutive year.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Provided timely and accurate weather prediction services for military missions and exercises both at home and abroad, including support to Operation Nunalivut, a major, annual multi-departmental sovereignty operation led by the Department of National Defence (DND).
- Collaborated with National Defence to complete the Joint Meteorological Centre at Canadian Forces Base Gagetown. The Centre is fully staffed with complete meteorological support to DND.
- Continued to provide ongoing support for various North Atlantic Treaty Organization (NATO) working panels in developing specific products for military operations. Through collaboration with DND, Canada will be the "lead nation" to NATO for the global response force in 2018, with other NATO nations relying on Canada to provide big-picture meteorological support for each operation to avoid duplication of effort and inconsistent meteorological support.

- Collaborated with DND on the aircraft and ship-based deployment of ice buoys in the Beaufort Sea (which provided detailed information not possible from ice breakers), and with the Department of Fisheries and Oceans on the deployment of both drifting buoys (ice buoys) and one seasonal moored buoy in the Beaufort Sea.

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 news media, natural resources sectors and specialized users) with climate and meteorological services, including data from the Canadian Lightning Detection Network. The information and tools are used to make tactical and strategic decisions that maximize economic and commercial efficiency, competitiveness, environmental performance and safety in the short and longer term. In doing so, the program 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., hydro-electrical 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)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
5,326,122	3,560,526	-1,765,596

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
39	27	-12

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 March 2015	7.42 in 2012 Data for this indicator were obtained from a survey of media clients of the program (radio, television, print, web-based) administered in 2012. This is the most recent survey conducted with this client group. The reported value is an average of individual responses to four questions regarding satisfaction with: accessibility and delivery of weather services; responsiveness to client needs; understanding of client needs; and the extent to which services provided met client needs. There are no prior values for this indicator. Performance cannot be assessed in relation to the target in the absence of a new value.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Facilitated expansion of the use of lightning information by the power utility sector. Environment Canada worked with public authorities and the private sector to ensure that an increasing number of jurisdictions have access to lightning information to support decision-making.
- Provided Canadians with up-to-date information on past, present and future weather conditions, in addition to offering multiple data access services to specialized users that required information at regular intervals and in an unprocessed form.
- Expanded Datamart to include hydrometric observations across Canada, experimental hurricane trajectories, and data from Very High Resolution continental weather models in order to meet the growing needs of specialized users.

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	Performance Measurement Framework target: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas (GHG) emissions 17% by 2020[8]	726 Mt in 2013 The reported value is based on Canada's National Inventory Report, which follows an internationally agreed upon structure providing detailed information on greenhouse gas emissions by sources and removals by sinks in Canada over the period 1990–2013. The 2013 value is 3.1% lower than in 2005, and per-capita emissions remain at historic lows.
Ambient fine particulate matter ($PM_{2.5}$) concentrations (i) 24-hour average (ii) Annual average	2015 Canadian Ambient Air Quality Standards for fine particulate matter ($PM_{2.5}$) (i) 28 µg/m^3 by December 2015 (ii) 10 µg/m^3 by December 2015	Achievement of the 2015 Canadian Ambient Air Quality Standard will be determined at the local air zone level in each of the provinces and territories in 2016 once the ambient air quality information for 2015 becomes available. In the interim, information on the percentage of monitoring stations of the National Air Pollution Surveillance program where measured ambient concentrations of fine particulate matter ($PM_{2.5}$) were below the 24-hour and the annual targets during the 2011 to 2013 time period is provided. 91% of the stations (168 of a total of 184 stations) met the target during the 2011 to 2013 time period.
Ambient ground-level ozone concentrations (8-hour average)	2015 Canadian Ambient Air Quality Standard for ground-level ozone of 63 ppb by December 2015	Achievement of the 2015 Canadian Ambient Air Quality Standard will be determined at the local air zone level in each of the provinces and territories in 2016 once the ambient air quality information for 2015 becomes available. In the interim, information on the percentage of monitoring stations of the National Air Pollution Surveillance program where measured ambient concentrations for ground-level ozone were below the 8-hour target during the 2011 to 2013 time period is provided. 81% of the stations (158 of a total of 195 stations) met the target during the 2011 to 2013 time period.

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 the environment from substances that are already in commercial use (existing substances) and substances proposed for 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.

[8] On May 15, 2015, the Minister of the Environment announced Canada's new post-2020 climate change target as part of the submission of its Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCCC). Canada's economy-wide, post-2020 target is a 30% reduction in GHG emissions below 2005 levels by 2030.

Budgetary Financial Resources (dollars)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
75,747,789	75,747,789	90,048,046	86,779,805	11,032,016

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
628	618	-10

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 (FEQG) are not exceeded for selected substances in sediment, water and/or biota	Perfluorooctane sulfonate (PFOS): 80% by September 2013 Polybrominated diphenyl ethers (PBDEs): 80% by September 2014	Fish: 30% of drainage regions where FEQG are not exceeded in the period 2011 to 2012 Sediments: 33% of drainage regions where FEQG are not exceeded in the period 2009 to 2014 Environment Canada conducted fish sampling in ten drainage regions and sediment sampling in nine drainage regions. Concentrations PBDEs were determined for subgroups (congeners) for which guidelines have been set. A drainage region is counted as having exceeded the guidelines if concentrations of any subgroup are founded at any sampling site. For fish, improvements were noted for three drainage regions as compared to the 2008 to 2010 sampling. For sediments, there was improvement in one drainage region, although concentrations now exceed the guidelines in two other regions.

Performance Analysis and Lessons Learned

In 2014–15, Environment Canada carried out a range of activities to assess risks to the environment from existing and new substances, and implemented measures to prevent and manage risks. Over the year, the Department published screening assessment reports (draft or final) that cover some 1,100 substances. These screening reports communicate with industry stakeholders and Canadians on the risk findings and conclusions of Environment Canada's risk assessments completed under the Chemicals Management Plan (CMP).The Department received notification of, assessed and, where appropriate, took risk management actions. Actions included notification of new uses for chemical substances with respect to 500 new substances (including chemicals, polymers, nanomaterials and living organisms).

Environment Canada continued its work to build and maintain a strong science foundation for the CMP. With information received during the second phase of the Domestic Substances List Inventory Update, the Department set priorities for the next phase of the CMP, helped align with international initiatives applicable to Canadian context, and supported subsequent risk assessment and risk management activities.

The Department maintained stakeholder engagement by organizing three workshops to discuss scientific issues, future priorities for assessment and issues with the current program (see also 3.1.1, below).

In collaboration with Health Canada, the Department published two issues of the Chemicals Management Progress Report[lxxvi] (July and December 2014) which provided stakeholders and others with up-to-date information on the activities and programs of the CMP. In addition to these reports, biannual reporting was undertaken to enhance the transparency of work under the CMP.

On the international front, under the Canada-China Joint Committee on Environmental Cooperation, the Department hosted a workshop for Chinese delegates (including site visits, case studies and an overview of Canada's Environmental Emergencies Management System) and maintained discussions with China on chemical management frameworks, including approaches to managing perfluoroctane sulfonate and mercury.

Sub-Program 3.1.1: Substances Management

Sub-Program Description

This program is jointly implemented by Health Canada and Environment Canada. It is responsible for assessing all targeted existing commercial substances identified under the Chemicals Management Plan, as well as new substances, upon notification by industry of their import or manufacture, for risks to the environment. The program uses science-based risk assessment, priority-setting and timely regulatory actions (or other measures where appropriate) to manage these substances. It works to improve substance management through research and monitoring, and tracking of pollutant releases through reporting to the National Pollutant Release Inventory and ensures appropriate risk measures are in place, as well as engaging in national and international collaborations. The program maintains transparency with stakeholders through consultation processes. International obligations include the Basel, Rotterdam Convention and Stockholm Conventions, the Convention on Long-Range Transboundary Air Pollution and the Minamata Convention. Program delivery includes the assessed contribution to the Organisation for Economic Co-operation and Development. This program also uses regulations and other control measures to address the risks posed by end-of-life substances of concern, international and interprovincial movement of waste and hazardous recyclable material.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
49,328,823	55,319,130	5,990,307

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
410	417	7

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	Isoprene: 80% reduction relative to the 2009 baseline by March 2016	56% reduction as of 2013 This indicator measures the effectiveness of a Pollution Prevention Plan in reducing releases of isoprene from the rubber manufacturing sector. Data on releases are from the National Pollutant Release Inventory. The most recent available data are from 2013. Percentage reductions are calculated compared to 2009. The downward trend in releases is on-track to achieving the target.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Published National Targets for the Road Salts Code of Practice, and published the *Regulations Amending the PCB Regulations and Repealing the Federal Mobile PCB Treatment and Destruction Regulations*
- Continued to implement the Chemical Management Plan (CMP), including:
    - Published the *Products Containing Mercury Regulations (PCMR)*[lxxvii], a Code of Practice for 2-Butanone, oxime and amended the *2-Butoxyethanol Regulations*.
    - Continued to implement the *Prohibition of Certain Toxic Substances Regulations, 2012* and the CMP2 Groupings Initiative, including three risk management scope documents and two risk management approach documents.
    - Published final risk assessments for approximately 500 substances and prepared draft risk assessments for an additional 1,170.
    - Received and assessed (within prescribed regulatory timelines) 100% of approximately 500 new substances notifications and subsequently published five Significantly New Activity Orders/Notices for chemicals and polymers, and five Ministerial Conditions
    - Received 26 Pre-Notification Consultations for chemicals and polymers, and four for organisms. These provide stakeholders with the opportunity to discuss the regulatory requirements of their notifications prior to the submission of these substances.
    - Published risk assessment summaries for six chemical and polymer substances and new living organisms; these communicate the risk assessment findings of the Department's work under the *Canadian Environmental Protection Act, 1999* (CEPA 1999), and help ensure transparency in its decision making process.
    - Published a non-confidential summary of information received from the second phase of the Domestic Substances List Inventory Update[lxxviii] to increase public awareness of and access to information on manufactured and/or imported substances.
    - Hosted two multi-stakeholder workshops to plan the next phase of the CMP and initiated 21 research projects that addressed priority substances and issues under the CMP and CEPA 1999.
- Completed annual data collection under the National Pollutant Release Inventory[lxxix] (NPRI), conducted quality control of facility-reported information, data interpretation and trend analysis, and published data on the website in various searchable formats—work that helps maintain the NPRI as a reliable and relevant means to track pollutant releases.
- Continued to chair the Small Intersessional Working Group on Persistent Organic Pollutants (POPs) waste under the Basel Convention and led on two technical guidelines for sound management of POPs waste; also engaged in discussions under the Minamata Convention on Mercury[lxxx] and supported negotiations on chemicals and waste at the first United Nations Environment Assembly.

