

*Ministry of  
Environment including  
Environmental Assessment Office*

**2005/06  
Annual Service Plan Report**



**BRITISH  
COLUMBIA**

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## Message from the Minister and Accountability Statement

Transformative change has been the key to British Columbia's progress in the past four and a half years. Our province has experienced remarkable economic revitalization, fiscal renewal and societal achievement.

In February 2005, the government set out its Five Great Goals for B.C.'s golden decade to continue this transformation and sharpen the focus on key priorities that will benefit British Columbians and the environment. (See the Strategic Context section of this report for a list of the Five Great Goals.)

In 2005, as part of a government-wide reorganization, the Ministry of Environment was re-established and redefined, and was joined by the Environmental Assessment Office (EAO). The EAO is a neutral agency with its own budget that coordinates the assessment of the environmental impacts of major development proposals in British Columbia.

This joint 2005/06 Annual Service Plan Report outlines the changes that have occurred within the ministry and the EAO over the past year, and reports on our achievements in meeting the government's goals for maintaining our environmental integrity and sustainability, promoting the health of our citizens and encouraging job creation.

We made progress in 2005 by improving the safety and quality of our precious groundwater resource with the coming into effect of the Ground Water Protection Regulation. We have successfully opposed the Sumas Energy 2 project in Washington State, which posed a major threat to our air quality. We continued to strive for the best air quality possible in British Columbia by supporting projects and education to reduce air pollution and greenhouse gas emissions. In the decade to come, alternative energy will form an integral part of the government's expanded energy vision. In 2005/06, we continued our leadership role in supporting alternative energy technology and effective responses to climate change.

British Columbia parks are our heritage, to enjoy and enhance, then pass on for future generations. Our government made significant capital investments in the parks system in 2005/06 and will continue to do so over the next three years. By sustainably managing this rich legacy, residents and visitors alike are encouraged to explore our province's special places and world-renowned natural beauty. This increases the appreciation of British Columbians for wilderness protection and environmental stewardship, while promoting an active lifestyle.

In 2005/06, the ministry continued to develop collaborative and innovative approaches to environmental stewardship. The new Central Coast and North Coast land use plans cover an area the size of Belgium and a protected area three times the size of Prince Edward Island. They represent an unprecedented collaboration between First Nations, communities, industries, environmental organizations and government. The newly established conservancy designation under the *Park Act* sets aside Crown Land for the protection of its biological diversity, natural environments and recreational values, and the preservation and maintenance of First Nations' social, ceremonial and cultural uses.

The 103,000 hectare Kitasoo Spirit Bear Conservancy will protect the primary habitat of our official provincial mammal, the Spirit Bear.

Other partnerships we have forged in 2005/06 have enabled us to initiate projects across the province to rebuild fish stocks, improve oceans management, improve water quality, and support species recovery. We also are working with partners across government to help mitigate the devastating effects of the mountain pine beetle and are developing simpler and more direct ways for the public to report poachers and polluters. In 2005, we introduced the B.C. Conservation Corps program, which provides work opportunities for students and recent graduates to promote interest in conservation and environmental careers.

Due to a strong provincial economy fueling mining and energy in the province, along with BC Hydro's call for clean energy and run-of-the-river projects, the Environmental Assessment Office has continued to manage a high workload in 2005/06. Throughout the year, the EAO managed 50 projects, which were in the pre-application and application stages, made three project referrals to ministers for decision, and handled a number of Environmental Certificate Amendments.

The Environmental Assessment Office recently received the 2005/06 Premier's Award for organizational excellence. Receiving this honour is a significant achievement and recognizes the EAO for its performance excellence, best practices and innovative approaches to managing its unprecedented workload.

Collectively, British Columbians understand that the environment, the economy and all social systems are interdependent. We recognize that there are limits to the carrying capacity of our world, and we all share responsibility for the stewardship of our environment.

The government's Five Great Goals set the bar high. The ministry will continue to build new relationships, engage citizens, promote the sustainable use of British Columbia's environmental resources and improve the health of our water, land and air. This 2005/06 Annual Service Plan Report provides an account of our work to date with local governments, regional districts, stakeholders, First Nations and citizens across British Columbia. As a province, we have come a long way in four and a half years, but we have further to go to create sustainable, vibrant communities that make wise use of our natural assets and will provide for their use in generations to come.

The 2005/06 Ministry of Environment including the Environmental Assessment Office Annual Service Plan Report compares the actual results to expected results identified in the joint 2005/06 – 2007/08 Service Plan Update. I am accountable for those results as reported.



Honourable Barry Penner  
Minister of Environment  
Minister Responsible for Water Stewardship and Sustainable Communities

June 30, 2006

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# Highlights of the Year

## Clean and safe water, land and air

- The ministry invested \$500,000 to enhance its air, surface and groundwater monitoring capability in April 2005. These funds were used to maintain, modernize and expand equipment at some of the 37 air quality, 35 surface water and 160 groundwater monitoring locations across the province.
- A Code of Practice for the Discharge of Produced Water from Coalbed Gas Operations came into effect July 1, 2005. The code was developed to ensure that during coal production, when “produced water” is discharged into streams or to the ground, both water quality and the environment are protected.

## Water quality and safety

- *WaterBucket* came into being in April 2005. *WaterBucket* (<http://www.waterbucket.ca/>) is an interactive, web-based resource that brings together local governments, water utilities, water suppliers and managers to share information, tools and ideas about water sustainability and conservation. The Ministry of Environment is a key partner in this initiative.
- The new Ground Water Protection Regulation took effect November 1, 2005 to improve the safety and quality of the province’s groundwater. New well construction, installation and maintenance requirements are identified in the regulation and a brochure for well owners was produced.
- The ministry is supporting the rehabilitation of the Britannia Mine site. A \$15 million water treatment plant at the site was commissioned in December 2005. The treatment plant is designed to treat an average of 3,000 gallons per minute of metal-laden mine water and groundwater at the Britannia Mine south of Squamish, and will remove a combined total of over 600 kilograms/day of copper and zinc from waters flowing to Howe Sound. The Britannia Project is jointly sponsored by the Britannia Mining Museum, Natural Resources Canada, University of British Columbia and the Province.

## Healthy air quality

- Sumas Energy 2 owners in Washington State wanted to build a power plant with a line into Canada through British Columbia to connect to BC Hydro’s transmission system. Due to the impact the operation of this plant would have had on British Columbia’s airsheds, the government opposed the project. A decision by Sumas Energy 2 to officially terminate the project was made in March 2006.
- Investments of over \$309,000 were made in February 2006 to support eight related projects to reduce greenhouse gas emissions and improve air quality. These projects included a community air quality/health lecture series, clean air forums, research on particulate matter and ozone, and green technology in building design and urban development to reduce greenhouse gases.

### **Effective responses to climate change**

- Research grants of approximately \$88,000 were presented in October 2005 to the University of Victoria and the University of British Columbia to study air quality and climate change.
- The Province provided \$325,000\* to the OURANOS project to model climate change in B.C.'s mountainous terrain.

### **Alternative energy**

- The Minister was presented with the E-Visionary Award from the World Electric Vehicle Association in December 2005 to recognize British Columbia's leadership in alternative technology such as electric drive and green transportation.
- In January 2006, the ministry presented a \$25,000 grant to the Fraser Basin Council to support market development of biodiesel as a sustainable fuel alternative. The use of biodiesel (made from recycled cooking oil) as a renewable fuel-blend reduces greenhouse gas emissions and most air pollutants.

### **Effective responses to environmental emergencies**

- On August 5, 2005, a Canadian National Railway train derailed, spilling sodium hydroxide into the Cheakamus River. A Technical Committee led by the ministry was struck to develop a recovery plan. The ministry recommended angling closures, habitat enhancement techniques, and limited hatchery augmentation to assist in the recovery of steelhead stocks.
- The ministry's spill response team was at the site of the March 2006 ferry sinking of the Queen of the North within hours of its occurrence. Ministry of Environment staff continue to work on protecting the areas affected by the ferry accident and are committed to the development of a long-term monitoring and rehabilitation plan, if necessary.
- In the fall and winter of 2005/06, due to the provincial mountain pine beetle epidemic, beetle-attacked pine trees in Lac le Jeune, Tunkwa, Ten Mile Lake, Manning, Silver Star and Pinnacles provincial parks were removed from park areas to ensure public safety from falling trees and reduce risks from potential wildfires. These projects were managed by the ministry's parks and protected areas staff. Mountain pine beetle control actions were also conducted in cooperation with the Ministry of Forests and Range in Monkman, Wapiti, Kakwa, Robson, Babine River and Elk Lakes provincial parks. These latter projects were conducted under the Mountain Pine Beetle Emergency Response Canada – B.C. Implementation Strategy.<sup>1</sup>

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<sup>1</sup> For more information on this strategy, please see the Ministry of Forests and Range 2006/07 – 2008/09 Service Plan. Available at <http://www.bcbudget.gov.bc.ca/2006/sp/for/>.

\* Updated on August 16, 2006.



## Healthy and diverse native species and ecosystems

### Protected, maintained and restored native species and ecosystems

- Funding in the amount of approximately \$3.6 million was provided to the ministry by the Habitat Conservation Trust Fund for 78 fish and wildlife projects. These projects include river and stream restorations, steelhead recovery, grassland ecosystem restoration and wildlife population studies.
- Fifteen marmots were released back into the wild in 2005. Seven Vancouver Island marmots, Canada's most endangered mammal, were released in the Haley Lake Ecological Reserve near Nanaimo in July 2005. This brings the number of marmots now living in the wild on Vancouver Island to approximately 30 to 35 individuals. The success of the breeding and recovery program suggests that the restoration of the wild population is possible and can reach self-sustaining levels.
- The Living Rivers Trust Fund was tripled with the addition of \$14 million.

### Parks and protected areas

- Amendments to the *Protected Areas of British Columbia Act* were passed in March 2006 establishing four new Class A provincial parks (Enderby Cliffs, Kiskatinaw River, Klin-se-za and Sikanni Chief Canyon) and adding lands to three existing Class A parks and one existing ecological reserve.
- Amendments to the *Protected Areas of British Columbia Act* were passed in November 2005 to add lands to Charlie Lake Park in the Peace Region and San Juan River Estuary Ecological Reserve on west Vancouver Island.
- In 2005/06, the ministry acquired, through purchase, exchange or donation, 13 properties valued at approximately \$13 million. All acquisitions were private lands that will either become additions to existing parks or new protected areas.
- In 2005, the Province made a commitment to invest \$20 million for park capital improvements over three years, including \$12.2 million in the 2005/06 budget.



## **British Columbians understand that they share responsibility for the environment**

### **Shared stewardship**

- Introduced in 2005, the British Columbia Conservation Corps is a program that provides work opportunities for students and recent graduates to promote interest in conservation and environmental careers. Over 150 Corps members were employed in 2005/06 to work on 34 projects located throughout the province. Projects included work related to species at risk inventory; data collection and monitoring; surveying angler usage and satisfaction; implementing bear awareness and bear aversion strategies; mapping vegetation and managing invasive plants; assessing mosquito breeding sites in conjunction with research into West Nile Virus; and restoration and restocking of steelhead habitat.

### **Product stewardship**

- Electronic products were added to the B.C. Recycling Regulation in February 2006. The electronic products included in the B.C. Recycling Regulation are computers, monitors, desktop printers and televisions. Disposal of these products has become a growing concern with the expansion of technology industries. It is estimated that up to 70% of electronic waste can be recycled.
- Scrap tires were added to the B.C. Recycling Regulation in March 2006 in order to divert them from going into landfills and/or to stop illegal dumping. The regulation places responsibility on manufacturers for end-of-life product management. This includes reducing the environmental impacts, collection, storage and safe disposal of product residuals.

### **Conservation Officer Service**

- New highway signs, a website and a toll-free hotline for the public to “report all poachers and polluters” (RAPP) were introduced in March 2006. The new online reporting form will make it easier for the public to report violations of environmental regulations.
- The Conservation Officer Service celebrated 100 years of service to the province. The role of Conservation Officers is to protect the environment where human health and safety are at risk. The Conservation Officer Service works with other Ministry of Environment staff to ensure compliance with environmental legislation. Officers also respond to wildlife – human conflicts.
- The Conservation Officer Service successfully implemented a Seasonal Conservation Officer program, hiring and training 13 Conservation Officers to provide additional compliance and enforcement capacity during those times of increased operational pressure.

## **Sustainable use of British Columbia's environmental resources**

### **Sustainable and collaborative management and use of marine and ocean resources**

- Contributions in the amount of \$190,000 were made during the 2005/06 fiscal year to help reform the management of Pacific salmon fisheries; support the implementation of a new integrated Groundfish Quota Management system; build new approaches to recreational fisheries development and marketing; and support oceans science and technology development projects.
- Ministry staff represented the British Columbia seafood industry at the European Seafood Show in Brussels in May 2005 and at the North American Seafood Show in Boston in March 2006. Ministry staff promoted our seafood sector companies to key international markets.
- In 2005/06, the ministry established a new Oceans Coordinating Committee in conjunction with the Government of Canada to collaboratively deliver programs and initiatives for Canada's Ocean Strategy.
- The Oceans and Marine Fisheries Division worked with BC Parks and the Integrated Land Management Bureau to update resource data on the province's Marine Protected Areas (MPAs). This update will help to identify the potential conservation contribution of provincial protected areas to a national system of MPAs.

### **Compliance**

- The ministry established a new Compliance Division in February 2005. This division consolidates the strategic development of compliance policy and planning with the operational delivery of compliance and enforcement to provide ministry-wide leadership, innovation and services in support of the ministry's compliance goals.
- The ministry's new Compliance and Enforcement Policy and Procedures were completed in June 2005. This document guides the selection of appropriate compliance tools to ensure compliance with regulatory requirements. Compliance tools include warnings, advisories, tickets, investigations and/or prosecutions.
- The ministry announced that it will be releasing a Quarterly Compliance and Enforcement Summary to demonstrate its commitment to being publicly accountable for achieving its environmental protection responsibilities.
- The ministry provided funding of \$330,000 for the province-wide Bear Smart program.

# Purpose, Vision, Mission and Values

## Purpose

The transformation of the Ministry of Water, Land and Air Protection into the Ministry of Environment was an opportunity to reaffirm our mandate to protect, manage and enhance the province's natural environment, a responsibility we share with all British Columbians. We champion environmental stewardship through partnerships and volunteer programs, environmental awards and consultative processes that engage stakeholders, and we vigorously promote the sustainable use of the province's environmental resources. We strive to ensure that healthy and diverse native species and ecosystems are maintained and that outstanding outdoor and wildlife services and opportunities are available to all.

To continue to offer the best possible service to British Columbians and uphold our vision, mission and values, we ensure that our planning and management decisions are informed by science, our results achieved through innovative legislation and effective program development, and B.C.'s environmental resources are protected by a full range of effective compliance and enforcement services.

## Vision, Mission and Values

As a result of the government-wide reorganization in 2005, the Ministry of Environment assumed responsibility for marine fisheries from the former Ministry of Agriculture, Food and Fisheries,<sup>2</sup> and for water stewardship and the Conservation Data Centre from the former Ministry of Sustainable Resource Management and Land and Water BC. At the same time, the Minister of Environment assumed responsibility for the Environmental Assessment Office.

These new responsibilities required us to restructure our organization (see Figure 1 under Ministry Organization).

To support this new corporate structure and enhance our ability to support the government's goal of sustainable environmental management, the ministry revitalized its vision, mission and values, and redefined its goals, objectives, strategies and performance measures over the fall of 2005. These changes were confirmed in the February 2006/07–2008/09 Service Plan and now provide the foundation upon which the ministry operates. The ministry's new vision, mission and values are presented below. See Appendix B for a comparison between our old and new vision, mission and values. For more information about changes to the ministry's goals, objectives, strategies and performance measures, go to the Report on Performance section.

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<sup>2</sup> Now called the Ministry of Agriculture and Lands.

## **Vision**

Our new vision recaptures the public purpose we serve and our continued commitment to safeguard British Columbia's environmental legacy.

*A clean, healthy and naturally diverse environment.*

## **Mission**

Our new mission continues to reflect our evolving leadership role and our reliance on the people of British Columbia to help us reach higher goals for environmental stewardship and sustainability.

*Lead, inform, involve and support British Columbians to achieve the best environmental stewardship and sustainability.*

## **Values**

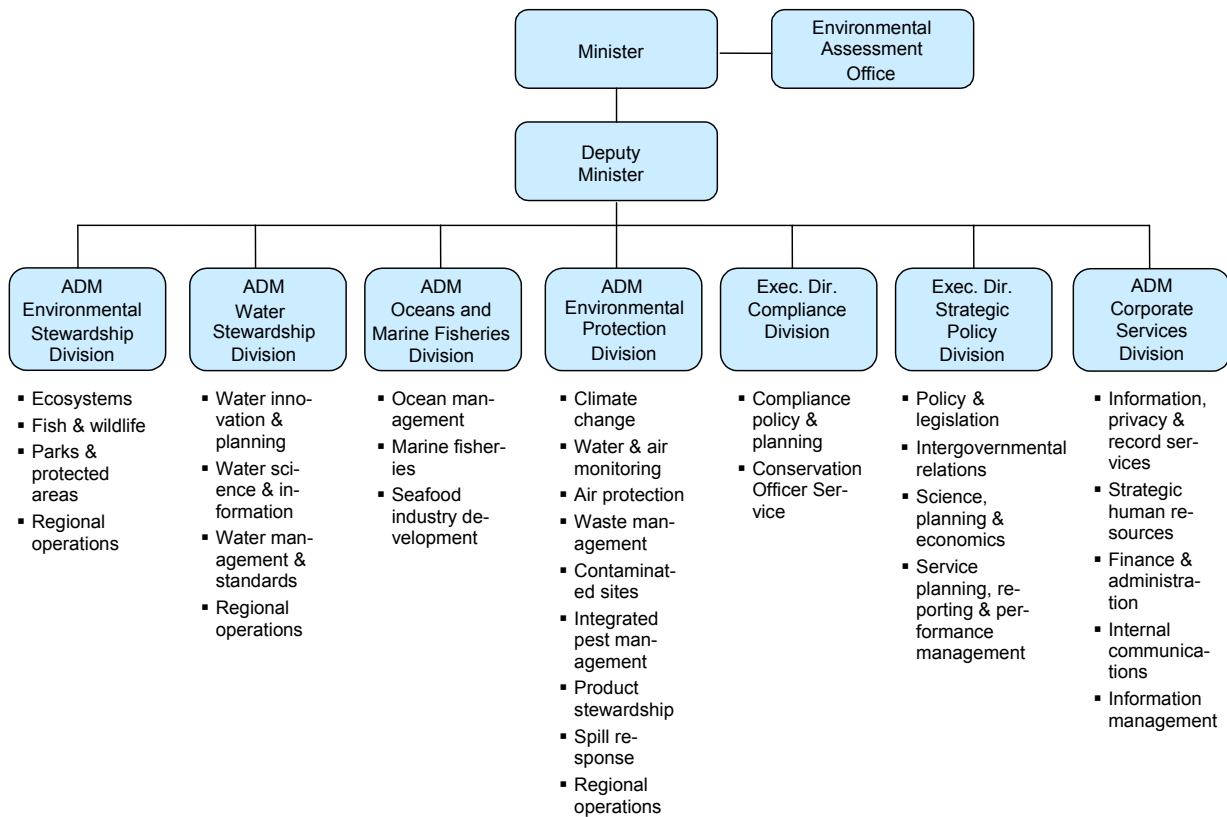
Our new values redefine our corporate behaviour, shift our focus onto meeting the service needs of our clients in an objective and accountable way and provide a challenging and supportive work environment to staff. These statements guide our policies, decisions and daily work.

- *Service* — We provide service that is responsive, adaptive and based on client needs.
- *Objectivity* — We perform our work in a professional manner that promotes an objective approach to environmental management.
- *Integrity* — We act in a truthful, ethical and transparent manner.
- *Excellence* — We encourage innovation, creative solutions and a culture of continuous learning.
- *Accountability* — We are efficient and effective in our work and accountable to the Legislature and the public for results.
- *Wellness* — We believe in a working environment that promotes health and well-being, and allows staff to achieve their highest potential.

## Ministry Organization

The Ministry of Environment currently has seven divisions to support the programs, services, and initiatives carried out by its six core business areas. The Strategic Policy Division and Corporate Service Division are represented as one core business area under Executive and Support Services. Figure 1 shows the ministry’s organizational structure and the main responsibilities for each division. For a more detailed overview of core business area responsibilities, see the Service Delivery and Core Business Areas section of this report.

**Figure 1.** Ministry of Environment organizational structure



# Strategic Context

## Introduction

The ministry plans and assesses its performance within a context of external and internal factors. These factors include trends and shifts in the environment, economy and society and within government itself, as evidenced by the government's ministry-wide restructuring and the introduction of its Five Great Goals. Over the previous year, as in other years, the ministry analyzed these factors and made operational adjustments where necessary to ensure that it continued to fulfill its mandate and meet government priorities.

## Government Goals and Priorities

The government's Five Great Goals provided renewed direction and context for the work of the ministry during 2005/06. These goals are:

1. Make British Columbia the best-educated, most literate jurisdiction on the continent.
2. Lead the way in North America in healthy living and physical fitness.
3. Build the best system of support in Canada for persons with disabilities, those with special needs, children-at-risk, and seniors.
4. Lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none.
5. Create more jobs per capita than anywhere else in Canada.

The government's reorganization in 2005 resulted in additional responsibilities for the ministry in the core business areas of Water Stewardship and Oceans and Marine Fisheries. The ministry's new corporate framework and revised vision, mission, goals and objectives better reflect its enhanced mandate and the government's Great Goals. The ministry has a leadership role in achieving the government's objectives under Great Goal 4 and accountability for Great Goals 2 and 5.

## External Factors

### Environmental Factors

In 2005/06, the ministry has continued to build on existing programs and develop new initiatives to provide renewed direction in sustainable environmental management. However, despite these efforts, certain challenges remain. A number of environmental trends are negative, and their threat to the environment is increasing. Science shows that climate change may have more significant implications than previously predicted. Loss of habitat threatens biodiversity in British Columbia and other parts of the world. Industrial contaminants are becoming more widely dispersed in our air, water, land and species. Human-caused and naturally occurring contaminants negatively impact water quality, and water supplies are increasingly under pressure, as are important resources such as marine fisheries. Despite the challenges such threats present, the ministry continues to make significant headway on a number of environmental fronts.

## Climate Change

Steady increases in average temperatures have been recorded in British Columbia and other parts of the world. This trend and the more volatile weather patterns linked to it have far-reaching implications for government, society and ecosystems. Preparing for, adapting to and developing initiatives to mitigate climate change are government priorities. The Ministry of Environment is the lead agency for implementing the government's response to climate change as outlined in *Weather, Climate and the Future: B.C.'s Plan*. The ministry has been developing more initiatives to manage greenhouse gas emissions and enhance British Columbia's capacity to assess impacts connected with climate change and manage climate-related risks such as changes in water quantity, quality and timing of river flow, pest outbreaks, species distributions, and agricultural conditions. The ministry also invested approximately \$88,000 to support research in the areas of climate change and air quality.

## Mountain Pine Beetle

The outbreak of mountain pine beetle in British Columbia has been ongoing for approximately 10 years, but the infestation has increased rapidly in recent years to become the largest in Canadian history.<sup>3</sup> Many forest values are affected by the mountain pine beetle infestation, such as landscape aesthetics and tourism, water quality and wildlife habitat. The ministry continues its work on cross ministry initiatives related to the management of the infestation within parks and protected areas, including the Mountain Pine Beetle Action Plan. In 2005/06, the ministry authorized the removal of infested pine trees in several provincial parks to lessen the risks associated with this devastating biological event.

## Air Quality

Air quality can be affected by many factors such as economic activity, population size and density, energy consumption, topography, meteorology and seasonal variations. Pollutants such as carbon monoxide, lead, nitrogen dioxide, ozone, volatile organic compounds (VOCs), particulate matter and sulphur dioxide can negatively affect our health and the environment, cause property damage and contribute to climate change. The responsibility for air quality regulation and monitoring is shared among federal, provincial and local governments. Improving air quality is a key component of Great Goal 4, and the ministry continues to support strategies, such as the Clean Air Strategy, and initiatives to promote cleaner air and reduce greenhouse gas emissions. The ministry is also seizing opportunities to work with community partners on the development of airshed plans throughout the province.

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<sup>3</sup> Natural Resources Canada. *The Mountain Pine Beetle Initiative: Federal Forestlands Rehabilitation Program. First Nations Mountain Pine Beetle Element*. 2003. Available at: [http://mpb.cfs.nrcan.gc.ca/federal/first\\_nations/funding/FirstNations\\_Guidelines\\_e.pdf](http://mpb.cfs.nrcan.gc.ca/federal/first_nations/funding/FirstNations_Guidelines_e.pdf).



