

*Ministry of  
Water, Land and  
Air Protection*

**2003/04  
Annual Service Plan Report**



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## Accountability Statement

The 2003/04 Ministry of Water, Land and Air Protection Annual Service Plan Report was prepared under my direction in accordance with the *Budget Transparency and Accountability Act*. This report compares the actual results to the expected results identified in the ministry's 2003/04 Service Plan. I am accountable for the ministry's results and the basis on which they have been reported.

A handwritten signature in black ink, appearing to read "Bill Barisoff". The signature is written in a cursive style with a large initial "B" and a long horizontal stroke at the end.

Honourable Bill Barisoff  
Minister of Water, Land and Air Protection

May 29, 2004





## Ministry of Water, Land and Air Protection



The Ministry of Water, Land and Air Protection is committed to protecting the province's water, land and air in partnership with all British Columbians. Our ministry understands the government's goal of sustained economic competitiveness assumes British Columbians must maximize the benefits from our natural resources, maintain the quality of our environment, and enhance the health of our communities. It is this balance that the ministry is working toward — all within the realm of a balanced provincial budget.

This Annual Service Plan Report outlines our achievements in relation to our 2003/04–2005/06 Service Plan. Our ministry is committed to streamlining processes and regulation. We have modernized regulatory requirements and legislation in environmental management. By removing unnecessary process and outdated regulation, we are focusing government resources on making decisions that provide certainty, clarity, opportunity and results — and doing so quickly. In 2003/04, the new *Integrated Pest Management Act*, the new *Environmental Management Act* and the *Flood Hazard Statutes Amendment Act* received Royal Assent. These changes in legislation allow ministry staff to focus on higher risk activities, to spend more time monitoring for compliance, to accelerate cleanup of contaminated sites and to have the resources to be responsive to environmental emergencies.

Over the past year, we have dedicated funds for conservation and outdoor recreation projects to improve environmental stewardship in the areas of fish protection, agricultural land preservation and wetland habitat conservation. The ministry continued to work with communities, academic institutions, First Nations, non-profit organizations, industry, business and other government agents to maintain and restore the ecological diversity of fish and wildlife species and their habitats and to provide and enhance outdoor recreation and tourism opportunities in British Columbia.

British Columbia's natural resources are precious. In 2003, the *Water, Land, and Air Protection Statutes Amendment Act* and the *Parks and Protected Areas Statutes Amendment Act* received Royal Assent. This legislation ensures water, land and air protection, yet allows for recreational and commercial opportunities so that visitors and residents can enjoy the natural beauty of this province.

I would like to thank ministry staff, our colleagues in other ministries, our numerous partners outside of government and the people of British Columbia for their support of our efforts to make decisions informed by science, which allow for economic development while protecting our natural resources.

A handwritten signature in black ink, appearing to read "Bill Barisoff". The signature is written in a cursive style with a large initial "B" and a long, sweeping underline.

Honourable Bill Barisoff  
Minister of Water, Land and Air Protection



# Year-at-a-Glance Highlights

The 2003/04 Annual Service Plan Report covers the fiscal year April 1, 2003 to March 31, 2004 and reports on the ministry's 2003/04 – 2005/06 Service Plan, which was prepared under the *Budget Transparency and Accountability Act*. All ministries are accountable for making yearly progress toward their goals and objectives and to report on that progress to the citizens of British Columbia. This annual report provides the public, stakeholders, legislators and other agencies with meaningful, credible information on the ministry's progress in achieving its vision and mission. It reports on the ministry's performance results and how they may affect future planning.

Some of the ministry's significant actions and achievements over the past year are highlighted below. (See Appendix A for a glossary of terms and Appendix B for the ministry's progress in meeting its *New Era* commitments.)

## April 2003

- A total of \$382,600 was dedicated for 16 conservation and outdoor recreation projects in the Okanagan to improve environmental stewardship. This funding will be allocated for key projects, such as three Okanagan University College research projects related to the South Okanagan. Funding will also go to the Okanagan Nation Alliance to set the stage for Okanagan River restoration planning, a project with potential for long-term benefits for fish and wildlife species within the watershed.
- Funding of \$2.6 million was dedicated to the Freshwater Fisheries Society of BC, (<http://www.gofishbc.com>) as part of the government's BC Heartlands Economic Strategy. The transfer of provincial freshwater fish hatcheries to this new non-profit society will expand British Columbia's world-class outdoor recreation opportunities by creating new partnerships to increase funding while protecting native fish populations.
- An additional \$505,000 was provided to the Habitat Conservation Trust Fund to support the steelhead fish recovery strategy on Vancouver Island and the lower mainland and fish monitoring and applied research in the Krough River (<http://www.hctf.ca/hctf.htm>).

## May 2003

- The Government of Canada and the Province of British Columbia signed the Gulf Islands National Park Reserve Establishment Agreement. The agreement will help protect nationally significant landscapes and seascapes in this unique area.

## June 2003

- The province contributed \$100,000 to the campaign for the construction of the Kokanee Glacier Cabin, as well as an additional \$150,000 in funding and staff time for the project. The cabin was built as a result of a fundraising campaign carried out in memory of Michel Trudeau and others who have lost their lives in Kokanee Glacier Provincial Park.

The facility will provide a welcome refuge for backcountry users, and will provide information to reduce the risks associated with summer and winter backcountry travel.

- The Wildlife-Human Conflict Prevention Strategy was released, which aims to protect human health and safety and reduce the destruction or removal of wildlife. Ministry staff developed the strategy during the past year with advice from an MLA advisory committee and targeted consultations with selected communities, First Nations, non-government organizations and other jurisdictions.
- A new used oil recycling program was launched by the Minister of Water, Land, and Air Protection at a meeting of the BC Used Oil Management Association. The association is accountable for used oil, used filters and empty oil containers, which can now be returned to any of the more than 400 approved depots across the province.

### **August 2003**

- In response to the provincial forest fire emergency, ministry staff played an important role working in Provincial Emergency Operation Centres (PREOCs). Many ministry employees are members of the Provincial Emergency Program's Temporary Emergency Response Management System (TEAMS). This pool of provincial government employees from across government is trained to provide leadership at the Incident Command Post during an emergency in support of local government and other response personnel.

### **September 2003**

- The provincial government and the Heiltsuk First Nation entered into a new collaborative management agreement that will ensure First Nations are directly involved in new tourism opportunities and conservation. The agreement to co-manage the Hakai Luxvbalis Conservancy Area is the first of its kind on the Central Coast and includes land and marine environments that are renowned for their beauty, eco-tourism and angling.

### **October 2003**

- The ministry and the Nature Trust of British Columbia announced the purchase of a 175-hectare (432-acre) property from TimberWest on the main stem of the Englishman River, the most important salmon-producing stream on the mid-east coast of Vancouver Island.
- The province donated \$60,000 to the Land Conservancy's Conservation Partners Program to promote environmental conservation on agricultural land and support farmers who are preserving habitat for future generations.
- The *Integrated Pest Management Act* received Royal Assent on October 23, 2003 and replaces the *Pesticide Control Act*. The new Act shifts the regulatory approval process for pesticide use to a standards-based framework that will make more efficient use of ministry resources.
- The *Environmental Management Act* received Royal Assent on October 23, 2003, replacing two statutes, the *Waste Management Act* and the *Environment Management Act*. The new Act is intended to reduce regulatory burden by enabling a risk-based and results-based

approach to environmental management and provides for new regulatory tools, such as market-based incentives, to promote sensitive environmental behaviour.

- The ministry participated in Burrard Clean Operations' major oil spill exercise in Tofino. Held every five years, as part of the Pacific States/BC Oil Spill Task Force, the exercise aims to integrate federal and provincial government staff and industry response personnel into a cohesive team working toward a common response strategy.
- The Government of Canada and the Province of British Columbia signed a memorandum of understanding (MOU) regarding the establishment of a new park reserve and national marine conservation area reserves in B.C. The MOU commits to undertaking a feasibility study for a proposed national marine conservation area reserve in the Strait of Georgia marine area, initiating a feasibility study for a national park reserve in the south Okanagan, and undertaking consultation on an interim management plan for the proposed Gwaii Haanas National Marine Conservation Area Reserve.

### **November 2003**

- Funding of \$152,000 was provided to protect the white sturgeon in the Prince George area. A partnership with the Nechako River White Sturgeon Recovery Initiatives team, which includes government, First Nations, industry and stakeholders, will help protect and restore this ancient species by increasing knowledge and scientific understanding of the fish. This funding will also provide administrative support for team planning.
- The ministry hosted the Canadian Council of Ministers of the Environment (CCME). Ministers agreed on the many benefits of taking collaborative and consistent action to address environmental issues, such as working on a national strategy for the harmonized management of municipal wastewater effluents, dealing with waste from electronic products, and adopting Canada-wide standards for dioxins and furans from combustion of municipal waste.
- The *Water, Land, and Air Protection Statutes Amendment Act* received Royal Assent on November 20, 2003. The Act amends the *Park Act* and the *Wildlife Act* and repeals several outdated statutes as part of the ministry's contribution to the government's deregulation initiative.
- The *Flood Hazard Statutes Amendment Act* received Royal Assent on November 17, 2003. The Act amends a number of statutes related to diking and construction requirements in flood-prone areas. This legislation will increase local government control over floodplain development and foster improved dike management.

### **December 2003**

- The *Parks and Protected Areas Statutes Amendment Act* received Royal Assent on December 2, 2003. This Act amends the *Park Act* and portions of the schedules to the *Protected Areas of British Columbia Act*. The new Act clarifies responsibility for authorizing resorts and related tourism activities within provincial parks, outlines the rules for directional drilling rigs located outside the boundaries of park and protected areas to access oil and gas resources under those areas, and amends the process for the designation of park categories.

## **January 2004**

- Ducks Unlimited Canada presented a Heritage Gold sponsor award to Minister Barisoff. The award recognizes contributions to the Habitat Conservation Trust Fund in excess of \$500,000 to improve wetland habitats across the province.

## **February 2004**

- The ministry signed an agreement with Environment Canada (British Columbia and Yukon Region) to enhance cooperative relationships between the two entities on environmental management issues. The agreement aims to explore improved bilateral arrangements in the areas of air management, water management, species and habitat management and diversity, compliance and enforcement, science and research, and information and knowledge management.

## **March 2004**

- The National Energy Board denied an application by Sumas Energy II to construct a power line in connection with a proposed cogeneration plant located in Washington State. This proposed project was expected to have impacts on air quality in the Abbotsford area.
- The Province of British Columbia, together with the Government of Canada, the Greater Vancouver Regional District and Corporation of Delta, acquired Burns Bog at a purchase price of \$73 million for approximately 2,023 hectares (5,000 acres). The purchase means that an area five times the size of Stanley Park will be preserved so that generations to come will be able to enjoy this remarkable natural treasure.
- The Habitat Conservation Trust Fund contributed \$900,000 to support 21 wildlife and environmental enhancement projects. Key funding will support the Nature Trust of British Columbia's purchase of the 4,200-hectare (10,378-acre) Hoodoo/Hofert property, which supports a number of endangered and at-risk species. Other projects to receive funding include white sturgeon restoration in the Upper Columbia River, a study of Gerrard Rainbow trout in the Lardeau River and an assessment of mountain goat summer ranges in the East Kootenays.

# Ministry Role and Services

## Ministry Overview

The mandate of the Ministry of Water, Land and Air Protection is to protect and enhance the quality of British Columbia's water, land and air in a way that contributes to healthy communities, recreational opportunities, a sustainable environment, and a strong and vibrant provincial economy. The ministry strives to bring an effective, balanced approach to environmental management that optimizes benefits from a healthy economy and retains British Columbia's world-renowned natural beauty and environmental integrity. To accomplish this, the ministry provides leadership, develops innovative legislation and new business models, and promotes effective relationships with clients such as other government bodies, First Nations, industry, and the range of groups in the environmental community. Our clients also encompass the public at large, small business, users of our parks and recreational services, and our staff.<sup>1</sup>

The ministry carries out its mandate through four divisions with approximately 924 staff located in nine regions of the province: Vancouver Island, Lower Mainland, Thompson, Okanagan, Kootenay, Cariboo, Skeena, Omineca and Peace. Regional staff in the Environmental Protection and Environmental Stewardship divisions work together in regional offices to encourage teamwork and efficiency. Smaller area offices are located throughout the province to provide a visible presence, enforcement and park operations capacity in local areas (see Appendix E: Ministry Office Locations).

The ministry has three major areas of activity:

- **Environmental Protection** — the ministry develops policy and legislation, regulations, codes of practice and administers statutes. Regulatory frameworks allow the ministry to set, monitor and report on standards for environmental quality, such as discharges and emissions to water, land and air. Frameworks are also used for the acceptable remediation of contaminated sites and facilitation of effective responses to high-risk environmental and human health and safety emergencies.
- **Environmental Stewardship** — the ministry sets results-based objectives and standards informed by science for activities that affect ecosystems, species and habitat. It also monitors and reports on selected species and habitats, and acquires information on habitat and species health.

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<sup>1</sup> Two other agencies have mandates closely aligned to that of the ministry. The Ministry of Sustainable Resource Management is responsible for land and water use planning and land and resource information services. Land and Water British Columbia (a Crown corporation) administers issues related to land and water allocation, while the Ministry of Water, Land and Air Protection has responsibility for issues related to land and water quality.

- **Outdoor Recreation** — the ministry supports the social, economic and cultural values associated with recreational and other uses of Crown land by managing key fish, wildlife and habitat activities, as well as managing provincial parks, protected areas and conservation lands.

An overview of the wide range of legislation administered by the ministry is included in Appendix C.

## **Innovative Service Delivery in 2003/04**

The ministry recognizes that effective service delivery and stewardship of the environment requires forging new relationships, building trust, developing new business models and striving for ongoing improvement.

During 2003/04, the ministry implemented a number of business models and streamlined processes that will enable it to continue to pursue an innovative approach to service delivery, such as:

- providing additional park management opportunities to regional private contractors;
- transferring responsibility for the operation of hatcheries to the Freshwater Fisheries Society of BC;
- continuing to partner with the Habitat Conservation Trust Fund to support wildlife and environmental enhancement programs;
- expanding the role of government-recognized, private-sector environmental professionals in addressing contaminated sites;
- partnering with other ministries (e.g., Ministry of Agriculture, Food and Fisheries, Ministry of Transportation) in areas such as aquaculture compliance and highway operations and their impact on the environment; and
- streamlining processes to enable individuals to write pesticide applicator exams at Government Agent offices rather than in ministry regional offices, working to harmonize regulatory requirements with other governments (e.g., the Streamside Protection Regulation with the Department of Fisheries and Oceans), and working with the Alberta government on harmonizing special waste regulatory requirements.

In addition to these partnerships and collaborative efforts, the ministry uses internal committees to facilitate the effective integration of operations in areas such as science, monitoring and reporting, compliance and information systems planning. (The Ministry of Sustainable Resource Management is an important partner in the implementation of a multi-year information systems plan.)

Ministry representatives also participate in a number of cross-government initiatives, such as the Provincial Resort Strategy, Fire Management Team, Pine Beetle Task Force and Provincial Drought Action Plan. The ministry is also part of the Ministry of Sustainable Resource Management's Land Information BC Client Council (a key provider of information services and information technology to the Ministry of Water, Land and Air Protection).

## Ministry Vision, Mission and Values

### Vision

The ministry's vision is a clean, healthy and naturally diverse environment that enriches people's lives, now and in the future.

### Mission

The ministry provides leadership and support to British Columbians to help them limit the adverse effects of their individual and collective activities on the environment, while fostering economic development and providing recreational opportunities.

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## Organizational Values and Principles

The following major organizational values and principles underpin our work.

### Values

- We respect our staff and create a healthy workplace that sets and communicates clear expectations, and supports a culture of staff development, recognition, reward and opportunity.
- We ensure that professional accountability and discipline characterize our behaviour.
- We focus on achieving high environmental standards through a culture of continuous adaptation to change.
- We strive to consistently meet agreed-upon client requirements and deliver our services in a transparent, fair and timely manner.
- We are committed to continuous improvement in the environmental management of the province.

### Principles

- We believe a sustainable environment is central to providing economic and social opportunities for all British Columbians.
- We believe a sustainable environment is a naturally diverse environment.
- We believe that all sectors of society are responsible for ensuring a sustainable environment — government, business, industry and citizenry.
- We believe that citizens have the right to safe, healthy communities.

Our values and principles guide us in the way we define and attempt to reach our goals. Some examples are:

- Communicating clear expectations to staff and encouraging a culture of continuous improvement has led to the development and review of an Employee Performance and Development Plan (EPDP) for each ministry employee on an annual basis.
- Improving environmental management by involving business, industry and citizens in maintaining a sustainable environment has led to the replacement of the 20-year-old *Waste Management Act* with a new *Environmental Management Act*. The new Act will streamline standards and make the private sector more accountable for upholding codes of practice and safeguarding the environment against harm.
- Achieving high environmental standards and delivering our services in a transparent, fair and timely manner is reflected in the publicly reported performance measures contained in our annual Service Plan and in the government's Strategic Plan. In addition, broad environmental outcome indicators are made public in our Environmental Trends reports.

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## Ministry Operating Context

Each year, as part of its planning cycle, the ministry carries out a broad scan of the external<sup>2</sup> and internal factors influencing its ability to meet ministry and government objectives. The challenge is to identify and address the impact these factors might have, while making fundamental changes to our business approaches and maintaining an environment in which staff can achieve results and grow professionally.

The flexibility to refine and update plans as circumstances evolve is a vital part of our resource planning and risk management processes. Adjustments to Service Plan objectives, program priorities, targets and internal budget allocations may result from our analysis of a range of factors, such as the degree of economic activity in the province, the impact of changing weather patterns or international market demands.

