



Environment
Canada

Environnement
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Pacific & Yukon Region

air quality

wildlife & habitat

climate change

water

Priorities Plan 2004-2006

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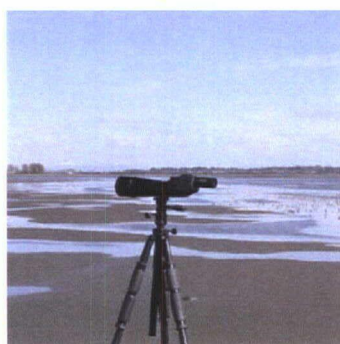
ENVIRONMENT CANADA

Vision & Mission

VISION A Canada where people make responsible decisions about the environment; and where the environment is thereby sustained for the benefit of present and future generations

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

- Protect Canadians from domestic and global sources of pollution
- Conserve biodiversity in healthy ecosystems
- Enable Canadians to adapt to weather and related environmental influences and impacts on human health and safety, economic prosperity and environmental quality





BVAEP

PRIORITIES PLAN, 2004-2006**PACIFIC & YUKON REGION****ENVIRONMENT CANADA**

April 2004

**CONTENTS**

Message From the Regional Director General 2

I. INTRODUCTION

Why Do We Need a Priorities Plan? 03

Overview of the Pacific and Yukon Region 03

Key Regional Priorities, 2004-2006 04

II. PEOPLE AND CONTEXT

Environment 05

Demographic and Economic Contexts 06

III. ENVIRONMENTAL PRIORITIES

Introduction 07

Air Quality 08

Clean, Safe and Secure Water 10

Climate Change 13

Habitat and Species 16

IV. ORGANIZATIONAL PRIORITIES

Meteorological Service of Canada Transition 18

Pacific and Yukon Region People Plan 19

V. BRANCHES OVERVIEW

Regional Director General 21

Meteorological Services 21

Environmental Conservation 21

Environmental Protection 22

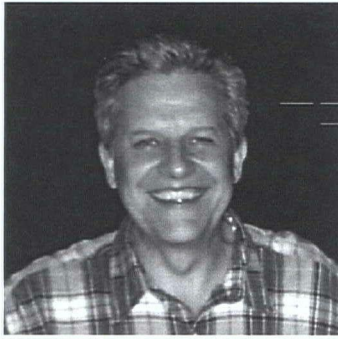
Climate Change 22

Corporate 22

Finance 22

Human Resources 22

NOTE: Throughout Priorities Plan, 2004-2006
the following acronym is commonly used:
PYR: Pacific and Yukon Region



MESSAGE FROM THE REGIONAL DIRECTOR GENERAL

Ecosystems are sophisticated and dynamic with inter-dependent components. Within the complex ecosystems of British Columbia and Yukon, the work of protecting and conserving our changing environment requires dedication, innovation and adaptation. In the Pacific and Yukon Region a compelling example of this environmental change is seen in the effects of climate change on our air and water quality as well as on species and habitat. These changes – which demand thoughtful and creative responses – challenge our science, our environmental monitoring, and our environmental conservation, prediction and protection activities.

The 2003 Federal Speech from the Throne emphasized Canada's environmental agenda; it stressed the need to integrate social, economic and environmental objectives to promote sustainability in our decisions and actions to ensure a better quality of life for all Canadians. Over the next several years, Canada will focus on the critical areas of reducing the health and safety impacts of environmental threats, sustaining our natural environment, and moving forward on climate change. The Department's evolving approach to these priorities includes further enhancing partnerships and alliances, developing innovative policy instruments, and sharing knowledge to leverage our efforts internally and externally to provide results for Canadians.

The public has considerable expectations for the people and work of Environment Canada. To meet these expectations it is essential that we take a strategic approach in sharing our knowledge and experience with Canadians so that they, in turn, can make decisions that benefit the environment. We must raise Environment Canada's profile in British Columbia and Yukon to show people that we are addressing their everyday concerns about, for example, urban air pollution and water quality. To deliver on these we must work to ensure that Environment Canada attracts, supports, and retains a diverse, productive, and highly skilled workforce, an organizational priority being addressed under our People Plan.

By collaborating with other public sector partners as well as non-government organizations, we can demonstrate that we have the scientific expertise and knowledge to help individuals and communities find the right solutions for their environmental concerns. By continuing to provide relevant and responsive service – and results – we will be managing and addressing the many priorities we face as an organization.

Don Fast *Regional Director General, Environment Canada*

Section I: Introduction



WHY DO WE NEED A PRIORITIES PLAN?

All organizations need to periodically examine their activities and take stock of their resources. Our Region is no exception. Investments in people and equipment, and in training and development, need to be aligned and adapted to meet emerging challenges. During management meetings, the importance of planning, clear priorities, knowledge sharing and employee development have all been identified as issues of importance for our employees.

We have prepared Priorities Plan 2004-2006 to address that demand. The intent is not to fully capture all of PYR's activities but to identify its priorities and outline its strategic directions over the next three years. It will lead to a common regional business planning process that will serve as an integrated management and communications tool as well as provide focus and facilitate the management of key and common priorities.

Staff throughout PYR provided us with valuable input for the production of this document. This is a tool for all of us. We look forward to your comments and further participation in aligning our efforts towards our shared environmental and human resource goals.

Pacific and Yukon Region Priorities Planning Team:

Paul Kluckner, Al Wallace, Larry Funnell, Athana Mentzelopoulos,

Chris Pharo, Chris Doyle, Cecile Lam, Marilyn Issavian,

Doug McCallum, Peter Greenwood

For more information on the Pacific and Yukon Region, go to our Web site at www.PYR.ec.gc.ca

OVERVIEW

The Pacific and Yukon Region, encompassing British Columbia and the Yukon Territory, and the associated coastal waters, is one of five geographic regions in Canada in which Environment Canada works to advance the environmental and sustainable development agenda. Environment Canada employees deliver their programs by drawing on their scientific and technical knowledge and combining it with a broad understanding of the social, cultural, environmental, ecological and economic factors that shape attitudes, perceptions and behaviours within these Regions.

Pacific and Yukon Region works in partnership with the Government of British Columbia, the Government of Yukon Territory, First Nations, municipal governments and other organizations in the Region. In addition, collaboration with United States federal, state and local government agencies in the Pacific Northwest helps to foster the setting of goals sensitive to local and regional ecosystems.

Through the provision of science-based information, tools for action and opportunities for shared learning and knowledge, Environment Canada helps build the capacity of decision makers in governments and private organizations at all levels to effect environmental changes that will improve the quality of life for Canadians.

PYR employees provide scientific and technical knowledge through such services as disseminating environmental information, weather warnings and forecasts. They promote compliance with and, where necessary, enforce environmental legislation. In addition, regional activities facilitate the development and sharing of knowledge through communities of practice. PYR staff also consult and work with citizens and decision makers to create opportunities for environmental programs that support a sustainable future for current and future generations.

The Pacific and Yukon Region is organized into five operational branches:

- Environmental Protection Branch
- Environmental Conservation Branch
- Meteorological Service of Canada
- Climate Change Branch
- Corporate Branch

In addition, there are two administrative branches: Human Resources and Finance. All support the work of Environment Canada and build accountability.

KEY REGIONAL PRIORITIES, 2004-2006

PYR's Branches contribute directly towards meeting the objectives of the following **four environmental priorities**:

Air Quality PYR is playing an important role in Canada's **strategy on clean air** that is bringing both short-and long-term benefits. PYR is involved in action on transportation emissions, transboundary pollution, industrial emissions and scientific research. In addition, the Region is encouraging individuals, corporations and governments to develop their own solutions to air quality issues. See page 08.

Clean, Safe and Secure Water Environment Canada provides national leadership to **ensure the management of Canada's water resources (both freshwater and marine) is in the national interest**, and promotes partnerships with other levels of government and the private sector to encourage wise management and sustainable use of water. PYR is involved in many initiatives to ensure clean, safe and secure water for both Canadians and ecosystems in British Columbia and Yukon. See page 10.



Good Science Helps to Resolve Difficult Issues

"Air quality is being assessed by atmospheric scientists, conducting research that is broadening our conception of what the atmosphere consists of. Testing aimed at emissions from agriculture and industry are revealing how different sources contribute in previously unknown ways to particulate matter and primary pollutants in the atmosphere as well as the concentration of toxins at the poles. Air quality and climatological experts work together to develop an increasingly developed understanding of an evolving environment."