## **Water Quality and Supply**

The need for clean, safe and abundant water resources is fundamental to maintaining our health, prosperity and the environment, and is an important part of Great Goal 4. British Columbia's water resources support vital uses such as drinking water, recreation, wildlife habitats, fisheries, and commerce. Demands on water supplies from population growth, agricultural use and industrial development will continue to increase, especially as British Columbia's population is expected to increase by more than 30% in the next 25 years.<sup>4</sup> In areas such as the Okanagan Basin, which is a vital and rapidly growing region in British Columbia, the ministry is working in partnership with the Okanagan Basin Water Board and its Water Stewardship Council to assess current and future water availability and demand.

## **Biodiversity**

Biodiversity is life in all its forms and the habitat and natural processes that support it. British Columbia is home to a rich diversity and abundance of native species and habitats. Programs within the ministry endeavour to conserve biodiversity and the viability of ecosystems, which support all forms of life, moderate climates, filter water and air, and preserve soil and its nutrients. The ministry has prepared a document entitled *Develop with Care: Environmental Guidelines for Urban and Rural Development in British Columbia*, which provides province-wide guidelines for maintaining environmental values during the development of urban and rural lands.

## **Oceans and Marine Fisheries**

The ocean resources and marine fisheries of British Columbia are important contributors to the provincial economy and are the foundation for many coastal and First Nation communities. There are cross jurisdictional responsibilities for and interests in ocean resources and marine fisheries at all levels of government and by many organizations. Finding opportunities to develop effective partnerships and coordinate ministry activities with these entities is essential to protecting and enhancing B.C.'s interests and in meeting the government's objectives under Great Goal 4. The ministry worked with the Canadian Oceans Information Network (COIN Pacific) to assist with the transition from government to its new host at the University of Victoria. Here COIN Pacific will continue to provide increased public access to oceans information and help stimulate oceans science and technology in B.C. In 2006, the government will invest in a number of ocean, fish and watershed projects across the province to help rebuild fish stocks and improve oceans management and water quality.

## **Parks, Ecological Reserves and Protected Areas**

The significance people put on the world's great natural areas and cultural sites arises from a widely varying and sometimes conflicting array of values and beliefs.

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<sup>4</sup> B.C. Stats. P.E.O.P.L.E. May 2005. Available at <http://www.bcstats.gov.bc.ca/data/pop/pop/Project/P30BCIntro.pdf>.

As British Columbia's population grows, and the economy continues to be strong, there is increasing pressure on the province's many significant and world-renowned parks, ecological reserves and protected areas. In early 2006, the government announced historic provincial land use decisions for the Central Coast and the North Coast. This unprecedented collaboration between First Nations, industry, environmentalists, local governments and many other stakeholders will determine how the vast richness of B.C.'s coast is managed for the benefit of all British Columbians. Legislation was introduced by the Minister of Environment in April 2006 to establish a new "conservancy" designation for protected areas that is vital to implementing these land use decisions.<sup>5</sup>

### **Economic Factors**

Economic growth in British Columbia has been strong, supported by robust domestic demand, strong business investment and higher consumer spending. The expanding economy of emerging countries such as China and India has resulted in enhanced markets for our products such as coal and metals. The increasing demand for oil and gas also presents enhanced economic opportunities as well as difficult environmental challenges for the province.

Such a robust economy requires effective resource stewardship by everyone involved. Business plays an integral role in society: developing the economy, creating jobs and building wealth. Society expects businesses to be increasingly responsible for their actions, changing their behaviour while meeting consumer demands. The ministry continues to work with companies to focus on generating broader social and environmental dividends through investments in cleaner technology and corporate responsibility.

### **Societal Factors**

Activities associated with population growth and human activity such as expanding development, increasing use of fossil fuels, changing land use patterns and associated economic activities put increasing pressure on the environment. British Columbians realize the government is not and cannot be the sole protector of the environment and that environmental stewardship is everyone's responsibility. The ministry is enhancing and promoting shared stewardship through various strategies such as the B.C. Water Strategy and the Clean Air Strategy. The ministry is also continuing to expand its product stewardship programs. Electronic products and tires were both added to the B.C. Recycling Regulation in 2006. The regulation puts the responsibility on producers to redirect recyclable material from landfills.

### **Other External Factors**

Unforeseen disasters and severe natural or biological events that impact our ecosystems and human health and safety cannot always be predicted. However, the ministry must anticipate such events and manage them once they do occur, as it did for the devastating forest fires

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<sup>5</sup> The legislation, Bill 28-2006, the *Park (Conservancy Enabling) Amendment Act, 2006*, was passed in April 2006 and will be brought into force by Order in Council.

of 2003 and the Avian Flu outbreak of 2004. In 2005, the ministry responded quickly to the sodium hydroxide spill into the Cheakamus River from a derailed Canadian National Railway train. The spill killed approximately 90% of the fish in the river at the time of derailment, threatening species, habitat and economic livelihoods. The ministry is continuing to work with local partners to restore the health and diversity of this important ecosystem. In 2006, ministry staff responded within hours of the tragic sinking of the Queen of the North and worked closely with First Nation and emergency preparedness partners to mitigate environmental damage.

## **Internal Factors**

### **Changing organizational structure**

The year 2005/06 was a time of transition for the ministry, which included integrating new business areas, changing from a division centric focus to a cross ministry focus, continuing to build a unified staff culture, and coordinating the planning, management and reporting operations of a new entity. The ministry will continue to evolve in its role, focusing on achieving the government's objectives of leadership in sustainable environmental practices and maintaining a healthy environment.

### **Capacity**

The ministry achieved its objectives over the previous year through effective relationships with partner and service delivery agencies, and through continued efforts to streamline processes and focus resources on clearly defined goals, objectives and strategies. In addition, the ministry continued to advance good business practices and improved technology, and ensured staff were provided with the support, training and tools necessary to do the job. These conditions were critical to the ministry successfully achieving its mandate in 2005/06.

### **Staff retirements**

The public sector is in the early stages of a profound transition. Two hundred and ninety seven of the ministry's staff are expected to retire over the next five years, including a significant number of senior managers. This could result in a significant loss of corporate memory, technical expertise and general capacity. The ministry has developed a People Strategy that outlines the ministry's key human resource objectives for the coming year and is working to identify and resolve future workforce planning needs and challenges. In 2005, the ministry established the B.C. Conservation Corps, which will develop student and graduate skills, provide mentoring opportunities and inspire a new generation of conservationists and future ministry employment candidates.

## Risk Management

The government defines risk as the uncertainty that surrounds future events and outcomes, such as those mentioned above. Managing adverse events that could influence ministry progress requires planning — identifying and taking action to minimize the likelihood of risk and the consequences should an event occur.

All core business areas within the ministry address risk in the development, monitoring and implementation of their initiatives, regulations, services and programs. For example, protecting the health of British Columbians and taking a leadership role in environmental stewardship requires programs to clearly identify, assess and undertake activities to mitigate potential risks related to water quality, air quality, contaminated sites and managing species at risk.

In addition, the ministry has a diverse set of proactive planning approaches in which risk is identified, assessed and management strategies are developed and implemented. Some examples include:

- **Ministry Audit and Risk Management Committee:** This Executive-level committee ensures audits are undertaken as a result of a risk-based prioritization model. Audits may include financial management, information systems reviews, and compliance audits (contractual, regulatory and legislative).
- **Program Evaluation and Business Reviews:** Program evaluations and cross ministry business reviews are undertaken by the ministry. Results are analyzed and corrective activities are incorporated into business planning and decision-making.
- **Financial Risk Management (FRM):** FRM, with respect to managing the ministry's budget, includes planning, quarterly reporting, balance reviews and variance analysis. Financial policies and procedures in accordance with the *Financial Administration Act*, including contract management, are continually updated and communicated through training programs. Ministry transfer payments are monitored and audited for policy compliance. FRM is also supported through the ministry's Audit Plan.
- **People Planning Committee:** This cross ministry committee researches issues and develops effective human resource strategies to address future risks associated with workforce needs and succession planning.
- **Business Continuity Management Program (BCMP):** The BCMP is an integral part of the ministry's risk management approach. The ministry is responsible for developing and implementing a business continuity plan to ensure availability of ministry services, programs and operations, and the timely resumption of services in the event of a major failure, emergency or disaster.
- **Structured Decision-Making (SDM):** The SDM process is used to consider uncertainty and consequences in the evaluation of alternative management policy options. SDM allows decision-makers to make "risk" trade-offs based on a better understanding of the technical information and the values and risk tolerance of stakeholders.

Government continues to be called upon to anticipate and address new and emerging risks, as well as potential opportunities. Most issues relating to the environment are complex and have profound implications for both the environment and society. Science plays an important role in effective environmental decision-making. Ministry decision-making processes are informed by the best available science, supported through adaptive management<sup>6</sup> processes and depend on the sound and rigorous judgement of knowledgeable and professional staff.

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<sup>6</sup> Adaptive management is defined as a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.

# Service Delivery and Core Business Areas

Our service delivery is citizen-centred and our clients are all citizens of British Columbia — we serve them in their communities, in their businesses and in their workplaces. The success of our work relies on a highly skilled workforce and on our ability to form effective relationships with other government bodies, First Nations, industry, associations, communities and environmental groups.

The ministry's values of service, objectivity, integrity, excellence and accountability are the foundation upon which we build our relationships and deliver our services.

As described in the Purpose, Vision, Mission and Values section of this report, our new corporate structure, which resulted in the formation of two new core business areas (Water Stewardship and Oceans and Marine Fisheries), enables us to expand our services to a broader client base and ensure that our mandate continues to be fulfilled.

## Service Delivery

We deliver our programs and services through six core business areas functioning in seven divisions, and through staff located in regional offices throughout the province. In addition to Vancouver Island, we have offices in the Lower Mainland, Thompson, Okanagan, Kootenay, Cariboo, Skeena and Omineca/Peace regions (see Appendix C for a complete list of our offices).

Our regional delivery model is just one way we provide service. Many of B.C.'s provincial parks' facilities and services are managed by contractors (park facility operators) who operate the parks based on specific standards approved by BC Parks. As well, qualified professionals<sup>7</sup> help the ministry in its work under legislation such as the *Environmental Management Act*.

*One of our key ministry values is providing service that is responsive, adaptive and based on client needs. Our regional delivery model helps us respond more effectively to clients in their communities and helps us engage them in innovative projects and initiatives, such as monitoring the health of local water bodies.*

We support organizations such as the Habitat Conservation Trust Fund, the Freshwater Fisheries Society of B.C. and the Pacific Salmon Endowment Fund Society, who help fund local programs such as habitat restoration, resource stewardship, habitat protection and strategic resource enhancement.

We actively participate in a number of cross government initiatives, such as the Action Plan for Safe Drinking Water and the Mountain Pine Beetle Action Plan, and work with

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<sup>7</sup> A qualified professional is a professional with specific qualifications, training and experience authorized by legislation to undertake work defined by the standards and accountabilities of that legislation.

and depend on the contributions and support of a range of partners. Such efforts are aimed at ensuring that British Columbians have a clean and safe environment in which to live and play, and a vital resource base on which their communities can depend. Our partners include, but are not limited to: Ministry of Agriculture and Lands, Ministry of Energy, Mines and Petroleum Resources, Ministry of Forests and Range, Ministry of Health, Ministry of Transportation, Integrated Land Management Bureau, Fisheries and Oceans Canada, Environment Canada, First Nations, and a variety of other agencies and organizations. We are also quite involved, along with other ministries, in ActNow BC, government's initiative to have the province lead the way in North America in healthy living and physical fitness and make British Columbia the healthiest jurisdiction ever to host an Olympic Games.

We also look outside British Columbia to build relationships and coordinate our work with other provincial partners. For example, we are continuing to develop and implement collaborative strategic approaches to common areas of environmental management, including regulatory harmonization with Alberta. This collaboration will allow a better understanding of the environmental management approaches used by each jurisdiction and an opportunity to identify and prioritize areas that may be considered for harmonization.

To reflect our values of *service, excellence and accountability*, we continuously strive to ensure the quality, efficiency and effectiveness of our programs and services, as well as those of our delivery agents, through program evaluation, business reviews, audits and satisfaction surveys. For example, park facility operators are required to submit annual operating plans and updated three-year business plans and are inspected and evaluated annually. As well, in order to more accurately measure the extent to which our services are being provided in a citizen-focused manner, in the future, the ministry will be reporting on a performance measure that captures changes in the satisfaction of client groups.

Legislation is the foundation upon which the ministry delivers its programs and services. Our focus is on results-based legislation. This means that the ministry is responsible for setting standards and monitoring and auditing outcomes. Significant legislation that drives ministry programs includes:

- the *Environmental Assessment Act*
- the *Integrated Pest Management Act*
- the *Wildlife Act*
- the *Water Act*
- the *Environmental Management Act*
- the *Protected Areas of British Columbia Act*
- the *Park Act*

A full listing of all the legislation that the Ministry of Environment administers appears in Appendix D.

## **Core Business Areas Overview**

The ministry delivers its services, its mandate, and addresses the government's Great Goals through the following core business areas.

### **Core Business Area: Environmental Stewardship**

This core business area is led by the Environmental Stewardship Division. Key programs and services focus on working with other ministries, First Nations, industry, communities and governments to establish standards for the use and protection of species and habitats. This area has the lead role in collecting, maintaining and managing the scientific information necessary to ensure these standards represent the best available science. Other programs and services focus on the provision of outdoor opportunities in B.C. parks and protected areas, allocation of natural resources for hunting, angling and wildlife viewing, and helping to ensure the economic potential of these activities is realized in a sustainable way. Key functions focus on shared stewardship and sustainable economic development and are aimed at maintaining and restoring fish and wildlife species and their habitats. This core business area also works to promote the effective management of fish, wildlife and park resources. Environmental Stewardship provides and enhances park, freshwater fish and wildlife services and opportunities for British Columbians and others. This area establishes legislation (e.g., *Park Act*, *Protected Areas of British Columbia Act*, and *Wildlife Act*), and policies and procedures that allow for the protection and conservation of our natural environment.

Approximately \$81,699,000 and 474 FTEs were dedicated to this core business area in the 2005/06 fiscal year.

### **Core Business Area: Water Stewardship**

This core business area is led by the Water Stewardship Division. Key programs and services focus on providing provincial leadership in ensuring the water resources and aquatic ecosystems of British Columbia are safe, sustainable and valued by all. This involves protecting and managing water quality and quantity to optimize the benefits and sustainability of the province's water resources for communities, the economy and the environment. The division leads innovative approaches to water governance; develops legislation and non-regulatory tools; develops and delivers science and information critical to understanding and managing the water resource; and carries out statutory and public safety functions that support fair and sustainable water allocation, protect groundwater resources and minimize the risk to British Columbians from floods and droughts. Other program areas include water planning, source drinking water protection, and water utility regulation. The division, through the Comptroller of Water Rights, is responsible for administering the *Water Act*, *Water Protection Act* and *Water Utilities Act*. This core business area's work places a high priority on fostering water stewardship through public awareness, education, partnerships and capacity building.

Approximately \$15,435,000 and 87 FTEs were dedicated to this core business area in the 2005/06 fiscal year.



### **Core Business Area: Oceans and Marine Fisheries**

The Oceans and Marine Fisheries Division leads this core business area in the development and implementation of the provincial government's ocean resources and marine fisheries initiatives. The focus of the program includes sustainable and integrated management and use of B.C.'s ocean resources, a stable and diverse marine fishery that provides broad social and economic benefits for British Columbians, and growth and diversification of a seafood sector that offers strong competition in global markets with a focus on sustainability and quality. Key functions include leading the development of provincial oceans interests and objectives; creating collaborative provincial-federal resource management strategies; developing shared governance frameworks to ensure a stronger provincial role in the management of marine fisheries and ocean resources; supporting traceability and certification programs; and marketing the sustainability and quality of B.C.'s seafood industry in the global marketplace.

Approximately \$2,353,000 and 8 FTEs were dedicated to this core business area in the 2005/06 fiscal year.

### **Core Business Area: Environmental Protection**

This core business area is led by the Environmental Protection Division. Key programs and services focus on protecting human health and maintaining high environmental standards for water, land and air by promoting sustainable environmental practices in communities through partnerships and education on best management practices; maintaining a system for air and water quality monitoring and reporting; and regulating and monitoring industrial and community activities to ensure compliance. This core business area also focuses on providing opportunities such as industry-led stewardship programs for the reuse and recycling of post-consumer products; shifting the responsibility for lower risk spills to industry and partners; and leading the provincial climate change initiative.

The development and enactment of legislation such as the *Environmental Management Act* and the *Integrated Pest Management Act* facilitate implementation of 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 in compliance with regulatory requirements. This business area continues to develop, amend and implement regulations, codes, policies and procedures that support the outcome-based model and protect water, land and air.

Approximately \$40,855,000 and 251 FTEs were dedicated to this core business area in the 2005/06 fiscal year.

### **Core Business Area: Compliance**

This core business area is led by the Compliance Division.

Key programs and services focus on providing ministry-wide leadership, innovation and services in support of the ministry's compliance goals.

Activities include providing expertise in environmental investigation and enforcement, wildlife/human incident response and preventative programs, and compliance techniques and tools. Key functions include delivering a full range of compliance-related activities, including educating citizens to be better stewards; promoting the understanding of, and compliance with, regulatory requirements; conducting investigations; and working with ministry programs on a range of enforcement options. The division supports the management and delivery of compliance activities in a manner that is timely, appropriate and consistent with the mandate of the ministry, and with the risk to the environmental values at issue.



Approximately \$16,376,000 and 137 FTEs were dedicated to this core business area in the 2005/06 fiscal year.

### **Core Business Area: Executive and Support Services**

The Deputy Minister's Office, Strategic Policy Division and Corporate Services Division lead this core business area and support other core business areas to achieve ministry objectives. Key programs and services focus on the planning and development of effective policies and legislation. Other key programs include intergovernmental relations; structured decision-making; State of the Environment reporting; economic analysis; and service planning, reporting, evaluation and performance management. Other key functions cover a full range of financial, human resource, administration and information systems services (these services also support the Ministry of Agriculture and Lands and the Integrated Land Management Bureau).

Approximately \$22,782,000 and 107 FTEs were dedicated to this core business area in the 2005/06 fiscal year.

# Report on Performance

The *Budget Transparency and Accountability Act* sets out government's accountability framework and planning and reporting requirements. The framework provides a continuous line of accountability from government through ministries to core business areas and individual employees. It is characterized by a cascading series of goals, objectives, strategies and performance measures to assess progress toward their achievement. Also included in the accountability framework are employee performance plans to align personal responsibilities with accomplishment of the ministry's goals and objectives.

All components of the accountability framework are closely integrated. Therefore, when a goal is revised or replaced (for example, to better reflect the link between what the ministry is doing and the government's strategic direction), so must the objectives, strategies and performance measures associated with it be revised or replaced. This is the cycle of continuous improvement, and it underpins both effective public service planning and meaningful, accountable public performance reporting.

When the ministry developed its new corporate structure in 2005, it revitalized its vision and mission and redefined its values. This meant that the ministry's goals, objectives, strategies and performance measures had to be revised in order to align with a more sharply focused vision and mission and a more client-centred set of values. This reflected a significant change from the goals, objectives and strategies presented in the September 2005/06 – 2007/08 Service Plan Update.

Because of this change, the ministry decided it was not a true reflection of accountability to report on goals that no longer exist. Therefore, while the Report on Performance section will report on the ministry's progress over the 2005/06 fiscal year, it will report on performance measures as they currently exist under the ministry's new goals and objectives.

The following tables show the changes to ministry goals, objectives, strategies and performance measures that took place between the September 2005/06 – 2007/08 Service Plan Update and the February 2006/07 – 2008/09 Service Plan.<sup>8</sup>

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<sup>8</sup> The Ministry of Environment's September 2005/06 – 2007/08 Service Plan Update is available at [http://www.bcbudget.gov.bc.ca/2005\\_Sept\\_Update/default.htm](http://www.bcbudget.gov.bc.ca/2005_Sept_Update/default.htm). The Ministry of Environment's February 2006/07 – 2008/09 Service Plan is available at <http://www.bcbudget.gov.bc.ca/2006>.

## Summary of Changes to the Ministry of Environment Service Plan

Table 1 summarizes the changes made to the ministry's goals and objectives. The left-hand column reflects the goals and objectives in the September 2005/06 – 2007/08 Service Plan Update. The right-hand column reflects the goals and objectives in the February 2006/07 – 2008/09 Service Plan.

**Table 1.** *Changes to Ministry of Environment Goals and Objectives in 2005/06*

Goals and Objectives September 2005/06 – 2007/08 Service Plan Update		Goals and Objectives February 2006/07 – 2008/09 Service Plan	
Goals	Objectives	Goals	Objectives
1. Protect the environment and human health and safety by ensuring clean and safe water, land and air	1.1 Streamline standards and improve monitoring, reporting and compliance	1. Clean and safe water, land and air	1.1 Enhanced protection and stewardship of our water resources
	1.2 Limit air pollution and lead British Columbia's efforts to respond to climate change		1.2 Reduced contamination from toxins and wastes
	1.3 Ensure safe, high-quality drinking water and reduce discharges that threaten water quality		1.3 Healthy air quality
	1.4 Reduce/remove toxins and wastes that contaminate land		1.4 Effective responses to climate change
	1.5 Effective response to high-risk environmental emergencies		1.5 Effective management of environmental risks
2. Maintain and restore the ecological diversity of fish and wildlife species and their habitats	2.1 Clear strategies and legislation to protect and restore species and their habitats	2. Healthy and diverse native species and ecosystems	2.1 Well-managed and accessible information on species and ecosystems
	2.2 Improved use of scientific and inventory information for the development of standards and for effective management, monitoring and reporting		2.2 Well-maintained parks and protected lands
	2.3 Increased number of partnerships to conserve species and their habitats		2.3 Protected, maintained and restored native species and ecosystems
3. Provide and enhance park, fish and wildlife services and opportunities for British Columbians and others	3.1 High-quality park facilities, services and opportunities	3. British Columbians understand that they share responsibility for the environment	3.1 British Columbians understand the benefits of healthy living and the effect of their actions on the environment
	3.2 High-quality hunting, angling and wildlife viewing opportunities		3.2 Shared stewardship
	3.3 Optimize the economic contribution of park, fish and wildlife opportunities		3.3 Industry and client groups are knowledgeable and implement best environmental management practices

Goals and Objectives September 2005/06 – 2007/08 Service Plan Update		Goals and Objectives February 2006/07 – 2008/09 Service Plan	
Goals	Objectives	Goals	Objectives
4. Provide effective and efficient planning and support for ministry programs	4.1 Clear vision, leadership, direction and support for all ministry programs	4. Sustainable use of British Columbia's environmental resources	4.1 Sustainable use and continued benefits of water and air
	4.2 Efficient program management, fiscal responsibility and client service		4.2 Optimized public, outdoor and commercial opportunities from British Columbia's parks, fish and wildlife
			4.3 Sustainable and collaborative management and use of marine and ocean resources
		5. A high performance organization	5.1 A client-focused organization
			5.2 A healthy working environment that motivates and supports staff, promotes innovation and attracts and retains high performance employees
			5.3 A coordinated approach to legislation, policy, resource allocation and compliance
			5.4 An integrated approach to ministry planning, performance management and evaluation
			5.5 Accurate, timely information

Table 2, which follows, presents the changes to the ministry's performance measures by goal. The performance measures from the September 2005/06 – 2007/08 Service Plan Update appear in the left-hand column; those from the February 2006/07 – 2008/09 Service Plan appear in the right-hand column. The ministry's restructuring afforded an opportunity to sharpen its focus on key priorities and the government's Great Goals. As a result, three outcomes were possible as the ministry reassessed each performance measure: the performance measure remained unchanged; the measure was revised; or the measure was discontinued. Discontinued performance measures are reported on in Appendix E.

