Environment Canada

1998-99

Estimates

A Report on Plans and Priorities

Approved

Minister of the Environment

Management Representation Statement

Management Representation

Report on Plans and Priorities 1998-99

I submit, for tabling in Parliament, the 1998-99 Report on Plans and Priorities (RPP) for

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To the best of my knowledge (and subject to the qualifications outlined below), the information:

- ❑ Accurately portrays the Department's mandate, plans, priorities, strategies and expected key results of the organization.
- ❑ Is consistent with Treasury Board policy and instructions and the disclosure principles contained in the *Guidelines for Preparing a Report on Plans and Priorities.*
- ❑ Is comprehensive and accurate.
- ❑ Is based on sound underlying departmental information and management systems.
- ❑ I am satisfied as to the quality assurance processes and procedures used for the RPP's production.

The planning and reporting structure on which this document is based has been approved by Treasury Board Ministers and is the basis for accountability for the results achieved with the resources and authorities provided.

Name: _____

Date: _____

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Section 1: Message from the Minister of the Environment

Canadians want to feel confident that they and their children will live in a healthy environment now and in the future. They also want a reaffirmation of the Government of Canada's commitment to conserve and improve the quality of our natural environment.

Canada's environment is in better shape today than it has been for many decades. But in the absence of continued action the hard won gains of the past quarter century will not endure into the next millenium.

As Minister, my goal is to define an environmental agenda that everyone can own and act upon. I am committed to delivering for Canadians now and in the future the kind of environment they want and deserve, the kind of environment which is the foundation of good health, which is the foundation of prosperity, which is a source of pride for Canadians and an example for all.

For these reasons I am committed to making some significant improvements to the quality of the Canadian environment in four areas where science tells us the risks to human and ecological health are greatest:

- Climate Change
- Clean water
- Clean air
- Nature

There is no debate over the need for strong and effective government leadership in tackling these environmental priorities. Our air, our water and our nature are held in common by the community that is Canada. The capacity to tackle these challenges is as widespread and diverse as Canada itself. Success will depend on harnessing the will power and the ingenuity of individuals in all walks of public and private life.

My approach is based on the firm belief that Canadians are well positioned to make progress and that the mosaic of Canada is best mobilized through a focus on the shared results we want to achieve. Canadians are tired of debate over jurisdictions and responsibilities - they want to see the job done - and they want to know where and how they can best contribute.

To put this approach into action, I am pleased to introduce Environment Canada's *Report on Plans and Priorities*. This report identifies for Canadians what we intend to achieve and by when on each of my priorities. It also specifies what Environment Canada will do over the course of the next three years to make measurable progress towards achieving those results. In setting out some measurable results, my approach not only lays the groundwork for effective action, it also responds to Canadians' needs for an approach which is trustworthy, transparent and open. As such it sets out a clear framework of accountability for the Department's partnerships.

A results focus which is based on science is the only way to mobilize the partnerships and inspire the innovation needed to make lasting improvements to the quality of the Canadian environment.

Christine S. Stewart

Summary of Key Plans and Priorities

For the period covered by this Report on Plans and Priorities, Environment Canada's priorities are:

- **Climate change**. In 1995, Canadian emissions of greenhouse gases were 9.2% above 1990 levels. With other federal departments, Environment Canada is working toward a domestic agenda to meet new international emissions reduction obligations. Also, Environment Canada will continue to improve its predictive capability to help Canadians protect themselves, their property and their livelihood from the reality of climate variability and adapt to climate change.

- **Clean water**. Environment Canada with its partners is working to prevent releases of toxics into our water and air; virtually eliminate the most serious toxics from the environment; life cycle manage other substances of concern; and restore and conserve ecosystems.

- **Clean air**. Poor air quality contributes to an unacceptable number of hospitalizations and premature deaths in Canadian cities. Environment Canada is working toward: preventing Canadian emissions that contribute to urban smog; and providing more Canadians with information on smog episodes through air quality predictions.

- **Nature**. With its partners, Environment Canada is working toward the conservation of biodiversity in functioning ecosystems, the recovery of species at risk and the conservation of species habitat.

In cooperation with partners, Environment Canada wants to set targets for the above to encourage and sustain concerted action. Environment Canada will put greater emphasis on partnering with Canadian citizens, empowering them with information and some tools to help them take action in addressing the key issues of clean air, clean water, climate change and our natural heritage.

Environment Canada will deliver on these priorities largely through its business line, a *Healthy Environment*. The Department will continue to provide scientific knowledge, devise policies, identify opportunities and costs, and put in place and enforce rules, regulations and incentives as appropriate. Its objectives are to: integrate air quality and climate change actions; target toxics for life-cycle management/pollution prevention and accelerate action to virtually eliminate the worst toxics; work with the provinces to protect species at risk and re-energize completion of Canada's network of protected areas; and continue to engage communities and all our citizens and deliver real environmental results through its ecosystems initiatives.

Environment Canada's second business line, *Safety from Environmental Hazards*, will respond to the priorities by continuing to provide Canadians with weather and environmental information that enables them to understand atmospheric issues and adapt to the risks associated with poor air quality, severe weather and climate change. The objectives will be to: upgrade its climate, air quality and water monitoring networks; develop new products; enhance the Department's predictive capacity; work with other government departments, provinces and industry to ensure national consistency and coordinated response to pollution accidents and environmental disasters; and enhance and promote preparedness and prevention.

Its third business line, a *Greener Society*, will contribute to the departmental priorities by informing Canadians, engaging them in defining time-bounded targets and equipping them with the information, skills and tools to take action to achieve environmental results. The objectives will be to: enhance Canadians' access to environmental information; communicate science more effectively; promote pollution prevention; work with industry to remove barriers to innovation; build on momentum created by the process of developing Canada’s climate change position and the National Accord on Environmental Harmonization to share agendas and ownership of issues and key files.

The Speech from the Throne announced the Government’s intention to recognize the approaching millennium through a series of special initiatives. Environment Canada intends to fully

participate in these initiatives and will announce additional activities throughout the coming year.

In delivering on the departmental priorities, Environment Canada will adhere to five principles:

- Focus on results.
- Mobilize key partners and communities.
- Sound science is the cornerstone for action.
- Achieve results through innovation, information sharing and best practices.
- The Federal Government does its part and demonstrates leadership.

Environment Canada has adopted an ecosystems approach to delivering on its priorities and operationalizing its principles.

From Environment Canada's comprehensive Results Framework (Appendix 7), the following are the selected long-term results and near-term targets and measures of success for the plans and priorities discussed in this report.

Environment Canada (EC)

with its partners, seeks to achieve results:	*to be demonstrated by (targets/measures of success):*
A Healthy Environment	
Goal: Reduce negative impacts on the atmosphere and better understand and adapt to their consequences.	
Concentration of greenhouse gases to be limited through global actions to levels that avoid serious disruption to climate systems.	• A national plan for implementing the Kyoto Protocol on greenhouse gas emissions developed with Natural Resources Canada and other partners by December, 1999; leadership by EC on specific elements (e.g., public education and outreach, science). • Negotiations on international rules associated with the implementation of the Kyoto Protocol and agreement to meaningful participation by developing countries completed by end 1999.
Clean air to breathe in Canada and existing clean Canadian airsheds to be protected from deterioration.	• CCME Canada-wide standards on particulates and ground-level ozone developed by end 1999. • New ambient air quality levels for fine particulates published with HC in 1998.
Negative effects of inhalable particulates on human health and visibility to be minimized.	• Ozone annex to the Canada/United States Air Quality Agreement drafted for negotiation by April 1999.
Negative effects from SO_2 and NO_x emissions on aquatic and terrestrial ecosystems, human health and materials to be minimized.	• The UN ECE Protocol on Multi Pollutants, Multi Effects (ozone/acid rain) negotiated by end 1999. • Sulphur in gasoline regulation promulgated in early 1999. • A *Canada-Wide Acid Rain Strategy* for post-2000 developed by the end of 1999.
Knowledge of atmospheric processes to be improved to anticipate and cope with future atmospheric changes.	• Canada's scientific contribution to the Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report (1998-2000) led by EC. • Air quality monitoring equipment and lab facilities upgraded by end 1999 to improve measurement and analysis of air borne chemicals.
Goal: Eliminate the threat posed by toxics.	
Sources and quantities of toxic substances requiring management to be identified in a timely manner based on sound science.	• CEPA reintroduced in Parliament in 1998. • Risk assessments for 25 PSL2 substances completed 1998-2000. • CCME Canada-wide standards for dioxins/furans, mercury, and benzene developed by end 2000.
Management actions to be implemented toward virtual elimination of PBTs.	• Plans developed and implemented for virtual elimination once PBTs are identified congruent with TSMP and PMTS ongoing. • UN ECE POPs and heavy metals protocols signed in 1998. • UNEP global POPs convention completed by end 2000.
Management actions to be implemented to prevent, reduce or eliminate risks posed by toxics and other substances of concern that do not meet TSMP Track 1 criteria.	• Recommendations to manage 25 PSL1 toxics implemented 1998-2000. • Under National Pollutants Release Inventory, mandatory reporting of materials sent off site for recycling by end 1998. • Releases of toxics reduced by 25 000 tonnes through ARET by end 1999. • *Federal Pollution Prevention Strategy* implemented by all federal government departments 1998-2000. • Federal pollution prevention planning process for CEPA toxic substances implemented by end 1999. • Regional action plans under NAFTA CEC developed by end 1999. • Obligations under Binational Strategy fulfilled 1998-2005. • Computerized tracking of hazardous waste for safe disposal and recycling implemented by end 1999. • Action plan under National Programme of Action for the protection of the marine environment from land-based activities implemented in 1998.
Goal: Fairly and effectively enforce environmental laws and regulations.	
A high level of compliance with laws and regulations to be achieved.	• Targeted compliance promotion and enforcement actions for ODS, hazardous waste and wildlife smuggling, particularly at international borders, starting in 1998. • Inter-agency coordination enhanced and, through CCME, process to discuss harmonization of enforcement launched in 1998.

Goal: Conserve and enhance Canadian and global biodiversity.

Positive recovery trends for threatened or endangered species to be achieved through federal endangered species initiatives.	• CESPA reintroduced in Parliament in 1998. • Implementation strategy developed with provinces and territories for the National Accord for the Protection of Species at Risk in 1998.
Targeted wildlife populations under federal jurisdiction to be sustained at or increased to healthy levels.	• Migratory Birds Regulations updated by August 1999. • All regional working groups of Partners In Flight in place by March 1999.
Significant wildlife habitat and ecosystems to be protected and enhanced.	• Habitat status on an ecosystem basis better understood through a National Wildlife Areas systems plan in 1998. • Update to the North American Waterfowl Management Plan completed by September 1998.
International biodiversity agenda to be advanced through Canada's leadership and expertise.	• WAPPRIITA regulations regarding personal and household effects and personal pets and labeling provisions of packages or shipping containers with regard to CITES listed species approved in 1998. • Canada's first Country Report on implementation of the Convention on Biological Diversity released in 1998 and federal modules on implementation of the *Canadian Biodiversity Strategy* completed by end 1998. • International negotiations on the Biosafety Protocol under the Biodiversity Convention finalized by end 1998.

Goal: Conserve and restore ecosystems.

Federal leadership to conserve and protect Canada's water resources.	• Federal water policy updated in 1999.
Ecosystem science, tools and information to be developed in support of ecosystem management initiatives.	• Northern contaminants program and toxics research expanded in 1999. • Socio-economic information for decision-making improved in 1999.
Vulnerable ecosystems of priority to be identified and conserved through strategies/initiatives.	• Northern ecosystem initiative developed in 1998, launched in 1999.
Ecosystem initiatives of national priority implemented.	• Next phases of St. Lawrence, Lower Fraser/Georgia Basin, Atlantic Coastal and Northern Rivers ecosystems initiatives launched in 1998.

Safety from Environmental Hazards

Goal: Timely and accurate weather and environmental predictions and warnings of severe weather events.

Timely and accurate weather and environmental information to be provided to Canadians.	• Real time access to climate data provided by end 2001. • Seven new Doppler radar installed and 12 existing radars retrofitted for Doppler capability under the National Radar Project by end 2000.
Effective decisions related to social/ economic impacts of changing weather, climate and hydrology.	• Smog forecast expanded to up to four locally-sensitive areas by end 2000. • At least five target markets for specialized products developed 1998-2001 starting with the media and transportation sectors. • Recommendations of the interim report of the Red River Flood Task Force responded to by end 1998. • A client feedback mechanism developed to resolve client concerns by end 1998.
Scientific capacity to understand the past, present and future states of the atmospheric environment.	• Representation of clouds/aerosols in climate and weather models improved by end 1999. • Physical/chemical processes in life cycle of atmospheric constituents (GHG, toxics, acid rain precursors) better understood by end 2001. • Canada's susceptibility to a changing and variable climate better understood, and adaptation strategies assessed by end 2000. • Seasonal to annual predictions improved by end 2000.

Goal: Prevent or reduce the frequency, severity and environmental consequences of emergencies that affect Canada .

Accidental releases to be prevented.	• With OGDs, current emergency prevention and preparedness practices of 20 federal facilities handling hazardous substances (MIACC list 1) evaluated by early 1999 and improvements implemented. • The National Environmental Emergency System implemented in 1998 and system harmonization with OGDs and three provinces explored by early 1999. • Sub-agreement on emergencies under the CCME Harmonization Accord developed by end 1999.

Goal: Promote environmental citizenship and help Canadians effectively use timely environmental information and advice.

Products and services for environmentally-responsible decisions.	• Indicators of health of Canada's environment developed; ongoing reporting through Indicators Bulletins and GreenLane on Canada's progress toward environmentally sustainable development • GreenLane sites for clean air, clean water, nature and climate change to ensure single-window, integrated access to EC science by end 1998. • Integrated (social, economic, environmental) assessments of the state of science and environment on 12 priority issues (acid rain, UVb effects, nutrients, mercury, etc.) 1998-2000. • Computer-based models and tools developed to help Canadians understand and visualize the potential impacts of flood damage and industrial development on ecosystems by end 1999.
Broad public support to be built for the information services provided by Environment Canada.	• Bulletins, publications, computer applications, other initiatives developed to make available, and more effectively communicate, EC science to Canadians in 1998. • Through Biosphère , information/instruction on reducing water pollution and the importance of clean water to St. Lawrence, Great Lakes ecosystems.

Goal: Develop green technologies and provide Canadians with tools to prevent pollution.

Environmental technologies and techniques to be developed and promoted domestically and internationally.	• International protocols, agreements and technology transfer to build environmental capacity expanded by end 1999. • Expert environmental assessment advice provided on projects and Cabinet memoranda ongoing.
Competitive industrial sectors to be achieved through clean production/pollution prevention technologies/techniques.	• Uptake of clean technologies and processes advancement programs in Canada and abroad increased by end 1999. • Information on 10 industrial sectors made available electronically through the Canadian Pollution Prevention Information Clearinghouse in 1998.
Management skills, capacity and activity to be built in communities to address environmental priorities.	• Community funding for 200 projects yearly, in support of climate change, clean air and water, and nature; specifically number of climate change community projects increased by 20%. • With Health Canada, 100 communities assisted yearly through the Community Animation Program to build capacity in addressing local health and environmental issues.

Goal: Mobilize effective partnerships nationally and provide a strong international voice for a sustainable development agenda.

Canada's domestic interests related to sustainable development to be reflected in international fora and mechanisms.	• With DFAIT and other departments, cohesive plan for international environmental activities developed in 1998. • Obligations under the Basel Convention fulfilled by end 2004.
Partnerships with all sectors of society to be established to mobilize action on sustainable development.	• Shared environmental strategy with provinces advanced by implementing the Harmonization Accord and sub-agreements. • Community-based partnerships, education and public engagement in support of climate change outreach launched in 1998. • Models of community sustainability defined and common denominators identified. • Initial remediation measures completed for Sydney Tar Ponds/Muggah Creek contaminated site by end 1999. • With industry, barriers assessed to more rapid development/diffusion of innovation in support of national implementation plan on climate change. • Capacity-building strategy for Aboriginal peoples developed in 1998.
Environmental, economic and social agendas to be integrated in government policies and operations in the context of sustainable development.	• With OGDs, next steps on SD strategies developed by June 1998, including addressing the role of tax measures and subsidy removal. • Authority and responsibility shared and coherent approaches ensured with key OGDs on files such as climate change, CEPA and CESPA implementation. • Size of EC's fleet reduced by 30% in 1998; environmental management systems expanded and environmental performance clauses in contracts by end 1999.

Note: Environment Canada measures its performance over the life cycle of an environmental issue against three kinds of result: near-term outputs (targets); intermediate outcomes (reduced loadings to the environment, pollution prevented, rates of compliance); and long-term outcomes (environmental quality, capacity of society). Which kind of result is the focus of Environment Canada's planning largely depends on the maturity of the particular issue (i.e. the state of knowledge, policy implemented, actions taken).

Section II: Departmental Overview

Mandate, Roles and Responsibilities of the Environment Program

Environment Canada is a science-based department with a mandate (under the *Department of the Environment Act*) that covers preservation and enhancement of the quality of the natural environment, renewable resources (including water, migratory birds and other non-domestic flora and fauna), meteorology, enforcement of the rules of the Canada-U.S. International Joint Commission, and coordination of federal environmental policies and programs.

