

Ministry of  
Environment including  
Environmental Assessment Office

---

2006/07  
Annual Service Plan Report

---



**National Library of Canada Cataloguing in Publication Data**  
Library and Archives Canada Cataloguing in Publication Data  
British Columbia. Ministry of Environment.  
Annual service plan report. — 2005/06—

Annual.

Title from cover.

Also available on the Internet.

Merger of: British Columbia. Ministry of Water, Land and Air Protection.

Annual service plan report. ISSN 1705-9089; and, British Columbia Environmental Assessment Office. Annual service plan report. ISSN 1710-8144.

ISSN 1911-0286 = Annual service plan report (British Columbia. Ministry of Environment including Environmental Assessment Office).

1. British Columbia. Ministry of Environment — Periodicals. 2. British Columbia. Environmental Assessment Office — Periodicals. 3. Environmental policy — British Columbia — Periodicals. 4. Natural resources — British Columbia — Management — Periodicals. 5. Ecosystem management — Government policy — British Columbia — Periodicals. 6. Environmental impact analysis — British Columbia — Periodicals. I. Title. II. Title: Ministry of Environment including Environmental Assessment Office ... annual service plan report.

JL186.B74      354.3'2800971105      C2006-960093-7

For more information on how to contact the British Columbia  
Ministry of Environment  
see Ministry Contact Information on Page 64 or contact:

**Ministry of Environment**  
PO BOX 9339  
STN PROV GOVT  
VICTORIA BC  
V8W 9M1

or visit our website at

<http://www.gov.bc.ca/env>

Published by the Ministry of Environment



## Message from the Minister and Accountability Statement

I am pleased to present the joint 2006/07 Annual Service Plan Report of the Ministry of Environment and the Environmental Assessment Office. This report outlines our achievements during the fiscal year ending March 31, 2007, and reflects our shared objective of achieving exemplary levels of environmental stewardship and sustainability.

Climate change and greenhouse gas reduction has become a major concern for British Columbians. At the Ministry of Environment, we continued to focus on greenhouse gas reduction projects and climate change adaptation in an effort to assess future regional climate trends and identify possible responses. We developed and strengthened many partnerships to seek ways to reduce greenhouse gases and identified actions that governments, corporations and individuals alike could take to address, mitigate or adapt to the effects of climate change. In 2006/07, we also coordinated and implemented the actions outlined in *Weather, Climate and the Future: B.C.'s Plan*, British Columbia's original climate change plan released in 2004. These activities provide the foundation from which to address the challenging issues of climate change and greenhouse gases and move forward with the government's aggressive new greenhouse gas reduction targets announced as part of the February 2007 Speech from the Throne.

In 2006/07, the ministry continued its work in support of British Columbia's goal to lead the world in sustainable environmental management, with the best air and water quality and the best fisheries management. The ministry led the development of a government air action plan to improve air quality in B.C., which will be implemented this year. The plan includes retrofitting diesel vehicles, providing incentives to reduce the use of conventional wood stoves and encouraging industry to adopt better emission technologies.

Protecting water resources, the lifeblood of our province, has been a key ministry focus in 2006/07. B.C.'s water action plan, *Water for B.C. — Safe, Sustainable, and Valued by All*, captures and celebrates the accomplishments of communities, industry and organizations in water stewardship and sustainability across the province. The plan is built around three broad goals: public health and safety, healthy watersheds and responsible use, and encourages British Columbians to adopt a sustainability ethic around caring for and protecting water resources and aquatic ecosystems.

Over the past year, the ministry has made great strides in advancing British Columbia's interests in sustainable ocean and marine fisheries resources in collaboration with the federal government. Development of a joint system of marine-protected areas on the Pacific coast has begun, and we are working with commercial fisheries and the Marine Stewardship Council to obtain independent third-party sustainability certification for eco-labelling of our seafood products.

Parks and protected areas continued to be an important focus for the ministry in 2006/07. The total amount of protected area in British Columbia is now equivalent to the size of England and is recognized internationally for its size, beauty, and representation of the province's exceptional diversity of ecosystems and natural resources. To meet the challenge of changing park visitor demographics, the ministry invested more than \$13.3 million to upgrade the infrastructure of provincial parks and to acquire additional park land to improve the camping and day-use experience for park visitors. The ministry also worked on developing its Parks for People Plan, which identifies actions British Columbia can take to deliver world-class, high quality recreation, tourism and wildlife viewing opportunities.

Compliance and enforcement are an essential part of the ministry's work in achieving our mandate. In 2006/07, the ministry launched the Quarterly Compliance and Enforcement Summary,<sup>1</sup> which reports on compliance and enforcement actions taken across the entire ministry during each quarterly period. In order to build additional capacity within the Conservation Officer Service, the ministry also launched the new Commercial Environmental Investigation Unit. This specialized unit provides expertise in commercial and industrial environmental compliance and enforcement. Staff are situated in key locations throughout the province.