**Table 2. Changes to Ministry of Environment Performance Measures in 2005/06**

Goals and Performance Measures September 2005/06 – 2007/08 Service Plan Update		Goals and Performance Measures February 2006/07 – 2008/09 Service Plan	
Goals	Performance Measures	Goals	Performance Measures
1. Protect the environment and human health and safety by ensuring clean and safe water, land and air	Contaminated sites backlog reduction (X)	1. Clean and safe water, land and air	Water quality trends in water bodies monitored under a federal/provincial agreement
	Average processing time for issuing permits (X)		
	Turnaround time for pesticide certification (X)		
	Percentage of communities achieving the Canada-wide standard (CWS) for particulate matter (PM <sub>2.5</sub> ) and low level ozone		Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective for particulate matter (PM <sub>2.5</sub> ) and low level ozone
	Per capita greenhouse gas (GHG) emissions relative to other provinces		Per capita greenhouse gas (GHG) emissions relative to other provinces
	Water quality trends in water bodies monitored under a federal/provincial agreement		
	Products with industry-led product stewardship		
	Response to environmental emergencies (X)		
2. Maintain and restore the ecological diversity of fish and wildlife species and their habitats	Designations established under the <i>Forest and Range Practices Act</i>	2. Healthy and diverse native species and ecosystems	Number of completed designations under the <i>Forest and Range Practices Act</i>
	Number of Collaborative Management Agreements and Official Wildlife Processes with First Nations		
3. Provide and enhance park, fish and wildlife services and opportunities for British Columbians and others	Visitor satisfaction with park and campground facilities and services	3. British Columbians understand that they share responsibility for the environment	Municipal solid waste disposal (kilograms/capita)
	Client satisfaction with fish and wildlife opportunities		Number of Collaborative Management Agreements and Regional Fish and Wildlife Advisory Processes with First Nations
	Number of hunting and angling licences sold		Number of product categories with industry-led product stewardship programs
	Number of recorded visits to B.C. parks		

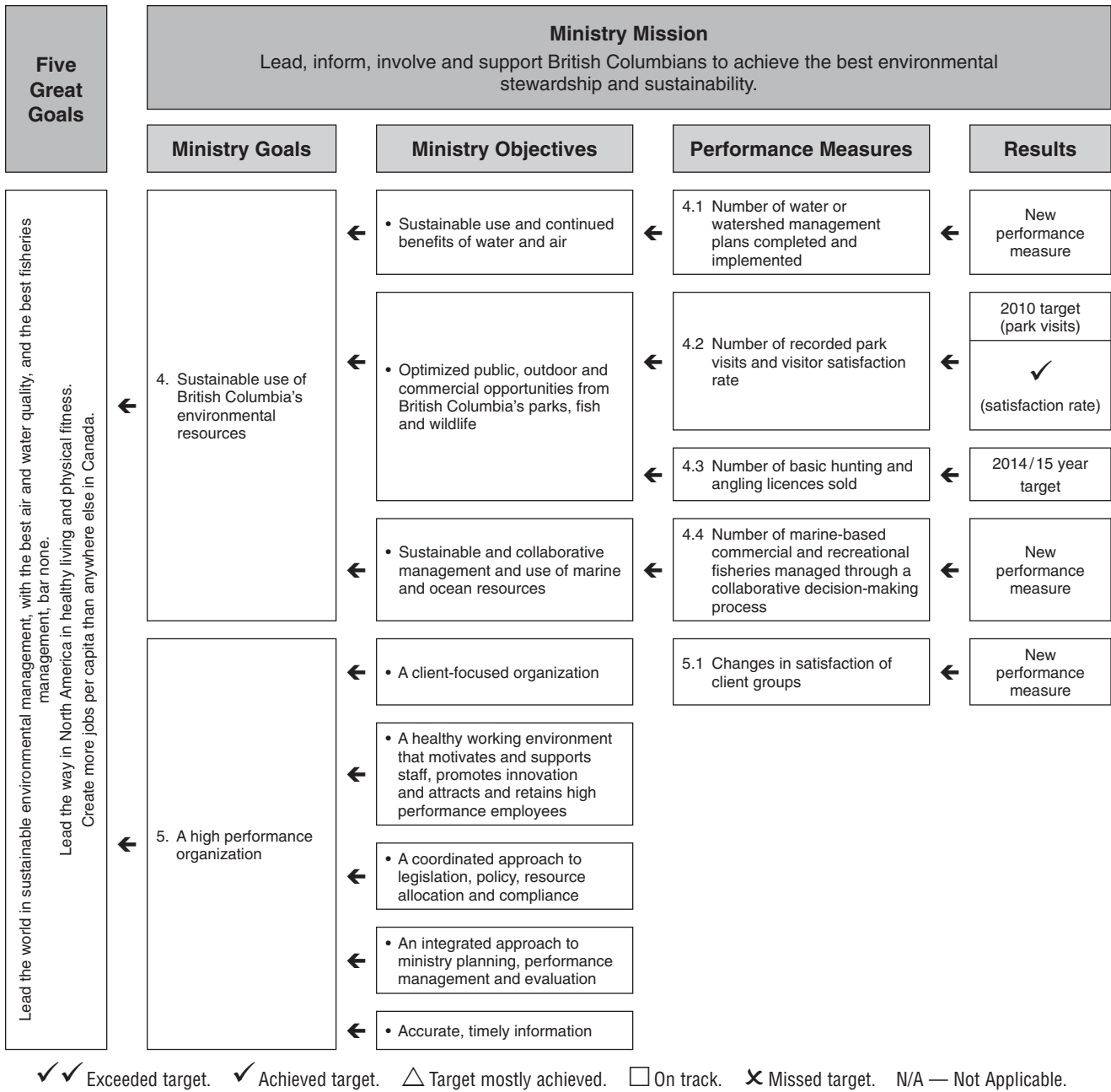
Goals and Performance Measures September 2005/06 – 2007/08 Service Plan Update		Goals and Performance Measures February 2006/07 – 2008/09 Service Plan	
Goals	Performance Measures	Goals	Performance Measures
4. Provide effective and efficient planning and support for ministry programs	Regulatory reform targets (X)	4. Sustainable use of British Columbia's environmental resources	Number of water or watershed management plans completed and implemented
	Percentage of staff with an Employee Performance and Development Plan (EPDP) (X)		Number of recorded park visits and visitor satisfaction rate
Number of basic hunting and angling licences sold			
Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process			
<b>Note — 'X' indicates measure has been discontinued. Explanations and rationales for changes in the performance measures can be found in Appendix E</b>		5. A high performance organization	Changes in satisfaction of client groups

# Performance Plan Summary Table

Table 3. Synopsis of Ministry of Environment Performance Measure Results

Five Great Goals	Ministry Mission Lead, inform, involve and support British Columbians to achieve the best environmental stewardship and sustainability.			
	Ministry Goals	Ministry Objectives	Performance Measures	Results
Lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none. Lead the way in North America in healthy living and physical fitness. Create more jobs per capita than anywhere else in Canada.	1. Clean and safe water, land and air	• Enhanced protection and stewardship of our water resources	1.1. Water quality trends in water bodies monitored under a federal/provincial agreement	✓
		• Reduced contamination from toxins and wastes		
		• Healthy air quality	1.2. Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective for particulate matter (PM <sub>2.5</sub> ) and low level ozone	2010 target
		• Effective responses to climate change	1.3 Per capita greenhouse gas (GHG) emissions relative to other provinces	✓
		• Effective management of environmental risks		
	2. Healthy and diverse native species and ecosystems	• Well-managed and accessible information on species and ecosystems		
		• Well-maintained parks and protected lands		
		• Protected, maintained and restored native species and ecosystems	2.1 Number of completed designations under the <i>Forest and Range Practices Act</i> (WHAs and UWRs)	✓✓ (WHA) ✗ (UWR)
	3. British Columbians understand that they share responsibility for the environment		3.1 Municipal solid waste disposal (kilograms/capita)	New performance measure
		• British Columbians understand the benefits of healthy living and the effect of their actions on the environment		
		• Shared stewardship	3.2 Number of Collaborative Management Agreements and Regional Fish and Wildlife Advisory Processes with First Nations	✓
		• Industry and client groups are knowledgeable and implement best environmental management practices	3.3 Number of product categories with industry-led product stewardship programs	□





New performance measures will be reported on in the 06/07 Annual Service Plan Report.

# Goals, Objectives, Strategies and Performance Measures

The Annual Service Plan Report affords the ministry an opportunity to publicly communicate its achievements, comparing actual results against planned results from the previous year. It is also an opportunity to demonstrate the ministry's commitment to *objectivity and accountability* — two of its key values — and to effective performance management.

Successful and meaningful performance management provides the impetus to achieve, underpins ministry decision-making and fosters a culture of continuous improvement. The ministry strives to select performance measures that will “raise the bar” and continue to move the province toward its goal of leading the world in sustainable environmental management.

The following sections provide an overview of each ministry goal, and present the supporting objectives, strategies and performance measures. Each performance measure includes a rationale of why that particular measure was chosen, confirms key achievements, compares actual results to planned results (reporting on variations), addresses issues and risks associated with the measure and identifies the future direction or plans for the measure. Together these performance indicators provide a picture of the ministry's continuous efforts to fulfill its mandate and achieve its vision.

New performance measures established in the February 2006/07 – 2008/09 Service Plan will be reported on in next year's Annual Service Plan Report.

Appendix F provides supplemental information on the types of performance measures the ministry has developed and why (e.g., outcome vs. output), as well as additional information on the performance measures themselves.

## Goal 1

### *Clean and safe water, land and air*

Healthy communities and a healthy environment depend on clean and safe water, land and air. This goal reflects the ministry's commitment to enhanced protection of our water resources, reduced contamination of land and air, and effective responses to climate change and environmental emergencies. Achievement of this goal is key to a healthy and sustainable environment for British Columbia, and supports the government's broader goal to have the best air and water quality in North America.

**Core business areas: Water Stewardship, Environmental Protection and Compliance.**

## Objective 1

### *Enhanced protection and stewardship of our water resources*

A safe and sustainable supply of high quality water is vital to our communities, economy and environment. Both protection and stewardship of our water resources are of utmost importance to the ministry. Achievement of this objective through effective legislation, innovative approaches to water governance and coordinated watershed-based planning contributes directly to the goal and is critical to the health of British Columbians and the environment.

*Goal 1 is key to a healthy and sustainable environment for British Columbia, and supports the government's broader goal to have the best air and water quality in North America. The objectives and performance measures selected for this goal reflect areas of critical importance to the health of our communities and our air and water resources.*

## Strategy

A key strategy for this objective includes:

- approving and implementing the B.C. Water Strategy. Under this strategy, actions include:
  - appointing a Chief Water Officer and defining accountabilities for ensuring exemplary water stewardship
  - integrating cross ministry initiatives to promote and enhance water stewardship
  - developing and implementing proactive planning and adaptation strategies to address emerging issues and cumulative effects (e.g., climate change, population growth)
  - integrating water stewardship and long-term sustainability into local government planning and development programs
  - continuing to ensure safe and secure drinking water sources through the ministry's source water protection program
  - ensuring well-managed and accessible water resources information to support science-based decision-making

## Performance Measure

### *Water quality trends in water bodies monitored under a federal/provincial agreement*

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Trends in environmentally significant variables indicating the health of 30 water bodies monitored under a federal/provincial agreement	Maintain or improve water quality trends for water bodies monitored under the federal/provincial agreement	96% of water bodies monitored under the federal/provincial agreement had maintained or improved water quality trends	—	Yes
<b>Benchmark/Explanatory Information:</b>	<p>In 2004/05, 96% of the monitoring stations in the 30 water bodies have stable or improving water quality trends. In 2003/04 and 2002/03, 90% of the monitoring stations in the 30 water bodies had stable or improving water quality trends. (Source: Ministry of Environment.)</p> <p>In addition to the 30 water bodies used to report water quality trends, the ministry uses water quality data from approximately 150 other community-based stations on other water bodies. By comparison, Ontario's water quality monitoring network has 390 monitoring stations operated in partnership with 30 conservation authorities. In 2000, Ontario had approximately 240 locations and 19 conservation authority partners. Ontario's water quality monitoring network has been significantly improved as part of the government's commitment to having the best science to support protection decisions.</p>			

## Rationale for the Performance Measure

British Columbia has 25% of the flowing freshwater in Canada. Drinking water, water to support aquatic life, wildlife, recreation, and industry all rely on a high water quality. This is why ongoing monitoring, protection and management of these water sources are so important. This measure monitors trends in surface water quality based on the presence of environmentally significant variables, such as metals, nutrients, nitrate, pH, temperature, dissolved gases and flow. The results for this measure provide a good indication of the cumulative effects of stewardship and the programs and efforts to protect the province's water resources. This information helps inform authorizations for water use and helps to establish further water monitoring requirements.

While there are approximately 150 additional water monitoring stations in the province, an agreement has been signed with the federal government under a Canada – B.C. Water Quality Monitoring Agreement to analyze trends in 30 water bodies. The purpose of the agreement is to provide for the coordination and integration of Canada and B.C. surface water quality



monitoring activities to develop joint, cost-shared, comprehensive assessments of water quality. Water bodies included in the water quality trend analysis are identified in a three-year plan agreed to by Environment Canada and the ministry. To determine which water bodies are monitored under the agreement, the ministry bases its decisions on provincial coverage, water use, alternative monitoring agencies, such as regional districts, and events or issues near water bodies that may have negative consequences to the water quality of those water bodies.

### **Achievements and Key Issues**

The 2005/06 target was to maintain or improve water quality trends in 96% of the 30 water bodies monitored under the federal/provincial agreement. This target was met.

Water quality trends can be classed as decreasing, stable or not being at environmentally significant levels (i.e., higher than the B.C. Water Quality Guidelines, which provide the benchmarks for the assessment of water quality). All monitored water bodies maintained the quality they had in 2004. Currently, one monitored water body is experiencing an environmentally significant trend. Elk River contains levels of selenium higher than the selenium water quality guideline. This is due to expansion of nearby coal mining activities, which have selenium as a by-product. The guideline is being reviewed to ensure that it is equally applicable to both river and lake environments.

Gathering water quality data to find trends is a multi-step process. For each water quality monitoring station, data are collected every two weeks, or in some cases monthly, 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). Because the government does not expect to see changes in the data on a yearly basis, water quality interpreters within the federal and provincial government look at data from approximately six stations per year. Once data have been collected over a period of time, they can start looking for trends that show change in the water quality.

The accuracy of water quality data relies on accurate water sampling. Local residents living near the water bodies are well-trained by provincial or federal staff for sampling and professional safety. The water samplers are audited for technique and safety a minimum of once per year and twice if possible. Written reports on training are maintained. However, errors can still occur. Similarly, the data analysis relies upon the accuracy of the technology and interpretation of the data. These factors all represent a risk to the final analysis of water quality. Although risks cannot altogether be eliminated, updated training and technology mitigates some of the risk involved in determining water quality and approving water quality uses.

## **Future Direction**

As discussed above, the results reported for this measure are for those water bodies monitored under the federal/provincial agreement. The ministry is in the process of expanding its monitoring program of water bodies for water quality trends. Planning is underway to increase the number of monitoring stations from 30 to 35. To ensure that resources are allocated where they are needed most, the ministry has suspended the operation of monitoring stations for stable water bodies. The ministry is planning to revisit these sites after five years to ensure that past results are still valid. However, this timing may vary, depending on interest in the particular watershed and activities that may occur near the water bodies.

## **Objective 2**

### ***Reduced contamination from toxins and wastes***

The disposal of toxins and wastes generated each year results in significant costs. These include financial costs associated with shutting down landfills and establishing new ones, dealing with the contamination of land, water and air, and addressing the impact on ecosystems and the health of citizens. By reducing contamination from toxins and wastes efficiently and effectively, the ministry will minimize impacts to water, land, air, human health and safety, and the economy.

## **Strategies**

Key strategies for this objective include:

- completing the 2005 Municipal Solid Waste (MSW) tracking report for baseline data
- creating a strategy to further reduce MSW such as diversion of demolition, land clearing and construction waste
- adding new products to the B.C. Recycling Regulation
- leading the development of a Brownfield<sup>9</sup> strategy for British Columbia
- updating the Hazardous Waste Regulation

## **Objective 3**

### ***Healthy air quality***

Protecting the quality of the air remains a key focus of the ministry. Healthy air quality means healthy people and a healthy environment. Taking action to reduce air pollution will help improve the health of British Columbians, preserve our environment and enhance our economic competitiveness.

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<sup>9</sup> Brownfields are idle or underused properties where past activities have caused environmental contamination but which, nevertheless, exhibit good potential for other uses and which provide economically viable business opportunities.

## Strategy

A key strategy for this objective includes:

- approving and implementing the Clean Air Strategy. The actions under this strategy include initiatives such as:
  - improving and increasing efforts to replace uncertified woodstoves with more efficient and approved clean-burning appliances
  - identifying and improving multi-agency collaborative initiatives that bring relevant regulatory authorities, program initiatives and human resources from all levels and parts of government together to address air quality issues
  - developing an Air Quality Health Index in collaboration with federal partners

## Performance Measure

### Air quality

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective for PM <sub>2.5</sub> and low level ozone	By 2010, 100% of communities monitored achieve, or continue to achieve, the CWS for PM <sub>2.5</sub> and low level ozone	PM <sub>2.5</sub> : 88% of communities (21 out of 24) achieved the CWS (based on 2003–2005 data)  Low level ozone: 95% of communities (22 out of 23) achieved the CWS (based on 2003–2005 data)	2010 target	2010 target
<b>Benchmark/Explanatory Information:</b>	Comparable data for previous years are: PM <sub>2.5</sub> : 88% in 2004 (14 out of 16 communities), 87% in 2003 (13 out of 15 communities), 91% in 2002 (10 out of 11 communities), 91% in 2001 (10 out of 11 communities), and 100% in 2000 (7 out of 7 communities). Low level ozone: 96% in 2004 (25 out of 26 communities), 95% in 2003 (21 out of 22 communities) and 100% in 2002 (21 out of 21 communities). <sup>1</sup>			

<sup>1</sup> The number of communities reported for PM<sub>2.5</sub> and low level ozone has generally increased over time. This is due to an increase in the number of monitored communities having sufficient data to generate the statistics needed to determine the CWS. The PM<sub>2.5</sub> measure is taken based on the most representative monitoring station, as selected by the regional air quality meteorologist. Similar methodologies have now been applied to the low level ozone performance measure calculation, which have resulted in a small (1%) change in the performance measure results cited for 2002, 2003 and 2004.

## Rationale for the Performance Measure

The outdoor air contaminants of most concern in British Columbia, from a human health perspective, are particulate matter (PM) and low level or ground level ozone.

Particles smaller than 2.5µm (PM<sub>2.5</sub>) are believed to pose the greatest health risk. These fine particulates, which are most often generated by combustion processes and chemical reactions that take place in the air, are easily inhaled and penetrate into the lungs, posing a threat to human health.

Although ozone in the stratosphere (the ozone layer) is beneficial and filters out harmful ultraviolet rays, ground level ozone is a pollutant and can be damaging to human health and the environment. Ground level ozone is also a major component of photochemical smog. Ground level ozone is a secondary pollutant, formed through chemical reactions involving nitrogen oxides (NOx) and volatile organic compounds (VOCs) in the presence of sunlight. Nitrogen oxides and VOCs are primarily emitted during the combustion of fuel, and VOCs from the evaporation of fuels, solvents, paints and dry-cleaning fluids, or from natural sources such as biogenic emissions from vegetation. Ground level ozone also occurs naturally and can come from downward mixing from the stratosphere to the troposphere, the layer of air we live in.

The ministry, in conjunction with regional districts and industry, collects PM<sub>2.5</sub> data from approximately 80 air quality monitoring sites from over 45 communities across the province, and ozone data from approximately 30 monitoring sites from over 25 communities. The percentage of monitored communities achieving the Canada-wide standard (CWS) for PM<sub>2.5</sub> of 30 µg/m<sup>3</sup> (24-hour average)<sup>10</sup> and the CWS for ozone of 65 parts per billion (ppb) (8-hour average)<sup>11</sup> have 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. As a greater number of communities meet the CWS, the better the air quality — and the cleaner and healthier the environment, which benefits British Columbians both today and in the future.

*The outdoor air contaminants of most concern in British Columbia, from a human health perspective, are particulate matter (PM) and low level or ground level ozone. Use of a performance measure that tracks how many communities achieve a Canada-wide standard for these contaminants helps the ministry determine how effectively it is achieving its objective of healthy air quality under Goal 1.*

## Achievements and Key Issues

The results in the performance measurement table refer to the percentage of monitored communities that achieve the specified air quality objective. The ministry continues to work toward meeting the target by 2010. Historically, sampling efforts tended to focus on those areas experiencing air quality problems related to particulate matter. More recently, the focus has been on community-based monitoring in populated areas. As such, trend

<sup>10</sup> Achievement is based on the annual 98th percentile value, averaged over three consecutive years.

<sup>11</sup> Achievement is based on the annual 4th highest daily maximum, averaged over three consecutive years.



results should be interpreted carefully to determine if trends reflect actual changes to air quality, changes in the monitoring network or other factors. Based on the last three years of data (2003 – 2005), the communities of Prince George, Golden and Bear Lake exceeded the CWS for  $PM_{2.5}$ , and Hope exceeded the CWS for ozone. Golden exceeded the CWS standard largely due to the wildfires in the summer of 2003, which had a major impact on air quality in many interior communities, including Kelowna and Kamloops.

In 2005/06, the ministry continued its efforts to support initiatives related to protecting or improving air quality in the province, including:

- providing funding and regional technical support for airshed activities in Port Alberni, the Sea-to-Sky airshed, Merritt, Kelowna, Golden, Quesnel, Williams Lake, Prince George and the Bulkley Valley-Lakes District
- continuing or initiating a number of technical studies to better inform air management decisions at the provincial or airshed level. These studies looked at:
  - chemical composition of airborne particles in Golden, Kelowna and Prince George as a first step to determining their sources
  - background levels of  $PM_{2.5}$  and ozone in the province
  - meteorology's role in degraded air quality
  - best management practices for land use near major roadways
- seeking stakeholder input on the development of new provincial ambient air quality objectives for  $PM_{2.5}$  and on the development of a provincial framework for airshed planning
- seeking further stakeholder input to finalize a guidance document to assist users of dispersion models
- conducting the first Canadian pilot study of the new health-based Air Quality Health Index in the following communities: Thompson and Okanagan Valleys, Vernon, Kelowna and Osoyoos and Kamloops. Partner agencies included the Ministry of Environment, Interior Health Authority, Health Canada and Environment Canada. Feedback is being used to run a province-wide pilot in 2006, which will be conducted in partnership with the Greater Vancouver Regional District.
- piloting a study examining the barriers, benefits and potential solutions around more efficient woodstove change-out programs in the Skeena Highway 16 corridor

The ministry also co-funded a number of events to share information on the effects of air pollution and actions to improve air quality, including the Fraser Basin Council's Clean Air Forum and Idle-Free BC Workshop, the BC Lung Association Air Quality and Health Workshop, and the Cowichan Green Community's Rural Air Quality Forum.

## **Future Direction**

The ministry is working closely with other jurisdictions through the Canadian Council of Ministers of the Environment (CCME) toward improved implementation of the CWS for both of these parameters. Cooperation with other jurisdictions is essential because air emissions and air quality are trans-boundary issues. The ministry continues to support local airshed planning efforts to improve local air quality, through technical expertise,

information-sharing, partnership-building and resources. Such efforts support the government’s priority for the “*best air quality.*” Between major metropolitan areas of similar size and population, Vancouver is ranked second in Canada with respect to its air quality. The government’s 2015/16 target for PM<sub>2.5</sub> concentrations in major metropolitan areas is to achieve first place.

## Objective 4

### *Effective responses to climate change*

Climate change is an issue that has both local and global significance. All jurisdictions, including British Columbia, have a role to play in reducing these emissions. B.C. is also seeing some amount of warming and climate-related impacts. The ministry is the lead agency for the provincial government’s response to climate change, which includes the reduction of provincial greenhouse emissions (“mitigation”), as well as preparation for climate change and related extreme weather (“adaptation”).

## Strategies

Key strategies for this objective include:

- leading B.C.’s response to climate change — coordinating and reporting on government implementation of *Weather, Climate and the Future: B.C.’s Plan*
- implementing climate change mitigation actions that are outlined in *Weather, Climate and the Future: B.C.’s Plan*
- implementing climate change adaptation actions that are outlined in *Weather, Climate and the Future: B.C.’s Plan*

## Performance Measure

### *Greenhouse gas emissions*

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Per capita greenhouse gas (GHG) emissions relative to other provinces	Maintain or improve on ranking	3rd lowest emissions per capita in Canada (based on 2003 data)	—	Yes
<b>Benchmark/Explanatory Information:</b>	Data for 2004 will be available later in 2006. For 2003, 2002 and 2001, B.C. had the 3rd lowest per capita greenhouse gas emissions behind Prince Edward Island and Quebec. (Source: Environment Canada. <i>Canada’s Greenhouse Gas Inventory 1990–2003</i> ). B.C.’s two largest GHG contributors are transportation (38.2%) <sup>1</sup> and stationary sources (31.7%). <sup>2</sup>			

<sup>1</sup> Transportation sources include those from domestic aviation, road transportation (various types and variously fueled vehicles), railways, domestic marine traffic and off road travel. The 38.2% figure does not include pipelines.