Environment Canada's long-standing and complementary roles are to:

- provide leadership nationally and internationally on matters pertaining to the sustainability of the environment;
- act on behalf of all Canadians to address environmental issues of national concern and administer and enforce federal environmental laws and regulations;
- advocate, promote and encourage practices that lead to environmental sustainability and cooperate with others having similar objectives; and
- build capacity and deliver services to Canadians to enable them in their daily lives to sustain and adapt to the environment.

Science is the foundation of Environment Canada's leadership, practices, services and regulations, and is essential to achieving results in all its roles and in addressing the priorities outlined in this report.

Sustainable development is the context within which Environment Canada carries out its environmental mandate. As a national goal and policy of the Government of Canada, it shapes environmental management in Canada. The Department is uniquely positioned to provide leadership in building an agenda and in mobilizing Canadians to make sustainable development a reality.

Externally, Environment Canada's accountability is by business lines; internally, management of resources and delivery of results is by responsibility centre within existing organizational structures. The business lines crosscut structures in a matrix management approach, which ensures that the Environment Program: is defined in a national context and delivered in a client-centred manner respecting regional differences; makes results the focus of departmental planning and reporting; and provides a shared strategic context for department-wide expenditure management.

Environment Canada is organized into seven headquarters organizations:

- Offices of the Minister and Deputy Minister
- Athmospheric Environment Service
- Environmental Conservation Service
- Environmental Protection Service
- Corporate Services
- Policy and Communications
- Human Resources Directorate

and five integrated regions: Atlantic; Quebec; Ontario; Prairie and Northern; and Pacific and Yukon.

Vision: At Environment Canada, we want to see a Canada:

- where people make responsible decisions about the environment; and,
- where the environment is thereby sustained for the benefit of present and future generations.

Mission: Make sustainable development a reality in Canada. In order to help present and future generations of Canadians live and prosper in an environment that needs to be respected, protected and conserved, we undertake and promote programs to:

- reduce risk to human health and to the environment;
- provide weather forecasts and warnings and emergency preparedness services; and,
- give Canadians the tools to build a greener society.

Objective

Environment Canada's vision translates into the three results-focused business lines through which the Department plans and reports on its performance:

A Healthy Environment: Canadians are concerned about risks to the environment from human activities, and the danger that these risks pose to human health and the sustainability of the environment. They expect that environmental risks will be understood, monitored and prevented or controlled. In this business line, Environment Canada responds to these risks by: providing scientific knowledge and expertise; developing national strategies and standards with its partners; and establishing federal environmental laws and regulations and ensuring they are vigorously enforced.

Safety from Environmental Hazards: The lives, property and livelihood of Canadians are threatened by naturally-occurring and human-induced environmental hazards ranging from severe weather and airborne volcanic ash to oil spills and tire fires. Through this business line, Environment Canada enables Canadians to minimize the risk, to protect themselves, their property and businesses, and adapt to changing conditions by providing timely weather and environmental warnings, predictions of probable future environmental states, and services aimed at reducing the frequency and severity of environmental emergencies. Our environmental prediction capability provides Canadians with an important social and economic tool.

A Greener Society: Through its third business line, the Department seeks to reconcile environmental and economic interests, remove barriers to environmentally-responsible action, and foster the capacity of all sectors of society to act on their environmental values and responsibilities. The Department provides Canadians with useful and accessible information, readily applicable technologies and tools, and policies that integrate social, economic and environmental considerations and funding for community projects and processes in support of sustainable development.

A fourth activity–*Management and Administration* –provides corporate leadership, integrated systems and common services to support the business lines.

Environment Canada’s science underpins each of its departmental business lines and is fundamental to the delivery of its vision and mission. Its science includes research, monitoring and assessment, technology and indicators development, and reporting activities. Environment Canada uses its science to:

- understand naturally-occurring aquatic, biotic, terrestrial and atmospheric processes and their interactions;
- evaluate and assess the effects of known and emerging stressors on the environment;
- design and evaluate policy options for control, management and adaptation; and
- communicate scientific knowledge and provide Canadians with tools to develop and evaluate actions to address environmental issues.

Context

Environmental Challenges

Over the past 27 years, the quality of Canada's environment has improved. Nevertheless, we face mounting environmental pressures. Air quality in major cities is threatened by automobile and energy use. Toxic chemicals are accumulating in lakes, rivers, wildlife and the North. Greenhouse gas emissions continue to rise. Growing numbers of species face an uncertain future. Weather-related disasters are occurring with increasing frequency.

Much of the pollution pressure originates far beyond Canada's borders. Around the world we see growing consumerism in developed nations, rapid industrialization and urbanization in developing ones, and global population growth. Together, these are putting stress on global ecosystems, testing the limits of the earth's capacity to provide food, water and energy and to absorb wastes.

Whatever the causes, the result is a widening gap between environmental performance and environmental pressures. The problems appear to

be outstripping our capacity to deal with them. And there may still be surprises ahead, unrecognized today.

As our understanding of environmental issues advances, so too does our appreciation of their complex interactions. We are beginning to see disturbing links between seemingly discrete issues like ozone depletion and species loss, the spread in the Great Lakes of zebra mussels and the reappearance of DDT in raptors. And as we understand more about the effects of very low levels of certain substances, we begin to suspect that effects thresholds may be lower than previously thought.

As our attention shifts from localized issues, we may be reaching the limit of incremental, piecemeal approaches. The required solutions may be global pollution prevention, greater respect for the thresholds of ecosystem sustainability, and sustainable resource use. Such solutions will not be achieved in the short term. For Environment Canada, this means building and sustaining the commitment of many partners, domestic and international, to integrated approaches and coordinated action over the years and even decades required to achieve results. Not a simple task.

Strategic Considerations

Traditional distinctions between economic, social and environmental issues are becoming blurred. Increasingly, the environment is a factor in business competition, quality of life, and health and wellbeing.

At every level of society and across all jurisdictions, environmental, economic and social considerations need to be integrated in ways that stimulate employment and preserve quality of life. To achieve this, we must overcome the myth that environmental considerations limit competitiveness in the global market, and must find innovative ways to combine human, social, financial and natural capital.

With the globalization of environmental issues, environmental policy is being internationalized. Where once Environment Canada may have been able to focus primarily on the end-of-pipe discharge of domestic pollutants, today Environment Canada must spend considerable effort developing policy in concert with other nations and international organizations to address issues like acid rain, transport of hazardous waste, hazardous air pollutants or climate change.

Along with this upward shift of policy making is an outward shift of capacity and responsibility toward communities and citizens. Canadians are concerned for their health and environmental legacy and want to act. Environment Canada has had much success in engaging Canadians at the community level, but it is always a challenge to build consensus on goals and actions across differing interests and approaches.

Across orders of government, the environment is a shared jurisdiction. Within the Government of Canada, many departments and agencies share mutual responsibility for the environment. Environment is the most horizontal of mandates. From its creation, Environment Canada has worked to improve its horizontal relations. Perhaps the most important lesson learned has been that a focus on results rather than jurisdiction is the most effective way to work with others.

Working in cooperation with provinces and territories to achieve concrete environmental results has been a long-standing objective of Environment Canada. Past efforts in taking joint and complementary action on major environmental issues (e.g., reduction of ozone depleting substances, reductions in NOx and VOCs and SO_2 emissions) have proven that cooperation leads to concrete environmental results. The challenge is to build on this record of cooperation and the recently signed Canada-wide Accord on Environmental Harmonization to deliver real results.

The Year 2000 issue is recognized as a serious concern for Canada and the world; but it poses its own particular challenges to the Environment Program. In addition to creating financial and program delivery problems, failures of information technology and imbedded systems to deal with the millennium date challenge could threaten systems that safeguard the environment.

Finally, there is the challenge of operating within a fixed budget. While the Department's resources declined substantially between 1994 and 1998, most major program adjustments have been completed, and its reference levels are now

expected to remain constant into the next century. Fixed reference levels carry their own challenge however; inflation, infrastructure renewal and new program priorities will all necessitate ongoing adjustment to Environment Program expenditures.

Environment Canada's Response

Priorities: In recognition of the areas of greatest risk to human and environmental health, the Minister has set four broad priorities as a focus for action over the next years. They are:

- **Climate change**: In 1995, Canadian emissions of greenhouse gases were 9.2% above 1990 levels. Environment Canada is working with other federal departments, provinces and stakeholders toward a domestic agenda to meet new international emissions reduction obligations. Also, Environment Canada will continue to improve its predictive capability to help Canadians protect themselves, their property and their livelihood from the reality of climate variability and adapt to climate change.

  Environment Canada will give particular attention to developing:

  - a national plan for implementing the Kyoto Protocol on greenhouse gas emissions, developed with Natural Resources Canada and other partners, by December, 1999; leadership by Environment Canada on specific elements (e.g., public education and outreach, science);
  - Canada's scientific contribution to the Intergovernmental Panel on Climate Change Third Assessment Report (1998-2000); and
  - negotiations on international rules associated with the implementation of the Kyoto Protocol and agreement to meaningful participation by developing countries completed by end 1999.

  As a result of the 1998 Budget announcement on climate change, $50 million per year for the next three years ($10 million by Environment Canada and $40 million by Natural Resources Canada) will be allocated to build public understanding and encourage early action on climate change.

- **Clean water and air**: Environment Canada is working toward: reducing Canadian emissions that contribute to urban smog; achieving the virtual elimination of the most serious toxic substances from the environment; and providing more Canadians with information on smog episodes through air quality predictions. In co-operation with partners, Environment Canada wants to set targets to encourage and sustain concerted action.

  Highlights of the Department's actions include:

  - publish new ambient air-quality levels for fine particulates in 1998;
  - develop Canada-wide standards on particulates and ground-level ozone by end 1999;
  - promulgate the sulphur in gasoline regulation in early 1999;
  - draft an ozone annex to the Canada/U.S. Air Quality Agreement for negotiation by April 1999;
  - reintroduce the *Canadian Environmental Protection Act* (CEPA) in 1998;
  - reduce toxic releases by 25 000 tonnes through Accelerated Reduction/Elimination of Toxics (ARET) Program and renew the challenge beyond 2000;
  - update the federal water policy by end 1999; and
  - implement recommendations to manage 25 Priority Substance List 1 (PSL1) toxics 1998-2000.

- **Nature**: With its partners, Environment Canada is working toward the conservation of biodiversity in functioning ecosystems, recovery of species at risk and the conservation of species habitat. Environment Canada's priority actions will include:

  - reintroduce the *Canada Endangered Species Protection Act* (CESPA) in Parliament in 1998;
  - develop an implementation strategy with the provinces and territories for the National Accord for the Protection of Species at Risk in 1998;
  - through a National Wildlife Areas systems plan in 1998, better understand habitat status on an ecosystem basis;
  - update the North American Waterfowl Management Plan (NAWMP) by September

1998 to secure habitat and influence land-use practices; and

- continue to implement 10 recovery plans and develop 6 new plans for threatened or endangered species.

Environment Canada intends to fully participate in the Government's Millenium Initiative and will announce additional activities through the coming year.

Many other actions by Environment Canada to address these priorities are described in Section III. Environment Canada will do its part; but the real objective is to engage all Canadians in the national challenge to achieve real environmental results.

There is an important international dimension to each of these priorities. Canada's international environmental agenda needs to be strengthened and better coordinated. Hence the Minister's commitment to ensure Environment Canada provides leadership in international fora and to work with DFAIT to develop a cohesive plan for Canada's international environmental action.

Principles: In order to exercise its leadership effectively, Environment Canada will adhere to the following principles in all its activities and partnerships:

- *Focus on results*. Canadians have little patience for issues of jurisdiction and process; they just want the job done. Governments must focus on what matters — the specific results to be achieved and challenging our partners and ourselves to set targets to achieve them.

- *Mobilize key partners and communities*. Environment Canada's leadership role will be based on mobilizing action throughout Canadian society focused on results. Over the period of the plan, Environment Canada will:

  - continue to emphasize concrete environmental results through coordinated actions with **provinces and territories** and implementation of the recently signed Harmonization Accord;
  - foster relationships with various segments of the **private sector** to establish common or complementary goals, lever actions and work to develop the capacity of **industry** to compete effectively in the global market for sustainable development knowledge;
  - bring **communities** fully within its planning and program delivery, and engage communities in defining and achieving goals;
  - engage **young Canadians** in building environmental knowledge and shaping Environment Canada's management strategy;
  - build partnerships with **Aboriginal people** to successfully achieve sustainable development and ecosystem health; and
  - contribute to building Canadian positions that effectively promote Canada's interests in international agenda related to environment and in a variety of **international** institutions and fora.

- *Sound Science is the cornerstone of action*. Environment Canada is committed to sustain and rejuvenate its scientific capacity, continue to better target its scientific effort, and to better communicate its knowledge. Canadians have a right to know the risks they face and the actions they can take. Information is essential to building a shared understanding of problems and alliances for actions. Environment Canada will increase its communication of science results in a fashion that is relevant to local communities and citizens.

- *Achieve results through innovation, information sharing and best practices*. Developing new, clean technologies will address environmental performance gaps and create economic opportunities. Environment Canada will:

  - expand its capacity to transfer innovative technologies; and
  - work closely with universities and the private sector.

- *The Federal Government does its part and demonstrates leadership*. It is important to move forward on key federal government commitments with our partners. Action on CESPA, CEPA and climate change are important steps toward longer-term success on achieving environmental results.

An ecosystem approach is fundamental to the way Environment Canada carries out its mandate,

delivers on its priorities, and operationalizes its principles. An ecosystems approach combines scientific knowledge on the environment with an understanding of social and economic factors that shape human attitudes, perceptions and behavior. It assumes cooperation among clients and stakeholders, from issue definition through decision making and implementation.

Financial Spending Plan

Overview

($ millions)	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Gross Program Spending	627.4	**578.7**	574.7	573.2
Less: Revenue credited to the vote	(71.7)	**(67.6)**	(68.2)	(67.5)
Net Program Spending**	555.7	**511.1**	506.5	505.7
Less: Revenue credited to the Consolidated Revenue Fund	(7.0)	**(10.7)**	(9.6)	(9.6)
Plus: Cost of services provided by other departments	50.3	**50.6**	50.6	50.6
Net Cost of the Department	**599.0**	**551.0**	**547.5**	**546.7**

Gross Planned Expenditures by Business Line for the Planning Period

($ millions) **Business Lines**	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
A Healthy Environment	242.8	**233.6**	232.1	231.3
Safety from Environmental Hazards	224.3	**200.8**	201.9	201.6
A Greener Society	92.3	**80.8**	78.5	78.7
Administration	68.0	**63.5**	62.2	61.6
Departmental Total	627.4	**578.7**	574.7	573.2

* Reflects best forecast of total planned spending to the end of the fiscal year.

** The $44.6 million decrease in 1998-99 planned spending over 1997-98 forecast spending is due mainly to:

- 1996-97 operating budget carry-forward into 1997-98 ($21.3)
- Savings identified through the Program Review II ($20.1)
- 1997-98 Payments under the Employee Departure Incentive Program ($9.1)
- Completion of the Canadian Lightning Detection Network Project ($9.5)
- Funding for Climate Change Initiatives (1998 Federal Budget) $10.0
- Adjustment included in the Fiscal Framework 98-99 for St-Lawrence Action Plan and Irving Whale $6.8

Section III: Plans and Priorities by Business Line

Healthy Environment

Goals: Environment Canada's *Healthy Environment* business line is about understanding the environment and taking action with Canadians to protect, conserve and adapt to it. With its partners and all Canadians, Environment Canada's long-term goals are to: reduce the negative impacts of human activity on the atmosphere and help Canadians better understand and adapt to the consequences; eliminate the threat posed by toxics to human health and the environment; conserve and enhance Canadian and global biodiversity; conserve and restore ecosystems; and fairly and effectively enforce and promote compliance with Canada's environmental laws and regulations.

Roles: With these goals in mind, Environment Canada's activities include: engaging partners in restoring and conserving ecosystems such as the Fraser, northern rivers, Great Lakes, and Atlantic coast; research and development on the atmosphere, toxics, water and wildlife; working with the International Joint Commission, provinces and communities in protecting Canada's interests in boundary and transboundary waters; identifying and controlling the most dangerous chemicals that threaten air and water quality from among the more than 20 000 in use in Canada; protecting over 400 species of migratory birds and 11 million hectares of habitat; efforts to sustain 291 plant and animal species endangered or at risk in Canada; and approximately 1 700 inspections each year for compliance with Canada's environmental laws and regulations (yielding some 85 prosecutions in the last five years).

Resource Adjustments: These activities consume approximately 40% of the Department's reference level. Proportional investment in its *Healthy Environment* activities from year to year remains roughly the same. However, in real dollars Environment Canada's expenditure in this business line declined by $80 M (26%) from 1994 to 1998. While the reference level is expected to remain stable to 2001, the net effect of capital renewal, inflation and other demands will be to further constrain program resources.

Reductions to date have been accomplished through: reduced atmospheric monitoring; refocusing research on climate change, smog and particulates, and air toxics; sunsetting as planned the contaminated sites clean-up program and federal PCB destruction; reductions in migratory bird and wildlife science; new funding mechanisms for the Wildlife Habitat Conservation Stamp; reductions in grants and contributions; and reductions in water management activities.