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). It does this by developing, implementing and administering strategies and programs, such as pollution prevention plans, regulations, codes of practice, guidelines and environmental performance agreements. It works under the *Canadian Environmental Protection Act, 1999*, and the *Fisheries Act* 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; providing technical advice to environmental assessments; and acting as the focal point for the Department for the *Fisheries Act* Pollution Prevention Provisions (FA-PPP). Specifically, the program administers the FA-PPP, including the development of risk management instruments; administers the Wastewater Systems Effluent Regulations to reduce the threats to fish, fish habitat and human health from fish consumption; works with the Northwest Territories, Nunavut, Quebec, and Newfoundland and Labrador on minimum effluent quality standards for wastewater effluent for the Far North; works to amend the Wastewater Systems Effluent Regulations to include the Far North, and administers the Metal Mining Effluent Regulations and the Pulp and Paper Effluent Regulations under the *Fisheries Act* to control or manage the deposit of deleterious substances into water to protect water quality and aquatic ecosystems.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
7,179,294	8,394,522	1,215,228

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
77	65	-12

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 requirements	95% by March 2015	*Pulp and Paper Effluent Regulations*: 99.8% for total suspended solids (TSS); 99.9% for biochemical oxygen demand; and 96.2% for effluent non-lethality requirements All results are for calendar year 2013. These results are similar to those from 2012, with the exception of the rate for non-acute lethality, for which compliance decreased slightly from 98.3%. Since 1985, the quality of pulp and paper effluent released directly to the environment has improved considerably. *Metal Mining Effluent Regulations*: Over 99% compliance for metals and pH 99.3% compliance for cyanide (CN^-) 97.9% for TSS 96.8% for acute lethality testing All results are for calendar year 2013. These results are similar to those from 2012, with the exception of rates for copper and acute lethality, which decreased slightly, and for cyanide, nickel, zinc and TSS, for

			which compliance increased slightly. Results have been mostly stable since 2003, except for TSS, for which compliance has increased. *Wastewater Systems Effluent Regulations:* Regulated limits came into force on January 1, 2015 and will be reported for the first time in the 2016–17 Departmental Performance Report. The reported values are based on the percentage of tests that are within authorized limits.
	Loading (in tonnes) of biological oxygen demand (BOD) matter and total suspended solids from wastewater treatment facilities subject to federal regulations	To be determined (2015)	Results for this indicator are not available. Regulated limits came into force on January 1, 2015 and will be reported for the first time in the 2016–17 Departmental Performance Report.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to administer the *Metal Mining Effluent Regulations* (MMER), which included advancing the 10-year review of the Regulations through consultations with industry, environmental and Aboriginal organizations on various proposed changes. The consultations included consideration of expanding the MMER to include diamond mines, as well as exploring possible regulatory approaches for coal mines.
- Continued to issue authorizations to system owners and operators regulated by the *Wastewater Systems Effluent Regulations* (WSER), and completed development of a Web-based reporting system through which the 2,500-plus wastewater system owners and operators submit information required under the regulations. Intergovernmental cooperation was essential to the progress made in establishing long-term partnerships, as well as to the WSER bilateral agreements made with Yukon and New Brunswick, which reduce administrative regulatory burden and duplication.
- Through the Canadian Council of Ministers of the Environment Working Group on wastewater, progressed with analysis regarding risk level criteria, performance standards, monitoring and reporting in the North.
- Finalized the *Regulations Establishing Conditions for Making Regulations under Subsection 36(5.2) of the Fisheries Act* and the *Experimental Lakes Area Research Activities Regulations*, both aligned with the Minister of the Environment's role for the enforcement and administration of pollution prevention in compliance with the *Fisheries Act*.
- Continued to administer the *Pulp and Paper Effluent Regulations,* including promoting compliance and providing advice for the pulp and paper sector on the regulatory and environmental effects monitoring requirements.
- Organized expert exchanges with bilateral partners, including through the Environment Working Group of the Canada–Mexico Partnership, with the objective of contributing Canada's capacity and knowledge to assist Mexico in strengthening its ability to establish a robust regulatory framework for mining operations.

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 advises on marine pollution from ships. Since 2010, the program also has responsibility for assessing and controlling the risk of impacts to the marine environment resulting from Canadians or Canadian maritime traffic in the Antarctic. The program uses a mix of regulatory and non-regulatory instruments to prevent marine pollution. It addresses impacts on sediments and other wastes; administers prohibitions and controls, assesses and issues permits for disposal at sea and Antarctic expeditions; and researches and develops decision-making and monitoring tools, and standards. The program contributes to federal coordination of marine pollution prevention (ship-sourced); It works under the *Canadian Environmental Protection Act, 1999*, including Part 7, Division 3 (Disposal at Sea), and the *Antarctic Environmental Protection Act, 2003*. The program also meets international obligations, including the London Convention and Protocol, the Antarctic Treaty and Madrid Protocol, and works to advance Canadian positions to influence global rules toward reducing and managing global marine pollution from all sources. 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 inert inorganic material.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
1,191,370	3,218,389	2,027,019

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
20	29	9

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% by March 2015	100% in 2014 This indicator is used to measure the effectiveness of the Disposal at Sea permit assessment process by looking at the results of disposal site monitoring. Any management action required at the disposal site because of deficiency in the original permit assessment will result in improvements to the permit assessment process. Eleven representative sites were monitored in 2014. No management actions were required and all sites monitored remain available for continued sustainable use, exceeding the stated target. Previous reported values were 89% in 2013 and 92% in 2012.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Led and participated in a number of activities relating to the London Convention and London Protocol, accepted the role of Chair of the Scientific Groups of the London Convention and London Protocol and participated in the Compliance Group of the London Protocol.

- Continued to participate in the Madrid Protocol regarding Antarctic Environmental Protection, and provided advice for Transport Canada relating to the Marine Pollution Convention.
- Successfully completed amendments to *Disposal at Sea Regulations* and a related Applicant's Guide[lxxxi] (implemented in September 2014). The amendments introduced service timelines, a newly created prioritization and delivery process, and 12 new policies directly relevant to national permit delivery.
- Conducted a major national study that will allow up-to-date information to be used to generate a modern marine pollution placement regime; the study included recommendations on potential marine geoengineering activities (such as ocean fertilization) in the next decade, as well as potential implementation options for the London Protocol Amendment.

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, preparedness, response, recovery, and research and development. Prevention involves regulating chemical facilities to develop and implement environmental emergency plans. Preparedness includes coordinating and planning international, national and regional environmental emergency preparedness capabilities, as well as sensitivity mapping. Response includes monitoring the actions of responsible parties, 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 Montréal. Recovery activities include assessing the damage and providing advice to polluters on repairing an environment damaged by an environmental emergency. Other activities include development of spill models, analysis methods, fate and behaviour algorithms, measurement and remote-sensing capabilities, decontamination protocols and counter-measures used during incidents. The program's authority comes from the Environmental Emergency Regulations, as well as sections 34-8 of the *Fisheries Act*. Its responsibilities during an emergency are described in the Federal Emergency Response Plan's Emergency Support Function, Annex #6 – Environment (2009).

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
10,223,358	10,128,030	-95,328

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
79	71	-8

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 March 2015	86% as of March 31, 2015 This indicator is based on the percentage of regulated facilities that state that they have an environmental emergency plan developed and implemented as part of their reporting required under the Regulations.

			Previous values of the indicator were 93% in 2014 and 98.5% in 2013.
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% by March 2015	0.9% in 2014–15 This indicator is a measure of the effectiveness of mandatory environmental emergency plans in preventing emergency incidents. Lower values are desirable. Previous values of the indicator are 0.4% in 2013–14 and 0.4% in 2012–13. The target has been met for the past three consecutive years.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Updated approximately 95% of regulatee records under the *Environmental Emergencies (E2) Regulations*. Of the 4,601 registered facilities in Canada, 2,852 required E2 plans; the majority (86%) of these facilities have developed and implemented the required plans.
- Completed preliminary consultations with stakeholders and the public, which supported potential regulatory amendments to the *E2 Regulations*. These amendments could help improve the clarity and effectiveness of the Regulations, and harmonize them with existing laws and regulations.
- Continued work with provincial and territorial counterparts on the development of standard operating procedures for the collection and processing of notifications of environmental occurrences in accordance with Environmental Occurrences Notification Agreements[lxxxii], and initiated discussions with British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Northwest Territories and Yukon in preparation for renewal of existing agreements.
- Provided scientific support (for example, on the fate and behaviour of spilled contaminants in the environment) for approximately 50 environmental emergency incidents. For example, under the World Class Tanker Safety System program, the Department conducted studies on the physical and chemical properties of spilled bitumen in support of federal marine oil spill safety priorities. This work reaffirmed the importance of research on spilled hazardous materials and confirmed that these studies provide essential new knowledge needed to mitigate the environmental effects of spill events.
- Completed the Beaufort Coastal Sensitivity Atlas, which provides a consolidated source of key environmental information. The Atlas is critical for prioritizing operational and on-site oil spill response activities and supports responsible environmental decision-making across the coastal areas of the Beaufort Sea region.
- Continued to operate the National Environmental Emergencies Centre 24 hours a day, 7 days a week. Highlights of its performance include:
    - Assessed notifications for the approximately 36,000 pollution incidents received, and engaged in 3,000 of these incidents that fell within its mandate and met a set of triggers that include jurisdiction, size, complexity, source and/or impact. The triggers determined Environment Canada's level of engagement, which included activities such as notifying partners and assessing the emergency and mitigation measures. The Department also coordinated and/or provided scientific and technical advice remotely and on-site for approximately 250 incidents; and
    - Chaired approximately 25 Environmental Emergencies Science Tables, an advisory mechanism that coordinates the best available scientific and field expertise and abilities to identify environmental protection priorities.