The ministry operates within a complex environment that is influenced by:

- *An increasing number of severe and unpredictable natural or biological events that can impact ecosystems, human health, and local, national or international economies.* Examples are Severe Acute Respiratory Syndrome (SARS), Bovine Spongiform Encephalopathy (BSE, "mad cow disease"), and Avian Influenza. The ability to change or develop plans quickly is critical to achieving an effective response to such events.
- *The need to apply multidisciplinary approaches to problems, considering scientific, social and economic factors.* For example, the catastrophic series of wildfires in the province's interior affected a number of significant ecosystems and led to reduced tourism and economic activity in the province. (See the "Report on Results" section for the ministry's performance measure for the number of recorded visits to B.C. parks.)

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<sup>2</sup> External factors refer to global, national and provincial considerations. For more information see the "Planning Context" section in the ministry's 2004/05–2006/07 Service Plan at <http://www.bcbudget.gov.bc.ca/sp2004/wlap/wlap-appendix1.htm>.



- *A broader role for the ministry in which it supports maximizing the benefits of the natural environment while maintaining its quality (e.g., actively supporting the 2010 Olympic and Paralympic Winter Games).* This more holistic approach acknowledges the role that a healthy environment plays in supporting the economy, and the role that a healthy economy has in supporting government's ability to deliver its environmental and other goals.
- *Public expectations that legislation and regulations should be both effective and efficient in achieving objectives.* Public confidence comes from the belief that legislation and regulations are well designed, minimize duplication, have the flexibility to adapt to new circumstances, and will encourage compliance while not unduly burdening stakeholders with unnecessary process and cost. Public confidence comes from the knowledge that the ministry carries out periodic program reviews, audits and assurance pilots to enhance its ability to deliver services, develop effective legislation and business practices and report on its performance fairly and openly.
- *The need to move toward a more collaborative approach in meeting ministry objectives.* Stakeholder and other new relationships must be developed and opportunities for harmonizing regulatory requirements explored.
- *An increased need to support staff development and carry out program and infrastructure renewal within the limited resources available to government.* To do so, revenue opportunities, innovative business models, streamlined processes and risk management practices must be considered.

## **Risk Management**

The ministry is an active proponent of risk management and has considerable experience in examining risks related to human health, the environment, public and private property, Crown assets and its own business operations. Examples of these include risks associated with revenue, habitat, park facilities and contaminated sites. During 2003/04, the ministry managed a number of risks linked to the achievement of its Service Plan goals and its capacity to deliver its mandate. Table 1 summarizes some of these. (See the "Report on Resources" section for a broader discussion of capacity.)

**Table 1. Risk identification and ministry response**

Situation	Potential Risk	Risk Management Action
Risks that originate outside the organization.	Negative perceptions about environmental practices in British Columbia may adversely affect international markets.	Continue to use outcome reporting (e.g., Environmental Trends reports) to provide current and scientifically credible information to media, educators and policy-makers to foster awareness of environmental issues in decision-making.
	Revenue from fees (e.g., from recreation activities) may be affected by: <ul style="list-style-type: none"> <li>• changing demographics</li> <li>• natural disasters</li> <li>• negative consumer response</li> <li>• international tourism trends.</li> </ul>	Continue to conduct environmental scans and monitor changes in demographics that may affect revenue generation.  Continue to work with Treasury Board staff to improve revenue-reporting models and develop contingencies to mitigate revenue fluctuations.
Risks that relate to the sustainability of the environment.	Rapid expansion of human activities continues to alter habitat and increases the number of species at risk.	Continue to develop strategies and partnerships (e.g., the Freshwater Fisheries Society of BC) that encourage stewardship and improve science to inform decisions and the identification, protection and recovery of species and habitat.
Risks that relate to the effectiveness and efficiency of processes and operations.	The optimal indicators of environmental health may not have been identified, which may have a particular result attributed to a certain action when the outcome may be produced by another action or variable.  Expansion of the use of partners and shared stewardship may impact the ability to manage project delivery and meet objectives.	Periodically review outcome measures, results and measures in other jurisdictions to determine the best environmental indicators for future reporting.  Ensure that the three-year audit and program review plan is used to monitor the outcomes intended from implementing improved approaches (e.g., the park operating contract process).

**Table 1. Risk identification and ministry response (continued)**

Situation	Potential Risk	Risk Management Action
Risks that relate to tangible assets such as land, buildings and equipment.	The possible loss of asset value (e.g., reduced level of maintenance, obsolescence), which would result in decreased revenue potential or return on Crown assets or greater long-term replacement costs.	Use the annual capital plan and asset management strategy with the condition assessment inventory to look at situations that could pose risks to human health or result in serious environmental damage and prioritize capital expenditures for upgrading facilities.
Risks that relate to the use of information (e.g., how it is protected, stored and shared).	Lack of robust information technology will affect the ministry's ability to support effective monitoring and reporting systems or to benefit from business process improvements.	Use the multi-year Information Resource Management Plan to ensure information systems and information management needs are identified and data standards are met.  Continue to work with the Ministry of Sustainable Resource Management and other service providers on database integration using improved information systems platforms.
Risks that relate to the organizational culture, human resource activities and fiscal allocation activities.	An aging workforce may mean increased retirement rates, knowledge retention issues and the need to recruit people for key positions.  Existing staff may need to supplement skill sets to effectively respond to changing operational requirements.	Monitor progress in implementing succession management for key ministry positions that have been identified.  Ensure that all staff have an Employee Performance and Development Plan in place.
Risks that originate from the need to regulate or comply with policies, practices or statutes.	Policies, programs and actions to address environmental impacts may not be appropriate or adequate, which could result in unintended consequences.	Continue to explore opportunities to incorporate reporting information (e.g., Environmental Trends reports) into priority setting, policy development and performance measurement.

The ministry has sponsored activities such as the Risk-Based Responses to Human-Wildlife Conflict MLA panel and the Integrating Risk into Ministry Decision Making workshops for staff over the past year. As well, the ministry also included risk information in the 2002/03 Annual Service Plan Report in an effort to foster understanding about potential risks faced

by the environment and by those who share in its protection (e.g., other government bodies, partners and the public). This awareness of risk was beneficial as the ministry dealt with the impact of the 2003 forest fires on recreational revenue and park facility operations.

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## Ministry Structure and Core Business Areas

The ministry relies on the integration of four core business areas to achieve its four Service Plan goals.

### 1. Environmental Protection

The core business area of Environmental Protection is led primarily by the Environmental Protection Division. Key programs and services in this business area focus on protecting human health and the environmental quality of water, land and air in British Columbia. The Environmental Protection business area is responsible for delivering Goal 1.

This area's key functions reflect the government's priority of ensuring a strong, private-sector economy that maintains high environmental standards by:

- regulating and monitoring industrial and community activities to ensure compliance with established provincial environmental standards;
- promoting sustainable environmental practices in communities; and
- maintaining a system for ambient air and water quality monitoring and reporting.

Approximately \$47,711,000 and 328 FTEs were dedicated in 2003/04 to this core business area.

One of the major focuses of this business area has been developing new legislation, including the *Environmental Management Act*, the *Integrated Pest Management Act* and the *Flood Hazard Statutes Amendment Act*. Such legislative changes, which were made using stakeholder input (e.g., Advisory Panel on Contaminated Sites), facilitate outcome-based regulations that provide clear roles for governments and stakeholders, consistent performance standards, updated fee structures, decreased remedial and legal costs, and a greater focus on those not complying with regulatory requirements. Providing opportunities for industry-led stewardship programs for the disposal of post-consumer products and shifting the responsibility for lower risk spills to industry and partners will enable the ministry to better focus its resources on high-risk issues.

### 2. Environmental Stewardship

The core business area of Environmental Stewardship is led primarily by the Environmental Stewardship Division. Key programs and services in this business area focus on working with other ministries, industries, communities and governments to establish standards for governing the use and protection of ecosystems, species and habitats. The Environmental Stewardship business area is responsible for delivering Goal 2.

This area's key functions reflect the government's priorities of shared stewardship and sustainable economic development. These stewardship activities are aimed at maintaining and restoring fish and wildlife species and their habitats.

Approximately \$43,153,000 and 360 FTEs were dedicated in 2003/04 to this core business area.

The ministry has been working with partners to update provincial regulations and strengthen the role of science professionals in developing standards and best practices for ecosystem, species and habitat conservation. The ministry has worked on the *Forest and Range Practices Act* and other regulations that enable results-based stewardship. In 2003, the ministry amended the *Wildlife Act* and *Park Act* to better support conservation and the allocation of fish and wildlife resources and to reduce the regulatory burden on business.

### **Conservation Officer Service**

The dual reporting relationship of the Conservation Officer Service (COS) to the Environmental Protection Division and the Environmental Stewardship Division guides the compliance and enforcement activities in all areas of the ministry's legislative mandate. The COS provides education to clients and promotes compliance with regulatory requirements, conducts inspections and, if necessary, works within ministry programs on a range of enforcement options to address non-compliance. The COS is also responsible for implementing the Wildlife-Human Conflict Prevention Strategy.

### **3. Park, Fish and Wildlife Recreation**

The core business area of Park, Fish and Wildlife Recreation is also led primarily by the Environmental Stewardship Division. Key programs and services in this business area focus on the allocation of natural resources for hunting, angling and wildlife viewing, protecting recreational values and encouraging recreation-linked economic activity. The Park, Fish and Wildlife Recreation business area is responsible for delivering Goal 3.

This area's key functions reflect the government's priorities of protecting and enhancing recreational services and opportunities and of establishing workable relationships with First Nations, regional communities, other ministries and governments by:

- applying an approach informed by science to promote the effective management of fish, wildlife and park resources;
- providing and enhancing park, fish and wildlife recreational services and opportunities for British Columbians and others; and
- establishing legislation, policies and procedures for park, fish and wildlife recreation.

Approximately \$8,223,000 and 156 FTEs were dedicated to this core business area in 2003/04.

Progress was made on several key issues, with stakeholder input playing an important role (e.g., the Recreation Stewardship Panel). The ministry worked with partners to establish the Freshwater Fisheries Society of BC and to improve park management by contractors.

Over the coming years, the ministry will continue to respond to the Recreation Stewardship Panel's recommendations to further support responsible tourism growth. The 2010 Olympic and Paralympic Winter Games will provide an opportunity to encourage sound environmental planning and infrastructure development associated with the Games. In the future, fish, wildlife and park-based recreation and appropriate development within the province's parks will continue to provide regional economic opportunities.

#### **4. Executive and Support Services**

The core business area of Executive and Support Services is led through the Deputy Minister's Office, Strategic Policy Division and Corporate Services Division. Key programs and services in this business area focus on providing effective and efficient planning and legislative support to assist core business areas in achieving their goals and objectives. The Executive and Support Services business area is responsible for delivering Goal 4.

This area's key functions support the government's priorities of efficient program management and fiscal responsibility.

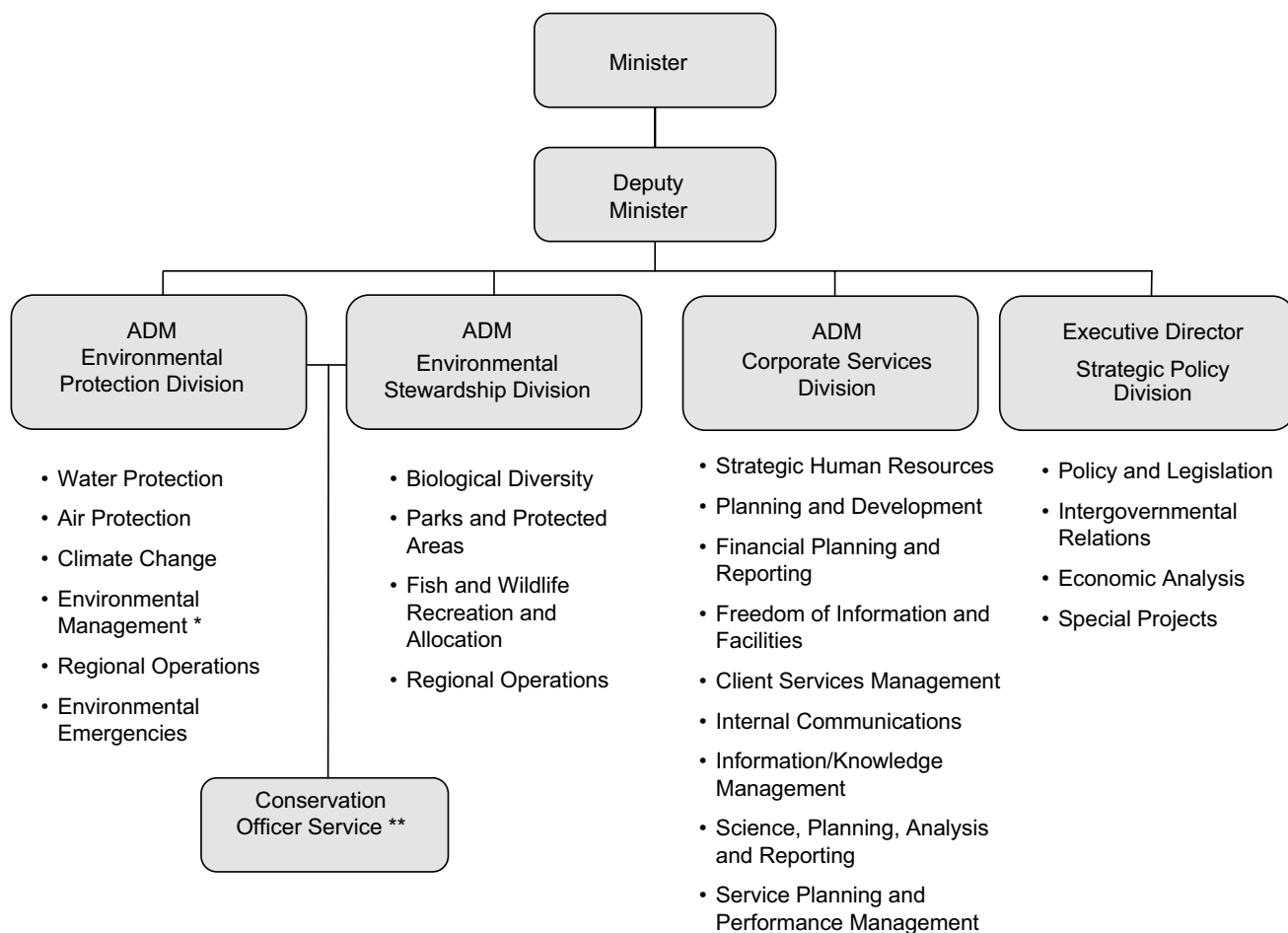
Approximately \$30,162,000 and 160 FTEs were dedicated to this core business area in 2003/04.

In 2003/04, this business area supported key ministry initiatives, such as streamlining legislation and encouraging cooperation for stronger environmental protection (e.g., bilateral agreements with Idaho, Montana and Washington states signed in September 2003). The ministry will continue to support legislative reform and improve critical information systems to enhance client service and monitoring. Efforts will also focus on further integrating the ministry's planning processes, identifying risks and reporting environmental trends to the public.

## Organizational Structure

The ministry's structure supports the services, programs, regulatory reform and other initiatives carried out in each core business area. Figure 1 shows the ministry's organizational chart and the main responsibilities of each division.

**Figure 1.** Ministry organizational chart



\*Environmental Management includes product stewardship, industry and local government emissions and discharges, hazardous wastes, floodplain and dike safety, and contaminated sites.

\*\*The Conservation Office Service has a dual reporting relationship to the ADM of Environmental Protection and the ADM of Environmental Stewardship.

## Strategic Shifts and Significant Changes in Policy Direction

The ministry continues to make progress in realizing the strategic shifts outlined in its 2002/03 – 2004/05 Service Plan. As noted in this and past annual reports, the ministry has made strides in changing its business practices and shifting its strategic direction toward:

- Sharing responsibility for the environment with others as appropriate and emphasizing a ministry staff culture of client service.
- Setting appropriate environmental standards and ensuring standards are met.
- Having clear roles for the ministry, industry and other stakeholders in the gathering and reporting of environmental information and in achieving environmental objectives.
- Integrating ministry program delivery using approaches informed by science.
- Facilitating economic development based on clear, reasonable environmental outcomes.
- Making public information available in a transparent, timely and accessible manner.

This direction continues, and the ministry has responded to the challenge of such strategic change by: implementing business models for improved service delivery (see “Ministry Overview” section); developing partnerships to protect species and habitat; streamlining legislation to both protect the environment and contribute to economic development (e.g., the *Integrated Pest Management Act*); adjusting its program structure to continue to deliver on key initiatives; and refining its results reporting to focus on a few key measures that link to environmental and operational outcomes.

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## Update on *New Era* Commitments

In 2001, the government set out key priorities for the ministry, including a list of *New Era* commitments. Since that time, the ministry has made significant progress in fulfilling these commitments, beginning or completing work on all nine *New Era* commitments involving the ministry.

Significant accomplishments in 2003/04 include:

- enactment of the *Environmental Management Amendment Act*;
- purchase and preservation of Burns Bog;
- work with the Groundwater Advisory Board on the development of groundwater regulations under the *Drinking Water Protection Act*;
- reassessment of the Streamside Protection Regulation; and
- preparation of amendments to the *Flood Protection Act*.

For more information about the ministry’s progress in addressing the government’s *New Era* commitments see Appendix B: Progress on *New Era* Commitments and Key Projects.



# Performance Reporting

## Overview of Ministry Goals

In early 2002, the government completed its Core Review of all ministries. The Core Review provided direction on three major areas of action for the ministry:

- Environmental Protection — shift to results-based regulation, industry responsibility and market incentives.
- Environmental Stewardship and Conservation — shift to results-based regulation and focus on priority ecosystems for protection.
- Outdoor Recreation — increase partnerships and private-sector involvement and move to market-rate fees for service.

For more information about these areas see the “Ministry Overview” section.