Risks: While Environment Canada's resources are declining, Canadians face mounting risks to their health and environmental legacy, as well as to Canada's trade and prosperity.

Smog: Canada's cities experience smog at levels that, according to a recent OECD review, are unacceptable to human health. An estimated 1 500 Canadians die prematurely every year as a result of smog. Many more are hospitalized.

Ozone depletion: The deterioration of the ozone layer has contributed to a tripling of skin cancer rates in Canada over the past 15 years.

Biodiversity: 291 species are listed as being at risk in Canada. Globally, we are losing an estimated 40 species per day and within 20 years will lose a quarter of the species existing today.

Toxics: 63% of children on Baffin Island have unhealthy concentrations of PCBs in their blood. 300 000 tonnes of chemicals and heavy metals fall on the Great Lakes watershed every year.

Climate change: Scientists predict greenhouse gas emissions will contribute to a projected global temperature increase of 1°C to 3.5°C. In Canada, increasing variability in weather patterns could increase the frequency of severe weather and related losses of lives and property.

Priorities: In this context, priorities must be chosen carefully, based on assessed risk to human and environmental health and opportunities to lever action among essential partners and stakeholders. The priorities for the period covered by this report are clean air and water, nature, and climate change. It is largely through its *Healthy Environment* business line that Environment Canada will deliver on these priorities.

Environment Canada's Commitments

Long-Term Goal:

Reduce the negative impact that human activity has on the ***atmosphere*** *and adapt to its consequences*

The atmosphere is undergoing changes not yet fully understood. In large part, the changes are due to emissions to the air from human activity — acidifying emissions, hazardous air pollutants, smog, ozone-depleting substances and greenhouse gases (GHGs). Resulting changes can be grouped under two broad but interconnected issues: air quality and climate change. The variety of pollutants that contribute to air quality issues and to climate change often have common sources. Many of the solutions to these problems lie in the way we produce and use energy and how we transport people and goods. For example, switching to cleaner energy sources can reduce the emissions contributing to smog, acid rain, particulate matter, and climate change. More environmentally-responsible practices will reduce health inpacts of poor urban air and greenhouse gas emissions while at the same time providing opportunities to improve the private sector bottom line.

Environment Canada's recent accomplishments on air quality include its acid rain and smog science assessments, regulations on benzene in gasoline and low sulphur diesel, and new emissions standards for 1998 vehicles; and on climate change, its negotiation of the Kyoto Protocol.

Despite such progress, Canada still confronts major challenges. There is an urgent need to reduce the impact of poor urban air quality on human health. Regarding climate change, the most immediate priority is to develop Canadian measures to effectively implement the Kyoto Protocol to reduce greenhouse gas emissions.

The challenge will be to work with partners (other departments, provinces, industry) to develop strategies that will, as far as possible, improve air quality and at the same time reduce greenhouse gas emissions. Other challenges will be to: sustain the will to act across all sectors and jurisdictions of government in Canada; ensure shared ownership of the issues and Canada's commitments; and overcome barriers and avoid delays in taking action. A key strategy will be to engage Canadians in reducing Canadian greenhouse gas emissions to 6% below 1990 levels by 2008-2012. Other possible targets could include:

- reducing air-pollution related mortality, hospital admissions and asthma episodes by 50% by 2010; and
- protecting 57 milion hectares from acid rain (70% reduction in damaged areas) by 2010.

Environment Canada and its partners have a particular responsibility to help Canadians understand the environmental, economic and social implications of climate change and the causes and health impacts of poor air quality. Environment Canada's science priorities are to: more fully integrate its climate science and ecosystem effects monitoring and its science and socio-economics, and to provide information to enable Canadians to adapt to a changing atmosphere. Environment Canada intends to communicate its science as effectively as possible so that Canadians understand

Science and Technology

Ecosystems Approach to Science Planning

In an effort to more fully understand the effects and interaction of multiple stressors on the environment (e.g., acid rain, atmospheric ozone depletion, toxics, climate change) EC has consciously adopted an integrated ecosystem approach to science planning, delivery and communications.

This approach has created new challenges and demands on our science programs in terms of filling information gaps, ensuring that science focuses on the right questions, that the science capacity to respond to emerging issues is maintained, and that the knowledge can be effectively transferred to Canadians so they can make informed decisions.

It has also led EC to rationalize its R&D programs to be able to more fully address ecosystem conservation (e.g., impacts of climate, UVb radiation and other atmospheric contaminants), ecosystem protection (e.g., sources and fate of toxic substances, non-point source pollution, the effects of toxic substances), ecosystem restoration (e.g., assessment and restoration of sediments, lakes and groundwater) assessment of ecosystem impacts (e.g., climate and land use impacts on hydrology on aquatic ecosystems, cumulative environmental impacts, integrated modeling) and wildlife and wildlife habitat, including endangered species.

the impacts and effects of climate change. The Department will also work with partners to ensure adequate monitoring to support the clean air and climate change priorities.

Environment Canada and its partners across the federal government must lead by doing their fair share. Environment Canada will strengthen key partnerships among federal departments; for example, with Health Canada related to poor air quality, with Natural Resources Canada to address energy practices, and with Industry Canada to promote technology advancement.

Environment Canada, with Natural Resources Canada and the Department of Foreign Affairs and International Trade, is a leader among federal departments in working to reduce greenhouse gas emissions. As a result of the 1998 Budget announcement on climate change, $50 million per year for the next three years ($10 million to Environment Canada and $40 million to Natural Resources Canada over and above their resources already devoted to climate change) will be allocated to help build public understanding and encourage early action on climate change. The additional resources will be allocated to a range of initiatives based on advice from the interdepartmental Climate Change Secretariat established in February 1998 and reporting to the Deputy Ministers of Environment Canada and Natural Resources Canada.

Federal action alone will not do the job; concerted action by industry, communities, the provinces and individual Canadians will be indispensable. Effective engagement with the United States will also be essential. In this context, Environment Canada's measures of success within the planning horizon will include the following:

- A national plan for implementing the Kyoto Protocol on greenhouse gas emissions developed with Natural Resources Canada and other partners by December, 1999; leadership by EC on specific elements (e.g., public education and outreach, science).
- Negotiations on international rules associated with the implementation of the Kyoto Protocol and agreement to meaningful participation by developing countries completed by end 1999.
- Canada's scientific contribution to the Intergovernmental Panel on Climate Change Third Assessment Report, 1998-2000.
- Canada-wide standards on particulates and ground-level ozone developed by end 1999.
- New ambient air-quality levels for fine particulates published with Health Canada in 1998.
- Ozone annex to the Canada/United States Air Quality Agreement drafted for negotiation by April 1999.
- Air quality monitoring equipment and lab facilities upgraded by end 1999 to improve analysis and measurement of air borne chemicals.
- The UN ECE Protocol on Multi Pollutants, Multi Effects (ozone/acid rain) negotiated by end 1999.
- Sulphur in gasoline regulation promulgated in early 1999.
- A Canada-wide acid rain strategy for post-2000 developed by the end of 1999.

Long-Term Goal:

Eliminate the threat posed by ***toxics***

In the effort to eliminate the threat posed by toxics, Environment Canada and its partners have accomplished much. Over the last year we have: released the second and third *National Pollutants Release Inventory* Reports; and initiated a concerted investigation of endocrine disrupters. With regard to persistent and bioaccumulative toxics (PBTs), we have: succesfully concluded a Canadian Council of Ministers of the Environment Policy for the Management of Toxic Substances (PMTS); consulted on the scientific justification and proposed 13 toxic substances for virtual elimination; obtained commitment from the provinces and territories to implement a Canada-wide ban on landfilling wastes containing PCB concentrations higher than 50 ppm; and signed the Great Lakes Binational Toxics Strategy. With regard to other substances of concern, we have: announced management strategies for four PSL1 toxic substances; completed Strategic Options reports for five sectors (electric power generation, steel manufacturing, base metals smelting, metal finishing, refractory ceramic fibres); explored other

tools (regulations and prohibitions for new substances like chlorophenyl and voluntary actions like the Best Management Practices for the Control of Benzene Emissions From Glycol Dehydrators) and new ways of doing business (covenants/ environmental performance agreements, eco-efficiency, ISO 14 000, extended producer responsibility, green products); published the *Canadian Arctic Contaminants Assessment Report* (DIAND lead) and *State of Knowledge Report on Environmental Contaminants and Human Health in the Great Lakes Basin* (HC lead).

For all this progress, much remains to be done. The fundamental challenge is to dispell the belief that economic growth requires environmental pollution. Of paramount concern are the virtual elimination of existing persistent and bioaccumulative toxics and the prevention of new toxic substances entering the environment. Our priorities are to:

- Renew the *Canadian Environmental Protection Act* (CEPA).

  CEPA is Environment Canada's most important tool for managing toxic substances. More than seven in 10 Canadians are very concerned with the manufacture, use and disposal of toxic chemicals. A modernized CEPA will place priority on pollution prevention and improved mechanisms and processes for managing toxics.

- Implement a harmonized federal-provincial approach to the management of toxics.

  A harmonized policy on managing toxic substances with the provinces has been negotiated; its implementation is the next challenge.

- Accelerate our action on PBTs.

  With stakeholders, implement recommendations made to control PSL1 toxic substances and accelerate action on those that are to be declared PBTs. Such actions will require co-operation and support by industry and provinces, as well as international agreement to take action.

- Pick our targets based on assessments of risk.

  The quality and timeliness of risk assessments are important to accelerate action on toxics. We must get the science right to adequately understand the impacts and effects of substances (e.g., endocrine disrupting chemicals). We need to fill in gaps in our data and continue to develop environmental indicators to show progress towards clean water and air.

- Employ innovative approaches to address other toxics of concern.

  Managing other toxics means engaging industry leaders, focusing on prevention and taking a life-cycle approach. It means using the full range of non-regulatory (right to know, challenges, covenants/agreements) as well as regulatory tools. It means stimulating innovative solutions like extended producer responsibility, design for environment, sustainable consumption and production, and eco-efficiency. It means renewing the ARET challenge beyond 2000. Finally, it means enhancing the National Pollutants Release Inventory (e.g., adding substances, lowering thresholds, tracking pollution prevention activities) to aid in tracking progress.

- Play a leadership role in addressing the issue of contaminated sites.

  Federal contaminated sites are a major source of pollution and a government liability. Since resources are a challenge, the federal government must focus on hot spots. As a result, Environment Canada is directing its expertise to high priority federal concerns: Sydney Tar Ponds, *Irving Whale*, Pacific Environment Centre site, Randall Reef, and Northern Woods, as well as addressing its own liabilities.

- Promote due diligence with partners on the Year 2000 issue and take actions based on second Statistic Canada survey of Year 2000 preparedness.

Finally, Environment Canada's priority is to galvanize concerted action among its partners and to establish time-bounded targets for the virtual elimination of the worst toxics and action on other toxics of concern.

For its part, Environment Canada's targets and measures of success within the planning horizon will include:

- CEPA reintroduced in Parliament in 1998.

- Risk assessments for 25 PSL2 substances completed 1998-2000.
- Canada-wide standards for dioxins/furans, mercury, and benzene developed by end 2000.
- Plans developed and implemented for virtual elimination once PBTs are identified, congruent with the federal Toxic Substance Management Policy (TSMP) and PMTS.
- UN ECE persistent organic pollutants (POP) and heavy metals protocols signed in 1998.
- UNEP global POPs convention completed by end 2000.
- Recommendations to manage 25 PSL1 toxics implemented 1998-2000.
- The National Pollutants Release Inventory (NPRI) enhanced by end 1998.
- Releases of toxics reduced by 25 000 tonnes through the ARET program by end 1999.
- Federal Pollution Prevention Strategy implemented by all federal government departments 1998-2000.
- Federal pollution prevention planning process for CEPA toxic substances implemented by end 1999.
- Regional action plans under NAFTA CEC developed by end 1999.
- Obligations under Binational Strategy fulfilled 1998-2005.
- Computerized tracking of hazardous waste for safe disposal/recycling implemented by end 1999.
- Action plan under National Programme of Action for the protection of the marine environment from land-based activities implemented in 1998.

To deliver on commitments within its limited resources, Environment Canada will explore re-engineering its toxics activities and recovering costs of assessing new substances and permitting hazardous waste and ocean disposal.

Long-Term Goal:

Canadian and global biodiversity conserved and enhanced

Canada stewards 20% of the world's remaining natural areas, 9% of the earth's renewable fresh water, 10% of its forests and 25% of its wetlands. With its partners, Environment Canada over the past year: developed the *Canada Endangered Species Protection Act* (CESPA) and signed the National Accord for the Protection of Species at Risk; and implemented a range of habitat protection initiatives. Among the results have been the protection of 82 000 hectares of habitat, the stewardship of 4 000 hectares in land donations (valued at $11 M) and the signing of implementation agreements with five provinces. Among the lessons learned were the importance of focusing on results rather than process or jurisdiction, and of nurturing shared agendas with partners across the Federal Government and with the provinces.

In spite of this progress, Canada remains at risk of losing more of its natural heritage. So we must take action to secure our natural legacy by recovering species at risk and saving habitat.

The challenge will be to channel mounting public interest in nature constructively, build consensus across a broad range of interests, work with a broader range of partners, and seek greater engagement of communities — all while managing expectations carefully. A key strategy will be to build consensus on environmental improvements that Canadians understand and will commit to achieving. For example:

- ❑ Stable or increasing populations of 10 migratory bird species currently designated endangered or threatened by 2005.
- ❑ Recovery plans for all threatened or endangered species of migratory birds implemented by 2005.
- ❑ Two million hectares of habitat protected under the North American Waterfowl Management Plan (NAWMP) by 2002.

Accountability for these targets will be shared by many partners. Environment Canada's contribution will include the following priority actions:

- ❑ Reintroducing CESPA.

  The protection of endangered species is a national priority. CESPA is the Federal Government's first endangered species legislation and Environment Canada is committed to its reintroduction. The Department is reassessing its approach,

building consensus, and developing options for adjusting the legislation.

- ❑ Working closely with the provinces to protect species at risk.

  In particular, the priority will be to implement species recovery plans.

- ❑ Re-energizing the completion of Canada's network of protected areas.

  This will mean creating new wildlife areas and migratory bird sanctuaries and a network of important bird areas, and strengthening incentives for managing private lands for conservation purposes.

- ❑ Renewing and building on the successes of the North American Waterfowl Management Plan (NAWMP).

  NAWMP has been very effective in engaging partners in achieving important environmental results; the priority is to sign the update.

Within the planning horizon, Environment Canada's targets and measures of success will include:

- CESPA reintroduced in Parliament in 1998.
- Implementation strategy developed with provinces and territories for a National Accord for the Protection of Species at Risk in 1998.
- Migratory Birds Regulations updated by August 1999.
- All regional working groups of Partners In Flight in place by March 1999.
- Habitat status on an ecosystem basis better understood through a National Wildlife Areas systems plan in 1998.
- Update to the NAWMP completed by September 1998.
- *Wild Animal and Plant Protection Regulation of International and Interprovincial Trade Act* (WAPPRIITA) regulations regarding personal and household effects and personal pets and labeling provisions of packages or shipping containers with regard to the Convention on International Trade in Endangered Species (CITES) listed species approved in 1998.
- Canada's first Country Report on implementation of the Convention on Biological Diversity released in 1998 and federal modules on implementating the Canadian Biodiversity Strategy by end 1998.
- International negotiations on the Biosafety Protocol under the Biodiversity Convention finalized by end 1998.

Long-Term Goal:

Ecosystems conserved and restored

Environment Canada's initiatives in ecosystems of national priority are the vehicle for delivering many of the Department's environmental and societal results. The Department also applies a comprehensive and collaborative ecosystems approach in addressing its responsibilities for conserving and protecting Canada's water resources, particularly those shared with the United States. Ecosystems results substantiate the importance of integrating shared science, governance, action and reporting in delivering the Environment Program.

Environment Canada's achievements over the past year have included: completion of the Northern River Basins and Mackenzie Basin impact studies; reduced contaminant loadings, degraded sites rehabilitated, wetlands and upland habitat conserved, and public understanding of sustainability enhanced in the Great Lakes, St. Lawrence and Fraser ecosystems. Among the lessons learned through the ecosystems initiatives are: the enormous value of a community-based approach, the importance of clear communications among partners and with stakeholders and the public; and the value of sound science communicated in an effective and timely manner.

Environment Canada's priority actions will include:

- ❑ Continued delivery of measurable environmental improvements under its ecosystem initiatives.

  Specifically, under the Atlantic Coastal Action Program, St. Lawrence Action Plan, Great Lakes Action Plan , Northern Rivers Ecosystem Initiative, Lower Fraser/Georgia Basin Initiative.

- ❑ Continuing to provide environmental leadership in the Arctic.

  Specifically through its support of the Arctic Council, development of a Northern Ecosystem Initiative, and promotion of northern science and technology.

- ❑ Continuing the Department's leadership role in ecosystem science.

  Specifically Phase II of the Northern Contaminants Program II, its role in the Government's $10M toxics research program, and its efforts to integrate socio-economics and ecosystems science.

- ❑ Development of an updated federal water policy as a framework for integrated freshwater management in Canada.

- ❑ Continuing scientific, technical and policy leadership in protecting and conserving Canada's water resources.