Sub-Program 3.1.5: Contaminated Sites

Sub-Program Description

This program is primarily directed to Environment Canada's responsibilities in supporting the Federal Contaminated Sites Action Plan (FCSAP). The FCSAP is a 15-year Government of Canada horizontal program with the aim of reducing environmental and human health risks from known federal contaminated sites and associated federal financial liabilities. Sixteen federal departments, agencies and consolidated Crown corporations responsible for contaminated sites, including Environment Canada, are currently involved in the FCSAP program as custodians of sites. The Contaminated Sites Program responsibilities include hosting the FCSAP Secretariat, developing guidance and program policies, and providing expert support to federal custodians for the assessment and remediation/risk management activities at their sites. In addition, the FCSAP Secretariat coordinates the implementation of the Shared Sites Policy Framework. Under the Contaminated Sites Program, EC also provides technical and scientific advice to the custodial department responsible for the Sydney Tar Ponds project.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
7,824,944	9,719,734	1,894,790

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
42	36	-6

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[9]	$1.17 billion by March 2016	$592 million as of March 31, 2014 This indicator is a measure of the reduction of environmental liabilities associated with higher risk federal contaminated sites during Phase II of the Federal Contaminated Sites Action Plan. 2014–15 results will not be available until tabling in Parliament of the 2014–15 Public Accounts of Canada. For the period 2011–12 to 2013–14, remediation expenditures have reduced the environmental liability by $592 million (approximately $200 million each year). Based on planning information provided by custodians, a reduction on liability of $1.12 billion of the $1.17 billion target (96%) is expected by 2015–16. While remediation expenditures at contaminated sites contribute to decreases in liability, recorded liability may increase due to the completion of assessment activities and/or changes in the estimated remediation costs as better information becomes available.

[9] 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.

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 March 2016	140 as of March 31, 2015 This indicator is a measure of the implementation of remediation or risk-management activities at Class 1 (high priority) and Class 2 (medium priority) sites funded under Phase II of the Federal Contaminated Sites Action Plan. On average, approximately 35 sites complete risk reduction activities each year. The target is not on track to be met by 2015–16 since the work to implement the remediation or risk-management plans has taken longer than anticipated when the target was established by custodians in 2011–12. The number of sites does not always correlate with the level of effort. As remediation activities progress, additional contamination may be discovered resulting in delays to the completion of sites and increases in the amount of resources required to complete the risk reduction activities.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued, as part of the Department's ongoing and overall role as Secretariat for the Federal Contaminated Sites Action Plan[lxxxiii] (FCSAP), to work closely with custodians and Treasury Board of Canada Secretariat to ensure that information reported to the Federal Contaminated Site Inventory is accurate and complete.
- Led the development of a successful proposal for the renewal of FCSAP (Phase III) using a risk-based prioritization approach to identify sites that should be addressed in Phase III, in collaboration with program partners in other federal organizations.
- Published the 2011–12 FCSAP annual report[lxxxiv] on the federal contaminated sites web portal and prepared draft 2012–13 and 2013–14 annual reports. Work on these reports was delayed due to the priority of preparing the Phase III proposal.
- Developed a guidance document for federal custodians on monitored natural attenuation in soil and water, finalized new modules for the Ecological Risk Assessment Guidance (to address specific contaminants, such as perfluorooctane sulfonate), and delivered training sessions at the 2014 Real Property Institute of Canada Federal Contaminated Sites National Workshop, all in its role as an expert support department to FCSAP.

Program 3.2: Climate Change and Clean Air

Program Description

This program aims to protect the health of Canadians, the state of the environment and Canada's economy from the harmful effects of air pollutants and the impacts of greenhouse gas (GHG) emissions through the development and implementation of regulations and other control measures. Actions are based on sound scientific and economic analysis, and emissions monitoring and reporting. Work under this program involves 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 GHG regulations as appropriate, reduce transboundary air pollution and advance the development of clean technologies. It also involves participation, negotiations and contributions to international fora to address climate change and transboundary air pollution, and bilateral and multilateral processes in order to support Canada's positions and objectives. This program includes contributions in support of Climate Change and Clean Air, and grants for the implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer.

Budgetary Financial Resources (dollars)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
154,813,450	234,152,193	161,572,084	121,061,134	-113,091,059

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
699	705	6

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	Aggregate emissions of greenhouse gases from targeted and/or regulated sources	Canada's national targets are a 17% reduction from 2005 levels by 2020, and a 30% reduction from 2005 levels by 2030[10]	510 Mt in 2013 The reported value is the sum of emissions from the transportation, electricity, oil and gas, and emissions-intensive and trade-exposed sectors as reported in the 2013 National Inventory Report submitted by Canada to the United Nations Framework Convention on Climate Change. Units are in carbon dioxide equivalents. Previous values of the indicator include: 505 Mt in 2012 and 498 Mt in 2011. The 2013 value represents a 5% decrease from 2005.
	Canadian emissions of air pollutants from targeted sources	Annual decline in the three-year moving average for all tracked substances	Particulate matter (PM_{10}): 221,687 tonnes (5.0% decrease) Nitrogen oxides (NOx): 2,033,645 tonnes (2.2% decrease) Volatile organic compounds (VOC): 1,240,750 tonnes (4.4% decrease) Reported values are from Canada's Air Pollutant Emission Inventory. The values are the combined three-year average emissions from industrial sectors (including electricity generation) and all mobile sources for the period 2011 to 2013. Percentage changes are in comparison to 2010 to 2012.

Performance Analysis and Lessons Learned

The Department continued to advance its sector-by-sector regulatory approach to reducing greenhouse gas (GHG) emissions towards meeting the national 2020[11] reduction target. With regulations already in place for the transportation and coal-fired electricity sectors, work continued on development of regulations for other major emitting industrial sectors, as well as more stringent standards for transportation.

The Department also continued implementing the Air Quality Management System (AQMS) in collaboration with provinces, territories, and stakeholders to better protect human health and the environment. The system includes new ambient air quality standards, a framework for managing air quality through local air zones and regional airsheds, and emissions requirements for major industrial

[10] These are economy-wide targets.
[11] On May 15, 2015, the Minister of the Environment announced Canada's new post-2020 climate change target as part of the submission of its Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCCC). Canada's economy-wide, post-2020 target is a 30% reduction in GHG emissions below 2005 levels by 2030.

sectors and equipment types, as well as enhanced collaboration among governments to reduce emissions from mobile sources. Among its efforts on this front, in June 2014, the Department proposed in *Canada Gazette,* Part I the *Multi-sector Air Pollutants Regulations*, and published two draft Codes of Practice (see also 3.2.1.1). Environment Canada also continued work with provinces, territories and stakeholders to develop Canadian Ambient Air Quality Standards for two other air pollutants of concern: sulphur dioxide and nitrogen dioxide. Early and ongoing engagement with provinces, territories and stakeholders continues to be important for the successful implementation of AQMS.

Environment Canada also continued to address short-lived climate pollutants (SLCPs). The Department co-chaired the Arctic Council Task Force for Action on Black Carbon and Methane, which finalized a framework to improve black carbon and methane science and reporting (see also 3.2.2). Canada developed its first black carbon inventory for submission in 2015 under the Convention on Long-Range Transboundary Air Pollution (see also 3.2.2), and continued its leadership under the Climate and Clean Air Coalition. The Department's active contributions under international fora are key to engaging with international partners; Canada also benefits from collective advancements in science and best practices for SLCPs.

