

Environment Canada

**1999-2000
Estimates**

A Report on Plans and Priorities

Approved

Minister of the Environment

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Management Presentation Statement

Management Representation

Report on Plans and Priorities 1999-2000

I submit, for tabling in Parliament, the 1999-2000 Report on Plans and Priorities (RPP) for **Environment Canada**

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.

This document also serves as Environment Canada's report on its plans and priorities for Science and Technology.

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: _____

Section I: Message from the Minister of the Environment

Canada's rich and diverse environment is a source of national pride. In many ways it defines who we are, where we live, and what we do. Canadians want to preserve the integrity of this natural heritage. As trustees for this land, we must ensure that the environment we leave our grandchildren is at least as clean as that entrusted to us by our grandparents.

When we have healthy air, water and nature, and less climate variability, human health, the economy and society all benefit. Canadians want concrete action and measurable results to safeguard their health and the health of their natural environment. Selecting issues on which to act means weighing the risks of inaction, the costs (social and economic) of achieving results, and the opportunities to lever action by others.

As Minister, I plan to build upon the progress that we have made on delivering measurable improvements to the quality of the environment and the integrity of our ecosystems. I have put an agenda in place to achieve results in four broad priority areas where science has found the risks to human and ecological health to be greatest: *Clean Air, Clean Water, Climate Change, and Nature*. I will also focus on sustaining vital weather and atmospheric services that provide Canadians with information, warnings and predictions about the impacts of the environment on human health and safety, and on socio-economic activities.

My priorities establish the framework within which all Canadians can act as stewards for a clean, safe, and diverse environment. By exercising leadership and by influencing key partners, Environment Canada will work to make sure that the environment forms an integral part of government-wide policy priorities. I will continue to foster new and existing partnerships with environmental, health, community and Aboriginal groups, with provinces and territories, with other government departments and with business and industry to help us deliver on our commitments. I will also continue to seek and put in place innovative ways of engaging Canadians in communities across the country in positive actions to improve the environment.

Accordingly, I am pleased to introduce *Environment Canada's 1999-2000 Report on Plans and Priorities*, which identifies what we intend to achieve over the next three years. The Report sets out targets against which Environment Canada's progress will be measured. Targets also demonstrate how tax dollars are being used to ensure that Canadians will continue to live and prosper in an environment that is protected, respected and conserved.

My goal for the new millennium is to see a Canada that is stronger and healthier because we cared enough to get results on the environment. I know that you will join with me in making this happen.

Christine S. Stewart

Summary of Key Plans and Priorities

Environment Canada (EC)

with its partners, seek to achieve these key results: *to be demonstrated by (targets to be achieved):*

Clean Environment

Adverse human impact on the atmosphere and on air quality is reduced.

Total emissions of greenhouse gases reduced to 6% below 1990 levels for the period 2008 - 2012 as provided for under the Kyoto Protocol once it is ratified.

Air pollution related hospital admissions reduced by 50% from 1990 levels by 2010.

Permanent national limit on sulphur dioxide emissions of 3.2 million tonnes annually (first met in 1993).

Consumption of HCFCs reduced 35% by 2004 (base year 1996) and production and consumption of methyl bromide reduced 50% by 2001 (base year 1991).

Canada-wide standards for inhalable particulate matter and ground-level ozone presented to federal and provincial Ministers of the Environment by 2000.

The environmental and human health threats posed by toxic substances and other substances of concern are understood, and prevented or reduced.

Releases of toxics reported through the ARET program reduced by 25,000 tonnes by the end of 2000.

Approximately 500 new substances and 500 non-DSL substances assessed per year, and controls implemented where required.

Remedial action started at Sydney tar ponds and the PEC site.

By 2000, consideration of economic instruments is incorporated into the management of toxic substances.*

All of the approximately 23,000 substances on the Domestic Substances List categorized (jointly with Health Canada) for exposure potential, persistence, bioaccumulation and inherent toxicity within seven years of royal assent of revisions to CEPA.

Continue to meet mercury emissions reductions of 50% from 1990 levels in accordance with UNECE commitments.

Canada-wide standards for mercury, benzene, petroleum hydrocarbons and dioxins and furans presented to federal and provincial Ministers of the Environment by 2000.

Nature

Biological diversity is conserved.

Stable or increasing populations by 2005 of 10 migratory bird species currently designated endangered or threatened.

By 2001, wintering populations of pintails to be increased by 100%; maintain stable populations of mallards, trumpeter swans, tundra swans and black ducks.

Management and protection of polar bears grounded in legislation by 2001.

One million hectares of habitat protected under the North American Waterfowl Management Plan (NAWMP) by 2002.

6% increase in area protected by Environment Canada for wildlife by 2000.

Incidences of chronic marine oil pollution affecting Atlantic seabirds reduced by 75% by 2004.

* Targets identified under EC's Sustainable Development Strategy.

Human impacts on the health of ecosystems are understood and reduced.	<p>Biodiversity planning, reporting, performance measurement and information infrastructure in place by 2001.</p> <p>Improved knowledge of the impacts of specific stressors (e.g. land use practices, atmospheric change and pollution, and the cumulative impacts of stressors) by 2002.</p> <p>Scientific knowledge and tools for management actions to reduce human impacts on the health of ecosystems by 2002.*</p> <p>Sustained S&T capacity consistent with federal S&T policy.</p>
Priority ecosystems are conserved and restored.	<p>A national accord on bulk water removals (including for the purposes of export) by 2001.</p> <p>A Great Lakes Basin Ecosystem Program by 2000.</p> <p>Priorities and action plans by 2001 to ensure sustainability of northern communities and ecosystems.</p> <p>Priorities in Northern Labrador and Northern Quebec identified by partners in the Northern Ecosystem Initiative by 2000.</p>

Weather and Environmental Predictions

Reduced impact of weather and related hazards on health, safety, and the economy.	<p>Year 2000 compliant mission critical systems by June 1999.</p> <p>Year 2000 Business Continuity Plans by April 30, 1999.</p> <p>90% of monitoring systems within their expected lifespan by 2003-2004.</p> <p>Service standards for warnings lead time met by 2000-2001.</p> <p>Service standards for warnings accuracy met 80% of the time by 2000-2001.</p> <p>Satisfaction with the accuracy of warnings improved by 10% in 2001-2002 from the 1997-1998 baseline.</p>
Adaptation to day-to-day and longer term changes in atmospheric, hydrologic, and ice conditions.	<p>Awareness of climate change and variability increases 10% over the 1999-2000 baseline by 2001-2002.</p> <p>Awareness of stratospheric ozone depletion and effects on human health increases 10% over the 1999-2000 baseline by 2001-2002.</p> <p>Stakeholder consultations demonstrate confidence in credibility of science.</p> <p>Service standards for ice and aviation products met in accordance with signed client agreements.</p> <p>Service standards for products and services met 80% of the time by 2000-2001.*</p> <p>Public and government satisfaction with products and services increased 10% in 2001-2002 over 1997-1998 baseline.*</p> <p>Initial response to all complaints within 48 hours of receipt by 2001-2002.</p>

* Targets identified under EC's Sustainable Development Strategy.

Management, Administration and Policy

Strategic and integrated policy priorities and plans.

Coordinated sustainable development agendas with key sectors (e.g. health) by end of 2000.*

Perspectives and knowledge of Aboriginal people consistently considered in EC decision making and their capacity to participate in SD projects and initiative is enhanced by end of 2000.*

A sustainable development component is added to the government-wide Policy Research Initiative by 2000.*

A government-wide international strategy to advance the environmental and sustainable development agenda in international fora by end of 2000, in cooperation with DFAIT and other federal departments.

EC's existing youth network is expanded by 25% by end of year 2000, to ensure Canada's diversity of youth are providing their perspectives and knowledge to EC's decision making processes.*

100 communities benefit from information sharing and networking activities under the Millennium Eco-Communities initiative (MEC) by end of 2000.*

A 20 % increase in the number of EC's Green Lane site visits by 2000.*

A well-performing organization supported by efficient and innovative services.

All ongoing and future program funding linked to performance measurement information by 2001.

All decisions on strategic commitments of the department supported by results-based implementation plans and reporting strategies by 2000.

HR considerations and impacts integrated into managerial decision making at all levels.

Departmental vision, direction and values are communicated effectively to all employees.

80% of employees report their capabilities are appropriately employed.

Workforce increasingly representative of the public it serves by April 2002 - representation targets for women (technical category) 20.6%; Aboriginal Peoples 2.5%; persons with disabilities 3.3%; visible minorities 6%.

95% bilingual positions are filled by employees who meet the linguistic requirements of their positions.

Baseline established for organizational health, against which significant improvements will be made.

Measurable progress by May 2000 to reduce environmental risks and liabilities identified in the May 1999 Environmental Management Programs.*

Year 2000 compliance of government-wide mission critical systems supporting environmental forecasting and warning by June 1999, and of departmental mission critical systems by December 31, 1999.

* *Targets identified under EC's Sustainable Development Strategy*

Section II: Departmental Overview

Introduction

Five facts set environmental issues apart from all others confronting governments. First, everything in the environment is interconnected; every part is linked to every other in subtle but profound ways. It follows that every environmental issue is linked in some way to every other.

Second, the environment is more complex than we yet understand. While our knowledge is improving, new issues can arise with apparent suddenness, and seemingly discrete issues can interact in unanticipated ways. All of which means that the public environmental agenda has a volatility which is not easily constrained.

Third, changes in environmental conditions often take decades to become visible. Many of these changes are difficult to measure, such as the harm avoided through preventative actions, or the impacts of scientific and technological research. It is also difficult to attribute changes to a single organization because of the number of players that must be involved to successfully implement solutions.

Fourth, people are part of (not apart from) the environment. The environment supplies the necessities of life, and the raw material of most economic activity. It absorbs the waste of the processes of living. The inherent variability of environmental and atmospheric conditions introduces an element of uncertainty into the human enterprise that cannot be eliminated. Human health, safety, prosperity, and even spiritual well-being are inextricably linked to the environment. This makes the environment the most 'horizontal' of the challenges facing government.

Fifth, the environment and our relation to it are everyone's responsibility. The decisions we make - in our homes, communities and businesses - determine both the quality of the environment and our vulnerability to changing environmental conditions. Making responsible decisions is a function of our skills and knowledge, and of the social and economic signals and support we receive from the society around us.

Living responsibly on this planet is everyone's affair. Ensuring people have the means and opportunity to exercise their responsibility is the mandate of government. Environment Canada has a leadership role in ensuring Canadians can exercise their environmental responsibilities.

“There is a continuity and flow between living things, water, atmosphere and the mineral worlds. Understanding and maintaining the integrity of these relationships are important to conservation, to a sustainable environment, and hence to sustainable development.”

It's About Our Health!

*Report of the Standing Committee on
the Environment and Sustainable
Development*

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.*

Mandate

Environment Canada is a science-based department with a large mandate. Under the *Department of the Environment Act*, it is expected to preserve and enhance the quality of the natural environment (including migratory birds and other non-domestic flora and fauna), conserve and protect our water resources, carry out meteorology, enforce the rules of the Canada-U.S. International Joint Commission, and coordinate federal environmental policies and programs.

For its large mandate, Environment Canada is actually one of the smaller federal departments. Excluding its weather services, its budget is comparable to provincial budgets for environmental protection. Yet, we live in an evolving federation which demands that environmental issues be addressed from a national perspective. Canadians look to the federal government to set national goals that serve Canada's environmental health, their health and safety, and their natural legacy. They also want solutions to be tailored to reflect the unique qualities and characteristics of communities.

Sustainable development is the context within which Environment Canada delivers on its mandate. Sustainable development is a national goal, a policy of the Government of Canada, and a shaping assumption for environmental management in this country. Although the department contributes every day to sustainable development, there is more it could do. It is uniquely positioned to provide leadership in building an agenda and in mobilizing Canadians to make sustainable development a reality.

Mission: *To make sustainable development a reality in Canada by helping Canadians live and prosper in an environment that needs to be protected, respected and conserved. To this end we undertake and promote programs to:*

- *protect Canadians from domestic and global sources of pollution;*
- *conserve biodiversity in healthy ecosystems; and*
- *enable Canadians to adapt to weather and related environmental influences and impacts on human health and safety, economic prosperity, and environmental quality.*

Organizing to Deliver Results

While Environment Canada's vision is of responsible decision making, it exercises its leadership through a focus on results. This approach ensures that we are making a measurable difference in the quality of the environment, and helps to build and sustain public commitment to environmental action.

Environment Canada's business lines are based on the broad environmental objectives toward which all its activities are oriented. They are:

- *A Clean Environment* - Canadians are affected by pollutants from many sources - both global and domestic - and in many different forms; Environment Canada's objective in this business line is to protect Canadians from substances released as a result of human activity.
- *Nature* - Canadians depend on ecosystems for valued resources and services, from producing oxygen that sustains us to providing recreational enjoyment; the objective of this business line is to conserve biological diversity in healthy ecosystems.
- *Weather and Environmental Predictions* - Environmental conditions affect Canadians on many scales of time and space; from minutes to centuries and from cities to continents. Environment Canada's objective is to help them adapt to the environment in ways which safeguard their health and safety, optimize economic activity and enhance environmental quality.

A fourth business line, *Management, Administration and Policy* provides strategic and effective departmental management to achieve environmental results, and encourages citizen engagement and action on environmental priorities.

Business Lines are the forums for setting national direction, resource allocation and accountability.

Linkages Across Business Lines

Every part of the environment is linked. Every day the atmosphere interacts with every ecosystem and every person. Although atmospheric issues and their impacts appear unrelated, there are strong links between the issues of atmospheric change. These global air issues are integrators of our business lines. For instance, some chemicals linked to climate change are also implicated in smog, acidification, and stratospheric ozone depletion. The science behind all these air issues plays a role in the decline, invasion and adaptation of species, the adaptation of humans and their economic processes, the production of environmental services and the development of policies and protocols. These linkages provide the key in mitigating atmospheric change issues. Strategies to reduce greenhouse gases will produce visible results in the other atmospheric issues, as well as ecosystem health, biodiversity and human health. Through its interdependent business lines and matrix structure, the department has organized itself to reflect these profound linkages.

Business lines develop objectives, allocate resources, and measure performance consistent with the overall priorities and directions of the department. But business lines are not isolated from each other; each business line makes important contributions to the success of the others. As well, science is the foundation of every business line and is essential to achieving results in all Environment Canada's roles.

Over the past year, the department revised its planning, reporting and accountability structure to more clearly define accountabilities; and to strengthen its capacity to strategically allocate resources based on priorities and performance. The most obvious adjustments were dividing its Healthy Environment business line into Clean Environment and Nature, and distributing elements of the Greener Society business line across the new business lines. The relationship between the old and new lines is shown in Section V. None of the adjustments necessitated organizational change.

Environment Canada has adopted a matrix approach to departmental management, to ensure integrated program delivery that respects regional differences.

Environment Canada's organizational structures crosscut business lines in a matrix management approach. This allows the Environment Program to be defined in a national context, while being delivered in a client-centered manner respecting regional differences.

EC is organized into seven headquarters organizations:

- ◆ Office of the Minister and Deputy Minister
- ◆ Atmospheric 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.

The strength of Environment Canada's integrated regions is their ecosystem approach. This approach is fundamental to the way Environment Canada carries out its mandate and delivers on its priorities. It combines scientific knowledge of the environment with an understanding of the 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.

Operating Environment

Over the past quarter century, the quality of Canada's environment has improved. The water we drink is safer, the air we breathe is cleaner, our rivers and lakes are healthier, and in the international community Canada has one of the best records for conserving species. The evidence is that Environment Canada has made a material contribution to these improvements. However, it is becoming clear that the global environment is deteriorating at an accelerating rate, and that Canada's environmental heritage and achievements are increasingly vulnerable to changing global conditions. Furthermore, severe storms, floods and other environmental events are having a worsening impact on Canadians, their property and businesses.