Wayne Belzer, Scientist, Environmental Conservation Branch

Climate Change Realizing that climate change will have significant impacts on British Columbia and Yukon, including increased flood and fire dangers, drought and widespread disruption for forests, fisheries and wildlife, **PYR is leading the way to show people and communities how to reduce greenhouse gas emissions**. The Region is also developing science that will improve public knowledge of the effects of climate change and enable people and communities to identify adaptation strategies. See page 13.

Habitat and Species PYR is acting to **conserve and protect biodiversity and ecosystems in British Columbia and Yukon** by helping to secure and manage critical habitat for migratory bird populations, working with partners in key ecosystems to **understand and influence the impacts of human activities on species and habitat**, protecting species that have become at risk by effective implementation of **Canada's new Species at Risk Act**, and preventing **international trade in endangered species**. See page 16.

In addition, during this three-year period, there are **two organizational priorities**:

Meteorological Services Canada Transition On

March 13, 2003, Environment Minister David Anderson announced an investment of \$75 million over five years to improve the MSC overall service to Canadians. The MSC Transition will see a transformation of weather forecast production, service delivery, science research and monitoring capacity. See page 18.

Pacific and Yukon Region People Plan is an initiative supporting a healthy workplace of choice in which knowledge and skills are developed, shared, and retained within the Region to meet the future requirements of the Department in the Pacific and Yukon Region. See page 19.

Incorporating the department-wide initiative "Knowledge in the Service of Canadians" into PYR's priorities and activities has allowed the Region to become more focused and selective about learning and sharing knowledge. In addition, it encourages PYR to shape its services by working with citizens and groups to increase our collective knowledge and further our environmental priorities. Such activities involve combining science and technology with monitoring, information and innovative policies. This enables PYR to make sound and cost-effective decisions that benefit people and the environment.

Section II: People and Context

THE NATURAL ENVIRONMENT



Environment Canada Science and Programs Provide Knowledge to Canadians

"Knowledge strategists work across Canada to build bridges between government divisions and offices, in order to facilitate knowledge sharing. Program Advisors for Environment Canada's Outreach Branch are committed to developing new and more efficient policy for facilitating outreach objectives. Emphasis is currently being applied to defining and connecting 'communities of practice' with the objective of 'capacity building', comparing 'performance measures' and further refining 'tools and mechanisms'."

Zita Botelho, Outreach, Corporate Branch

ECOZONES

Exceptional environmental diversity is a major characteristic of the Pacific and Yukon Region. The Region contains nine distinct ecozones. Each ecozone is an area where organisms and their physical environment interact as a system. In the midst of all these larger areas are a myriad of special habitats that themselves support significant life. This biotic richness and diversity is a natural heritage for which stewardship, protection, conservation and responsibility are shared by all citizens and levels of government.

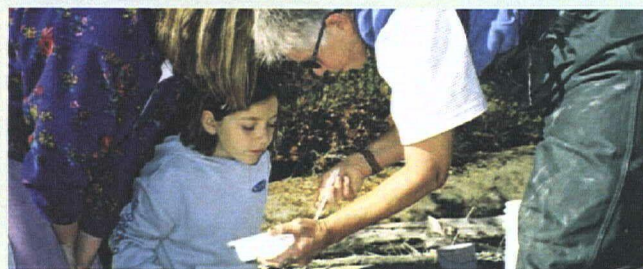
ENDANGERED SPECIES

Within this diverse environment dwell an equally wide range of marine, freshwater, and land-based flora and fauna. Many of these species and their habitat are under stress. The 2002 report by the Committee on the Status of Endangered Wildlife in Canada found that PYR contained 43 of 125 identified Endangered Species, 35 of 100 Threatened Species, and 44 of 147 Special Concern Species. Monitoring the health and range of these widely

diverse species populations and protecting habitat demands innovative and dedicated scientific and technical strategies. Effective monitoring and enforcement of federal environmental legislation for which Environment Canada is responsible is also imperative.

CLIMATIC ZONES AND WEATHER

The topography, geography and differing climatic zones in British Columbia and Yukon make PYR's atmospheric and hydrological environmental monitoring activities challenging. The monitoring infrastructure requires a highly skilled force of technicians and engineers to calibrate and maintain equipment and networks to ensure the reliability, accuracy, and timely flow of atmospheric and hydrological information. Meteorologists analyse and interpret the data to ensure accurate weather warnings and forecasts. Data collected across the region enable meteorologists to provide an average of 700 public weather warnings and 150 marine warnings a year as well as specialized forecasts such as air quality. PYR forecasts support commercial activities in tourism, forestry, fisheries and agriculture. Specialized forecast services provide additional support during environmental emergencies such as forest fires and floods. In addition, nationally, Environment Canada provides over 100,000 environmental consultations each year and maintains a Web site that receives over 2 billion contacts per year.



Helping Canadians Understand Environmental Issues

"We produce educational posters, workbooks, models, and other tools from diverse areas of work, including water and air quality, climate change and wildlife. These learning aids are used as projects for school classes, downloads from Environment Canada Web sites, and handouts to the general public."

Gail Moyle, Scientists, Environmental Conservation Branch

DEMOGRAPHIC AND ECONOMIC CONTEXTS

PEOPLE AND THE ENVIRONMENT

The region supports a population of over 4.12 million people. The majority of these, approximately 75 per cent, are concentrated in the mostly urban southwest corner of British Columbia. The 2001 census shows populations of 2.7 million in the Lower Mainland/South Vancouver Island area, 260,000 in the Thompson-Okanagan and 215,000 along the east coast of Vancouver Island.

Demographic forecasts suggest that population and economic growth in the Okanagan Valley and the Lower Fraser Valley/Lower Mainland will continue to be above the Canadian average. These regions are also ecologically sensitive and are important for sustaining biodiversity. Increasing population growth will continue to stress air and water quality and demand on water quantity; in response, governments will need effective and creative policies and solutions to preserve the natural environment and support sustainability.

THE REGION'S ECONOMY

The economy needed to support the growing population is also changing. The mature resource-based economy – fishing, forestry, and mining – is facing many challenges and a reduced workforce which is accelerating the population's move to urban areas. However, increasing demand for oil and gas is contributing to wildlife habitat loss in parts of the Region as well as further generation and emission of greenhouse gases.

Agriculture industries within the Lower Fraser Valley and the Okanagan are also causing concerns. The concentration of agriculture within these densely populated areas leads to threats to ground and drinking water as well as aquatic ecosystems from pesticides, herbicides and fertilizers. In addition, there are competing uses for land with the concentration and growth of population in areas best suited to support agriculture.

FIRST NATIONS

First Nations peoples are major stakeholders and landowners – and developers and harvesters of the natural environment. The First Nations population is currently growing at over twice the rate of the general population

with over 60 per cent of the on-reserve population under the age of 30.

This population growth is creating demand for supporting infrastructure, housing and employment. Additionally, this is an emerging population for which the Delgamuukw decision confirmed Aboriginal title as well as the requirement that First Nations be consulted and engaged in decision-making processes with respect to Aboriginal lands.

As part of this process, Environment Canada is working to incorporate traditional ecological knowledge within program delivery as well as actively engaging First Nations in PYR's Habitat Stewardship Programs.

GLOBAL PERSPECTIVE

Since the environment and ecosystems pay no attention to national boundaries, PYR is responsible for promoting a strong international environmental agenda. The Region's work with federal, state and local government agencies in the United States, particularly within the Georgia Basin/Puget Sound area through the Georgia Basin Action Plan, has been forward looking in developing partnerships and communities of practice to share knowledge and best practices. Working together to share information and efforts, all parties are recognizing the shared responsibility of managing growth within healthy and sustainable ecosystems and communities.

To meet Canada's international commitments to constrain the trade in endangered species, PYR is active in inspecting and interdicting shipments at Canada's Ports of Entry in the region

PYR is also working with its counterparts in the United States on the development of a cross-border airshed management strategy and, within the International Joint Commission (IJC), addressing the Department's transboundary water obligations.

Across the Pacific, PYR leads in the delivery of Environment Canada's bilateral Memorandum of Understanding on Environmental Collaboration with China, Hong Kong and the Republic of Korea. The Region addresses global threats to the Canadian and world environment with these other jurisdictions and promotes Canadian expertise and technology through international workshops, environmental trade missions, study tours and scientific exchanges.