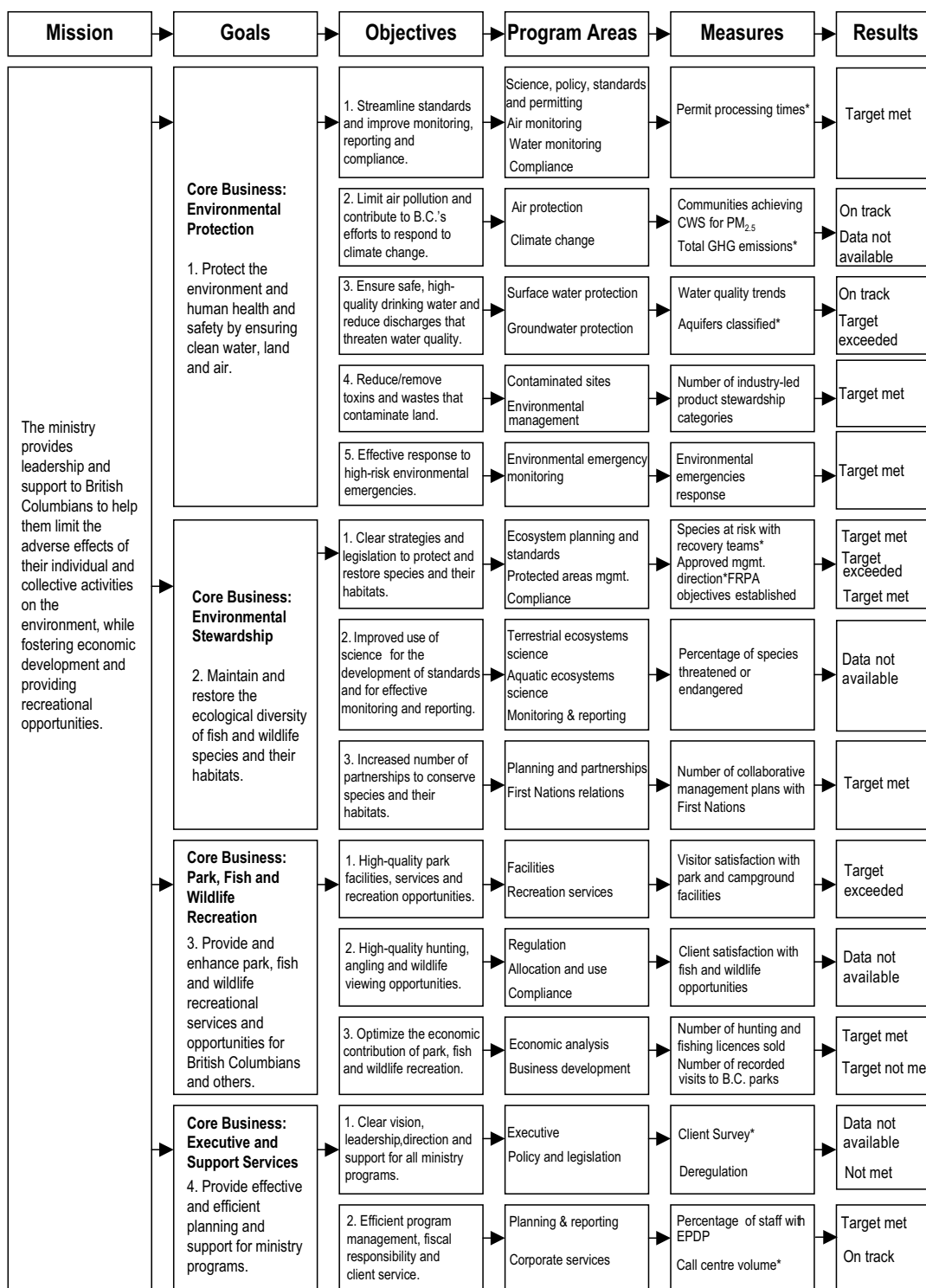
This direction, in conjunction with the ministry’s mandate and mission, is the foundation for the four goals set by the ministry’s Executive (see Figure 2). Each goal is supported by a set of objectives that shape ministry programs and activities and aim at achieving longer-term outcomes. These objectives are supported by strategies, which are developed within each program area. The strategies show the general approach the ministry is taking to achieve its objectives. Goals, objectives and strategies are updated as key initiatives are completed, new priorities evolve, innovative business models are developed or clarification is needed for public understanding.

The reorganization of the ministry, which took place at the same time as the Core Review, enabled it to align core business areas and goals with organizational divisions, thereby improving accountability. Where possible, accountability for each objective and performance measure is now linked to a specific program area (see Figure 2).

To monitor our progress toward meeting our goals, each objective is supported by at least one performance measure. These measures are intended to provide a balance of outcome and output measures. Targets are set by programs based on historical accomplishment, government priorities and availability of resources.

Figure 2 is a snapshot of how the ministry’s mission, goals, core business areas, objectives, programs and performance measures currently are linked. It also reports on progress in meeting ministry targets. The measures shown in the figure focus on key aspects of the ministry’s performance in 2003/04. Over the past year, some measures and objectives have been revised, discontinued or developed for future use and may not appear in the figure. These are explained more fully in the “Report on Results” section.

**Figure 2. Links between our mission, core business areas, goals, objectives, programs and measures**



**Key:** CWS = Canada-wide standard; PM = particulate matter; GHG = greenhouse gases;  
FRPA = Forest and Range Practices Act; EPDP = Employee Performance and Development Plan.

**Note:** Measures marked with \* are not included in the 2004/05 – 2006/07 Service Plan.

## Report on Results

This section presents detailed information about the ministry's performance in attaining the targets it set in the 2003/04 – 2005/06 Service Plan for the 2003/04 fiscal year. The information is reported by each of last year's four core business areas and, under those, by goal, associated objectives and summarized strategies.

We are continuing to refine our performance management framework by beginning to link resources to results. This year, we adjusted our financial reporting system to provide senior managers with financial information at the objective level to help them better integrate performance information into their management and strategic decisions. This information is included under each goal below and is an important first step in linking resources to results.

Included for each performance measure is the rationale for selecting the measure, the ministry's performance relative to the target identified in the Service Plan, and other key issues related to the measure. Where appropriate, benchmarks, how the results are used, trend information and future direction are also presented to provide readers with a greater understanding of the results. For further information about the reliability and limitations of the data reported see Appendix D: Notes on Data Completeness, Reliability and Methodology. For definitions of distinct ministry terms or uncommon terms see Appendix A: Glossary.

### Goal 1: Protect the environment and human health and safety by ensuring clean and safe water, land and air.

#### Core Business Area: Environmental Protection

The following table summarizes the 2003 – 2004 operating expenses by objective.

Objective	2003-2004 Actual (\$000)	2003-2004 FTEs
1. Streamline standards and improve monitoring, reporting and compliance.	22,858	194
2. Limit air pollution and contribute to B.C.'s efforts to respond to climate change.	4,749	48
3. Ensure safe, high-quality drinking water and reduce discharges that threaten water quality.	4,922	42
4. Reduce/remove toxins and wastes that contaminate land.	10,882	44
5. Effective response to high-risk environmental emergencies.	4,300	—
<b>Total Core Business Area</b>	<b>47,711</b>	<b>328</b>

For more information see Appendix D: Notes on Data Completeness, Reliability and Methodology.

## Objective 1: Streamline standards and improve monitoring, reporting and compliance.

This objective addresses the ministry's shift from a prescriptive approach to environmental regulation to a results-based approach informed by science. To make progress toward attaining this objective, the ministry is simultaneously working to change some of its processes, clarify regulatory requirements and improve the use of science for informing decision-making. Key priorities include revising appropriate legislation and regulatory requirements to increase flexibility in methods used to achieve environmental standards; updating scientific information used to develop best practices, guidelines and standards for environmental protection; and improving systems used to monitor air and water quality.

### Performance Measure:

#### *Number of days to process approval requests for contaminated sites*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Number of days to process approval requests for contaminated sites.</b>	30 days	100% of approval requests for low- and medium-risk sites were processed within 30 days when the rostered review process was used.	Target met for low- and medium-risk sites. Target does not apply to high-risk sites. Work is in progress to reduce processing time for all approval requests.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** This measure was intended to refer only to approval requests regarding low- and medium-risk sites. The targets were based on expected timing of when legislative and regulatory changes would be made, which would enable the approvals process to be streamlined.

### Rationale for the Performance Measure

The ministry is working to streamline standards and processes to remove unnecessary impediments to business and foster economic development. A key objective of the *Waste Management Act* review in 2002 was to make the legislative and regulatory changes needed to enable more timely decisions on applications from businesses. This performance measure was to demonstrate progress in streamlining the approval process for requests regarding contaminated sites.

### Achievements and Key Issues

Considerable progress was made in 2003/04 to improve the regime for contaminated sites administration. Approval was received in the fall of 2003 for a first set of important legislative changes that are expected to come into effect in the summer of 2004. Additional

legislative changes that will allow further streamlining of the ministry approval process are awaiting approval and implementation. The ministry's internal approval process was also streamlined.

Two key issues that affect the time required by the ministry to process approval requests are: (1) whether or not an approval request (for a low- or medium-risk site) has been reviewed by a rostered professional (i.e., someone selected from a list of government-recognized, private-sector environmental professionals) before it is submitted to the ministry; and (2) the backlog of applications. In 2003/04, all approval requests for low- and medium-risk sites that had been reviewed by a rostered professional prior to submission to the ministry were processed within 30 days, and often in less than two weeks. These approval requests represented 40% of new approval requests, and this percentage is expected to increase substantially as more people become aware that approval requests are processed much more quickly when this review process is used.

Using this approval process will also enable ministry staff to focus on high-risk sites and issues. For high-risk sites (which will continue to require ministry involvement at all stages) and for low- and medium-risk sites for which the rostered professional review process is not used, reducing the backlog will be critical for enabling ministry staff to handle new approval requests more quickly.

Regarding the level of ministry involvement in the clean-up of contaminated sites, 80% of all the contaminated sites cleaned up in 2003/04 were done independently or were reviewed by rostered professionals (i.e., with minimal or no ministry involvement), and 20% were overseen in detail by the ministry. The ministry monitored low- and medium-risk site remediation by undertaking audits of rostered-professional work and by carrying out follow-up checks regarding independent remediation, where warranted.

### **Future Direction**

As indicated in the Premier's letter to the Minister in the 2004/05 – 2006/07 Service Plan, a priority for the ministry is to eliminate contaminated sites regulatory backlogs within 24 months. A new performance measure was developed and included in the new Service Plan that will monitor the reduction in the backlog of applications for low- and medium-risk contaminated sites.

Two other new measures were also introduced in the 2004/05 – 2006/07 Service Plan for this objective. The average processing time for issuing permits compared to Alberta was introduced as a measure of progress in streamlining regulatory requirements perceived as an impediment to economic development and diversification of regional economies in British Columbia. A performance measure has also been added pertaining to streamlining approval processes for pesticide certification under the new *Integrated Pest Management Act*.

## Objective 2: Limit air pollution and contribute to British Columbia's efforts to respond to climate change.

Protecting the quality of air in the province is a key part of the ministry's goal to protect the environment and human health. This objective addresses that component of the goal. Meeting the objective requires action in a number of areas to address air quality issues in the province and contribute to addressing the climate change issue worldwide. Key priorities of the ministry include undertaking area-based planning in order to consider all sources that contribute to air emissions that affect health and the environment, and encouraging incorporation of environmental technology and clean energy into government and other operations.

### Performance Measures:

**Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective of amount of fine particulates in the air under 2.5 microns per cubic metre (PM<sub>2.5</sub>)**

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective of amount of fine particulates in the air under 2.5 microns per cubic metre (PM<sub>2.5</sub>).</b>	100% of communities monitored achieve, or continue to achieve, the CWS for PM <sub>2.5</sub> by 2005/06.	93% of communities (13 out of 14) achieve the CWS where PM <sub>2.5</sub> is monitored and sufficient data are available to generate the statistic (based on 2003 data).	On track.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** Comparable data for previous years are: 100% in 2000 (7 out of 7 communities), 90% in 2001 (9 out of 10 communities), and 91% in 2002 (10 out of 11 communities). (Source: Ministry of Water, Land and Air Protection.)

### Rationale for the Performance Measure

The outdoor air contaminant of most concern in British Columbia, from a human health perspective, is particulate matter (PM). Particles smaller than 2.5 µm (PM<sub>2.5</sub>) are believed to pose the greatest health risk. The ministry collects PM<sub>2.5</sub> data from approximately 40 air quality monitoring sites from over 25 communities across the province. The percentage of monitored communities achieving the Canada-wide standard (CWS) for PM<sub>2.5</sub> has been selected as the performance measure. Use of this performance measure is designed to help the ministry determine how effectively it is achieving its air quality improvement targets.

### Achievements and Key Issues

The results in the table refer to the percentage of *monitored* communities that achieve the specified air quality objective. It is important to note that the communities included in the sampling tend to be those that have experienced air quality problems related to particulate

matter. When a community's air quality problems have been resolved, monitoring may be reduced, except in those communities where long-term regional trends are monitored. Trend results must therefore be interpreted carefully because they may not accurately reflect whether air quality has been improving in the monitored communities if the sample of communities being monitored has changed. Changes from 2001 to 2003 are largely a result of adding new monitoring sites (i.e., increasing the total number of communities represented). In each of these years, Prince George has been the only monitored site in British Columbia exceeding the CWS for PM<sub>2.5</sub>.

In 2003/04, the ministry continued to support several initiatives related to protecting or improving air quality in the province:

- Funding and regional technical support was provided for airshed activities in Quesnel, Prince George, the Bulkley Valley-Lakes District, Kamloops, Golden, Creston Valley and the Sea-to-Sky airshed.
- A number of technical studies were continued or initiated to better inform air management decisions at the provincial or airshed level. These studies looked at:
  - improved estimates of air emissions (e.g., Year 2000 Emission Inventory; provincial wood stove survey);
  - the health impacts of air pollution on human health in British Columbia; and
  - meteorology's role in degraded air quality.
- Guidance documents are being developed to assist users of dispersion models and to assist local governments in airshed planning.

### Future Direction

The ministry is working closely with other jurisdictions through the Canadian Council of Ministers of the Environment (CCME) toward improved implementation of this standard. Cooperation with other jurisdictions is essential because air emissions and air quality are trans-boundary issues.

Efforts are ongoing to improve our understanding of PM<sub>2.5</sub> sources and levels in British Columbia. For example, a pilot study under development in Golden will use the chemical composition of PM<sub>2.5</sub> samples and other measures to estimate source contributions to ambient PM<sub>2.5</sub> levels.

### Total greenhouse gas (GHG) emissions in British Columbia

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Total greenhouse gas (GHG) emissions in British Columbia.</b>	No target was identified.	65.0 million tonnes of CO <sub>2</sub> equivalent (in 2001).	Data not available.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** In 2001, British Columbia's total GHG emissions represented 9.0% of Canada's total GHG emissions. Since 1990, the province's total annual GHG emissions have increased by 12.1 million tonnes or 22.9% while population has increased by 24.6%. British Columbia currently ranks third after PEI and Quebec on the basis of GHG emissions per capita. (Source: Ministry of Water, Land and Air Protection.)

## **Rationale for the Performance Measure**

Elevated levels of greenhouse gases (GHGs) in the atmosphere are causing changes to global climate and in climate-sensitive physical and biological systems. Reducing emissions on a worldwide scale is expected to slow the rate of climate change, and thus the timing of its impacts. British Columbia participated with other jurisdictions in Canada to develop a national climate change strategy. The province's climate change efforts support B.C.'s broader drive for economic revitalization. This measure was selected because it is the estimate of total greenhouse gas emissions in British Columbia that reflects the extent of the province's contribution to total global emissions.

## **Achievements and Key Issues**

The ministry is working with many partners, including other provincial ministries and levels of government, as well as other agencies, to reduce GHG emissions and to manage the risks associated with climate change impacts. While the ministry plays an important technical role in the development of policy options, industry sectors have a more direct role in business decisions that can contribute to the reduction of climate change. The ministry, together with BC Hydro, has been working to ensure that the national approach to climate change includes appropriate credit for renewable electricity supply, including energy efficiency resources. This work has resulted in draft federal policies being put forward that allow renewable supplies to offset greenhouse gas emissions from other industrial sectors. Other related ministry efforts in 2003/04 included:

- completing a review of climate-related monitoring networks in British Columbia, sharing findings with relevant agencies, and working with the Ministry of Sustainable Resource Management and the Meteorological Service of Canada to improve monitoring capabilities; and
- participating in the production of a national report published in 2003 by the Canadian Council of Ministers of the Environment (CCME) entitled *Climate, Nature, People: Indicators of Canada's Changing Climate*, which documents climate-related trends during the 20th century.

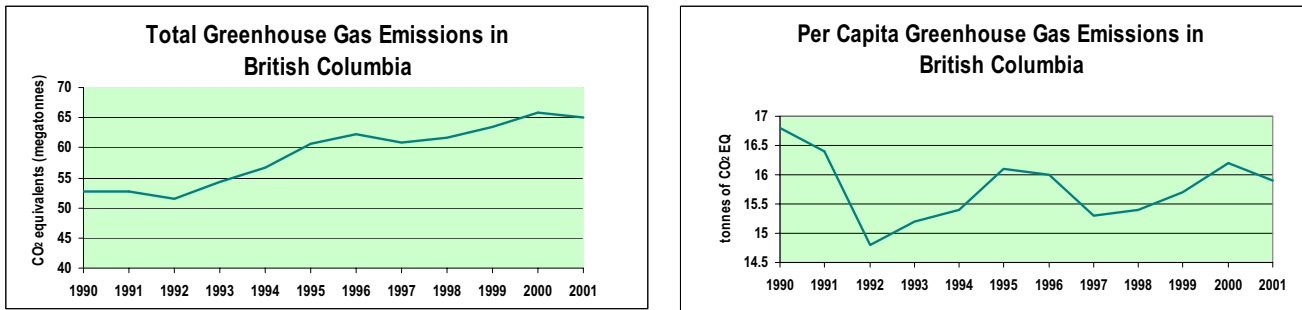
## **Future Direction**

The emission targets for this measure are not expected to be available in the near future. Therefore, to assess performance in contributing to addressing the climate change issue, in the 2004/05 – 2006/07 Service Plan, the ministry replaced this measure with an outcome measure of per capita GHG emissions relative to other provinces. A per capita measure accounts for the largely unknown effects of future GHG commitments and clean technology development that are likely to apply to all provinces, and hence should reflect the effect of British Columbia's actions relative to other provinces. The target will be to maintain or improve on the per capita ranking relative to other provinces.