  Specifically, working with the International Joint Commission, provinces and stakeholders in addressing the environmental challenges of the 21st century, reducing future flood damages in the Red River Basin, and preventing American actions that could damage Canadian waters (e.g., Devils Lake/Garrison Diversion).

Many of these activities are also supportive of activities and objectives outlined in other components and vice versa. In particular, the first three points above contribute to the toxics agenda.

Within the planning horizon, the targets and measures of Environment Canada's success will include:

- Next phases of St. Lawrence, Lower Fraser/Georgia Basin, Atlantic Coastal and Northern Rivers ecosystems initiatives launched in 1998; and a new northern ecosystem initiative developed in 1998 and launched in 1999.
- Northern contaminants program and toxics research expanded in 1999.
- Federal water policy updated by end 1999.
- Improved socio-economic information for decision making in 1999.

Long-Term Goal:

Environmental laws and regulations fairly and effectively enforced

Environmental laws and regulations, clearly understood and fairly and effectively enforced, are essential to the protection of Canada's endangered species and to the provision of clean air and water. Environment Canada's achievements over the past year have included: strengthened enforcement capacity; implementation of WAPPRIITA, stronger partnerships with the provinces, United States and Canada Customs, the United States EPA, CEC, Interpol and various non-government organizations; improved communications with the public; and the development of enforcement tools for its partners (including two CITES guides used internationally, CFC guides for Customs, and WAPPRIITA training for Canada Customs officers). The results include a compliance rate with dioxin and furan regulations estimated to be 97%.

Environment Canada's enforcement activities confront three kinds of challenges. First, we must lever our work. Given Environment Canada's limited resources, and in order to be effective and avoid gaps in coverage, we must work through partners. Our partners, however, face significant resource reductions of their own (e.g., provincial cuts of up to 30% of environmental enforcement). To maintain proper and prompt intervention, we need to determine the best mix of roles with our partners and coordinate efforts with many key departments (e.g., DFO, Coast Guard, RCMP). Second, working through partners requires new tools like potential new cooperative arrangements with the RCMP on intelligence gathering and analysis. Third, we need to ensure a level playing field. Enforcement has impacts on trade and international agreements (e.g., NAAEC); enforcement activities must be equitable, effective and credible in the eyes of international partners and Canadians alike.

Environment Canada's enforcement priorities are to:

- Target the borders to ensure Canada's international obligations are respected (e.g., ozone-depleting substances, hazardous waste, wildlife smuggling). Offenders will be given one warning letter at most before charges are laid on a given offense. The target will be compliance of over 90% in key sectors.
- Improve communications, reports on activities, statistical information, brochures, enforcement and compliance policies.
- Ensure the federal house is in order. Federal agencies are currently not obligated to follow many CEPA requirements. They do it on a voluntary basis; Environment Canada pro-actively promotes voluntary compliance with CEPA and assists in the development of environmental management systems and compliance plans.
- Assess existing, or the possibility of developing, technologies to support enforcement, particularly at the borders.

Measures of Environment Canada's success will include:

- Targeted compliance promotion and enforcement actions for ozone-depleting substances, hazardous waste and wildlife smuggling, particularly at international borders starting in 1998.
- Inter-agency coordination enhanced, and through CCME, process to discuss harmonization of enforcement launched in 1998.

A Healthy Environment

Gross Planned Expenditures within Business Line

($ millions) **Business Line Components**	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Atmospheric Change	47.5	**54.1**	54.2	54.2
Toxics	42.7	**38.7**	39.5	39.5
Compliance and Enforcement	18.0	**16.9**	17.0	17.0
Biodiversity/Wildlife	44.5	**41.3**	40.0	39.6
Conserving Canada's Ecosystems	90.1	**82.6**	81.4	81.0
Total: A Healthy Environment	242.8	**233.6**	232.1	231.3

*Reflects best forecast of total planned spending to the end of the fiscal year.

Safety from Environmental Hazards

Environment Canada's *Safety from Environmental Hazards* business line is about: reducing the adverse impact of the environment on Canadians, their property and livelihood; and preventing or reducing the frequency, severity and environmental consequences of pollution emergencies. Environment Canada's goals are to help Canadians anticipate or prevent impacts of environmental disasters and to adapt to their environment.

Roles: Environment Canada provides Canadians with warnings, response advice and information for health, safety, adaptation, reduced economic loss, economic efficiency and environmental quality. Each year Environment Canada staff provide on average: 500 000 public forecasts, 200 000 marine forecasts, 400 000 aviation forecasts and 14 000 warnings of severe weather. They respond to 44 million requests for weather information and provide advice on and assessments of over 1000 pollution accidents.

Resource Adjustments: These activities consume approximately 30% of the Department's reference level. From year to year this percentage remains approximately the same. However in real dollars Environment Canada's expenditure in this business line declined by $46 M (21%) between 1994 and 1998. While the reference level is expected to remain stable into the next century, new priorities, capital renewal, salary increases and inflation will have the effect of reducing resources still further and may necessitate further program adjustments. Reductions to date have been made through: the closure of 56 weather offices and the consolidation of forecast production and delivery in 17 centres; rationalization of the climate observation system; reductions in water quality and quantity monitoring; automation of weather observation at 50 sites; a shift in emphasis from emergencies response to prevention and preparedness; and a focus on sharing skills for emergencies prevention and response with industry, provinces and lead agencies.

Risks: The Department has continuously improved the efficiency and timeliness of its operations and the quality of its weather and emergencies services. Today, however, the challenges are becoming greater as the character and costs of environmental hazards are changing. This past year has made Canadians very aware of the enormous cost of, and very real danger from, severe weather events. There is mounting evidence that the global climate is becoming more variable and that extreme weather events may become more frequent. At the same time, Canadians are concerned that we are becoming more vulnerable to human-induced environmental disasters such as chemical spills and toxic fires — as new technologies create more complex and fragile systems, transportation infrastructure ages and resource development increases.

Cost of Canada's Environmental Disasters

Severe Weather	*($ millions)*
Quebec/Ontario/N.B. Ice Storm 1998	500+
Saguenay Flood 1996	500+
Red River Flood 1997	400
Calgary Hailstorm 1991	360
Victoria Snow Storm 1996	200
Winnipeg Floods 1993	160
Edmonton Tornado 1987	149
Calgary Hailstorm 1996	140
Winnipeg Hailstorm 1996	120
Saskatchewan Hailstorm 1994	100
Pollution Emergencies	
St-Basile le Grand 1988	50
Hagersville Tire Fire 1990	25
Laval Paint Factory Fire 1996	25
Ste-Julie PVC Plant Fire 1993	20
St-Amable Tire Fire 1990	10

Priorities: In recognition of these risks and in support of the Department's actions on climate change and clean air and water, Environment Canada's priorities in this business line will include:

- upgrading air quality and water monitoring;
- enhancing climate models and developing new air quality and weather products; and
- promoting pollution spills prevention and ensuring national consistency and capability for emergencies response.

Science and Technology

Improved Prediction Models and Detection Technology

Canadians need information and advice on the environment to help them evaluate risk to their health and safety, businesses and environmental quality. Sound science involving multidisciplinary partnerships is the key. There are two main directions for atmospheric science and prediction: computer models for predicting weather and environmental forecasts and hazards; and detection technology (e.g., Doppler radar, lightning) for detecting and responding to hazards and making short-term forecasts.

Under the first direction, Environment Canada is developing finer-scale atmospheric models and improving the way in which three-dimensional data from around the world are input to the models. These models are used for various environmental hazards and forecasts, including severe weather, seasonal climate predictions, smog and chemical concentrations from pollution emergencies. The highest priority for the second direction is using data from the Doppler radar network (which will be implemented over the next six years) to better understand the science of severe weather and develop short-term forecast techniques for severe weather and environmental hazards, including tornadoes, large hail and floods.

Through these efforts, Environment Canada is trying to widen Canadians' margin of safety from pollution and natural hazards by developing the tools to anticipate, detect and respond effectively to hazards. In so doing, one objective is to minimize social and economic disruption. But Environment Canada is also trying to ensure the quality and value of its environmental products and services with the objective of improving the economic efficiency and global competitiveness of Canadian companies.

Long-Term Goal:

Timely and accurate weather and environmental predictions and warnings of severe weather events

For more than a century, Canada's national weather service has provided Canadians with weather forecasts and warnings. However, risks to lives and property from severe weather, flooding, and poor air quality are worsening. In part because risks are changing and in part because clients are using environmental information in new and different ways, the demand for weather and environmental predictions is changing. Over the past year, Environment Canada responded by: implementing the Canadian Lightning Detection Network; piloting smog forecasting in New Brunswick; introducing the new high-resolution numerical weather prediction model; and piloting a TV weather-alert crawler service in the Toronto area.

The challenges and priorities are:

- Contribute to achieving priority environmental results, namely clean air and climate change.

  We need to fully utilize our weather, hydrological and climate networks and expertise to make progress in meeting our results commitments, notably by upgrading our climate network, expanding our smog forecasts to other provinces, and communicating air and water quality information to decision makers.

- Respond to the changing needs of Canadians, their governments, clients and partners.

  We need to continue to diversify the product base, ensure services are available 24 hours a day, and become more citizen and client centred. The latter includes a push towards implementing a performance measurement system that includes the client's perception of utility.

- Continued development of Environment Canada's prediction capacity.

  We need to continue to build upon our expertise in physical modeling to develop an integrated capacity to predict a wider variety of environmental parameters on various time scales by utilizing a multi-disciplinary approach and conducting scientific research.

- Enhance key linkages with scientific and international partners.

  We can't do it all ourselves — we need to increase synergy by levering resources, technology and expertise through partnerships in four ways: i) more interdisciplinary scientific partnerships; ii) continued exchange of weather and environmental data between jurisdictions; iii) promoting international standards for monitoring; and iv) promoting weather and environmental prediction internationally.

- Mitigate risks of limited resources and "rust-out".

In order to achieve this goal we need to: i) re-engineer and upgrade the infrastructure within existing budgets and, where appropriate, new partnerships; ii) re-engineer service outlets and the efficiency of our aviation program; and iii) support the development of individual learning and succession plans.

- ❑ Ensure weather services are Year 2000 resilient.

  The business of producing weather forecasts and warnings is vulnerable to the "millennium bug" throughout its computer systems. The Environmental Prediction System is one of the Government's mission-critical systems, as it affects the safety and security of Canadians. A formal action plan for Year 2000 targeting mission-critical systems will be completed by June 1998 and fully implemented by January 1, 1999.

Environment Canada's targets and measures of success in meeting these challenges within the planning horizon will include:

- Real time access to climate data provided by end 2001.
- Seven new Doppler radar installed and 12 existing radars retrofitted for Doppler capability under the National Radar Project by end 2000.
- Smog forecast expanded to up to four locally-sensitive areas by end 2000.
- At least five target markets for specialized products developed 1998-2001 starting with the media and transportation sectors.
- Recommendations of the interim report of the Red River Flood Task Force responded to by end 1998.
- A client feedback mechanism developed to resolve client concerns by end 1998.
- Representation of clouds/aerosols in climate and weather models improved by end 1999.
- Physical/chemical processes in life cycle of atmospheric constituents (e.g., greenhouse gases, toxics, acid rain precursors) better understood by end 2001.
- Canada's susceptibility to a changing and variable climate better understood and adaptation strategies assessed by end 2000.
- Seasonal to annual predictions improved by end 2000.

Long-Term Goal:

Frequency, severity and environmental consequences of emergencies that affect Canada prevented or reduced

Accidental releases of polluting substances into the air, land or water can cause severe adverse effects on human health and the environment. Environment Canada seeks to minimize the risk and consequences of emergencies by providing preparedness policies, standards, codes of practice, contingency plans, and technologies for response and remediation. Achievements over the past year included: leading the Regional Environmental Emergencies Team in the planning and recovery of the *Irving Whale*; providing real-time weather information to responders and organizing federal advice during the Red River Flood; under the Fraser River Estuary Spill Prevention Program, reviewing 50 sites along the estuary for compliance with CCME guidelines; providing leadership in developing emergency planning standards and process safety management guidelines for partners and clients; and through partnership in the Major Industrial Accidents Council of Canada (MIACC) announcing the Safer Communities program to raise awareness of environmental emergencies at the community level.

The challenges still ahead and priority actions will include:

- ❑ Enhance partnerships.

  Specifically, the harmonization and co-management of the federal/provincial spill notification and reporting system; working with MIACC partners to raise community awareness of pollution prevention and response; working with other departments regarding emergencies awareness at federal facilities; and science and technology collaboration nationally and internationally.

- ❑ Promote the pollution-prevention provisions of a renewed CEPA.

  Including the safety net provisions of a renewed CEPA, a key benefit of which will be

- Ensure national consistency and capability.

  Environment Canada will undertake various initiatives to strengthen national consistency, including: implementation of the National Environmental Emergency System in all regions with trained staff; developing national statistics on spills and trends; client surveys; performance measures; and improved spill prevention and response technologies and techniques.

Within the planning horizon, Environment Canada's measures of success will include:

- With other departments, current emergency prevention and preparedness practices of 20 federal facilities handling hazardous substances (MIACC list 1) evaluated by early 1999 and improvements implemented.
- The National Environmental Emergency System implemented in 1998 and system harmonization with other departments and three provinces explored by early 1999.
- Sub-agreement on emergencies under the CCME Harmonization Accord developed by end 1999

Safety from Environmental Hazards

Gross Planned Expenditures within Business Line

($ millions) **Business Line Components**	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Weather and Environmental Predictions	214.7	**192.8**	193.9	193.6
Emergency Prevention and Preparedness	9.6	**8.0**	8.0	8.0
Total: Safety from Environmental Hazards	224.3	**200.8**	201.9	201.6

*Reflects best forecast of total planned spending to the end of the fiscal year.

A Greener Society

Goals: Environment Canada's *Greener Society* business line is about helping the Canadian public, community and private sectors understand their environmental responsibilities and act on their environmental values. Environment Canada's long-term goals are to: ensure Canadians have access to timely environmental information and advice; provide Canadians with tools and technologies to prevent pollution and create social, economic and environmental benefits; mobilize effective partnerships in communities and nationally; and provide a strong international voice to build a sustainable development agenda.

Roles: Environment Canada's most valuable contributions to building an environmentally-responsible society are its integration and dissemination of environmental, economic and social information and its support to sectors and communities to act in their own enlightened best interest. Environment Canada's activities include: supporting initiatives in almost 400 communities in two years; transferring nearly 40 patents to the private sector for environmental technologies; receiving one million hits every month on its Internet site; and representing Canada's environmental interests at international environmental gatherings. Public outreach and community engagement are important strategies for coping with today's environmental problems. But Environment Canada's real objective is to bring about the behaviour change that is essential to preventing tomorrow's environmental problems.

Resource Reductions: Environment Canada's activities under this business line account for approximately 20% of the Department's reference level. As a proportion of its overall expenditure, this percentage remains constant year over year. In real dollars, however, Environment Canada's expenditures in this business line declined by $41 M (26%) between 1994 and 1998. Program adjustments included: replacement of the five-year comprehensive *State of Environment Report* with more frequent SOE indicator bulletins developed collaboratively with other departments, the provinces and universities; privatization of the Ecologo; restructuring and reducing its previous community outreach programs to create the Action 21 Program focused on priorities; reductions in grants and contributions and the Environmental Innovations Program. The adjustments are complete and the current level of expenditure will be maintained into the next century.

In a survey of 1400 adults between November 28 and December 2, 1997:

- 92% felt their daily activities had at least a small impact on the environment.
- 84%, including a strong majority from every region, said they would be willing to use less electricity or burn fewer fossil fuels to reduce their impact on the environment.
- 94% of young women said they were willing to change their habits.
- However, only 27% felt their actions would have a significant effect.

A 1994 survey of Ontario mayors found that:

- more than 70% did not know which jurisdictions were responsible for a range of environmental regulations and standards.

Risks: Most Canadians believe the next generation will suffer greater health problems because of an ailing environment. Despite considerable effort over many years by many environmental groups, prominent spokespersons, educators and every jurisdiction to persuade them to the contrary, most Canadians appear to feel helpless to do much about making the world greener. Barriers to environmental citizenship may be systemic. Perceptions persist that: information is either too complex, too difficult to access or too late to be useful; tools are either too costly, risky or time consuming to be beneficial; and messages and incentives are too confusing, contradictory or unsubstantiated to be persuasive.

Priorities: To overcome barriers to environmental citizenship and to contribute to actions on departmental priorities — climate change, clean air and water, and nature — priorities in this business line will be:

- ❑ communicating Environment Canada's science and building understanding of climate change, clean air and water, and nature; and
- ❑ building consensus among key partners on a results-based agenda to galvanize action and align commitments across sectors and communities.

Long-Term Goal:

*Canadians effectively use timely environmental **information** and advice*

Information enables Canadians to turn knowledge into action on environmental issues. Environment Canada has always been a major source of national environmental information and expertise on a wide range of environmental conditions and issues. Environment Canada's achievements over the past year include: collaboration in the production of *Earth Tones* vignettes on the Discovery Channel; a CD-ROM version of the *State of Canada's Environment Report*; over 12 million hits on Environment Canada's Internet website and its expansion to cover areas such as toxics, endangered species, and climate change; and linkages with SchoolNet and other World Wide Web Sites.