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

Sub-Program Description

This program develops domestic approaches to climate change and air pollution by controlling emissions of greenhouse gases (GHGs) and air pollutants, and promotes science-based approaches to develop new standards and regulations. Core program activities focus on developing and implementing regulations to achieve the reduction of emissions from the industrial, transportation, and consumer and commercial products sectors while maintaining economic competitiveness. The program also involves analysis related to cross-cutting issues, compliance flexibilities, and equivalency agreements with provinces, as well as consultations with industry, provincial and territorial governments, and other stakeholders. The program works with provinces and territories through the Canadian Council of Ministers of the Environment and is implementing the new Air Quality Management System, which includes establishing new outdoor air quality standards, implementing the industrial emission requirements. The program also works with other jurisdictions, including the U.S., to undertake regional and international efforts to manage transboundary air pollution. The program's core activities are supported by legal and economic analysis, as well as scientific research, monitoring and modelling on the impacts of air pollution, which provide a basis to develop, implement and evaluate standards and regulations. The program involves data collection, emissions estimation and reporting to support domestic programs and meet international requirements. This includes: the design and implementation of the Single Window Reporting Initiative to provide a single harmonized system to report on GHG and air pollutant emissions; the maintenance of the GHG Emissions Reporting Program to track progress in GHG emission reduction; the estimation of emissions and removals for GHGs and the development, submission, and publication of the annual National GHG Inventory Report and Canada's Air Pollutant Emissions Inventory; and, the submission of emission data to the United Nations Economic Commission for Europe and to the U.S. to meet commitments under the Ozone Annex and assess general performance reducing air pollutant emissions.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
95,534,501	96,164,115	629,614

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
609	608	-1

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: total particulate matter (TPM); sulphur dioxide (SO_2); nitrogen oxides (NO_x); volatile organic compounds (VOC), mercury (Hg) and ammonia (NH_3)	To be determined with the finalization of the regulations	Total particulate matter (TPM): 436,978 tonnes (3.0% decrease) Sulphur oxides (SOx): 1,129,544 tonnes (3.2% decrease) Nitrogen oxides (NOx): 847,206 tonnes (2.0% decrease) Volatile organic compounds (VOC): 778,305 tonnes (2.1% increase) Mercury (Hg): 2,399 kg (12.2% decrease) Ammonia (NH_3): 15,340 tonnes (2.7% decrease) Reported values are from Canada's Air Pollutant Emission Inventory. The values are three-year average emissions from industrial sectors (including electricity generation) for the period 2011–13. Percentage changes are in comparison to 2010–12.
	Canadian transportation emissions of: particulate matter (PM_{10}); nitrogen oxides (NO_x) and volatile organic compounds (VOC)	Decline of total emissions by March 2015	Particulate matter (PM_{10}): 71,254 tonnes (9.3% decrease) Nitrogen oxides (NOx): 1,186,439 tonnes (2.3% decrease) Volatile organic compounds (VOC): 462,445 tonnes (13.6% decrease) Reported values are from Canada's Air Pollutant Emission Inventory. The values are three-year average emissions from all mobile sources for the period 2011–13. Percentage changes are in comparison to 2010–12.
	Canadian emissions of greenhouse gases (carbon dioxide equivalents) in megatonnes (Mt) from industrial and mobile sources	To be determined by sector-specific approach to addressing climate change	Oil & Gas: 179 Mt (14% increase) Electricity: 85 Mt (30% decrease) Transportation: 170 Mt (<1% increase) EITE: 76 Mt (15% decrease) Reported emissions are for 2013 for sectors covered by Environment Canada's sector-by-sector approach. Values are derived from Canada's 2013 National Inventory Report submitted to the United Nations Framework Convention on Climate Change. Units are in carbon dioxide equivalents. Percentage changes are in comparison to 2005.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Published the final *Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emissions Regulations*, which establish progressively stringent emission standards over the 2017 to 2025 model years. Environment Canada benefited from active and sustained engagement with other federal agencies, provinces, territories and stakeholders in the development of GHG regulatory approaches.
- Undertook regulatory development for other major emitting industrial sectors, including work to develop regulatory frameworks to address methane emissions from the oil and gas sector, for natural gas-fired electricity generation and for the production of chemicals and nitrogen fertilizers.
- Made progress in developing regulatory and non-regulatory measures to reduce air pollutant emissions from major industrial and mobile sources. Early and ongoing engagement with industry, provinces and territories contributed to a more transparent process for development of the proposed measures.

- Developed and submitted (to the United Nations Framework Convention on Climate Change) Canada's intended nationally determined contribution under a new international climate change agreement.
- Published approximately 90 peer-reviewed publications related to air quality science studies to inform decision making, and to evaluate the effectiveness and impacts of actions on Canadians and the environment. These studies highlighted results related to atmospheric processes, air quality forecast models, health impacts from air pollutants and the effects of oil sands emissions on ecosystems.
- Led or contributed to a number of science assessments published in 2014, including the Canadian Smog Science Assessment, the Global Assessment of Precipitation Chemistry and Deposition, and the Scientific Assessment of Ozone Depletion.
- Continued to conduct air quality monitoring under the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring. Data on all components (air, water, biodiversity and wildlife contaminants) are posted on the Canada-Alberta Oil Sands Environmental Monitoring Information Portal[lxxxv].
- Published key inventories that meet domestic and international reporting requirements and informed projections and policy development, including Canada's Air Pollutant Emission Inventory[lxxxvi] (February 2015); Canada's first Black Carbon Emission Inventory[lxxxvii] (February 2015), and Canada's National Inventory of Greenhouse Gas Emissions and Removals[lxxxviii] (April 2015), and a number of regulatory impact analysis statements pertaining to air pollutant and GHG regulations.
- Prepared Canada's Emissions Trends 2014[lxxxix], which presents projections of GHG emissions to 2020 by economic sector and sub-sector (and by province), and describes the expected trends in the emission trajectories as well as the recent past.
- Performed modelling and analysis, including of economic and competitiveness impacts, to inform policy and regulatory development to reduce GHG and air pollutant emissions.

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 (GHGs) from industrial sectors. Key activities include the development, implementation and administration of standards, regulations and other risk management instruments to reduce air pollutant in the major industrial sectors and GHG emissions from electricity, oil and gas and emissions-intensive, trade-exposed (EITE) industrial sectors. The program includes the implementation of the new ambient air quality standards and the new industrial emission standards, which are key elements of federal responsibility within the new Air Quality Management System. Additional activities include monitoring, emission quantification and reporting, verification, research and modelling, as well as economic and scientific assessments of current and future levels of air pollutants and GHG emissions to improve risk management, develop standards, regulations and other risk management instruments. The program is also responsible for reporting requirements under the *Canadian Environmental Protection Act, 1999*, and reporting to meet domestic and international obligations. It includes the design and implementation of the Single Window Reporting Initiative. Furthermore, the program provides information to Canadians and decision-makers about the environmental impacts associated with air pollutants, which includes scientific monitoring and short-term studies regarding impacts from the oil sands.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
77,903,412	70,911,780	-6,991,632

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
466	419	-47

Performance Results

Sub-Sub-Program 3.2.1.1: Industrial Sector Emissions			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
Industrial sectors meet emission intensity levels of greenhouse gases to comply with new or amended regulations by required dates	Percentage of industrial facilities meeting their regulated greenhouse gas emissions performance target	To be determined by the regulation	Results for this indicator are not available. Reduction of Carbon Dioxide Emissions from Coal-Fired Generation of Electricity Regulations were published in the Canada Gazette, Part II in 2012. Performance standards entered into force on July 1, 2015. Data for this indicator will be available in 2016 after the initial compliance reporting. GHG regulations for certain 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 by the regulation	Results for this indicator are not available. Air pollutant regulations for industrial sectors and equipment were under development in 2014–15. There are currently none in force. Reporting information will be available once the regulations are in force.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to implement the Air Quality Management System (AQMS) through collaboration with provinces, territories and stakeholders. Highlights include:
    - Published (June 2014) proposed *Multi-sector Air Pollutants Regulations* in the *Canada Gazette*, Part I, which will establish, for the first time, mandatory national emission requirements for major industrial sectors and various types of equipment.
    - Published two draft codes of practice to reduce air emissions from the aluminum and iron and steel sectors. The codes outline best practices for these sectors to reduce emissions of particulate matter and volatile organic compounds
    - Continued to monitor concentrations of contaminants in outdoor air and to assess air quality trends, and contributed air quality data, science products and expertise to support development of new Canadian Ambient Air Quality Standards for sulphur dioxide and nitrogen dioxide.

  - Established regional airsheds to report on the movement of air pollutants and worked to advance knowledge of transboundary flow of pollutants (and their transformation and deposition).

- Continued to implement the *Federal Coal-Fired Electricity Generation Regulations*, and to engage with provinces, territories and industry toward developing a federal approach for the remaining emissions-intensive and trade-exposed industrial sectors.
- Renewed five-year bilateral agreements with Ontario, British Colombia and Alberta for data collection via the Department's Single Window Reporting System[xc] and established a new agreement with New Brunswick.
- Continued to conduct air quality monitoring—findings will support development of new Canadian Ambient Air Quality standards for nitrogen dioxide and sulphur dioxide. The Department improved regional and national understanding of transboundary transport and deposition of air pollutants to ecosystems through the delivery of monitoring and research results, including through air and precipitation monitoring sites in western Canada upwind and downwind of the oil sands. Results were posted under the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring.
- Completed expansion of the GHG monitoring network to improve baseline monitoring and understanding of source influences of GHGs and aerosols, and further enhanced climate system computer models to better simulate global and regional climate change.
- Monitored levels of atmospheric pollutants of concern in a number of wildlife indicator species from priority ecosystems; evaluated the impacts of exposure on gene expression and hormone regulations; and developed a new methodology for rapid estimation of health impacts on wildlife in support of Environment Canada's air pollutant regulatory initiatives.