<sup>2</sup> Stationary sources are defined as those originating from electricity and heat generation, fossil fuel industries, mining, manufacturing industries, construction, commercial and institutional, residential, and stationary agriculture and forestry sources.

## Rationale for the Performance Measure

Elevated levels of greenhouse gas (GHG) in the atmosphere are causing changes to global climates and 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 the impacts.

The ministry continues to use this performance measure of “Per capita greenhouse gas (GHG) emissions relative to other provinces.” It is more appropriate than a measure of total GHG emissions in British Columbia because 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. The target of maintaining or improving on the province’s current ranking of third lowest emissions per capita in Canada reflects British Columbia’s commitment to keeping pace with, or exceeding, the national effort to reduce greenhouse gas emissions. However, to combat the negative effects of GHG emissions and to ensure B.C. has the best air quality, it is necessary to improve on the current ranking. Less GHG emissions mean better environmental quality and ultimately a higher quality of life for British Columbians.

## Achievements and Key Issues

The target was met. Figure 2 shows that British Columbia continues to maintain its ranking of third lowest GHG emissions per capita compared to other provinces (based on 2003 data).<sup>12</sup>

In May 2006, the ministry received data from Environment Canada that reflects greenhouse gas emissions data for the period 1990 to 2004. These data indicate a new ranking of second place for B.C., relative to the greenhouse gas emissions of other provinces. However, this report included a number of significant changes to the methodology under which GHG inventories are prepared. Consequently, GHG emissions for each province for the period from 1990 to 2004 have been reassessed. This may have implications for B.C.’s ranking. Although these new data are now available to the ministry for analysis, the process of drawing conclusions is not yet complete. This information will be included in the next service plan.

*British Columbia has maintained its ranking of third lowest greenhouse gas (GHG) emissions compared to other provinces, an achievement that furthers the government’s goals for exemplary air quality and healthy living. However, addressing climate change requires the continued efforts of government, industry and citizens.*

The ministry continues to work hard to achieve the objectives set out in the government’s *Weather, Climate and the Future: B.C.’s Plan*.<sup>13</sup> This plan responds to and protects the

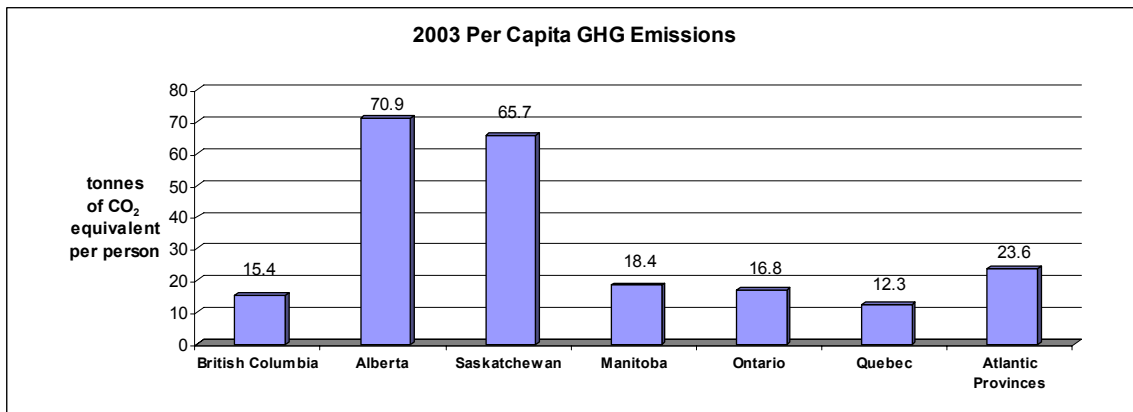
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<sup>12</sup> Environment Canada. *Monitoring, Accounting and Reporting on Greenhouse Gases*. Available at [http://www.ec.gc.ca/pdb/ghg/ghg\\_home\\_e.cfm](http://www.ec.gc.ca/pdb/ghg/ghg_home_e.cfm).

<sup>13</sup> B.C. Ministry of Water, Land and Air Protection. *Weather, Climate and the Future: B.C.’s Plan*. December 2004. Available at <http://www.env.gov.bc.ca/air/climate>.

interests of British Columbia. It builds upon the significant investments already made in clean energy, infrastructure and forestry and is accompanied by actions already underway to adapt to challenges presented by the mountain pine beetle, forest fires and drought. The list of 40 actions contained in the plan is supported by specific emissions and targets for agriculture, buildings, government operations and other sectors. While government plays an important role in the development of policy options, industry sectors have a more direct role in making business decisions that can help mitigate climate change. Addressing climate change is a joint effort that requires the involvement of all stakeholders.

**Figure 2.** *Per capita greenhouse gas emissions by province*



## Future Direction

Ongoing efforts coupled with new initiatives by several provincial agencies, and by numerous other provincial stakeholders, will continue to mitigate greenhouse gas emissions and manage the risks associated with climate change impacts. For example, the Province of British Columbia has invested \$4.4 million in clean energy and fuel cell research in the past two years to promote the development of clean energy.

Other Canadian jurisdictions provide good points of comparison against which B.C. can be compared. However, GHG emissions know no boundaries. British Columbia's performance against other jurisdictions of geographic proximity such as Washington State and Oregon can provide insight into how well B.C. is doing in regard to its GHG emissions. For example, B.C. currently produces more GHG emissions per capita than Oregon, but less than Washington State. Because the government's strategic plan states a 2015/16 target that calls for an improvement in B.C.'s ranking, it may be appropriate for B.C. to be evaluated against better performing jurisdictions (i.e., jurisdictions with lower GHG emissions per capita), such as Quebec and the state of Oregon.

## **Objective 5**

### ***Effective management of environmental risks***

Activities and events that occur in the environment, such as oil spills and flooding, can present risks to public health and safety, property and the environment itself. Although not all environmental risks are avoidable, effective management means that impacts from risks can be minimized. The ministry anticipates, responds to and manages the consequences of risks to the environment.

### **Strategies**

Key strategies for this objective include:

- responding effectively to high risk environmental emergencies such as oil spills, hazardous material spills and gas leaks
- developing a strategy to enhance partnerships for environmental stewardship in spill responses
- reducing the risk to public safety through effective flood hazard management (working with local governments), drought management and dam safety programs

## **Goal 2**

### ***Healthy and diverse native species and ecosystems***

Healthy and diverse native species and ecosystems provide significant environmental, social and economic benefits to British Columbia and its people. To achieve this goal, the ministry develops, manages, regulates and enforces environmental programs and legislation that contribute significantly to ensuring the health and diversity of native species and ecosystems.

**Core business areas: Environmental Stewardship, Oceans and Marine Fisheries and Compliance.**

## **Objective 1**

### ***Well-managed and accessible information on species and ecosystems***

The collection, storage, management and distribution of scientific information on native species and ecosystems provides for effective research, contributes to the understanding of the status of native species and ecosystems and is critical to making informed decisions.

### **Strategies**

Key strategies for this objective include:

- compiling, consolidating, analyzing and distributing information on species and ecosystems
- providing the conservation status of species and ecosystems
- providing guidelines and standards for the protection and conservation of species and ecosystems, including monitoring and reporting on achievements

## Objective 2

### *Well-maintained parks and protected lands*

Parks and protected lands have great conservation value and provide a place for native species to exist in their natural environment. The designation of parks and protected lands means these areas will be preserved for future generations and demonstrates British Columbia's commitment to the conservation of native species and ecosystems.

### Strategies

Key strategies for this objective include:

- continuing to identify, design, designate and secure parks and protected lands
- undertaking parks and protected lands planning and management to ensure long-term conservation
- maintaining and promoting partnerships for securing and managing parks and protected lands

*The objectives and performance measure under Goal 2 are aimed at protecting native species and ecosystems while providing opportunities for people to enjoy B.C.'s natural places. Ministry progress in this area will determine how well it fulfills the government's goals of managing the environment sustainably, ensuring healthy living and generating employment for British Columbians. However, the ministry is not solely responsible for achieving these goals. Communities, industries and individuals must play a collaborative role.*

## Objective 3

### *Protected, maintained and restored native species and ecosystems*

British Columbia is home to a rich diversity and abundance of native species and habitats. Programs within the ministry conserve biodiversity, maintain and enhance native ecosystems and achieve a balance between the needs of wildlife and the needs of the people. The ministry encourages others to accept a greater role in environmental stewardship and facilitates community initiatives to protect and restore local environments.

### Strategies

Key strategies for this objective include:

- improving cumulative impact assessment processes<sup>14</sup>
- continuing to work with and expand partnerships, including those with First Nations, to identify, protect and restore species and ecosystems
- developing a responsive resource assessment and management strategy that builds capacity to manage fish and wildlife populations and ecosystems
- developing guidelines and standards for protection and conservation of species and ecosystems

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<sup>14</sup> An approach where all activities occurring on the land base are studied and the overall impact is determined.

- developing and implementing an enhanced legal and policy framework and regional-based planning programs
- providing scientific advice to decision-makers and implementers of resource use policies and land use planning
- providing leadership in species at risk ranking and designation, and preparing and implementing recovery plans
- developing and implementing a provincial policy that balances water flow requirements for species, ecosystems, communities and industrial needs
- leading, in collaboration with the federal government, the development of a marine protected area system for the Pacific coast

## Performance Measure

### *Number of completed designations under the Forest and Range Practices Act*

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Number of completed designations by the Ministry of Environment under the <i>Forest and Range Practices Act</i> , including Wildlife Habitat Areas, Ungulate Winter Ranges, and Fisheries Sensitive Watersheds	An additional 30 WHA and 15 UWR designations approved	94 approved WHAs (10,125 hectares) 7 approved UWRs* (373,890 hectares)	64 more WHAs approved than targeted 8 less UWRs approved than targeted	WHA target exceeded UWR target not met
<b>Benchmark/Explanatory Information:</b>	<p>As of March 31/05, there were 320 Wildlife Habitat Area (WHA) designations approved (covering 658,935 hectares) and 28 Ungulate Winter Range (UWR) * designations approved (covering 2,284,917 hectares). The baseline for Fisheries Sensitive Watersheds (FSW) will be established at year-end 2005/06. As of March 31, 2004, there were 160 WHA designations approved (covering 49,120 hectares) and 15 UWR designations approved (covering 913,462 hectares). As of March 31, 2003, there were 129 WHA designations approved (covering 44,233 hectares) and no UWR designations approved. (Source: Ministry of Environment.)</p> <p>* Specifies the number of UWR packages; each package may have as few as 1 to more than 1,000 winter ranges. Thus, when monitoring progress in this area, it is important also to consider the amount of area designated.</p>			

## Rationale for the Performance Measure

Designations under the *Forest and Range Practices Act* (FRPA) provide special management for species impacted by forest and range activities on Crown land. These designations provide legislated protection for habitats and contribute significantly to the conservation of native species.

Because the FRPA is a critical piece of legislation for protecting and restoring species and their habitats, it is important to measure ministry progress in establishing environmental standards under the FRPA. The ministry is assessing its progress by monitoring the number of legal designations for Wildlife Habitat Areas (WHA), Ungulate Winter Ranges (UWR) and, starting in 2006/07, Fisheries Sensitive Watersheds (FSW).<sup>15</sup> FSW designations will provide valuable protection to fish in some of B.C.'s watersheds that are most sensitive to forest and range activities.

## Achievements and Key Issues

In 2005/06, an additional 94 WHAs were designated for a total of 414 (covering 668,424 hectares), exceeding the target of an additional 30 designations. As well, 7 UWRs were designated for a total of 35 UWRs (covering 2,658,725 hectares). The target for UWRs was not achieved largely because of delays in consultation. A number of the plans scheduled for 2005/06 will be considered for approval early in the 2006/07 fiscal year, which should put the ministry back on track to meet its target for this performance measure.



A risk to achieving the ministry's target is the level of funding available for these designations. Targets are based on expected levels of funding from the Forest Investment Account and other funding sources, and provide only a count of the number of designations. The size of the designations will vary depending on the species involved.

In addition, 17 FSWs were designated under the FRPA. These values were not included in the 2005/06 targets; however, they will provide a benchmark for 2006/07.

## 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 designations are established, the ministry's focus will be on monitoring and reporting.

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<sup>15</sup> For more information, see the B.C. Ministry of Environment, Environment Stewardship Division, Fisheries Sensitive Watersheds at <http://www.env.gov.bc.ca/wld/fsw/>.



## Goal 3

### *British Columbians understand that they share responsibility for the environment*

Environmental sustainability can neither be created by governments nor imposed by public policy. It depends on the collective knowledge, commitment and actions of individuals, organizations, communities and all levels of government as a whole. Achievement of this goal requires strong and expanded partnerships with industry and stakeholders, and an environmentally conscious and knowledgeable public. Having a society in which individuals act as stewards by considering the environmental impacts of their individual and collective actions will be a great step toward sustainability.

**Core business areas: Environmental Stewardship, Water Stewardship, Environmental Protection, Oceans and Marine Fisheries, Compliance, Executive and Support Services.**

### Performance Measure

#### *Municipal solid waste disposal*

Performance Measure	2006/07 Target	2006/07 Actual	Variance	Target Met?
Municipal solid waste (MSW) disposal (kilograms/capita)	Baseline data to be collected for the 2005 MSW tracking report	N/A — New performance measure — to be reported on in the 2006/07 Annual Service Plan Report	N/A	N/A

### Rationale for the Performance Measure

This is a new performance measure as of February 2006. Municipal solid waste (MSW) disposal is a goal level performance measure that demonstrates the commitment by businesses and the public to reduce their impacts on the environment. In 2006/07, activities will include collecting data for the 2005/06 baseline, and scoping and analysis to determine achievable targets for inclusion in future service plans.

*Goal 3 galvanizes the ministry's vision for a clean, healthy and naturally diverse environment. A new goal level performance measure underscores the commitment by government, industry and the public to take greater responsibility for protecting the environment. Other objectives and performance measures for this goal promote shared stewardship, strong partnerships with First Nations and good environmental management practices.*

## **Objective 1**

### ***British Columbians understand the benefits of healthy living and the effect of their actions on the environment***

In order for a society to become environmentally conscious, its citizens must understand the relationship between their actions and how those actions directly impact their health, the quality of their lives, and the lives of other people and species with which they share ecosystems. As British Columbians continue to make the connection between actions and impacts, they are much more likely to take on the role of stewards and demand a much higher environmental standard for their own actions and those of others.

## **Strategy**

A key strategy for this objective includes:

- exploring and developing a comprehensive and integrated ministry stewardship outreach strategy

## **Objective 2**

### ***Shared stewardship***

Public and stakeholder expectations of meaningful involvement in decision-making and in sharing responsibility for environmental outcomes continue to be a force for change in the way the ministry does its business. The ministry recognizes that a successful shared stewardship model needs to integrate cooperative and collaborative partnerships across all sectors and geographic jurisdictions. Necessary tools include sharing information and knowledge, consultation and partnering opportunities.

## **Strategies**

Key strategies for this objective include:

- effectively communicating and sharing knowledge through consultative processes that engage stakeholders
- enhancing and promoting shared stewardship through partnership and volunteer programs, environmental awards and the creation of a stewardship network
- designing and developing legislation, regulations, policies and guidelines that are publicly accessible, consultation driven and client focused
- promoting collaborative management and decision-making processes for resource use
- pursuing opportunities for the Conservation Officer Service to provide compliance and enforcement activities through partnerships with other agencies

## Performance Measure

### *Number of partnerships with First Nations*

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Number of Collaborative Management Agreements and Regional Fish and Wildlife Advisory Processes with First Nations	2 new Collaborative Management Agreements or Official Wildlife Processes per year	2 agreements negotiated and signed	—	Yes
<b>Benchmark/Explanatory Information:</b>	There were 20 Collaborative Management Agreements in place with First Nations as of year end 2005/06. As of 2004/05, there were 15 Parks Collaborative Management Agreements and 5 Regional Fish and Wildlife Advisory Processes. In 2003/04, there were 14 Parks Collaborative Management Agreements and 2 Official Wildlife Processes with First Nations. In 2002/03, there were 12 Parks Collaborative Management Agreements and 2 Official Wildlife Processes with First Nations. (Source: Ministry of Environment.) Currently, 115 of 198 bands (representing 58% of British Columbia's First Nations bands) are engaged in Parks Collaborative Management Agreements and/or Regional Fish and Wildlife Advisory Processes with the ministry.			

## Rationale for the Performance Measure

Partnerships are an important mechanism for a shared-stewardship approach to protecting the environment and fish and wildlife. The ministry has developed this measure to monitor its progress in developing partnerships with First Nations that help build government-to-government relationships between First Nations and the ministry.

Parks Collaborative Management Agreements with First Nations define how the province and First Nations will work together to manage B.C.'s parks and protected areas. Parks Collaborative Management Agreements can be developed at the request of First Nations who are interested in taking a more active role in the management of B.C. parks and protected areas. These agreements may also be developed as part of treaty negotiations or other First Nation-related provincial initiatives, or as part of the creation of new protected areas under land use plans.

Regional Fish and Wildlife Advisory Processes typically include the participation of a number of First Nations who work with the ministry on a government-to-government basis to address issues of mutual interest relating to the collaborative management of fish and wildlife. This measure was slightly changed between the September 2005/06 – 2007/08 Service Plan Update and the February 2006/07 – 2008/09 Service Plan. “Official Wildlife Processes” are now referred to as “Regional Fish and Wildlife Advisory Processes.”

## Achievements and Key Issues

The target has been met. Two Fish and Wildlife Advisory Process negotiations were formally signed off and one Parks Collaborative Management Agreement has been finalized and is being signed in May 2006. This additional agreement will bring the total number of Collaborative Management Agreements in place to 21, with another 25 Collaborative Management Agreements in draft stage.

The ministry has initiated negotiations with several First Nations on new Collaborative Management Agreements, and has continued negotiations on the development of numerous additional potential agreements. It is important to note that in some of these cases the negotiations surrounding Collaborative

Management Agreements are time consuming and require a great deal of communication on the part of both the ministry and First Nations on a number of sensitive issues. As a result, the sign-off on some agreements takes much longer than originally anticipated. In addition, in some areas of the province, the ministry and First Nations are communicating about fish and wildlife issues in a new way that focuses on areas of mutual interest rather than on individualized positions. In these cases, the actual negotiation process is a vital part of the relationship-building process that is almost as important as a signed agreement itself.

*Progress on negotiating Collaborative Management Agreements and Regional Fish Advisory Processes depends on the ministry's ability to respond and adapt to client needs. This key ministry value is enabling the ministry to build new relationships with First Nations and informs its approach to negotiation with these important partners.*

## Future Direction

The ministry has reviewed the current process for initiating and establishing Fish and Wildlife Advisory Processes and is in the process of formalizing recommendations for the development and implementation of new agreements. The ministry is also reviewing its signed Parks Collaborative Management Agreements to determine gaps and address emerging issues of concern for First Nations and regions.

The ministry may consider establishing new targets for the measure of these advisory processes.

## Objective 3

### ***Industry and client groups are knowledgeable and implement best environmental management practices***

British Columbia continues to enjoy expanding economic opportunities. More and more, industry, organizations and other ministry client groups understand the benefits of incorporating environmental values and best practices into their decision-making processes and activities. Good environmental management practices not only protect the environment, and greatly reduce costs (e.g., use resources and energy more efficiently, reduce waste and reduce discards in marine fisheries), they also set the foundation for good corporate citizenship.

## Strategies

Key strategies for this objective include:

- developing stewardship programs to mitigate environmental impact from product production to disposal
- providing resource information to facilitate shared responsibility and partnerships
- encouraging compliance by reporting those in non-compliance and those exceeding environmental standards

## Performance Measure

### *Industry-led product stewardship*

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Number of product categories with industry-led product stewardship programs	1 additional product category	2 additional product categories added to the B.C. Recycling Regulation; stewardship programs under development	—	On track
<b>Benchmark/Explanatory Information:</b>	<p>British Columbia is a recognized leader in industry product stewardship with 9 product categories under the B.C. Recycling Regulation: beverage containers; solvent and flammable liquids; paints; pesticides; gasoline; pharmaceuticals; oil products, filters and containers; electronic products; and tires.</p> <p>Ontario and other provinces operate product stewardship programs although the governance of these programs differs from B.C. Ontario's "Blue Box" program includes the collection of beverage containers. Pesticides are managed under the <i>Pesticide Act</i> and oil, tires and electronic waste are included in the <i>Waste Diversion Act</i> — these products have no approved stewardship programs to date.</p>			

## Rationale for the Performance Measure

Under industry product stewardship, manufacturers of products listed under the B.C. Recycling Regulation are responsible for end-of-life product management. Manufacturers submit stewardship plans that outline the collection and management of their products in accordance with the pollution prevention hierarchy.<sup>16</sup> These product management techniques result in reduced contaminants discharged to the environment, conservation of resources and reduced waste. Consumers, although not required to, are expected to return used products to collection stations.

<sup>16</sup> Pollution prevention hierarchy — in descending order or priority: reduce the environmental impact of producing the product by eliminating toxic components and increasing energy and resource efficiency; redesign the product to improve reusability or recyclability; eliminate or reduce the generation of unused portions of a product that is consumable; reuse the product; recycle the product; recover material or energy from the product; otherwise dispose of the waste from the product in compliance with the *Environmental Management Act*.

For these reasons, the ministry is using the number of product categories with industry product stewardship programs as a measure of the above objective. Producers must have approved product stewardship plans that require the following: at least 75% recovery rates or meet alternative product-specific performance requirements; product management in accordance with the pollution prevention hierarchy; and reports on efforts to eliminate or reduce environmental impacts throughout the product life cycle. To meet these requirements, industry must become knowledgeable about the life cycle of its product(s) and use best management practices. Since most, if not all, programs are funded by fees collected at the retail level, consumers will become more aware of the impacts a product, container or residual has on the environment. This is, therefore, a reasonable indicator of success in meeting the objective. Industry must understand the potential impacts a product has on the environment, the most efficient collection systems and environmentally appropriate end-of-life management. Consumers potentially become more knowledgeable about the products they use either through collection and residual management protocols and/or cost to support stewardship programs.

### **Achievements and Key Issues**

In 2005/06, two additional product categories were added to the B.C. Recycling Regulation. The stewardship programs for these categories, electronics and tires, are currently under development in accordance with the regulation. The tire program is scheduled to be implemented in late 2006/07 and the electronics program is scheduled to be implemented in early 2007/08.

Two risks to using product stewardship programs as a measure of success are the level of uncertainty in producers complying with the regulation and consumer awareness of the stewardship programs. The ministry puts the onus on producers to develop and implement stewardship plans and relies on consumers to take used products to collection sites. These risks are somewhat mitigated in two ways: (1) if a stewardship plan is not submitted by producers, the regulation will prescribe stewardship program requirements, and (2) stewardship plans are required to provide consumer information to increase consumer awareness.

### **Future Direction**

The beverage container program will be reviewed in 2006/07. Beverage containers used to be regulated under the Beverage Container Recycling Regulation. This regulation has now been repealed. Beverage containers are now listed under the B.C. Recycling Regulation. Because of this, three beverage container stewardship plans that were previously approved under the now-repealed Beverage Container Recycling Regulation will be reviewed in 2006/07, resulting in the potential approval of the plans under the B.C. Recycling Regulation. Similarly, three stewardship plans previously approved under the Residuals Regulation (which has also been repealed) will be submitted by manufacturers by October 2006 and will require ministry review. The ministry will also work with the appropriate stewardship agencies for electronic products and tires on the development, consultation and approval of stewardship plans. Finally, in 2006/07, the ministry intends to develop a prioritized list of future product categories to add to the B.C. Recycling Regulation

in consultation with provincial stakeholders and in collaboration with other provinces and the federal government in a task group formed by the Canadian Council of Ministers of the Environment (CCME).

The current performance measure indicates the number of product categories with industry product stewardship programs. The ministry will be reviewing this performance measure and may modify it to include the number of product categories either regulated or with programs implemented. This will reflect the time between adding a new product to the regulation and the date, up to 18 months later, when the stewardship program is actually implemented.

## Goal 4

### *Sustainable use of British Columbia's environmental resources*

British Columbia's environment provides benefits to its citizens and visitors in a variety of ways. Sustainable use of British Columbia's environmental resources promotes job creation, and contributes significantly to the quality of life of residents and visitors. Sustainable use means that resources are used in ways that ensure their continued availability today and for generations to come.