China
File

Section III: Environmental Priorities

MAKING SUSTAINABLE DEVELOPMENT A REALITY

New issues continue to emerge and shape the policies and work of Environment Canada. These issues in turn require us to recognize client needs and to engage and work with others in an integrated manner to achieve PYR's environmental and sustainability goals. By increasing our science and knowledge, creating innovative policies and developing productive partnerships, PYR employees can contribute significantly to the environment.

The broad environmental, social and economic issues that Canadians face require innovative solutions to which PYR employees make important contributions. In this process they show their ability to enhance governance and be accountable. It is these characteristics that, in the future, will help to bring people together who will ensure that the environmental agenda remains an integral part of the decision-making processes of individuals, governments and industries.

To move forward, PYR will make its science and expertise available so that citizens and important decision makers in communities, governments and corporations can achieve their own environmental goals. PYR's Community Outreach programs are one example of Environment Canada's emerging role as a facilitator for change. Linking PYR's science and expertise to the needs of urban communities is another.

Environment Canada's new tools for achieving this change include regulatory harmonization, emissions trading, eco-gifting and promoting private sector environmental technologies. These mechanisms can ensure that sound environmental decisions make good economic sense.

In 2004-2006, PYR will continue to contribute to new governance models such as ecosystem management, as exemplified in the Georgia Basin Action Plan. These models recognize that conservation and stewardship require collaboration and partnerships. At the same time, Environment Canada will uphold the standards and regulations which contribute to the quality of Canadians' health and environment.

Environment Canada's Sustainable Development Strategy 2004 – 2006 in recognition of the shared nature of responsibilities and accountabilities at local, national, and global scales, promotes three key approaches to enhancing the capacity for integrated decision making

– information for decision making, innovative instruments, and partnerships for sustainable development. In addition, the department has a responsibility to demonstrate leadership in sustainable development across the federal government through managing for sustainable development within our own departmental operations.



**Environment Canada Science and Programs
Provide Knowledge to Canadians**

"Early in 1998, the Georgia Basin Ecosystem Initiative set the groundwork for collaborative ecosystem-based action in the Georgia Basin and Puget Sound transboundary region. Now, the Georgia Basin Action Plan provides the ecosystem-based framework through which we deliver on our mandate and integrate across other federal mandates and programs. For example, Parks Canada, through its creation of a national park in the southern Gulf Islands, and movement towards the development of a National Marine Conservation Areas in the region, will offer their considerable outreach and interpretive resources to disseminate ecosystem information for the Basin; DFO will work through GBAP to better integrate their stewardship initiatives, and pursue opportunities to implement integrated management actions under the Oceans Act. And collaborative working relationships with provincial and municipal governments and First Nations will continue to be strengthened and enhanced. This collaborative approach works to advance our departmental priorities within a larger sustainability context to achieve measurable improvements in ecosystem health, strengthen capacity both internally and externally with our partners and audiences, and to more effectively deliver on our environmental mandate."

Bruce Kay, Manager, Georgia Basin Action Plan

AIR QUALITY

OBJECTIVE

By reducing the adverse impacts of human activity on the atmosphere and air quality, humans, animals and plant species receive the health and environmental benefits of clean air.

BACKGROUND

Increasing urbanization and associated transportation, industrial, and agricultural activities are contributing to the increase of particulate matter, air-borne toxics and the generation of tropospheric ozone. The resultant smog affects the health of citizens within the Region and decreases visibility. Air quality issues are becoming more acute in the Lower Fraser Valley, Whitehorse, Kamloops, and the Okanagan Valley.

IMMEDIATE FOCUS OF EFFORTS

- Georgia Basin – Puget Sound
- South and East Coast Vancouver Island
- Okanagan Valley

ENVIRONMENTAL GOALS AND RESULTS, 2004-2006

The Pacific and Yukon Region environmental goals and results for clean air are:

- Reduction in the occurrence of excess ground level ozone events exceeding Canada-wide Standards in selected communities and in the lower Fraser Valley by 2010.
- No further degradation and, where possible, improvement in ambient air quality conditions – including visibility – in British Columbia and Yukon communities, (consistent with Canada-wide Standard provisions for maintaining clean areas and the Canada-US Air Quality Agreement).
- Protecting ecosystem integrity by making sure that pollutant concentrations and depositions do not exceed critical levels.
- By 2010, reducing sulphur oxides and particulate matter exhaust emissions from ocean-going vessels in the Port of Vancouver and adjacent waterways from 1990 emission levels.



KEY ACTIONS, 2004-2006

AIR QUALITY

Georgia Basin Airshed

PYR is committed to the development of an International Airshed Strategy for the Georgia Basin-Puget Sound region with US federal and state agencies, provincial agencies, First Nations, regional and municipal organizations and stakeholders.

This cooperative air quality planning will increase:

1. the scientific understanding of the effects of anthropogenic activity on the airshed
2. the knowledge to develop mitigating processes and alternative methods to support sustainable development and growth.

Marine Vessel Emissions

PYR will work with other stakeholders in the region, nationally and internationally, to address the issue of marine vessel emissions by developing management options and exploring measures such as a clean fuels special area designation for the west coast of North America.

Air Pollution and Greenhouse Gases

PYR will also provide knowledge, leadership and support to BC and Yukon communities to help them develop community-based management strategies for reducing air pollution and greenhouse gas emissions. The Region's participation in these projects will assist in establishing Canada-wide Standards as a base from which further air quality improvements can be developed.

Air Quality Forecasts

PYR will issue regular seasonal air-quality ozone smog forecasts and advisories for the Lower Mainland and Kamloops-Okanagan and year-round particulate air quality forecasts.

KEY STRATEGIES 2004-2006

Action on the industrial and commercial sectors will include:

- Working with Environment Canada's national headquarters to:

1. provide the technical and scientific knowledge for establishing targets that will protect the environment and human health

2. develop emission reduction strategies, monitor progress on emission reductions and the achievement of air quality goals.

- Improving PYR's understanding of the causes and sources of poor air quality.

- Working with provincial, regional, and local governments, as well as US authorities, to develop airshed management plans, in particular the Georgia Basin-Puget Sound International Airshed Plan.

- Continuing to support innovative dialogue and action relevant to improving regional air quality, such as the regional stakeholder group on marine vessel emissions.

- Utilizing Environment Canada's environmental assessment program to achieve emission reduction targets.

Through public engagement programs, PYR will support and enhance existing community initiatives, such as the GVRD Sustainable Region Initiative. These programs may involve encouraging adaptive and meaningful lifestyle changes as well as solutions-oriented actions by both individuals and communities.

By adopting an ecosystem approach to regional growth strategies and input into regional transportation infrastructure developments, PYR can help to effect reductions of harmful emissions.

PYR will also continue to build and develop, both internally through integrated Branch activity and in concert with national headquarters, the core atmospheric research and science necessary to increase and share knowledge of atmospheric processes and to generate air quality forecasts.

Telling Canadians What We Do

"Regional analysts and coordinators organize the work of multiple government levels. From municipal, to provincial, federal to international, the efforts and resources of public service are collaboratively directed. One of the ways this manifests is in the presence of Environment Canada speakers at events ranging from the Scouts Canada National Jamboree to the Globe conference."

Lisa Vitols, Regional Policy analyst, Corporate Branch



International Relations

"I work in the International and Intergovernmental Affairs Division, coordinating Environment Canada's bilateral cooperation with China, Hong Kong and Korea. Many of the pollutants we see in Canada came from other countries. As an example, it is estimated that 95 per cent of the mercury in Canada originates from outside Canada. These foreign pollutants can have a detrimental effect on our ecosystems and the health of our people. Cooperation with countries such as China allows us to address these global environmental threats. By facilitating the exchange of scientific knowledge, best management practices and policy frameworks, we can improve our ability to protect our environment, our wildlife and the health of the Canadians as well as assist the Chinese in managing their environmental problems. Another equally important aspect of my job is to assist various branches to engage the local Chinese community, promote environmental awareness and encourage taking personal actions that protect the environment. I am proud of what I do."

Xin Gao, Regional Policy Analyst, Corporate Branch

CLEAN, SAFE, AND SECURE WATER

OBJECTIVE

To contribute to the multi-jurisdictional provision of clean, safe and secure water for Canadians and ecosystems in British Columbia and Yukon.