Selecting issues on which to act means weighing the risks of inaction, the costs (social and economic) of achieving results, and the opportunities to lever action by others. With regard to every issue, Environment Canada exercises a combination of roles:

Selecting issues on which to act means weighing risks, costs and opportunities.

- Where Environment Canada is best positioned, it creates new knowledge -- of the effect and interaction of multiple stressors on the environment and of solutions to address them; at the ecosystems or global atmospheric levels; or over time scales (as with climate change) other institutions cannot sustain.
- It builds public and political understanding through its development of science assessments and scientific tools such as indicators of the health of the environment; through its reporting on the state of the environment; and via its electronic and traditional communications.
- Environment Canada represents Canada's environmental interests in the development of protocols and conventions for global action; leads in the development of national positions, based on science, to take into international fora; and through international scientific cooperation on emerging issues.
- It builds national approaches to guide Canadians' actions through development of national standards, guidelines, and frameworks for action.
- Within its jurisdiction and where it is best positioned, it prescribes the actions of others through legislation, regulation, and permitting.

- Where it is best positioned for reasons of economy of scale or national sovereignty, Environment Canada operates national infrastructure such as water, air, or climate monitoring networks, research facilities, or weather forecasting services, and partners with the provinces in operating national infrastructure like the National Air Pollution Surveillance Network.
- It builds social capital and community capacity through its partnerships, ecosystems initiatives and support to community action.
- Finally, where best positioned to do so, Environment Canada acts on behalf of all Canadians with other levels of government to manage national wildlife areas and migratory bird sanctuaries, and to redress mistakes of the past, as with its efforts at species remediation, habitat restoration, or contaminated sites clean-up.

In carrying out its roles, Environment Canada must set priorities, assess results, find new delivery options and maintain its human and scientific capacity.

In configuring its investment in each issue, Environment Canada draws on these broad functions. They reflect the life cycle through which every environmental issue tends to pass: from identification and scientific assessment of the issue, through public awareness and consensus on the need for action, to development of appropriate responses, to action in communities and evaluation of the effectiveness of those actions. Which roles are most appropriate for Environment Canada to play on a particular issue depend in part on the point in its life cycle an issue has reached. Of course, ongoing investment is needed to maintain the department's basic operational infrastructure and ensure its capacity to meet new challenges.

Today, Environment Canada faces challenges in each of its roles:

- Environment Canada's research and development are increasingly important, as seemingly straightforward issues like acid rain are found to defy conventional solutions, and very different issues like ozone depletion and species loss are found to interact in unexpected ways.
- Building public understanding in an age of information demands new skills and tools.
- Representing Canada's environmental interests internationally becomes increasingly difficult: as industrializing nations increase environmental pressures; as the number of international fora multiplies; and as the international community wrestles with

international linkages between environmental protection and global trade liberalization.

- Building national approaches becomes more complex as an increasingly heterogeneous society makes defining single public interests difficult, and as economic uncertainties and global competition overshadow environmental considerations.
- Prescribing solutions becomes costly and protracted as more issues become global in scale and as we reach the limit of conventional responses to single source issues.
- Mounting public demand for clear government accountabilities and near term results can conflict with the long-term commitment of time and resources required to create community capacity and with the shared accountability for results.
- The costs of keeping a national infrastructure adequately maintained and technologically current are mounting at a time when pressing issues with a higher policy profile continually challenge the resolve to do so.
- Never has it been more true that Environment Canada cannot act alone, but informing others -- other departments, levels of government, and the private sector -- of their responsibilities is a thankless task, one which can disrupt efforts to build shared agendas.

To continue to play its roles effectively in the face of these challenges, Environment Canada must be selective about when and where to intervene in the life cycle of an issue. It needs to measure and report on results, deliver quality service in innovative ways, and ensure a sustainable workforce to face the challenges of the next century. It needs to enhance its science and technology human resources and infrastructure to meet future science requirements. And it needs to draw the links as clearly as possible between economic opportunity and environmental health and quality of life.

Priorities

In recognition of the risks to human and environmental health and safety, and the importance of sharing our skills and knowledge, the Minister has developed priorities for action. They are:

- ❑ Achieving results with partners under four broad themes:
 - Climate change: by working with other federal departments, provinces and stakeholders toward a domestic agenda to meet new international emissions reduction obligations; by participating in international negotiations on rules for implementing the Kyoto Protocol; by continuing to contribute its science and information on the likely effects of climate change; and by continuing to improve its predictive capability to help Canadians protect themselves, their property and their livelihood from the reality of climate variability, and to adapt to climate change.
 - Clean air: by continuing to advance scientific understanding of air quality and its effects; by negotiating international agreements to reduce cross-border transport of air pollutants; by working with provinces and others through CCME to develop Canada-wide standards; and by federal actions such as regulations on sulphur in gasoline.
 - Clean Water: by focusing on the major sources of pollution from industrial sectors, the worst toxics, and water security.
 - Nature: by working with its partners toward the conservation of biodiversity in functioning ecosystems, recovery of species at risk and conservation of species habitat.

In support of these priorities, and to meet the government's obligations under the revised *Canadian Environmental Protection Act*, an additional \$42 million over three years was announced in the 1999 Federal budget.

- ❑ Sharing ideas and solutions with and among communities and other key target groups:
 - Ecosystems initiatives to enable federal, provincial and community partners to focus on objectives rather than

jurisdiction, overcome barriers and build community capacity for real environmental improvements.

- Millennium Eco-Communities Initiative to enable communities to share their successes and expertise in community based environmental action.
- Communicating Environment Canada's knowledge, using new techniques and technologies.

☐ Safeguarding Canadians

- Positioning and renewing Environment Canada's national weather services to ensure their long-term viability and the safety and well-being of Canadians.

Specific strategies and commitments are described by business line in Section III. In each business line an effort has been made to specify measurable targets to be achieved within the planning horizon, and against Environment Canada's long-term indicators of environmental improvement or social change. In particular, targets are provided related to the four commitments under Environment Canada's Sustainable Development Strategy, tabled in Parliament in April 1997.

The intent of Environment Canada's first Sustainable Development Strategy was to strengthen its own capacity for leadership, that is: its ability to meet Sustainable Development goals; its effectiveness as an advocate of Sustainable Development; its tools for sound decisions in a changing environment; and its example in the greening of government operations. Although developed as part of its Sustainable Development Strategy, care was taken to ensure Sustainable Development targets are an integral part of the department's management framework.

Financial Spending Plan

(\$ millions)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Gross Program Spending	631.0	618.3	603.1	591.8
Less: Revenue credited to the Vote	(71.6)	(69.9)	(69.6)	(72.5)
Net Program Spending	559.4	548.4	533.5	519.3
Less: Revenue credited to the Consolidated Revenue Fund	(8.5)	(7.4)	(7.3)	(7.3)
Plus: Cost of services provided by other departments / agencies	50.6	44.5	44.5	44.5
Net Cost of the Department	601.5	585.5	570.7	556.5

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

Gross Planned Expenditures by Business Line for the Planning Period

(\$ millions)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Clean Environment	135.4	154.0	150.4	142.8
Nature	147.1	145.2	144.6	143.3
Weather and Environmental Predictions	234.2	224.7	217.7	214.8
Management, Administration and Policy	114.3	94.4	90.4	90.9
Total Gross Planned Expenditures	631.0	618.3	603.1	591.8

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

Included in the 1998-1999 fiscal year but not included in 1999-2000 are: \$Millions

- Settlement of Methylcyclopentadienyl Manganese Tricarbonyl (MMT) claim	15.7
- Environmental remediation of leased site	15.0
- Year 2000 issue for Government-Wide Mission Critical Systems (GWMCS)	5.0
- Decrease in salary costs related to Employee Departure Incentive and employee benefit costs	4.5
- Reduced planned carryforward from 1997-98	4.2
- Miscellaneous adjustments	4.5

Included in the 1999-2000 fiscal year but not included in 1998-1999 are:

- Funds to improve management and control of toxic substances in the environment	14.4
- Climate Change Action Fund reprofile	11.6
- Funding received for workload and price increases	7.8
- Capital carryforward	2.4

The decrease in future years is primarily related to the cash flow changes in the Climate Change Action Fund which sunsets in 2001-2002; and costs associated with implementing Y2K remediation action and repayment of the loan.

Section III: Plans and Priorities by Business Line

Clean Environment

In the Clean Environment business line Environment Canada acts to protect Canadians from domestic and global sources of pollution. Emphasizing a preventative approach, it leads in the development of shared, long-term strategies to reduce the impacts on the environment of substances released as a result of human activity. The long-term results of the Clean Environment business line are: to reduce human impact on the atmosphere and on air quality; and to understand and prevent or reduce the environmental and human health threats posed by toxic substances and other substances of concern.

The objective of the Clean Environment Business Line is to protect Canadians from domestic and global sources of pollution.

Planned Spending (\$ millions)

Results	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Adverse human impact on the atmosphere and on air quality is reduced	27.0	36.7	32.8	20.8
The environmental and human health threats posed by toxic substances and other substances of concern are understood, and prevented or reduced	108.4	117.3	117.6	122.0
Gross Planned Expenditures	135.4	154.0	150.4	142.8
Less: Revenues credited to the Vote	(4.4)	(5.8)	(5.8)	(6.7)
Net Planned Expenditures	131.0	148.2	144.6	136.1

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

The year over year variances are mainly due to change in resource levels related to the Climate Change Action Fund and to improve management and control of toxic substances in the environment.

The work of the Clean Environment business line involves four core functions: research and development, policy analysis, program delivery and the tracking of progress. Research and development are used to identify and understand existing and emerging problems, support the development and application of solutions, and provide the knowledge needed to make sound decisions on policies and control options. Policy analysis involves identifying the important aspects of a problem, building scenarios to anticipate potential consequences, and developing possible options and courses of action. Program delivery then implements the agreed management approach, balancing departmental capacity and the need to act in a precautionary manner; this also includes support to communities in their efforts to take action.

Tracking includes determining baseline conditions, building inventories (for example, sources of a particular substance), and monitoring environmental effects and compliance with regulations and standards. This information feeds back into science, policy and program delivery where it is used to identify trends and assess whether management actions are having their intended results for ecosystem health.

The activities of the Clean Environment business line are closely linked to those of the other business lines. Actions related to climate change depend on research and atmospheric modeling that also supports results in the Weather and Environmental Predictions business line. The Nature business line detects, assesses and reports on the impacts of pollutants on the health of ecosystems and on biodiversity. The Management, Administration and Policy business line provides essential support in communications, environmental economics, coordination of international activities and many other areas. It is also responsible for providing departmental coordination and support to the EcoAction 2000 Funding Program which supports the delivery of Clean Environment results (for example, it will support 75 community action and animation projects by end of 2000).

Sound science and innovative technological research are required to ensure cost-effective protection of health and the environment. Many of the issues that Environment Canada must address are now only partly understood. It is essential, however, that potential problems be identified early and that ways to prevent harm are developed. Science and technology priorities within the Clean Environment business line include: understanding the impacts of nitrogen compounds, ultraviolet radiation and climate change on ecosystems; the impacts of the atmospheric deposition of persistent organic pollutants and metals, especially mercury; the occurrence, persistence, fate and effects on ecosystems of toxic chemicals and effluents, especially endocrine-disruptive substances; and developing and implementing improved pollution prevention and measurement technologies.

Challenges

The Clean Environment business line faces many challenges in ensuring the protection of human and environmental health. For example, there are over 23,000 substances in commercial use in Canada, and the impacts of release into the environment of most of these substances is unknown. In addition, compliance with regulations must be ensured for over 14,000 sites under the *Fisheries Act* alone. The demand for advice in support of environmental assessments increases with the pace of economic activity; while these assessments yield real environmental benefits, they require substantial investments

of time and resources, especially in the Regions. Constrained by limited resources it is essential that Environment Canada set priorities for action, targeting the most serious threats first.

Environment Canada has been expanding the range of tools it uses, complementing regulations with economic instruments and enhanced voluntary measures. While these approaches offer greater flexibility, we must ensure that the results achieved are equivalent to those obtained through regulation. New tools, such as the ability to write tickets for minor infractions, are proposed in the revisions to the *Canadian Environmental Protection Act*. Environment Canada is searching for innovative ways to achieve compliance with environmental laws and regulations. Harmonization of approaches with the provinces will also help to ensure enhanced environmental protection, promotion of sustainable development, and the achievement for greater effectiveness, efficiency, accountability and predictability of environmental management issues of Canada-wide interest.

The broad range of threats to human and environmental health means that Environment Canada must target the most serious threats first.

Environmental issues are increasingly global in scope, and the environmental rules for economic activity are now often set in international fora. This has both positive and negative consequences; international rules have been a key lever for domestic action, however, trade agreements are a growing challenge to domestic environmental management. We must ensure that our environmental policies and programs, including our regulatory regime and international agreements, are reflective of and adaptive to current trade and competitiveness considerations. Canadians also need to be well represented when such rules are set, including not only the negotiation of environmental protocols, but trade and investment agreements as well. Canada has an opportunity, through its domestic environmental agenda and as a leader on the international stage, to ensure that economic growth complements efforts to enhance domestic and global environmental conditions.

Increased awareness of the importance of environmental protection also brings opportunities. A domestic industry has arisen to provide solutions for reducing emissions, preventing pollution and remediating contaminated sites. Progress toward a cleaner environment has long been dependent on our technological capacity to use energy and materials more efficiently. Expertise developed here may also offer export potential, and thereby help to reduce the global environmental burden.



Long-Term Result

Adverse human impact on the atmosphere and on air quality is reduced.

There are three broad categories of air pollutants, although all air issues are closely interconnected and have common sources and common health and environmental impacts. Some pollutants alter the atmosphere itself; these changes may then affect human

and environmental health. The effects of these pollutants are felt on a global level, and any solutions require international cooperation. This category includes emissions of greenhouse gases and the resulting climate change, and emissions of substances that deplete the stratospheric ozone layer. A second category of pollutants uses the air as a pathway, with most environmental and health effects arising after they are deposited on land or in water, often at considerable distances from their source. Examples include acid rain and persistent organic pollutants. Addressing these substances requires international cooperation as well as actions to control releases within Canada. The third category of pollutants are those that by themselves or in combination reduce the quality of the air we breathe. Ground level ozone and particulate matter are significant pollutants of this type.

The past year saw significant progress toward reducing impacts on the atmosphere and on air quality, particularly in the area of climate change. Canada signed the Kyoto Protocol, committing to reduce domestic greenhouse gas emissions. Regulatory action was taken to restrict particulate emissions from diesel fuel and to control the level of benzene in gasoline. Air quality and smog were of great public concern and actions were taken to implement the second phase of the Smog Plan in cooperation with Natural Resources Canada and Transport Canada. Also, a pilot project was initiated in New Brunswick to provide forecasts of ground-level ozone, a major component of smog hazardous to health.

Plans and Priorities

Since air issues are so interrelated, Environment Canada's strategy will be to work in partnership with others, nationally and internationally, to develop and implement solutions which promote cross-cutting actions that have multiple benefits. As a result, accountability for many of the milestones to be achieved is shared with these partners.

Environment Canada will work in partnership with others, nationally and internationally, to develop and implement solutions that have multiple benefits.

Canada's National Climate Change Implementation Strategy

In Kyoto, Canada agreed to reduce its greenhouse gas emissions to six per cent below 1990 levels by 2008-2012. In November 1998, in Buenos Aires, Canada confirmed its commitment. The Government of Canada, in partnership with the provinces and territories, has launched a comprehensive, inclusive process to develop a National Implementation Strategy.

In October, 1998, federal and provincial Energy and Environment Ministers asked that the Strategy be completed for their consideration by the end of 1999. The Strategy will incorporate the work of more than 450 experts from across the country and all sectors of society. Last October, the federal government announced details of the Climate Change Action Fund, a three-year, \$150 million initiative to support the national process, spur early action in the areas of technology and public education to reduce emissions, and further understanding of climate change.