**Core business areas: Environmental Stewardship, Water Stewardship, Environmental Protection, Oceans and Marine Fisheries and Compliance.**

### Objective 1

#### *Sustainable use and continued benefits of water and air*

British Columbia's water and air resources sustain a full range of economic, community and ecosystem needs. Understanding the important benefits that these resources provide, the ministry ensures wise and prudent management of our water and air resources will continue to provide benefits to British Columbians in the future.

*British Columbia's environmental resources require careful management. The objectives and performance measures for Goal 4 reflect the government's goals of sustainable environmental management, healthy living and job creation. Two new performance measures for this goal reflect the ministry's expanded responsibilities in the areas of water stewardship and oceans and marine fisheries, and will track its progress in optimizing water use and access to marine resources.*

### Strategies

Key strategies for this objective include:

- seeking public consensus on a new water allocation model
- exploring shared governance frameworks to promote increased community and stakeholder involvement at the local level
- modifying and streamlining the *Water Act* and related legislation
- valuing water appropriately by recognizing its full range of benefits
- continuing to promote water conservation and demand-side management measures

- continuing to ensure timely response to water licence applications to support economic development
- promoting and facilitating multi-stakeholder airshed and watershed management plans

## Performance Measure

### *Number of water management plans completed and implemented*

Performance Measure	2006/07 Target	2005/06 Actual	Variance	Target Met?
Number of water or watershed management plans completed and implemented	Increase the total number of completed plans to 6 by 2010 2 additional plans completed by 2007/08 and 3 additional plans completed by 2009/10	N/A — New performance measure — to be reported on in the 2006/07 Annual Service Plan Report	N/A	N/A
<b>Benchmark/Explanatory Information:</b>	As of June 2004, one watershed plan (Trepanier Creek Watershed Plan) has been completed.			

## Rationale for the Performance Measure

This is a new performance measure as of February 2006. Water or watershed management plans are undertaken to coordinate development and management of water, land and related resources to optimize the benefits and sustainability of the community, economy and environment. These plans serve as a valuable tool to address conflicts between water users and in-stream flow requirements, risks to water quality and aquatic ecosystems, concerns about land use and other issues. The water management plan performance measure assesses both the number of water management plans designated under the *Water Act* and plans with no statutory basis. The province will seek to promote and facilitate the completion and implementation of water management plans over the coming years as an important part of its goal to sustain British Columbia's water resources.



## Objective 2

### *Optimized public, outdoor and commercial opportunities from British Columbia's parks, fish and wildlife*

British Columbia's parks, fish and wildlife provide a variety of unique outdoor opportunities for residents and visitors in the form of recreation, camping, angling, hunting and wildlife viewing. The use of these resources by British Columbians and visitors to the province promotes healthy living and an appreciation of B.C.'s landscape, native species and the environment as a whole. The use of campgrounds and purchase of angling and hunting licences contributes to the maintenance and infrastructure of our natural places and to environmental protection and management activities. Several commercial organizations also use these resources, attracting visitors from around the world. This creates jobs within B.C. and contributes significantly to the province's economy. Effective management and use of these resources will ensure their sustainability and promote economic opportunities.



## Strategies

Key strategies for this objective include:

- providing outstanding hunting, angling and wildlife viewing opportunities
- developing and implementing outdoor activities and commercial opportunities that reflect client preferences
- maximizing opportunities for partnerships with First Nations, local communities, non-profit groups and private land owners
- developing and implementing marketing strategies to promote healthy living through park visitation

## Performance Measure

### *Number of recorded park visits and visitor satisfaction rate*

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Number of recorded park visits and visitor satisfaction rate	Increase the number of recorded visits to B.C. parks by 20% by 2010 (baseline in 2004/05)  Maintain or improve on parks satisfaction survey results based on a 5-year rolling average (80%)	Recorded visits to B.C. parks — 18.0 million  Visitor satisfaction rate — 81%	2010 target  +1%	2010 target  Yes
<b>Benchmark/Explanatory Information:</b>	Recorded park visits: The number of recorded visits to B.C. parks was approximately 18.3 million in 2004/05, 19.0 million in 2003 and approximately 22.6 million in 2002. (Source: Ministry of Environment.)  Visitor satisfaction rate: The five-year rolling average for 2004/2005 was approximately 80%, which is based on the Visitor Satisfaction Index rating of the reporting years of 2000/01 to 2004/05. This has been consistent since 1998. (Source: Ministry of Environment.)			

## Rationale for the Performance Measure

Recreational services and opportunities provided in provincial parks make an important contribution to local economies, promote healthy living and support an appreciation for the environment by providing an undisturbed area to observe B.C. landscapes and native species. These public, outdoor and economic contributions are an important factor that the ministry considers when determining the level and types of park recreational services and opportunities to provide. A measure of these park contributions 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 these data should provide a reasonable indication of the trend in the public, outdoor and commercial opportunities from British Columbia's parks.

Additionally, the ministry is the largest supplier of overnight camping accommodation throughout British Columbia. Since 1985, the ministry has monitored the effectiveness of providing services in provincial park campgrounds by conducting an annual satisfaction survey with a random sample of park visitors in these campgrounds (See Appendix F for more information). The results of this survey are used by ministry staff and park facility operators to better assess what services are being provided well and what services require improvements.

In February 2006, the ministry combined two performance measures — the number of recorded visits to B.C. parks and the visitor satisfaction rate with parks and campground facilities. The combination of park visitations and the satisfaction of visitors provides a

measure of the contribution of recreational services and opportunities offered in provincial parks to the economy and human health, now and in the future.

## **Achievements and Key Issues**

**Number of park visits:** The ministry has conducted an extensive quality assurance review of the 2005 park visitation data. For 2005, the quality assurance process showed total recorded visits as 18.0 million. In 2005, camping attendance (which contributes approximately 12% to the total recorded visits) increased 3%; while day use (which contributes approximately 87% to the total recorded visits) declined 2%. Overall, the decline in total recorded visits was approximately 1.3%, significantly less than the decline from 2003 to 2004 of approximately 3.7%.

In an effort to achieve a 20% increase in attendance by 2010, BC Parks is undertaking a number of initiatives aimed at increasing attendance. These initiatives include developing a marketing plan, increasing awareness of the various recreational opportunities in parks, and increasing the range of recreational opportunities available. The ministry expects that these activities and other strategies currently under development will enable us to reach the 2010 performance target.

Over the past few years, the ministry has been streamlining how park recreation is provided. In 2002/03, changes in operational processes included changes to the sampling method used for collecting visitor data. Therefore, current data are not comparable to data reported from before these changes were implemented. The changes have resulted in a lower level of overall recorded visits. A new methodology for deriving data for identifying trends in park visitation from year to year is under development. (See Appendix F for more information about the methodology for this measure.)

**Park satisfaction survey results:** In 2005/06, the ministry's park visitor satisfaction index was 81%. The index of visitor satisfaction is an average provincial rating for five services: cleanliness of restrooms, cleanliness of grounds, condition of facilities, a sense of security and control of noise. The rating is based on responses of "excellent" and "above average."

The ministry's target of 80% for 2005/06 was met. One of the services that contributed to the slight increase in the overall index was an increase in the rating of cleanliness of restrooms from 71% in 04/05 to 75% in 05/06. Over the last 10 years, this service has been rated by many park visitors as being very important to their stay in the campground. The ratings for the other four services continued to be similar to the previous year.

The index of visitor satisfaction for the past 10 years is shown in Figure 3. In 2004/05, the index was increased from 75% in previous years to 80% in 2004/05 to reflect recent performance. The measure provides an indication of how effective service improvements have been throughout the past 10 years.

**Figure 3.** Visitor satisfaction index from 1996/07 to 2005/06



### Future Direction

To continue to meet the ministry’s target for visitor satisfaction rate and increase the number of visitors to provincial parks by 20% by 2010, the ministry will continue to upgrade facilities to ensure they are safe, clean and operational. Park facility operators will continue to concentrate on services that maintain and improve customer satisfaction, and the ministry will consider innovative ways to address changing demographics and camper demand for high quality recreational opportunities. Implementation of the government’s resort strategy and working with communities on the development of key parks and special tourism destinations is also expected to increase park visitation. All of these efforts will ensure that B.C.’s parks provide world class outdoor recreation opportunities and promote healthy living, particularly for visitors who will attend the 2010 Olympic and Paralympic Winter Games.

## Performance Measure

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

Performance Measure	2005/06 Target	2005/06 Actual	Variance	Target Met?
Number of basic hunting and angling licences sold	<p>Increase the number of basic hunting licences sold to 100,000 over the next 10 years (baseline in 2004/05)</p> <p>Increase the number of angling licences sold by 30% over the next 10 years (baseline in 2004/05)</p>	<p>Hunting — 83,701 resident 6,131 non-resident</p> <p>Angling — 247,789 resident 65,942 non-resident</p>	10-year target (2014/15)	10-year target (2014/15)
<b>Benchmark/Explanatory Information:</b>	<p>Hunting and angling licences sold: 2004/05: Hunting — 84,003 resident and 5,931 non-resident; Angling — 248,052 resident; and 68,328 non-resident. 2003/04: Hunting — 81,368 resident and 5,785 non-resident; Angling — 252,867 resident and 69,398 non-resident. 2002/03: Hunting — 85,714 resident and 6,234 non-resident; Angling — 275,430 resident and 79,772 non-resident. (Source: Ministry of Environment.)</p>			

## Rationale for the Performance Measure

Fish and wildlife recreational services and opportunities are important sources of regional tourism throughout the province. The 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 on the actual number of hunters and anglers benefiting from these opportunities in British Columbia. The trend in this data should provide a reasonable indication of any changes in the contribution resulting from fish and wildlife opportunities.

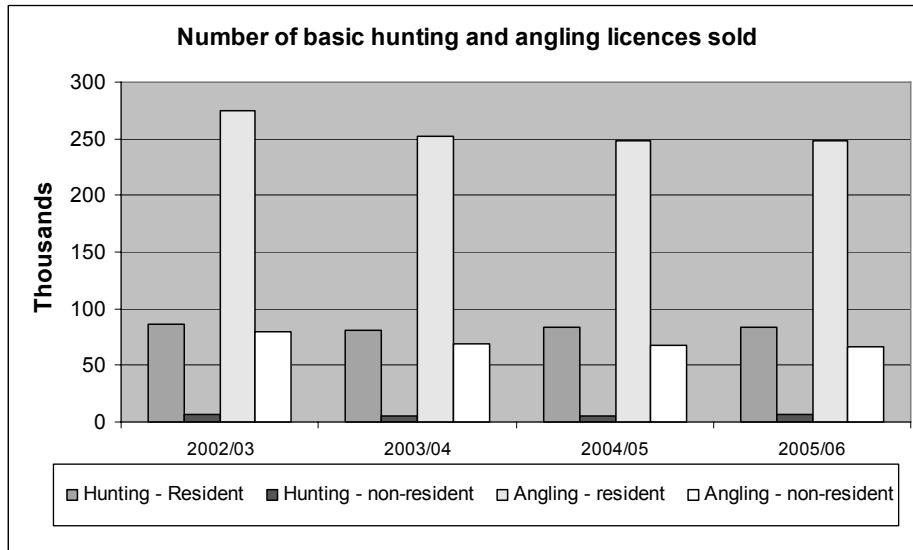
## Achievements and Key Issues

In 2005/06, a ministry focus was to ensure the continuance of healthy fish and wildlife populations, which included a number of wildlife inventory and fish stocking projects in every region of the province. Surveying and population modelling for big game species, as well as developing management strategies, were completed and will continue through 2006/07. In partnership with the Freshwater Fisheries Society of B.C., 6.8 million fish were released into 1,062 lakes and streams.

While the total number of basic hunting licenses sold in 2005/06 declined slightly from the previous year (see Figure 4), the number of non-resident basic hunting licenses increased from the previous year, and the number of resident basic hunting licenses declined. The number of angling licenses sold to both residents and non-residents declined slightly.

Licence fees were increased in the past few years as a response to the recommendations of the Recreation Stewardship Panel Report, which may be contributing to a short-term decline as residents and non-residents adjust to the new prices. Weather conditions over the last two summers may also be a contributing factor for the decline in the number of anglers.

**Figure 4.** Number of basic hunting and angling licenses sold from 2002/03 to 2005/06



### 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 has worked with BC Stats to develop an economic model for estimating economic contribution more directly. In 2003, resident and non-resident hunters, anglers and trappers contributed about \$161 million (0.13%) to the province’s Gross Domestic Product (GDP). These activities also generated employment for approximately 9,770 British Columbians. In the future, the ministry is considering including different performance measures to report on the contributions of hunters, anglers and trappers to the province’s GDP and employment. Possible measures are the percentage of the province’s GDP contributed by hunters, anglers and trappers, as well as the number of jobs dependent on hunting, angling and trapping activities.

### Objective 3

#### *Sustainable and collaborative management and use of marine and ocean resources*

British Columbia's marine and ocean resources provide great economic benefits to the citizens of the province. The ministry works in collaboration with the federal government to ensure British Columbia's interests are represented in the governance of ocean and marine resources and that these resources are managed in a sustainable manner.

#### Strategies

Key strategies for this objective include:

- identifying and advancing provincial objectives as they relate to ocean resources and their use
- influencing implementation of the federal Oceans Strategy on the Pacific coast
- ensuring that federal management and international relations reflect provincial objectives for marine fisheries
- representing B.C.'s interests to ensure the seafood sector's fair share of federal and cross government programs, initiatives and activities to promote research, exports and investment
- undertaking programs and strategies to enhance the competitiveness and sustainability of B.C.'s seafood products in domestic and export markets

#### Performance Measure

*Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process*

Performance Measure	2006/07 Target	2006/07 Actual	Variance	Target Met?
Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process	1 additional/year – 4 fisheries (total)	N/A — New performance measure — to be reported on in the 2006/07 Annual Service Plan Report	N/A	N/A
<b>Benchmark/Explanatory Information:</b>	The three fisheries managed through a collaborative decision-making process in the 2004/05 baseline data are hake, herring and tuna.			

## Rationale for the Performance Measure

This is a new performance measure as of February 2006. Economic sustainability is dependent on the level and certainty of access to resources. Measuring the increase in the number of B.C. marine fisheries that are managed collaboratively and include provincial government participation will determine if B.C.'s interests concerning fair allocation and certainty of access to resources are represented.

## Goal 5

### *A high performance organization*

A high performance organization is reflected in its leadership, people, corporate operating systems, culture and the services it provides. It is flexible, able to adapt to situations and events, and is responsive to the needs of its clients. A high performance organization provides a challenging and healthy working environment to staff, promotes learning and is committed to continuous improvement.

**Core business areas: Environmental Stewardship, Water Stewardship, Environmental Protection, Oceans and Marine Fisheries, Compliance and Executive and Support Services.**

### Objective 1

#### *A client-focused organization*

A client-focused organization strives to identify and develop ways to continuously improve client service. The ministry anticipates what its clients — the citizens, organizations and businesses of British Columbia — will need and how best to meet those needs through responsive staff, effective programs, policy, legislation, decision-making and timely information systems.

## Strategies

Key strategies for this objective include:

- fostering positive relationships with clients
- identifying and implementing continuous improvements to client business processes



*Success in fulfilling the ministry's mandate, achieving the government's goals and meeting client service needs depends on a high performance workforce. In the objectives and new performance measure for Goal 5, all of the ministry's values are reflected: responsive and adaptive service, professional objectivity, integrity, excellence through innovation and continuous learning, accountability, and the health and well-being of our staff.*



## Performance Measure

### *Changes in satisfaction of client groups*

Performance Measure	2006/07 Target	2006/07 Actual	Variance	Target Met?
Changes in satisfaction of client groups	Baseline data to be collected in 2006/07	N/A — New performance measure — to be reported on in the 2006/07 Annual Service Plan Report	N/A	N/A
<b>Benchmark/Explanatory Information:</b>	Currently, the ministry administers several client satisfaction surveys, including the parks satisfaction survey and hunter and angler satisfaction surveys. The survey intended to provide data for this measure will be in addition to the surveys currently administered by the ministry.			

## Rationale for the Performance Measure

This is a new performance measure as of February 2006. Ensuring client groups are satisfied with the services and working relationships with the ministry is important. Over the coming year, the ministry will be designing and administering a baseline survey of targeted clients. This baseline will provide a starting point from which changes in client satisfaction will be tracked over the coming years.

## Objective 2

### *A healthy working environment that motivates and supports staff, promotes innovation, and attracts and retains high performance employees*

The ministry strives to ensure that it is a sought-after, well-respected and innovative place to work. Recognizing that a challenging and balanced work environment is essential for good health and a productive workforce, the ministry recognizes staff for their contributions, supports their work with appropriate resources, and encourages professional development opportunities and health and wellness activities.

## Strategies

Key strategies for this objective include:

- updating and implementing the ministry's human resources strategy
- optimizing performance by providing developmental opportunities, recognition and reward initiatives
- advancing the development of a knowledgeable and skilled workforce
- fostering a supportive workplace culture through leadership, health promotion and social relationships

### **Objective 3**

#### ***A coordinated approach to legislation, policy, resource allocation and compliance***

Leadership and a coordinated approach to legislation and policy development, resource allocation and compliance and enforcement services is essential to ensuring cross ministry consistency, effective and efficient program delivery and the realization of ministry goals. The ministry works across core business areas to support goals and objectives, improve outcomes, identify risks and focus on ministry and government priorities.

### **Strategies**

Key strategies for this objective include:

- providing a legislative and policy framework that supports ministry goals
- leading and managing the deployment of effective and efficient shared services
- providing leadership and service in support of a strategic ministry compliance approach and maintaining strong and effective compliance and enforcement services

### **Objective 4**

#### ***An integrated approach to ministry planning, performance management and evaluation***

The ministry undertakes an integrated cross ministry approach to strategic, service and business planning, reporting, program evaluation and performance management, ensuring all planning activities reflect the ministry's goals and objectives.

### **Strategies**

Key strategies for this objective include:

- facilitating a strategic and integrated approach to ministry planning and performance management
- providing tools, guidelines, expertise and support for effective business planning and program evaluation

### **Objective 5**

#### ***Accurate, timely information***

The effective and efficient sharing of accurate, timely information is an essential component of a high performance organization. Well-managed, accurate and accessible information is critical to making informed environmental management decisions and meeting the service needs of British Columbians.

## Strategies

Key strategies for this objective include:

- developing information resources to produce optimum results
- pursuing opportunities to maximize the use of technology and best practices in the management of business applications and information resources

## Deregulation

The Ministry of Environment has undertaken significant deregulation and regulatory reform initiatives that aim to ensure British Columbia's regulatory climate enables strong economic growth while maintaining effective environmental standards.

Regulatory reform has been and will continue to be undertaken under each core business area as the Ministry of Environment pursues its shift from a prescriptive to a results-based approach to regulation. For example, the implementation of new regulations and codes of practice under the *Environmental Management Act* and *Integrated Pest Management Act* will reduce regulatory burden, clarify responsibilities and make more efficient use of ministry resources.

Another three-year plan for regulatory reform has been introduced by the government. The ministry will support this initiative by committing to controlling regulatory burden and improving regulatory quality. The cross government target of a zero per cent increase in regulations will be maintained through 2008/09. Over the next three years, the ministry will continue its review of legislation and regulations (e.g., the *Wildlife Act*) and look for opportunities that will shift the ministry's regulations to be more citizen-centred, cost effective, results-based and responsive to our clients by reducing and/or streamlining the steps or processes involved in complying with ministry regulations.

# Report on Resources

## Introduction

A results-based and accountable government requires ministries to disclose the impact of budgetary decisions on performance. Linking performance and financial information is both a key feature of sound management — reinforcing the connection between resources consumed and results achieved — and an effective way to present an informative perspective on ministry spending to the public.

The September 2005/06–2007/08 Service Plan Update presents the ministry’s performance plans — goals, objectives and strategies — and the resources that will be required to achieve the planned outcomes over three years. The following sections detail the fiscal performance of the ministry, providing an overview of ministry funding, reporting the resources consumed over the 2005/06 fiscal year and comparing actual expenditures against estimated expenditures.

## Overview

The ministry’s resources are dedicated to activities associated with protecting the environment, managing the province’s natural resources, promoting and supporting sustainability practices and promoting the understanding of, and compliance with, environmental regulatory requirements.

The ministry’s business model has been evolving and now places less emphasis on the administrative functions of service delivery and more on setting standards and encouraging and enabling others. Enabling partners to accept a greater role in environmental stewardship allows the ministry to focus its resources on key programs and activities, monitor for results and ensure government outcomes are realized.

## Efficiencies

The ministry supports government’s commitment to balanced budgets and continuous improvement. Programs and systems are evaluated regularly to determine where efficiencies can be made, while maintaining and enhancing program effectiveness and improving client service.

As a result of an internal business review, the ministry revised its administrative policy and process relating to permitting and authorizations for park, fish and wildlife activities. At the time of the review, 22 staff processed approximately 15,000 permits and commercial licences annually. The results of the review demonstrated that the system in place at the time — processing permits and commercial licences manually from regional offices — was inefficient, took staff time away from priority activities, was time consuming for the client, resulted in application inconsistencies, and produced inaccuracies in data collection.

The ministry centralized and streamlined the process through a one-stop web-based service, which currently employs 13 staff who process approximately 12,000 permits and licences annually. Most permits and licences are sent directly to clients' homes. Assistance, through government agent offices and FrontCounter BC, is also available to clients who are uncomfortable with computers. This streamlined system allows the ministry to track licences by region and identify outstanding fees owed. For example, in its first year of operation, the ministry was able to recover over \$50,000 in outstanding fees. Clients have reported that they are very satisfied with the new model.

Over the coming year, the ministry is planning to expand this service to enable clients to apply for, pay for, and receive their permits online.

## Ministry Funding

The total net funding available for ministry operations in fiscal year 2005/06 was \$180.62 million. This funding was derived from the following sources:

- Voted appropriation<sup>17</sup> — this is the largest source of ministry funding, which provided \$134.38 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* (i.e., surcharges collected on products that cause a problem to the environment, such as children's disposable diapers, and are used for environmental protection programs). This funding source provided \$35.71 million.
- Other authorizations — Contingency Funding (all ministries) and the New Programs Vote provided \$10.53 million.

Other funding sources available to the ministry for operational expenses not summarized above include:

- Internal recoveries — Recoveries within the government reporting entity, excluding the Sustainable Environment Fund, are estimated at \$3.49 million. Internal recoveries include recoveries from other provincial government ministries, such as programs funded under the Ministry of Health's ActNow BC program and the Forest Investment Account. Actual internal recoveries for the year were \$5.46 million.
- External recoveries — Recoveries from outside the Consolidated Revenue fund were estimated at \$10.30 million. External recoveries include recoveries from within the government reporting entity, such as government corporations, and funds outside the government reporting entity, such as other levels of government and private corporations. Actual external recoveries were \$9.06 million.

## Ministry Expense by Goal

Resources, strategies and results are linked to goals and objectives in the ministry's service plan. Each core business area has responsibility for undertaking specific strategies and achieving specific results under each goal and objective. As a result, core business

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<sup>17</sup> Voted appropriation — the *Supply Act* as represented in the estimates.

area responsibilities and resources are integrated across ministry goals and objectives. This cross ministry approach is an effective business model and has enhanced cross ministry communication, planning and decision-making. Appendix G presents an example of the linkages between goal, objectives, strategies, performance results and core business areas. A portion of each core business area funding is linked to specific strategies.

**Ministry Expense (see Figure 5)**

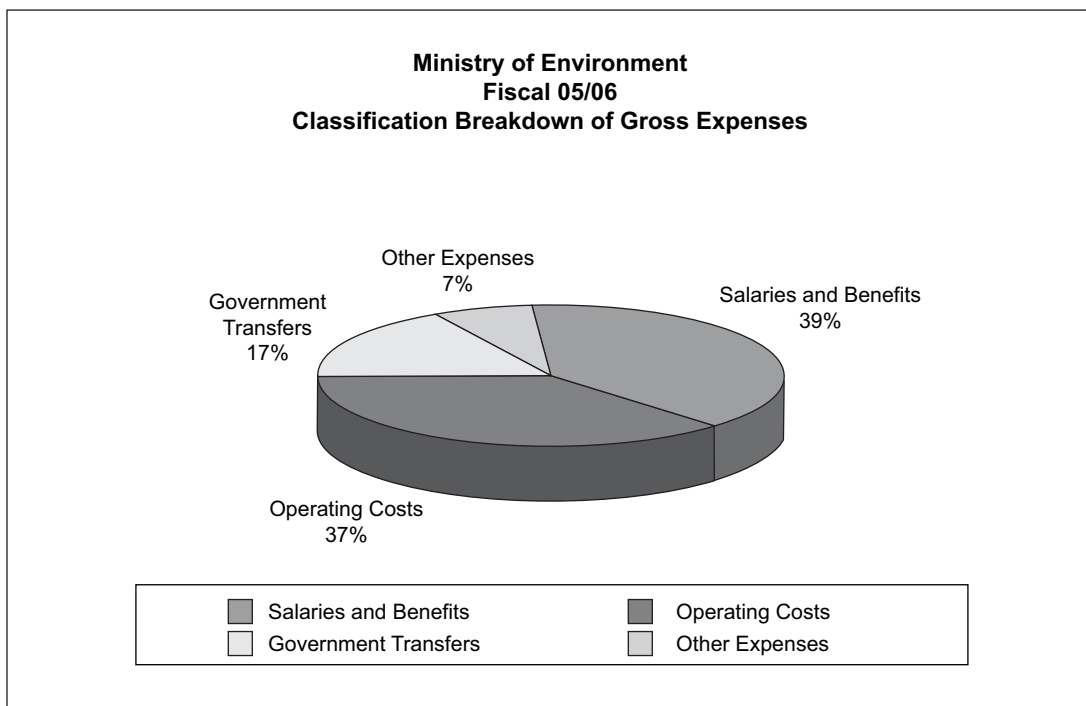
Salaries and benefits — \$75.64 million — the largest expense for the ministry, accounted for 39% of annual spending.