Sub-Sub-Program 3.2.1.2: Transportation Sector Emissions

Sub-Sub-Program Description

Under the Canadian Environmental Protection Agency, this program aims to reduce emissions from transportation sources (vehicles, engines and fuels) through key activities such as: the delivery of sound science and scientific advice, the development of GHG and air pollutant regulations as well as the implementation and administration of those regulations. These activities also include scientific testing and emissions verification to ensure compliance with standards. In addition, the program is working with Transport Canada to address air pollutant and GHG emissions from maritime shipping through the development of new domestic and international standards, and recommends practices for marine vessels in collaboration with the International Maritime Organization. As well, it shares information and identifies areas of joint interest with provinces and territories toward reducing emissions, through a Mobile Sources Working Group.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
16,551,663	24,610,919	8,059,256

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
133	183	50

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	Percentage of companies meeting the fleet average greenhouse gas (GHG) emission requirements for passenger automobiles and light-trucks	100% by 2015	100% for the 2011 model year The Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations introduced progressively more stringent GHG emissions standards for the 2011 to 2025 model years. Under the Regulations, companies that manufacture or import new vehicles are required to submit an annual end of model year report that is used to establish a company's fleet average greenhouse gas performance relative to its applicable standard. The 2011 data was used since that was the most recent data available. The target has been met.
Reduced air pollutant emissions from new motor vehicles, engines and fuels sold in Canada	Percentage of companies meeting the fleet average nitrogen oxides (NOx) emission requirements for light-duty on-road vehicles	100% by December 2014	100% for the 2012 model year The On-Road Vehicle and Engine Emission Regulations introduced progressively more stringent air pollutant (including NOx) emission standards for the 2004 to 2016 model years. Under the Regulations, companies that manufacture or import new vehicles are required to submit an annual end of model year report that is used to establish a company's fleet NOx average relative to the regulatory standard. The 2012 data was used since that was the most recent data available. The target has been met.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Further supported Canada's contribution to curb GHG emissions and provided cleaner air for Canadians through regulatory initiatives developed in alignment with the U.S. Such alignment provides industry with regulatory certainty. It can both reduce the compliance burden on regulatees and provide efficiencies in the administration of regulatory programs.
- Key regulatory developments included:
    - publication of final *Regulations Amending the Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations* (in *Canada Gazette*, Part II – October 2014) which establish more stringent GHG emission standards for new vehicles of 2017 and later model years;

- publication of a Notice of Intent in *Canada Gazette*, Part I (October 2014) to develop regulations to further reduce GHG emissions from on-road heavy-duty vehicles and engines; and
- publication of proposed *Regulations Amending the On-Road Vehicle and Engine Emission Regulations* and *Regulations Amending the Sulphur in Gasoline Regulations* (*Canada Gazette,* Part I – September 2014) which would establish more stringent air pollutant emission standards for new cars, light-duty trucks and certain heavy-duty vehicles of the 2017 and later model years, and would reduce the allowable sulphur content of gasoline.

- Continued work to align standards for vehicle and engine emissions and coordinated their implementation with the U.S. Environmental Protection Agency, consistent with a work plan established under the framework of the Canada–U.S. Air Quality Committee. This collaborative work included information-sharing, technical work-sharing and emission testing.
- Continued collaboration with provinces and territories on implementation of the Action Plan for the Mobile Sources Working Group[12] on initiatives to address emissions from mobile sources.
- Supported Canada's participation at the International Maritime Organization by providing technical advice for Transport Canada on emission reduction approaches, and presented to the Arctic Council an updated work plan to assess the impacts of current and future ship emissions on the Canadian Arctic.
- Operated a comprehensive program to administer six vehicle and engine emission regulations, including review of over 1,700 submissions such as annual reports, Canada-unique submissions and importation declarations, response to approximately 1,000 technical queries and testing of 84 vehicles and engines to verify compliance against emission standards.

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

Sub-Sub-Program Description

This program aims to reduce emissions of air pollutants from consumer and commercial products. This is achieved through the development and administration of regulations and other measures under the *Canadian Environmental Protection Act, 1999* (Part 5–Controlling Toxic Substances). The program provides strategic planning to guide action in other consumer and commercial product sectors for the next phase of regulatory and non-regulatory measures.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
1,079,426	641,416	-438,010

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
11	6	-5

[12] This working group is one of the mechanisms under the Air Quality Management System and builds on the existing range of federal, provincial and territorial initiatives aimed at reducing emissions from the transportation sector. Collaborative work included information sharing and developing tools to help address areas of joint interest among jurisdictions.

Performance Results

Sub-Sub-Program 3.2.1.3: Consumer and Commercial 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 the architectural coatings sector	28% by 2014	72% as of 2014 The reported value is based on a voluntary survey of firms in the architectural coatings sector. The percentage reduction was estimated by comparing the survey results to a 2005 baseline. The estimate corresponds to a reduction of 41 Kt of volatile organic compounds releases per year.

Performance Analysis and Lessons Learned

In 2014–15, the Department continued to target control measures for volatile organic compounds (VOCs) in some consumer and commercial products, such as solvents, which account for approximately 33% of all VOC emissions.

Highlights of the Department's work included:

- Held stakeholder consultations regarding proposed modifications (published in *Canada Gazette*, Part I, May 2015) to the scope of VOCs regulated under the *Canadian Environmental Protection Act, 1999.* These changes are aimed at alignment with the U.S. definition (given the integrated North American market) to: ensure a level playing field for manufacturers and importers of products containing VOCs; avoid varying requirements across jurisdictions; and offer greater choice to industry of compounds that meet VOC regulations.
- Published a consultation document on a draft Code of Practice for the Reduction of VOC Emissions from the Use of Cutback and Emulsified Asphalt in 2014. This was followed by a 60-day comment period. Comments received from stakeholders are being considered in the development of a final Code. The objective of the Code is to contribute to the reduction of VOC emissions from the use of cutback and emulsified asphalt to reduce health and environmental impacts in Canada.

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. The program represents Canada at the North American Leaders' Summit; leads and participates 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 advances Canada's negotiating positions and objectives in international fora, such as: the Climate Change and Clean Air Coalition to reduce Short Lived Climate Pollutants, the Arctic Council, Global Methane Initiative and Global Alliance for Clean Cookstoves. The program meets international obligations by contributing to organizations such as the Intergovernmental Panel on Climate Change and the Inter American Institute for Global Change. The program also works with the U.S. under the Canada-U.S. Air Quality Agreement (AQA), to undertake regional and international efforts to manage transboundary air pollution. The program also works to implement the U.S.-Canada Clean Energy Dialogue, to support bilateral collaboration on clean energy priorities, as well as with the Commission for Environmental Cooperation to address common issues related to climate change and air quality. It also participates in the ongoing negotiations and implementation of the Convention on Long-Range Transboundary Air Pollution. Using the National Pollutant Release Inventory, the program prepares and submits the Air Pollutant Emission

Inventory to meet domestic needs and international reporting requirements. As well, it coordinates Canada's participation under the Montreal Protocol on Substances that Deplete the Ozone Layer and its Multilateral Fund, with a view to ensuring the gradual elimination of ozone-depleting substances at a global level. Participation under the Montreal Protocol includes promoting a North American proposal to phase-down consumption and production of hydrofluorocarbons (HFCs), in a manner complementary to provisions on HFCs under the UNFCCC. Participation in the Multilateral Fund includes ensuring payment of Canada's assessed contribution to the Fund and of the costs of hosting its Secretariat in Montreal (paid through the grants for implementation of the Montreal Protocol). The program supports, in cooperation with other departments and in alignment with international programs, domestic priorities regarding climate change.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
16,817,489	18,366,717	1,549,228

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
42	38	-4

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: 70% by March 2015 Agreements: 70% by March 2015	Negotiations: 86% Agreements: No agreements were concluded in 2014–15 This indicator is a measure of program performance in furthering Canada's objectives in the United Nations Framework Agreement on Climate Change negotiations. Previous results for negotiations were 71% in 2013–14 and 81% in 2012–13. The target was raised to 70% from 50% last year, but continued to be met. The current target is a balanced and realistic approach since some objectives cannot be realized in most negotiating sessions due to procedural issues outside of Canada's control. Such issues are not expected to impede progress towards reaching an agreement in 2015 that sets a new climate change framework.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Led delegations to UNFCCC negotiations in collaboration with all Parties under the Convention and delivered on its UNFCCC reporting and financial commitments by submitting Canada's National Greenhouse Gas Inventory Report,[xci] and its Sixth National Communication and First Biennial Report on Climate Change.[xcii] Canada also pledged $300 million to the Green Climate Fund.

- Played a leadership role, through the Arctic Council, in advancing work to address short-lived climate pollutants by co-chairing the Task Force for Action on Black Carbon and Methane, followed by successful negotiation of a Framework for Action among Arctic States (adopted by Ministers in April 2015).
- Submitted its first black carbon inventory to the Convention on Long-Range Transboundary Air Pollution and continued its leadership under the Climate and Clean Air Coalition through initiatives on agriculture, hydrofluorocarbons (HFCs), and diesel engines.
- Continued to participate in and advance air quality and climate work through international partnerships, including: the Gothenburg Protocol to the Convention on Long-Range Transboundary Air Pollution; the Montreal Protocol; the Organisation for Economic Co-operation and Development; and the annual meeting of the federal environment ministers of Canada, the U.S. and Mexico, under the Commission for Environmental Cooperation.
- Continued collaborative work under the Canada–U.S. Air Quality Agreement to reduce transboundary air pollution, including completing joint scientific and technical analyses to update the 2004 Canada–U.S. Transboundary Particulate Matter Science Assessment.
- Published a Notice of Intent to Regulate HFCs in the *Canada Gazette,* Part I and initiated stakeholder consultations on the proposed regulatory measures, which are intended to align, to the extent possible, with recently proposed U.S. measures. The Department also published proposed revisions to the domestic regulations on ozone-depleting substances in the *Canada Gazette,* Part I, implementing Canada's commitment to accelerate the phase-out of hydrochlorofluorocarbons (HCFCs) while introducing a permitting and reporting regime for HFCs.
- Continued to advance clean energy technologies to reduce GHG emissions and the transition to a low-carbon economy through the U.S.–Canada Clean Energy Dialogue, including over 50 projects either completed or underway.[13]
- Contributed to the work under the Intergovernmental Panel on Climate Change (IPCC) and the Inter-American Institute for Global Change Research (IAI), including the completion of the IPCC's Fifth Assessment Report, and made financial contributions to the IPCC ($150,000) and the IAI (US$159,000).