Total and per capita GHG emissions in British Columbia since 1990 are shown in Figure 3. The 2002 and 2003 data are not yet available from Environment Canada.



**Figure 3.** Total and per capita greenhouse gas emissions in British Columbia from 1990 to 2001



**Objective 3: Ensure safe, high-quality drinking water and reduce discharges that threaten water quality.**

This objective addresses the component of Goal 1 that pertains to ensuring clean and safe water. The major priority is to work on activities that protect surface water and groundwater from health-threatening contamination by implementing groundwater regulations.

**Performance Measures:**

*The trends in environmentally significant variables, such as metals and nutrients, that indicate the health of water for 30 water bodies monitored under federal/provincial agreement*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>The trends in environmentally significant variables, such as metals and nutrients, that indicate the health of water for 30 water bodies monitored under federal/provincial agreement.</b>	Maintain or improve water quality trends for water bodies monitored under the federal/provincial agreement by 2005.	90% of the monitoring stations in the 30 water bodies have stable or improving water quality trends (in 2003/04).	On track.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** In addition to the 30 stations funded under the Canada – BC Water Quality Monitoring Agreement, the ministry uses water quality data from approximately 150 other community-based stations. This number compares with Ontario’s 200 stations for monitoring the water quality of streams and rivers, which is down from a peak of about 2,700 stations in the 1970s. (Source: Agriculture and Agri-Food Canada. 2000. Research Branch. *The Health of Our Water: Toward Sustainable Agriculture in Canada.*)

### Rationale for the Performance Measure

British Columbia has 25% of the flowing freshwater resources in Canada. Ongoing monitoring, protection and management of these water resources are of critical importance. This performance measure is an outcome measure of surface water quality in 30 water bodies monitored under a federal/provincial agreement. The measure monitors trends based on the presence of environmentally significant variables, such as metals and nutrients, which will indicate the cumulative effect of multi-agency land use activities and resource management activities in source watersheds.

### Achievements and Key Issues

The target is now for water quality trends in the monitored water bodies to be maintained or improved by 2006. In 2003/04, 90% of the monitoring stations in the 30 water bodies had stable or improving water quality trends, which is consistent with the results from the previous year.

Data is collected and reviewed annually for each of the 30 water bodies to assess whether there has been a significant variance from the trend, and each water body is subjected to statistical analysis approximately every five years. Variances from the trend are usually the result of a significant event or issue and are reviewed further to determine the nature of the event or issue and the action, if required, to mitigate the potential risks to the water body.

### Future Direction

Efforts are ongoing to improve our understanding of water quality and explore opportunities to expand our water quality monitoring network in partnership with others.

### *Number of aquifers identified and classified*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Number of aquifers identified and classified.</b>	643 (identify and classify an additional 50 aquifers.)	675	Target exceeded.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** Significant aquifer mapping programs are found in British Columbia, Saskatchewan, Manitoba and Nova Scotia. Other provinces and the Yukon do not have programs. (Source: Ministry of Water, Land and Air Protection.)

### Rationale for the Performance Measure

Most usable groundwater comes from aquifers, natural water-bearing geologic formations or subsurface reservoirs. There are approximately 1,000 developed aquifers in the province. A classification system is being used to characterize an aquifer based on the development of its groundwater resource (i.e., the availability of its water supply relative to the demand placed on it) and on the vulnerability of groundwater to contamination. This output measure indicates ministry progress in collecting this critical information for determining protection requirements, setting groundwater management priorities, and implementing management initiatives in individual aquifers, particularly for drinking water supplies.

## Achievements and Key Issues

The Office of the Auditor General recommended in its 1998/99 report, *Protecting Drinking Water Sources*, that the province establish a comprehensive and coordinated aquifer mapping and inventory program. The ministry is now a leader in aquifer mapping.

In 2003/04, 82 aquifers were identified and classified, bringing the total number of identified and classified aquifers to 675. Partnerships, which allowed leveraging of resources, enabled the ministry to exceed the target of identifying and classifying an additional 50 aquifers. In recent years, the ministry's target has been to identify and classify approximately 50 aquifers per year. The progress that is made depends on the number of wells in the areas being addressed, the geological information at hand and the number of qualified contractors available to assist in the work.

## Future Direction

This measure is not included in the 2004/05 – 2006/07 Service Plan. The ministry is attempting to reduce its performance measures to focus on a smaller number of key outcome measures. This output measure will continue to be used for internal management purposes.

However, British Columbia has recently formed a partnership with the federal government to conduct aquifer characterization mapping in the Okanagan Valley.

## Objective 4: Reduce/remove toxins and wastes that contaminate land.

This objective addresses the component of Goal 1 that pertains to ensuring clean and safe land. Critical to attaining the objective will be the creation of a business strategy that enables producers to remove high-risk components from the waste stream and expand the number of products that can be recycled.

### Performance Measure:

#### *Number of product categories with industry-led product stewardship*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Number of product categories with industry-led product stewardship.</b>	1 additional product category (total of 7).	1 additional product category (used oil products).	Target met.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** British Columbia is a recognized leader in industry-led product stewardship with seven product categories (paint, used oil products, beverage containers and four other post-consumer residuals). Many other provinces have only one or two products managed through industry-led product stewardship. (Source: Ministry of Water, Land and Air Protection.)

## **Rationale for the Performance Measure**

Many provincial and international jurisdictions are encouraging development of industry-led product stewardship programs in order to expand producer responsibility for the treatment or disposal of post-consumer products. Efforts tend to focus on reducing waste from product categories that pose relatively high risks to the environment. Hence, this measure of the number of product categories with industry-led product stewardship should be a reasonable indicator of success in attaining the objective. In time, the ministry may move to an outcome-based measure, such as product recovery rate.

## **Achievements and Key Issues**

The ministry is responsible for the approval of the initial product stewardship plans developed by industry groups and the review of annual performance results.

In July 2003, an industry-led product stewardship program for recycling used oil was launched. The BC Used Oil Management Association is now accountable for used oil, used filters and empty oil containers, which can be returned to more than 400 approved collection depots located across the province. From July 1, 2003 to March 31, 2004, the estimated volumes of used oil materials collected are nearly 26 million litres of oil, nearly 2.5 million oil filters and nearly 0.5 million kilograms of empty oil containers.

This performance measure is easy to monitor at minimal cost. One limitation, though, is that the ministry is not solely responsible for attaining the targets related to this measure, and so cannot be totally accountable for its achievement. Performance targets are based on the expected lead time for industry-led product stewardship programs to be developed for additional product categories.

## **Future Direction**

Governments and industry across Canada are working together to seek common solutions for dealing with electronic waste. It is estimated that more than 2,150 tractor-trailer loads of computers, monitors, printers, TVs, stereos and other equipment are now sent to urban landfills in the province each year. After lead-acid batteries, electronic waste is the second biggest source of heavy metals in landfills, posing new challenges to municipalities.

British Columbia is leading a task group through the Canadian Council of Ministers of the Environment (CCME) toward the development of a common set of guiding principles for the development of an electronic product stewardship program. These principles may provide greater certainty to industries as they move to develop this new initiative. In tandem with Alberta's e-recycling initiative, British Columbia and Alberta have been working closely to explore the feasibility of developing a common set of product listings, fees and vendor qualifications for electronic waste processing standards.

## Objective 5: Effective response to high-risk environmental emergencies.

Responding to environmental emergencies is an area in which the ministry is implementing its shift to focusing on high-risk issues. Like Objective 1 above, this objective pertains to all components of Goal 1, encompassing air, water and land. The ministry is undertaking a range of strategies to achieve this objective, including clarifying roles and responsibilities for flood hazard management; working with others to respond effectively to high-risk environmental emergencies; expanding industry responsibility for spill response and clean-up; and testing emergency response plans.

### Performance Measure:

#### *Percentage of high-risk environmental emergencies responded to effectively*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
Percentage of high-risk environmental emergencies responded to effectively.	100%	100%	Target met.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** The proportion of spills responded to by the ministry has declined from nearly 20% before the ministry's transition to focusing on high-risk spills to less than 10% currently. (Source: Ministry of Water, Land and Air Protection.)

### Rationale for the Performance Measure

The shift to focusing on high-risk issues is being achieved by increasing the use of partnerships and expanding industry responsibility for responding to low- and medium-risk spills. This outcome measure was introduced in the 2003/04–2005/06 Service Plan to monitor the ministry's effectiveness in attaining the objective of responding effectively to high-risk environmental spills, for which it has responsibility to respond. Due to the importance of responding effectively to high-risk spills, the performance target was set at 100%.

### Achievements and Key Issues

During the past two years, the ministry made considerable progress toward shifting the responsibility for low- and medium-risk spills to industry, local governments and other partners. The responsible party addressing a low- or medium-risk spill will report how impacts were mitigated to enable further monitoring and evaluation. In 2003/04, an important area of focus was to clarify what spills are "high risk" and should therefore be responded to by the ministry. In June 2003, a Risk-Based Spill Assessment Model was implemented for identifying high-risk spills. From July 1, 2003 to March 31, 2004, there were 2,633 reports of hazardous materials spills, and the ministry responded to all 162 high-risk spills.

## Future Direction

This performance measure was introduced to assess ministry performance in addressing high-risk environmental spills during a time of major transition in the program area. The transition has been done in such a way that the ministry is able to contract for the resources required to respond effectively to high-risk spills and bill the costs to the responsible parties. While still relevant, this measure may be more appropriate as an operating measure and may not be included in future Service Plans.

The ministry is monitoring the use of the new Risk-Based Spill Assessment Model to ensure that it is accurately identifying the high-risk spills. The ministry is also working with local governments, industry, emergency response organizations (such as the Canadian Coast Guard), and other partners to improve the effectiveness of the response to all spills. In addition, preparation of the Flood Hazard Area Land Use Management Guidelines is nearing completion. The guidelines support the new flood hazard management framework.

## Goal 2: Maintain and restore the ecological diversity of fish and wildlife species and their habitats.

### Core Business Area: Environmental Stewardship

The following table summarizes the 2003 – 2004 operating expenses by objective.

Objective	2003-2004 Actual (\$000)	2003-2004 FTEs
1. Clear strategies and legislation to protect and restore species and their habitats.	31,727	258
2. Improved use of science for the development of standards and for effective monitoring and reporting.	9,356	85
3. Increased number of partnerships to conserve species and their habitats.	2,070	17
<b>Total Core Business Area</b>	<b>43,153</b>	<b>360</b>

For more information see Appendix D: Notes on Data Completeness, Reliability and Methodology.

### Objective 1: Clear strategies and legislation to protect and restore species and their habitats.

This objective, which is key to attaining Goal 2, reflects the ministry's intent to provide certainty for people who must comply with ministry regulations by clearly identifying expectations and required results. To attain this objective, the ministry is focusing on reducing regulatory requirements to implement results-based stewardship; providing clear guidelines and standards for appropriate protection and conservation of species and habitats on Crown land outside the protected area system; and developing an action plan for managing and conserving species and their habitats.

**Performance Measures:**

***Number of nationally listed species at risk being addressed by recovery teams***

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Number of nationally listed species at risk being addressed by recovery teams.</b>	All nationally listed species are being addressed by recovery teams.	Recovery teams are in place for all extirpated, endangered and threatened species for which the province is responsible.	Target met.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assesses and designates species in five “risk” categories: extinct, extirpated, endangered, threatened and special concern. In COSEWIC’s November 2003 report, there are 441 species in Canada designated in the five “risk” categories.

(Source: COSEWIC, 2003. Canadian Species at Risk, November 2003. Committee on the Status of Endangered Wildlife in Canada.)

**Rationale for the Performance Measure**

The number of nationally listed species at risk being addressed by recovery teams is a measure that will enable the ministry to track its progress toward meeting requirements under the National Accord on the Protection of Species at Risk (the Accord). Putting recovery teams in place in partnership with the federal government, First Nations, local governments, industry and other stakeholders, is a key role of ministry regional and headquarters staff in working toward the desired outcome of protecting species at risk. These teams provide the mechanism through which recovery plans for the species are developed.

**Achievements and Key Issues**

The ministry’s target is to have recovery teams in place for all listed species at risk. The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) meets at least once a year to discuss and evaluate the status of Canadian species and adjust the list of species in the different “risk” categories. As of March 31, 2004, COSEWIC’s list includes 151 species in British Columbia, with 119 of the listed species currently being addressed by recovery teams. Of the 32 species not being addressed by teams, 26 are listed as special concern and do not require recovery teams. The federal government is responsible for leading recovery planning for the six remaining species.

**Future Direction**

This measure is not included in the 2004/05 – 2006/07 Service Plan. The ministry is attempting to reduce its performance measures to focus on a smaller number of key outcome measures. However, this measure remains an important ministry output for management purposes.

**Number of protected areas with approved management direction**

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Number of protected areas with approved management direction.</b>	582 as of March 31/04.	609 as of March 31/04.	Target exceeded.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** Approximately 12.5% (11.86 million hectares) of the provincial land base is dedicated to protected areas. The number of protected areas with approved management direction was 226 as of March 31/02 and 520 as of March 31/03. The total geographic area protected with approved management direction is approximately 7.75 million hectares, which compares to the size of New Brunswick. (Source: Ministry of Water, Land and Air Protection.)

**Rationale for the Performance Measure**

The protected areas network is an integral part of British Columbia’s strategy to protect the province’s ecological diversity and to enable people to visit and enjoy nature. Protected areas have become an important part of land use planning, contributing to the maintenance of habitats, species and genetic diversity, as well as providing economic opportunities related to tourism and recreation. The management planning program of the Environmental Stewardship Division consists of purpose statements, management direction statements and management plans that provide both long-term vision and guidance for the day-to-day stewardship, management and development of protected areas.

This performance measure was developed to provide an indication of the ministry’s progress in having the information required to conserve habitat in the protected areas system, while identifying areas suitable for increased tourism activities.

**Achievements and Key Issues**

The target was for approved management direction to be provided for a total of 582 protected areas at the end of 2003/04. This was based on a need to make progress in this area while balancing other business area priorities. Meeting this target required completion of the plans for 35 protected areas that were needed to achieve the 2002/03 target, as well as for an additional 27 protected areas. This and the confirmation of boundaries had been an area of increased effort in recent years. The target was exceeded, with 609 of 817 protected areas (75%) having approved management direction in place as of March 31, 2004.

**Future Direction**

The ministry is working on improvements to its already extensive network of protected areas. Legislative amendments to both the *Protected Areas of British Columbia Act* and the *Park Act* were passed in the spring of 2004. These amendments will add more than 150,000 hectares to British Columbia’s protected area system, an area 13 times the size of the city of Vancouver. The new legislation will establish 28 new class A parks and one ecological reserve and add to four existing ecological reserves and 31 class A parks. This will



mean more opportunities for visitors and may provide more tourism opportunities for communities.

This measure is not included in the 2004/05 – 2006/07 Service Plan. The ministry is attempting to reduce its performance measures to focus on a smaller number of key outcome measures. However, this measure remains an important ministry output for which data is readily available at minimal cost. It will continue to be used for internal management purposes.

***An appropriate measure relating to environmental standards for the Forest and Range Practices Act***

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>An appropriate measure relating to environmental standards for the <i>Forest and Range Practices Act</i> (FRPA).</b>	Measure to be developed in 2003/04.	Ministry progress in establishing designations and objectives for fisheries, wildlife and water quality using statutory authorities under the FRPA was selected.	Target met.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** Benchmark is not available as this is a new measure.

**Rationale for the Performance Measure**

The *Forest and Range Practices Act* (FRPA) was passed in 2002 and is to be fully implemented by December 2005. The FRPA is a results-based regime under which government will set clear standards for a wide variety of forest values, and forest companies will be accountable for being consistent with these standards. Management regarding a number of the forest values included under the FRPA is the responsibility of this ministry. Since this is a critical piece of legislation for protecting and restoring species and their habitats, it is important that ministry progress in establishing environmental standards under the FRPA be measured.

**Achievements and Key Issues**

The 2003/04 – 2005/06 Service Plan stated that an appropriate measure relating to environmental standards for the *Forest and Range Practices Act* (FRPA) would be developed in 2003/04. The specific focus for this performance measure was identified in the 2004/05 – 2006/07 Service Plan. The ministry is piloting an output measure to demonstrate its progress in establishing designations and objectives for fish, wildlife and water quality under the authority of the FRPA. This measure will indicate the ministry’s progress in setting results-based environmental standards informed by science under the FRPA, which will be critical to attaining the desired environmental outcomes.

Initially, the ministry will assess its progress by monitoring designations of wildlife habitat areas (WHA) and ungulate winter ranges (UWR). As of March 31, 2003, there were 129 WHA designations approved (covering 44,233 hectares) and no UWR. In 2003/04, an additional 31 WHA were designated, for a total of 160 (covering 49,120 hectares), and the first 15 UWR were designated (covering 913,462 hectares).

### Future Direction

The ministry will continue working to establish designations and objectives in all areas for which the ministry has responsibility under the FRPA. The ministry will also work to develop a long-term outcome measure and acquire trend data. Once the designations are established, the ministry's focus will be on monitoring and reporting.

## Objective 2: Improved use of science for the development of standards and for effective monitoring and reporting.

Improving the use of science is a key component in the ministry's work toward attaining Goal 2. Work is being undertaken simultaneously in a number of areas, including improving access to scientific information to support approaches to ecological diversity; tracking species and habitats and their responses to management actions; developing standards and an assessment process to support an approach to the protection of fish habitat in urban areas; and working with partners to develop environmental standards for the *Forest and Range Practices Act*.

### Performance Measure:

*The percentage of known native species that are threatened or endangered in the province*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<p><b>The percentage of known native species that are threatened or endangered in the province.</b></p> <p><b>Note: Species at risk include birds, mammals, reptiles, amphibians, freshwater fish, ferns and orchids.</b></p>	<p>Improve on the baseline situation (of 14.2% of species at risk in 2000).</p>	<p>New data will not be available for publication until 2006.</p>	<p>Data not available.</p>

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** "Regionally, British Columbia and the Yukon contain the greatest total number and proportion of species at risk. Differences between regions may be due to a variety of interacting factors, including species diversity, geography, climate, history, land use practice, human population size, and economic activity."