BACKGROUND

Water is a fundamental component of all ecosystems. In British Columbia and the Yukon Territory, people consider themselves fortunate with their share of the world's freshwater and ocean coastline. But increasing urbanization and human activity as well as industrial and agricultural development are affecting the quantity and quality of natural water systems. While water is an important economic resource for the region, its economic use must be balanced with its role as both a cultural icon and an essential element of all life on Earth. For this reason the management of water must integrate all three values in the context of the many human and natural systems of which water is an essential element. This approach is necessary for the sustainable development of the Region.

Stewardship

PYR shares stewardship of thousands of streams and lakes as well as extensive coastlines and numerous estuaries on both the Pacific and Arctic oceans. This tally includes approximately 60 significant stream crossings in watersheds along the Canada-US borders.

Issues

People in this region remain concerned about their continuing access to safe and clean drinking water because of proposals for development and resource extraction in watersheds that are the source of their drinking water, numerous boil-water orders and reports such as the BC Auditor General's on high rates of intestinal illness caused by water-borne microbes. Government agencies and communities in Canada and the United States have increasingly expressed concern about past and current transboundary water pollution in some areas. In both BC and Yukon, water quality is often affected by municipal, agricultural, forestry, mining and industrial activities. The prospect of new oil and gas developments in some areas, if not assessed and managed properly, will

warrant attention to the health of aquatic ecosystems in those regions. In addition, there are demands on water sources for resource development and bulk exports and expansion of areas under shellfish harvesting closure due to marine contamination.

Federal responsibility

Environment Canada contributes to the monitoring, conservation and protection of the nation's extensive water resources and addresses present and potential hazards, threats and stressors within the context of its mandate.

Several Acts outline Environment Canada's key responsibilities for water. The *Department of the Environment Act*, *Canadian Environmental Protection Act* (1999), *Canadian Environmental Assessment Act*, *Yukon Waters Act* and *sections of the Fisheries Act* commit the department to the following water-related activities:

- environmental monitoring and reporting
- environmental research
- the provision of weather warnings, including weather conditions that contribute to floods
- the development of objectives, guidelines and codes of practice
- promoting pollution prevention
- the provision of expert advice in our possession for conducting environmental assessments
- evaluation and control of toxic substances
- control of specific pollutants
- regulation and management of industrial and municipal effluents
- environmental protection at contaminated sites
- regulation and monitoring of substances disposed at sea

The Department of the Environment Act authorizes PYR to provide environmental information in the public interest, advise the government on the quality of the natural environment and coordinate policies and programs of the federal government with respect to the natural environment. The *Fisheries Act* and the *Canadian Environmental Protection Act* are key authorities for addressing sources of water pollution. For example, the *Shellfish Water Quality Protection Program* protects public health by ensuring shellfish harvesting is conducted only in coastal areas uncontaminated by bacteria and viruses.

The *International River Improvements Act* requires

Environmental Priorities cont...

the Minister of Environment to authorize requests for developments that significantly affect transboundary waters. The *Canadian Environmental Assessment Act* requires that the responsible department review new activities and projects to anticipate, prevent or mitigate significant adverse environmental effects.

Environment Canada has the authority under the *Canada Water Act* to develop water resource management arrangements with the province related to waters of "significant national interest" including federal, "inter-jurisdictional", and boundary or transboundary waters.

The federal government is responsible for the safety of drinking water within areas of its jurisdiction, such as national parks and First Nations reserves. This responsibility is borne by the Department(s) that are custodians of those federal lands.

Other governments' responsibilities

Other governments have important and wide-reaching responsibilities for water. The British Columbia and Yukon governments are the primary regulators and managers of freshwater resources (not situated on federal lands) in the region. Constitutional authority grants them the responsibility and right to licence and permit water use, decide allocations, and protect the resource. This authority is exercised through various acts and regulations. Municipalities and regional governments enact sewer and other bylaws and ensure that drinking water is available and safe for their citizens.



Gathering Needed Information

"I'm in the field year round, checking loggers that provide data on water level and quality from Mount Currie to Boston Bar. Precipitation amounts and the effects of storms on local waterways are confirmed through this monitoring. The raw data culled by water survey technicians is used by meteorological and climatic specialists at Environment Canada as well as public and private interests."

Kevin Dunk, Water Survey Technician, Meteorological Services of Canada

To deal with water issues, PYR has developed cooperative arrangements with these other authorities and continues to share knowledge with them for the benefit of citizens and ecosystems.

IMMEDIATE FOCUS OF EFFORTS

- The Georgia Basin, due to impacts of population growth on both water resources and the aquatic environment.
- The Okanagan Valley, where rapid population growth and human activity impact the biodiversity of this fragile semi-desert and threaten supply and quality of water with urbanization and land-use pressures.
- Watersheds shared between Canada and the United States.

ENVIRONMENTAL GOALS AND RESULTS, 2004-2006

- Canadians in BC and Yukon are protected from health threats related to water quality.
- Aquatic ecosystems are protected and conserved.
- Water and aquatic resources are managed in a sustainable manner.
- Impacts of extreme weather and water events on health, safety and the economy are reduced.

KEY STRATEGIES, 2004-2006

- Investigate, predict and report to the public and government on the status, trends and future of our water resources and aquatic environment;
- Improve our understanding of ecosystem function and the effects of human disturbance on both the environment and people;
- Prevent pollution, control toxics and wastes;
- Help people, particularly those with influence, make responsible decisions about water; this includes building relationships with Aboriginal Peoples; and
- Help prevent and resolve transboundary water issues in light of federal responsibility for international affairs and EC responsibilities for enforcement of International Joint Council Orders.
- Enforce pollution legislation to ensure compliance with various Acts and regulations where pollution prevention, compliance promotion, and other programs have not been effective.

KEY ACTIONS, 2004-2006

CLEAN, SAFE AND SECURE WATER

Investigate, predict and report to the public and government on the status, trends and future of our water resources and aquatic environment.

1. Monitor surface water quality and quantity through federal and federal-provincial networks in BC and the Yukon. Develop and apply an effective monitoring method for assessing the water quality of the Fraser River as it enters the Strait of Georgia. Implement the CCME Water Quality Index for reporting water quality conditions in the Georgia Basin to decision-makers and the public.
2. Monitor and report on groundwater quality at Abbotsford and selected international aquifers
3. Monitor biological condition of selected aquatic systems as part of Canadian Aquatic Biomonitoring Network (CABIN); make CABIN data protocols and models accessible to Georgia Basin communities.
4. Increase shellfish harvesting opportunities through restoration of marginally contaminated growing areas.
5. Survey in-use pesticides in the region's aquatic environments as part of the national assessment of in-use pesticides.
6. Provide warnings of weather events that contribute to water-related threats to Canadians, their property and the environment.

Improve our understanding of ecosystem function and the effects of human disturbance on both the environment and people

1. Improve approaches for assessing potential impacts of atmospherically transported and deposited nitrogen and sulphur pollutants in support of developing critical loads for sensitive terrestrial and aquatic ecosystems in Georgia Basin.
2. Develop contaminant-specific toxicological and bio-accumulation information for a set of key pollutants to improve the scientific basis for sediment quality objectives and contaminated sediment clean-up targets.
3. Develop a whole basin budget model (including terrestrial, atmospheric, freshwater and marine components) to assess the sources, pathways, and sinks of persistent organic pollutants (POPs) in Georgia Basin; quantitatively determine the concentration and deposition of airborne pollutants – primarily POPS – to the basin.

4. Assess the potential risk of pharmaceuticals, personal care products, and antibiotics in municipal waste water effluents to selected biota in Georgia Strait and the Fraser River Estuary using a wide spectrum of chemical and bioassay analyses including new genomic techniques.

5. Study hydrological processes and variability in complex mountainous terrain, including rainfall runoff, snowmelt runoff, stream form and function, alluvial and riparian response and hydrological connections from precipitation to surface and groundwater processes.

6. Evaluate new Microbial Source Tracking technologies to identify pollution sources and enhance restoration of contaminated coastal areas.