Operating costs — \$71.41 million — includes professional services, parks operating and other contracts, building occupancy and materials and supplies costs, accounted for 37% of gross expenditures.

Government transfers — \$32.78 million — includes grants and transfers under agreement, accounted for 17% of gross expenditures.

Other expenses — \$14.20 million total — includes costs not attributable to other categories, such as charges for water rental remissions, accounted for 7% of gross expenditures.

**Figure 5.** *Gross expense for fiscal 2005/06 (Source: B.C. Draft Public Accounts, 2005–2006)*



## **2005/06 Resource Summary**

The 2005/06 Resource Summary on the next page reports on the resources used during the year, by core business area, and compares actual expenditures to the amounts estimated. All significant variances are explained in the section that follows.

## Resource Summary Table 2005/06

Core Business Areas	Estimated <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
Environmental Stewardship .....	66,107	9,000	75,107	81,699	6,592
Water Stewardship.....	21,256		21,256	15,435	(5,821)
Oceans and Marine Fisheries.....	2,131		2,131	2,353	222
Environmental Protection.....	39,807	1,160	40,967	40,855	(112)
Compliance.....	16,308		16,308	16,376	68
Executive and Support Services <sup>3</sup> .....	24,476	370	24,846	22,782	(2,064)
Adjustments of Prior Year's Accrual.....				(155)	(155)
<b>Total .....</b>	<b>170,085</b>	<b>10,530</b>	<b>180,615</b>	<b>179,346</b>	<b>(1,269)</b>
<b>Full-time Equivalents (FTEs)</b>					
Environmental Stewardship .....	433		433	474	41
Water Stewardship.....	85		85	87	2
Oceans and Marine Fisheries.....	10		10	8	(2)
Environmental Protection.....	247		247	251	4
Compliance.....	145		145	137	(8)
Executive and Support Services .....	130		130	107	(23)
<b>Total .....</b>	<b>1,050</b>		<b>1,050</b>	<b>1,064</b>	<b>14</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)<sup>4</sup></b>					
Environmental Stewardship .....	24,678	2,844	27,522	26,403	(1,119)
Water Stewardship.....	214	25	239	223	(16)
Oceans and Marine Fisheries.....	0		0	2	2
Environmental Protection.....	272	1,518	1,790	2,225	435
Compliance.....	150	2,894	3,044	3,496	452
Executive and Support Services .....	4,543		4,543	1,785	(2,758)
<b>Total .....</b>	<b>29,857</b>	<b>7,281</b>	<b>37,138</b>	<b>34,134</b>	<b>(3,004)</b>

<sup>1</sup> The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly in September 2005.

<sup>2</sup> "Other Authorizations" include access to Operating Contingencies for the Living Rivers Trust Fund contribution for \$9 million, Financial Incentives for Recycling Scrap Tires for \$1.16 million and Benefits Cost Pressures for \$0.37 million. Access to capital contingencies was for Capitalized Vehicle Leases in the amount of \$7.281 million.

<sup>3</sup> Executive and Support Services include expenses for the Minister's Office, Deputy Minister's Office, Strategic Policy Division, Corporate Services Division (shared with the Ministry of Agriculture and Lands), and shared administrative staff in the regional offices.

<sup>4</sup> Capital Expenditures in fiscal 2005/06 included \$6.5 million on the Myra Canyon trestles, \$5.5 million in Park and Protected Area land acquisitions, \$12 million in park facilities and \$6.7 million for Capitalized Vehicle Leases.



## **Operating Expenses**

Overall, the ministry's actual expenses were less than the total estimated expenses by \$1.27 million or 0.7%. Any core business surpluses were redirected within the ministry to address priorities. The surplus variance in Water Stewardship, which was due to water rental remissions, contributed toward the \$14 million government transfer payment made to the Living Rivers Trust Fund by Environmental Stewardship.

The Executive and Support Services variance was due to lower than anticipated overhead and shared service costs.

## **Full-time Equivalent**

Overall, the ministry utilized 14 FTEs more than estimated. Environmental Stewardship used 41 FTEs more than budgeted due to staff hired to meet the objectives of recoverable programs. Although salaries costs were recovered by sources outside the ministry (e.g., Forest Investment Account, BC Hydro), the FTE usage was not. This overage was mostly offset by underuse in Executive and Support Services due to recruitment lag.

## **Capital Expenditures**

Overall, the ministry's capital expenditure was under total estimates by \$3.00 million or 8.8%. Information systems development plan delays, as a result of government reorganization, led to a surplus in Executive and Support Services. Where possible, surpluses were redirected to address air/water monitoring equipment and aging equipment replacement needs in Environmental Protection and Compliance programs. Environmental Stewardship was under budget by \$0.60 million due to vehicles not being delivered before fiscal year-end and \$0.50 million due to Myra Canyon trestle delays.

## **Comparison of 2005/06 and 2004/05 Expense**

The ministry's gross expense in 2005/06 increased by \$24.40 million from 2004/05 primarily as a result of program transfers related to government reorganization (\$12.75 million), and approved budget lifts (\$9.18 million) for initiatives such as increased environmental protection activities, additional park rangers and conservation officers, and the creation of the B.C. Conservation Corps.

The breakdown of these expenses is as follows:

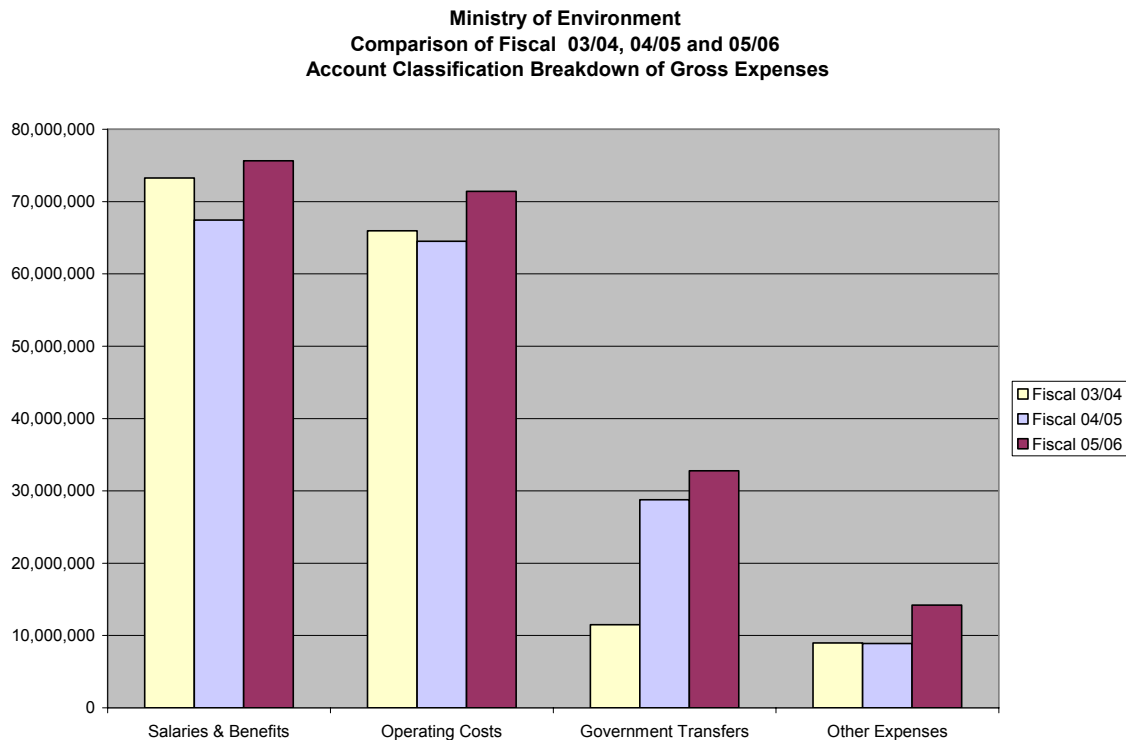
- Salaries and benefits increased by \$8.20 million, due to the addition of the Water Stewardship and Oceans and Marine Fisheries programs (\$6.94 million), and the increase of Park Ranger and Conservation Officer positions.
- Operating costs increased by \$6.89 million, as a result of the inclusion of Water Stewardship and Oceans and Marine Fisheries and other program budget lifts noted above.
- Government transfers increased by \$4.1 million, of which \$2.30 million is accounted for by the addition of Water Stewardship and Oceans and Marine Fisheries.
- Other expenses increased by \$5.30 million, primarily due to water rental remissions in the amount of \$3.66 million.

## Year-Over-Year Resource Changes

Figure 6 provides a year-over-year description of the changes to the ministry's resources. It should be noted that additional programs (Water Stewardship and Oceans and Marine Fisheries) were added to the ministry during fiscal 2005/06.

Previous fiscal periods have not been restated for comparative purposes to reflect these resource increases. The two new programs accounted for \$23.38 million in 2005/06 voted appropriations.

**Figure 6.** Three-year comparison of gross expense<sup>18</sup>



## Environmental Appeal Board and Forest Appeals Commission

The Environmental Appeal Board (Board) and Forest Appeals Commission (Commission) are independent, quasi-judicial tribunals jointly administered by the same office. They hear appeals of government decisions under several provincial statutes concerned with natural resource management, environmental quality and public health protection.

The Board has statutory authority to hear appeals from administrative decisions under the *Environmental Management Act*, the *Health Act*, the *Integrated Pest Management Act*, the *Water Act* and the *Wildfire Act*. For 2005/06, the Board received approximately 67 appeals against 64 orders/permits/decisions.

<sup>18</sup> Source: B.C. Draft Public Accounts, 2005–2006

The Commission has statutory authority to hear appeals from administrative decisions made with respect to a variety of matters regulated by the *Forest and Range Practices Act*, the *Forest Act*, the *Range Act*, the *Wildfire Act* and the *Private Managed Forest Land Act*. For 2005/06, the Commission received 112 appeals against 111 orders/permits/decisions.

The Board<sup>19</sup> and Commission<sup>20</sup> each produce an annual report, which is provided to their ministers for tabling in the legislature.

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<sup>19</sup> Go to <http://www.eab.gov.bc.ca> for more information on the Environmental Appeal Board.

<sup>20</sup> Go to <http://www.fac.gov.bc.ca> for more information on the Forest Appeals Commission.

# Environmental Assessment Office

## Highlights of the Year

### Overview

In 2005/2006, the Environmental Assessment Office (EAO) effectively managed the largest project volume in its ten-year history with 50 reviewable projects totalling over 16 billion dollars in potential investment in British Columbia. In an independent client survey, proponents expressed high levels of satisfaction with British Columbia's environmental assessment process and the knowledge and competence of our staff. To further harmonize federal and provincial environmental assessment requirements and promote inter-jurisdictional cooperation, the Environmental Assessment Office negotiated project review agreements with federal counterparts on three major mine developments currently under assessment. In March 2006, the Environmental Assessment Office received the Premier's Award for Organizational Excellence, an honour for high performance and contributions to British Columbia.

### Projects Update

During 2005/06, four projects were certified and a total of 50 projects were in the environmental process. The Environmental Assessment Office also reviewed and approved requests from three proponents for amendments to their respective environmental assessment certificates. Under the *Environmental Assessment Act*, the Environmental Assessment Office may declare that an environmental assessment certificate is not required for a project, if satisfied that the project will not result in any significant adverse effects when practical mitigation measures are taken into account. The Environmental Assessment Office determined that two reviewable projects, the Cranbrook Airport Runway Extension and the Vintage Landing Resort and Wellness Village Project did not require an environmental assessment certificate. Each proponent must still obtain all relevant permits and meet all regulatory requirements before they can proceed. Further information about the projects can be reviewed in Appendices H to K. More detailed information can be found on the Environmental Assessment Office's electronic Project Information Centre (ePIC) at <http://www.eao.gov.bc.ca>.

### Intergovernmental

When a project is reviewable under the federal *Canadian Environmental Assessment Act* and the *British Columbia Environmental Assessment Act*, the Environmental Assessment Office manages the environmental assessment to minimize duplication and overlap wherever possible. In 2005/06, the Environmental Assessment Office negotiated protocols with the Canadian Environmental Assessment Agency to streamline environmental

assessment and reporting of the Kitimat LNG Project and the Galore Creek Mine Project. For each project, this will result in a joint assessment report for use in decision-making by provincial ministers and the federal Minister of Environment. For the Kemess North Project, the Environmental Assessment Office and Canadian Environmental Assessment Agency established a panel to conduct the environmental assessment, a first under the *British Columbia Environmental Assessment Act*.

## **First Nations**

The Environmental Assessment Office encourages First Nation involvement in project reviews and works to fully identify and address Aboriginal interests through meaningful consultation and accommodation where indicated. Proponents, federal, provincial and local governments continue to work with First Nations on project-specific issues and broader issues of economic development and resource management.

Initiatives in 2005/06 to build relationships with First Nations included three successful workshops with Tahltan communities on the environmental assessment process and mining projects, support for the First Nations Environmental Assessment Technical Working Group and third-party technical assistance to First Nations in the assessments of various mining and energy sector projects.

Respectful engagement with First Nations by the Environmental Assessment Office built trust and support for the environmental assessment process. For example, at the end of the review of the Kitimat LNG Project, the Haisla Nation commended Environmental Assessment Office staff and other government representatives for working hard to understand Haisla interests, which then led to a process on consultation and accommodation that the Haisla view as the standard for how to define relationships between a First Nation, industry and government.

# Purpose, Vision, Mission and Values

## Purpose

The provincial government created the Environmental Assessment Office in 1995 to coordinate the assessment of proposed major projects in British Columbia under the former *Environmental Assessment Act* and preserved this role for the Environmental Assessment Office when government proclaimed the new *Environmental Assessment Act* in December 2002.

Environmental assessment in the provincial context examines the potential for adverse environmental, economic, social, health and heritage effects from the construction, operation and, where required, decommissioning stage of a project. For any project requiring an environmental assessment certificate, the proponent must complete an environmental assessment and receive a certificate before ministries can issue approvals for the project under other provincial enactments.

There are three ways a project can be designated reviewable under the *Environmental Assessment Act*. The Reviewable Projects Regulation (B.C. Reg. 370/2002) sets size thresholds for projects in the industrial, mining, energy, water management (dams, dykes, and reservoirs), waste disposal, food processing, transportation and tourism (destination resorts) sectors. In 2005/06, seventeen new projects entered the environmental assessment process because they equaled or exceeded thresholds in the regulation. If a project is not automatically reviewable by regulation, a proponent may request the Environmental Assessment Office to designate the project reviewable. In 2005/06, the Environmental Assessment Office designated two projects reviewable after requests from the respective proponents. If a project is not automatically reviewable, and a proponent does not request to enter the environmental assessment process, the Minister may still order an assessment if convinced the project has potential for significant adverse effects and the designation is in the public interest. All projects under review in 2005/06 were either reviewable by regulation or designated reviewable at the request of the proponent.

During an assessment, the Environmental Assessment Office obtains valuable advice on technical and policy considerations within their respective mandates from ministries such as Ministry of Energy, Mines and Petroleum Resources, Ministry of Small Business and Revenue and Ministry of Environment.

The *Environmental Assessment Act* provides for:

- all interested parties, government agencies and First Nations to provide input and identify issues;
- consultations with First Nations to address, and where appropriate accommodate, potential effects on established and asserted Aboriginal rights and title;
- technical studies to identify any potentially adverse environmental, social, economic, heritage or health effects of a proposed project;

- the creation of strategies and measures to avoid, prevent or mitigate potential adverse effects;
- thorough reporting of findings and recommendations on whether to issue an environmental assessment certificate for a project; and
- assigning conditions and follow-up or compliance reporting requirements to a proponent in an environmental assessment certificate.

Proponents are accountable to provide information on their projects and to minimize project impacts. Issues or concerns identified by provincial, federal and local governments, First Nations and the public may trigger modifications or changes to a project as it moves through the environmental assessment process.

Projects subject to the *Environmental Assessment Act* may also be reviewable under the federal *Canadian Environmental Assessment Act*. To minimize duplication and overlap, Canada and British Columbia agreed in the *Canada/British Columbia Agreement on Environmental Assessment Cooperation* (2004) to coordinate information requirements, use provincial time limits and issue a joint assessment report wherever possible, while retaining their respective decision-making powers.

## Vision, Mission and Values

The following vision, mission and values replace those presented in the September 2005/06 – 2007/08 Service Plan Update and are taken from the February 2006/07 – 2008/09 Service Plan.

### Vision

Environmentally and socially responsible development that contributes to a strong and vibrant economy in British Columbia.

### Mission

The Environmental Assessment Office delivers a timely and integrated process for assessing the environmental, social, heritage, economic and health effects, and potential impacts to First Nations' claims to Aboriginal rights and title, of major projects in British Columbia, reports the findings of environmental assessment reviews to government and may make recommendations regarding project certification.

### Values

The Environmental Assessment Office respects First Nations and all stakeholders in the environmental assessment process through a principle-based approach that is neutral, fair, balanced and open. The Environmental Assessment Office relies on science and results-based standards wherever possible, encourages innovation, creativity and values:

- Cooperation and teamwork
- Respect for the opinions of others
- Honesty and integrity
- Service excellence
- A healthy workplace
- Accountability to the people of British Columbia

### Principles

The Environmental Assessment Office is guided by the following principles:

- *Neutrality* — Neutrally and centrally administered process.
- *Fairness* — Fair and open process.
- *Balance* — Decisions are based on impartial, balanced and informed recommendations.
- *Science-informed decision-making* — Best available information, knowledge and technologies are considered and utilized.
- *Consultative* — Participatory and transparent, ensuring meaningful opportunities for First Nations and public input.
- *Inter-jurisdictional coordination* — Streamlined process minimizing duplication and overlap.



## Strategic Context

The steady growth of the provincial economy, increased demand for energy and for energy self-sufficiency, and high commodity prices account for the unprecedented volume of project activity in 2005/06. The Environmental Assessment Office effectively manages environmental assessment in cooperation with other provincial agencies to promote regulatory efficiency and deliver a fair and balanced assessment process competitive with other jurisdictions.

### **British Columbia Economy**

British Columbia's real GDP grew by a solid 3.5% in 2005, slightly above the 3.4% growth rate forecast in the September Budget Update. With strong consumer spending and investment, British Columbia's growth was the second fastest in the country after Alberta's 4.5% expansion. Other signs of the strong economy were lower unemployment rates, strong labour income growth and a residential construction boom.

### **Energy Sector Development**

Government initiatives created numerous market opportunities in the energy sector and an influx of new projects. In 2005/06, nine new major energy projects, each over 50 megawatts, entered the environmental assessment process as industry responded to the opportunity created by BC Hydro's Open Call for Power. In total, 20 energy projects were in the pre-application or application phase of environmental assessment process as of March 31, 2006.

### **Mining Sector Development**

Increased metal and coal prices meant increased investment in mining exploration and development. Seven new mining projects entered the environmental assessment process in 2005/06 for a total of 18 mining projects in pre-application or in the application review phase of the environmental assessment process as of March 31, 2006.

### **Provincial Infrastructure Development**

The Lower Mainland is a major international gateway for the global economy. The Port of Vancouver, Canada's busiest port, handled more than 43 billion dollars in goods in 2005. Vancouver International Airport is Canada's second busiest airport and the second largest international passenger gateway on the west coast of North America. Deltaport Third Berth, Canada Line (formerly the Richmond Airport Vancouver Line) and the South Fraser Perimeter Road were major infrastructure projects in the Lower Mainland in the environmental assessment process as of March 31, 2006.

## **First Nations**

The Environmental Assessment Office continues to facilitate First Nations' participation in reviews to ensure that potential impacts on First Nations' interests are identified and addressed through meaningful consultation and accommodation (where appropriate) in accordance with applicable policy and common law requirements.

## **Federal Government's Role**

Three-quarters of all projects in the environmental assessment process in 2005/06 were also reviewable under the federal *Canadian Environmental Assessment Act*. Coordination of federal and provincial requirements creates a more timely and cost-effective process for proponents. The Environmental Assessment Office works closely with federal counterparts on project-specific timelines, effective management of federal participation and harmonization of federal/provincial reviews.

## **Risks**

Proponents with projects subject to the *Environmental Assessment Act* require an environmental assessment certificate before they can apply for approvals under other provincial enactments and proceed with their projects. Competitiveness and the ability to take advantage of market opportunities increase with a timely environmental assessment process. The Environmental Assessment Office's capacity to manage project loads and harmonize federal assessment requirements is integral to the effective review of major projects, and the Environmental Assessment Office experienced significant budget pressures in 2005/06 from the rapid increase in project volumes.

# Service Delivery and Core Business Areas

## Service Delivery

Environmental assessment in the provincial context examines the potential for adverse environmental, economic, social, health and heritage effects from the construction, operation and, where required, decommissioning stage of a project.

A flexible, non-hierarchical and responsive team matrix structure enables the Environmental Assessment Office, a small organization, to effectively manage large numbers of time-sensitive project assessments. The Environmental Assessment Office assigns a project lead and core project team to work with each proponent throughout the various phases of the review process. Core project teams can add or reassign members where required for the most efficient and flexible use of human resources. All Environmental Assessment Office employees benefit from developmental opportunities provided by the core project team approach.

The Environmental Assessment Office also uses sector leads for each major project category to ensure timely client access to information and advice on sector-specific issues. The Environmental Assessment Office website at <http://www.eao.gov.bc.ca> contains more information on project and sector leads.

## Core Business Areas Overview

The Environmental Assessment Office fulfils its mandated responsibilities through two business areas: Major Project Environmental Assessments and Corporate Operations.

### Core Business Area: Major Project Environmental Assessments

The Environmental Assessment Office manages the province's review and assessment of the potential environmental, economic, social, health and heritage effects of major projects in the industrial, mining, energy, water management (dams, dykes, and reservoirs), waste disposal, food processing, transportation and tourism (destination resorts) sectors.

### Core Business Area: Corporate Operations

The Environmental Assessment Office shares many of its corporate services with the Corporate Services Division of the Ministry of Environment and the Ministry of Agriculture and Lands. Corporate operations managed by the Environmental Assessment Office include service planning, budgeting, expenditure control, staff development, human resources, policy and legislation, records management, and the electronic Project Information Centre (ePIC) and website. Resources for corporate operations are included under the Environmental Assessment Office's "Core Business."

The Environmental Assessment Office experienced significant budget pressures in 2005/06 due to the increased volume of reviewable projects. On average, 31 of the 34 FTEs were utilized and \$4,457,000 of the \$4,480,000 of the operating budget was expended.

# Report on Performance

## Service Plan Goal Changes Summary

Table 4 summarizes the changes made to the Environmental Assessment Office’s goals and objectives. The left-hand column reflects the goals and objectives in the September 2005/06–2007/08 *Service Plan Update*. The right-hand column reflects the goals and objectives in the February 2006/07–2008/09 *Service Plan*.

**Table 4.** *Changes to the Environmental Assessment Office’s Goals and Objectives in 2005/06*

Goals and Objectives September 2005/06–2007/08 Service Plan Update		Goals and Objectives February 2006/07–2008/09 Service Plan	
Goal	Objectives	Goal	Objectives
1. Efficient and effective delivery of environmental assessment	1.1 Continual improvement of the provincial environmental assessment process	1. Environmental assessment reports and recommendations are comprehensive and timely	1.1 Applications for environmental assessment certificates are complete and thorough
	1.2 Enhance federal/provincial cooperation to improve timeliness and certainty, and minimize overlap and duplication		1.2 Meaningful consultation with First Nations during environmental assessments
2. Organizational excellence	2.1 Optimize delivery of environmental assessment	2. The environmental assessment process is clear and streamlined	2.1 The environmental assessment process is easy to follow
	2.2 Timely communication with all stakeholders		2.2 Harmonized federal/provincial assessment processes

Table 5 presents the changes to the Environmental Assessment Office’s performance measures by goal. The performance measures from the September 2005/06–2007/08 *Service Plan Update* appear in the left-hand column; those from the February 2006/07–2008/09 *Service Plan* appear in the right-hand column. Review of key priorities in relation to the government’s Great Goals resulted in three possible outcomes: the performance measure remained unchanged; the measure was revised; or the measure was discontinued. Discontinued performance measures are reported in Appendix L.