There is more Environment Canada can do to understand Canadians' information needs; better inform them about environmental priorities, the science behind them, and the actions they can take; and ensure ready access to the environmental information and products they want. The challenges are to: engage partners; integrate the Department's data management; fully exploit the power of Environment Canada's presence on the Internet (Green Lane) to build public understanding and awareness; and re-engineer its information infrastructure. Environment Canada's priority actions will include:

- Communicating environmental science and information.

  Including development of national indicators and integrated assessments in support of climate change, nature, clean water and air.

- Monitoring and information systems.

  Putting results of environmental monitoring data and interpretive reports on the Internet and enhancing information systems to improve accessibility and management information on environmental issues.

- Expanded use of Green Lane in support of departmental priorities. Environment Canada's web site on the Internet will provide sites on each of the Department's key priorities.

Environment Canada's targets and measures of success will include:

- indicators of health of Canada's environment developed; ongoing reporting through Indicators Bulletins and GreenLane on Canada's progress toward environmentally sustainable development
- GreenLane sites on climate change, clean air, clean water and nature to ensure single-window, integrated access to Environment Canada science by end 1998.
- integrated (social, economic, environmental) assessments of the state of science and environment on 12 priority issues (acid rain, UVb effects, nutrients, mercury, etc.) 1998-2000.
- bulletins, publications, computer applications, and other initiatives developed to make available, and more effectively communicate, Environment Canada science to Canadians in 1998
- computer-based models and tools developed to help Canadians understand and visualize the potential impacts of flood damage and industrial development on ecosystems by end 1999.
- through Biosphère , information/instruction on reducing water pollution and the importance of clean water to St. Lawrence, Great Lakes ecosystems.

Long-Term Goal:

*Tools to prevent pollution and green **technologies** for social, economic and environmental benefits developed*

Clean technologies and pollution-prevention skills benefit Canadians and the global environment in terms of better health and quality of life. Environment Canada is a major source of tools, technologies and skills to clean up, control and/or eliminate pollution. Environment Canada's recent achievements include: promotion of green technologies through Technology Partnerships Canada Program and international environmental assessments; implementation of 18 projects under the International Environmental Management Initiative; promotion of ISO 14000; the publication of *Environmental Life Cycle Management — A Guide to Better Business Decisions*; Action 21 initiatives all across Canada; and the creation of a Youth Round Table.

Science and Technology

Communications and Partnerships in Science and Technology

Effective communication of Environment Canada's science is critical to building the support and confidence of Canadians. At no time in our past has this aspect held such a central focus as it does today. Canadians, being more sophisticated and knowledgeable about the environment, need the tools and information to make better decisions on how to deal with environmental issues that directly impact on their lives. Environment Canada has taken an important step to develop and implement a science communication strategy targeted at improving the transfer of knowledge to Canadians. The strategy will be a reflection of the Department's desire to engage Canadians in our science planning and delivery.

At the same time, our related science activities have become focused, and nowhere is this more evident than in our expanded efforts to develop and transfer environmental information (e.g., Discovery Channel vignettes, S&T home page, youth journalists project) and technologies (e.g., waste-fuel burner with DND for northern Canada, 67 new technology projects with FORD-Q under the St. Lawrence ecosystems initiative, microwave-assisted processes to reduce solvent use in lab testing).

Partnerships are fundamental to every science program and initiative that Environment Canada undertakes. We rely more than ever on partnerships to ensure our science is relevant, timely and useful. This includes scoping of issues, identifying knowledge gaps and developing science-based objectives, guidelines, and standards (e.g., science assessments on environmental issues, environmental effects monitoring programs, and environmental quality guidelines).

Environment Canada's challenges will be to: target departmental support for technology development to the priorities of climate change, clean air and water, and nature; stimulate private sector innovation and eco-efficiency technologies in support of departmental priorities; renew support for the Canadian environmental industry sector with Industry Canada; and improve accessibility for under-represented groups such as youth and Aboriginals to Environment Canada's community-based partnerships.

Environment Canada's priority actions will include:

- transferring technology and know-how within public and private sectors through international protocols and agreements, and promoting clean technologies and processes advancement programs in Canada and abroad;
- improving eco-efficiency, competitiveness, and environmental performance of small- and medium-sized enterprises and working with stakeholders to apply technologies to reduce releases of toxics;
- developing positions and advice through the environmental assessment process for Canadian development projects, plans and policies to improve decision making; and
- providing community funding for projects on climate change, clean air and water, and nature.

The measures of Environment Canada's success will include:

- International protocols, agreements and technology transfer to build environmental capacity expanded by end 1999.
- Expert environmental assessment advice provided on projects and Cabinet memoranda ongoing.
- Uptake of clean technologies and processes advancement programs in Canada and abroad increased by end 1999.
- Information on 10 industrial sectors made available electronically through the Canadian Pollution Prevention Clearinghouse in 1998.
- Community funding for 200 projects yearly, in support of climate change, clean air and water, and nature; specifically, number of climate change community projects increased by 20%.
- With Health Canada, 100 communities assisted yearly through the Community Animation Program, to build capacity in addressing local health and environmental issues.

Long-Term Goal:

Effective partnership nationally and a strong international voice to build a sustainable development agenda

Sustaining the environment is a shared responsibility. Environment Canada has a leadership role to play in establishing stronger and more strategic partnerships, domestically and internationally, based on shared goals and mutual commitment. Over the

past year, Environment Canada has worked to strengthen its partnerships with other government departments. The Department has forged stronger working relationships with the provinces. It is also taking steps to improve the way it engages Aboriginal peoples. While it has had significant success in community-based initiatives, it needs to improve its performance in reaching out to Canadians.

Climate change has given environmental issues momentum. We want to maintain and diversify interest within the Federal Government and with the public. Our inclusive partnership approach to climate change will help us set the tone for other areas of action.

Environment Canada's priorities are to build new partnerships and deliver on existing ones at five broad levels:

- Federal Government: The objective is to ensure federal programs internalize sustainable development. Environment Canada will:
  - build relationships and understanding through joint project management and development;
  - share responsibility for other key files, in particular climate change, CEPA and CESPA implementation;
  - work with other departments to continue to integrate the environment into their agendas; and
  - use the four environmental priorities (climate change, clean air and water, and nature) as a basis for engaging other departments in setting targets and working together to achieve them.
- Provinces and Aboriginal peoples. The objective is continued dialogue and action on results to ensure the highest level of environmental quality throughout Canada. Environment Canada will:
  - launch an inclusive approach to climate change implementation with dedicated resources;
  - build on existing cooperative policies and programs, like the toxics policy, smog management plans, and proposed national program for protection of species at risk;
  - make progress on Harmonization Accord sub-agreements; and
  - develop a capacity-building strategy for Aboriginal peoples consistent with *Gathering Strength: Canada's Aboriginal Action Plan*.
- Canadians/communities. The objective is informed public judgment, consensus and action. Environment Canada will:
  - get information out to Canadians, employ new models of engagement, and foster joint action;
  - catalyse support and action at the community level to reduce climate change emissions; broaden the involvement of youth, create a coalition of educators and a national framework for environmental education with stakeholders and provinces; and
  - work with federal and provincial colleagues and the Joint Action Group (JAG) to provide a feasible community-based solution to the environmental and social challenges of remediating the Sydney Tar Ponds/Muggah Creek contaminated site.
- Industry: The objective is industry ownership and action on environmental protection. Environment Canada will:
  - actively work with industry to assess barriers to more rapid development and diffusion of innovation;
  - effectively engage industry in our policy development process; and
  - work with industry to identify and mitigate risks to the environment due to Year 2000 issues.
- International: The issues of major concern include trade and the environment, multilateral agreement on investment, harmonization of international standards, and international competitiveness. The objective is to use international contacts to protect the Canadian environment and to contribute to the Government's sustainable development and jobs and growth agendas. The challenge is to balance domestic action with international rhetoric. Environment Canada will:
  - with DFAIT and other departments seek to develop a cohesive plan for international environmental activities;
  - target regions (e.g. USA, APEC, arctic countries); and
  - adopt an integrated approach (e.g. agendas, involvement of civil society, regional

implementation of global agreements, strengthen regional agreements).

Along with its science, an important component of Environment Canada's capacity for leadership is the credibility of its own actions. Environment Canada is leading greening activities across government, with other organizations and on the international scene. The Department is committed to reducing the environmental impacts of its activities by adopting a strategic approach to environmental management. Environment Canada's priorities include:

- developing environmental management programs for all Regions and Services;
- requiring environmental performance clauses in all contracts; and
- purchasing energy from renewable sources and reducing Environment Canada's fleet.

Environment Canada's targets and measures of success within the planning horizon will include:

- With DFAIT and other departments, cohesive plan for international environmental activities developed in 1998.
- With other departments, next steps on sustainable development strategies developed by June 1998, including addressing the role of tax measures and subsidy removal.
- Authority and responsibility shared and coherent approaches ensured with other key departments on files such as climate change, CEPA and CESPA implementation.
- Size of the Department's fleet reduced by 30% and environmental management programs in place by end 1998; environmental performance clauses in contracts by end 1998.
- Shared environmental strategy with provinces advanced by implementing the Harmonization Accord and sub-agreements.
- Models of community sustainability defined and common denominators identified.
- Community-based partnerships, education and public engagement campaign in support of climate change launched in 1998.
- With industry, barriers assessed to more rapid development/diffusion of innovation in support of national implementation plan on climate change.
- Capacity-building strategy for Aboriginal peoples developed in 1998.
- Obligations under the Basel Convention fulfilled by end 2004.
- Initial remediation measures completed for Sydney Tar Ponds/Muggah Creek by end 1999.

A Greener Society

Gross Planned Expenditures within Business Line

($ millions) **Business Line Components**	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Information Products and Services	10.7	**7.0**	6.9	6.9
Technologies, Jobs and Capacity Building	55.5	**49.7**	47.7	48.2
Partnerships for Sustainable Development	26.1	**24.1**	23.9	23.6
Total: A Greener Society	92.3	**80.8**	78.5	78.7

*Reflects best forecast of total planned spending to the end of the fiscal year.

Management and Administration

Goals: The purpose of *Management and Administration* (M&A) is to provide corporate leadership, decision-making support, integrated systems and common services to the Minister and the Department. The intended results are:

- M&A infrastructure directly aligned with and supportive of the Department's results-based agenda;
- client service as first priority;
- government-wide directions supported in innovative ways; and
- measurable progress toward results within existing fiscal constraints.

These results must be pursued within the larger government context: cohesive policy management, partnerships, alternative approaches to service delivery, and ongoing fiscal restraint. Environment Canada must prepare for future challenges by being flexible and continuing to develop skills and tools to fulfill its mandate in creative, cost-effective ways.

Roles: The *Management and Administration* function is concerned with managing a complex organization of 4300 people, around the clock and in every region of Canada; that is with setting direction, allocating money, hiring, training and retiring staff, paying bills, keeping the lights on and the computers running, reporting to Parliament and central agencies, maintaining vehicles and delivering the mail.

Resource Adjustments: This business line accounts for approximately 12% of the Department's reference level. Environment Canada's expenditure in this business line has declined by $28M (31%) between 1994 and 1998 but, when streamlining in 1992/93 is taken into account, the combined reduction is closer to 40%. A further reduction of $1M will be made in each of 1999/2000 and 2000/2001. Reductions were made through internal efficiencies, rationalization of activities and the scaling back of administrative support as the Department reduced its program staff and expenditures.

Risks: Risks include an aging work force, technological change, evolving client expectations, Year 2000, and maintaining quality service and accommodating new priorities within a fixed reference level. All these risks serve to underscore the importance of being increasingly strategic in managing the Department's business.

Priorities: Over the planning period priorities will include: developing a framework for more effective management of science and technology (S&T), increasing efficiency and adaptability through alternative service delivery (ASD) as well as through cost recovery; strategic human resource planning; and improved client-focused services, including the application of information technology. The Department will also focus effort on meeting critical Year 2000 readiness objectives.

Managing Environment Canada's Science and Technology

Environment Canada plays an important environmental S&T role in Canada. It is committed to ensuring that environmental S&T meets the needs of Canadians and is delivered in an efficient and effective manner. Environment Canada does so by continuing to emphasize federal and national S&T policies, management of the federal S&T community, effective development and delivery of relevant S&T (especially to policy making), partnerships, and communicating S&T.

During the planning period Environment Canada will advance its S&T agenda by fulfilling previous commitments under the S&T framework and building capacity in the following areas:

- The Deputy Minister's R&D Advisory Board (reported on previously in last year's *Performance Report*) is increasing its involvement in the management of Environment Canada's S&T. It will study R&D priority setting; assessment of Canadian environmental S&T capacity with a focus on the year 2002; integration of socio-economics into Environment Canada policy and planning; enhanced capacity for communicating the relevance and value of Environment Canada's science; and improved linkages between science and policy.

- In conjunction with the natural resource departments and Health Canada, Environment Canada will expand the scope of work under the four natural resource departments' Memorandum of Understanding to include health-environment issues.

- In cooperation with other departments, Environment Canada will pursue a number of key S&T initiatives to: implement the recommendations of the Treasury Board S&T HR exercise; implement the recommendations of the Prime Minister's Advisory Council on S&T; complete and implement the Northern and International S&T strategies; advance technology through the renewal of the Energy Research and Development Program and the Environment Industry and National Biotechnology strategies; and, through partnership with academic institutions and private sectors, enhance science capacity.

Alternative Service Delivery

Alternative service delivery (ASD) encourages effective and innovative programs and service delivery models. Environment Canada has been using a range of models for some time. Examples include: the Canada-BC Laboratory agreement; Terrachoice Environmental Services, a Government-owned, contractor-operated agreement; a "single window" approach to pulp and paper regulations with several provinces; and licensing of the microwave-assisted process technology, which helps chemical laboratories prevent pollution and achieve energy savings. Following are some ASD initiatives within Environment Canada:

- Developing tools, policies and guidelines that enable staff to select and assess commercialization and ASD opportunities.

- Exploring ASD for the Atmospheric Environment Program. The provision of federal services to Canadians has always been the cornerstone of government, and keeping government services modern and adaptive to changing needs is important. The Atmospheric Environment Program is one of Canada's most visible public services and has a long history of providing Canadians with essential weather services and scientific information and advice on past, present and future states of the atmosphere and other related environmental states such as ice, and water quantity and quality. Environment Canada, together with the Treasury Board Secretariat, is studying service delivery alternatives for this important function of government.

The Department is committed to carrying out this study in an open, consultative manner. Consultations sufficient to scope the issues have already been held with stakeholders, including other government departments, provinces, academia, business, employees and citizens. More extensive and formal consultations will be conducted through the spring of 1998. To ensure adequate consideration of all factors and options, the study will continue into the summer.

Considerable work has already been done to analyze the current performance and future requirements of the Atmospheric Environment Program. The study has examined models of weather service delivery in other countries, their mandates, key clients, relations with the private sector, partnership arrangements and funding levels. The study has looked at the current and projected funding requirements of a national atmospheric environment service. Its current and future technological requirements have been examined to determine how Canada is positioned to maintain the integrity of its infrastructure and monitoring and predictive capacity. Finally, it has looked at the human resource requirements of the national weather services in the context of an increasingly competitive international market for weather services personnel and an aging workforce.

The analytic work continues. Canada's public good and strategic requirements of its national atmospheric environment service are being very carefully assessed. Various models are being examined for their potential to maintain and enhance the input of atmospheric science to the Government's process of environmental policy making. Finally, key clients of its services are being interviewed, the current and future potential of domestic and international markets for weather and environmental prediction products and services are being analyzed, and

different approaches for enhancing relations between the public and private sectors in these markets are being assessed.

Taking into consideration the results of these analyses and the Government's commitment to maintain quality weather services for the health, safety and economic wellbeing of all Canadians, the study will analyze various options for sustaining quality atmospheric environmental services well into the next century. The final report of this study will be completed in late summer 1998 and submitted to the Minister of the Environment and President of Treasury Board.

- Exploring ASD for the Emergencies Engineering Division of the Environmental Technology Centre under an approach that will take into account the needs of staff, partners and the Department.
- Exploring ASD for labs as part of the overall review to identify improvements in analytical and laboratory services. Preliminary outcomes suggest various opportunities, such as joint federal-provincial laboratory programs, joint federal laboratory services, private-sector access to Environment Canada laboratories, and joint ventures.
- Continuing to explore shared services with other departments/agencies in the Les Terrasses de la Chaudière complex in Hull. To date, over $3M in savings and improved efficiencies have been realized. The shared services approach is also being used in human resources training and the Department is exploring expanding this approach to a broader range of areas.

Cost Recovery

Since the early 1990s, Environment Canada has been responding to the Government's policy direction to recover costs for services to identifiable recipients of direct benefits beyond those provided to the general public. Revenues have grown steadily, reaching a total revenue forecast of $75M for 1997/98. A further increase of approximately $3M is expected in 1998/99. The major elements of cost recovery are:

- Agreement with NAV Canada for the provision of aviation weather services (annual value approximately $24M).
- Agreements with other federal departments for:
  - provision of ice services to Fisheries and Oceans ($9.7M);
  - delivery of Canadian Forces weather services to DND ($7.2M); and
  - research and development work in support of the Panel on Energy Research and Development administered by Natural Resources Canada ($5.7M);
- Agreements with provinces and other non-federal clients for hydrometric services ($6M).
- Sale of meteorological products and services ($5.3M).