The Environmental Assessment Office successfully managed a record number of projects in 2006/07, with over 60 projects in the environmental assessment process. The Environmental Assessment Office completed its review of 11 of these projects, ensuring that new economic opportunities for British Columbia include sound environmental management and stewardship practices. Five of the 11 projects represent potential new investment to develop 700 megawatts of new clean energy and support provincial goals for energy self-sufficiency and reductions in greenhouse gas emissions.

The Environmental Assessment Office continued to provide meaningful opportunities for First Nations' participation in the environmental assessment process and to build respectful and constructive working relationships with First Nations. One example of this relationship was the recent signing of a Letter of Understanding with the Taku River Tlingit First Nation, which established a process for consultation and accommodation discussions between the Province and the First Nation on the proposed Ruby Creek Molybdenum Project. The Environmental Assessment Office also delivered on its commitment to public involvement in the environmental assessment process through public comment periods on projects under review, extensive access to information through the Environmental Assessment Office's website, and regular contact with stakeholder groups.

---

<sup>1</sup> The reports are available at <http://www.env.gov.bc.ca/main/prgs/compliancereport.html>.

In 2006/07, we developed important partnerships with B.C. businesses, First Nations, local governments, non-government organizations and private citizens. Together, we have worked hard to improve the quality of our land, air and water, protect and enhance our fisheries and aquatic ecosystems, recycle our post-consumer products and conserve British Columbia's precious wildlife and unsurpassable natural areas.

This 2006/07 Annual Service Plan Report compares the actual results to the expected results identified in the Ministry of Environment and the Environmental Assessment Office's 2006/07–2008/09 Service Plan. I am accountable for those results as reported.

A handwritten signature in black ink, appearing to read "Barry Penner". The signature is stylized with large, sweeping loops.

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

June 20, 2007



# Table of Contents

<b>Message from the Minister and Accountability Statement</b> .....	3
<b>Ministry of Environment</b>	
<b>Highlights of the Year</b> .....	9
<b>Purpose of Ministry</b> .....	12
<b>Strategic Context</b> .....	14
<b>Report on Performance</b> .....	17
Performance Plan Summary Table .....	18
Goals, Objectives, Strategies and Performance Results .....	20
<b>Report on Resources</b> .....	55
Resource Summary Table .....	60
<b>Ministry of Environment Contact Information</b> .....	64
<b>Environmental Assessment Office</b>	
<b>Highlights of the Year</b> .....	65
Overview .....	65
<b>Purpose of the Environmental Assessment Office</b> .....	67
<b>Strategic Context</b> .....	69
<b>Report on Performance</b> .....	72
Performance Plan Summary Table .....	72
Goals, Objectives, Strategies and Performance Measures .....	72
<b>Report on Resources</b> .....	80
Resource Summary Table .....	80
<b>Environmental Assessment Office Contact Information</b> .....	81

<b>Annual Service Plan Report Appendices</b> .....	82
Appendix A — Ministry of Environment Website Links .....	82
Appendix B — Environmental Assessment Office: Certified Projects from April 1, 2006–March 31, 2007 .....	83
Appendix C — Environmental Assessment Office: Projects in the Application Review Stage from April 1, 2006–March 31, 2007 .....	84
Appendix D — Environmental Assessment Office: Projects in the Pre-Application Stage from April 1, 2006–March 31, 2007 .....	87
Appendix E — Environmental Assessment Office: Amendments to Projects from April 1, 2006–March 31, 2007 .....	91



## Highlights of the Year

Some of the ministry's key achievements and noteworthy examples of service delivery during the past year are summarized below.

**Seasonal Conservation Officer Program:** The Seasonal Conservation Officer program had a second successful year. Eighteen officers were hired and provided compliance services across the province in 17 locations.

**Inter-Agency Workshop on Compliance Management:** The ministry partnered with the Ministry of Forests and Range and the Ministry of Public Safety and Solicitor General to deliver an Inter-Agency Workshop on Compliance Management. The workshop provided an opportunity for regulators to share lessons learned and innovative practices. Over 70 participants from 30 different agencies attended.

**Okanagan Water Supply and Demand Study:** Phase 2 of this two-year, \$1.3 million project was launched, which will provide a best estimate of current and future water supply and demand in the Okanagan Basin, taking into account the influence of growth, climate change, land use and preservation of the environment. The study is a partnership between the Okanagan Basin Water Board and the Province, along with significant contributions from Agriculture and Agri-Food Canada, Environment Canada and the Okanagan Nation Alliance.

**Capital Regional District Core Liquid Waste Management Plan:** In July 2006, Minister Penner announced the requirement for the Capital Regional District to amend its Core Area Liquid Waste Management Plan, detailing a fixed schedule for providing sewage treatment.

**Solar Roofs Task Team:** The Minister, in partnership with the Ministry of Energy and Mines and Petroleum Resources, initiated a 100,000 Solar Roofs Task Team that is charged with charting a path for the significant advancement of solar technology in B.C.