**Table 5.** *Changes to the Environmental Assessment Office’s Performance Measures in 2005/06*

Goals and Performance Measures 2005/06 September Service Plan Update		Goals and Performance Measures 2006/07 February Service Plan	
Goal	Performance Measure	Goal	Performance Measure
1. Efficient and effective delivery of environmental assessment	Percentage of application reviews completed in 180 days	1. Environmental assessment reports and recommendations are comprehensive and timely	Percentage of application reviews within 180 days
	Proponents’ overall level of satisfaction with the review process		Percentage of environmental assessment reports that identify and consider all potential significant environmental, social, economic, heritage and health effects raised during the project review
	Value of the EAO’s advice to the proponent during the pre-application stage (X)		Percentage of project assessments with First Nations engaged in working group(s)
	Deregulation: reducing unnecessary red tape and regulation (X)		
	Percentage of harmonized reviews that meet provincial timelines		
2. Organizational excellence	Internal policies and procedures are relevant and consistent with new environmental assessment direction (X)	2. The environmental assessment process is clear and streamlined	Proponents’ overall satisfaction with the assessment process
	Percentage of staff with an EPDP (X)		Percentage of harmonized federal/provincial reviews that meet provincial timelines
	Posting of public and agency comments on the EAO’s ePIC within 7 days (X)		

**Note — ‘X’ indicates measure has been dropped. Explanations and rationales for changes in the performance measures can be found in Appendix L.**

# Performance Plan Summary Table

Table 6. Synopsis of Environmental Assessment Office Performance Measure Results

Five Great Goals	Environmental Assessment Office Mission			
	The Environmental Assessment Office delivers a timely and integrated process for assessing the environmental, social, heritage, economic and health effects, and potential impacts to First Nations' claims to Aboriginal rights and title, of major projects in British Columbia, reports the findings of environmental assessment reviews to government and may make recommendations regarding project certification.			
	EAO Goals	EAO Objectives	Performance Measures	Results
Lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none. Lead the way in North America in healthy living and physical fitness. Create more jobs per capita than anywhere else in Canada.	1. Environmental assessment reports and recommendations are comprehensive and timely	<ul style="list-style-type: none"> <li>Applications for environmental assessment certificates are complete and thorough</li> </ul>	1.1. Percentage of application reviews within 180 days	✗
		<ul style="list-style-type: none"> <li>Meaningful consultation with First Nations during environmental assessments</li> </ul>	1.2. Percentage of environmental assessment reports that identify and consider all potential significant environmental, social, economic, heritage and health effects raised during the project review	New performance measure
		<ul style="list-style-type: none"> <li>The environmental assessment process is easy to follow</li> </ul>	1.3. Percentage of project assessments with First Nations engaged in working group(s)	New performance measure
	2. The environmental assessment process is clear and streamlined	<ul style="list-style-type: none"> <li>Harmonized federal/provincial assessment processes</li> </ul>	2.1. Proponents' overall satisfaction with the assessment process	✓
			2.2. Percentage of harmonized federal/provincial reviews that meet provincial timelines	✓✓

✓✓ Exceeded target. ✓ Achieved target. △ Target mostly achieved. ✗ Missed target. N/A — Not Applicable.

New performance measures will be reported on in the 06/07 Annual Service Plan Report.

## Goals, Objectives, Strategies and Performance Measures

### Goal 1

***Environmental assessment reports and recommendations are comprehensive and timely***

Ministers require timely, high quality information, analysis and recommendations about the potential effects of a project to decide whether to issue an environmental assessment certificate. The Environmental Assessment Office recognizes that to assess the impacts of a project, information in applications for environmental assessment certificates must be complete and thorough. Also key is meaningful consultation with First Nations to identify and address potential effects to First Nations' interests. The Environmental Assessment Office will report its performance against this goal in the Annual Service Plan Report for 2006/07.

### Objective 1

***Applications for environmental assessment certificates are complete and thorough***

The Environmental Assessment Office works closely with government agencies, First Nations and proponents to determine the information required from a proponent (known as an application for an environmental assessment certificate) to assess the potential environmental, economic, social, health and heritage effects of a project. The Environmental Assessment Office also assesses the adequacy of a proponent's proposed plans for consulting the public and First Nations during the application review. These measures help ensure the proponent's application is complete so the process can proceed in a timely manner.

### Strategies

The Environmental Assessment Office sets out, in Terms of Reference issued to a proponent, the information required for an application for an environmental assessment certificate and carefully screens all applications to ensure they contain all information necessary for a thorough assessment of the potential effects of the project.

### Performance Measure

***Percentage of application reviews completed within 180 days***

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Percentage of application reviews completed within 180 days	75%	100%	90%	75%	15%	No
<b>Explanatory Information</b>	The Environmental Assessment Office completed four environmental reviews and referrals to ministers. Three reviews took 124, 161 and 178 days respectively and one review took 186 days. The average number of days per review was 162 days.					

## **Rationale for the Performance Measure**

Legislated time limits in the *Environmental Assessment Act*, including a 180-day limit for review of applications for environmental assessment certificates, offer greater process certainty and are important for effective planning and decision-making. The Environmental Assessment Office carefully monitors whether legislated time limits are met.

## **Achievements and Key Issues**

Whistler Nordic Centre, Orca Sand and Gravel, Canada Line and Red Chris Porphyry Copper-Gold Mine were all subject to the *Environmental Assessment Act* and the *Canadian Environmental Assessment Act*, and the Environmental Assessment Office worked closely with federal counterparts to harmonize the review process. For the review of the Red Chris Porphyry Copper-Gold Mine, the Environmental Assessment Office extended the legislated time limits by six days to allow sufficient time to resolve a First Nation's concern.

The Environmental Assessment Office works with First Nations to facilitate their involvement in project reviews to ensure potential impacts on First Nations' asserted Aboriginal rights and title are identified and addressed through meaningful consultation and accommodation (where indicated) in accordance with applicable policy and law requirements. The Environmental Assessment Office provides funding for First Nations' participation and invites First Nations to comment on key assessment documents and reports, and participate in technical working group meetings to discuss and resolve issues.

## **Goal 2**

### ***The environmental assessment process is clear and streamlined***

The environmental assessment of major projects must preserve high environmental standards, offer process certainty to proponents, be competitive with other jurisdictions and be accessible to all levels of government and stakeholders. To meet the goal of an environmental assessment process that is clear and streamlined, the Environmental Assessment Office set two objectives: (1) an environmental assessment process that is easy to follow and (2) harmonization with the federal government.

### **Objective 1**

#### ***The environmental assessment process is easy to follow***

The Environmental Assessment Office seeks to continually improve the environmental assessment process through the development of tools to improve proponents', First Nations', and the public's understanding of the process and assist with the preparation of assessment documentation. Efforts are also made to enhance public information about the environmental assessment process and provide access to information about project reviews as they proceed.



## Strategies

Strategies for this objective include the drafting of sector specific guidelines for each project category and a proponents' guide to the environmental assessment process as well as publications and tools for increased public understanding of the process and how to participate.

## Performance Measure

*Proponents' overall level of satisfaction with the review process*

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Proponents' overall level of satisfaction with the review process.	N/A	8 out of 10	Maintain or improve	8 out of 10	None	Yes

## Rationale for the Performance Measure

The Environmental Assessment Office values client feedback for continuous improvement and to gauge whether proponents find the environmental process clear and easy to follow. Environmental assessments require significant human and financial resources from proponents and government. The best use of these resources depends on a process that is clear.

## Objective 2

*Harmonized federal/provincial assessment processes*

In 2004, British Columbia and Canada renewed the Canada/British Columbia Agreement on Environmental Assessment Cooperation. The agreement is designed to achieve government cooperation, efficient and effective use of public and private resources and procedural certainty for participants in the environmental assessment process. The agreement includes specific measures to minimize costly and time-consuming duplication and overlap when a project is subject to provincial and federal assessment legislation.

## Strategy

The key strategy for this objective is to ensure that joint federal/provincial environmental assessments meet all requirements of the *Canada/British Columbia Agreement on Environmental Assessment Cooperation* (2004).

## Performance Measure

### *Percentage of harmonized reviews that meet provincial timelines*

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Percentage of harmonized reviews that meet provincial timelines	N/A	100% of all harmonized reviews met provincial timelines	80%	75%	5%	No

## Rationale for the Performance Measure

A unified time limit for completion of provincial and federal environmental assessments reduces duplication and overlap, supports the efficient and effective use of public and private resources and offers procedural certainty for participants in the environmental assessment process.

For the year 2005/06, each of the four projects certified by provincial ministers under the *Environmental Assessment Act* were also subject to the *Canadian Environmental Assessment Act*. In each case, the Environmental Assessment Office managed these harmonized reviews on behalf of both governments using provincial time limits and consulted extensively with federal departments to develop federal/provincial work plans and address any coordination issues. For the review of the Red Chris Porphyry Copper-Gold Mine, the Environmental Assessment Office extended the legislated time limits by six days to allow sufficient time to resolve a First Nation's concern.

## Deregulation

In 2004/05, our regulations were recounted and a baseline was set from which there was no net increase in regulations. The Environmental Assessment Office remains committed to ensuring no net increase in regulations occurs. We met this commitment over the 2005/06 period.

# Report on Resources

During 2005/06, the Environmental Assessment Office experienced budget pressure from a significant increase in the volume of reviewable projects. Internal and external recoveries associated with project reviews helped ensure the Environmental Assessment Office met its operating expenses. To be consistent with the change introduced in the Public Accounts, the variance column has been changed this year. Variance will be displayed as “Actual” minus “Total Estimated.” If the “Actual” is greater, then the variance will be displayed as a positive number.

## Resource Summary Table 2005/06

Core Business Areas	Estimated	Other Authorizations	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
<b>Major Project Environmental Assessments</b> .....	4,480	0	4,480	4,457	(23)
<b>Corporate Operations</b> .....	Rolled into core business item 1				
<b>Total</b> .....	4,480	0	4,480	4,457	(23)
<b>Full-time Equivalents (Direct FTEs)</b>					
<b>FTEs</b> .....	34	0	34	31	(3)
<b>Total</b> .....	34	0	34	31	(3)
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>					
<b>Corporate Operations</b> .....	62	0	62	47	(15)
<b>Total</b> .....	62	0	62	47	(15)

### Capital Expenditures

Improvements to the electronic Project Information Centre operating system planned for 2005/06 will be completed in May 2006.

# Annual Report Appendices

## Appendix A: Ministry of Environment Glossary of Terms

**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.

**baseline:** an actual result or a composite of an organization's past performance in a particular area that can be used to set future targets, or for comparison to other organizations. A baseline provides a starting point against which future progress can be assessed.

**B.C. water quality guidelines:** guidelines developed in B.C. that provide benchmarks for the assessment of water quality. If a substance concentration is lower than the concentration indicated in the guideline, generally speaking, a water quality problem for that particular substance is non-existent; however, if the substance concentration exceeds its guideline, an assessment of the water quality is warranted.

**benchmarking:** a process of continuously comparing and measuring an organization or aspects of an organization against sector/industry leaders, with the objective of gaining information that will help the organization take actions and make changes to improve its performance.

**brownfield:** an idle or underused property where past activities have caused environmental contamination but which exhibit good potential for other uses and provide economically viable business opportunities.

**coal bed gas:** natural gas found in underground coal deposits. The gas is contained within the coal seam where it is absorbed or attached to the coal particles. During production, water is pumped out of the coal seams lowering the pressure thus releasing the gas to be collected and sent to market.

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

**Fisheries Sensitive Watershed (FSW):** a designation under the *Forest and Range Practices Act*. To qualify as an FSW candidate, watersheds must meet two criteria: significant fisheries values and watershed sensitivity. More information can be found at <http://www.env.gov.bc.ca/wld/fsw/>.

**greenhouse gases:** 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.

**industry-led product stewardship:** places the responsibility for end-of-life product management on those who produce, distribute, sell or use products or containers listed under the B.C. Recycling Regulation.

**low level ozone:** Also called ground level ozone. A bluish gas with a pungent odour. At ground level, ozone is formed by chemical reactions between volatile organic compounds (VOCs) and nitrogen dioxide (NO<sub>2</sub>) in the presence of sunlight. VOCs and NO<sub>2</sub> are released by burning coal, gasoline and other fuels, and naturally released by plants and trees.

**mountain pine beetle:** the mountain pine beetle epidemic in B.C. is the largest forest insect infestation in Canada's history. The beetle prefers mature timber and is affecting lodge pole pines of 80 years or more.

**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.

**pollution prevention hierarchy:** as follows in descending order of priority: reduce the environmental impact of producing the product by eliminating toxic components and increasing energy and resource efficiency; redesign the product to improve reusability or recyclability; eliminate or reduce the generation of unused portions of a product that is consumable; reuse the product; recycle the product; recover material or energy from the product; otherwise dispose of the waste from the product in compliance with the *Environmental Management Act*.

**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 legislation for which the Ministry of Environment is responsible. 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 Environment.

**species at risk:** species at risk means endangered, extirpated or threatened.

**stewardship:** 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, government and industry.

**Ungulate Winter Range (UWR):** an area that contains habitat that is necessary to meet the winter habitat requirements of an ungulate species. UWRs are based on our current understanding of ungulate habitat requirements in winter, as interpreted by the Ministry of Environment regional staff from current scientific and management literature, local knowledge, and other expertise from the region. For more information, please visit <http://www.env.gov.bc.ca/wld/uwr/index.html>.

**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: Comparison between Previous and Revised Ministry of Environment Vision, Mission and Values

The left-hand column of table below shows the ministry’s vision, mission and values as they were presented in the September 2005/06 – 2007/08 Service Plan Update. The right-hand column presents our new vision, mission and values as they appear in the February 2006/07 – 2008/09 Service Plan. Our new vision, mission and values build on the strong foundation of the old and continue to inform our approach and the work that we do.

September 2005/06 – 2007/08 Service Plan Update	February 2006/07 – 2008/09 Service Plan
<b>Vision</b>	<b>Vision</b>
A clean, healthy and naturally diverse environment that enriches people’s lives, now and in the future.	A clean, healthy and naturally diverse environment.
<b>Mission</b>	<b>Mission</b>
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 outdoor opportunities.	Lead, inform, involve and support British Columbians to achieve the best environmental stewardship and sustainability.
<b>Values</b>	<b>Values</b>
<ul style="list-style-type: none"> <li>• 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.</li> <li>• We ensure that professional accountability and discipline characterize our behaviour.</li> <li>• We focus on achieving high environmental standards through a culture of continuous adaptation to change.</li> <li>• We strive to consistently meet agreed-upon client requirements and deliver our services in a transparent, fair and timely manner.</li> <li>• We are committed to continuous improvement in the environmental management of the province.</li> </ul>	<ul style="list-style-type: none"> <li>• Service — We provide service that is responsive, adaptive and based on client needs.</li> <li>• Objectivity — We perform our work in a professional manner that promotes an objective approach to environmental management.</li> <li>• Integrity — We act in a truthful, ethical and transparent manner.</li> <li>• Excellence — We encourage innovation, creative solutions and a culture of continuous learning.</li> <li>• Accountability — We are efficient and effective in our work and accountable to the Legislature and the public for results.</li> <li>• Wellness — We believe in a working environment that promotes health and well-being, and allows staff to achieve their highest potential.</li> </ul>

## Appendix C: Ministry of Environment Office Locations

<p><b>Vancouver Island</b></p> <ul style="list-style-type: none"> <li>• Nanaimo</li> <li>• Parksville</li> <li>• Ucluelet</li> <li>• Victoria</li> </ul>	<ul style="list-style-type: none"> <li>• Goldstream Park</li> <li>• Black Creek</li> <li>• Duncan</li> <li>• Port Alberni</li> <li>• Port Hardy</li> </ul>
<p><b>Lower Mainland</b></p> <ul style="list-style-type: none"> <li>• Powell River</li> <li>• Cultus Lake</li> <li>• Sechelt</li> </ul>	<ul style="list-style-type: none"> <li>• Surrey</li> <li>• Brackendale (Squamish)</li> <li>• North Vancouver</li> </ul>
<p><b>Southern Interior</b></p> <ul style="list-style-type: none"> <li>• Clearwater</li> <li>• Grand Forks</li> <li>• Merritt</li> <li>• Lillooet</li> </ul>	<ul style="list-style-type: none"> <li>• Kamloops</li> <li>• Penticton</li> <li>• Vernon</li> <li>• Princeton/Manning Park</li> <li>• Kelowna/Oliver</li> </ul>
<p><b>Kootenay</b></p> <ul style="list-style-type: none"> <li>• Cranbrook</li> <li>• Castlegar</li> <li>• Creston/West Creston</li> </ul>	<ul style="list-style-type: none"> <li>• Nelson</li> <li>• Fernie</li> <li>• Revelstoke</li> <li>• Invermere</li> </ul>
<p><b>Cariboo</b></p> <ul style="list-style-type: none"> <li>• Williams Lake</li> <li>• 100 Mile House</li> </ul>	<ul style="list-style-type: none"> <li>• Quesnel</li> <li>• Bella Coola/Hagensborg</li> </ul>
<p><b>Skeena</b></p> <ul style="list-style-type: none"> <li>• Terrace/Lakelse Lake</li> <li>• Queen Charlotte City</li> <li>• Smithers</li> </ul>	<ul style="list-style-type: none"> <li>• Burns Lake</li> <li>• Dease Lake</li> <li>• Atlin</li> </ul>
<p><b>Omineca-Peace</b></p> <ul style="list-style-type: none"> <li>• Fort Nelson/Liard Hotsprings</li> <li>• Prince George</li> <li>• Mackenzie</li> </ul>	<ul style="list-style-type: none"> <li>• Fort St. John</li> <li>• Dawson Creek</li> <li>• Vanderhoof</li> <li>• Chetwynd/Moberly Lake Park</li> </ul>



## Appendix D: List of Legislation Administered by the Ministry of Environment

The following legislation, in alphabetical order, is currently administered by the Ministry of Environment:<sup>21</sup>

- *Beaver Lodge Lands Trust Renewal Act*
- *Commercial River Rafting Safety Act* (only some sections relating to safety inspections and enforcement remain in force)
- *Creston Valley Wildlife Act*
- *Dike Maintenance Act*
- *Drainage, Ditch and Dike Act*
- *Ecological Reserve Act*
- *Environmental Assessment Act*
- *Environmental Management Act*
- *Fish Protection Act*
- *Hunting and Fishing Heritage Act*
- *Industrial Operation Compensation Act*
- *Integrated Pest Management Act*
- *Land Title Act* (s. 219 only, insofar as it relates to the portfolio of the Minister)
- *Ministry of Environment Act* (all except s. 4 (2) (d))
- *Ministry of Lands, Parks and Housing Act* (ss. 3(4), 5(b), 6 and 9, insofar as they relate to the portfolio of the Minister)
- *Okanagan River Boundaries Settlement Act*
- *Park Act*
- *Protected Areas of British Columbia Act*
- *Skagit Environmental Enhancement Act*
- *Sustainable Environment Fund Act*
- *Water Act*
- *Water Protection Act*
- *Water Utility Act*
- *Wildlife Act*

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<sup>21</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.

## Appendix E: Discontinued Ministry of Environment Performance Measures

Below is a list of the performance measures that appeared in the September 2005/06 – 2007/08 Service Plan Update, but were discontinued in the February 2006/07 – 2008/09 Service Plan. The rationale for not continuing a performance measure is included. Some measures continue to be tracked.

Discontinued Ministry of Environment Performance Measures from the September 2005/06 – 2007/08 Service Plan Update	
Performance Measure	Rationale
Contaminated sites backlog reduction	This was the first of three indicators for the objective to “Streamline standards and improve monitoring, reporting and compliance” under the ministry’s previous Goal 1 in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. The 2005/06 target to eliminate 95% of the backlog of non-high-risk applications by March 2006 was surpassed, and the approximately 150 applications in the backlog as of April 2003 were eliminated.
Average processing time for issuing permits	This was the second of three indicators for the objective to “Streamline standards and improve monitoring, reporting and compliance” under the ministry’s previous Goal 1 in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. The bringing into effect of the <i>Environmental Management Act</i> in 2004 resulted in streamlining legislative requirements. British Columbia and Alberta continue to work on identifying and, where appropriate, prioritizing harmonization opportunities and approaches to effective and efficient regulatory requirements, codes and processes.
Turnaround time for pesticide certification	This was the third indicator for the objective to “Streamline standards and improve monitoring, reporting and compliance” under the ministry’s previous Goal 1 in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. The target was to reduce the time people had to wait to receive examination results and certification. The two-week turnaround target continues to be met.
Response to environmental emergencies	This indicator was for the objective “Effective response to high-risk environmental emergencies” under the ministry’s previous Goal 1 in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. The ministry has shifted its focus to high-risk issues/events and expanded industry’s responsibility for responding to low- and medium-risk spills. The ministry continues to meet its target of 100%.

<b>Discontinued Ministry of Environment Performance Measures from the September 2005/06 – 2007/08 Service Plan Update</b>	
<b>Performance Measure</b>	<b>Rationale</b>
Regulatory reform targets	<p>This indicator was for the objective “Clear vision, leadership, direction and support for all ministry programs” under the ministry’s previous Goal 4 in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. This measure is part of government’s commitment to regulatory reform.</p> <p>The initial three-year regulatory reform plan was about meeting targets for the reduction of regulatory requirements by one-third across government. The ministry exceeded this goal by achieving a 42% reduction in regulatory requirements, accomplished in large part by repealing outdated statutes and regulations and by consolidating and streamlining other existing statutes and regulations.</p> <p>This initial three-year plan was successfully completed in 2005. As of 2006, a new multi-year commitment on regulatory reform has been developed. As part of these next steps, ministers have committed to a zero per cent increase in regulatory requirements and to continue to pursue regulatory reform and reduction opportunities over the next three years. As part of government’s commitment to accountability and transparency, the Regulatory Reform Office reports quarterly to British Columbians on the progress being made on regulatory reform.</p>
Percentage of staff with an Employee Performance and Development Plan (EPDP)	<p>This indicator was for the objective “Efficient program management, fiscal responsibility and client service” under the ministry’s previous Goal 4 in the September 2005 Service Plan Update. This measure was discontinued in the February 2006 Service Plan. The target of 100 % of staff with an EPDP continues to be met. The plans make clear links to the ministry’s service plan and identify the work outcomes for which an employee is accountable.</p>

## Appendix F: Notes on Ministry of Environment Performance Measures and Supplemental Information

Performance measurement is the process of assessing progress toward achievement of pre-determined goals and objectives. Performance measures are the yardsticks we use for assessing our progress toward the achievement of these goals and objectives.

Outcome measures<sup>22</sup> are the most important type of measure as they are an indicator of the impact, consequence or change that resulted from a program or activity. Two key limitations of outcome measures are (1) many factors other than a specific program or activity can affect them; and (2) it can take a long period of time before an outcome can be realized. In most cases, the ministry's service plans have established output or process measures.<sup>23</sup> These measures identify how the program or activity is doing based on pre-established targets. The ministry also utilizes quality measures.<sup>24</sup> In the future, the ministry will attempt to incorporate outcome measures into its performance management framework, where possible, as they remain a key indicator of the effectiveness of a program.

In developing its performance framework, the ministry focuses on those few, critical aspects of performance<sup>25</sup> that relate to the organization's goals and objectives and for which it has a particular responsibility or major influence over. Potential measures are assessed in relation to whether they are a meaningful indicator of the goal or objective, data sources are accurate and reliable, and there is methodological consistency in comparative measures.

The ministry's twelve performance measures are:

1. Trends in environmentally significant variables indicating the health of 30 water bodies monitored under a federal/provincial agreement.
2. Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective for PM<sub>2.5</sub> and low level ozone.
3. Per capita greenhouse gas (GHG) emissions relative to other provinces.
4. Number of completed designations by the Ministry of Environment under the *Forest and Range Practices Act*, including Wildlife Habitat Areas, Ungulate Winter Ranges, and Fisheries Sensitive Watersheds.
5. Municipal solid waste disposal (kilograms/capita).<sup>26\*</sup>
6. Number of Collaborative Management Agreements and Regional Fish and Wildlife Advisory Processes with First Nations.