Sub-Program 3.2.3: Environmental Technology

Sub-Program Description

This program delivers expert environmental science and technology analysis and assessment, and program management to support the Government of Canada's clean air and greenhouse gas (GHG) technology investment decisions, policy-making and regulations. It oversees the operations of Sustainable Development Technology Canada with Natural Resources Canada and a range of other science and technology programs related to clean technology. It provides expert analysis and assessment to advance clean technologies to help ensure that government priorities regarding clean air, climate change mitigation and green infrastructure are addressed.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
121,800,203	6,530,302	-115,269,901

[13] Please see Clean Energy Dialogue Third Report (http://www.climatechange.gc.ca/dialogue/default.asp?lang=En&n=6ECF361C-1) to the President of the United States of America and the Prime Minister of Canada for more information.

Human Resources (FTEs)*

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
48	59	11

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	7.1 Mt by 2015	4.5 Mt as of 2014 This value represents the combined annual reductions reported as achieved for all projects supported by Sustainable Development Technology Canada 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	22.1 kt by 2025	Annual reductions for 2014 are estimated to be: 3.5 kt for nitrogen oxides 2.8 kt for sulphur oxides 0.3 kt for particulate matter 0.1 kt for volatile organic compounds These values are mostly due to reductions reported by Sustainable Development Technology Canada. The Green Municipal Fund also reported combined annual reductions of air pollutants of 3.1 t, but separate values for specific substances are not available.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Continued to deliver science and technology analysis and program management to support the Government of Canada's clean air and greenhouse gas (GHG) technology investment decisions, and provided expert analysis to support clean technologies and government priorities regarding clean air, climate change mitigation, and green infrastructure.
- Through Sustainable Development Technology Canada (SDTC), delivered jointly with Natural Resources Canada, the SD Tech Fund™ awarded grants for a maximum amount of $82 million (compared to $102 million in 2013). Total disbursements to eligible recipients during the fiscal year were $56 million (compared to $59 million in 2013). Completed projects in the SDTC portfolio reduced GHG emissions significantly (see also 3.2.3.1, below) and, since its inception in 2001, the portfolio of completed projects has achieved cumulative estimated reductions in particulate matter (311 tonnes), nitrogen oxide (3,705 tonnes), sulphur oxide (3,515 tonnes), and volatile organic compounds (165 tonnes).
- Provided over $57 million in below-market loans and grants for 60 environmental initiatives through the Green Municipal Fund (see also 3.2.3.2, below).

Sub-Sub-Program 3.2.3.1: Sustainable Development Technologies

Sub-Sub-Program Description

Sustainable Development Technology Canada (SDTC) is a not-for-profit foundation, created by the Government of Canada, to finance and support the development and demonstration of clean technologies. It is overseen by Environment Canada and Natural Resources Canada. SDTC operates two funds aimed at the development and demonstration of innovative technological solutions: the $590-million 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. SDTC reports to Parliament through the Minister of Natural Resources Canada. Federal funding flows to SDTC from Environment Canada (50 percent) and Natural Resources Canada (50 percent).

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
117,044,282[14]	158,437	-116,885,845

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
2	1	-1

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™	7 Mt by 2015	4.5 Mt as of 2014 The SD Tech Fund™ portfolio companies are on track to deliver GHG emissions reductions in line with expected targets. Reductions are dependent on a number of economic factors, including technology uptake, volatility in commodities pricing, and changes in the regulatory environment. Reported values have been discounted to allow for potential uncertainty.
	Annual reduction of emissions of air pollutants (criteria air contaminants) resulting from environmental technologies funded under the SD Tech Fund™	22 kt by 2025	Annual reductions for 2014 are estimated to be: 3.5 kt for nitrogen oxides 2.8 kt for sulphur oxides 0.3 kt for particulate matter 0.1 kt for volatile organic compounds The SD Tech Fund™ portfolio companies are on track to deliver estimated air pollutant reductions that exceed expected targets in 2025. Reductions are dependent on a number of economic factors, including technology uptake, volatility in commodities pricing, and changes in the regulatory environment. Reported values have been discounted to allow for potential uncertainty.

[14] Planned spending included $79.3M in statutory funds for the NextGen Biofuels Fund™ (NGBF), which was not provided as SDTC was able to meet its 2014-15 obligations without needing additional funding.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- With Natural Resources Canada, finalized a funding agreement with Sustainable Development Technology Canada (SDTC) governing $325 million announced in Budget 2013 for the SD Tech Fund™. The agreement provides funding over eight years for ongoing support for the development and demonstration of new technologies that deliver economic, environmental and health benefits to Canadians in addressing issues related to air quality, clean water, clean soil, and climate change. To enhance oversight, the funding agreement contains new financial and performance reporting requirements.
- Sustainable Development Technology Canada (SDTC) indicated that 66 completed projects reported GHG emissions reductions of approximately 4.5 megatonnes in 2014; they are collectively on track to deliver a projected annual reduction of 6 to 12 megatonnes by the end of 2015.
- The 2014–15 difference that appears in the Budgetary Financial Resources table (above) for 3.2.3.1 is a result of the following: $12.5M allocated for the SD Tech Fund™ was re-profiled to future years; $25M in appropriated funds for the NextGen Biofuels Fund™ (NGBF) was returned to the fiscal framework; and $79.3M in statutory funding that was available for the NGBF which was not provided as SDTC was able to meet its 2014-15 obligations without needing additional funding.

Sub-Sub-Program 3.2.3.2: Environmental Technology Innovation

Sub-Sub-Program Description

This program delivers expert environmental science and technology (S&T) analysis, assessment and program management. It provides advice and conducts assessments of the environmental performance (benefits and impacts) of new and emerging technologies that advance clean technologies on a life cycle basis. It also supports interdepartmental steering committees in prioritizing and governing the activities of funds aimed at supporting clean technologies, including providing expert advice, establishing criteria to guide funding decisions and evaluating environmental outcomes of funded projects. It oversees and supports a range of S&T programs including the 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.

Budgetary Financial Resources (dollars)

2014–15 Planned Spending	2014–15 Actual Spending	2014–15 Difference (actual minus planned)
4,755,921	6,371,865	1,615,944

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
46	58	12

Performance Results

Sub-Sub-Program 3.2.3.2: Environmental Technology Innovation			
Expected Results	**Performance Indicators**	**Targets**	**Actual Results**
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 criteria air contaminants (CACs) resulting from municipal projects supported by the GMF	100,000 t greenhouse gases (GHGs) by 2013–14 100 t CACs by 2013–14	11,533 t GHGs in 2014–15 5,280 t GHGs in 2013–14 4.2 t of air pollutants in 2014–15 3.1 t of air pollutants in 2013–14 GMF funding recipients report on environmental benefits based on one complete year of operation within the first three years of the project being completed. Environmental benefits reported this year thus reflect recently completed projects that were approved for GMF funding in previous years. In 2013-14 and 2014–15, GMF-funded projects reported fewer GHG and CAC emissions reductions than expected. This may be due in part to the focus of GMF projects reporting in those years (GMF funds projects focused on many aspects of environmental performance including, but not limited to, emissions reductions), the limitation that emissions reductions are reported for only one year of a project lifetime, and because some projects may omit reporting their emissions reductions. In addition, the targets were identified by Environment Canada based on emissions reductions reported in the 2009-10, 2010-11 and 2011-12 GMF Annual Reports; these reductions may not have been representative of future emissions reductions. The indicator will be refined in future years to provide better measurement of the environmental benefits of GMF.

Performance Analysis and Lessons Learned

Highlights of the Department's performance in 2014–15 include the following:

- Delivered environmental science and technology analysis and program management to support the Government of Canada's clean air and GHG technology investment in the Green Municipal Fund (GMF).
- Continued to lead the development of an International Organization for Standardization (ISO) standard on ETV (ISO 14034) on behalf of Canada. Work by two international working group meetings brought the standard closer to publication. Environment Canada was appointed Convener and Chair of the ISO 14034 Expert Working Group for the duration of the project (to 2016). The standard has already garnered interest in Canada from Sustainable Development Technology Canada and the GMF as a due diligence tool for federal investment in environmental technologies.

- Completed two environmental technology verifications and renewed six others through Globe Performance Solutions (Environment Canada's third-party delivery agent for the ETV Program until March 31, 2015).

Program 3.3: Compliance Promotion and Enforcement – Pollution

Program Description

This program contributes to minimizing damage and threats to the natural environment and biodiversity through the promotion and enforcement of legislation administered by Environment Canada. Activities 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 deliver activities to increase regulatees' awareness, understanding and compliance with regulations and other risk management instruments under the *Canadian Environmental Protection Act, 1999,* and the *Fisheries Act.* The goal is to increase the effectiveness in achieving desired environmental results. The officers also provide information on risk management instrument requirements, the benefits of compliance and the potential penalties of non-compliance, when applicable. Enforcement officers gather intelligence, conduct inspections to verify compliance with laws and regulations, and pursue investigations to take appropriate enforcement measures against offenders. The program works with the U.S. and Mexico through the North American Commission for Environmental Cooperation to strengthen transboundary environmental enforcement. The program also includes officer training, information management systems for new regulations and administration, and is informed by scientific analyses and expertise, including science advice to support compliance promotion and enforcement actions.