Environment Canada is charged to provide leadership in the areas of: science on the likely impacts of climate change; public education and outreach; and negotiations on the international rules associated with the implementation of the Kyoto Protocol.

Environment Canada has set clear priorities on which it will focus its attention during the next several years. With Natural Resources Canada, it will work to ensure that Canada's commitment to reduce greenhouse gas emissions will be met. Specifically, a National Implementation Strategy for the Kyoto Protocol will be presented to a Joint Ministers Meeting by the end of 1999. Environment Canada will also continue as the federal lead in negotiations on international rules on implementing the Kyoto Protocol, including the Clean Development Mechanism. In partnership with the provinces, further reductions in the area damaged by acid rain will be sought through lower emissions from both domestic and cross-border sources. A report to federal and provincial Ministers on a Canada-wide Acid Rain Strategy for post-2000 will be completed by the end of 1999. Improving air quality is also a high priority for action. Key steps include progress toward international agreements such as the Joint Plan for addressing transboundary air pollution (including drafting of an ozone annex to the Canada / US Air Quality Agreement, to be drafted for negotiation by 1999 - 2000) and the global Convention on Persistent Organic Pollutants under the United Nations Environment Program, to be negotiated by the end of 2000. Canada-wide Standards for particulate matter and ground-level ozone will be developed with the provinces through the Canadian Council of Ministers of the Environment and presented to Ministers by the end of 1999. Environment Canada will also take action alone in areas where it is best placed, including in 1999 the promulgation of regulations for sulphur in gasoline.

Progress will be measured by the following indicators and targets:

<i>Indicators</i>	<i>Targets</i>
Canadian emissions of greenhouse gases.	Total emissions of greenhouse gases reduced to 6% below 1990 levels between 2008 - 2012, as provided for under the Kyoto Protocol once it is ratified.
Air pollution related hospital admissions.	Admissions reduced by 50% from 1990 levels by 2010.
Canadian emissions of sulphur dioxide.	Permanent national limit on sulphur dioxide emissions of 3.2 million tonnes annually (first met in 1993).
Domestic consumption and production of ozone depleting substances.	Consumption of HCFCs reduced 35% by 2004 (base year 1996) and production and consumption of methyl bromide reduced 50% by 2001 (base year 1991).
Development of Canada-wide standards.	Canada-wide standards for inhalable particulate matter and ground-level ozone presented to federal and provincial Ministers of the Environment by 2000.



Long-Term Result

The environmental and human health threats posed by toxic substances and other substances of concern are understood, and prevented or reduced.

Toxic substances in the environment, in food and in drinking water present significant risks to the health of Canadians. Children are especially vulnerable – exposure to toxic substances can affect fetal, infant and childhood growth, impair development of nervous systems and cause abnormal development.

Much has been learned about the problem of persistent, bioaccumulative toxic substances. Many of these substances are produced in other countries and enter the Canadian environment after being transported long distances through the air. While present in amounts that are only barely detectable, they can adversely affect many species and sensitive ecosystems. They can also build up in the tissues of aquatic animals that many Canadians consume.

Steady progress has been made toward addressing this problem. Emissions of substances identified as toxic under the *Canadian Environmental Protection Act* and reported in the National Pollutant Release Inventory were reduced by 6% between 1995 and 1996. This marks the fourth straight year in which declines have been measured. A recent major achievement has been the signing of a Canada-wide Accord on Environmental Harmonization and three sub-agreements on inspections, environmental assessment and environmental standards by

federal and provincial Ministers of the Environment (except Quebec). This Accord, and the signing in 1998 of the Policy for the Management of Toxic Substances, should pave the way for enhanced coordination in all jurisdictions, including Canada-wide standards currently under development for six priority substances.

Plans and Priorities

The large number of substances entering the environment and the large number of potential sources means that it is essential for Environment Canada to focus its efforts where it can make the greatest difference. Determining priorities is a complex and ongoing process -- many activities are mandated in legislation, while others fulfill obligations under international agreements. Environment Canada's strategy is to employ a rigorous science-based process to develop lists of substances which will be given priority for management actions. Implementation of the recommendations for management of 25 substances on the first such list will be completed by 2002, and assessment of 25 substances on the second list will be completed by the end of 2000. Progress will also continue to be made toward virtual elimination of releases of persistent bioaccumulative toxic substances.

A science-based approach is required to identify priorities for action and control options.

In response to the recommendations of the Standing Committee on the Environment and Sustainable Development, the government recently introduced amendments to the *Canadian Environmental Protection Act*. Upon passage of this legislation, screening of all potentially harmful substances currently in the Canadian market must be completed in seven years, and prompt action will be taken on substances found to be toxic. Additional funds provided in the budget will serve to accelerate screening and assessment of new and existing substances, improve management and control of toxic substances, and track progress.

Environment Canada will assess and implement controls as needed, for all submitted notifications of new substances (approximately 500 per year), plus an additional 500 substances not previously used in Canada. This will help to ensure that no new toxic substance is introduced into the Canadian environment. Environmental assessment is one of the most effective tools for pollution prevention -- advice will be provided to the assessment of approximately 2,000 projects or activities per year. In addition, Canada-wide standards will be developed jointly with the provinces and territories through the Canadian Council of Ministers of the Environment for the following substances: dioxins, furans, mercury, benzene and petroleum hydrocarbons.

Enhancement of Environment Canada's enforcement capacity will also be given priority. Actions here will include implementation of the

Enforcement Action Plan, development of an intelligence program to better focus enforcement activities, and implementation of the Inspections Sub-Agreement of the Harmonization Accord.

The legacy of toxic wastes will also be addressed by beginning remediation of the Sydney Tar Ponds and Pacific Environment Centre sites.

Progress will be measured by the following indicators and targets:

<i>Indicators</i>	<i>Targets</i>
Domestic releases of toxic substances for which EC controls are in place.	Releases of toxics reported through the ARET program reduced by 25,000 tonnes by the end of 2000.
Assessments of new substances and substances not on the Domestic Substances List (DSL) where notifications have been submitted.	Approximately 500 new substances and 500 non-DSL substances assessed per year, and controls implemented where required.
Remediation of contaminated sites.	Remedial action started at Sydney tar ponds and the PEC site.
Extent to which economic impacts are considered in environmental policy decisions.	By 2000, consideration of economic instruments is incorporated into the management of toxic substances.*
Identification of toxic substances.	All of the approximately 23,000 substances on the Domestic Substances List categorized (jointly with Health Canada) for exposure potential, persistence, bioaccumulation and inherent toxicity within seven years of royal assent of revisions to CEPA.
Domestic emissions of mercury from human sources.	Continue to meet mercury emissions reductions of 50% from 1990 levels in accordance with UNECE commitments.
Development of Canada-wide standards.	Canada-wide standards for mercury, benzene, petroleum hydrocarbons and dioxins and furans presented to federal and provincial Ministers of the Environment by 2000.

* *Targets identified under EC's Sustainable Development Strategy*

Nature

The Nature business line is about conserving biological diversity in healthy ecosystems. The business line leads in building shared sustainability strategies for Canada's wildlife and ecosystems. Its three long-term results are to conserve biological diversity, to understand and reduce human impacts on the health of ecosystems, and to conserve and restore priority ecosystems.

The objective of the Nature Business Line is to conserve biological diversity in healthy ecosystems.

Planned Spending (\$ millions)

Results	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Biological diversity is conserved	49.0	48.1	47.6	47.4
Human impacts on the health of ecosystems are understood and reduced	43.2	43.0	42.6	41.0
Priority ecosystems are conserved and restored	54.9	54.1	54.4	54.9
Gross Planned Expenditures	147.1	145.2	144.6	143.3
Less: Revenues credited to the Vote	(6.8)	(7.6)	(7.3)	(7.3)
Net Planned Expenditures	140.3	137.6	137.3	136.0

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

The year over year variances are attributable to a number of miscellaneous adjustments.

The activities of the Nature business line include managing migratory birds and nationally significant migratory bird habitat; developing and implementing recovery plans with provinces, territories and other partners for endangered species; and providing leadership on the implementation of the Convention on Biological Diversity. This business line also contributes scientific understanding of ecosystem function and develops science-based tools for assessing ecosystem health. With others, it applies an integrated approach to conserving and restoring significant ecosystems, and provides tools to build local capacity to continue this work. For example, the EcoAction 2000 Funding Program will support approximately 225 community action and animation projects related to conserving nature by end of 2000. The Nature business line also represents Canada's interests in international arenas dealing with wildlife, ecosystem health and biodiversity, and provides federal leadership in conserving and protecting Canada's water resources.

These activities are closely linked to other business lines. Recovery plans for species at risk, protection of biodiversity, and initiatives in priority ecosystems depend on actions taken by the Clean Environment

business line to prevent toxic substances from entering the environment. Knowledge and tools generated in this business line are essential to policy development and management of toxic substances, air quality and atmospheric issues in Clean Environment and Weather and Environmental Predictions business lines.

Dealing effectively with the environmental issues in any ecosystem requires a holistic approach to managing the effects of human activities. Environment Canada's ecosystem initiatives use a comprehensive and collaborative approach to deliver many of the department's environmental and social results.

Science is the foundation of the business line. Currently, the focus is on wildlife conservation biology and impacts of human activities on aquatic ecosystems, although other issues are also addressed. Examples include investigating: impacts of land use practices and cumulative effects of stressors; the role of contaminants in the reported decline of selected wildlife populations such as amphibian and reptilian populations in agricultural areas; and ecotoxicology of selected priority substances including endocrine-disruptive chemicals and effects of mercury on loons and other fish-eating birds.

Challenges

Attaining and promoting a better understanding of biodiversity conservation requires an integrated national and international effort.

Conservation of nature requires international management. World-wide recognition of the value and need to conserve freshwater resources, biological diversity, and wetlands has provided a powerful impetus to improve international cooperation in the search for solutions. International conventions such as the Convention on Biological Diversity, Convention on International Trade in Endangered Species, and Ramsar (wetlands of international significance) will figure prominently in the work of the business line, particularly with respect to its responsibilities for nature and water.

Despite such efforts, globally we continue to lose species through pollution and habitat degradation and loss. Population growth and unsustainable resource development and consumption continue to put pressure on the environment. The challenge is to work with industrialized nations to clarify the linkages between environmental conservation and sustained economic development.

Globalization and international trade are altering the ability of individual governments to deal with some environmental issues. International trade agreements and their institutions, such as North American Free Trade Agreement and the General Agreement on Tariffs and Trade, are challenging national governments to find new ways of undertaking their environmental responsibilities. For the

Nature business line, trade agreements are having a major influence on how Canada addresses issues such as biosafety and water exports.



Long-Term Result

Biological diversity is conserved.

The diversity of genes, species, and ecosystems represents the biological foundation for sustainable development. Pressures on biodiversity have resulted in significant declines in many species of animals and plants (in certain cases pushing them to the edge of extinction), and in the loss or damage of habitat and ecosystems and the essential functions they perform. In 1992, Canada became the first industrialized nation to ratify the Convention on Biological Diversity, committing to rehabilitate and restore ecosystems, regulate or manage biological resources to ensure their conservation and sustainable use, promote their recovery, and develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species.

Environment Canada provides leadership on the implementation of the Convention on Biological Diversity.

Over the past year, the business line acted to conserve biodiversity by: signing an Accord for the Protection of Species at Risk in Canada and beginning its implementation; implementing recovery plans for nine species and developing three new recovery plans; conserving an additional 61,752 hectares of key wetland habitat under the North American Waterfowl Management Plan for a total of more than 680,000 hectares across Canada since 1986; and protecting about 20,000 hectares through land donations and agreements.

Plans and Priorities

A business priority will be to achieve positive recovery trends for threatened and endangered species of migratory birds and to sustain or increase targeted wildlife populations. Strategies will include work in partnership with: provinces and territories to implement the Accord, including the assessment of species at risk, and the development and implementation of recovery plans for threatened and endangered species; the public to increase commitment and involvement for recovery actions; and, with the scientific community to enhance research on conservation issues. Actions will include: reintroducing Species at Risk legislation in Parliament in 1999; developing bilateral agreements on implementing the Accord by fall of 1999; and revalidating in 2001 the Committee on the Status of Endangered Wildlife in Canada list of threatened or endangered species, using new criteria for determining risk of extinction; and, developing and implementing recovery plans for species already designated endangered or threatened.

A second priority is to reverse habitat loss and fragmentation trends, as well as raise the standard of biodiversity conservation in Canada and internationally. Environment Canada will work with non-governmental organizations and private landowners toward a comprehensive conservation vision. Measures will include implementation of the North American Waterfowl Management Plan Update (including a sea duck venture) in 1999. Environment Canada will also begin consultations to upgrade the Migratory Birds Regulations in the Fall of 1999, and to complete a National Wildlife Areas strategic plan and Marine Protected Areas Strategy in 1999.

Working with other departments, provinces and territories is essential. Actions will include a credit of Canadian Biodiversity Information Network by end of 1999; a program of work and national communications related to provisions of the Convention regarding indigenous people by end of 1999; and a federal performance measurement framework for the Canadian Biodiversity Strategy by 2000. Environment Canada will work with federal, provincial and international wildlife enforcement agencies in the implementation of the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* and the *Migratory Birds Convention Act*; and with the Royal Canadian Mounted Police and Canada Customs to enforce the Convention on International Trade in Endangered Species at international points of entry. To reduce the incidence of oiled birds in Atlantic Canada the department will, with its partners, develop its capacity for oil matching and fingerprinting, and evaluate the uses of RADARSAT imagery to detect oil spills. It will coordinate surveillance and enforcement, and investigate and prosecute oil discharge violations while continuing to promote awareness.

Progress will be demonstrated through the following:

<i>Indicators</i>	<i>Targets</i>
Threatened and endangered species of migratory birds with stable or increasing populations.	Stable or increasing populations by 2005 of 10 migratory bird species currently designated endangered or threatened.
Population levels of targeted migratory bird species and other wildlife under federal jurisdiction.	By 2001, wintering population of pintails to be increased by 100%; maintain stable population of mallards, trumpeter swans, tundra swans and black ducks.
Area of wildlife habitat conserved under direct EC protection and through departmental partnerships and influence.	Management and protection of polar bears grounded in legislation by 2001. One million hectares of habitat protected under NAWMP by 2002. 6% increase in area protected by Environment Canada for wildlife by 2000.
Indicators of domestic and global biodiversity conservation (<i>under development</i>).	Incidences of chronic marine oil pollution affecting Atlantic seabirds reduced by 75% by 2004. Biodiversity planning, reporting, performance measurement and information infrastructure in place by 2001.



Long-Term Result

Human impacts on the health of ecosystems are understood and reduced.

Understanding of ecosystem structures, processes and functions, as well as economic activities (for example, land-use changes, inputs, products, wastes generated and resource stocks and flows across all sectors) is critical to an effective ecosystem-based management approach, and fundamental to sound decision-making.

The Nature business line works to understand how Canada's ecosystems are affected by human induced stressors. It then transfers that knowledge to Canadians and the global community so that it can be incorporated into decision-making.

Significant achievements include: an ecosystem-based approach to assessing sediment quality in freshwater ecosystems; a method of using naturally occurring isotopes to track migratory species; science assessments of nutrients and their impacts on the Canadian environment, the state of the Great Lakes, stratospheric ozone depletion, and acid rain; national guidelines for the protection of water, soil, and sediment quality; and continued implementation of pulp and paper environmental effects monitoring.

Plans and Priorities

Environment Canada's first priority toward this long-term result is to assess and report on the current state and trends of ecosystem health. This will include establishing an early warning system by 2001 to detect changes in ecosystems, and the development of new ecosystem health indicators by 2002.