Recoveries from new sources include:

- Revenues expected from the new Canadian Lightning Detection Network (CLDN), operational by the end of 1997/98, will accrue from the sale of data to provinces, hydro utilities and the insurance industry. The CLDN is expected to pay for itself by 2002/03. Forecast revenue in 1998/99 is $1.5M; this is expected to rise to $2.2M by 2000/01.
- For Environmental Protection regulatory services revenue forecasts for 1998/99 are: ocean disposal monitoring, $0.54M; import/export of hazardous wastes, $0.54M; and new substances notifications, $0.25M.
- For migratory bird hunting permits, a proposed fee increase could raise revenues to $2 M.

During 1998/99 efforts to improve cost-recovery support will focus on:

- Financial Systems: to enhance Environment Canada's capacity for marketing and sales analysis involving client information from the accounts receivable database.
- Policy Development and Best Practices: to provide direction for management practices to increase the consistency of cost-recovery practices across the Department and policy

guidance on issues such as dispute resolution and client consultation.

- Education: to provide training in meaningful and effective consultation for commercialization; to implement the Corporate Commercial Office Website.

Human Resources

The Human Resources focus for the next three years will be on the consolidation, adjustment, development and renewal of the current workforce. First, Environment Canada is investigating better ways of organizing the work and deploying the workforce to meet current demands. Second, the workforce must be developed and prepared for a changing future. Finally, Environment Canada will undertake some renewal to supplement the current knowledge and skill mix while substantially improving the representative character of the workforce.

We will begin recruitment in the S&T field to offset the loss of expertise that occurred during Program Review and is expected to continue over the next five to 10 years due to normal attrition.

In the next three years, Human Resources infrastructure activities will focus on implementation of the Universal Classification Standard and Competency-Based Management. These will affect virtually all aspects of HR systems and management practices throughout the Department.

Meeting Clients' Needs

As Environment Canada continues to emphasize a "user pays, user says" approach, it needs the capacity to continuously monitor its performance in delivering client-centered, value-added and results-focused services.

Initiatives will continue in four main areas:

- Performance Measurement: Over the past year, Environment Canada has strengthened its performance measurement in a number of its components and provided training to staff in performance measurement. To continue to do so, Environment Canada will give priority to: refining its performance measurement framework, including the results and measures used to determine the achievement of results; integrating Environment Canada's performance measurement for its business planning, review and sustainable development strategies; and developing additional training opportunities for our staff in performance measurement.
- Complaint Management: A departmental framework is being developed for complaints resolution for cost-recovery initiatives.
- Quality Services: Environment Canada will build on aviation service standards already developed for the agreement with NAV Canada and for its ice services and to develop marine and public weather-service standards.
- Client Consultation: Environment Canada's consultations are guided by a departmental policy, "Our Commitment to Effective Consultation". As part of the commercialization initiative we are in the process of developing consultation training for the specific needs of cost-recovery initiatives.

Information Technology

Information technology forms an integral part of the daily operations of Environment Canada's programs in all business lines. Given its critical role, the most important challenge will be to ensure Year 2000 readiness of the critical departmental systems. In addition, the ongoing challenge is to continuously evolve and improve the value of Environment Canada's information technology to the Department's programs in order to improve services to clients and contribute to Canadians' right to know about environmental states and changes.

To do so over the planning period, the Department will be working closely with other government departments and levels of government to develop and deliver client-centered services. The Department will be developing and adopting an information technology/information management strategic plan during 1998/99, which will ensure that this critical function remains responsive and program driven.

Administration

Gross Planned Expenditures within Business Line

($ millions) **Business Line Components**	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Administration	68.0	**63.5**	62.2	61.6

*Reflects best forecast of total planned spending to the end of the fiscal year.

Section IV: Supplementary Information

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Environment Canada

Table 1: Spending Authorities - Ministry Summary Part II of the Estimates

Vote	(thousands of dollars)	**1998-99 Main Estimates**	1997-98 Main Estimates
	Environment Program		
1	Operating expenditures	**388,654**	407,212
5	Capital expenditures	24,529	26,175
10	Grants and contributions	32,178	33,688
(S)	Minister of the Environment - salary and motor car allowance	49	49
(S)	Contributions to employee benefit plans	48, 863	40,387
	Total Program	494,273	507,511

Explanation of Change

The $13.2 million net decrease in 1998-99 over 1997-98 Main Estimates is due mainly to:

Increases:

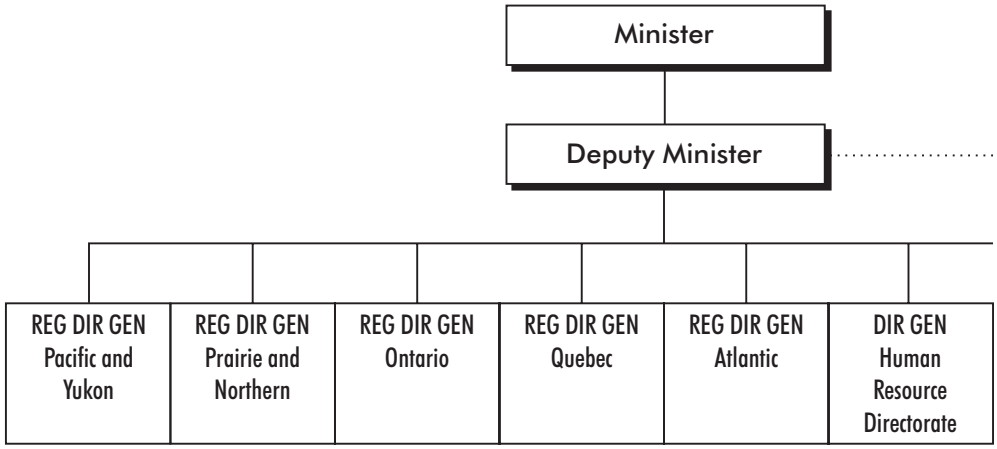
- $8.5 million due to the increase of employee benefit costs;
- $6.3 million for other initiatives including costs associated with increased third-party revenue and the implementation of the universal classification standard;
- $3.2 million for the payment of contributions under the Youth Employment Initiative Program;
- $2.2 million related to the acquisition of a facility housing the Canadian Meteorological Centre in Dorval, Quebec; and
- $1.4 million for the payment of a repayable contribution to Wildlife Habitat Canada Foundation for the implementation of habitat conservation initiatives across Canada.

Decreases:

- $20.1 million in savings identified through the Program Review;
- $10 million due to the sunsetting of funding for the St. Lawrence Action Plan II;
- $2.3 million related to the partial repayment of a loan for establishing the Canadian Lightning Detection Network; and
- $2.2 million due to the sunset of the Wildlife Habitat Compensation Program - Fraser River.

Table 2: Organization

Gross Planned Spendings by Branch and Business Line ($ millions)

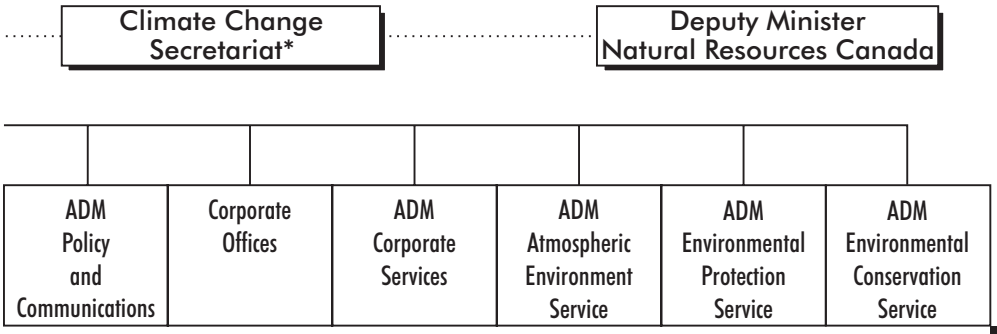


A Healthy Environment	25.7	17.7	24.3	17.8	10.6	
Safety from Environmental Hazards	20.4	36.5	17.8	15.4	13.5	
A Greener Society	4.3	5.1	6.2	7.6	5.6	
Administration	2.1	6.3	7.5	3.8	4.6	7.5
Total	**52.5**	**65.6**	**55.8**	**44.6**	**34.3**	**7.5**

REG DIR GEN = Regional Director General

ADM = Assistant Deputy Minister

Table 2: Organization (cont'd)



ADM Policy and Communications	Corporate Offices	ADM Corporate Services	ADM Atmospheric Environment Service	ADM Environmental Protection Service	ADM Environmental Conservation Service	Total
1.3		14.4**	25.9	36.7	59.2	**233.6**
		2.2	91.0	3.7	0.3	**200.8**
19.3	0.1	1.2	0.1	27.4	3.9	**80.8**
0.5	7.7	21.2	0.6	1.2	0.5	**63.5**
21.1	**7.8**	**39.0**	**117.6**	**69.0**	**63.9**	**578.7**

* **Climate Change Secretariat**: climate change resources announced in the Budget will be notionally allocated as follows: $10 M to Environment Canada and $40 M to Natural Resources Canada.

** Includes $10 M (to be administered under a special account) for Environment Canada initiatives in support of the inter-departmental Climate Change Secretariat and the national plan for climate change.

Table 2.1: Planned Full-Time Equivalents (FTEs) by Business Line

Business Lines	Forecast 1997-98	**Planned 1998-99**	Planned 1999-00	Planned 2000-01
A Healthy Environment	1,618	**1,587**	1,585	1,585
Safety from Environmental Hazards	1,406	**1,377**	1,377	1,376
A Greener Society	575	**569**	569	569
Administration	750	**708**	706	706
Department Total	4,349	**4,241**	4,237	4,236

Table 2.2: Details of FTE Requirements

Salary Ranges ($)	Forecast 1997-98	**Planned 1998-99**	Planned 1999-00	Planned 2000-01
<30,000	394	**368**	365	365
30,000-40,000	535	**503**	499	499
40,000-50,000	873	**852**	853	853
50,000-60,000	1,397	**1,401**	1,398	1,395
60,000-70,000	676	**663**	669	667
70,000-80,000	318	**298**	297	300
>80,000	156	**156**	156	157
Department Total	4,349	**4,241**	4,237	4,236

Table 3: Capital Spending by Business Line ($ millions)

Business Lines	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
A Healthy Environment	4.9	**5.3**	5.3	5.3
Safety from Environmental Hazards	24.4	**14.9**	15.3	15.7
A Greener Society	6.2	**3.0**	3.0	3.4
Administration	1.0	**1.3**	1.3	1.3
Department Total	36.5	**24.5**	24.9	25.7

* Reflects best forecast of total planned spending to the end of the fiscal year.

Table 3.1: Capital Projects by Business Line ($ millions)

Environment Program	Current Estimated Total Cost	Forecast Spending to March 31, 1998	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01	Future Year Spending Requirement
A Healthy Environment						
Revitalization of laboratories - National Water Research Institute	**5.7**	**4.3**	**-**	**-**	**-**	**1.4**
Safety from Environmental Hazards						
Doppler upgrade - Radar Network Modernization	39.2	7.1	**4.4**	6.0	6.0	15.7
North American Lightning Detection Network	9.6	9.6	**-**	-	-	-
Ice Integration and Analysis System	5.7	5.0	**0.3**	0.4	-	-
Weather station construction Eureka N.W.T.	4.1	1.8	**0.1**	0.7	0.5	1.0
Weather Warning Delivery System	3.8	1.9	**0.3**	0.7	0.4	0.5
Mercury manometer replacement program	3.8	1.5	**0.9**	0.8	0.6	
Automation & real-time access to discharge data - hydrology	3.3	0.6	**0.5**	0.7	0.7	0.8
Data processing upgrades for Radarsat	2.7	2.7			-	
	72.2	**30.2**	**6.5**	**9.3**	**8.2**	**18.0**
Other						
Controlled capital projects between $1 million and $2.5 million	**20.5**	**7.4**	**3.6**	**3.1**	**2.7**	**3.7**
Projects under $1 million	-	-	**14.4**	**12.5**	**14.8**	-
Total Capital Expenditures	**98.4**	**41.9**	**24.5**	**24.9**	**25.7**	**23.1**

Table 4: Departmental Summary of Standard Objects of Expenditure ($ millions)

	Forecast Spending 1997-98*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Personnel				
Salaries and wages	249.9	**232.7**	234.5	234.3
Contributions to employee benefit plans	40.4	**48.9**	49.2	49.2
	290.3	**281.6**	283.7	283.5
Goods and services				
Transportation and communications	43.9	**41.2**	44.9	45.2
Information	7.4	**7.1**	7.2	7.1
Professional and special services	115.5	**109.4**	106.0	104.5
Rentals	19.6	**19.0**	19.5	19.3
Purchased repair and maintenance	14.6	**13.1**	13.3	13.2
Utilities, materials and supplies	35.4	**30.4**	30.6	30.4
Other subsidies and payments	5.9	**4.6**	4.6	4.6
Minor capital	15.9	**15.5**	15.4	15.4
	258.2	**240.4**	241.5	239.7
Total operating	548.5	**522.0**	525.2	523.2
Capital				
Personnel	0.1	**0.6**	0.6	0.6
Transportation and communications	0.4	**0.5**	0.5	0.5
Professional and special services	2.4	**2.3**	2.4	2.5
Purchased repair and maintenance	4.5	**3.6**	3.7	3.7
Utilities, materials and supplies	0.5	**0.5**	0.5	0.5
Construction and acquisition of land building and equipment	2.9	**0.6**	0.6	0.6
Construction and acquisition of machinery and equipment	25.5	**16.2**	16.5	17.1
Other subsidies and payments	0.2	**0.2**	0.1	0.2
	36.5	**24.5**	24.9	25.7
Transfer payments				
Grants	4.1	**3.3**	3.1	3.1
Contributions	38.3	**28.9**	21.5	21.2
	42.4	**32.2**	24.6	24.3
Gross budgetary expenditures	627.4	**578.7**	574.7	573.2
Less: Revenues credited to the vote	(71.7)	**(67.6)**	(68.2)	(67.5)
Net budgetary expenditures	555.7	**511.1**	506.5	505.7

*Reflects best forecast of total planned spending to the end of the fiscal year.

Table 4.1: Program Resources by Business Line for the Estimates Year ($ millions)

		Budgetary					
	FTE	Operating	Capital	Grants and Contributions	Gross Planned Spending	Less: Revenue Credited to the Vote	Net Planned Spending
A Healthy Environment	1,587	213.0	5.3	15.3	233.6	(8.8)	224.8
Safety from Environmental Hazards	1,377	183.0	14.9	2.9	200.8	(54.9)	145.9
A Greener Society	569	63.8	3.0	14.0	80.8	(3.9)	76.9
Administration	708	62.2	1.3		63.5		63.5
Total	4,241	522.0	24.5	32.2	578.7	(67.6)	511.1

Table 4.2: Details of Transfer Payments by Program and Business Line ($)

	Forecast Spending 1997-98*	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Grants				
A Healthy Environment				
Grants for the implementation of the Montreal Protocol on substances that deplete the ozone layer	926,200	2,000,000	2,000,000	2,000,000
Fur Institute of Canada	17,000	17,000	17,000	17,000
University Research Councils Program	314,652	252,400		
Grant to the Wildlife Habitat Canada Foundation	2,000,000			
	3,257,852	2,269,400	2,017,000	2,017,000
Safety from Environmental Hazards				
Meteorological research	621,500	850,000	850,000	850,000
Canadian Meteorological and Oceanographic Society	17,000	17,000	17,000	17,000
	638,500	867,000	867,000	867,000
A Greener Society				
Grant to the International Institute for Sustainable Development to support the operation of the Institute and the undertaking of sustainable development initiatives	200,000	200,000	200,000	200,000
	200,000	200,000	200,000	200,000
Total Grants	4,096,352	3,336,400	3,084,000	3,084,000
Contributions				
A Healthy Environment				
Contribution to the Organization for Economic Cooperation and Development - Chemical Controls Program	27,951	125,000	125,000	125,000
Contribution to the Wildlife Habitat Canada Foundation		1,400,000		
Contribution for the Technological Development and Demonstration Program (TDDP) - St. Lawrence River	833,100			
Contribution to the province of Quebec for the St. Lawrence Action Team	2,500,000			
Contributions to provinces towards federal-provincial water resources projects	265,000			
Contribution to the United Nations for the Convention in Trade of Rare and Endangered Species (CITES)	219,000	219,000	219,000	219,000
Contribution to the Convention on Wetlands of International Importance (RAMSAR)	96,000	99,000	99,000	99,000
Contribution to the Interjurisdictional Caribou Management Board	13,500	13,000	13,000	13,000
Contribution to the Fur Institute of Canada	350,000	350,000	350,000	350,000

Table 4.2: Details of Transfer Payments by Program and Business Line (cont'd)