Budgetary Financial Resources (dollars)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
38,324,642	38,324,642	42,693,720	42,309,866	3,985,224

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
296	363	67

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	10% increase in compliance relative to the baseline *Dry Cleaning Regulations*: 2015–16 (baseline year 2012–13) *Pulp and Paper Effluent Regulations:* 2016–17 (baseline year 2013–14)	98% in 2014–15 This indicator is intended to measure changes in compliance for selected regulated sectors. First, a baseline compliance rate is determined through inspections of a random sample of regulated facilities or persons. A second measurement is then conducted a few years later to determine if the application of enforcement and compliance promotion efforts has increased compliance. Where

		Metal Mining Effluent Regulations: 2017–18 (baseline year 2014–15)	the initial baseline rate of compliance is 90% or higher, a second measurement is not conducted and efforts are directed to other sectors. The value reported this year is the baseline rate for facilities regulated under the *Metal Mining Effluent Regulations*. As the current compliance rate is very high, future reporting for this indicator will address other sectors. The reported compliance rate considers only specific sections of the regulations and the *Fisheries Act* at each site at the particular time it was inspected. It does not take into account non-compliance that may have occurred or was reported at other times during the year. It also does not include contraventions to administrative or other sections of the regulations that do not have direct environmental impact.

Performance Analysis and Lessons Learned

In 2014–15, Environment Canada conducted and reported on 7,944 inspections and 66 investigations to enforce regulations under the *Canadian Environmental Protection Act, 1999* (CEPA 1999) and the *Fisheries Act*. These activities resulted in 3,430 enforcement measures taken in cases of non-compliance, which included prosecutions, written warnings, Environment Protection Compliance Orders, directions and tickets. Successful prosecutions totaled 40 and resulted in over $9.4 million in penalties. The largest penalty ever imposed for environmental infractions in Canada saw a company (Québec) fined $7.5 million for 45 charges under the *Fisheries Act*, resulting from several incidents. In another case, a company (Alberta) was fined $850,000 under the *Fisheries Act*. Other successful prosecutions were published in the Enforcement Notifications.[xciii]

In order to increase regulatory compliance in the dry cleaning sector, the Department contacted and provided promotional materials for all concerned dry cleaners resulting in 100% of the community being aware of the regulatory requirements. Environment Canada conducted 720 new inspections and 16 new investigations under the *Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations,* resulting in 706 enforcement measures.

Action taken to address some priority issues under the National Enforcement Plan included: establishing a baseline compliance rate for *Metal Mining Effluent Regulations* (98.6%*);* initiating work to ensure the removal of 325 high-risk storage tanks (*Storage Tanks Systems for Petroleum Products and Allied Petroleum Products Regulations*); and improving reporting to the National Pollutant Release Inventory[xciv] in the Chemicals and Manufacturing, Oil and Gas and Metal Manufacturing sectors.

The Department continued to develop operational capacity to identify high risk non-compliance in the North (e.g., illegal entry into protected areas) and continued its participation in interdepartmental working groups to ensure environmental enforcement is taken into consideration in pan-government policy development regarding the North.

The Department engaged with the U.S. and Mexico under the auspices of the Commission for Environmental Cooperation's Enforcement Working Group to deliver on its multilateral commitments and participated in capacity building initiatives.

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 Travel and Other Administrative Services. Internal Services include only those activities and resources that apply across an organization and not to those provided to a specific program.

Budgetary Financial Resources (dollars)

2014–15 Main Estimates	2014–15 Planned Spending	2014–15 Total Authorities Available for Use	2014–15 Actual Spending (authorities used)	2014–15 Difference (actual minus planned)
181,427,802	181,427,802	204,386,901	203,115,955	21,688,153

Human Resources (FTEs)

2014–15 Planned	2014–15 Actual	2014–15 Difference (actual minus planned)
1,472	1,487	15

Performance Analysis and Lessons Learned

In 2014–15, Environment Canada's internal services continued to enable the Department to align with government-wide goals to accelerate the transformation of systems and processes providing increased efficiency. Progress on several fronts of the Department's Transformation@ EC Agenda aligned with Central Agencies' directions (including the Clerk of the Privy Council's Blueprint 2020 Initiative).

The Department:

- Established a senior management committee to implement and oversee change management in a manner that supports employees and managers during the transformation.
- Continued to implement key human resources change strategies, focusing on building a shared understanding and promoting greater employee engagement in the performance assessment and rating process (including for core competencies), and supported employees during the migration to a new standardized online system to document performance conversations.
- Completed all necessary design, development, testing and training to allow for migration to the new SAP financial system, and advanced migration to new enterprise-based systems for telephony and electronic mail.
- Worked closely with partner organizations to prepare content for migration to the site, as theme lead for the Environment and Natural Resources section on the newly created canada.ca.
- Improved the usability of the Department's intranet site, reducing content by 75% and introducing a structure that makes content easier to find.
- Continued to implement a national accommodation strategy to modernize and to reduce EC's footprint.
- Developed, implemented and monitored an overarching communications approach for each transformation initiative with a view to gauging readiness, awareness, employee engagement and adaptation throughout each phase of change.

- Advanced Environment Canada's greening government operations by shifting the focus of departmental publications from print to online and updating the Greenhouse Gas reduction implementation plan for departmental facilities and fleet, and continued to implement the federal Policy on Green Procurement.

In collaboration with the Department's science and technical programs, Internal Services continued to address the challenges of recruiting and retaining highly specialized staff to deliver key scientific programming. Efforts focused on maintaining long-term recruitment and staff development strategies, and on maintaining the close working relationships with universities to assist in developing the future workforce.

As part of a broader strategy to reduce the risk of not being able to deliver its services because of the failure of essential infrastructure and systems, Internal Services providers continued to support key departmental programs in developing and testing business continuity plans.

Section III: Supplementary Information

Financial Statements Highlights

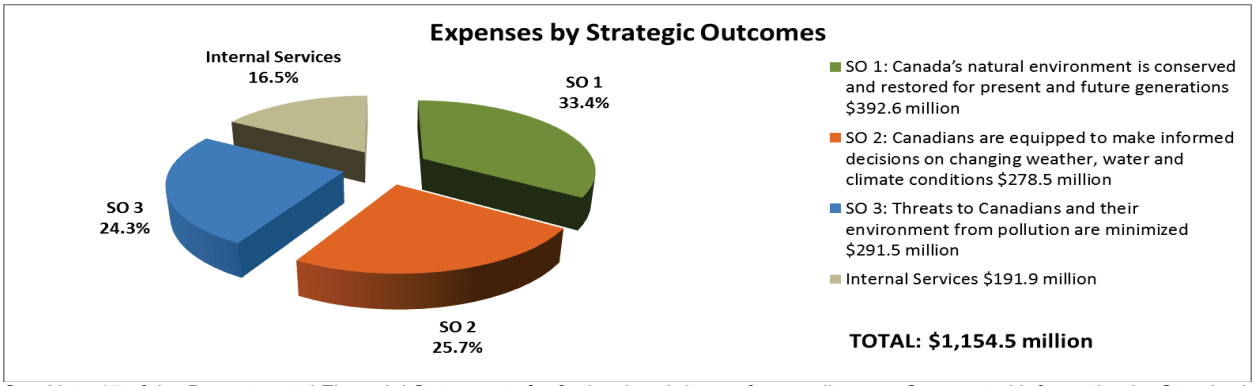
The financial highlights presented on the following pages offer an overview of Environment Canada's Statement of Operations and, Departmental Net Financial Position, and Statement of Financial Position.

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

Environment Canada **Condensed Statement of Operations and Departmental Net Financial Position (unaudited)** **For the Year Ended March 31, 2015** **(dollars)**					
	2014–15 Planned Results	**2014–15 Actual**	**2013–14 Actual**	**Difference (2014–15 actual minus 2014–15 planned)**	**Difference (2014–15 actual minus 2013–14 actual)**
Total expenses	1,188,166,457	1,154,524,465	1,136,476,168	-33,641,692	18,048,297
Total revenues	88,595,384	90,287,423	90,284,419	1,694,039	3,004
Net cost of operations before government funding and transfers*	1,099,571,073	1,064,237,042	1,046,191,749	-35,335,731	18,045,293

Expenses by Strategic Outcomes

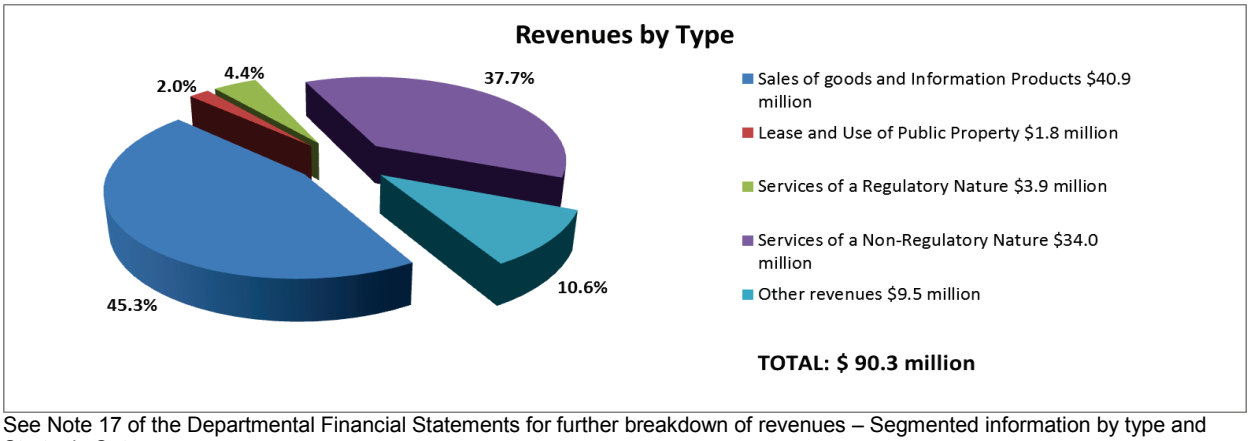
Total departmental expenses by Strategic Outcomes amounted to $1,594.5 million for 2014–15 ($1,136.5 million for 2013–14). The increase of $18 million or 1.6 percent is mostly due to additional transfer payments of $10 million related to National Conservation Plan and a contribution of $11.2 million in support of Sustainable Ecosystems. The increase is also explained by a $9.9 million write-down/write-off and $5.4 million in amortization of Asset Under Construction (AUC) from the clean-up effort resulting from the asset count. A total of $21.6 million is attributable to environmental liability expenses due to a different method for calculating discounted liabilities as per a new directive from Treasury Board and the Department of Finance. These increases are offset by the withdrawal of a provision for contingent liabilities and a reduction in professional and special services expenses.