A second priority will be to advance understanding of the impacts of human activities on ecosystems, and to contribute knowledge and tools for responsible actions. For example, the business line will publish eight science assessments on, for example, atmospheric change, nutrients and endocrine disruptors by 2002; develop 20 science-based standards of environmental quality, including Canadian water quality guidelines, by 2002; and develop new techniques and approaches for sediment remediation by 2002.

Environment Canada contributes scientific understanding of the condition of ecosystems, the stressors causing their degradation, and the tools needed to improve environmental quality.

Indicators and targets for assessing progress will include:

<i>Indicators</i>	<i>Targets</i>
Measures of the impact of science in policies, programs and on clients (are under development).	Improved knowledge of the impacts of specific stressors (e.g. land use practices, atmospheric change and pollution, and the cumulative impacts of stressors) by 2002. Scientific knowledge and tools for the development of management actions to reduce human impacts on the health of ecosystems by 2002.* Sustained S&T capacity consistent with federal S&T policy.

* *Targets identified under EC's Sustainable Development Strategy.*



Long-Term Result

Priority ecosystems are conserved and restored.

Environment Canada's ecosystems initiatives represent a major component of its leadership in securing a more sustainable future for Canada, and are a vehicle for delivering many of its environmental and societal results.

Ecosystems initiatives lever resources, focus science, coordinate efforts, generate public and political support, and shape decisions about the future of ecosystems.

Ecosystems initiatives help Canadians achieve environmental results through partnerships, pooling resources, focusing science, coordinating efforts, sharing information, and generating a broad base of support for action.

Over the years, Environment Canada's ecosystem initiatives have produced a number of environmental improvements: 65,000 hectares of wild bird habitat protected in the Fraser Basin; action plans to enhance the sustainability of 13 Atlantic communities; toxic effluent from 50 priority industrial plants along the St. Lawrence River reduced by 96%; and emissions of dioxins and furans in the Great Lakes Basin reduced by 66%.

Water is a key component of all ecosystems, and tends to be the component most subject to abuse. Canada's water resources face pressures from increased population, urbanization, and industrial development. Climate change is expected to directly affect both the quantity of Canadian waters available and their quality, intensify competing demands for water resources from multiple sectors, and add to the stress on aquatic ecosystems. While we have made progress in protecting freshwater in Canada, much remains to be done.

Plans and Priorities

Priorities include the implementation of a Federal Freshwater Strategy. Environment Canada is currently leading the development of the Strategy to identify priority issues and provide a basis for collaborative partnerships in sustainable freshwater management. The Nature business line will continue to work with provinces, territories and local governments to improve and integrate freshwater management. It will provide important information on reducing water pollution, and of the importance of clean water. Initiatives will include renewal of the Federal Water Policy by 2000, development of a national accord on the bulk water removals (including for the purposes of export) by 2000, and education activities to highlight major issues and successes in the St. Lawrence and Great Lakes ecosystems.

A second priority is the renewal of the federal Great Lakes Program. This will involve research on new approaches to the assessment, conservation and restoration of priority ecosystems. It will also require new partnerships to address environmental priorities in the Great Lakes Basin. In turn this will require re-negotiating the Canada-Ontario Agreement and renewing Canada's commitment to sustainability in the Great Lakes Basin ecosystem by 2000.

A third priority is the launch of the Northern Ecosystem Initiative. Specifically, the department will work with other partners in a unique multi-regional initiative to define northern ecosystem priorities. This will be a key contribution to federal northern science and technology efforts. The initiative will develop partnerships and priorities to assess the impact of atmospheric change by 2001. It will also identify our partners' ecosystem priorities for Northern Labrador and Quebec by 2000.

In addition, the Atlantic Coastal Action Program, St. Lawrence Action Plan Vision 2000, Northern Rivers Ecosystem Initiative and Georgia Basin Ecosystem Initiative will all enter new phases in their efforts to respond to the unique environmental, economic and social concerns of their respective targeted areas and communities.

Great Lakes

The Great Lakes contain one fifth of the global supply of fresh surface water. They are an invaluable natural resource, providing drinking water to some 8 million Canadians as well as supporting numerous wildlife populations and 150 species of fish. The Great Lakes basin generates \$150 billion annually in Canada/US trade, supports 45% of Canada's industry, 25% of Canada's agricultural population, and a \$100 million commercial fishing industry, in addition to being a source of transportation, power generation and recreation. Through the Great Lakes Water Quality Agreement, Canada is committed to protecting the "*chemical, physical and biological integrity of the waters of the Great Lakes Basin ecosystem*". Doing so requires the commitment of all levels of Government, non-government stakeholders and private citizens. The current federal Great Lakes 2000 initiative ends in March 2000, as does the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem. Over the coming months Environment Canada will lead efforts to design the next phase of the Great Lakes Program in consultation with partners and stakeholders, and reaffirm commitment to a healthy and sustainable Great Lakes Basin ecosystem.

Progress will be measured through the following:

<i>Indicators</i>	<i>Targets</i>
<i>Under development</i>	A national accord on bulk water removals (including for the purposes of export) by 2001.
	A Canadian Great Lakes Basin Ecosystem Program by 2000.
	Priorities and action plans to ensure sustainability of northern communities and ecosystems (including ecosystem impacts of atmospheric change and major developments in the North) by 2001.
	Priorities in Northern Labrador and Northern Quebec identified by partners in the Northern Ecosystem Initiative by 2000.

Weather and Environmental Predictions

The objective of the Weather and Environmental Predictions Business Line is to help Canadians adapt to their environment in ways which safeguard their health and safety, optimize economic activity and enhance environmental quality.

Environment Canada's Weather and Environmental Predictions business line is about helping Canadians respect and adapt to the environment, both in the short term and the long-term, in order to reduce adverse impacts of the environment on Canadians, their property and livelihood. Its two key results are: reducing the impact of weather and related hazards; and adaptation to changes in atmosphere, hydrosphere and cryosphere.

Planned Spending (\$ millions)

Results	Forecast* Spending 1998-1999	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Reduced impact of weather and related hazards on health, safety and the economy	167.5	160.8	155.3	153.4
Adaptation to day-to-day and longer term changes in the atmospheric, hydrological and ice conditions	66.7	63.9	62.4	61.4
Gross Planned Expenditures	234.2	224.7	217.7	214.8
Less: Revenues credited to the Vote	(60.4)	(56.5)	(56.5)	(58.5)
Net Planned Expenditures	173.8	168.2	161.2	156.3

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

The year over year variances are mainly due to the reduction of resource levels attributable to Year 2000 remediation of Government-Wide Mission Critical Systems (GWMCS).

The Weather and Environmental Predictions business line provides Canadians with the information necessary to safeguard their health, safety and property, and to optimize economic efficiency. Operating 365 days a year, 24 hours a day, it provides information on the past, present and future states of the physical environment. Examples of its products and services include: weather forecasts, warnings of extreme weather events and hazardous air quality; information on atmospheric conditions and the quantity of water in our lakes and rivers; forecasts of ice and wave conditions on our oceans and inland waters; and predictions of the state of our climate.

Environment Canada leads the development of atmospheric science and environmental prediction. Its weather services receive some 50 million telephone calls a year, its Internet sites are among the country's most frequently visited, and polls have indicated that over 80% of Canadians check the weather forecast every day. Environment Canada translates science into operational service delivery for the benefit of Canada and Canadians; for example, its forecasts of ozone and ultraviolet radiation and of the transport of acid rain precursors, radionuclides and volcanic ash (a major hazard to aviation).

The same atmospheric and climate modeling, analysis and scientific services which support the business line's results also support the other business lines. For example, the Weather and Environmental Predictions business line provides the Clean Environment business line with research in support of the Kyoto Protocol, and development of Canada-wide standards for particulate matter and ground-level ozone. This business line also meets the Nature business line's requirements for research on impacts of atmospheric change and ultraviolet radiation. The infrastructure supporting this business line also supports other departmental infrastructure requirements such as the Green Lane and internal communications.

Environment Canada research is increasingly multidisciplinary. One of the contributions of this business line is an evolving capacity for environmental prediction. The atmosphere touches almost every part of the environment. The business line is building on its capacity to predict atmospheric conditions, in order to undertake the broader challenge of environmental prediction.

Atlantic Environmental Prediction Research Initiative

A strategic response to the environmental prediction thrust is illustrated by the establishment of the Atlantic Environmental Prediction Research Initiative (AEPRI) in Halifax. In this leading edge initiative Environment Canada is partnering with a number of agencies, including the Department of Fisheries and Oceans, Dalhousie University, McGill University and MARTEC (a private company in Halifax). Research will focus on regional environmental simulation and prediction for all time scales (e.g. from hourly to weekly) in Atlantic Canada. The initial efforts involve integrating atmospheric models with ocean, hydrological and atmospheric chemical models. This will result in improved regional marine, hurricane, water level and air quality forecasts and warnings, with resulting benefits to the public.

This involves applying analytical techniques and modeling to the prediction of future states of, or scenarios regarding the physical environment. Environmental prediction encompasses a range of products from air quality forecasts to distribution forecasts for species of butterflies, and all time scales, from short-range warnings to long-range climate projection.

Through this business line, Environment Canada delivers on one component of its first Sustainable Development Strategy -- to provide Canadians with tools to make sound decisions in a changing environment.

Challenges

The Weather and Environmental Predictions business line continues to adapt to its reduced resource level. It has streamlined its networks of weather stations and rationalized and automated its water monitoring and climate observing networks, reduced staff and increased its reliance on technology. The most urgent challenge is to ensure the business line can maintain its infrastructure and maintain, qualify and renew its human resources with adequate skills, tools and recruitment.

Environment Canada must maintain or improve its ability to anticipate environmental hazards and events, and thus allow Canadians time to prevent or adapt to them more effectively.

To produce forecasts and warnings, the business line depends upon the global exchange of data. The World Meteorological Organization (to which Environment Canada is the Canadian representative) coordinates the exchange and distribution of data. Meteorology and hydrology and their associated science are dependent not only on global data, but on the vast Canadian infrastructure, most standards for which are set internationally. With continual and rapid changes in technology, the infrastructure has an average useful life cycle of only five to seven years. In order to fulfill international obligations, the infrastructure requires ongoing investment in existing and new technologies.

Meteorological and hydrological services have become a strategic resource. As atmospheric variability increases, economic infrastructure ages, development pressures on the environment mount, and exposure to natural and man-made hazards in the environment grows. As a consequence, reliance on accurate and timely weather warnings, forecasts, and environmental information also grows. Demand is increasing for longer lead times for tornado and hail warnings, real-time water level monitoring networks, and better forecasting of heavy precipitation events. Such information is essential to minimize risk and adapt to changing conditions, and to take advantage of opportunities afforded by such change.

For reasons of competitiveness and sovereignty it is important for Canada to maintain a capacity to understand and predict its own

weather and water resources. However, the meteorological sector is subject to market forces and globalization. Foreign meteorological organizations compete aggressively for market share. Increasingly sophisticated users are demanding improved access, higher accuracy, longer lead times, and tailored predictions. Maintaining satisfactory relations with key clients is essential.

Partnerships are a key factor in the delivery of the business line, for example: the hydrometric program depends on partnership with the provinces and territories, the relationship with the media is indispensable, as are relations with other government departments and academia. The business line must adapt to the evolving expectations of its partners as their needs change.

In response to this evolving context, Environment Canada conducted an Alternative Service Delivery Study to identify risks and issues. It is now developing options to position the business line for a sustainable future.



Long-Term Result

Reduced impact of weather and related hazards on health, safety, and the economy.

Environment Canada informs Canadians of imminent or short term hazards from their physical environment. Through its warnings, forecasts and advisories, Environment Canada's objective is to ensure that Canadians have the knowledge and the time to react, to protect themselves, their property and business.

Plans and Priorities

The most immediate priority for the business line is to ensure its mission critical systems (highly vulnerable to the "Year 2000 problem") are Year 2000 compliant by June 1999. One means of doing so will be to minimize all discretionary information technology development.

Beyond this immediate pressure, the priority is to secure the long-term health of Environment Canada's weather forecasting and warning system. Especially important is revitalizing the business line's meteorological and hydrometric infrastructure, including installation of 10 new Doppler radars and the upgrading of 16 others by 2003-2004. Research on weather detection and forecasting will be targeted to extreme weather and climate prediction. Measures will be taken to

strengthen the cohesiveness and consistency of the national weather forecast and warning program through the implementation of a framework of national standards for all functions in 1999-2000.

Hydrological services are an important component of this business line. Recommendations from the International Joint Committee Reference of the Red River Flood in 1999-2000 will be addressed, partnerships and federal-provincial agreements for the water program will be renewed in 2001-2002, and hydrometric applications in the areas of water flow and oil and chemical spills across inter-jurisdictional boundaries will be developed by 2000-2001.

Monitoring, understanding and predicting weather and other phenomena of the physical environment requires a substantial investment in infrastructure and skilled personnel.

The demographic profile of its professional staff and a decade of very limited recruiting now means the business line must implement a comprehensive set of measures to revitalize its human resources.

Progress toward achieving these priorities and strategies will be measured by the following indicators and targets:

<i>Indicators</i>	<i>Targets</i>
State of readiness of mission critical systems for the Year 2000.	Implementation of Year 2000-compliant mission critical systems by June 1999.
Proportion of monitoring systems (by dollar value) within their expected lifespan.	Year 2000 Business Continuity Plans by April 1999.
Average time between issuance of summer severe weather warnings and marine warnings and event occurrence (warning lead times).	90% of monitoring systems within their expected lifespan by 2003-2004. Service standards for warnings lead time met by 2000-2001.
Accuracy of summer severe weather warnings and marine warnings.	Service standards for warnings accuracy met 80% of the time by 2000-2001.
Client satisfaction with warning and forecast services (includes quality, utility, timeliness and accessibility).	Satisfaction with the accuracy of warnings improved by 10% in 2001-2002 from the 1997-1998 baseline.



Long-Term Result

Adaptation to day-to-day and longer term changes in atmospheric, hydrologic, and ice conditions.

To be able to make informed decisions regarding their health, safety and prosperity, Canadians need to understand changes to the physical environment, their vulnerabilities, and opportunities that changes may bring. Governments need to understand changes to the physical environment and

their possible impacts in order to develop policy to reduce Canada's vulnerability to such changes.

Environment Canada has built a world-wide reputation for its forecast and prediction techniques and models; for example, its high resolution Global Environmental Multiscale model is used to forecast meteorological conditions more accurately and as a base for other environmental products.

Plans and Priorities

One priority is to maintain Environment Canada’s science capacity as the basis for its weather services and atmospheric and climate change policy development. Environment Canada will modernize its networks and measurement capacity, in particular, its observing network for stratospheric ozone and ultraviolet radiation. The business line will focus on the co-benefits of climate change research, for example, in studying the impact of climate change on biodiversity and the adaptation of species, and in developing regional-scale climate change scenarios by 2000-2001.

Environment Canada will maintain its science capacity as the basis for its weather services and for policy development related to the atmosphere and climate change.

A second priority will be to broaden the range of weather and environmental information in support of various economic sectors. It will expand its research and development capacity in partnership with the academic community and the private sector: to improve predictions from climate and weather models as a result of better representation of clouds and aerosols by 1999-2000; to develop a heat balance model in support of the road weather program by 2000-2001; to enhance understanding of the variability and trends in Canadian climate extremes of precipitation, wind and temperature by 2000-2001; and to develop 4-dimensional data assimilation techniques for its numerical models by 2001-2002.

This business line will strengthen its service culture and renew relationships with clients and partners, through the development of specialized products for the media and transportation sectors by 2001-2002, as well as the development of media and public education tools on climate change and air issues by 2000-2001.

Progress toward priorities and strategies will be measured by:

<i>Indicators</i>	<i>Targets</i>
Canadians’ awareness of changes to their physical environment and the effects of these changes on their health and safety.	Awareness of climate change and variability increases 10% over the 1999-2000 baseline by 2001-2002.
	Awareness of stratospheric ozone depletion and effects on human health increases 10% over the 1999-2000 baseline by 2001-2002.
Level of agreement of those affected by environmental policies with the scientific basis of the policies.	Stakeholders consultations demonstrate confidence in credibility of science.