Prevent pollution, control toxics and wastes

1. Urban: promote sustainable stormwater management, monitor contaminants from storm sewers in northern communities.
2. Municipal: implement the Canadian Environmental Protection Act (1999) pollution prevention planning requirements for ammonia and chlorine compounds in municipal wastewater and contribute to the development of a long-term national wastewater strategy, including a wastewater regulation under the Fisheries Act.
3. Industrial: ensure pulp and paper mills and metal mines comply with federal effluent regulations for these sectors and resolve the eulachon tainting problem in the Kitimat River.
4. Agricultural: support implementation of an agricultural nutrient management strategy for the Fraser Valley.
5. Marine: review and adjudicate applications for ocean disposal permits and monitoring ocean disposal sites.
6. Finfish Aquaculture: assessing environmental impacts of fish farms and developing methods to evaluate recuperative time periods from these impacts, as well as developing guidelines for the location of fish farms.
7. Environmental Assessment: influence comprehensive reviews of industrial developments and other projects to ensure that those that are approved do not cause significant adverse environmental effects and do contribute to sustainable development.
8. Water Quality: promote compliance with and enforcement of Canadian Environmental Protection Act regulations, the general provisions of the Fisheries Act, and regulations under the Fisheries Act, to protect water quality and fishery resources.

Help people, particularly those with influence, make responsible decisions about water

1. Integrate water management practices with climate change vulnerability studies in the Okanagan; build a framework for assessing the adequacy of water in the Okanagan to provide science advice and information to decision-makers.
2. Develop and publish indicators of environmental quality of BC, Yukon and transboundary Georgia Basin/Puget Sound.
3. Report data and information through CISE water portal.
4. Report out on knowledge from studies on the biological effects of runoff in urban and agricultural watersheds.
5. Support shellfish community roundtables to encourage and facilitate community initiatives aimed at addressing sewage and other contamination in surrounding marine and freshwater environment.
6. Develop, under the Agricultural Policy Framework, appropriate agri-environmental standards or objectives for water, soil and air quality, water quantity and biodiversity for agricultural areas.
7. Develop guidelines on agricultural pesticide use to protect non-target organisms and habitat areas from negative impacts of priority pesticides.
8. Develop water quality objectives for specific stressors in BC rivers (e.g., selenium in Elk River) and contaminated sites.
9. Promote personal stewardship values for the protection of the aquatic environment through public presentations and interactive tools.
10. Develop a strategy for the delivery of information and advice to people making decisions that affect water.

Help prevent and resolve transboundary water issues:

1. Influence the management of issues such as gas pressure in Columbia, arsenic in Similkameen, and other US Total Maximum Daily Load developments.
2. Develop a Canadian position and response for US modifications to the flow of Kootenay River.
3. Assist the International Joint Commission with the renewal of its Osoyoos Lake Order.
4. Participate on IJC Boards, References, and associated forums.

CLIMATE CHANGE

OBJECTIVE

Reduce greenhouse gas emissions in PYR and lessen the impact of a changing climate on ecosystems and society.

BACKGROUND

A recent report, Indicators of Climate Change, produced by the Province of British Columbia states that during the past century:

- average air temperatures increased across the region by 0.6°-1.7° Celsius
- precipitation in southern BC increased by 2-4 percent in each decade
- the sea level along much of the coast of BC rose by 4-12 centimetres
- both glacial retreat and an earlier and increasingly warmer discharge have been observed in the Fraser River

In Yukon, noticeable climate change indicators include:

- increases in annual snowfall north of 60 degrees latitude
- winters are warmer and wetter
- decreases in ice thickness and summer sea ice coverage
- earlier ice break up

Greenhouse gases produced by the burning of fossil fuels have been linked to a warming environment and climate change. In ratifying the Kyoto Protocol, Canada agreed to reduce greenhouse gas emissions by 6 per cent below 1990 levels by 2010.

STRATEGIC FOCUS

Climate change is a global issue that requires strong and effective action in all regions to be successful in mitigating global impacts and readying ourselves for the inevitable change. PYR will focus on four strategic areas:

- Developing and improving our knowledge and understanding of climate systems and adaptation strategies
- Ensuring sustainable observation networks.
- Expanding awareness and engagement on climate change issues.
- Building capacity and taking action to reduce greenhouse gas emissions and adapt to changes.

Environmental Priorities cont...

PYR's key approach to action on climate change will include partnerships and recognizing the shared nature of the climate itself. This focus will include:

- Maintaining ongoing coordination within the regional climate change team and between regional and national activities
- Collaborating with Provinces and Territories, various federal departments, and international partners such as China
- Maximizing the ancillary benefits within the other priorities of Clean Water, Habitat and Species, and Air Quality.
- Delivery of innovative and responsive services to achieve environmental results through the sharing of knowledge in science and technology, and engaging citizens and decision makers in addressing climate change.

ENVIRONMENTAL GOALS AND RESULTS, 2004-2006

- Reduce greenhouse gas emissions within the Pacific and Yukon Region.
- Improve our knowledge of past, present and future climates, monitor trends and changes in climate change indicators.
- Develop capacity to assess the vulnerability of ecosystems and society in BC and Yukon to climate change, to project the impacts of climate change, and to promote the development of adaptation strategies to minimize adverse effects.
- Raise awareness of climate change and the need for mitigation and adaptation through behaviour change.
- Co-chair the Canada/China Climate Change Working group to influence China's policies and to promote Canadian technology and expertise

KEY ACTIONS, 2004-2006 CLIMATE CHANGE

Developing and improving our knowledge and understanding of climate systems and adaptation strategies.

- Analyze the climate of the Okanagan Valley including the influences of large-scale variability.
- Develop, in partnership with Agriculture Canada, a microclimate network for mapping crop suitability and the production of high-resolution climate change scenarios for input into hydrological models.
- Analyze and model climatic and hydrological variations in BC and Yukon including analysis of variations in groundwater in BC, modeling future groundwater recharge in the Kettle River, and forecasting hydrological regimes in the Georgia Basin.
- Monitor and understand impacts of reduced water levels in Northern wetlands.
- Develop models for stream flow, temperature, and precipitation for study areas as well as further assessment procedures, tools, and methods for climate regime modeling and predictions such as:
 - Precipitation models of present and future climates
 - Synoptic map-pattern classification for the verification of global circulation models
- Contribute and participate in collaborative projects on adaptation and impact studies within the department, with other departments, and with regional institutes:
 - Subsistence fisheries – impacts of climate change on freshwater fisheries resources in the Pacific Region
 - Agriculture – spatial changes in agricultural land capability and crop suitability due to climate change
 - Water – integrated assessment of climate change and water management in the Okanagan
 - Controls of lowflows by glaciers and groundwater in regions of BC
- Develop an understanding of how climate variations might affect ecosystem structure and function through:
 - Assessing potential future adaptation strategies for the Porcupine Caribou herd and range management
 - Developing future distribution projections of Garry Oak ecosystem
 - Assessing climate impacts on mountain habitats of birds

Environmental Priorities cont...

- Collaborative work on an international level.
 - Arctic Climate Impact Assessment
 - Earth Observation Summit
 - Projects with China such as the Canada/China Cooperation on Climate Change Working Group
 - Studies conducted with international scientists
- Development of vulnerability assessment tools and data-sets including:
 - Probabilistic scenarios – Monte Carlo simulations
 - Response curves – sensitivity of Okanagan hydrology to changes in climate using UBC Watershed model
 - Snowpack modeling of the Okanagan basin using synoptic downscaling
- Integrate vulnerability and impact information into decision making through co-management boards and develop further mechanisms through the Yukon Conservation Data Centre.
- Develop models and predict impacts of climate change on migratory caribou herds, habitat and user communities.
- Promote the evaluation of the effects of climate change within environmental assessments.

Ensuring sustainable observation networks.

- Rationalize and invest in climate reference network.
- Seek out partnerships with stakeholders to augment climate monitoring capacity.
- Ensure availability and exchange of climate data and information.
- Work through the Arctic Borderlands Ecological Knowledge Co-op to understand impacts of climate change on northern ecosystems and aboriginal subsistence use.

Expanding awareness and engagement on climate change issues.