	Forecast Spending 1997-98*	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Contributions under the North American Waterfowl Management Plan	3,069,000	2,932,300	2,932,300	2,932,300
Contribution to the World Wildlife Fund - Endangered Species Recovery Fund	180,000	180,000	180,000	180,000
Sustainable Management Program for the Fraser River Basin	1,270,000	1,136,000	1,136,000	1,136,000
Contribution to the University of Saskatchewan to establish a Canadian Wildlife Health Centre	200,000	200,000	200,000	200,000
Contribution to the Province of British Columbia and environmental non-government organizations (ENGOs) - Wildlife Strategy, Pacific Coast Joint Venture	325,000	325,000	325,000	325,000
Contribution for the Science Horizons Internship Program	1,301,235	1,128,000		
Contribution to establish a Cooperative Wildlife Research Network	325,000	260,000	260,000	260,000
Contribution to the University of Guelph for the Canadian Network of Toxicology Centres	1,797,000	1,797,000	1,797,000	1,797,000
Contributions under the St. Lawrence Vision 2000 - Community Interaction Program	1,308,400			
Contributions under the St. Lawrence Vision 2000 - Habitat Enhancement Program	51,000			
Contributions under the St. Lawrence Vision 2000 - Habitat Protection Program	363,000			
Contributions under the Wildlife Habitat Compensation Program - Fraser River	2,250,000			
Contribution to the University of Victoria to manage and operate the Canadian Climate Research Network	2,650,000	2,650,000		
Contributions - Building International Partnership	1,009,423	170,300	170,300	170,300
Contributions under the Montreal Protocol	1,000,000			
Minister's Authority	345,000			
	21,748,609	12,984,600	7,806,600	7,806,600
Safety from Environmental Hazards				
Membership fee - World Meteorological Organization	1,796,308	1,693,000	1,693,000	1,693,000
Contribution to the Major Industrial Accidents Council of Canada (MIACC)	150,000	150,000	150,000	150,000
Contribution to the Province of Quebec - Hydrometric Agreement	200,000	200,000	200,000	200,000
	2,146,308	2,043,000	2,043,000	2,043,000
A Greener Society				
Contribution program for the International Environmental Youth Corps Initiative	846,000	1,974,000		

Table 4.2: Details of Transfer Payments by Program and Business Line (cont'd)

	Forecast Spending 1997-98*	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Contribution to the Canadian Council of Ministers of the Environment in an amount equal to one-third of its operating budget	482,000	752,000	752,000	752,000
Contributions to environmental networking organizations under the Community Support Initiative	600,000	600,000	600,000	600,000
Contributions under the Action 21 Program to help Canadians take individual and collective actions in their communities in support of a greener society	6,099,087	5,194,000	5,194,000	5,194,000
Contribution to the United Nations University for the establishment of the International Network on Water, Environment and Health	1,376,000	1,060,000	924,000	590,000
Contribution to the Centre for Sustainable Transportation	72,294	34,000		
Contribution for Canada's share of the Commission of Environmental Co-operation (CEC) budget	4,025,000	4,200,000	4,200,000	4,200,000
Canadian organization - Canadian Environmental Citizenship Program	598,442			
Contribution to the Asia Pacific Foundation for the GLOBE Conferences	250,000			
Minister's Authority	48,500			
	14,397,323	13,814,000	11,670,000	11,336,000
Total Contributions	38,292,240	28,841,600	21,519,600	21,185,600
Total Grants and Contributions	**42,388,592**	**32,178,000**	**24,603,600**	**24,269,600**

* Reflects best forecast of total planned spending to the end of the fiscal year.

Table 4.3: Gross and Net Departmental Expenditures by Business Line ($ millions)

	Forecast Spending 1997-78*	**Planned Spending 1998-99**	Planned Spending 1999-00	Planned Spending 2000-01
Gross Expenditures by Business Line				
A Healthy Environment	242.8	**233.6**	232.1	231.3
Safety from Environmental Hazards	224.3	**200.8**	201.9	201.6
A Greener Society	92.3	**80.8**	78.5	78.7
Administration	68.0	**63.5**	62.2	61.6
Total Gross Expenditures	627.4	**578.7**	574.7	573.2
Less:				
Revenue Credited to the Vote				
A Healthy Environment	8.4	**8.8**	9.3	9.2
Safety from Environmental Hazards	58.8	**54.9**	55.1	54.5
A Greener Society	4.5	**3.9**	3.8	3.8
Total Revenue Credited to the Vote	71.7	**67.6**	68.2	67.5
Net Expenditures by Business Line				
A Healthy Environment	234.4	**224.8**	222.8	222.1
Safety from Environmental Hazards	165.4	**145.9**	146.8	147.1
A Greener Society	87.8	**76.9**	74.7	74.9
Administration	68.0	**63.5**	62.2	61.6
Total Net Expenditures by Business Line	**555.7**	**511.1**	**506.5**	**505.7**

* Reflects best forecast of total planned spending to the end of the fiscal year.

Table 4.4: Details of Revenue by Business Line

Revenue Credited to the Vote	Forecast Revenue 1997-98*	**Planned Revenue 1998-99**	Planned Revenue 1999-00	Planned Revenue 2000-01
A Healthy Environment				
Information Products	0.3	**0.2**	0.1	0.1
Realty Services	1.6	**1.1**	1.1	1.1
Scientific and Professional	5.8	**6.0**	5.9	5.8
Regulatory Services	0.7	**1.5**	2.2	2.2
	8.4	**8.8**	9.3	9.2
Safety from Environmental Hazards				
Information Products	1.2	**2.5**	2.7	2.7
Sale of Sponsorship / Advertising	0.2	**0.3**	0.3	0.3
Realty Services	0.3	**0.3**	0.3	0.3
Scientific and Professional	56.5	**51.0**	50.9	50.3
Miscellaneous	0.6	**0.8**	0.9	0.9
	58.8	**54.9**	55.1	54.5
A Greener Society				
Information Products	1.6	**0.3**	0.2	0.2
Realty Services	0.2	**0.4**	0.4	0.4
Scientific and Professional	2.6	**3.2**	3.2	3.2
Miscellaneous	0.1			
	4.5	**3.9**	3.8	3.8
Total Revenue Credited to the Vote	71.7	**67.6**	68.2	67.5
Revenue Credited to the Consolidated Revenue Fund (CRF)				
A Healthy Environment				
Realty Services	0.5	**3.7**	2.3	2.0
Scientific and Professional	0.4	**0.6**	0.6	0.6
Regulatory Services	3.9			
Miscellaneous		**0.6**	0.6	0.6
	4.8	**4.9**	3.5	3.2
Safety from Environmental Hazards				
Scientific and Professional	1.4	**5.6**	5.9	6.2
Miscellaneous	0.1	**0.1**	0.1	0.1
	1.5	**5.7**	6.0	6.3
A Greener Society				
Scientific and Professional	0.6			
Miscellaneous	0.1	**0.1**	0.1	0.1
	0.7	**0.1**	0.1	0.1
Total Credited to the CRF	7.0	**10.7**	9.6	9.6
Total Revenue	**78.7**	**78.3**	**77.8**	**77.1**

*Reflects best forecast of total planned spending to the end of the fiscal year.

Table 4.5: Net Cost of Program(s) for 1998-99 ($ millions)

	Environment Program
Gross Planned Spending	578.7
Plus:	
Services Received without Charge:	
Accommodation provided by Public Works and Government Services Canada (PWGSC)	32.0
Contributions covering employees' share of insurance premiums and costs paid by TBS	15.4
Workman's compensation coverage provided by Human Resources Canada	2.3
Salary and associated costs of legal services provided by Justice Canada	0.7
Services provided by Transport Canada	0.2
	50.6
Total Cost of the Program	**629.3**
Less:	
Revenue Credited to the Vote	(67.6)
Revenue Credited to the CRF	(10.7)
	(78.3)
1998-99 Net Cost of the Program	**551.0**
1997-98 Estimated Net Program Cost	**599.0**

5. Acts and Regulations Administered by the Environment Program

The Minister has sole responsibility to Parliament for the following acts and regulations:

Canada Water Act	R.S. 1985, c. C-11
Canada Wildlife Act	R.S. 1985, c. W-9
The administration, management and control of certain public lands was assigned pursuant to various statutory instruments.	
Wildlife Area Regulations	C.R.C., vol. XVIII, c.1609
Canadian Environmental Assessment Act	S.C. 1992, c. 37
Comprehensive Study List Regulations	SOR/94-638
Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements	SOR/97-181
Exclusion List Regulations	SOR/94-639
Federal Authorities Regulations	SOR/96-280
Inclusion List Regulations	SOR/94-637
Law List Regulations	SOR/94-636
Projects Outside Canada Environmental Assessment Regulations	SOR/96-491
Canadian Environmental Protection Act	R.S. 1985, c. 16 (4th Supp.)
Asbestos Mines and Mills Regulations	SOR/90-341
Benzene in Gasoline Regulations	SOR/97-493
Chlor-Alkali Mercury Release Regulations	SOR/90-130
Chlorobiphenyls Regulations	SOR/91-152
Chlorofluorocarbon Regulations 1989	SOR/90-127
Contaminated Fuel Regulations	SOR/91-485
Diesel Fuel Regulations	SOR/97-110
Domestic Substances List	SOR/94-311
Export and Import of Hazardous Wastes Regulations	SOR/92-637
Federal Mobile PCB Treatment and Destruction Regulations	SOR/90-5
Fuels Information Regulations	SOR/77-597
Gasoline Regulations	SOR/90-247
List of Hazardous Wastes Authorities	SOR/92-636
List of Toxic Substance Authorities	SOR/94-162
Masked Name Regulations	SOR/94-261
Ocean Dumping Regulations, 1988	SOR/89-500
Ozone-Depleting Substances Regulations	SOR/94-408
Ozone-Depleting Substances Products Regulations	SOR/95-584
PCB Waste Export Regulations	SOR/90-453
PCB Waste Export Regulations, 1996	SOR/97-108
Phosphorus Concentration Regulations	SOR/89-501
Polybrominated Biphenyls Regulations, l989	SOR/90-129
Prohibition of Certain Toxic Substances Regulations	SOR/96-237
Pulp and Paper Mill Defoamer and Wood Chip Regulations	SOR/92-268
Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations	SOR/92-267
Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum Products on Federal Lands Regulations	SOR/97-10
Secondary Lead Smelter Release Regulations	SOR/91-155
Storage of PCB Material Regulations	SOR/92-507
Toxic Substances Export Notification Regulations	SOR/92-634
Vinyl Chloride Release Regulations, l992	SOR/92-631
Canadian Environment Week Act	R.S. 1985, c. E-11
Department of the Environment Act	R.S. 1985, c. E-10

5. Acts and Regulations Administered by the Environment Program (cont'd)

Environmental Contaminants Act	R.S. 1985, c. E-12
Heritage Railway Stations Protection Act	R.S. c.52 (4th Supp.)
International River Improvements Act	R.S. 1985, c. I-20
Lac Seul Conservation Act	S.C. 1928, c. 32
Lake of the Woods Control Board Act	S.C. 1921, c. 10 and S.C. 1958, c. 20
Manganese-Based Fuel Additives Act	S.C. 1997, c. 11
Migratory Birds Convention Act, 1994	S.C. 1994, c. 22
Migratory Birds Regulations	C.R.C., Vol. XI, c.1035
Migratory Bird Sanctuary Regulations	C.R.C., Vol. XI, c.1036
National Wildlife Week Act	R.S. 1985, c. W-10
Weather Modification Information Act	R.S. 1985, c. W-5
Weather Modification Information Regulations	C.R.C., Vol. XVIII, c. 1604
Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act	S.C. 1992, c. 52
Wild Animal and Plant Trade Regulations	SOR/96-263

The Minister shares responsibility to Parliament or assists other departments in administering the following acts and regulations:

Arctic Waters Pollution Prevention Act	R.S. 1985, c. A-12
Auditor General Act	R.S. 1985, c. A-17
Canada Shipping Act	R.S. 1985, c. S-9
Emergency Preparedness Act	R.S. 1985, c. 6 (4th Supp.) (April 27, 1988)
Energy Supplies Emergency Act	R.S. 1985, c. E-9
Fisheries Act	R.S. 1985, c. F-14
Alice Arm Tailings Deposit Regulation	SOR/79-345
Chlor-Alkali Mercury Liquid Effluent Regulations	SOR/77-575
Meat and Poultry Products Plant Liquid Effluent Regulations	SOR/77-279
Metal Mining Liquid Effluent Regulations and Guidelines	SOR/77-178
Petroleum Refinery Liquid Effluent Regulations and Guidelines	SOR/73-670
Port Alberni Pulp and Paper Liquid Effluent Regulations	SOR/92-638
Potato Processing Plant Liquid Effluent Regulations and Guidelines	SOR/77-518
Pulp and Paper Effluent Regulations	SOR/92-269
James Bay and Northern Quebec Native Claims Settlement Act	S.C. 1976-77, c. 32
Hazardous Products Act	R.S. 1985, c. H-3
International Boundary Waters Treaty Act	R.S. 1985, c. I-17
Motor Vehicle Safety Act	S.C. 1993, c. 16 (in force 12.04.95)
National Round Table on Environment and Economy Act	S.C. 1993, c.31 (in force April 28, 1994)
Resources and Technical Surveys Act	R.S. 1985, c. R-7
Transportation of Dangerous Goods Act, 1992	S.C. 1992, c. 34

R.S. = Revised Statutes of Canada 1985

S.C. = Statutes of Canada

R.S.C. = Revised Statutes of Canada 1952

6. Planned Regulatory Initiatives

Regulations	In 1998-1999, Environment Canada proposes to:
Control of Hydrofluorocarbons (HFC) Regulations	• publish regulations by the 4th quarter of 1998-1999.
Federal Boiler Emission Regulations	• publish regulations and/or guidelines in 1998-1999.
Gasoline Regulations - amendment (Racing Fuels)	• publish regulations by the 1st quarter of 1998-1999.
Hazardous Wastes at Federal Facilities Regulations	• publish regulations in 1998-1999.
Import and Export of Hazardous Wastes Service Fees Regulations -*Financial Administration Act*	• publish regulations in the 2nd quarter of 1998-1999.
Limited exemptions and modifications under the Convention on International Trade in Endangered Species (CITES) for personal and household effects and personal pets - *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*	• put forward exemptions and modifications in 1998.
Management of Ozone-Depleting Substances at Federal Facilities	• promulgate regulations by the 4th quarter of 1998-1999.
New Substances Notification - Cost Recovery Regulations	• publish regulations in the 2nd quarter of 1998-1999.
New Substances Notification Regulations-amendment (revise schedules IX and X)	• publish regulations in 1998-1999.
Ocean Dumping Monitoring Fee Regulations	• publish regulations in 1998-1999.
Ozone Depleting Substances Regulations - amendment (Hydrofluorocarbons (HCFCs) and Chlorofluorocarbons (CFCs)	• publish amended regulations in the 3rd quarter of 1998-1999.
Package labeling provisions with regard to the CITES listed species-(WAPPRIITA)	• put forward provisions for accurate labelling of packages or shipping containers in 1998.
Port Alberni Pulp and Paper Liquid Effluent Regulations - amendments	• publish amended regulations in the 3rd quarter 1998-1999.
Prohibition of Certain Toxic Substances Regulations (amend1)- Amendment to prohibit the manufacturing, use, processing, offer for sale, sale and importation into Canada of (4-chlorophenyl) cyclopropylmethanone, O-[4-nitrophenyl) methyl]oxime	• publish regulations in the1st quarter of 1998-1999.
Prohibition of Certain Toxic Substances Regulations (amend2)- amendment to include Benzidine and HCB (Hexachlorobenzine)	• publish regulations in the 4th quarter of 1998-1999.
Pulp and Paper Mill Liquid Effluent Regulations - amendments	• publish amended regulations in the 3rd quarter of 1998-1999.
Solvent Degreasing Operations Regulations	• publish regulations in the 4th quarter of 1998-1999.
Sulphur in Gasoline Regulations to reduce emissions of pollution of vehicles through controls of sulphur in gasoline	• publish in Gazette II in 1998-1999.
Tetrachlorethylene Regulations to reduce emissions of tetrachlorethylene in the dry cleaning sector: phase out use in old technology equipment; establish consumption rating for new equipment; mandate seller responsibility for waste management; and require reporting on import and distribution	• publish regulations in Gazette II in 1998-1999.
Tributyl Tetradecyl Phosphonium Chloride (TTPC) Regulations	• publish regulations by the 3rd quarter of 1998-1999.