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<sup>22</sup> An "outcome" measure measures the intended impact, consequence or change resulting from a program or activity.

<sup>23</sup> An "output" measure measures the level of service or what has been produced by an activity.

<sup>24</sup> A "quality" measure measures the quality of service or output.

<sup>25</sup> Office of the Auditor General of British Columbia. Reporting Principle 3 from *Building Better Reports: Our Methodology for Assessing the Annual Service Plan Reports of Government*. July 2005.

<sup>26</sup> \*Performance measures 5, 8, 11 and 12 are new measures established in the February 2006/07 – 2008/09 Service Plan and will be reported on in next year's Annual Service Plan Report.

7. Number of product categories with industry-led product stewardship programs.
8. Number of water or watershed management plans completed and implemented.\*
9. Number of recorded park visits and visitor satisfaction rate.
10. Number of basic hunting and angling licences sold.
11. Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process.\*
12. Changes in satisfaction of client groups.\*

Performance measure targets are established by collecting current baseline data, assessing leading edge practices in other jurisdictions, reviewing and analyzing scientific data, determining what level of performance the ministry wishes to achieve over the coming year(s), and setting targets to measure progress.

The following provides supplemental information to the performance measures reported on in this Annual Service Plan Report.

### **Trends in environmentally significant variables indicating the health of 30 water bodies monitored under a 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 a detailed 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.

### **Percentage of monitored communities achieving the Canada-wide standard (CWS) quality objective for PM<sub>2.5</sub> and low level ozone**

The ministry collects PM<sub>2.5</sub> from approximately 80 air quality monitoring sites from over 45 communities, and ozone data from approximately 30 sites from over 25 communities across the province. The monitors are placed in communities that are more 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 are analyzed using SAS statistical software, and the end result for each community is checked against air quality results reported by other agencies (e.g., Environment Canada).

### **Per capita greenhouse gas (GHG) emissions relative to other provinces**

GHG emission data are 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.

Data on per capita GHG emissions are not available until two years later (e.g., 2005 data are available in 2007). The per capita emissions figures are calculated by dividing the total B.C. greenhouse gas emissions figures by the total B.C. population figures. For more information, please see <http://www.env.gov.bc.ca/soerpt/>.

### **Number of completed designations by the Ministry of Environment under the *Forest and Range Practices Act*, including Wildlife Habitat Areas, Ungulate Winter Ranges, and Fisheries Sensitive Watersheds**

Designations under the *Forest and Range Practices Act* (FRPA) provide special management for species impacted by forest and range activities on Crown land. These designations provide legislated protection for habitats and contribute significantly to the conservation of native species. To adequately demonstrate progress, two types of data are being collected: (1) the number of designations and objectives established, and (2) the area of forest land base for which designations and objectives have been established. Performance targets are based on expected levels of funding from the Forest Investment Account and other funding sources related to achieving the performance measure, and are provided only for the number of designations as the size of the areas will depend on the species. The areas for WHAs and UWRs are accurate within  $\pm 5\%$  as amounts may include overlapping areas not covered under the *Forest and Range Practices Act* such as parks and protected areas and private land.

### **Number of Collaborative Management Agreements and Regional Fish and Wildlife Advisory Processes with First Nations**

The ministry is committed to enhancing our relationships with First Nations and Aboriginal peoples as we work toward developing new models of shared stewardship of our natural resources and activities that conserve ecosystems, species and habitats.

British Columbia and Canada have a history of legislation that affects our relationship with Aboriginal peoples and land. This legislative history began in 1763 with the Royal Proclamation issued by King George III. The Royal Proclamation, which was focused on lands in eastern Canada, acknowledges that Aboriginal people continue to possess traditional territories until they are “ceded to or purchased by” the Crown. The Royal Proclamation is still referenced in the Canadian Charter of Rights and Freedoms.

This performance measure consists of the number of agreements with First Nations and includes Collaborative Management Agreements and Regional Fish and Wildlife Advisory Processes. Collaborative Management Agreements define how the province and First Nations will work together on the management of protected areas. Regional Fish and Wildlife Advisory Processes provide a region-wide perspective and actively engage First Nations, tenure holders and stakeholders with a direct interest in fish and wildlife management.

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

This measure outlines the number of product categories covered by the B.C. Recycling Regulation under the *Environmental Management Act*. For more information, please refer to <http://www.env.gov.bc.ca/epd/epdpa/ips/index.html>.

#### **Number of recorded park visits and visitor satisfaction rate**

There are three components to park visitation data: camper-nights, day-use visits (which account for almost 90% of all visits) 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 visiting 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. Total recorded visits are not a good indicator of trends in overall visitation from year to year because they are affected by when and where data are collected, which has not been consistent over time. To address this, the ministry is developing a new methodology for deriving trend data from a subset of core parks within the protected area system. Data will be collected consistently each year from this subset of parks in order to identify changes in park attendance trends overall. Additionally, the ministry has initiated a review of the existing park attendance system with the goal of having a new attendance system in place by 2006.

Approximately 5,000 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 a statistical database program, which is used to perform all statistical calculations (the software product used is designed to help manage complex surveys). There may be subsequent follow-up sampling to confirm that the surveys were completed by legitimate park visitors.

### **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 as 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 Labour and Citizens’ Services and the Ministry of Environment. The Government Agents Branch is responsible for the management of

Angling and Hunting Licence Vendor Operations and the sale of most but not all basic and supplementary licences throughout the province.

The Ministry of Environment also sells a 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.





## Appendix G: Example of Linkages between Ministry of Environment Goal, Objectives, Strategies, Performance Measures and Core Business Areas

Ministry Goal 4 Sustainable use of British Columbia's environmental resources					
Objective 1 Sustainable use and continued benefits of water and air		Objective 2 Optimized public, outdoor and commercial opportunities from B.C.'s parks, fish and wildlife		Objective 3 Sustainable and collaborative management and use of marine and ocean resources	
Key strategies	Responsibility	Key strategies	Responsibility	Key strategies	Responsibility
<ul style="list-style-type: none"> <li>seeking public consensus on a new water allocation model</li> </ul>	WS	<ul style="list-style-type: none"> <li>providing outstanding hunting, angling and wildlife viewing opportunities</li> </ul>	ES	<ul style="list-style-type: none"> <li>identifying and advancing provincial objectives as they relate to ocean resources and their use</li> </ul>	OMF
<ul style="list-style-type: none"> <li>exploring shared governance frameworks to promote increased community and stakeholder involvement at the local level</li> </ul>	All	<ul style="list-style-type: none"> <li>developing and implementing outdoor activities and commercial opportunities that reflect client preferences</li> </ul>	ES	<ul style="list-style-type: none"> <li>influencing implementation of the federal Oceans Strategy on the Pacific coast</li> </ul>	OMF
<ul style="list-style-type: none"> <li>modifying and streamlining the <i>Water Act</i> and related legislation</li> </ul>	WS	<ul style="list-style-type: none"> <li>maximizing opportunities for partnerships with First Nations, local communities, non-profit groups and private land owners</li> </ul>	ES	<ul style="list-style-type: none"> <li>ensuring that federal management and international relations reflect provincial objectives for marine fisheries</li> </ul>	OMF
<ul style="list-style-type: none"> <li>valuing water appropriately by recognizing its full range of benefits</li> </ul>	WS	<ul style="list-style-type: none"> <li>developing and implementing market strategies to promote healthy living through park visitation</li> </ul>	ES	<ul style="list-style-type: none"> <li>representing B.C.'s interests to ensure the seafood sector's fair share of federal and cross government programs, initiatives and activities to promote research, exports and investment</li> </ul>	OMF
<ul style="list-style-type: none"> <li>continuing to promote water conservation and demand-side management measures</li> </ul>	WS				
<ul style="list-style-type: none"> <li>continuing to ensure timely response to water licence applications to support economic development</li> </ul>	WS			<ul style="list-style-type: none"> <li>undertaking programs and strategies to enhance the competitiveness and sustainability of B.C.'s seafood products in domestic and export markets</li> </ul>	OMF
<ul style="list-style-type: none"> <li>promoting and facilitating multi-stakeholder airshed and watershed management plans</li> </ul>	EP/WS				
<p><b>Performance Measures</b></p> <ul style="list-style-type: none"> <li>Number of water or watershed management plans completed and implemented (WS)</li> </ul>		<p><b>Performance Measures</b></p> <ul style="list-style-type: none"> <li>Number of recorded park visits and visitor satisfaction rate (ES)</li> <li>Number of basic hunting and angling licenses sold (ES)</li> </ul>		<p><b>Performance Measures</b></p> <ul style="list-style-type: none"> <li>Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process (OMF)</li> </ul>	

**Responsibility** – the Core Business Area primarily responsible for the strategy.

Core Business Areas: **ES** — Environmental Stewardship; **WS** — Water Stewardship; **OMF** — Oceans and Marine Fisheries;

**EP** — Environmental Protection

## Appendix H (EAO): Certified Projects from April 1, 2005 – March 31, 2006

The table below details the four projects that were issued an Environmental Assessment Certificate by the Minister during the fiscal year 2005/06.

Project (proponent)	Location	Investment (\$million)	Jobs (Operating)	Date Certified
Whistler Nordic Centre (Vancouver 2010)	Callaghan Valley	100	53	April 7, 2005 (178-day review)
Richmond/Airport/Vancouver Rapid Transit (Canada Line Rapid Transit)	Lower Mainland	1720	140	June 7, 2005 (124-day review)
Orca Sand and Gravel (Polaris Minerals)	4 km west of Port McNeil	60	50	July 13, 2005 (161-day review)
Red Chris Porphyry Copper- Gold (Red Chris Development Company Ltd.)	18 km southeast of Iskut	228	250	Aug. 24, 2005 (186-day review)

## Appendix I (EAO): Projects in the Review Process from April 1, 2005 – March 31, 2006

The table below outlines the 17 projects under review in the 180-day period during the fiscal year 2005/06.

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)	Status of Review
<b>Energy</b>					
Cascade Heritage Power (Powerhouse Developments Inc.)	Construction of a hydro-electric power generating facility and associated historic park and museum.	Near Christina Lake	24	3	Review suspended at proponent's request on July 15, 2005. Review resumed on March 27, 2006.
Dokie Wind Farm (Dokie Wind Energy Inc.)	Construction of a new wind farm with a nominal capacity of 300 MW with a preliminary layout of 200 1.5 MW turbines.	South of W.A.C. Bennett Dam located in northeast B.C.	600	30	Expected to be referred to ministers for decision by late summer 2006.
Toba Inlet Montrose Creek Project (Plutonic Power Corporation)	The proposal consists of: a transmission line, the East Toba River hydro-electric project and a Montrose Creek hydro-electric project.	100 km north of Powell River	250	13	Expected to be referred to ministers for decision by late summer 2006.
Inland Pacific Pipeline Connector	Proposing 237 km of pipeline	Between Oliver and Huntington	495	15	Awaiting supplementary information from proponent
Kitimat LNG (Kitimat LNG Inc.)	Construction of a liquid natural gas (LNG) terminal.	14 km south of Kitimat	500	50	Project was referred to ministers for decision in April 2006.
Kwoiek Creek Hydro-electric (Kwoiek Creek Resources Inc.)	Construction of an 80 MW hydro-electric project and supporting infrastructure.	Fraser Canyon, 22 km south of Lytton	90	6	Awaiting supplementary information from proponent.

**Appendix I: Projects in Review Process from April 1, 2005 – March 31, 2006 (continued)**

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)	Status of Review
Revelstoke Unit 5 Generation Project (BC Hydro and Power Authority)	Construction and operation of a fifth generating unit at the Revelstoke Generating Station.	Columbia River at Revelstoke	140	0	Proponent preparing to submit a supplement to the application in June 2006.
Upper Harrison Water Power Project (Cloudworks Energy Inc.)	The project includes four interconnected river hydro-electric projects.	60 km northwest of Harrison Hot Springs	262.5	20	EAO received application for review on February 11, 2006.
Wartenbe Wind Farm	Construction of a new wind farm with a capacity of 94 MW and a layout of 50 2.0 MW turbines over a 760 hectare area	10 km southeast of Chetwynd	140	9	EAO received application for review on January 18, 2006.
<b>Mining</b>					
Brule Mine Project (Western Canadian Coal)	Open-pit coal mine, waste rock dumps, crushing facilities and coarse wash plant.	57 km south of Chetwynd	200	150	EAO received application for review on December 10, 2005
Cariboo Gold Mine (International Wayside Gold Mines Ltd.)	Construction of an open-pit gold mine and associated infrastructure.	Adjacent to Wells	60	50	Awaiting supplemental report.
Prosperity Gold-Copper (Taseko Mines Ltd.)	Construction of an open-pit gold and copper mine.	125 km southwest of Williams Lake	900	650	Awaiting supplementary information.
Swamp Point Aggregate Mine	Construction of a sand and gravel pit.	50 km south of Stewart	25	30	Preparing to be referred to ministers.
<b>Tourist Destination Resorts</b>					
Garibaldi at Squamish Mountain Resort Development (Garibaldi at Squamish Inc.)	Development of an all-seasons mountain resort destination.	13 km north of Squamish	238	620	Awaiting additional information.

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)	Status of Review
<b>Transportation</b>					
Deltaport Third Berth (Vancouver Port Authority)	Expansion of existing port terminal.	Lower Mainland – Roberts Bank	272	360	VPA requested a timeline suspension, which was granted on the 134th day, and the timeline resumed on February 13, 2006.
<b>Waste Disposal</b>					
Ashcroft Ranch Landfill Project (Greater Vancouver Regional District)	A proposed solid waste landfill with a 100-year lifespan.	Ashcroft Ranch – near Ashcroft	75	110	Assessment suspended on June 7, 2005 pending completion of a Solid Waste Management Plan.
<b>Water Management</b>					
Chemainus Wells Water Supply Project (District of North Cowichan)	The project includes three groundwater wells, approximately 4,000 metres of water main, and a new 4.54 million litre concrete reservoir.	Chemainus	3.62	N/A	Awaiting supplementary information from proponent.

## Appendix J (EAO): Projects in the Pre-Application Stage from April 1, 2005 – March 31, 2006

The table below outlines the 29 projects involved in pre-application during the fiscal year 2005/06.

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
<b>Energy</b>				
Bear Mountain Wind Park (Bear Mountain Wind LP)	120 MW wind park.	16 km southwest of Dawson Creek	240	N/A
KSL Pipeline Looping (Pacific Northern Gas Inc.)	Construction of a new 500 km, 24" natural gas pipeline.	Kitimat to Summit Lake B.C.	750	N/A
McGregor/Herrick Hydro-electric (TransCanada Energy Ltd)	49.8 MW hydro-electric facility on the McGregor River and a 33.2 MW hydro-electric facility on Herrick Creek and approximately 110 km of transmission line.	120 km northeast of Prince George	200	6
MacKenzie Green Energy Centre (MacKenzie Green Energy Corp)	Construct a new biomass cogeneration project capable of producing up to 65 MW of power.	Mackenzie, B.C.	230	20
Nahwitti Wind Power Project (Nomis Power Corp.)	New wind farm, operating 25 wind turbines.	50 km northwest of Port Hardy	900	7
Nai Kun Wind Farm (Nai Kun Wind Development Inc.)	700 MW wind turbine project.	Queen Charlotte Islands (offshore)	1,600	50
Princeton Wood Residue and Coal Power (Compliance Energy Corp.)	56 MW wood residue and coal fired power plant at the Similco mine site.	14 km south of Princeton, B.C.	200	40
South Meager Geothermal Project (Western Geopower Corp.)	New geothermal power generation plant with transmission line.	55 km northwest of Pemberton	276	45
Vancouver Island Cable (Sea Breeze Victoria Converter Corp.)	120 km high voltage (550 MW) direct current light transmission system between Vancouver Island and the lower mainland.	Between Surrey and Victoria	302	N/A

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
Vancouver Island Transmission Reinforcement Project (British Columbia Transmission Corporation)	Proposal to replace and upgrade existing 138 kV facilities connecting southern Vancouver Island to the Lower Mainland.	Delta to Duncan	210	N/A
Waneta Hydro-electric Expansion (2003) (Columbia Power Corporation)	Proposed new 435 MW hydro-electric generation station on the right bank of the Pend d'Oreille River.	17 km south of Trail	300	5
<b>Mining</b>				
Bear River Gravel Project (Beacon Ventures Inc.)	Gravel extraction from the Lower Bear River with a facility to alleviate the increasing threat of flooding to the District of Stewart.	Lower Bear River	20	40
Cogburn Magnesium (North Pacific Alloys Ltd.)	New quarry and magnesium facility.	Hope	1300	490
Davidson (Blue Pearl Mining Limited)	Underground molybdenum mine with an anticipated production of 2,000 tonnes per day with an expected mine life of 9 years.	9 km northwest of Smithers, B.C.	N/A	150-200
Galore Creek Gold/Silver/Copper Mine (SpectrumGold Inc.)	Copper and gold project with a production capacity between 30,000 and 60,000 tonnes per day. Expected mine life of 25 years.	Northwest British Columbia 75 km northeast of Eskay Creek Mine	1400	525
Hills Bar Aggregate Quarrying (Qualark Resources Inc.)	New aggregate quarry. Anticipated timing for submitting application is uncertain.	Hills Bar, near Yale	6.5	25
Horizon Coal Mine (Hillsborough Resources Limited)	Several open-pit coal mines with an estimated production capacity of 1.6 million tonnes per year. Expected mine life of 20 years.	Northeast B.C., 25 km southwest of Tumbler Ridge	30	200
Kemess North Copper Gold (Northgate Minerals Corporation)	Open-pit copper-gold mine with a production of 75,000 tonnes.	250 km northeast of Smithers	193	528

**Appendix J: Projects in the Pre-Application Stage from April 1, 2005–March 31, 2006**  
(continued)

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
Kutcho Creek (Western Keltic Mines Inc.)	Copper-zinc-silver-gold deposit with an anticipated production capacity of 1 million tonnes per year and a minimum mine life expectancy of 11 years.	100 km east of Dease Lake, B.C.	N/A	N/A
Lodgepole Coal Mine (Cline Mining Corp.)	2 million tonnes per year open pit coal mine and process facilities. Expected mine life of 12 years.	58 km south of Fernie and 35 km north of the international border with Montana	150	252
Morrison Copper Gold (Pacific Booker Minerals Inc.)	Copper and gold project with an estimated production of up to 9 million tonnes per year.	65 km northeast of Smithers	200	250
Mount Klappan Coal Project (Fortune Coal Limited)	Proposed open-pit mine to produce clean coal.	160 km northeast of Stewart	150	200
Ruby Creek Molybdenum Mine (Adanac Moly Corp.)	Open-pit molybdenum mine and a processing plan that would operate at 20,000 tonnes per day for over 20 years.	24 km northeast of Atlin	350	250
Sechelt Carbonate (Pan Pacific Aggregates Ltd.)	Large carbonate rock resource to produce chemical (calcium/magnesium) rock.	15 km north of Sechelt	100	100
Sustut Copper Project (Northgate Minerals Corporation)	Open-pit copper mine with a proposed 10 km haul road.	193 km northeast of Smithers	32	50
<b>Transportation</b>				
South Fraser Perimeter Road Project (Ministry of Transportation)	Construction of a four-lane highway along the south side of the Fraser River through Surrey and Delta.	Lower Mainland	900	N/A
<b>Tourism</b>				
Juliet Creek/Coquihalla Resort	An all-seasons resort consisting of a base village, golf course, ski lifts, spa and aquatic centre and eco-cultural activities.	Coquihalla Highway summit	500	1000



Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
<b>Waste Disposal</b>				
Highland Valley Centre (Highland Valley Copper Corporation)	Regional landfill proposed on a waste rock and overburden dump at the Highland Valley copper/molybdenum mine with a capacity of 50 million tonnes of municipal solid waste (up to 600,000 tonnes per year) from throughout southwestern B.C.	District of Logan Lake, 75 km southwest of Kamloops, B.C.	51	138
<b>Water Management</b>				
Terrace Green Street Well Project (Municipality of Terrace)	New municipal groundwater supply.	Terrace	1.6	N/A

## Appendix K (EAO): Amendments to Projects from April 1, 2005 – March 31, 2006

The table below outlines the three amendments that were made to the Environmental Assessment Certificates during the fiscal year 2005/06.

Project (proponent)	Location	Description	Date
New Fraser River Crossing (Greater Vancouver Transportation Authority)	Lower Mainland	Amendment to change proponent name to Fraser Bridge Project Ltd. instead of GVTA.	June 27, 2005
Wolverine Coal (Western Canadian Coal Corp.)	Northwest of Tumbler Ridge	Amendment to change commitment #95 of vegetation clearing outside of migratory bird breeding season to allow for clearing of a small area provided birds are not impacted.	June 27, 2005
Richmond / Airport / Vancouver Rapid Transit (Canada Line Rapid Transit)	Lower Mainland	Amendment #1 Design changes to a segment of the Sea Island portion of the YVR segment of the RAV Line.  Amendment #2 Design and construction refinements along Marine Drive and Cambie.	October 20, 2005  November 29, 2005

## Appendix L: Environmental Assessment Office Discontinued Performance Measures

The Environmental Assessment Office removed the following performance measures to integrate its reporting with the Ministry of Environment Service Plan.

### Measure 1

Performance Measure	Benchmark	2005/06 Target	2005/06 Actual	Variance	Target Met?
Value of the EAO's advice to the proponent during the pre-application stage	N/A	Baseline to be determined	82%*	N/A	N/A
<b>Explanatory Information:</b>	<p>The indicator was for the objective "Continual improvement of provincial environmental assessment" as part of Goal 1: Efficient and Effective Delivery of Environmental Assessment in the September 2005 Service Plan Update. The measure was replaced in the February 2006 Service Plan with a more precise indicator, namely, the proponents' level of overall satisfaction with the environmental assessment process. The EAO relies on surveys of review participants to provide feedback on the environmental assessment process to determine where improvements are needed. The findings of the Client Satisfaction Surveys (2004 and 2006) are being reviewed to identify areas for improvements.</p> <p>*Average % of clients surveyed who either agreed or strongly agreed that EAO staff were knowledgeable and competent, that the client was informed of everything they had to do, and that staff went the extra mile to make sure the client got what they needed.</p>				

### Measure 2

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Deregulation: reducing unnecessary red tape and regulation	56% reduction in regulatory requirement	No net increase in regulatory requirement	Zero % net increase	Zero % net increase	None	Yes
<b>Explanatory Information:</b>	<p>The indicator was for the objective "Continual Improvement of Provincial Environmental Assessment" as part of Goal 1: Efficient and Effective Delivery of Environmental Assessment in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan and the EAO consistently met the target. The Government of British Columbia is committed to reducing unnecessary red tape and regulation by one-third within three years. The EAO continues its commitment to a zero % net increase.</p>					

### Measure 3

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Internal policies and procedures are relevant and consistent with new environmental assessment direction	N/A	16 gaps were identified and addressed in the fiscal year	100% of gaps and redundancies addressed	100%	None	Yes
<b>Explanatory Information:</b>	The indicator was for the objective “Optimize delivery of environmental assessment” as part of Goal 2: Organizational Excellence in the September 2005 Service Plan Update. The EAO established policies and procedures to guide the environmental assessment process and regularly reviews these policies and procedures to ensure their continued relevance. The measure was discontinued in the February 2006 Service Plan after all gaps were identified and addressed. On an ongoing basis, when policy gaps or opportunities for improvement are identified, the EAO ensures they are addressed.					

### Measure 4

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Percentage of staff with an Employee Performance and Development Plan (EPDP)	100%	100%	100%	100%	None	Yes
<b>Explanatory Information:</b>	The indicator was for the objective “Optimize delivery of environmental assessment” as part of Goal 2: Organizational Excellence in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. The target of 100 % of staff with an EPDP continues to be met. The plans make clear links to the ministry’s service plan and identify the work outcomes for which an employee is accountable.					

**Measure 5**

Performance Measure	2003/04 Actual	2004/05 Actual	2005/06 Target	2005/06 Actual	Variance	Target Met?
Posting of public and agency comments on the EAO's electronic Project Information Centre (ePIC) within 7 days	N/A	100%	Maintain	100%	None	Yes
<b>Explanatory Information:</b>	The indicator was for the objective "Timely communication with all stakeholders" as part of Goal 2: Organizational Excellence in the September 2005 Service Plan Update. The measure was discontinued in the February 2006 Service Plan. The target of 100 % of comments are posted within 7 days continues to be met. It is the policy of the EAO that the records generated for the purposes of the assessment of a reviewable project are made accessible to the public through ePIC.					