- Assess optimum outreach strategies to effect behaviour change.
- Increase public awareness and understanding of climate change through the management of climate outreach approaches and programs in BC and Yukon.
- Provide guidance and assistance for the continued operation of the BC and Northern Climate ExChanges, including public education and outreach, BC nodes on education, energy and transportation, and coordination of the Northern Canadian Climate Impacts and Adaptation Research Network (CCIARN-North)

- Implement, monitor, and evaluate regional outreach and inreach strategies for climate change including Regional information sessions.
- Develop partnerships and networks for climate change strategies and actions.
- Contribute knowledge and resources to community level projects and other citizen-based activities
- Support behavioural change through all appropriate approaches to influence decision-makers and realize more responsible consumer choices.
- Collaborate in the development of status and trends reporting for Yukon and Northern Canada.
- Communicate science and knowledge of climate change through media.
- Promote Environment Canada agenda and priorities at major stakeholder conferences such as Globe 2004, Globe 2006, and annual conventions of the Union of BC Municipalities.

Building capacity and taking action to reduce greenhouse gas emissions and adapt to changes.

- Liaise and work with other government departments and national headquarters to reduce greenhouse gases by:
 - Promoting and implementing policies, technologies, and economic instruments
 - Encouraging the strategic use of funding mechanisms to promote and identify environmental technologies
 - Work with BC Provincial Officials and Yukon Officials to develop action plans following the signing of bilateral MOUs.
- Co-operate with departmental initiatives with international partners to reduce greenhouse gas emissions
- Lead by example through reducing greenhouse gas emissions from PYR activities and operations.
- Work with municipal leaders, planners, and engineers in adoption of greenhouse gas-mitigation approaches to development.
- Work through the Northern Ecosystem Initiative to develop partnerships and projects related to climate change impacts and adaptations in northern Canada.

Environmental Priorities cont...

HABITAT AND SPECIES

OBJECTIVE

Conserve and protect biodiversity and ecosystems in British Columbia and Yukon by working with partners to secure and manage critical habitat for migratory bird populations to effectively manage migratory bird populations, and to understand and influence the impacts of human activities on species and habitat.

Protect species that have become at risk by effective implementation of Canada's new Species at Risk Act, and preventing international trade in endangered species.

BACKGROUND

British Columbia and Yukon contain habitat and species as varied as the geography of the region. Within its diverse ecosystems dwell birds, mammals, reptiles, plants and marine life, many uniquely adapted to the region and found nowhere else in Canada. In bird communities alone, British Columbia is home to 75 per cent of the breeding birds found in Canada. The Committee on the Status of Species at Risk in Canada currently lists 115 at-risk species in BC.

Migratory populations of shorebirds, waterbirds, waterfowl and landbirds utilize the Region's diverse habitats during their lifecycles. Their ranges overall include Wrangell Island in the Russian Arctic, South America, and all points at sea and on land between, resulting in a complex scientific and management challenge involving many countries. Population growth, urban development and industrial activities – forestry and logging, agriculture, marine industries and energy development – continue to encroach upon both the habitat and the species themselves, and challenge environmental conservation efforts.

NABCI The four planning pillars of the North American Bird Conservation Initiative (NABCI), developed for each of the broad bird groupings noted above, provide the international foundation for regional actions. Environment Canada combines these plans with its mandate under the Canadian Wildlife Act, the Migratory Birds Convention Act, and other legislation to develop effectively locally-focused conservation and protection programs that respond to international objective and local issues.

IMMEDIATE FOCUS OF EFFORTS

- Georgia Basin
- Okanagan Valley
- East Kootenays
- North Slope and Old Crow Flats (Yukon)
- Southeast corner of Yukon Territory

KEY STRATEGIES, 2004-2006

Canada's new Species at Risk Act was proclaimed in 2003 and will be fully in force on June 1, 2004. In addition to ensuring that we are fully operational in the short term, PYR's implementation strategy has four major long term goals:

- integration and implementation within existing regional wildlife programs
- achieving balance between prevention and recovery
- strong science linked with traditional ecological knowledge
- effective communications, education and Outreach.

The conservation and protection of wildlife in Canada is a responsibility shared with provinces and territories. PYR's strategy relies on the shared commitment of Canada, British Columbia, and Yukon expressed in the 1996 Accord for the Protection of Species at Risk. Bilateral working arrangements will be negotiated with British Columbia and Yukon regarding governance, species prioritization, shared data management and reporting, planning, recovery, and stewardship actions.

First Nations and local governments also have jurisdiction and responsibilities to resolve species and habitat issues. PYR will work with them through formal and informal means, including the Fisheries Policy Dialogue with First Nations and the EC/Union of BC Municipalities Statement of Cooperation, to inform decision making and develop and support proactive stewardship actions. The Species at Risk Act recognizes that Canadians have a key role in the conservation of wildlife and habitat through proactive stewardship and PYR will continue to encourage and support those actions by landowners and land users through information sharing, agreements, and covenants.

PYR will continue to use the Pacific Coast Joint Venture and the recently launched Canadian Intermountain Joint

Venture as strategic mechanisms to protect migratory bird populations by conserving important habitat in BC and Yukon. The Joint Ventures address population targets and priorities set by NABCI through partnered acquisitions and restoration projects, and securement through stewardship commitments and agreements. The Pacific Coast Joint Venture's strategies are enhanced by its integration in the Georgia Basin with the EC-led Georgia Basin Action Plan, which provides linkages with municipal and regional growth strategies and pollution prevention and environmental quality initiatives. PYR will continue to manage its National Wildlife Areas and Migratory Bird Sanctuaries as both protected habitat and as key sites for scientific research and development of "working landscape" systems where sustainable interaction with human interests can occur.

PYR will continue to work in partnership with other jurisdictions and the new Canada Border Services Agency to monitor and interdict the international traffic in endangered species, and to educate travelers on the legal issues and environmental impact.



Partnerships Protect Migrating Birds

"Canadian Wildlife Service staff are working with the U.S. Environmental Protection Agency to maintain international bird conservation initiatives. In conjunction with partners including municipal governments, industry colleagues, and Ducks Unlimited, we are creating links between biologists and board members and across national borders. Biologists and researchers are performing studies on indigenous bird and animal species to monitor their habitat use. These surveys contribute to the development of resource management and practice policy in sensitive regions."

Krista deGroot, Migratory Birds Program, Canadian Wildlife Service

ENVIRONMENTAL GOALS AND RESULTS, 2004-2006

- Populations of priority species at risk stabilize and recover over the long term after recovery and stewardship actions undertaken by PYR and other parties.
- Proactive stewardship actions prevent species under federal and provincial/territorial jurisdictions from becoming threatened or endangered.
- Population targets for birds and other wildlife under EC jurisdiction are met through actions under NABCI Joint Ventures, and other mechanisms for securement and protection, and provision of scientific information to other jurisdictions and land stewards
- Traffic through PYR Ports of Entry of species proscribed by the Convention of International Trade in Endangered Species (CITES) is successfully interdicted and reduced.

KEY ACTIONS, 2004-2006 HABITAT AND SPECIES

- Implement the Species at Risk Act in British Columbia and Yukon.
- Negotiate bilateral agreements for collaborative management of species at risk programs with governments of BC and Yukon.
- Renew and expand the biological foundation and partnership base of the international Pacific Coast Joint Venture with American and Canadian partners, to embrace the "all bird, all habitat" principles of the North American Bird Conservation Initiative.
- Deliver the Environment Canada components of the South Okanagan-Similkameen Conservation Program, and support other partners' actions, as a key contributor to the Canadian Intermountain Joint Venture.
- Establish Canada's first Marine Wildlife Area around the Scott Islands.
- Secure key priority lands, including Burns Bog and the Royal Roads "adjacent lands", through actions with partners and promotion of Eco-Gifting and other conservation covenant mechanisms.
- Strengthen links with university research and build on the expanded renewal of the key Centre for Wildlife Ecology (Simon Fraser University) partnership.

Section IV: Organizational Priorities

METEOROLOGICAL SERVICES CANADA TRANSITION

OBJECTIVE

To reduce risks to Canadians from high impact weather events and environmental hazards through enhanced forecast programs, improved science, modernization of monitoring capacity and excellence in service delivery.

BACKGROUND

The infinite variety of Canada's climate is nowhere more striking than the PYR. The geography explains many of the unique features of the climate. The region encompasses a latitude spread of over 20 degrees with elevations ranging from sea-level to 5,950 metres (Mount Logan located in the St. Elias mountain range in Yukon). The relatively mild Pacific airstreams coupled with the rugged coastal strip of west facing slopes, uplands, and indented fiords give the BC coast an almost Mediterranean climate. Within the Greater Vancouver area, it is possible to play golf and ski on the same midwinter day. A few hours drive inland takes one from lush rain forest to semi-arid sagebrush country. In fact British Columbia is the wettest and almost driest place in Canada. All precipitation records in Canada for rain and snow for periods of hours to years are held by BC.