See Note 17 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 2014–15 ($90.3 million for 2013–14). This amount excludes $26.1 million earned on behalf of Government. The majority of the revenue in 2014–15 is derived from Environment Canada's sales of goods and information products and services of a non-regulatory nature. Major revenue items include for example: Oil sands monitoring activities, ocean disposal permit applications, the hydraulics laboratory, ocean disposal monitoring fees and weather and environmental services.



See Note 17 of the Departmental Financial Statements for further breakdown of revenues – Segmented information by type and Strategic Outcomes.

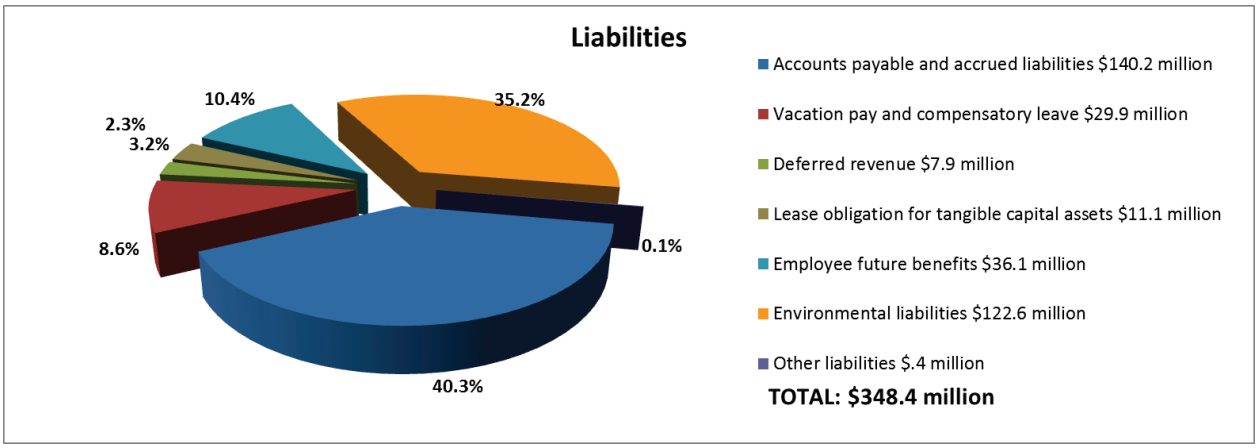
Environment Canada
Condensed Statement of Financial Position (unaudited)
As at March 31, 2015
(dollars)

	2014–15	2013–14	Difference (2014–15 minus 2013–14)
Total net liabilities	348,371,623	340,429,458	7,942,165
Total net financial assets	147,106,520	130,434,381	16,672,139
Departmental net debt	201,265,103	209,995,077	-8,730,274
Total non-financial assets	372,283,687	385,433,577	-13,150,190
Departmental net financial position	171,018,584	175,438,500	-4,419,916

Liabilities by Type

Total liabilities were $348.4 million at the end of 2014–15. This represents an increase of $8 million or 2.3 percent from the previous year's total liabilities of $340.4 million. Accounts payable and accrued liabilities and environmental liabilities represent the largest component of liabilities at $262.8 million (75.4 percent of total liabilities) in 2014–15.

The increase in Environment Canada's total net liabilities valuation is mainly attributable to three factors: increase in accrued liabilities related to the pay in arrears, increase of the Environmental liabilities due to the method for calculation discounted liabilities and the withdrawal of the contingent liabilities.



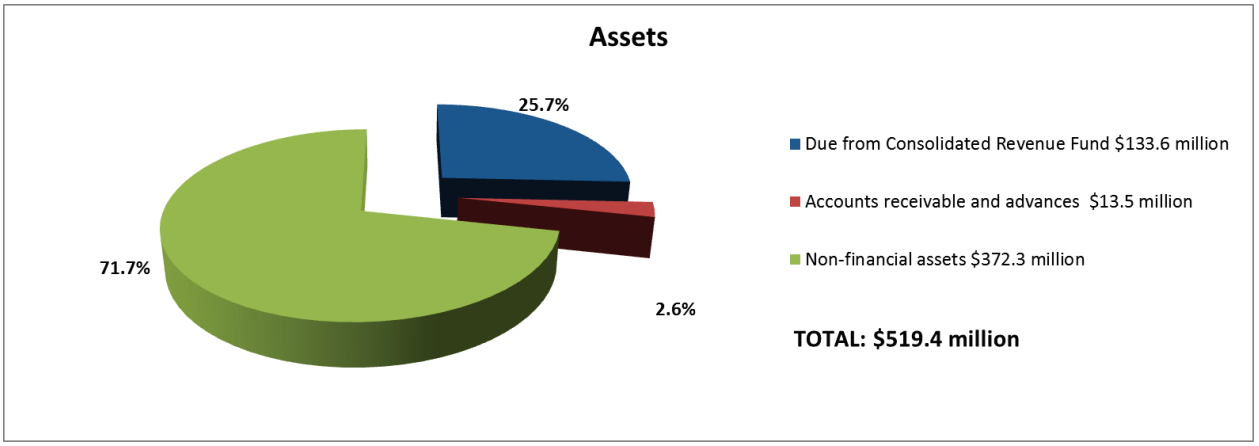
*Figures may not add up due to rounding

See Notes 4 to 7 and Notes 12 and 13 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 ($147.1 million) and non-financial assets ($372.3 million), together valued at $519.4 million, increased by $3.5 million or 0.7 percent in 2014–15. Tangible capital assets continue to represent the largest component of assets at $361.9 million (69.7 percent of total assets) in 2014–15.

The increase in Environment Canada's total net assets valuation is mainly attributable to the net of an increase in due to Consolidated Revenue Fund of $21.5 million related to the pay in arrears and a reduction of $13.9 million in tangible capital assets due to many write-offs resulting from the asset count and the AUC clean-up.



See Notes 9 to 11 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, and not an accrual basis. Reconciliation between Parliamentary Appropriations used (modified cash basis) and the Net Cost of Operations (accrual basis) is set out in Note 2 and 3 of Environment Canada's Unaudited Financial Statements on Environment Canada's website[xcvi].

Supplementary Information Tables

The supplementary information tables listed in the *2014–15 Departmental Performance Report* are available on Environment Canada's website[xcvii].

- Departmental Sustainable Development Strategy;
- Details on Transfer Payment Programs;
- Horizontal Initiatives;
- Internal Audits and Evaluations;
- Response to Parliamentary Committees and External Audits;
- Status Report on Transformational and Major Crown Projects;
- Up-front Multi-year Funding; and
- User Fees, Regulatory Charges and External Fees.

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*[xcviii] 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 (*crédit*): Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures (*dépenses budgétaires*): Includes operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

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

full-time equivalent (équivalent temps plein): 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 (résultats du gouvernement du Canada): 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 (Structure de la gestion, des ressources et des résultats): 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 (dépenses non budgétaires): Includes net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (rendement): 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 (indicateur de rendement): 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 (production de rapports sur le rendement): The process of communicating evidence-based performance information. Performance reporting supports decision-making, accountability and transparency.

planned spending (dépenses prévues): 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.

plan (*plan*): 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 (*priorité*): 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 (programme): 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.

Program Alignment Architecture (architecture d'alignement des programmes): 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 (rapport sur les plans et les priorités): Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

result (résultat): 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.

statutory expenditures (dépenses législatives): Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

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

sunset program (programme temporisé): 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 (cible): 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.

voted expenditures (dépenses votées): Expenditures that Parliament approves annually through an Appropriation Act. The Vote wording becomes the governing conditions under which these expenditures may be made.

whole-of-government framework (cadre pangouvernemental): 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] *Fisheries Act*: www.ec.gc.ca/pollution/default.asp?lang=En&n=072416B9-1
[viii] *Antarctic Environmental Protection Act*: www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=56303427-1
[ix] *Migratory Birds Convention Act, 1994*: www.ec.gc.ca/nature/default.asp?lang=En&n=496E2702-1
[x] *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
[xi] *Canada Wildlife Act*: www.ec.gc.ca/alef-ewe/default.asp?lang=En&n=E8EA5606-1
[xii] *Federal Sustainable Development Act*: www.ec.gc.ca/dd-sd/default.asp?lang=En&n=C2844D2D-1
[xiii] *Canadian Environmental Assessment Act, 2012*: www.laws-lois.justice.gc.ca/eng/acts/C-15.21/page-1.html
[xiv] *Environmental Violations Administrative Monetary Penalties Act*: www.laws-lois.justice.gc.ca/eng/acts/E-12.5/page-1.html
[xv] *National Wildlife Week Act*: www.laws-lois.justice.gc.ca/eng/acts/W-10/index.html
[xvi] *Canadian Environmental Week Act:* www.laws-lois.justice.gc.ca/eng/acts/e-11/index.html
[xvii] Environment Canada Science Strategy 2014–2019: www.ec.gc.ca/scitech/default.asp?lang=En&n=72C52D55-1
[xviii] Federal Sustainable Development Strategy: www.ec.gc.ca/dd-sd/default.asp?lang=En&n=A22718BA-1
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