Satisfaction of commercial clients and government partners.

Service standards for ice and aviation products met in accordance with signed client agreements.

Public and government satisfaction with products and services (includes accuracy, utility, and accessibility).

Service standards for products and services met 80% of the time by 2000-2001.*

Public and government satisfaction with products and services increased 10% in 2001-2002 over 1997-1998 baseline.*

Initial response to all complaints within 48 hours of receipt by 2001-2002.

* *Targets identified under EC's Sustainable Development Strategy*

Management, Administration and Policy

The objective of the Management, Administration and Policy Business Line is to provide integrated, strategic and effective departmental management to achieve environmental results.

The Management, Administration and Policy business line secures support and assures action by others for environmental and sustainable development goals. The business line's mandate is to develop the department's integrated management; that is, its strategic medium and long-term agenda, leadership skills, partnerships, and innovative means to inform and engage citizens, and provide efficient and innovative support services.

Management, Administration and Policy involves: strategic direction setting and policy development; development and coordination of external relations with the international community, provincial and territorial governments and non-governmental organizations, Aboriginal peoples, youth, and Canadian communities; and provision of essential corporate services and support including planning and financial systems and services, information technology, information holdings, human resources, security and management of assets and accommodations, and environmental management systems.

Planned Spending (\$ millions)

Results	Forecast* Spending 1998-1999	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Strategic and integrated policy priorities and plans	73.4	55.3	50.9	51.6
A well-performing organization supported by efficient and innovative services	40.9	39.1	39.5	39.3
Gross Planned Expenditures	114.3	94.4	90.4	90.9
Less: Revenues credited to the vote	-	-	-	-
Net Planned Expenditures	114.3	94.4	90.4	90.9

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

The year over year variances are mainly due to the Settlement of Methylcyclopentadienyl Manganese Tricarbonyl (MMT) claim and environmental remediation of leased site in 1998-99; and decreases in funding received for workload in 2000-01.

The Management, Administration and Policy business line provides part of the context for the planning and management of the other business lines through its analysis of external realities and trends, and definition of corporate priorities and allocation of resources. It is responsible for ensuring that the policy agendas of all business lines cohere, and that their proposed actions are mutually reinforcing. Through its EcoAction 2000 Funding Program, the business line supports community-based action, public awareness and environmental education designed to deliver the results of its other business lines. It also supports the other business lines in developing the skills and tools to make the most effective use of their limited resources.

Through this business line, Environment Canada delivers on three components of its Sustainable Development Strategy, that is: strengthening its internal capacity for sustainable development; advocating sustainable development; and setting an example in “greening” government operations. The business line will also lead development of the second departmental Sustainable Development Strategy, required by the end of 2000.

Challenges

A number of factors will shape priority setting in the Management, Administration and Policy business line for the coming three to five years. While some may represent constraints, they also present opportunities.

It is a truism that we live in an Information Age. Government in an age of information means dealing with citizens in increasingly open and transparent ways, as points of contact multiply, dialogue becomes continuous, stakeholders are increasingly informed, and alliances and partnerships are increasingly changeable. Providing leadership, engaging citizens and managing services in this context challenges traditional approaches and conventional thinking about Public Service.

The government’s policy priorities as it enters the second half of its mandate pose a challenges. Among its priorities are a social union with emphasis on health care, as well as tax reform for Canadians. Many environmental issues are also human health and economic issues. These challenges, however, also create opportunities for advancing Canada’s environmental, social and economic sustainability well into the new millennium. The promotion of horizontal policy development, based on a strong policy capacity, will be essential to take advantages of these opportunities.

The challenges of allocating scarce resources and ensuring value for money spent mean the department must search for innovative approaches to management and accountability.

For some years, the federal government has been committed to clearer departmental accountability to Parliament. It has dubbed this challenge Modern Comptrollership. This means linking performance measurement and resource decision-making through an integrated process of planning and reporting. For Environment Canada the challenge is to set out clearly the results, and their costs for which the department can be held directly accountable.

Perhaps the most significant management challenge Environment Canada faces is expenditure management. In its simplest sense, expenditure management means setting priorities to most effectively deploy limited resources in the face of mounting workload and organizational challenges. Since Program Review, Environment Canada's resources have effectively been capped. Workload continues to increase as new issues emerge and as policy issues and expectations of Canadians continue to grow. Challenges arising from demographic projections include turnover, changing skills requirements, and equity targets. Other management challenges include extraordinary corporate costs (e.g. Universal Classification System, Year 2000 'bug', and an aging capital infrastructure) and incremental pressures on core activities (e.g. enforcement). Environment Canada's new management framework is in part, a response to this growing demand. It should enhance the department's capacity to set strategic priorities and link performance to its resources management.



Long-Term Result

Strategic and integrated policy priorities and plans.

To be effective, Environment Canada's policy agenda needs to transcend short term policy pressures, respond to the longer term needs of government and non-government partners (domestic and international), and be communicated to, and supported by, stakeholders and the public alike.

Plans and Priorities

To secure public support and involvement in Environment Canada's results-focused agenda, the priority is to inform Canadians of environmental issues in innovative ways, and to engage them in federal policy initiatives. For example, Environment Canada will develop and implement a strategic communications plan and outreach activities focusing on key priorities such as climate change, nature, toxics, weather, partnerships and Environment Canada's international agenda.

...a comprehensive strategy to improve the capacity of communities...to take action in support of a clean environment, the preservation of nature and sustainable development.

Building on its many programs to support community-based action, Environment Canada will develop a comprehensive strategy to improve the capacity of local communities and communities of interest to take action in support of a clean environment, the preservation of nature and sustainable development.

Environment Canada will promote best practices, networking, information sharing and the development of tools to assist community-based action and the effective use of limited resources. As an extension of its community programs, the department will promote and support Millennium Eco-Communities as a means of recognizing and encouraging the application and exchange of community-based knowledge and experience.

Another strategy will be to improve Environment Canada's management and dissemination of information and data, including better use of its presence on the Internet (the Green Lane). For example, it will make greater use of the interactive capacity of the Green Lane with clients. It will support the work of the environmental education community towards the incorporation of sustainable development into all education sectors. It will build and expand networks of concerned youth (beginning with the Youth Round Table and Polaris Network) and incorporate their perspectives into environmental policy making.

Commitment to an integrated environment agenda that transcends individual departmental accountabilities is indispensable. Environment Canada's strategy is to exercise its leadership and influence with key partners to this commitment. With central agencies and other federal departments, Environment Canada will develop a liaison program to ensure the environment is an integral part of government-wide policy priorities.

With the Department of Foreign Affairs and International Trade and other federal departments, Environment Canada will work to develop a government-wide strategy to advance the environmental and sustainable development agenda in international fora. With the Canadian Council of Ministers of the Environment, Environment Canada will implement existing harmonization agreements and develop additional agreements in new areas of priority. With non-governmental organizations and industry groups concerned with environment and

NUNAVUT

On April 1, 1999, Canada will create two new territories: a changed Northwest Territories and Nunavut. The new eastern Arctic territory will have the same expectations of federal cooperation and support as any other province or territory. The Inuit have been effective stewards of the environment for thousands of years. But global environmental changes are affecting sensitive ecosystems and traditional use of wildlife. As a consequence, Environment Canada's mandate is particularly relevant in northern Canada. As a partner in northern environmental stewardship, EC will strengthen its presence and programs in the Eastern Arctic. Iqaluit-based staff and other departmental staff will work with Resource Co-Management Boards, communities, and the Nunavut government to implement Sustainable Development in the new Territory. The department will continue to meet its statutory obligations and strive to provide levels of service equivalent to other parts of Canada. The loss of support once provided through the Polar Continental Shelf Project is a barrier to managing the fragile Arctic ecosystem. However, Environment Canada will continue its efforts to enhance northern science in support of its partnerships with northern peoples.

Decisions on policies, priorities and plans should provide for broad involvement and integrate both long and short-term economic, environmental, social and equity considerations.

health, Environment Canada will develop a strategy for their engagement in major policy consultations. With First Nations, Environment Canada will establish a permanent vehicle to ensure ongoing dialogue and partnership in the department's policy initiatives. It will also encourage creation of a framework for Aboriginal involvement in matters of the Canadian Council of Ministers of the Environment.

Environment Canada is especially concerned to promote and support environment-economy integration in policy making. It will take advantage of opportunities to build upon its current policy capacity for sustainable development. It will work with federal economic departments to ensure economic policies are compatible with environmental goals. The development of Environment Canada's second Sustainable Development Strategy will present an opportunity to further its work in this area.

Progress will be measured by the following indicators and targets:

<i>Indicators</i>	<i>Targets</i>
Clear and effective policy priorities that are integrated with government-wide priorities.	Coordinated sustainable development agendas with key sectors (e.g. health) by end of 2000.*
Strengthened support of federal environmental policy priorities and active engagement in implementation of these priorities by key partners.	Perspectives and knowledge of Aboriginal people consistently considered in EC decision making and their capacity to participate in SD projects and initiatives is enhanced by end of 2000.* EC's existing youth network is expanded by 25% by end of year 2000 to ensure Canada's diversity of youth are providing their perspectives and knowledge to EC's decision making processes. *
Improve capacity of local communities and communities of interest to take action and share information.	A sustainable development component is added to the government-wide Policy Research Initiative by 2000.* 100 communities benefit from information sharing and networking activities under the Millennium Eco-Communities initiative (MEC) by end of 2000.*
Clear definition and advancement of Canada's environmental interests internationally.	A government-wide international strategy to advance the environmental and sustainable development agenda in international fora by end of 2000, in cooperation with DFAIT and other federal departments.
Number of users of EC's Internet sites and information products.	A 20 % increase in the number of EC's Green Lane site visits by 2000.*

* *Targets identified under EC's Sustainable Development Strategy.*



Long-Term Result

A well-performing organization supported by efficient and innovative services.

The focus of this result is on ensuring that the department has the management context and capacity to achieve its results in the context of ongoing expenditure management. This means providing the frameworks, principles and systems to guide good management decision making and the

skills and processes to sustain a motivated and productive workforce. An important contribution of the Management, Administration and Policy business line is to provide “early warning” of the need to take action to maintain departmental capacity.

Plans and Priorities

A major priority throughout 1999-2000 will be ensuring that Environment Canada satisfies its Year 2000-related responsibilities. This will involve repairing, testing and implementing Year 2000 compliant versions of the different departmental systems used in program delivery. It will also involve supporting the National Contingency Planning Group’s efforts to ensure that Year 2000-related risks associated with specific aspects of the national infrastructure (sewage/waste treatment, hazardous materials, meteorology) are identified and addressed.

At Environment Canada, comptrollership means providing the frameworks, principles and systems to guide good management decision making and the skills and processes to sustain a motivated and productive workforce.

Environment Canada’s management priority is to strengthen the department’s capacity for strategic and integrated decision making. One strategy is to provide leadership in framing choices through the development of corporate frameworks, including a departmental Environmental Management Program (including a three year action plan for managing the department’s contaminated sites) by May 1999, a Real Property Management Framework by September 1999, and an Information Technology and Information Management framework by October 2000.

A second strategy will be to strengthen departmental performance management. Specifically, performance measurement strategies for each of the department’s key result indicators will be completed by June 2000. The department will also foster skills in performance management; specifically in resource allocation, performance measurement, and financial analysis.

A third strategy will be to enhance the accessibility, quality, utility and timeliness of management information. In particular, the department's Financial Information Strategy will be fully implemented by April 2001.

Finally, management systems which underpin corporate decision making will be strengthened; in particular an integrated human resources, finance, and performance information reporting system will be implemented by March 2002.

The second corporate management priority is to build an increasingly motivated, skilled and representative workforce. One strategy will be to establish a base line for organizational health. In particular, the department will conduct an organizational review after the implementation of the Universal Classification System and organizational health surveys in fiscal years 2000-2001 and 2001-2002.

Of particular importance will be strengthening partnerships between the human resources community and line managers in the management of human resources. One strategy in building this relationship will be an integrated approach to organizational capacity across and within business lines, most notably a results and competency-based Human Resources Management Framework. Particular elements will include: implementation of a new specific staffing regime during 1999-2000; recruitment, retention and diversity action plans for all major organizational units by the Fall of 2000; and competency-based management throughout the department by 2002.

Another strategy will be to develop technology, information systems and products to increase the accessibility, integration and usability of human resources data and information. For example, reporting tools will be developed to support demographic analysis, succession planning and forecasting by Fall 1999, and an enhanced Human Resources Management Information System will be implemented by the end of fiscal year 1999-2000.

Progress toward achieving this long-term result will be measured by the following indicators and targets:

<i>Indicators</i>	<i>Targets</i>
Quality of corporate decision making (informed, realistic and communicated to staff).	All ongoing and future program funding linked to performance measurement information by 2001. All decisions on strategic commitments of the department supported by results-based implementation plans and reporting strategies by 2000.
Degree to which the workforce is well led.	HR considerations and impacts integrated into managerial decision making at all levels. Departmental vision, direction and values are communicated effectively to all employees.
Degree to which workforce productivity and capacity is being developed to meet the evolving and future requirements of the department.	Employee competencies are appropriately used to achieve organizational goals - 80% of employees report their capabilities are appropriately employed. Workforce increasingly representative of the public it serves by April 2002 - representation targets for women (technical category) 20.6%; Aboriginal Peoples 2.5%; persons with disabilities 3.3%; visible minorities 6%.
Degree to which the workplace environment supports and enables the work of the employees.	95% bilingual positions are filled by employees who meet the linguistic requirements of their positions. Baseline established for organizational health, against which significant improvements will be made.
The extent to which departmental environmental policy is applied and integrated into internal operations.	Measurable progress by May 2000 to reduce environmental risks and liabilities identified in the May 1999 Environmental Management Programs.*
State of readiness of mission critical systems.	Year 2000 compliance of government-wide mission critical systems supporting environmental forecasting and warning by June 1999, and of departmental mission critical systems by December 31, 1999.

* *Targets identified under EC's Sustainable Development Strategy.*

Section IV - Consolidated Reporting

Major Legislative and Regulatory Initiatives.....ii

Environment Canada’s Sustainable Development Strategyiii

Year 2000 Initiativevi

Major Legislative and Regulatory Initiatives

Legislation and Regulations	Expected Results
<p><i>Canada Act for the Protection of Species at Risk</i> - New legislation to be introduced for the protection of endangered species, and species at risk generally.</p>	<ul style="list-style-type: none"> • General assessment of status of all species. • Provide legislated mandate for the Committee on the Status of Endangered Wildlife in Canada to assess the status of species suspected of being at risk. • Broad agreement-making capacity to encourage partnerships and cooperation. • Establishment of federal-provincial ministerial council to oversee national program. • Provision of a safety net to ensure every threatened and endangered species is protected from direct harm. • Mandatory recovery planning for threatened and endangered species. • Habitat protected through recovery plans, and through stewardship initiatives.
<p>Bill C-32 – An Act to revise the <i>Canadian Environmental Protection Act (CEPA)</i>.</p>	<ul style="list-style-type: none"> • Clause by clause review of Bill C-32 by the House of Commons Standing Committee on Environment and Sustainable Development to be completed during the first quarter of 1999. • Bill to proceed to Report Stage and Third Reading in the House of Commons, with possible referral to the Senate and Royal Assent before the end of June 1999.
<p>Sulphur in Gasoline Regulations - To reduce emissions from vehicles through controls reducing the level of sulphur in gasoline.</p>	<ul style="list-style-type: none"> • Reduced pollution from gasoline-powered vehicles.
<p>Metal Mining Liquid Effluent Regulations - (Fisheries Act) - Amendment - To reduce the environmental impact of metal mining discharges to the aquatic environment.</p>	<ul style="list-style-type: none"> • Overall reduction in effluent discharges from Canadian mines.