6. Planned Regulatory Initiatives (cont'd)

Regulations	In 1998-1999, Environment Canada proposes to:
Regulations amending List of Toxic Substance Authorities	• amend the list following the approval of a revised *Canadian Environmental Protection Act* (CEPA) 1998-1999.
Migratory Birds Regulations - amendment	• increase fee for Migratory Game Bird Hunting Permit for 1998-99 hunting season.
Migratory Birds Regulations - amendment	• amend the definition of non-toxic shot to accommodate new approved shot for 1998-99 hunting season.
Migratory Bird Sanctuary Regulations - amendment	• delist the Cape Dorset Migratory Bird Sanctuary in the Northwest Territories in 1998.
Wildlife Area Regulations - amendment	• enlarge three National Wildlife Areas (Iles de Contrecoeur and Iles de l'Estuaire in Quebec, and Shepody in New Brunswick) by late 1998.
Wildlife Area Regulations - amendment	• establish the Igaliqtuuq National Wildlife Area in the Northwest Territories by late1998.
	In 1999-2001, Environment Canada proposes to:
Alice Arms Tailing Deposit Regulations- revocation	• revoke the regulations in the 1st quarter of 1999-2000.
Chlorobiphenyls Regulations- amendment	• amend and replace regulations in 1999-2000.
Export and Import of Hazardous Waste Regulations amendment	• draft in 1999-2000 and promulgate under the revised CEPA.
Export and Import of Prescribed Non-Hazardous Wastes Destined for Final Disposal Regulations	• draft in 1999-2000 and promulgate under the revised CEPA
Fish Habitat and Spill Reporting Regulations	• promulgate regulations in 1999-2000 or after.
Gasoline Dispensing Rates Regulations	• publish regulations in 1999-2000.
Hexavalent Chromium from Chrome Plating Regulations	• draft regulations in 1999-2000.
Inter-Provincial/Territorial Movement of Hazardous Waste Regulations - amendment	• draft in the 4th quarter of 1998-1999 and promulgate under the revised CEPA.
Metal Mining Liquid Effluent Regulations	• promulgate regulations in the 3rd quarter of 1999-2000.
New Substances Notification Regulations	• publish regulations by 2000-2001.
Ocean Dumping Regulations, 1988 and CEPA, Part VI - amendments	• amend the regulations following the approval of a revised CEPA.
Ozone-Depleting Substances Regulations - amendment (Methyl Bromide)	• amend regulations in 1999-2000.
Federal PCB Waste Management Regulations	• publish regulations by 1999-2000.
Regulations Respecting Persistence and Bioaccumulation of a Substance	• publish a regulation under the new CEPA.
Toxics from Gasoline Regulations (Gasoline Composition)	• publish regulations and/or guidelines in 1999-2000 or after.
Transboundary Movements of PCB Wastes Regulations	• draft in 1999-2000 and promulgate under the revised CEPA.

7. Departmental Long-Term Results Commitments

Environment Canada (EC) *with its partners, provides Canadians with:*	*to be demonstrated by:*
A Healthy Environment	
A reduction of the negative impacts on the atmosphere and to help Canadians better understand and adapt to these consequences.	• A reduction of the negative impacts on the atmosphere and to help Canadians better understand and adapt to these consequences. • Concentrations of greenhouse gases limited through global actions to levels that avoid serious disruption to climatic systems. • Recovery of the ozone layer to a level that minimizes the harmful effects to human health and natural ecosystems. • Clean air to breathe in Canada and existing Canadian clean airsheds protected from deterioration. • Negative impacts from sulphur dioxide (SO_2) and nitrogen oxides (NO_x) emissions on aquatic and terrestrial ecosystems, human health and materials minimized. • Negative impacts of inhalable particulates on human health and visibility minimized. • Consideration of sustainability increased in all Canadian energy decisions. • Environmental stress caused by transportation reduced.
Elimination of the threat posed by toxics.	• Sources and quantities of toxic substances, effluents, emissions and wastes requiring management identified (in a timely manner based on sound scientific research and assessment). • Management actions toward virtual elimination of existing persistent, bioaccumulative toxics (PBTs) resulting from human activity implemented. • Management actions to prevent, reduce or eliminate risks posed by toxics and other substances of concern that do not meet all the Toxic Substances Management Policy Track 1 criteria implemented.
Fairly and effectively enforced environmental laws and regulations.	• A high level of compliance with laws and regulations. • Improved enforcement capacity. • Canadians understand the law, know what is expected of them , and believe the law to be effectively enforced. • Federal government departments and agencies understand the law, know what is expected of them, and act accordingly.
Conservation and enhancement of Canadian and global biodiversity.	• Positive recovery trends for threatened or endangered species achieved through federal endangered species initiatives. • Targeted wildlife populations under federal jurisdiction sustained at or increased to healthy levels. • Significant wildlife habitat and ecosystems protected/enhanced. • International biodiversity agenda advanced through Canada's leadership and expertise. • National framework in place to guide effective conservation of Canadian biodiversity.
Conservation and restoration of ecosystems.	• Ecosystem science undertaken, scientific tools created and information transferred in support of ecosystem management initiatives. • A modern affordable management capacity and infrastructure to ensure effective delivery of quality ecosystem science programming. • Vulnerable ecosystems of priority identified and conserved through the development of ecosystem, regional, sectoral and other strategies/initiatives. • Federal leadership to conserve and protect Canada's water resources. • Health and sustainability of targeted ecosystems across Canada improved through ecosystems initiatives of national priority.

7. Departmental Long-Term Results Commitments (cont'd)

Safety from Environmental Hazards	
Weather and environmental predictions as well as timely and accurate warnings of severe weather events.	• Timely and accurate weather and environmental information for Canadians. • Effective decisions by Canadians related to the social and economic impacts of changing weather, climate and hydrology. • Scientific capacity to understand the past, present and future states of the atmospheric environment.
Prevention or reduction in the frequency, severity and environmental consequences of emergencies that affect Canada.	• Accidental releases prevented. • Preparations made to handle accidental releases. • Advice and specialized support provided to lead responders.
A Greener Society	
Promotion of responsible environmental citizenship by helping Canadians to effectively use timely environmental information and advice.	• Products and services from Environment Canada that meet the needs of Canadians. • Products and services developed that help Canadians to make environmentally-responsible decisions. • Broad public support for services provided by Environment Canada.
Tools to prevent pollution and develop green technologies and capacity that create social, economic, and environmental benefits.	• Environmental technologies and techniques developed and promoted domestically/internationally to address environmental problems and contribute to jobs and economic growth. • Pollution prevention that protects the environment while contributing to jobs and economic growth. • More competitive industrial sectors through clean production/pollution-prevention technologies and techniques. • Management skills, capacity and activity in communities to address environmental priorities. • Environment Canada compliance with the Canadian Environmental Assessment Act (CEAA) and Cabinet directives on environmental assessment of policies and programs.
Mobilize effective partnerships nationally and provide a strong international voice to build a sustainable development agenda.	• Environmental, economic and social agendas integrated in government policies and operations in the context of sustainable development. • Partnerships with all sectors of society established to mobilize action on sustainable development. • Canada's domestic interests related to sustainable development reflected in international fora and mechanisms.

8. References

Hard copy departmental publications can be obtained from the:

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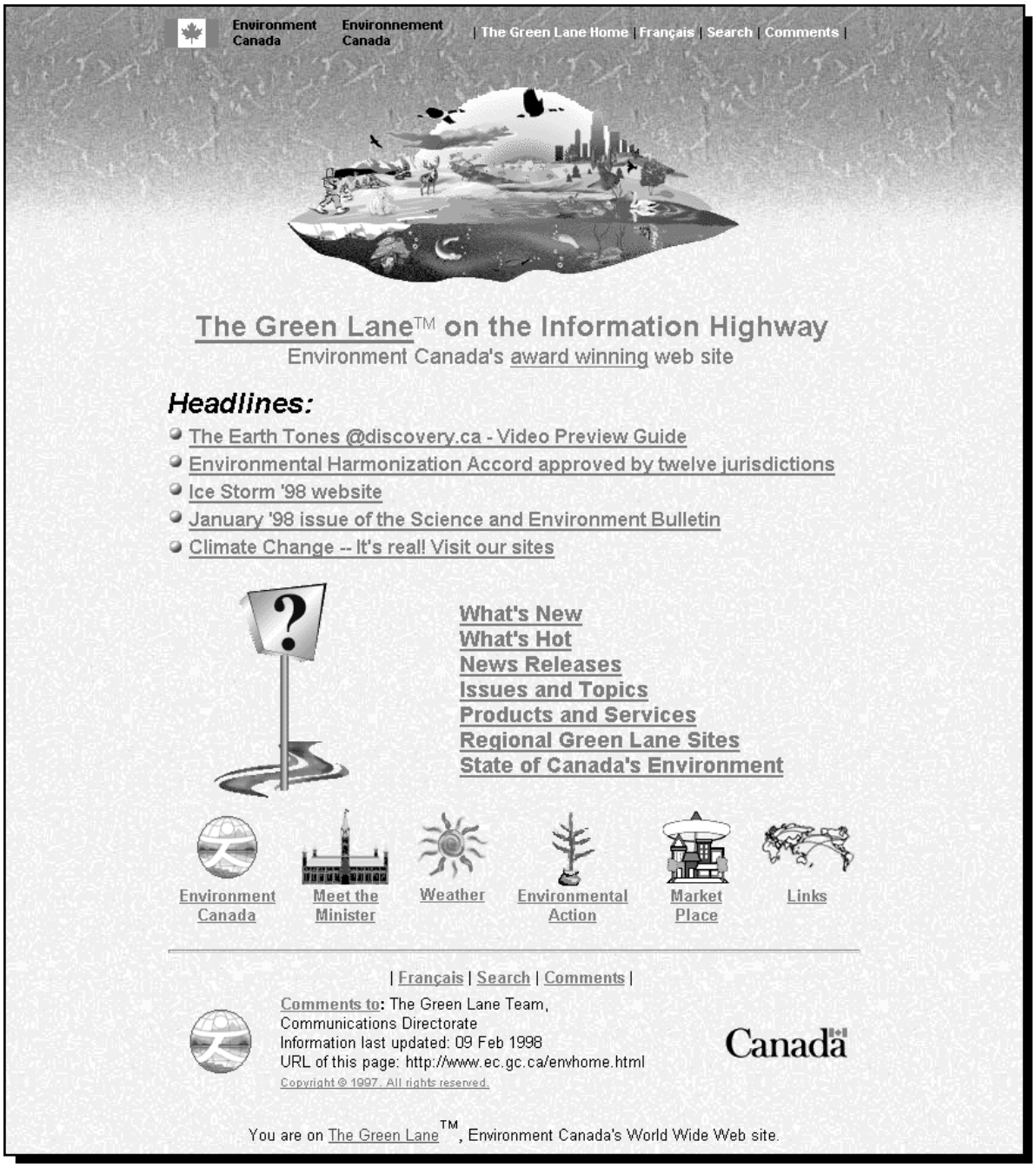
Environment Canada
Ottawa, Ontario
K1A 0H3
1-800-668-6767
1-819-997-2800

The Environment Canada Green Lane address on the World Wide Web is:

http://www.ec.gc.ca/envhome.html



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10. Glossary

Accelerated Reduction/Elimination of Toxics (ARET) — A departmental voluntary program to reduce toxic pollutant releases by industries.

Approved Reference Levels — The amount of resources that have been approved by the Treasury Board to carry out approved policies and programs.

Bioaccumulation — A term describing a process by which chemical substances are ingested and retained by organisms, either from the environment directly or through the consumption of food containing the chemicals.

Contingent Liabilities — The potential debts that may become actual financial obligations if certain events occur or fail to occur (e.g. potential losses from pending or threatened litigation).

CRF (Consolidated Revenue Fund) — The aggregate of all public moneys that are on deposit at the credit of the Receiver General of Canada.

Dioxins and Furans — Popular names for two classes of chlorinated organic compounds, formed either as by-products during some types of chemical production that involve chlorine and high temperatures or during combustion where a source of chlorine is present.

DDT (dichlorodiphenyl trichloroethane) — A synthetic insecticide introduced after World War II. This chlorinated organic compound is persistent and tends to bioaccumulate. No longer in use in Canada and the United States, it is still used in Mexico and Latin America, subject to long-range transport, and found in sediment of the Great Lakes.

Ecosystem — An integrated and stable association of living and non-living resources functioning within a defined physical location.

Endangered — A species facing imminent extirpation or extinction.

Environmental Management System — A systematic approach for organizations to bring environmental considerations into decision making and day-to-day operations. It also establishes a framework for tracking, evaluating and communicating environmental performance. An EMS helps to ensure that major environmental risks and liabilities are identified, minimized and managed.

Green Power — Power generated from environmentally-friendly sources or in ways that do not degrade the environment (e.g. wind, solar).

Greenhouse Gases (GHGs) — Gases in the atmosphere that trap the sun's energy and thereby contribute to rising surface temperatures. The main greenhouse gas that contributes to climate change is carbon dioxide (CO_2), a byproduct of the burning of fossil fuels. Other greenhouse gases include methane (from agricultural sources) and nitrous oxide (from industrial sources).

Ground-Level Ozone — Ozone (O_3) that occurs near the surface of the earth and is injurious to health. Its toxic effects make it a pollutant of concern in smog.

ISO 14000 — The series of international environmental management systems standards that provides organizations around the world with guidance on how to manage the environmental aspects of their activities, products and services more effectively.

PBTs (Persistent Bioaccumulative Toxic Substances) — Substances that produce toxic effects in living things and that stay in the environment a long time, accumulating as they are passed up the food chain.

PCB (Polychlorinated Biphenyl) — This group of isomers was originally used for its flame-retardant attributes. Used since 1929 in the production of electrical transformers and lubricating oils, PCBs became regulated in Canada in 1977. The importation of all electrical equipment containing PCBs was banned in 1980.

10. Glossary (cont'd)

Persistent Organic Pollutants (POPs)	Organic substances such as certain pesticides (DDT, Chlrodane, Endrin, etc.); industrial chemicals (PCBs) or by-products; and contaminants (dioxins and furans). These pollutants do not break down readily in the environment, and are easily taken in by living organisms (e.g. eating contaminated food, drinking polluted water, breathing polluted air).
Priority Substances List (PSL)	Two lists (list 1 and 2) of priority substances for assessment of toxicity. The first list of 44 substances has been assessed and management plans are being developed or implemented for the 25 substances that were assessed as toxics. The second list of 25 substances has been published in Part I of the *Canada Gazette* and is being assessed.
Program Review	A government-wide initiative (in three phases) to reduce budgets through program adjustments, technological improvements and alternative service delivery.
Program Spending-Gross	Planned budgetary spending, whether funded through budgetary appropriations or revenue credited to the vote.
Program Spending-Net	Planned budgetary spending, net of any revenue credited to the vote
Report on Plans and Priorities	A department's primary strategic planning document, intended for parliamentary and public scrutiny. It portrays the Department's mandate, plans and priorities and sets out strategies for achieving expected key results.
Report on Performance	A department's primary accountability document, intended for parliamentary and public scrutiny. It reports on a department's performance up to the most recently-completed fiscal year, and uses the plans and priorities identified in the Report on Plans and Priorities, as the basis for comparison.
Revenues Credited to the Vote	Receipts credited to the appropriation that the Department has the authority to reutilize.
Smog	A literal contraction of "smoke" and "fog", it occurs when nitrogen oxides (NO_x) and volatile organic compounds (VOCs) react during warm temperatures in the presence of sunlight. Stagnant air conditions aid smog formation.
SO_2	Sulphur dioxide, chemical whose emissions enter the atmosphere and return to earth with precipitation as acid rain.
Stratospheric Ozone	The layer of the earth's atmosphere, extending from 15 to 35 kilometers above the earth, that protects life on the planet by absorbing harmful ultra-violet rays.
Sustainable Development (SD)	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Threatened	A species likely to become endangered if limiting factors are not reversed.
Transfer Payments	A payment authorized by a budgetary appropriation for which no goods or services are received in exchange and that neither gives rise to financial claim nor represents the liquidation of financial obligations.
VOC (Volatile Organic Compound)	The organic (containing carbon) gases and vapours that are present in the air. They are involved in ground-level ozone formation and some are toxic air pollutants.
Vote	A request to Parliament for appropriation. A vote becomes an appropriation only when the Appropriations Act in which it is contained receives royal assent.
Vote Netted Revenue	Receipts credited to the appropriation that the Department has authority to reutilize.
Voted Appropriations	See vote.

11. Acronyms

ARET Accelerated Reduction/Elimination of Toxics Program

ASD Alternative Service Delivery

APEC Asia-Pacific Economic Cooperation

CCME Canadian Council of Ministers of the Environment

CESPA Canada Endangered Species Protection Act

CEPA Canadian Environmental Protection Act

CITES Convention on International Trade in Endangered Species

CLDN Canadian Lightning Detection Network

CRF Consolidated Revenue Fund

DIAND Department of Indian Affairs and Northern Development

DFAIT Department of Foreign Affairs and International Trade

DFO Department of Fisheries and Oceans

DDT Dichlorodiphenyltrichloroethane

EMS Environmental Management System

ENGOs Environmental Non-Government Organizations

FTEs Full-Time Equivalents

GHGs Greenhouse Gases

HAPs Hazardous Air Pollutants

HC Health Canada

IJC International Joint Commission

MIACC Major Industrial Accidents Council of Canada

NAAEC North American Agreement on Environmental Cooperation

NAFTA North American Free Trade Accord

NAWMP North American Wildlife Management Plan

NOx Nitrogen Oxides

NRCan Natural Resources Canada

NSN New Substances Notifications

ODS Ozone Depleting Substances

OZONE O_3 Ground-Level Ozone

PBTs Persistent Bioaccumulative Toxic Substances

PCB Polychlorinated Biphenyl

PM Particulate Matter (fine particulates)

PMTS A Canadian Council of Ministers of the Environment Policy for the Management of Toxics Substances

POPs Persistent Organic Pollutants

PSL Priority Substances List

12. Acronyms (cont'd)

RPP	Report on Plans and Priorities
SO_2	Sulphur Dioxide.
TC	Transport Canada
TSMP	Federal Toxics Substances Management Policy
UN ECE	United Nation's Economic Commission for Europe
UNEP	United Nation Environment Program
VNR	Vote Netted Revenue
VOC	Volatile Organic Compound
WAPPRIITA	*Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*

12. Index