(Source: Canadian Endangered Species Conservation Council (CESCC). 2001. *Wild Species 2000: The General Status of Species in Canada*. Ottawa: Minister of Public Works and Government Services Canada.)

## **Rationale for the Performance Measure**

The ministry is using an outcome measure of the percentage of known native species that are threatened or endangered in the province to track its progress in achieving this objective. Measures of species at risk are used nationally and internationally to indicate the status of ecological diversity, which is a commonly used indicator of environmental sustainability.

## **Achievements and Key Issues**

The base data is from a federal government report that was published for the first time using 2000 data. The next report is to be published in 2006 using 2005 data. Tremendous progress has been made in recent years to compile information on wild species, but considerable challenges remain to expand, improve and update the information. Also, as indicated above, the ministry has recovery teams in place for all COSEWIC-listed species for which the province is responsible and is working with partners to develop and implement recovery plans.

Performance measure results from different years cannot be readily compared because the number and percentage of species that are threatened or endangered fluctuate based on several factors that are unrelated to the rate at which species are actually becoming threatened or endangered. For example, the rate at which COSEWIC has been adding species to its lists in recent years reflects the rate at which it is able to examine species rather than the rate at which species are becoming at risk.

## **Future Direction**

Under the Accord, provincial, territorial and federal wildlife agencies are committed to an ongoing and comprehensive process for wild species assessment and monitoring. The ministry will increase the number and variety of species it assesses, and will periodically re-assess these species, addressing any data gaps it identifies. Currently, not all species have been assessed and appropriate sub-species classifications have not been confirmed, thus considerable work is left to do in this area. The ministry will also continue working toward recovering currently listed at-risk species. A challenge is that there is often a time lag between when an action is taken and when its impact is reflected in the data.

The ministry amended the *Wildlife Act* in the spring of 2004 to enhance the government's ability to designate and protect species at risk in British Columbia. The amendments will authorize the province, by Order-in-Council, to list and protect any species or population (animal, bird, fish or plant, etc.) as required to provide additional protection and management capability. These amendments will reinforce the province's authority regarding species and provide additional tools for protecting and recovering species. Decision-making will take into account the specific needs of species, be informed by science and consider socio-economic factors.

### **Objective 3: Increased number of partnerships to conserve species and their habitats.**

This objective addresses the ministry's shift from being sole protector of the environment to promoting a shared stewardship approach. Partnerships will be a crucial mechanism in the achievement of this goal. The ministry will be working to establish and maintain relationships with other provincial agencies and levels of government, First Nations, communities, academia and environmental organizations to undertake activities to conserve species and habitats and to provide standards, guidelines and best management practices to private landowners to develop and implement sustainable stewardship practices.

#### **Performance Measure:**

##### ***Number and value of partnerships***

<b>Performance Measure</b>	<b>2003/04 Target</b>	<b>2003/04 Actual</b>	<b>2003/04 Variance</b>
<b>Number and value of partnerships.</b>	Measure to be developed in 2003/04.	The number of First Nations collaborative management plans was selected as the base measure.	Target met.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** Not available.

#### **Rationale for the Performance Measure**

Given that partnerships will be a crucial mechanism for a shared-stewardship approach to protecting the environment, the ministry has developed a measure to monitor its progress in establishing these important relationships. The 2003/04–2005/06 Service Plan indicated that performance under this objective would be assessed using a measure of the “number and value of partnerships” and would be further developed in 2003/04.

#### **Achievements and Key Issues**

The specific focus for this performance measure was identified in the 2004/05–2006/07 Service Plan. Initially, the ministry is focusing on measuring its progress in the specific area of establishing collaborative management plans with First Nations. This is an important type of partnership through which the ministry is providing a significant role to First Nations for making recommendations for protected area management. There are currently 14 collaborative management plans in place.

#### **Future Direction**

The ministry has several other stewardship partnerships in place and is working to develop more. It is difficult to identify an aggregate measure of the extent to which all established partnerships are appropriate or of how effectively they produce the intended results and contribute to desired outcomes. The ministry may consider evaluating the effectiveness of individual partnerships to monitor progress.

### Goal 3: Provide and enhance park, fish and wildlife recreational services and opportunities for British Columbians and others.

The following table summarizes the 2003 – 2004 operating expenses by objective.

Objective	2003-2004 Actual (\$000)	2003-2004 FTEs
1. High-quality park facilities, services and recreation opportunities.	18,454	96
2. High-quality hunting, angling and wildlife viewing opportunities.	(10,335)	60
3. Optimize the economic contribution of park, fish and wildlife recreation.	104	—
<b>Total Core Business Area</b>	<b>8,223</b>	<b>156</b>

For more information see Appendix D: Notes on Data Completeness, Reliability and Methodology.

The excess recreation fee recoveries from hunting and angling are used for all objectives of this core business area.

#### Objective 1: High-quality park facilities, services and recreation opportunities.

This objective focuses on the outdoor recreation opportunities provided by the ministry in the provincial parks system. Key areas in which the ministry is working to provide high-quality client service in provincial parks include implementing a new management model for B.C. parks to increase visitation through day use, camping and lodge usage; initiating further opportunities for delivery of appropriate park recreation services through partnerships with commercial operators; and monitoring park operations to ensure service standards and facilities are maintained and conservation and habitat-restoration priorities are met.

#### Performance Measure:

##### *Visitor satisfaction with park and campground facilities and services*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Visitor satisfaction with park and campground facilities and services.</b>	75 %	82 %	Target exceeded.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** See Figure 4 for comparative information.

#### Rationale for the Performance Measure

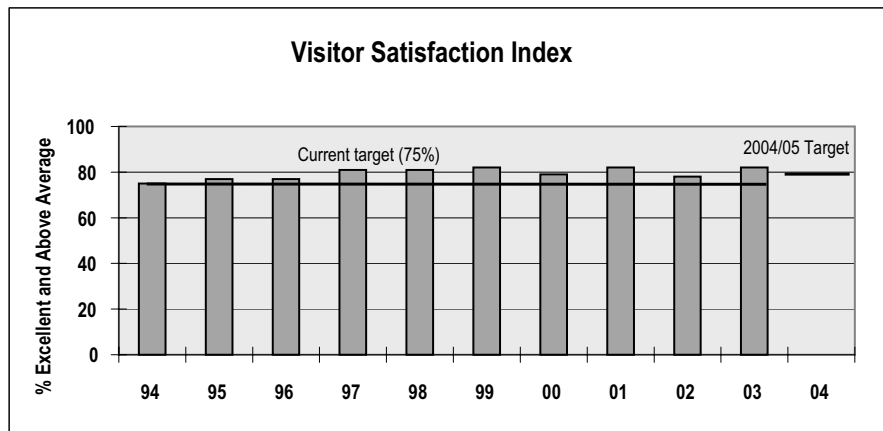
Camping is one of the key types of outdoor recreation that the ministry provides, with campground facilities and services provided in provincial parks throughout the province. To assess client satisfaction, the ministry has conducted an annual satisfaction survey of visitors to campgrounds in the provincial parks system since 1985. This is an important outcome measure as the survey results enable BC Parks to capture campers' views about the quality of services being provided in campgrounds, and, therefore, to identify priorities for service and facility improvements.

## Achievements and Key Issues

In 2003/04, the performance target was exceeded, with the satisfaction rating of 82 % matching the highest rating attained in the last 10 years.

The Visitor Satisfaction Index is the overall rating, averaged for the province, that campers give in the survey to five categories: cleanliness of restrooms, cleanliness of grounds, condition of facilities, sense of security, and control of noise. The rating is based on responses of “excellent” and “above average.” The ministry uses the index to determine how well these five particular services are being provided from year to year, and how effective service improvements have been. Figure 4 shows the visitor satisfaction index for the past 10 years.

**Figure 4.** Visitor satisfaction index from 1994 to 2003



## Future Direction

In its 2004/05 – 2006/07 Service Plan, the ministry increased the performance target for park visitation to reflect recent performance. The new target is to maintain or improve visitor satisfaction based on a five-year rolling average (which is currently approximately 80%). To improve customer satisfaction and increase the number of visits to provincial parks, the ministry will continue to focus on implementing its new parks management model and explore new ways of delivering park services through partnerships and commercial operators. In addition, the ministry will consider innovative ways to address changing demographics and camper demand for new services. These efforts will help ensure that B.C.’s parks will continue to showcase the natural beauty of the province, especially for visitors attending the 2010 Olympic and Paralympic Winter Games.

## Objective 2: High-quality hunting, angling and wildlife viewing opportunities.

This objective focuses on the outdoor recreation opportunities the ministry provides related to fish and wildlife. The ministry is working to cooperatively manage stocking fish in lakes and streams and undertake conservation activities with the Freshwater Fisheries Society of BC; implement new initiatives to enhance and diversify fish and wildlife recreation; increase the involvement of First Nations and other users in allocating natural resources for hunting, angling and wildlife viewing opportunities; and provide hunting and angling authorizations based on allowable harvest levels informed by science to ensure sustainability of resources.

### Performance Measure:

#### *Client satisfaction with fish and wildlife opportunities*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Client satisfaction with fish and wildlife opportunities.</b>	Survey to be developed and administered electronically to hunters and anglers who purchase licences using the electronic licensing system that is now under development.	There was no deliverable for 2003/04. The ministry's plan to implement a comprehensive electronic licensing and permitting application is currently on hold.	Data not available.

Source: Ministry of Water, Land and Air Protection.

### Rationale for the Performance Measure

Hunting, angling and wildlife viewing opportunities are other key types of outdoor recreation that the ministry provides throughout the province. Client satisfaction is a key intended outcome of providing British Columbians and visitors with fish and wildlife recreation opportunities. This performance measure was selected to determine the ministry's effectiveness in achieving this outcome.

### Achievements and Key Issues

The ministry intends to acquire the necessary data for this performance measure through a regular survey of hunters and anglers. In the fourth quarter of 2003/04, the annual paper-based survey of hunters and anglers that is used to collect harvest data included a portion on client satisfaction in order to obtain baseline data for this measure for subsequent years. This data is not yet available but may be included in the ministry's 2005/06 – 2007/08 Service Plan.

## Future Direction

The ministry's plan to implement a comprehensive electronic licensing and permitting application has been replaced with a more gradual and incremental approach. The ability to collect survey data electronically may not be available in the near future. At such time as electronic licensing is in place, a survey may be developed and administered to hunters and anglers who purchase licences over the internet. An electronic survey method may pose some data challenges, but it is expected to be a more cost-effective means of data collection than the paper method used currently.

The ministry will focus its efforts on working with the Freshwater Fisheries Society of BC to manage existing and create new fisheries. Currently, the society is responsible for stocking approximately 1,000 lakes and streams throughout the province annually and provides conservation fish culture services that support steelhead and sturgeon recovery programs. The society is also developing programs to inform and educate the public about fish in support of this important recreational and economic activity.

## Objective 3: Optimize the economic contribution of park, fish and wildlife recreation.

This objective is an important factor that the ministry considers when determining the level and types of park, fish and wildlife recreational services and opportunities to provide under Goal 3. The ministry will promote participation in recreational opportunities; work with First Nations, governments and communities to develop parks and special tourism destinations; provide unique hunting and fishing opportunities to enhance regional tourism; and explore electronic service delivery to improve timeliness of licensing, authorization and permitting processes for fish, wildlife and park recreation.

### Performance Measures:

#### *Number of basic hunting and angling licences sold*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Number of basic hunting and angling licences sold.</b>	Maintain or increase the number of licences sold.	<u>Hunting:</u> 85,714 resident; 6,234 non-resident (in 2002/03).  <u>Angling:</u> 275,430 resident; 107,057 non-resident (in 2002/03).	Target met for non-residents; target not met for residents.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** There is a global decline in the number of hunters and anglers, with the decline more pronounced for hunters. This is considered to be due to a combination of demographics, urbanization and changing preferences. In the U.S., between 1996 and 2001, the number of all anglers declined by 3%; hunters declined by 7%, and the total number of wildlife watchers decreased by 13%. (Source: U.S. Fish and Wildlife Service.)



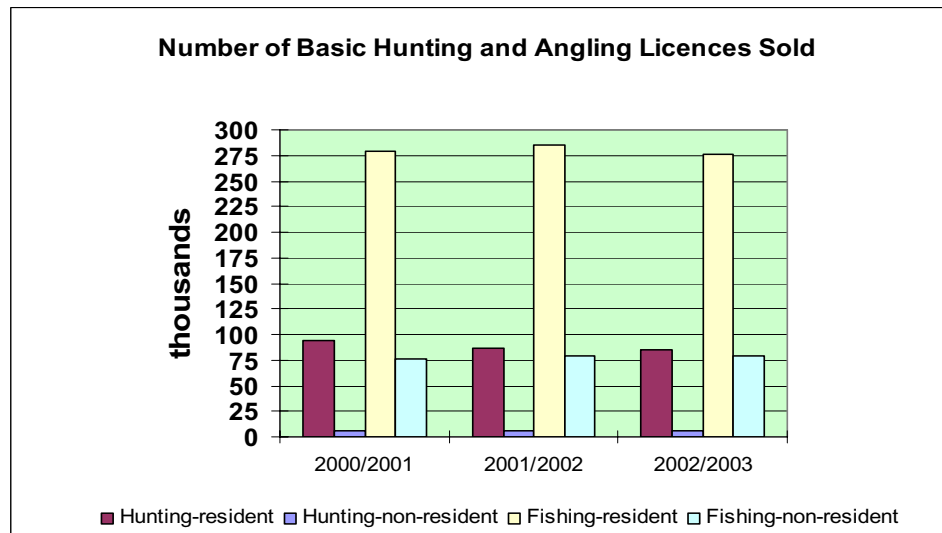
## Rationale for the Performance Measure

Fish and wildlife recreational services and opportunities are important sources of regional tourism throughout the province. The economic contribution from these sources is an important factor that the ministry considers when determining the level and types of fish and wildlife recreational services and opportunities to provide. This performance measure currently reports the actual number of hunters and anglers benefiting from these recreational opportunities in British Columbia as the trend in this data should provide a reasonable indication of changes in the economic contribution resulting from fish and wildlife opportunities.

## Achievements and Key Issues

In 2002/03, the number of non-resident hunting and angling licences sold increased from the previous year (see Figure 5). However, the number of licences sold to residents declined. Licence fees were increased in 2002/03 and 2003/04 in response to the recommendations of the Recreation Stewardship Panel Report, which may be contributing to a short-term decline as residents adjust to the new prices. B.C. provides world-renowned opportunities, particularly for wildlife, and non-resident hunters tend to purchase their licences well in advance of the hunting seasons as the licences are generally included as part of a package with a guide-outfitter. These licences would have been purchased before factors such as SARS, fires and terrorism were issues. Resident hunters and anglers would have been able to respond more quickly to these factors and cancel planned hunting and fishing trips.

**Figure 5.** Number of basic hunting and angling licences sold from 2000/01 to 2002/03



## Future Direction

Economic contribution can be estimated and reported in various ways. With the demographic characteristics of hunters and anglers changing, and increasing pressures placed on fish and wildlife populations, the focus when allocating fish and wildlife resources for recreation purposes is shifting from increasing the number of participants to providing

unique opportunities matched to the preferences of participants. With this shift, changes in the number of basic licences sold may no longer provide a good indication of changes in the economic contribution of fish and wildlife recreation.

The ministry is working with BC Stats to develop an economic model for estimating economic contribution more directly. As well, the ministry will review trend information and the performance measure in preparation for its next Service Plan to determine if adjustments to the measure or targets are appropriate.

The ministry is monitoring the revenue the government receives per participant (approximately \$83 per hunter and \$15 per angler in 2002/03 versus approximately \$80 per hunter and \$15 per angler in 2001/02), and it will be considered in making adjustments to recreational opportunities provided. The ministry will also work with the Government Agents Branch of the Ministry of Management Services, which is responsible for the management of Angling and Hunting Licence Vendor Operations throughout the province, to monitor the cost-effectiveness of the current delivery method.

### ***Number of recorded visits to B.C. parks***

<b>Performance Measure</b>	<b>2003/04 Target</b>	<b>2003/04 Actual</b>	<b>2003/04 Variance</b>
<b>Number of recorded visits to B.C. parks.</b>	23 million 2002/03 Actual: approximately 18.4 million	Approximately 17.4 million	Target not met. Approximately 5% decline from 2002/03

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** In 2001/02, Alberta had approximately 8,586,000 visitors to provincial parks and provincial recreation areas. (Source: Alberta Ministry of Community Development. *Community Development Annual Report for the Fiscal Year Ended March 31, 2003.*) In 2001/02, Ontario had approximately 10.1 million visits. (Source: Ontario Ministry of Natural Resources, 2002. *Ministry of Natural Resources Business Plan for 2002–2003.*)

### **Rationale for the Performance Measure**

Recreational services and opportunities provided in provincial parks make an important contribution to local economies throughout British Columbia. This economic contribution is an important factor that the ministry considers when determining the level and types of park recreational services and opportunities to provide. A measure of the economic contribution of parks is being provided through an estimate of the number of park visitors (measured as the number of recorded visits to provincial parks). The trend in this measure should provide a reasonable indication of the trend in the economic contribution.