The most noteworthy facts about the Yukon climate are the enormous annual temperature range and the remarkably high air pressure, both of which are greater than anywhere else in North America. Throughout the Yukon, mountains have more effect on the climate than any other controls, including latitude, marine effects, and weather systems.

PYR is replete with weather and environmental events which have a significant impact on safety, security and the economy. By virtue of its vastness, geography and varied climate, the region continues to demand special attention to the scope and depth and of its programs as well as the skill sets of its staff. MSC transition is focusing on these demands through the consolidation of the forecast operations into a Storm Prediction Centre (SPC), the creation of a new National Lab and a new National Service Office (NSO) in our region. Also addressed in the transition plan is the integration of new and more innovative technologies into the monitoring networks to enhance our observing capacity.

IMMEDIATE FOCUS OF EFFORTS, 2004-2006

- Transition of the Kelowna Mountain Weather Forecast Office to National Service Office with a goal of improving utility of meteorological information and services to target economic sectors involved in weather-sensitive activities.
- Development of a Coastal and Mountain laboratory for research in High Impact Weather.
- Development of a Science and Applications Centre for programs in climatology, air quality, hydrometeorology and data management and technologies.
- Successful transition of staff to positions in support of aviation meteorology in Edmonton and severe weather, marine, and public forecasting in Vancouver.
- Address upgrade of monitoring equipment infrastructure.

ENVIRONMENTAL GOALS AND RESULTS, 2004-2006

- Protection of Canadians against imminent or short-term weather and environmental hazards.
- Helping Canadians adapt to their changing environment.



Technology Informing Canadians

"Data acquisition specialists in the Meteorological Service of Canada visit automatic weather stations in remote locations, collecting precipitation, barometric, pollution and other information for widespread use. Working with members of the National Radar Program, these technicians install and maintain Doppler Radar stations that register cloud and precipitation patterns over immense geographical areas. Data collection sites range from buoys as far as 400 kilometres offshore, to the summit of Vernon's Silver Star Mountain."

*Bryan Phenix, Data Acquisition Specialist,
Meteorological Services of Canada*

Organizational Priorities cont...

KEY STRATEGIES, 2004-2006

- Implement recruitment and training strategies to create a continuous flow of scientists and technicians into the meteorological, hydrological and related scientific fields.
- Apply a life-cycle management philosophy for critical monitoring infrastructure to ensure all new equipment installed is maintained at specific standards and replacement is planned.
- Improve the quality of high-impact weather and hazardous events programs through focusing on research and development, automated guidance for forecasters, and improving community services.

KEY ACTIONS, 2004-2006

MSC TRANSITION

- Establishing a consolidated Storm Prediction Centre and National Laboratory in Vancouver
- Establishing a National Service Office in Kelowna that focuses on the resource sectors, including energy, forestry, surface transportation, recreation and mountain safety.
- Installing Doppler radar at Prince George
- Establishing new Monitoring Operations Centre in Richmond



Ensuring Accurate Weather Forecasting

"Atmospheric monitoring specialists interpret data collected in the Weather Buoy System from over 40 automated buoy stations as part of the Ocean Data Acquisition System. This data consists of measurements recorded on wind behaviour, atmospheric pressure, temperature and wave behaviour. These readings provide mariners with warnings necessary to avoid being surprised by ocean storms and suffering tragedy on the high seas."

Ron McLaren, Monitoring Division, Meteorological Services of Canada

PEOPLE PLAN

OBJECTIVE

A strongly performing learning organization that attracts, supports and retains a complement of diverse, outstanding and productive people in a workplace of choice.

BACKGROUND

The People Plan has been developed through a strategic and consultative process that was started after publication of the results of the 1999 Federal Public Service Employee Survey. The Plan incorporates strategies and actions to retain corporate knowledge and maintain and renew the skill sets necessary to further Environment Canada's success and to address critical demographic issues that are expected to result in a loss of skills and corporate knowledge.

The challenges of recruiting and retaining new employees in a highly competitive labour market require the PYR to become a favourable workplace in which managers and employees can share and take responsibility for their careers in a learning organization.



Looking after Employees

"Human resources staff manage the staffing requirements of Environment Canada, including creating job descriptions, classification, competitions, compensation, staff relations and union issues. Accommodation of special employee needs is also supervised, as in the case of personal crisis, sickness, or any other reason that necessitates time away from work."

Dave Dawson, Compensation Consultant, Human Resources Branch

Organizational Priorities cont...

STRATEGIC FOCUS

Initially, the People Plan is focusing on four key action areas:

- Employee Satisfaction
- Sustainable Competent Workforce
- Shared Management of Personnel Processes
- Safe and Healthy Work Environment

A three-year plan has been developed to address recommendations and achieve goals in each of the key areas.



KEY ACTIONS, 2004-2006

PEOPLE PLAN

Employee Satisfaction

- Supporting professional and career development
- Developing awareness and internal communication
- Encouraging personalized workspaces
- Recognition and appreciation

Competent Sustainable Workforce

- Promotion of individual career and learning plans
- Supporting learning and development
- Enabling succession planning

Shared Personnel Management

- Developing awareness and effective communications
- Promoting effective recruitment and retention

Healthy Work Environment

- Ensuring health and safety in the work place
- Effective workload management

Section V: Branches Overview

REGIONAL DIRECTOR GENERAL

The Pacific and Yukon Region's structure addresses regional needs and priorities as it delivers programs through five environmental branches – plus two administrative branches – in support of, and across, the four national business lines: Clean Environment; Nature; Weather and Environmental Predictions; Management, Administration and Policy. At the regional level the Branches take an integrated approach to challenges, opportunities and services.

Environment Canada's departmental representative within the region is the Regional Director General (RDG) who leads and manages priorities and programs through an integrated Regional Executive Committee. This committee includes the Regional Directors of the following Branches: Climate Change, Environmental Conservation, Environmental Protection, Corporate, Meteorological Services of Canada, Finance, and Human Resources.

The Office of the Regional Director General includes the RDG, an Executive Assistant and Secretary, the Regional People Plan Coordination Office and the Ministerial Services Section.



"Climate Change specialists are developing models projecting possible future climate scenarios based upon historical understandings of prevailing weather trends and current atmospheric data. The relationships between climate change and water supply, agricultural land, plant dormancy, drought and desertification are being assessed in conjunction with hydrological and agricultural experts."

Bill Taylor, Atmospheric Scientist, Environmental Conservation Branch

THE BRANCHES

METEOROLOGICAL SERVICE OF CANADA (MSC)

Through science and technology MSC provides the following services:

- severe weather warnings and weather forecasts
- environmental prediction and air quality forecasting
- monitoring of real-time and trend weather conditions, sea-state, water quantity and quality
- information technology services to the Region.

The Branch also provides operational research and development in the fields of meteorology and hydrology and specialized client services in data management and consultation.

ENVIRONMENTAL CONSERVATION BRANCH (ECB)

Environmental Conservation delivers science-based programs that increase the understanding and conservation of the natural capital of British Columbia and the Yukon, including migratory birds, birds at sea, species at risk and diverse habitats.

The Branch includes:

- Canadian Wildlife Service
- Aquatic and Atmospheric Sciences Division
- Laboratory Sciences Division
- Northern Conservation Division
- Wildlife Enforcement Division.

ECB provides leadership in science and research and works in collaboration with other branches on water and air-related issues.

ENVIRONMENTAL PROTECTION BRANCH (EPB)

Environmental Protection delivers a science-based program focused on the protection and preservation of the environment through:

- environmental impact assessment
- compliance promotion
- regulatory and enforcement action
- pollution prevention
- environmental emergency response and coordination activities
- chemical evaluation and control

The Branch includes Pollution Prevention and Assessment Division, the Enforcement and Emergencies Division, the Commercial Chemicals Division and the integrated Yukon Division.

CLIMATE CHANGE BRANCH

The Climate Change Branch leads and coordinates PYR's strategic management of the post-Kyoto implementation of the Climate Change Plan for Canada. The Branch contributes to the national strategy to address climate change, and influences policy within BC and Yukon. Climate change is a cross-cutting issue which involves all branches within the region. As such, the Climate Change Office ensures a cohesive and integrated approach to managing the climate change file.