Environment Canada's Sustainable Development Strategy

SDS Goal	Proposed Targets	Indicator	Deliverables
1. Strengthen EC's Ability to Meet SD Goals	By 2000, consideration of economic instruments is incorporated into the management of toxic substances.	<i>Extent to which economic policies and economic impacts are considered in environmental policy decisions.</i>	<ul style="list-style-type: none"> • with provinces and stakeholders, assess the feasibility of using economic instruments in managing priority toxic substances and other substances of concern
	By 2002, contribute scientific knowledge and tools to the development of management actions to reduce human impacts of the health of ecosystems.	<i>A measure of the impact of science in policies, programs and on clients.</i>	<ul style="list-style-type: none"> • early warning system that detects changes in ecosystem by 2001 • new ecosystem health indicators by 2002
2. Be a more effective advocate of SD	<p>By end of 2000, EC's base of support for SD is enlarged by ensuring</p> <ul style="list-style-type: none"> • Coordinated sustainable development agendas with key sectors (e.g. health) by end of 2000. • 100 communities benefit from information sharing and networking activities under the Millennium Eco-Communities initiative (MEC) by end of 2000. • EC's existing youth network is expanded by 25% by end of year 2000 to ensure Canada's diversity of youth are providing their perspectives and knowledge to EC's decision making processes. • A sustainable development component is added to the government-wide Policy Research Initiative by 2000. 	<p><i>Strengthened support of federal environmental policy priorities, and active engagement in implementation of these priorities, by key partners.</i></p> <p>As measured by:</p> <ul style="list-style-type: none"> • number of mutually beneficial partnership arrangements in place with major sectors • number of communities benefitting from MEC • enhanced awareness of, and commitment to, EC's priorities and actions at the level of individual Canadians • number of youth networks working collaboratively with EC • number and focus of research activities underway 	<ul style="list-style-type: none"> • consultations undertaken with sectors on specific problems/barriers in partnering with EC • health and other sector NGOs targeted, and a dialogue is initiated to identify mutual interests • an outreach strategy to encourage individual and collective action in place • a "partnerships plan" for NGOs with steps to improve mutual capacity to form effective partnerships • further development and marketing of Millennium Eco-Communities initiative • further development and expansion of Polaris and Youth Round Table to a broader base of youth • research activities to broaden understanding of sustainable development, barriers to its implementation, and solutions for better integrating sustainable development considerations into the policy process

SDS Goal	Proposed Targets	Indicator	Deliverables
	By end of 2000, the perspectives and knowledge of Aboriginal Peoples are consistently considered in EC decision making and their capacity to participate in SD projects and initiatives is enhanced.	<p><i>Strengthened support of federal environmental policy priorities, and active engagement in implementation of these priorities, by key partners.</i></p> <p>As measured by:</p> <ul style="list-style-type: none"> • nature of partnership arrangements in place between EC and Aboriginal organizations • extent to which Aboriginal organizations feel they are being adequately engaged in EC decision making (as determined through targeted surveys) 	<ul style="list-style-type: none"> • bilateral meetings with Aboriginal organizations to discuss approach and basic framework for establishment of 1) permanent vehicle for dialogue with Aboriginal organizations at departmental level on environmental issues of mutual interest, and 2) framework for Aboriginal involvement in matters of the CCME • government-Aboriginal working groups struck to develop frameworks • completion and adoption of the frameworks as regular modus operandi
3. Give Canadians the tools to make sound decisions in a changing environment	Public and government satisfaction with products and services increased 10% in 2001-2002 over 1997-1998 baseline.	<p><i>Studies of quality and utility of products and services.</i></p> <p>As measured by:</p> <ul style="list-style-type: none"> • surveys, client feedback mechanisms, client interviews 	<ul style="list-style-type: none"> • in partnership with provinces and other stakeholders, expand Smog forecast to up to four locally-sensitive areas by end of 2000 • by 2000, in partnership with provinces and other stakeholders, increase the number of Road Weather Information Systems (RWIS) to 100 from the present 45 • by 2000, develop and implement a heat balance model in support of Road forecast program • modernize and automate water quantity networks by end of 2002 • develop hydrometric applications in the areas of water resource management including water flow and oil/chemical spills across jurisdictional boundaries by end of 2000 • physical/chemical processes in the life cycle of atmospheric constituents better understood by end of 2002
	Service standards for products and services met 80% of the time by 2000-2001.	<p><i>Public and government satisfaction with products and services (includes accuracy, utility, accessibility)</i></p>	<ul style="list-style-type: none"> • develop and implement 4-D data assimilation techniques into numerical models by end year 2001 • improve predictions from climate and weather models as a result of better representations of clouds and aerosols by end year 2000 • install 10 new Doppler Radars and upgrade 16 others by 2003-2004 • modernize sea ice remote sensing capability by end 2001

SDS Goal	Proposed Targets	Indicator	Deliverables
	A 20 % increase in the number of EC's Green Lane site visits by 2000.	<ul style="list-style-type: none"> • number and characterization of Green Lane users • user satisfaction: degree to which Canadian users are satisfied with EC's information, products and services for sustainable development (to support sound decision-making, individual and collective action) on the Internet 	<ul style="list-style-type: none"> • determine information needs of target groups to help them take action on environment and SD issues • identify information to be developed by EC and shared through the Green Lane • assess the navigational weaknesses of the Green Lane and restructure it in such a way as to allow a variety of audiences to access the information they need • by 2000, renew EC's Green Lane, develop a corporate strategy to make more effective use of the Internet as an integrative tool to inform, educate, encourage and build capacity for action on Sustainable Development • ensure the Green Lane has the necessary Internet capacity to deliver EC information on the Internet
4. Set a good example in the greening of government operations	Measurable progress by May 2000 to reduce environmental risks and liabilities identified in May 1999 Environmental Management Programs.	<i>The extent to which departmental environmental policy is applied and integrated into internal operations.</i>	<ul style="list-style-type: none"> • by May 1999, accountability and responsibility for the EMS is formalized and service and regional EMPs are prepared • EMS integrated into departmental operations • EMPs will include 3-year targets for addressing environmental risks and liabilities, and benchmarks for the first year of implementation • the first departmental EMP, based on service and regional EMPs, is prepared and reflects department-wide priorities and targets • communications strategy to build employee awareness and participation

Year 2000 Initiative

- The variety and number of impacts that the Year 2000 challenge is having on Environment Canada's operations are unprecedented. The departmental response to Year 2000 represents one of the largest, most complex undertakings ever pursued by the organization. The decentralized nature of our operations increases the complexity of this effort.
- The effort to achieve Year 2000 compliancy will involve about 500 employees on a full or part-time basis. This represents about 12% of the organization's workforce.
- 1,270 applications must be assessed to determine their Year 2000 compliancy, with remediation being performed as required.
- The Weather Forecasting and Warning System is Environment Canada's only government-wide mission critical system. Approximately 140 different projects or workplans are being pursued to ensure that the Weather Forecast and Warning System will operate on and beyond January 1, 2000.
- The departmental Year 2000 response is not limited exclusively to information technology applications. It also involves addressing concerns relating to facilities, embedded systems within laboratories, regulatory concerns and other issues. The department's largest external Year 2000-related obligation involves supporting the National Contingency Planning Group. This will involve our leading an exercise to identify and evaluate the Year 2000-related risks associated with specific aspects of the national infrastructure (sewage/waste treatment, hazardous materials, meteorology).
- Environment Canada has implemented an extensive tracking system for action plans.
- The department has created a public website providing general information on the Year 2000 problem, its potential impact on the environment and actions which are being taken to address it. The website address is:
<http://www1.tor.ec.gc.ca/year2000>.

The target dates for various deliverables of the Year 2000 Project are established in accordance with the priority of the three categories of systems:

Description	Expected result
Weather Forecast and Warning System (Government-Wide Mission Critical System)	<ul style="list-style-type: none"> • Most systems supporting the Weather Forecast and Warning functions will be Year 2000 ready and fully implemented by June 1999. • Business Continuity Plans will be completed by April 30, 1999.
Departmental Mission Critical Systems	<ul style="list-style-type: none"> • Departmental systems which are assessed as being "mission critical" will be Year 2000 ready and fully implemented by December 31, 1999. • Business Continuity Plans will be completed by April 30, 1999.
Important and Other Systems	<ul style="list-style-type: none"> • Most systems falling in these categories will be year 2000 ready on or before December 31, 1999.

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Spending Authorities

Table 1: Ministry Summary Part II of the Estimates

Vote	(thousands of dollars)	1999-2000 Main Estimates	1998-1999 Main Estimates
	Environment Program		
1	Operating expenditures	417,752	388,654
5	Capital expenditures		24,529
		23,601	
10	Grants and contributions		32,178
		41,443	
(S)	Minister of the Environment - Salary and motor car allowance	49	49
(S)	Contributions to employee benefit plans	48,722	48,863
	Total Program	531,567	494,273

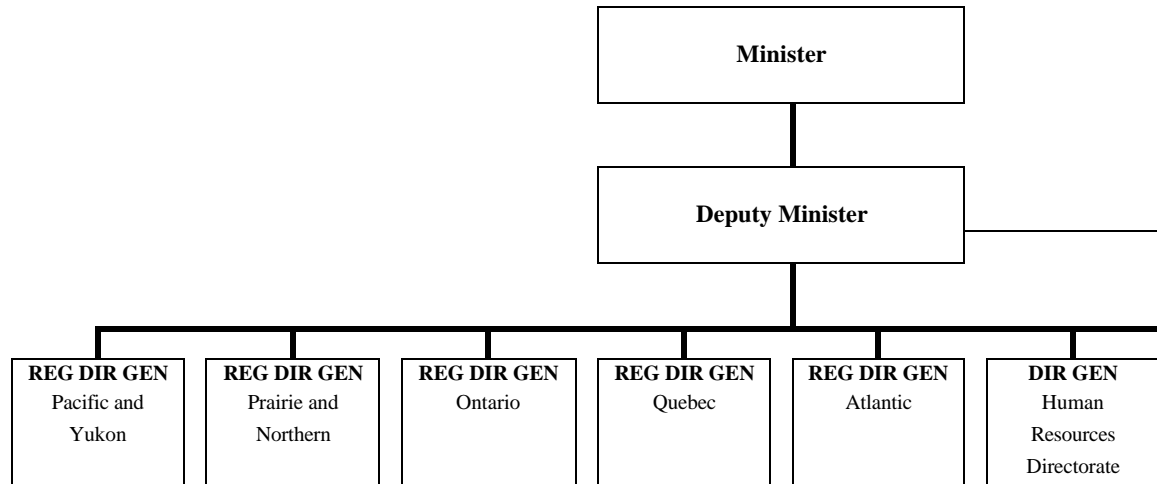
Explanation of change:

The \$37.3 million net increase in 1999-2000 over 1998-1999 Main Estimates is due mainly to:

- \$14 million increase related to the Climate Change Action Fund;
- \$9.6 million increase for the implementation of the St. Lawrence Vision 2000 Action Plan - Phase III;
- \$7.8 million related to workload and price increases;
- \$7.3 million increase for costs associated to collective agreements which have been signed before the end of September 1998;
- \$6 million increase to address the Year 2000 issue for Government-Wide Mission Critical Systems (GWMCS).

Personnel Information

Table 2.1: 1999-2000 Gross Planned Spending by Organization and Business Line (\$ millions)



Clean Environment	9.2	8.3	8.7	6.4	8.4	-
Nature	19.6	14.8	20.9	21.3	8.6	-
Weather and Environmental Predictions	20.9	39.9	18.3	15.8	13.5	-
Management, Administration and Policy	4.1	7.9	9.9	5.5	5.4	6.7
Total	53.8	70.9	57.8	49.0	35.9	6.7

REG DIR GEN = Regional Director General

ADM = Assistant Deputy Minister

		Climate Change Secretariat		Deputy Minister Natural Resources Canada				Total
	ADM Policy and Communications	Corporate Offices	ADM Corporate Services	ADM Atmospheric Environment Service	ADM Environmental Protection Service	ADM Environmental Conservation Service		
	17.7*	-	0.2	6.4	81.1	7.6		154.0
	-	-	2.1	-	1.5	56.4		145.2
	-	-	0.5	115.4	-	0.4		224.7
	20.8	6.4	24.9	0.7	1.6	0.5		94.4
	38.5	6.4	27.7	122.5	84.2	64.9		618.3

* Climate change resources previously shown under Corporate Services.

Table 2.2: Planned Full Time Equivalentents (FTEs) by Business Line

	Forecast 1998-1999*	Planned 1999-2000	Planned 2000-2001	Planned 2001-2002
Clean Environment	944	953	953	953
Nature	985	993	993	993
Weather and Environmental Predictions	1,533	1,530	1,530	1,530
Management, Administration and Policy	896	910	910	910
Total	4,358	4,386	4,386	4,386

* Reflects best forecast to the end of the fiscal year.

Capital Projects Information

Table 3.1: Capital Spending by Business Line

(\$millions)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Clean Environment	4.7	4.7	5.0	5.0
Nature	2.8	2.7	2.8	2.7
Weather and Environmental Predictions	20.8	16.0	14.9	14.8
Management, Administration and Policy	1.4	1.4	1.4	1.4
Total Capital Spending	29.7	24.8	24.1	23.9

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

Table 3.2: Capital Projects by Business Line

(\$millions)	Current Estimated Total Cost	Forecast Spending March 31, 1999	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002	Future Year Spending Requirement
Nature						
Revitalization of Laboratories - National Water Research Institute	5.7	4.3	-	-	-	1.4
Weather and Environmental Predictions						
Doppler upgrade - Radar Network Modernization	39.2	11.2	5.7	7.0	6.0	9.3
North American Lightning Detection Network	10.6	10.6	-	-	-	-
Ice Integration and Analysis System	5.1	5.1	-	-	-	-
Weather station construction Eureka N.W.T.	4.1	1.9	0.2	0.7	0.8	0.5
Weather Warning Delivery System	3.8	2.0	0.1	0.4	0.4	0.9
Mercury manometer replacement program	3.8	2.0	0.5	1.0	-	0.3
Automation & real-time access to discharge data-hydrology	3.3	1.0	-	0.7	0.6	1.0
Data processing upgrades for Radarsat	2.7	2.7	-	-	-	-
Modernization of the Climate Observing Program	2.5	0.5	-	0.7	0.7	0.6
Regional Infrastructure Renewal	2.5	0.4	-	0.5	0.5	1.1

Additional Financial Information

Table 4: Departmental Summary of Standard Objects of Expenditure

(\$ millions)	Forecast Spending 1998-1999 *	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Personnel				
Salaries and Wages	251.5	244.4	244.0	244.2
Contributions to employee benefit plans	48.9	48.9	48.8	48.9
	300.4	293.3	292.8	293.1
Goods and services				
Transportation and communications	39.6	45.7	44.4	45.4
Information	6.6	9.5	9.2	7.1
Professional and special services	124.5	111.9	106.5	105.6
Rentals	16.9	20.7	19.9	20.4
Purchased repair and maintenance	12.5	16.7	16.1	16.4
Utilities, materials and supplies	27.4	33.4	32.4	33.1
Other subsidies and payments	21.1	4.9	4.7	4.8
Minor Capital	13.7	12.9	12.9	13.1
	262.3	255.7	246.1	245.9
Total Operating	562.7	549.0	538.9	539.0
Capital				
Personnel	0.6	0.6	0.6	0.6
Transportation and communications	0.5	0.4	0.4	0.4
Professional and special services	2.3	2.1	2.2	2.1
Rentals	0.1	0.1	0.1	0.1
Purchased repair and maintenance	3.6	3.3	3.8	3.8
Utilities, materials and supplies	0.5	0.7	0.7	0.7
Construction and acquisition of land building and equipment	1.1	0.3	0.3	0.3
Construction and acquisition of machinery and equipment	20.9	17.2	15.9	15.8
Other subsidies and payments	0.1	0.1	0.1	0.1
	29.7	24.8	24.1	23.9
Transfer payments				
Grants	2.5	3.1	3.1	3.1
Contributions	36.1	41.4	37.0	25.8
	38.6	44.5	40.1	28.9
Gross budgetary expenditures	631.0	618.3	603.1	591.8
Less: Revenues credited to the Vote	(71.6)	(69.9)	(69.6)	(72.5)
Net budgetary expenditures	559.4	548.4	533.5	519.3

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

Table 5: Program Resources by Business Line for the Estimates Year

(\$ millions)	FTEs	Budgetary			Gross Planned Spending	Less: Revenue Credited to the Vote	Net Planned Spending
		Operating*	Capital	Transfer Payments			
Clean Environment	953	125.3	4.7	24.0	154.0	(5.8)	148.2
Nature	993	129.1	2.7	13.4	145.2	(7.6)	137.6
Weather and Environmental Predictions	1,530	203.4	16.0	5.3	224.7	(56.5)	168.2
Management, Administration and Policy	910	91.2	1.4	1.8	94.4	-	94.4
Total	4,386	549.0	24.8	44.5	618.3	(69.9)	548.4

* Operating includes contributions to employee benefit plans and Minister's allowances.