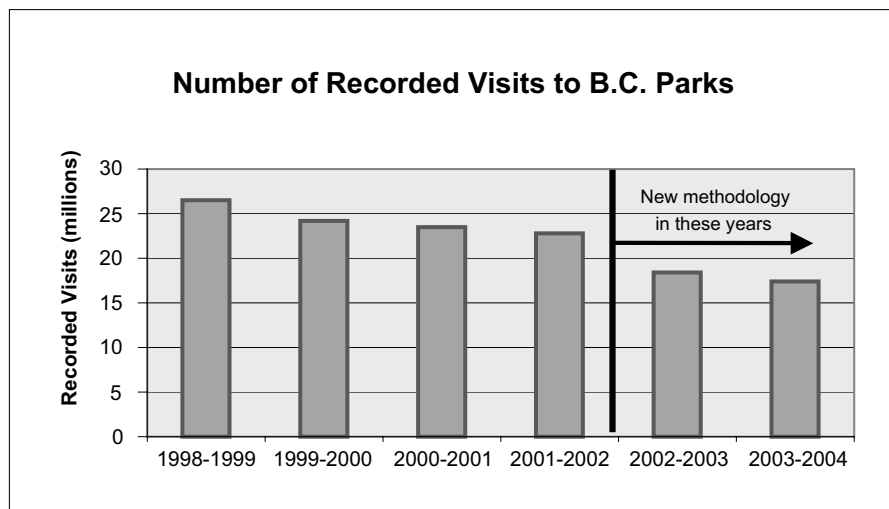
### **Achievements and Key Issues**

There were approximately 17.4 million recorded visits to provincial parks in 2003/04 (see Figure 6). This figure was approximately 5% lower than in 2002/03. A key reason for this decline in recorded visits was various natural phenomena that occurred. Forest fires burned throughout the province during part of the summer, which is the peak season for park visits. As well, toward the end of the camping season, Vancouver Island, the Lower Mainland

and the Okanagan regions experienced severe flooding. Other factors that contributed to a general reduction in tourism in the province (e.g., SARS and the threat of terrorism) would also likely have affected the level of park visits. The introduction of parking fees in some of the more popular parks may also have been a factor.

The ministry has been streamlining how park recreation is provided, and this has included changing the sampling method used for collecting visitor data. The target of 23 million was based on data from the previous sampling method (e.g., 23.5 million in 2000/01 and 22.8 million in 2001/02). Hence, it is more meaningful to compare the 2003/04 results to those from 2002/03. (See Appendix D: Notes on Data Completeness, Reliability and Methodology for more information about the methodology for this measure.)

**Figure 6.** Number of recorded visits to B.C. parks from 1998/99 to 2003/04



### Future Direction

The ministry's target is to increase recorded visits to provincial parks by 20% by 2010. This is expected to be attained through a general growth in tourism in British Columbia as well as through the provincial resort strategy initiative and working with communities on the development of key parks and special tourism destinations. Tourism BC is forecasting growth in visitor volume in 2004 of 1.5% for B.C. residents and 2.8% overall. (Source: Tourism British Columbia. *2004 Tourism Outlook*. March 2004.)

As with the performance measure above — the *number of basic hunting and angling licences sold* — changes in the number of participants will become a less accurate indicator of changes in the economic contribution of park recreation as the types of experiences provided become more varied. Hence, work may be undertaken to more directly estimate the economic contribution of parks to the provincial economy.

## Goal 4: Provide effective and efficient planning and support for ministry programs.

The following table summarizes the 2003 – 2004 operating expenses by objective.

Objective	2003-2004 Actual (\$000)	2003-2004 FTEs
Minister's Office	405	4
1. Clear vision, leadership, direction and support for all ministry programs.	5,379	156
2. Efficient program management, fiscal responsibility and client service.	24,378	—
<b>Total Core Business Area</b>	<b>30,162</b>	<b>160</b>

For more information see Appendix D: Notes on Data Completeness, Reliability and Methodology.

### Objective 1: Clear vision, leadership, direction and support for all ministry programs.

This objective helps to ensure that ministry resources are used to address high-priority issues in the most effective and efficient ways. It reflects the ministry's commitment to provide corporate leadership and services for ministry programs, and to demonstrate fiscal responsibility and efficient client service. To attain this objective, the ministry focuses on a range of strategies related to management, planning, deregulation and regulatory reform.

#### Performance Measures:

*Annual survey of ministry clients to determine if they understand what the ministry is trying to achieve and whether it is being done in the most efficient and effective way*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Annual survey of ministry clients to determine if they understand what the ministry is trying to achieve and whether it is being done in the most efficient and effective way.</b>	Conduct benchmark survey and determine base data.	Benchmark survey not completed.	Data not available.

Source: Ministry of Water, Land and Air Protection.

#### Rationale for the Performance Measure

The ministry did not complete a large annual survey of all its clients<sup>3</sup> during 2003/04. However, the ministry has been conducting surveys of some client groups for a number of years in the area of outdoor recreation. (See the performance measures discussed above for Goal 3.)

<sup>3</sup> Ministry clients include staff, First Nations, other government bodies, the general public, industries and businesses, and users of parks and recreational services in the province.

In recent years, the ministry has set up a number of external panels (such as the Advisory Panel on Contaminated Sites and the Recreation Stewardship Panel), which have consulted broadly with stakeholders from a number of sectors. In addition, as part of the ambitious legislative agenda needed to implement the ministry's strategic shifts, extensive targeted consultation with key stakeholder groups took place over regulatory issues. To reduce the risk of duplication, stakeholder fatigue and the need to shift resources from other operating priorities, the ministry considered this consultative approach to be more appropriate and cost effective for identifying gaps in information and targeting specific issues.

### **Achievements and Key Issues**

In 2003/04, the ministry conducted a wide-ranging staff survey to measure workplace wellness. The survey was timed to take the pulse of the ministry following restructuring, implementation of budget targets and workforce adjustment. It will serve as a valuable benchmark, not only enabling comparisons of results with other public- and private-sector organizations, but also in identifying key areas for improvement and monitoring changes over time. The survey was deemed a success with 70% of staff responding.

Results showed that:

- Fifty-nine per cent of staff indicated an overall positive satisfaction with the ministry as a place to work with supportive work policies.
- Fifty-eight per cent of managers are supportive of staff. This is a higher percentage than other Canadian private-sector (51%) and public-sector agencies (47%).<sup>4</sup>
- Eighty per cent of respondents said they were willing to contribute to the change management process.

The ministry's executive and senior management recognize that challenges remain and are developing a response to the survey's results and a roll-out plan linked to the Human Resource Management Plan. The ministry is conducting regional and branch visits to begin addressing the issues highlighted by the survey. The nature and frequency of follow-up employee surveys will be assessed as changes are implemented over the next few years.

### **Future Direction**

The ministry will continue its ongoing efforts to report meaningful and relevant performance results in its Annual Report while focusing on a few key measures of performance. In preparation for its next Service Plan, the ministry will review Goal 4 measures.

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<sup>4</sup> Dr. Linda Duxbury and Dr. Chris Higgins. 2001. *National Work, Family and Lifestyle Survey*.

**Progress toward delivery of a three-year deregulation plan (measured as percentage reduction in ministry's regulatory count)**

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Progress toward delivery of a three-year deregulation plan (measured as percentage reduction in ministry's regulatory count).</b>	34% cumulative reduction.	25.1% cumulative reduction.	Not met. Regulatory changes are in progress to meet the ministry's final target of a 38% cumulative reduction by June 2004.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** See information below and in the "Deregulation" section.

**Rationale for the Performance Measure**

As part of its *New Era* commitments, the government pledged to reduce regulations by 33% overall. This is the initial step in reducing the economic burden of prescriptive regulations for industry and other stakeholders. To support this initiative, the ministry has a three-year plan to reduce regulations by 38%, ending on June 4, 2004. This measure monitors ministry progress in delivering on its deregulation plan.

**Achievements and Key Issues**

As of March 31, 2003, the ministry had reduced its regulatory count by 5,143, or 23.87%, from a baseline of 21,541 regulations. Considerable progress was made in 2003/04 toward further reducing the ministry's regulatory count. Regulations were reduced by a further 1.3%. In addition, the *Integrated Pest Management Act* and *Environmental Management Act* were passed in the fall of 2003, and the subsequent regulatory changes that were expected to be completed by March 31, 2004 are in progress.

**Future Direction**

Between April 1, 2004 and June 4, 2004, the ministry's regulations are expected to be reduced by an additional 12.8%, to achieve the overall target of reducing regulations by 38%. June 2004 marks the end of the deregulation program. The ministry will continue to be judicious about maintaining appropriate regulations and using non-regulatory approaches and best management practices.

## Objective 2: Efficient program management, fiscal responsibility and client service.

Obtaining this objective is important for the ministry because it makes more resources available for other ministry initiatives, thus enabling us to make progress in delivering our mandate. To achieve this objective, the ministry is working simultaneously in a number of areas such as meeting government fiscal targets and taking care of staff.

### Performance Measure:

#### *Percentage of staff with an Employee Performance and Development Plan*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
Percentage of staff with an Employee Performance and Development Plan.	100 %	100 %	Target met.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** As of March 2003, an estimated 35% of all management staff and roughly 20% of all ministry staff had an EPDP. (Source: Ministry of Water, Land and Air Protection, Strategic Human Resources Branch.)

### Rationale for the Performance Measure

Achieving this objective requires ministry staff to focus on developing key performance and development goals that will enable them to contribute to accomplishing ministry objectives articulated in the Service Plan. A key initiative for ensuring that this occurs is a ministry requirement for all staff to have an Employee Performance and Development Plan (EPDP). This plan identifies what work an employee is accountable for and makes clear links to the ministry's Service Plan. As the EPDP initiative is being implemented, the ministry is using an output measure to indicate the percentage of staff with an EPDP.

### Achievements and Key Issues

The ministry achieved its target. As of May 31, 2003, 100% of ministry staff had an EPDP that linked their work and development goals to the 2003/04 – 2005/06 Service Plan. The EPDP is proving a valuable tool to assist staff in understanding how their efforts link to the ministry's objectives and broader goals of the government.

### Objective 3: Effective and efficient compliance and enforcement.

#### Performance Measure:

*Measures of call-centre trends, including response time, geographic areas, and call types to enable proactive area-based planning/resource allocations and response improvements*

Performance Measure	2003/04 Target	2003/04 Actual	2003/04 Variance
<b>Measures of call centre trends, including response time, geographic areas, and call types to enable proactive area-based planning/resource allocations and response improvements.</b>	Targets will be developed based on results from 2002/03.	Call centre received 36,987 calls; 6,437 calls referred to COs.	On track.

Source: Ministry of Water, Land and Air Protection.

**Benchmark Information:** Prior to the establishment of the call centre, the Conservation Officer Service (COS) received thousands of calls each year, most of which did not require an officer to attend in person and did not involve a threat to human safety. For example, in 2001, 17,000 calls were recorded pertaining to wildlife-human conflict complaints. Historically, 25% of such calls required a conservation officer to attend and 75% required provision of information. (Source: Conservation Officer Service.)

#### Rationale for the Performance Measure

A key ministry achievement in 2002/03 was the establishment of a call centre that the public can phone to report environmental violations or concerns. The centre, which opened on July 16, 2002, operates in partnership with the Provincial Emergency Program (PEP) and puts into action the ministry's commitment to shared stewardship. Use of the call centre means that more routine calls can be handled by trained call centre staff, while conservation officers focus their efforts on priority issues in local communities. In the 2003/04 – 2005/06 Service Plan, the ministry introduced a performance measure related to the call centre, at least for the early stages of its operation, to indicate the effectiveness of this new approach in serving the public.

#### Achievements and Key Issues

From July 16, 2002, when the call centre opened, to March 31, 2003, the centre received 24,121 calls, with 2,825 of the calls referred to conservation officers. In 2003/04, which was the call centre's first full year of operation, the centre received 36,987 calls, with 6,437 of the calls referred to conservation officers. The busy fire season, where damage to wildlife habitat resulted in animals coming into contact with urban settlements, caused September to be the busiest month with 6,269 calls.

#### Future Direction

This performance measure was not included in the 2004/05 – 2006/07 Service Plan. It is apparent from the data since the call centre opened that it has been effective in allowing conservation officers to focus their efforts on priority issues that require their attention.



The ministry holds regular meetings with PEP staff and will continue to monitor the operational effectiveness, performance and cost of the call centre.

Compliance and enforcement issues are included in the 2004/05 – 2006/07 Service Plan within the contexts of environmental protection, environmental stewardship and outdoor recreation. The ministry will continue to conduct inspections and, where non-compliance is detected, appropriate investigations and enforcement actions will be taken. For example, Table 2 below identifies the number of warnings, charges and other statistics related to enforcement activities during 2002/03 and 2003/04.

**Table 2. Enforcement statistics**

ENFORCEMENT STATISTICS								
Program	Number of Occurrence Reports		Number of Case Files		Number of Charges		Number of Warnings	
	2002/2003	2003/2004	2002/2003	2003/2004	2002/2003	2003/2004	2002/2003	2003/2004
Wildlife .....	2,828	3,104	2,120	2,262	1,197	1,055	1,010	892
Fisheries .....	1,327	1,050	1,114	844	575	475	797	529
Water .....	199	207	151	166	62	74	28	32
Waste .....	1,036	1,121	799	916	209	196	314	294
Pesticide .....	75	87	66	80	26	19	38	55
Forest Practices .....	24	148	16	132	9	59	6	51
Other .....	315	323	283	242	198	185	98	79
<b>TOTAL .....</b>	<b>5,804</b>	<b>6,040</b>	<b>4,549</b>	<b>4,642</b>	<b>2,276</b>	<b>2,063</b>	<b>2,291</b>	<b>1,932</b>

Source: Ministry of Water, Land and Air Protection, Conservation Office Service.

## Deregulation

As part of its *New Era* commitments, the government pledged to reduce regulations by 33% overall. The ministry's three-year plan is to reduce regulations by 38%, which will meet this commitment. (See the performance measure for deregulation under Goal 4, Objective 1.)

- As of March 31, 2003, the ministry reduced its regulations by 5,143, or 23.87%, from a baseline of 21,541 regulations.
- The target for the 2003/04 fiscal year (by March 31, 2004) was a reduction of 2,257 regulations, or a further 11% of the total. The regulations were reduced by 1.3% by March 31, 2004, and the other reductions required to meet the target are in progress and expected to be completed by June 4, 2004.
- In addition to the reductions above, the plan is for the ministry's regulations to be reduced by an additional 4% between April 1, 2004 and June 4, 2004 to achieve the ministry's overall target of reducing regulations by 38%.

# Report on Resources

The ministry is committed to supporting the government's plan to balance the budget and achieve its fiscal targets. The information below provides an overview of ministry funding and expenditures during 2003/04 and compares it with funding and expenditures from the previous fiscal year. Ministry capacity is also discussed and a Resource Summary provided for 2003/04 by Core Business Area. (For additional financial information see Appendix D: Notes on Data Completeness, Reliability and Methodology.)

## Ministry Funding

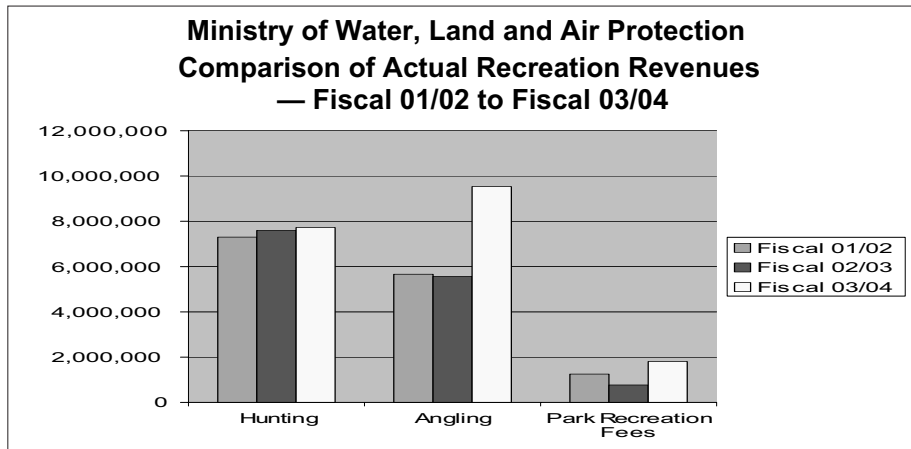
The total gross funding available at the beginning of fiscal 2003/04 for ministry operations was \$169.682 million. This funding was derived from the following sources:

- Voted appropriation. This is the largest source of ministry funding, which provided \$98.712 million.
- Statutory appropriation. The Sustainable Environment Fund authorizes the collection of waste permit fees under the *Environmental Management Act* and revenue collection under the *Social Services Tax Act* (e.g., taxes collected for products such as children's disposable diapers, which are used for environmental protection programs). This funding source provided \$31.345 million.
- Other authorizations. Contingency access provided \$0.489 million.
- Other recoveries. This funding, which is acquired from inside and outside of government for ministry services, totaled \$39.136 million.

## Comparison of 2003/04 and 2002/03 Funding

Implementation of some of the recommendations from the Recreation Stewardship Panel resulted in a forecasted increase of \$13.976 million in recreational revenues available to fund related programs (see Figure 7). The ministry was also granted increased contingency access of \$0.418 million over 2002/03. Overall, the ministry's budget was \$18.043 million lower in 2003/04 than in 2002/03 due to a reduction in voted appropriation.

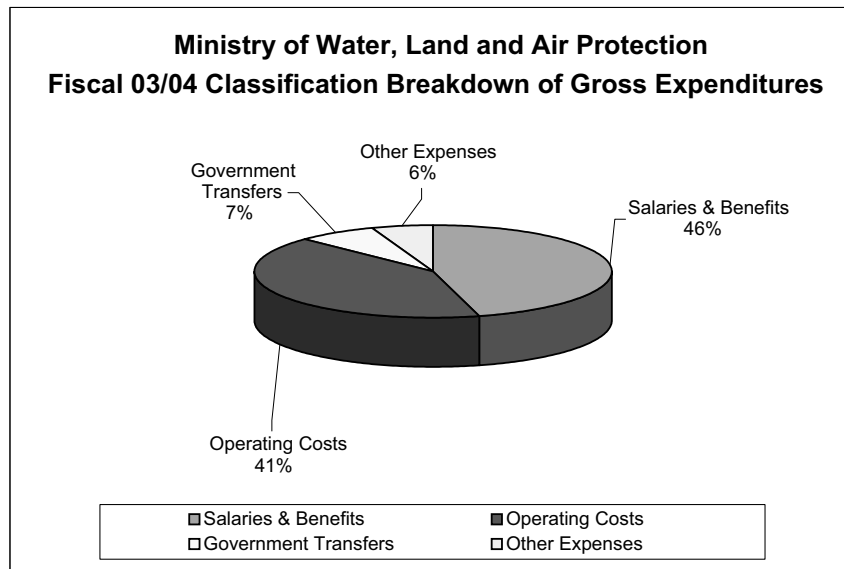
**Figure 7.** Three-year comparison of actual recreational revenues (Source: BC Draft Public Accounts 2003-2004)



## Ministry Expenditures

The largest expenditure for the ministry was salary and benefits (\$73.260 million), which accounted for 46% of annual spending (see Figure 8). Operating costs (\$65.973 million), which included professional services contracts, parks operating contracts and payments to the Freshwater Fisheries Society of BC, accounted for 41% of gross expenditures. Transfer payments (\$11.501 million) totaled 7%. Other spending, including property purchase tax for acquisition of protected areas land, was 6%.