Money Matters

"Finance staff work with human resources and appear at management meetings to assist in development of fiscal allocation. They make decisions to support cost-sharing agreements between Environment Canada and non-profit organizations, grants and contributions (i.e. with Ducks Unlimited) and community outreach."

Jay Perron, Financial Analyst, Finance Branch

CORPORATE BRANCH

The Corporate Branch facilitates and coordinates the development of an integrated departmental agenda within the Region as well as the promotion and facilitation of effective management, communications and community outreach. This Branch is responsible for addressing intergovernmental and international issues and First Nations relations. Corporate Branch contains:

- the Georgia Basin Action Plan Coordination Office
- the Aboriginal Affairs Division
- the International and Intergovernmental Affairs Division
- the Outreach Programs Division
- Communications
- Administration and Special Projects Division

The Branch is also responsible for the management of the Pacific Environment Centre site.

FINANCE BRANCH

The Finance Branch is responsible for providing financial advice and information on policy and procedures that assist all managers across the Region in program delivery. The Branch also provides specialized services and advice in such areas as financial arrangements, grants and contributions, assets management and disposal, contracting, trend analysis and budgetary planning and forecasting. In addition, it supplies expenditures and accounts payable services as well as training in financial procedures for Regional staff.

HUMAN RESOURCES BRANCH

The Human Resources Branch provides leadership and advice on legislation, policies and procedures related to various HR disciplines. These disciplines include staffing, staff relations, classification, compensation, training and development and HR planning. We provide support to managers in implementing good human resources management practices. We also provide assistance and information to employees on career development, learning and training, and employee assistance program. We provide support to the implementation team of PYR People Plan. We recognize that success in meeting organizational goals is dependent upon its human resources.

Environment Canada Pacific & Yukon Region Offices

Environment Canada

Pacific and Yukon Regional Office

#201 – 401 Burrard St
Vancouver, BC V6C 3S5
604-664-9100

Environment Canada

Yukon Offices

91782 Alaska Highway
Whitehorse, YT Y1A 5B7
867-667-3400

Pacific Wildlife Research Centre

Canadian Wildlife Service

5421 Robertson Road
R #1, Delta, BC V4K 3N2
604-940-4700
or
3567 Island Highway West
Qualicum Beach, BC V9K 2B7
250-752-9611

Pacific Environmental Science Centre

2645 Dollarton Hwy.
North Vancouver, BC V7H 1B1
604-924-2500

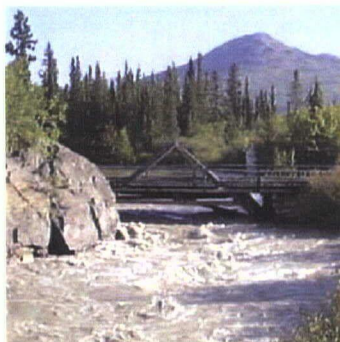
Meteorological Service of Canada

Monitoring Operations Centre

7th Floor – 1200 West 73rd Ave
Vancouver, BC
604-713-9588

Environmental Protection Field Offices

2400 Osipika Blvd
Prince George, BC V2N 3N5
250-561-6902
or
PO Box 2259
Smithers, BC V0J 2N0
250-847-1879



Meteorological Service of Canada

Water Survey Technical Field Offices

2080-C Labieux Road
Nanaimo, BC V9T 6J9
250-756-7360

1251 12th Street
Kamloops, BC V2B 3C8
250-376-7353

10220-94 Ave
Fort St. John, BC V1J 4X3
250-770-4453

PO Box 691 – 850 King Street
Cranbrook, BC V1C 4J2
250-417-2230

2335 Government Street
Penticton, BC V2A 4W5
250-770-4453

5235-B Keith Ave
Terrace, BC V8G 1L2
250-615-5375

3666 Massey Drive
Prince George, BC V2N 2S8
250-561-69100

Meteorological Service of Canada

National Service Office

3140 College Way
Kelowna, BC V1V 1V9
250-491-1504

Environmental Protection and Emergencies

Enforcement and Emergencies 604-666-6201
Emergency Spills (24hrs) 604-666-6100
Wildlife Enforcement 604-666-5892

Weather Information

Weather Recorded Forecast
604-664-9010 (English)
604-734-4146 (French)
Mountain Pass Weather 250-374-3661
On-line: www.weatheroffice.ec.gc.ca

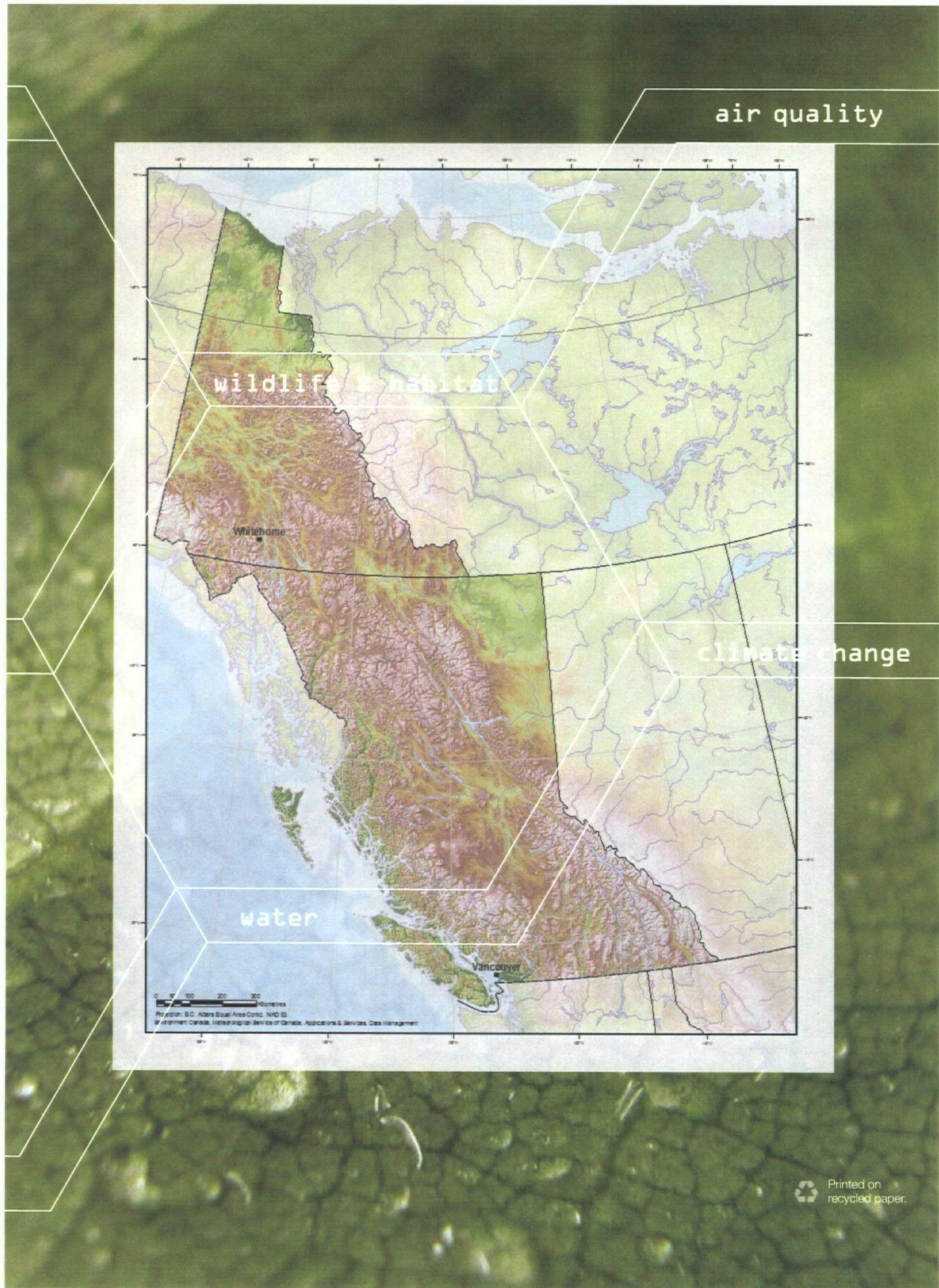
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