Table 6: Transfer Payments by Business Line

(\$ thousands)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
GRANTS				
Clean Environment				
Grants for the implementation of the Montreal Protocol on substances which deplete the ozone layer	1,721	2,000	2,000	2,000
Nature				
Fur Institute of Canada	17	17	17	17
University Research Councils Program	202	-	-	-
	219	17	17	17
Weather and Environmental Predictions				
Meteorological Research	386	850	850	850
Canadian Meteorological and Oceanographic Society	17	17	17	17
	403	867	867	867
Management, Administration and Policy				
Grant to the International Institute for Sustainable Development to support the operation of the Institute and the undertaking of sustainable development initiatives	200	200	200	200
Total Grants	2,543	3,084	3,084	3,084
CONTRIBUTIONS				
Clean Environment				
Contribution to the Organization for Economic Cooperation and Development -- Chemicals Controls Program	125	125	125	125
Contribution to the University of Guelph for the Canadian Network of Toxicology Centres	1,297	1,097	1,097	1,097
Contribution to the Major Industrial Accidents Council of Canada (MIACC)	191	150	150	150

(\$ thousands)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
EcoAction 2000 - Community Funding Initiative	2,739	2,522	2,522	2,522
Contribution for Canada's share of the Commission of Environmental Co-operation (CEC) Budget	4,200	4,200	4,200	4,200
Contribution to the Centre for Sustainable Transportation	72	-	-	-
Contribution Program for the International Environmental Youth Corps Initiative	2,613	1,953	1,953	-
Climate Change Action Fund (CCAF)	1,850	12,000	8,000	-
Contribution under the Montreal Protocol	315	-	-	-
Contribution to the Canadian Water & Wastewater Association	9	-	-	-
	13,411	22,047	18,047	8,094
Nature				
Contributions -- Building International Partnership	8	43	43	43
Contribution to the United Nations for the Convention in Trade of Rare and Endangered Species (CITES)	219	219	219	219
Contribution to the Convention on Wetlands of International Importance (RAMSAR)	99	99	110	110
Contribution to the Fur Institute of Canada	350	350	-	-
Contribution to the University of Saskatchewan to establish a Canadian Wildlife Health Centre	200	200	200	200
Contribution to establish a Cooperative Wildlife Research Network	325	260	260	260
Contribution to the World Wildlife Fund -- Endangered Species Recovery Fund	180	180	180	180
Contributions under the North American Waterfowl Management Plan	2,932	2,932	2,932	2,932
Contribution to the Interjurisdictional Caribou Management Board	14	13	13	13

(\$ thousands)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Contribution to the Province of British Columbia and environmental non-government organizations (ENGOs) - - Wildlife Strategy, Pacific Coast Joint Venture	325	325	325	325
Sustainable Management Program for the Fraser River Basin	945	1,040	1,273	1,730
Contribution for the Science Horizons Youth Internship Program	1,289	1,116	1,116	-
EcoAction 2000 - Community Funding Initiative	2,739	2,522	2,522	2,522
Contribution to the United Nations University for the establishment of the International Network on Water, Environment and Health	1,060	924	590	-
Contribution to the Wildlife Habitat Canada Foundation	1,530	-	-	-
St.Lawrence Action Plan (SLAP) Phase III - Contribution to Community Interaction Program	1,266	1,444	1,700	1,700
St.Lawrence Action Plan (SLAP) Phase III - Contribution to the Province of Quebec for joint projects	1,500	1,500	1,500	1,500
St.Lawrence Action Plan (SLAP) Phase III - Contribution to Habitat Protection Program	70	256	-	-
Contribution - Technology Development Program	163	-	-	-
Contribution to the Royal Society of Canada for the Canadian Global Change Program	160	-	-	-
Contribution for an International Workshop on Biosafety Regulatory Capacity	442	-	-	-
Contribution to Arctic Flora and Fauna (CAFF) Secretariat	32	-	-	-
	15,848	13,423	12,983	11,734
Weather and Environmental Predictions				
Contribution to the University of Victoria to manage and operate the Canadian Climate Research Network	2,500	2,500	2,500	2,500

(\$ thousands)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
Membership fee -- World Meteorological Organization	2,212	1,693	1,693	1,693
Contribution to the Province of Quebec -- Hydrometric Agreement	200	200	200	200
	4,912	4,393	4,393	4,393
Management, Administration and Policy				
Contributions -- Building International Partnership	162	162	162	162
EcoAction 2000 - Public Engagement Initiative	362	50	50	50
Contribution to the Canadian Council of Ministers of the Environment in an amount equal to one-third of its operating budget	752	752	752	752
Contributions to environmental networking organizations under the Community Support Initiative	600	600	600	600
Contribution agreement -- 1998 National Aboriginal Achievement Awards	20	-	-	-
	1,896	1,564	1,564	1,564
Total Contributions	36,067	41,427	36,987	25,785
Total Transfer Payments	38,610	44,511	40,071	28,869

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

Table 7: Revenue by Business Line

(\$ millions)	Forecast Spending 1998-1999*	Planned Spending 1999-2000	Planned Spending 2000-2001	Planned Spending 2001-2002
<i>Revenue Credited to the Vote</i>				
Clean Environment				
Information Products	2.8	3.7	3.7	4.2
Scientific and Professional Services	0.9	1.3	1.3	1.5
Regulatory Services	0.3	0.4	0.4	0.5
Realty (Accommodation)	0.1	0.1	0.1	0.1
Miscellaneous	0.3	0.3	0.3	0.4
	4.4	5.8	5.8	6.7
Nature				
Scientific and Professional Services	3.7	4.1	3.9	3.9
Realty (Accommodation)	1.3	1.4	1.4	1.4
Regulatory Services	0.2	0.2	0.2	0.2
Information Products	0.1	0.2	0.1	0.1
Miscellaneous	1.5	1.7	1.7	1.7
	6.8	7.6	7.3	7.3
Weather and Environmental Predictions				
Scientific and Professional Services	53.8	50.3	50.3	52.1
Information Products	2.4	2.3	2.3	2.3
Realty (Accommodation)	0.6	0.6	0.6	0.6
Sale of Sponsorships	0.2	0.6	0.6	0.6
Miscellaneous	3.4	2.7	2.7	2.9
	60.4	56.5	56.5	58.5
Total Revenues Credited to the Vote	71.6	69.9	69.6	72.5
<i>Revenue Credited to the Consolidated Revenue Fund (CRF)</i>				
Clean Environment				
Miscellaneous	0.1	-	-	-
Nature				
Regulatory Services	3.3	3.1	3.0	3.0
Scientific and Professional Services	0.6	0.5	0.5	0.5
Miscellaneous	0.5	0.5	0.5	0.5
	4.4	4.1	4.0	4.0
Weather and Environmental Predictions				
Scientific and Professional Services	3.9	3.2	3.2	3.2
Royalties	0.1	0.1	0.1	0.1
	4.0	3.3	3.3	3.3
Total Revenues Credited to the CRF	8.5	7.4	7.3	7.3

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

Table 8: Net Cost of Program for the Estimates Year (\$ millions)

Environment Program	1999-2000
Gross Planned Spending	618.3
Plus:	
<i>Services Received without Charge:</i>	
Accommodation provided by Public Works and Government Services Canada (PWGSC)	28.7
Contributions covering employees' share of employees' insurance premiums and costs paid by Treasury Board Secretariat	13.4
Workers' compensation coverage provided by Human Resources Canada	1.6
Salary and associated costs of legal services provided by Justice Canada	0.8
	<u>44.5</u>
Total Cost of the Program	662.8
Less:	
Revenue Credited to the Vote	(69.9)
Revenue Credited to the Consolidated Revenue Fund	<u>(7.4)</u>
Total Revenue	(77.3)
1999-2000 Estimated Net Program Cost	585.5

Table 9: 1998-99 Main Estimates Crosswalk (\$millions)

New Structure	Previous Structure				Total
	A Healthy Environment	Safety from Environmental Hazards	A Greener Society	Administration	
Clean Environment	68.2	7.3	46.1	-	121.6
Nature	116.6	-	11.2	-	127.8
Weather and Environmental Predictions	21.1	138.5	-	-	159.6
Management, Administration and Policy	2.2	-	19.6	63.5	85.3
Total	208.1	145.8	76.9	63.5	494.3

The following reflects the reallocation of constituent activities and associated resources from the previous accountability structure to the new Business Lines.

Previous Structure

New Structure

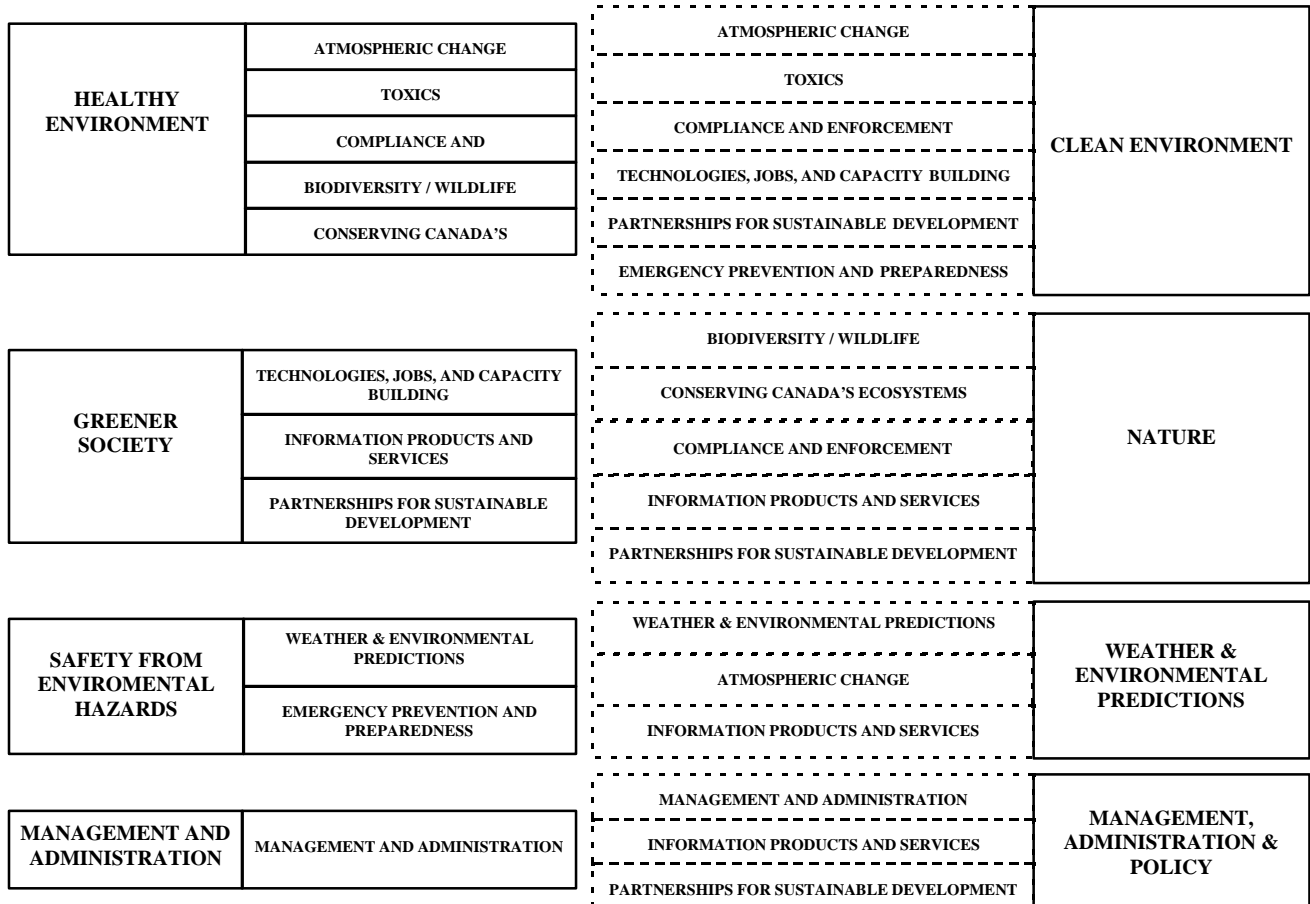


Table 10: Acts and Regulations Administered by the Environment Program

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

<i>Canada Water Act</i>	R.S. 1985, c. C-11
<i>Canada Wildlife Act</i>	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
<i>Canadian Environmental Assessment Act</i>	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
<i>Canadian Environmental Protection Act</i>	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
Contaminated Fuel Regulations	SOR/91-486
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, 1998	SOR/99-7
PCB Waste Export Regulations, 1996	SOR/97-109
Phosphorus Concentration Regulations	SOR/89-501
New Substances Notification	SOR/94-260
Regulations Amending the New Substances Notification Regulations - Biotechnology	SOR/97-119
Prohibition of Certain Toxic Substances Regulations	SOR/96-237
Pulp and Paper Mill Defoamer and Wood Chip Regulations	SOR/92-268

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

Registration of Storage Tank Systems for Petroleum Products and Allied Petroleum Products on Federal Lands Regulations	SOR/97-10
Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations	SOR/92-267
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, 1992	SOR/92-631
<i>Canadian Environment Week Act</i>	R.S. 1985, c. E-11
<i>Department of the Environment Act</i>	R.S. 1985, c. E-10
<i>Environmental Contaminants Act</i>	R.S. 1985, c. E-12
<i>Heritage Railway Stations Protection Act</i>	R.S. c.52 (4th Supp.)
<i>International River Improvements Act</i>	R.S. 1985, c. I-20
<i>Lac Seul Conservation Act</i>	S.C. 1928, c. 32
<i>Lake of the Woods Control Board Act</i>	S.C. 1921, c. 10 and S.C. 1958, c. 20
<i>Manganese-Based Fuel Additives Act</i>	S.C. 1997, c. 11
<i>Migratory Birds Convention Act, 1994</i>	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
<i>National Wildlife Week Act</i>	R.S. 1985, c. W-10
<i>Weather Modification Information Act</i>	R.S. 1985, c. W-5
Weather Modification Information Regulations	C.R.C., Vol. XVIII, c. 1604
<i>Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act</i>	S.C. 1992, c. 52
Wild Animal and Plant Trade Regulations	SOR/96-263
<hr/>	
<i>The Minister shares responsibility to Parliament or assists other departments in administering the following acts and regulations:</i>	
<hr/>	
<i>Arctic Waters Pollution Prevention Act</i>	R.S. 1985, c. A-12
<i>Auditor General Act</i>	R.S. 1985, c. A-17
<i>Canada Shipping Act</i>	R.S. 1985, c. S-9
<i>Emergency Preparedness Act</i>	R.S. 1985, c. 6 (4th Supp.) (April 27, 1988)
<i>Energy Supplies Emergency Act</i>	R.S. 1985, c. E-9
<i>Fisheries Act</i>	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