**Figure 8.** Gross expenditures for fiscal 2003/04 (Source: BC Draft Public Accounts 2003 – 2004)

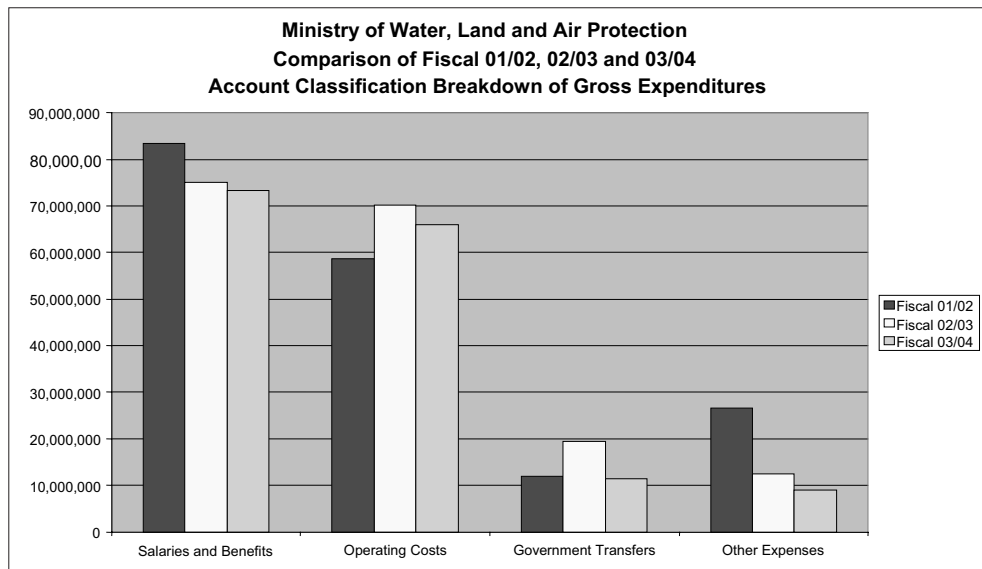


### Comparison of 2003/04 and 2002/03 Expenditures

The gross expenditures in 2003/04 decreased by \$17.546 million from 2002/03 (see Figure 9). These decreases were:

- \$1.822 million in salaries and benefits due to work force adjustment;
- \$4.242 million in operating costs including reduced building occupancy costs and decreased materials and supplies expenditures;
- \$7.977 million in government transfers as the majority of start-up costs associated with ministry partnerships were paid in 2002/2003;
- \$3.505 million in other expenditures including a reduction in shared and corporate costs; and
- Direct training costs increased from \$392/FTE in 2002/03 to \$447/FTE in 2003/04.

**Figure 9.** Three-year comparison of gross expenditures (Source: BC Draft Public Accounts 2003 – 2004)



### Capacity

The 2004/05 – 2006/07 Service Plan indicates that the ministry’s budget is expected to stabilize over the next three years after a significant period of transition, in which the ministry reduced its budgeted FTE allocation from 1,298 in 2001/02 to 998 in 2003/04. However, the complex nature of the ministry’s mandate means that ministry staff must address a wide range of issues and carry out numerous activities within this changed financial environment. During the last two years, the ministry has focused on key capacity areas such as:

- modernizing legislation to streamline processes and eliminate backlogs, thereby enabling staff to focus on high-priority issues (e.g., the *Integrated Pest Management Act*; the *Environmental Management Act*);

- exploring opportunities to share stewardship and partner with others for service delivery (e.g., Freshwater Fisheries Society of BC; Government Agents Offices);
- investing in information systems to improve processing, monitoring and reporting capability (e.g., Information Resource Management Plan; establishment of the Monitoring and Reporting Committee); and
- tracking costs on a monthly basis compared to budget allocations to maximize the effectiveness of program spending and increase accountability (e.g., aligning the Chart of Accounts to the Service Plan).

The ministry's ability to make advances in organizational capacity over the next three years, while meeting its targets, may be largely dependent on maintaining current staffing levels and tourism growth, increasing recreational revenues and continuing to focus on the above capacity areas.

Table 3 below compares revenue and expense trends by account group classification for three fiscal years.

**Table 3.** *Three-year breakdown of revenue and expenditures* (Source: BC Public Accounts and Estimates)

	2002/2003 Actual	2003/2004 Actual	2004/2005 Budget
<b>Funding (\$000)</b>			
Vote .....	131,149	98,712	112,436
Other Authorizations .....	71	489	
Sustainable Environment Funding .....	31,345	31,345	35,705
<b>Subtotal Net Budget .....</b>	<b>162,565</b>	<b>130,546</b>	<b>148,141</b>
Recoveries .....	11,449	39,136	
<b>Total Funding .....</b>	<b>174,014</b>	<b>169,682</b>	<b>148,141</b>
<b>Expenses (\$000)</b>			
Total Salaries and Benefits .....	75,083	73,260	66,243
Operating .....	70,213	65,972	71,216
Transfers .....	19,478	11,500	8,274
Other Expenses .....	43,834	40,331	44,687
<b>Subtotal Gross Expenditures .....</b>	<b>208,610</b>	<b>191,064</b>	<b>190,420</b>
Less: Internal Recoveries .....	(35,592)	(35,033)	(36,105)
External Recoveries .....	(10,470)	(26,781)	(6,174)
<b>Total Net Expenses .....</b>	<b>162,547</b>	<b>129,249</b>	<b>148,141</b>
<b>Net Under (Over) .....</b>	<b>18</b>	<b>1,297</b>	
<b>Gross Under (Over) .....</b>	<b>11,467</b>	<b>40,432</b>	

Figures presented correspond to the amounts in the *Estimates* and Public Accounts.

## Resource Summary by Core Business Areas

	Estimated <sup>1</sup>	Other Authorizations <sup>5</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
<b>Environmental Protection<sup>2</sup></b> .....	52,081	489	52,570	47,711	4,859
<b>Environmental Stewardship<sup>2,3</sup></b> ..	39,234		39,234	43,153	(3,919)
<b>Park, Fish and Wildlife Recreation<sup>2,3</sup></b> .....	11,305		11,305	8,223	3,082
<b>Executive and Support Services<sup>4</sup></b> .....	27,437		27,437	30,162	(2,725)
<b>Total</b> .....	<b>130,057</b>	<b>489</b>	<b>130,546</b>	<b>129,249</b>	<b>1,297</b>
<b>Full-time Equivalents (FTEs)</b>					
<b>Environmental Protection</b> .....	330		330	328	2
<b>Environmental Stewardship</b> .....	348		348	360	(12)
<b>Park, Fish and Wildlife Recreation</b> .....	181		181	156	25
<b>Executive and Support Services</b> .....	139		139	160	(21)
<b>Total</b> .....	<b>998</b>		<b>998</b>	<b>1,004</b>	<b>(6)</b>
<b>Ministry Capital Expenditures (CRF) (\$000)</b>					
<b>Environmental Protection</b> .....	584		584	355	229
<b>Environmental Stewardship</b> .....	80,583		80,583	45,119	35,464
<b>Park, Fish and Wildlife Recreation</b> .....	4,503		4,503	3,965	538
<b>Executive and Support Services</b> .....	1,250		1,250	305	945
<b>Total</b> .....	<b>86,920</b>		<b>86,920</b>	<b>49,744</b>	<b>37,176</b>

Notes:

<sup>1</sup> The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly on February 18, 2003.

<sup>2</sup> The salaries, operating costs and FTEs for the Conservation Officer Service have been allocated evenly to reflect their service to client groups in Environmental Protection and Environmental Stewardship.

<sup>3</sup> The salaries, operating expenditures and FTEs for the Environmental Stewardship Division have been allocated to reflect their dual responsibility for Environmental Stewardship and Park, Fish and Wildlife Recreation.

<sup>4</sup> Executive and Support Services includes expenditures for the Minister's Office, Deputy Minister's Office, Strategic Policy Division, Corporate Services (shared with the Ministry of Sustainable Resource Management), and shared administration staff in the regional offices.

<sup>5</sup> Other authorizations include supplementary *Estimates*.

## Appendix A: Glossary

**airshed:** Geographical areas in which air quality is a function of the same sources, weather and topography.

**ambient air or water quality:** The overall or general condition of air or water in a region outside the zone of influence of discharges — in contrast to local condition, which may be related to a specific source of contamination.

**aquifer:** An underground zone or stratum of permeable rock or loose material where water accumulates, and which can produce useful quantities of water when tapped by a well. It can be contaminated by improper disposal of waste.

**contaminated site:** As defined in the *Environmental Management Act*, means an area of the land in which the soil or any groundwater lying beneath it, or the water or the underlying sediment, contains a hazardous waste, or another prescribed substance in quantities or concentrations exceeding prescribed risk-based or numerical criteria or standards or conditions.

**ecosystem:** Organisms of a natural community, together with their physical, chemical and biological environment.

**greenhouse gases:** The gases that play a part in the greenhouse effect: carbon dioxide (CO<sub>2</sub>, the most significant greenhouse gas), methane, nitrous oxide, ozone, water vapour, CFCs and other trace gases.

**management direction statements:** Statements that describe significant protected area values and management issues, and recommend priority objectives, strategies and actions to respond to these issues. They provide direction where a more extensive protected area management plan is not required or feasible.

**management plans:** Plans that provide more comprehensive statements of objectives and strategies than management direction statements for the conservation, development, management and interpretation of a protected area, and normally include substantive public involvement in their preparation.

**nitrate:** An essential plant nutrient found in fertilizers and which may be produced during the breakdown of organic wastes. Excessive fertilizer application, improper agricultural waste management or underground septic tanks may increase nitrate levels in groundwater. Nitrates reduce the ability of blood to carry oxygen. Infants under six months are particularly at risk from drinking well-water containing excessive nitrates.

**particulate matter (PM):** Fine liquid or solid particles (such as dust, smoke, mist fumes or smog) found in the air or emissions. Also known as particulates.

**PM<sub>2.5</sub>:** Measure of particulate matter under 2.5 microns. Recent studies have shown that particles of 2.5 microns or less (PM<sub>2.5</sub>) pose the greatest health risk. A particle of 2.5 microns is about 1/20th the width of a human hair.

**Protected Areas:** Refers to parks, recreation areas, ecological reserves and designations under the *Environment and Land Use Act* managed by the Ministry of Water, Land and Air Protection. They include:

- Class A parks established under the *Park Act* or by the *Protected Areas of British Columbia Act*
- Class B and C parks and recreation areas established under the *Park Act*
- Ecological reserves established under the *Ecological Reserve Act* or by the *Protected Areas of British Columbia Act*
- “protected areas” and other conservation-oriented designations established under the *Environment and Land Use Act* that are managed by the Environmental Stewardship Division, Ministry of Water, Land and Air Protection

**species at risk:** Under the *Wildlife Act*, species at risk are endangered, extirpated and threatened species.

**stewardship:** Stewardship, as in “environmental stewardship,” refers to the concept of responsibly managing natural resources for the benefit of present and future generations and encouraging the active participation of persons or groups, including citizens, communities, First Nations, government and industry.

**sustainable development:** Economic and social development within the limits required to sustain long-term environmental well-being. Such development ensures that our use of the environment and natural resources today does not harm the prospects for their use in the future.

**watershed:** An entire area that is drained by a waterway or that drains into a lake or reservoir. Also referred to as a water basin.

**Wildlife Habitat Areas (WHAs):** Mapped areas of Crown land containing critical habitat, such as breeding, feeding and denning habitat, crucial to identified wildlife. WHAs help protect species and plant communities at risk by specifying mandatory practices called general wildlife measures.



## Appendix B: Progress on *New Era* Commitments and Key Projects

The ministry has made considerable progress in achieving the key government commitments contained in the *New Era* document. The ministry has also made progress toward completing other key projects as directed to the Minister. Many initiatives have been completely addressed, whereas others are multi-year in scope. The status of each commitment and project is indicated below, and for the sake of completeness a comprehensive list of initiatives is provided.

Commitments	Key Projects
Prohibit logging or mining in provincial parks	<ul style="list-style-type: none"><li>• The government has publicly re-confirmed this legislation and policy.</li><li>• The Minister of Water, Land and Air Protection lifted the blanket moratorium on July 16, 2001, and replaced it with regional moratoriums where specific conservation concerns were identified.</li><li>• An independent Grizzly Bear Scientific Panel (charged with reviewing methods and issues considered significant to grizzly bear conservation in British Columbia) submitted its report in March 2003. The report confirmed that the ministry's management of grizzly bears is effective and that sound population estimates are being used.</li></ul>
Lift grizzly bear moratorium	
Ensure decisions on new parks are made in public	<ul style="list-style-type: none"><li>• Approval for parks (such as a new Gulf Islands national park and new provincial park at Wakes Cove on Valdes Island) was granted by open cabinet.</li></ul>
Acquire and protect Burns Bog	<ul style="list-style-type: none"><li>• The Province of British Columbia, together with the Government of Canada, the Greater Vancouver Regional District and the Corporation of Delta, purchased Burns Bog for \$73 million for approximately 2,023 hectares (5,000 acres). The purchase means that an area five times the size of Stanley Park will be preserved.</li></ul>
Implement an improvement plan for threatened airsheds	<ul style="list-style-type: none"><li>• The ministry is developing the science and a framework for working with communities to improve air quality.</li></ul>
Oppose Sumas II power project	<ul style="list-style-type: none"><li>• The ministry is supporting the government's actions to represent British Columbia's interests at National Energy Board (NEB) hearings and file an appeal with the U.S. Environmental Protection Agency. In March 2004, the NEB denied an application to construct a power-line through Abbotsford.</li></ul>

### Commitments

Maintain ban on bulk water exports

Introduce comprehensive groundwater legislation to improve the quality of drinking water

Review the contaminated sites legislation

Use science-based standards to protect the environment

Consider the appointment of a Chief Scientist who will advise government from time to time

Enact new or revise legislation to deliver on *New Era* directions

### Key Projects

- The government maintains its commitment to the legislation establishing the ban.
- The government passed amendments to the *Drinking Water Protection Act* to strengthen accountability for the management and delivery of drinking water, and established an advisory board to assist with development of groundwater regulations.
- The ministry received and has acted on the report of the Advisory Panel on Contaminated Sites.
- The recommendations of the panel were used to develop a new legislative, regulatory and policy framework for contaminated sites in the province, culminating in the enactment of the *Environmental Management Act* (Phase I, 2003/04).
- The *Environmental Trends in British Columbia 2002* report was released, which summarizes scientific research on a set of environmental indicators.
- The ministry has established an internal committee to provide advice on the acquisition and use of science to inform decisions.
- The ministry has established panels of scientific experts to provide advice on specific issues (e.g., the Grizzly Bear Scientific Panel).
- The ministry is working with partners to update provincial regulations protecting urban streams and strengthen the role of science professionals. The assessment should be complete in 2004.
- The government has harmonized its vehicle and diesel regulations with those regulations under the *Canadian Environmental Protection Act* that meet U.S. Environmental Protection Agency standards.
- The government has passed the Aquaculture Waste Control Regulation to limit waste accumulation on the ocean floor.
- The ministry is reviewing the *Wildlife Act* and *Park Act* in order to update legislation in 2006.
- The government introduced the Organic Matter Recycling Regulation, which made British Columbia the first jurisdiction in North America to limit the use of recycled organic material in drinking-water watersheds.

### Commitments

### Key Projects

Enact new or revise legislation to deliver on *New Era* directions  
(continued)

- In May 2002, amendments to the *Environment Management Act* were introduced to streamline the ministry's process for entering into partnership agreements with government and non-government organizations. The amendments contributed to a mutual assistance agreement between the ministry's Conservation Officer Service and the Department of Fisheries and Oceans, Conservation and Protection service, and the Intergovernmental Mutual Aid Agreement for Problem Wildlife Incidents signed between the ministry and Parks Canada in July 2002.

Promote shared stewardship for the delivery of recreational services

- The Recreation Stewardship Panel has delivered its recommendations for a new model to support fish, wildlife and park recreation. Implementation of the panel's recommendations began in spring 2003 and will be completed by 2005/06.
- Preparation to transfer provincial freshwater fish hatcheries to the Freshwater Fisheries Society of BC, a non-profit society, was completed in March 2003.

Develop a Biodiversity Strategy

- The ministry has made significant progress during the last two years in developing its strategy to protect ecological diversity and manage and conserve species and habitats. Some important advances include the incorporation of identified wildlife sections into the *Forest and Range Practices Act* and amendments to the *Wildlife Act* in the spring of 2004, which enhance the government's ability to designate and protect species at risk in British Columbia.

Develop a Living Rivers Strategy

- The government has set up a \$2-million trust fund to assist in protecting and restoring British Columbia's rivers.

Deliver a results-based Forest Practices Code

- The ministry has worked with the Ministry of Forests and the Ministry of Sustainable Resource Management on the *Forest and Range Practices Act* and regulations. The ministry will continue to work with its private- and public-sector partners to develop environmental standards and best practices.

Create a trust for private land donations

- The ministry is working with the Ministry of Sustainable Resource Management on developing an approach for establishing this trust.