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

Pulp and Paper Effluent Regulations	SOR/92-269
<i>James Bay and Northern Quebec Native Claims Settlement Act</i>	S.C. 1976-77, c. 32
<i>Hazardous Products Act</i>	R.S. 1985, c. H-3
<i>International Boundary Waters Treaty Act</i>	R.S. 1985, c. I-17
<i>Motor Vehicle Safety Act</i>	S.C. 1993, c. 16 (in force 12.04.95)
<i>National Round Table on Environment and Economy Act</i>	S.C. 1993, c.31 (in force April 28, 1994)
<i>Resources and Technical Surveys Act</i>	R.S. 1985, c. R-7
<i>Transportation of Dangerous Goods Act, 1992</i>	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

Table 11: Planned Regulatory Initiatives

Regulations	In 1999-2000, Environment Canada proposes to:
Exemptions from permit requirements under the Convention on International 1999-2000 Trade in Endangered Species (CITES) for certain personal and household effects - <i>Wild Animal and Plant Trade Regulation</i>	<ul style="list-style-type: none"> publish regulations by the 1st quarter of 1999-2000
Package labeling provisions with regard to the CITES-listed species - <i>Wild Animal and Plant Trade Regulation</i>	<ul style="list-style-type: none"> publish regulations by the 1st quarter of 1999-2000
Administrative arrangements to improve provisions respecting forfeiture to the Crown and removal notices - <i>Wild Animal and Plant Trade Regulation</i>	<ul style="list-style-type: none"> publish regulations by the 1st quarter of 1999-2000
Establish a special hunting season to control overabundant populations of migratory game birds in the North - <i>Migratory Birds Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 1st quarter of 1999-2000
Annual hunting regulations establishing hunting season dates and bag and possession limits for migratory game birds - <i>Migratory Birds Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 1st quarter of 1999-2000
Increase from 125 to 200 the number of carcasses of migratory game birds that corporations training dogs as retrievers may have in their possession - <i>Migratory Birds Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 2nd quarter of 1999-2000
Enlarge the Cape Jourimain National Wildlife Area through a beneficial land exchange - <i>Wildlife Area Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 2nd quarter of 1999-2000
Delist the Cape Dorset and Pinafore Park Migratory Bird Sanctuaries (sanctuaries no longer serve a conservation purpose) - <i>Migratory Bird Sanctuary Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 3rd quarter of 1999-2000
Enlarge three National Wildlife Areas (Iles de Contrecoeur and Iles de l'Estuaire in Quebec, and Shepody in New Brunswick) - <i>Wildlife Area Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 4th quarter of 1999-2000
Enlarge Alaksen National Wildlife Area in British Columbia - <i>Wildlife Area Regulations</i>	<ul style="list-style-type: none"> publish regulations by the 4th quarter of 1999-2000
Ocean Dumping Permit Fee - <i>Financial Administration Act</i>	<ul style="list-style-type: none"> publish regulations in 1st quarter 1999
Sulphur in Gasoline Regulations	<ul style="list-style-type: none"> publish regulations in 2nd quarter 1999
New Substances Notification Regulations Amendment (Schedules IX and X)	<ul style="list-style-type: none"> publish regulations in 2nd quarter 1999
Port Alberni Pulp and Paper Liquid Effluent Regulations Amendment (<i>Fisheries Act</i>)	<ul style="list-style-type: none"> publish regulations in 3rd quarter 1999
Federal Halocarbon Regulations for Federal Facilities	<ul style="list-style-type: none"> publish regulations in 4th quarter 1999
Benzene in Gasoline Regulations - Amendment	<ul style="list-style-type: none"> publish regulations in 2nd quarter 1999
Pulp and Paper Mill Effluent Regulations (<i>Fisheries Act</i>) - Amendment	<ul style="list-style-type: none"> publish regulations in 3rd quarter 1999
Gasoline and Gasoline Blend Dispensing Flow Rates Regulations	<ul style="list-style-type: none"> publish regulations in 2nd quarter 1999

Planned Regulatory Initiatives (cont'd)

Regulations	In 1999-2000, Environment Canada proposes to:
New Substances Notification Service Fees - <i>Financial Administration Act</i>	<ul style="list-style-type: none"> publish regulations in 4th quarter 1999
Prohibition of Certain Toxic Substances Regulations - Amendment (Benzidine and Hexachlorobenzene)	<ul style="list-style-type: none"> publish regulations in 3rd quarter 1999
Tributyl Tetradecyl Phosphonium Chloride (TTPC) Regulations	<ul style="list-style-type: none"> publish regulations in 3rd quarter 1999
Ozone-depleting Substances Regulations (administrative changes) - Amendment	<ul style="list-style-type: none"> publish regulations in 3rd quarter 1999
Tetrachloroethylene in Dry Cleaning Regulations	<ul style="list-style-type: none"> publish regulations in 4th quarter 1999
Hydrofluorocarbons (HFCs) Regulations	<ul style="list-style-type: none"> publish regulations in 1st quarter 2000
Solvent Degreasing Regulations	<ul style="list-style-type: none"> publish regulations in 4th quarter 1999
Fish Habitat and Spill Reporting Regulations - <i>Fisheries Act</i>	<ul style="list-style-type: none"> publish regulations in 1st quarter 2000
Order Adding Toxic Substances to Schedule 1 of CEPA	<ul style="list-style-type: none"> publish in 2nd quarter of 1999
Regulations	In 2000-2002, Environment Canada proposes to:
Comprehensive revisions to the <i>Migratory Birds Regulations</i> and the <i>Migratory Birds Sanctuary Regulations</i>	<ul style="list-style-type: none"> publish regulations in 2000
Amendments to Schedule I to implement species decisions of 11 th Meeting of the Conference of the Parties (April 2000) - <i>Wild Animal and Plant Trade Regulations</i>	<ul style="list-style-type: none"> publish regulations in 2000
Regulations Respecting Chlorobiphenyls (1999) - Amendment	<ul style="list-style-type: none"> publish regulations in 2000
Metal Mining Liquid Effluent Regulations - (<i>Fisheries Act</i>) - Amendment	<ul style="list-style-type: none"> publish regulations in 2nd quarter 2000
Toxics from Gasoline Regulations	<ul style="list-style-type: none"> publish regulations in 2000
Hexavalent Chromium from Chrome Plating Regulations	<ul style="list-style-type: none"> publish regulations in 3rd quarter 2000
Ozone-depleting Substances Regulations (Methyl Bromide) - Amendment	<ul style="list-style-type: none"> publish regulations in 3rd quarter 2000
Alice Arms Tailings Deposit Regulations	<ul style="list-style-type: none"> publish regulations in 4th quarter 2000
Federal Hazardous Wastes Regulations	<ul style="list-style-type: none"> publish regulations in 2001
Toxic Substances Export Notification Regulations - Amendment	<ul style="list-style-type: none"> publish regulations under the revised CEPA
Inter-Provincial/Territorial Movement of Hazardous Waste Regulations - amendment	<ul style="list-style-type: none"> promulgate under the revised CEPA
Export and Import of Hazardous Waste Regulations amendment	<ul style="list-style-type: none"> promulgate under the revised CEPA
Export and Import of Prescribed Non-Hazardous Wastes Destined for Final Disposal Regulations	<ul style="list-style-type: none"> promulgate under the revised CEPA
Ocean Dumping Regulations, 1988 and CEPA, Part VI - amendments	<ul style="list-style-type: none"> promulgate under the revised CEPA
Transboundary Movements of PCB Wastes Regulations	<ul style="list-style-type: none"> promulgate under the revised CEPA

Planned Regulatory Initiatives (cont'd)

Regulations	In 2000-2002, Environment Canada proposes to:
Regulations Respecting Persistence and Bioaccumulation of a Substance	• promulgate under the revised CEPA
New Substances Notification Regulations - Amendment	• promulgate under the revised CEPA
Export and Import of Hazardous Wastes Service Fees Regulations	• unscheduled
Dichloromethane (DCM) regulations	• unscheduled

Table 12: Departmental Long-Term Results Commitments

Environment Canada (EC)

<i>with its partners, seek to achieve results:</i>	<i>to be demonstrated by:</i>
<i>Clean Environment</i>	
Protection from domestic and global sources of pollution.	<ul style="list-style-type: none"> • Adverse human impact on the atmosphere and on air quality is reduced. • The environmental and human health threats posed by toxic substances and other substances of concern are understood, and prevented or reduced.
<i>Nature</i>	
Conservation of biodiversity in healthy ecosystems.	<ul style="list-style-type: none"> • Biological diversity is conserved. • Human impacts on the health of ecosystems are understood and reduced. • Priority ecosystems are conserved and restored.
<i>Weather and Environmental Predictions</i>	
Adaptation to influences and impacts of atmospheric and related environmental conditions on human health and safety, economic prosperity and environmental quality.	<ul style="list-style-type: none"> • Reduced impact of weather and related hazards on health, safety, and the economy. • Adaptation to day-to-day and longer term changes in atmospheric, hydrological, and ice conditions.
<i>Management, Administration and Policy</i>	
Strategic and effective departmental management to achieve environmental results.	<ul style="list-style-type: none"> • Strategic and integrated policy priorities and plans. • A well-performing organization supported by efficient and innovative services.

Table 13: References

Hard copy departmental publications can be obtained from the:

Enquiries Centre
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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>

The screenshot shows the homepage of the Environment Canada Green Lane website. At the top, there is a navigation bar with the Environment Canada logo and the text "The Green Lane Home | Français | Search | Contacts". Below this is a large image of a globe with a green lane winding through it. The main heading is "The Green Lane™ on the Information Highway". Underneath, there is a section for "Environmental Priorities" with links to "Climate Change", "Clean Air", "Clean Water", and "Nature". A "Headlines" section lists several news items, including "Millennium Eco-Communities on The Green Lane", "Revised Canadian Wildlife Service Website", "Wildlife Ministers strengthen protection for endangered species", and "S&E Bulletin (September/October issue)". A "What's New" section lists "What's Hot", "News Releases", "Issues and Topics", "Products and Services", "Regional Sites and AES (Atmospheric Environment Service)", "Science & the Environment Bulletin", and "State of the Environment". Below this are icons for "Environment Canada", "Meet the Minister", "Weather", "Environmental Action", "Market Place", and "Links". At the bottom, there is a footer with the Environment Canada logo, the text "Comments to: The Green Lane Team, Communications and Outreach Programs and Services Directorate", the date "Information last updated: 05 Oct 1998", the URL "URL of this page: http://www.ec.gc.ca/envhome.html", the copyright notice "Copyright 1998, Environment Canada", the word "Canada" with its logo, and the text "You are on The Green Lane™, Environment Canada's accessible World Wide Web site."

Table 14: Contacts for further information

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Table 15: 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 approved by Treasury Board to carry out approved policies and programs.
Bioaccumulation	General term describing a process by which chemical substances are ingested and retained by organisms, either from the environment directly or through consumption of food containing the chemicals.
Biodiversity / biological diversity	The variability among living organisms, including diversity within species, between species and of ecosystems.
Biosafety	Safe handling, transfer and use of living organisms modified through biotechnology.
Consolidated Revenue Fund (CRF)	The aggregate of all public moneys on deposit at the credit of the Receiver General of Canada.
Critical load	A target for reductions of wet sulphate deposition in Eastern Canada, designed to protect moderately sensitive freshwater systems (20 kg/ha/yr).
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.
EcoAction 2000	A departmental funding program that helps Canadians take action in support of a healthy environment. It provides financial assistance to non-profit Canadian groups that wish to undertake local environmental projects.
Ecosystem	An integrated and stable association of living and non-living resources functioning within a defined physical location.
Endangered species	A species facing imminent extirpation or extinction.
Endocrine-disruptive substances	Pollutants that mimic the effects of natural hormones, and can affect growth, development and reproduction of fish and wildlife.
Environmental Management System (EMS)	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 ensure that major environmental risks and liabilities are identified, minimized and managed.
Federal Committee on Environmental Management System (FCEMs)	An interdepartmental committee that promotes information sharing and cooperative efforts towards greening governments operations.
Green Power	Power generated from environmentally-friendly sources or in ways that do not degrade the environment (e.g. wind, solar).

Glossary (cont'd)

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 burning 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 this pollutant a major component of smog.
Kyoto Protocol	An international agreement under the United Nations Framework Convention on Climate Change and signed by Canada in April 1998 that establishes binding targets for reducing emissions of greenhouse gases.
Particulate matter	Microscopic solid and liquid particles, of human and natural origin, that remain suspended in the air for some time. Particles give smog its color and affect visibility, and are believed to have adverse effects on vegetation and on various synthetic and natural surfaces.
Persistent Bioaccumulative Toxic Substances (PBTs)	Substances that produce toxic effects in living things, that stay in the environment a long time and accumulate as they are passed up the food chain.
Persistent Organic Pollutants (POPs)	Organic substances that do not break down quickly in the environment and are readily taken in by living organisms through contaminated food or polluted water or air. These pollutants include some pesticides (e.g. DDT, Chlordane, Endrin); industrial chemicals (e.g. PCBs) or byproducts; and contaminants (e.g. dioxins and furans).
Polychlorinated Biphenyls (PCBs)	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.
Precautionary principle	An internationally recognized principle for action that states where there are threats of serious or irreversible damage, scientific uncertainty shall not be used to postpone cost-effective measures to prevent environmental degradation.
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 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.

Glossary (cont'd)

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.
Revenues Credited to the Vote	Receipts credited to the appropriation that the department has the authority to reutilize.
Smog Plan (Federal Smog Management Plan)	A plan implemented jointly with Natural Resources Canada and Transport Canada as the federal contribution to CCME actions to improve smog-related air quality.
Species at risk	General term for species that are endangered, threatened or vulnerable.
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.
Sulphur dioxide, SO ₂ , wet sulphate	A chemical present in emissions from combustion of fossil fuels that enters the atmosphere and returns to earth with precipitation as acid rain.
Sustainable Development (SD)	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
Threatened species	A species likely to become endangered if limiting factors are not reversed.
Toxic substance	A substance that is entering or may enter the environment in a quantity or a concentration or under conditions: a) having or that may have an immediate or long-term harmful effect on the environment, or b) constituting or that may constitute a danger to the environment on which human life depends, or c) constituting or that may constitute a danger in Canada to human life or health.
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.
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.

Table 16: Acronyms

ARET	Accelerated Reduction/Elimination of Toxics Program
CAFF	Contribution to Arctic Flora and Fauna
CCAF	Climate Change Action Fund
CCME	Canadian Council of Ministers of the Environment
CEC	Commission on Environmental Cooperation
CEPA	Canadian Environmental Protection Act
CITES	Convention on International Trade in Endangered Species
CRF	Consolidated Revenue Fund
CRTC	Canadian Radio-Television and Telecommunications Commission
DCM	Dichloromethane
DFAIT	Department of Foreign Affairs and International Trade
DSL	Domestic Substances List
EC	Environment Canada
EMPs	Environmental Management Programs
EMS	Environmental Management System
ENGOS	Environmental Non-Government Organizations
GL	Green Lane
HFCs	Hydrofluorocarbons
HR	Human Resources
MEC	Millennium Eco-Communities
MIACC	Major Industrial Accidents Councils of Canada
NAWMP	North American Wildlife Management Plan
NGOs	Non-Governmental Organizations
PCB	Polychlorinated Biphenyl
PEC	Pacific Environment Centre
PRAS	Planning, Reporting and Accountability Structure
RWIS	Road Weather Information Systems
SD	Sustainable Development
SLAP	St. Lawrence Action Plan
S&T	Science and Technology
TTPC	Tributyl Tetradecyl Phosphonium Chloride
UNECE	United Nations Economic Commission Europe
Y2K	Year 2000

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