### Commitments

Encourage a strong private-sector economy that maintains high environmental standards

### Key Projects

- The ministry is exploring ways to expand investment in species protection and recovery by 2006/07.
- A new AOX Regulation was enacted in July 2002 to appropriately limit discharges of adsorbable organic halides (AOX). A new comprehensive pulp mill standard will be part of revisions to the *Environmental Management Act* (Phase III, 2005/06).
- The ministry's review of waste management legislation is expected to result in additional changes to the *Environmental Management Act* (Phase II, 2004/05; Phase III, 2005/06).
- The *Integrated Pest Management Act* was passed in the fall 2003 legislative session to replace previous legislation. Once fully implemented, the regulations are expected to eliminate the need for authorizing routine pesticide applications and enable a two-week turnaround on pesticide application certification, thus lowering costs for government and small business.
- New guidelines were introduced for coal-fired power boiler emissions, setting target limits that are comparable to those in neighbouring jurisdictions and are consistent with the province's energy policy.
- The ministry completed a review of the product stewardship program to extend industry-led product stewardship (e.g., used oil recycling).
- The ministry is exploring options to encourage First Nations partnerships to realize the economic benefits of tourism related to park, fish and wildlife recreation (e.g., the new collaborative management agreement with the Heiltsuk First Nation and the Hakai Luxvbalis Conservancy Area on the Central Coast).
- The ministry will support the 2010 Olympic and Paralympic Winter Games by identifying opportunities for appropriate economic development in recreational areas (e.g., enhanced parks) and participating in the resolution of land use issues.

## Appendix C: Legislation Administered by the Ministry

The following legislation, in alphabetical order, is currently administered by the Ministry of Water, Land and Air Protection:<sup>5</sup>

*Commercial River Rafting Safety Act*, R.S.B.C. 1996, c. 56

*Creston Valley Wildlife Act*, R.S.B.C. 1996, c. 84

*Dike Maintenance Act*, R.S.B.C. 1996, c. 95

*Drainage, Ditch and Dike Act*, R.S.B.C. 1996, c. 102

*Ecological Reserve Act*, R.S.B.C. 1996, c. 103

*Environmental Management Act* (Bill 57 — 2003)\*

*Environment Management Act*, R.S.B.C. 1996, c. 118

*Fish Protection Act*, S.B.C. 1997, c. 21 [Section 12 only]

*Flood Hazard Statutes Amendment Act, 2003* (Bill 56 — 2003)

*Industrial Operation Compensation Act*, R.S.B.C. 1996, c. 222

*Integrated Pest Management Act* (Bill 53 — 2003)\*

*Land Title Act*, R.S.B.C. 1996, c. 250 [Section 219 only, insofar as it relates to the portfolio of the Minister]

*Ministry of Environment Act*, R.S.B.C. 1996, c. 299 [Except s. 4(2)(d)]

*Ministry of Lands, Parks and Housing Act*, R.S.B.C. 1996, c. 307 [ss. 3(3), 5(b), 6 and 9]

*Park Act*, R.S.B.C. 1996, c. 344

*Parks and Protected Areas Statutes Amendment Act, 2003* (Bill 84 — 2003)

*Pesticide Control Act*, R.S.B.C. 1996, c. 360

*Protected Areas of British Columbia Act*, S.B.C. 2000, c. 17

*Skagit Environmental Enhancement Act*, R.S.B.C. 1996, c. 426

*Sustainable Environment Fund Act*, R.S.B.C. 1996, c. 445

*Waste Management Act*, R.S.B.C. 1996, c. 482

*Water, Land, and Air Protection Statutes Amendment Act, 2003* (Bill 55 — 2003)

*Water Protection Act*, R.S.B.C. 1996, c. 484

*Wildlife Act*, R.S.B.C. 1996, c. 488

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<sup>5</sup> Citations for all acts and regulations are to the most recent or original versions. Readers are strongly advised to confirm the currency of legislation with appropriate legal research before relying upon these citations as they are frequently amended and are subject to change without notice.

\* This legislation will be brought into force by regulation.

## Appendix D: Notes on Data Completeness, Reliability and Methodology

Performance measurement is undertaken to assess and communicate progress toward organizational goals and is contingent on the availability of useful data that are representative of performance. Because data can be imperfect, there is a need to balance the desire for meaningful information against the cost of a “perfect” measure. In the use of its performance measures, the ministry strives to provide accurate and timely information, but at a reasonable cost. In an attempt to improve the consistency and quality of its performance reporting, the ministry has made efforts to follow the *Performance Reporting Principles for the British Columbia Public Sector* (co-published by the Office of the Auditor General of British Columbia and the Province of British Columbia in 2003).

The following provides a general overview of the performance data, reliability and methodology for the information in the annual report.

### **Number of days to process approval requests for contaminated sites**

This measure refers only to approval requests regarding low- and medium-risk sites. For each approval request received by the ministry, the dates at which the submission reaches different stages in the approvals process are recorded by ministry staff. The ministry approval process involves verifying that the submission contains all required documentation, followed by stages of reviewing the documentation and requesting further information as necessary. The data used for this measure is the number of days between when a submission is received and when the requested approval is provided.

### **Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective of amount of fine particulates in the air under 2.5 microns per cubic metre (PM<sub>2.5</sub>)**

The ministry collects PM<sub>2.5</sub> data from approximately 40 air quality monitoring sites from over 25 communities across the province. The monitors are placed in communities that are densely populated or where air quality may be an issue. The monitors are audited twice a year by the ministry following U.S. Environmental Protection Agency protocols for auditing and record-keeping standards. Each community’s data is analyzed using the Statistical Analysis System (SAS) program, and the end result for each community is checked against air quality results reported by other agencies (e.g., Environment Canada).

### **Total greenhouse gas (GHG) emissions in British Columbia**

GHG emission data is collected by Environment Canada and per capita population statistics are derived from population statistics from Statistics Canada. The ministry relies on the quality of these data sources and the methodologies used by ministry technical experts and contractors for the analysis of the data. For more information, see <http://wlapwww.gov.bc.ca/soerpt/index.html>.

### **The trends in environmentally significant variables, such as metals and nutrients, that indicate the health of water for 30 water bodies monitored under the federal/provincial agreement**

The water bodies selected for monitoring are identified in a three-year business plan agreed to by the ministry and Environment Canada. They are selected based on the following criteria:

- whether provincial coverage is ensured;
- whether local activities may have a negative effect on the water quality of a water body;
- whether a water body is used and for what purposes (e.g., by residents for drinking, irrigation, livestock watering, or recreational purposes; and by wildlife and aquatic life); and
- whether water bodies are monitored by other entities.

Data are collected bi-weekly, or in some cases monthly, from each water body by trained samplers using established protocols. Once the samples have been collected, they are sent for analysis to laboratories that have been accredited by the Canadian Association of Environmental Laboratories (CAEL).

There are a wide variety of chemical, physical and biological indicators of water quality that are measured, including: major ions, dissolved solids, conductivity, trace elements, algae, zooplankton, nutrients, nitrate, pH levels, acidity, alkalinity, non-filterable residue and turbidity, colour, fecal coliforms, cyanide, adsorbable organic halides (AOX), temperature, total dissolved gases, dissolved oxygen, and flow. The trends in the above-monitored indicators are based on data collected regularly and consistently over periods of five to ten years or more. Data are reviewed annually for each of the 30 water bodies to assess whether there has been a significant variance from the trend. Each water body is subjected to statistical analysis approximately every five years (i.e., statistical analysis is conducted for five or six water bodies per year) as this is the timeframe in which it is expected that a change in the trend would become noticeable.

### **Number of aquifers identified and classified**

Data is collected by professional hydrogeologists contracted to the ministry. Areas in which aquifers are to be examined are selected based on factors such as the high use of groundwater in an area, a possible groundwater issue, and availability of data and information. Each identified aquifer is classified using the BC Aquifer Classification System and then digitized to provide an inventory of the developed aquifers in the province. The identification and mapping of aquifers increases public knowledge and understanding of our groundwater resources in the province. For more information see <http://wlapwww.gov.bc.ca/wat/aquifers/index.html>.

### **Number of product categories with industry-led product stewardship**

This measure identifies the number of product categories covered by the Post-Consumer Residual Stewardship Program Regulation under the *Environmental Management Act*. For more information please refer to <http://wlapwww.gov.bc.ca/epd/epdpa/ips/index.html>.

### **Percentage of high-risk environmental emergencies responded to effectively**

The Regional Operations Branch of the Environmental Protection Division oversees environmental emergency management by the ministry. Environmental Emergency Response Officers use a Risk-Based Spill Assessment Model that was implemented in June 2003 to determine which spills are “high risk,” and which the ministry is therefore responsible for attending. (The ministry responds to spills for which the overall risk rating is “high.”) The model uses a formula to determine an overall

risk rating, which is based on an assessment of the public threat, environmental sensitivity, incident status, response time by other parties, and response capability of other parties.

Measuring response “effectiveness” involves consideration of several issues, such as identifying the spills that require attendance by ministry staff, providing timely response, addressing the technical issues at the site, effecting proper response by parties responsible for the spill or by others when there is no responsible party, and ensuring appropriate clean-up. It can be challenging to measure effectiveness regarding these criteria individually or collectively. Currently, the measure involves an after-the-fact assessment of whether or not each spill was responded to effectively, and response effectiveness is reported based primarily on observation. The ministry is working on putting formal data collection methods in place.

### **Number of nationally listed species at risk being addressed by recovery teams**

The ministry participates on the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). “Under the Accord for the Protection of Species at Risk, federal, provincial and territorial governments have agreed to recognize COSEWIC as the source of independent advice on the status of species at risk nationally and to work together to protect these species.”<sup>6</sup> For this measure, the ministry is using COSEWIC data as the source for the number of nationally listed species at risk. Information about the number of those species that are being addressed by recovery teams is provided by the ministry.

### **Number of protected areas with approved management direction**

Protected areas are protected by Order-in-Council or through an amendment to the *Protected Areas of British Columbia Act*. Data regarding the total number of protected areas is from a registry maintained by the ministry.

Approved management direction refers to a protected area having an approved management plan, master plan, management direction statement, interim management statement, or purpose statement and zoning plan. The plans address issues relating to management of habitats, ecological diversity, species, genetic diversity, and economic opportunities relating to tourism and recreation.

Data on the number of protected areas with approved management direction are readily available. Up-to-date information is maintained by the ministry on the status of the development and approval of management direction for all protected areas.

### **An appropriate measure relating to environmental standards for the *Forest and Range Practices Act (FRPA)***

The specific focus for this measure was identified in the 2004/05 – 2006/07 Service Plan — ministry progress in establishing designations and objectives for fisheries, wildlife and water quality using statutory authorities under the FRPA. Initially, the ministry will assess its progress by monitoring designations of wildlife habitat areas and ungulate winter ranges. As there is no direct relationship between the number of designations and the area covered by the designations, both measures are being reported as they are both important for demonstrating progress. Data are collected and maintained by program staff.

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<sup>6</sup> Committee on the Status of Endangered Wildlife in Canada (COSEWIC).  
<http://www.cosewic.gc.ca/eng/sct6/sct6-3-e.cfm#hist>.



### **The percentage of known native species that are threatened or endangered in the province**

The data and the criteria underlying general status assessments for this measure are presented in the federal government's report *Wild Species 2000: The General Status of Species in Canada*.<sup>7</sup> This report was published for the first time using 2000 data. The next report is to be published in 2006 using 2005 data.

There are several data reliability issues related to this measure. To be accurate, the measure requires that we know of all existing native species in British Columbia and all species that are threatened or endangered. There are currently significant data gaps in both these areas, which is a challenge that is experienced in most jurisdictions that collect species information. Cooperation between both the provincial and federal governments should lead to progress in obtaining better data over time.

### **Number and value of partnerships**

The measure developed for inclusion in the 2004/05 – 2006/07 Service Plan is the number of collaborative management plans with First Nations. These plans are identified and counted.

### **Visitor satisfaction with park and campground facilities and services**

Approximately 4,000 campground park visitors are surveyed each year, usually between May 15 and just after the Labour Day long-weekend in the first week of September. The survey is sent to each park for distribution by park operators with provisions made for random sampling of subjects. A Visitor Satisfaction Index is derived from the survey responses. This is an overall rating, averaged for the province, that campers and park visitors provide for five categories: cleanliness of restrooms, cleanliness of grounds, condition of facilities, sense of security, and control of noise. Responses of "excellent" and "above average" are considered to indicate satisfaction.

The survey data are entered into the SurveyIt! program, which is used to perform all statistical calculations. (SurveyIt! is a software product designed to help manage complex surveys.) There may be subsequent follow-up sampling to confirm that the surveys were completed by legitimate park visitors.

### **Client satisfaction with fish and wildlife opportunities**

Data for this measure are not yet available. The ministry intends to acquire the necessary data for this performance measure through a regular survey of hunters and anglers. The ministry's plan to implement a comprehensive electronic licensing and permitting application is currently on hold, thus preventing the electronic collection of survey data. At such time as electronic licensing is in place, a survey may be developed and administered to hunters and anglers who purchase licences over the internet. In the fourth quarter of 2003/04, the annual paper-based survey of hunters and anglers that is used to collect harvest data included a portion on client satisfaction in order to obtain baseline data for this measure for subsequent years. The 2003/04 preliminary results are not yet available.

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<sup>7</sup> Canadian Endangered Species Conservation Council (CESCC). 2001. *Wild Species 2000: The General Status of Species in Canada*. Ottawa: Minister of Public Works and Government Services Canada. <http://www.wildspecies.ca/wildspecies2000>.

### **Number of basic hunting and angling licences sold**

The number of basic licences sold reflects the number of people participating in hunting and angling activities because a basic licence must be purchased before a person can hunt or fish or purchase a supplementary species licence. Data for this measure are obtained from the Government Agents Branch of the Ministry of Management Services and the ministry. The Government Agents Branch is responsible for the management of Angling and Hunting Licence Vendor Operations and the sale of all basic and supplementary licences throughout the province. The ministry also sells a small number of licences. Data are collected monthly and are reported by residency category and type of licence. Data are auditable as the number of licences sold must reconcile with revenues collected for sale of the licences. The data for 2003/04 are not yet available but may be included in the ministry's 2005/06–2007/08 Service Plan.

### **Number of recorded visits to B.C. parks**

There are three components to visitation data: camper-nights, day-use visits (which account for 80-90%) and visits to marine parks. Traffic counters, infra-red counters and visual counts are used throughout the province to collect data regarding the number of parties that visit parks. The number of parties recorded for each visitation component is then multiplied by a factor that estimates the average number of people per party to give the total number of recorded visits. The factors are 3.2 for camping parties and boating parties and 3.5 for day-use parties.

This is a measure of total recorded visits, not total visits, as there are parks where visitation data are not collected. Nonetheless, as long as data are collected from the same areas each year, the trend in the data should provide a useful indication of changes in the overall level of park visits. Implementation of the recommendations of the Recreation Stewardship Panel has resulted in park visitor statistics no longer being collected in the past couple of years at a number of sites where they were collected previously. Efforts are now focused on collecting statistics in the busier parks and/or the core areas in parks, rather than in the smaller, less used parks. Therefore, current data are not comparable to data from before this change was implemented, and recorded visits would be expected to be somewhat lower than before the change. Comparing annual results for this measure will be more meaningful when trend data becomes available for the locations where data are now being collected.

### **Annual survey of ministry clients to determine if they understand what the ministry is trying to achieve and whether it is being done in the most efficient and effective way**

The staff survey chosen for this measure was intended to help inform human resource strategies for the coming few years, and will be useful for making comparisons because it was also used widely in the public and private sectors. The survey was based on a 2001 National Work, Family and Lifestyle survey, conducted by Dr. Linda Duxbury of Carlton University and Dr. Chris Higgins of the University of Western Ontario, who had also surveyed 31,700 working Canadians at 100 major organizations, employing 500 or more people. The anonymous survey was open to staff from June 18 to August 18, 2003 and received a 70% response rate. The 35 questions and 160 items were responded to by 840 ministry employees. The survey is considered accurate within 1.5 percentage points, 19 out of 20 times.

### **Progress toward delivery of a three-year deregulation plan (measured as percentage reduction in ministry's regulatory count)**

Regulations are counted according to the Regulatory Reform Policy (see <http://www.deregulation.gov.bc.ca/regreformpolicy.htm>) of the Deregulation Office at the Ministry of Small Business and Economic Development.

### **Percentage of staff with an Employee Performance and Development Plan**

This measure identifies the percentage of ministry employees with an Employee Performance and Development Plan (EPDP) by the target date of May 31, 2003. The information is reported by Strategic Human Resources Branch.

### **Measures of call-centre trends, including response time, geographic areas, and call types to enable proactive area-based planning/resource allocations and response improvements**

Provincial Emergency Program staff enter each problem wildlife and enforcement report into an electronic database and create numbered Problem Wildlife Occurrence Reports and Enforcement Routing Sheets. The routing sheets are forwarded to Conservation Officer Service staff, and are also available through a web-based view application. Reports are sorted into various categories, including district, species and complaint type. Data are regularly audited and the written occurrence reports are regularly checked against the recorded telephone reports.

### **Other Information:**

#### **Annual Data**

Where possible, the data in this document are reported on a fiscal year basis (April 1 – March 31). The EPDP date is May 31 each year to link closer with the start of the fiscal year work-plan process. In some cases, when data are collected and reported from external sources, calendar-year data are used, as indicated.

#### **Financial Resources**

For consistency purposes, the numbers (unaudited) reflected in the Resource Summary by Core Business Area are based on information included in the BC Public Accounts 2003 – 2004.

#### **Expenses by Objective in the Report on Results**

Presenting expenditures (unaudited) by objective is part of the ministry's ongoing commitment to improve the links between revenues, expenses and the Service Plan. Program management costs for each core business area are allocated based on total expenses for each objective. The Sustainable Environment Special Account allocation has been prorated across the Environmental Protection core business area objectives. The numbers (unaudited) reflected in the resource summary for each core business area are based on information included in the BC Public Accounts 2003 – 2004. As acquisition of financial information and reporting methods improve, amounts may be restated, thereby allowing more effective comparisons in the future.

## Appendix E: Ministry Office Locations

The following map indicates the location of Ministry of Water, Land and Air Protection offices.