**Oceans Economic Study:** In partnership with the federal government, the ministry commissioned the report, *Economic Contribution of the Oceans Sector in British Columbia*, in an effort to define and describe the ocean sector. The results of the report indicated that ocean sector activities demonstrated a very significant current and potential contribution to the provincial economy.



**Sustainable Fisheries — Third-Party Certification:** The ministry has been encouraging more fisheries to enter the Marine Stewardship Council third-party certification process. Third-party certification is a globally supported means of demonstrating the sustainable use of an ocean resource. Currently, eight B.C. fisheries, including halibut, hake and salmon, are in various stages of the Marine Stewardship Council certification process.

**Strait of Georgia Sport Fishery Revitalization Initiative:** Over the last 20 years, recreational angling activity has dramatically declined in the Strait of Georgia. In 2006/07, the ministry initiated a program to increase the profile and revitalize interest in the tidal water sport fishery sector. Initiatives included a feasibility study on the potential of creating new fishery opportunity using net pen-reared pink salmon. The City of Campbell River was provided funding for its successful and ongoing “Pinks for the Pier” project and for a chiller system<sup>2</sup> to expand fish production at the Nanaimo hatchery.

**Freshwater Fisheries Management:** In 2006, the Riparian Areas Regulation was brought into force. This regulation is designed to make better use of limited land resources while ensuring fish habitat is protected in urban areas of the province. In addition, a Freshwater Fisheries Program Plan was developed, which will facilitate the coordination of freshwater fisheries management by clearly laying out activities that need to be undertaken to accomplish the fisheries priorities established by government.

**Wildlife Allocation:** The Harvest Allocation Policy and Procedure was finalized in March 2007. The result is a set of policies and procedures that clearly identify the interests of resident hunters and guide outfitters, while setting out a more objective and transparent approach to making allocation decisions province-wide.

**Parks and Protected Areas:** Amendments to the *Park Act* were passed in May 2006 to introduce a new “conservancy” designation. Conservancies are being used to implement protected area decisions resulting from the Central Coast and North Coast land use decisions. In July 2006, the first 24 conservancies were established. One new Class A park was established and additions made to three existing Class A parks. As well, an interprovincial park agreement was signed with the government of Alberta with respect to Kakwa Provincial Park in B.C. and Kakwa Wildland Park and Wilmore Wilderness Park in Alberta.

**New Parks Interpretation Program Pilot:** In 2006, BC Parks piloted a new interpretation program through a partnership with the BC Conservation Corps, the Federation of BC Naturalists, the Society of Park Facility Operators and Human Resources Canada. This program enabled 25 park interpreters to be hired throughout the province. Interpretation services were provided in 17 parks, reaching over 57,000 people.

---

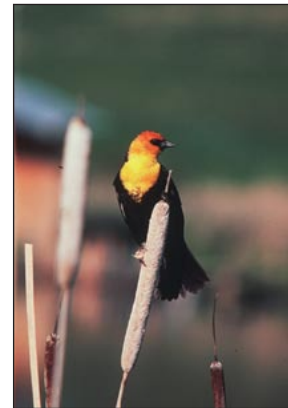
<sup>2</sup> A chiller system will be used in the hatchery’s incubation room to cool water from 14°C to 8°C. This will increase egg survival and slow development to provide self-sustaining pink runs in alternating years in the Nanaimo River.

**Wild at Heart Television Series:** In 2006/07, BC Parks partnered with the Knowledge Network and the ActNow BC program to produce the 13-episode Wild at Heart television series. The series promotes outdoor recreation in BC Parks, physical fitness, healthy lifestyles and tourism. The show began airing in March 2007 and has now been sold to public broadcasting networks in Alberta and Ontario — two of B.C.'s key tourism markets.

**Air Quality Health Index:** In 2006/07, the ministry partnered with the Ministry of Health, Interior Health, Greater Vancouver Regional District, the federal government and the BC Lung Association to pilot a new Air Quality Health Index in eight communities across the province and six regions in the Greater Vancouver Regional District. The index helps people make decisions to protect their health by limiting exposure to air pollution during increased levels of air pollution.

## Purpose of Ministry

The Ministry of Environment encourages environmental stewardship, provides environmental education opportunities, engages stakeholders, and vigorously promotes the sustainable use of British Columbia's environmental resources. The ministry strives to enhance the protection and stewardship of water and air resources, to ensure that healthy and diverse native species and ecosystems are maintained and that outstanding recreation and wildlife services and opportunities are available to all.



The ministry manages and delivers a wide range of programs and services that support the government's environmental goals and objectives. In particular, the ministry has a leadership role in achieving one of the Great Goals identified in the government's strategic plan:

*Great Goal 4 — Lead the world in sustainable environmental management, with the best air and water quality, and the best fisheries management, bar none.*

In leading this Great Goal, the ministry works diligently on a number of fronts. To foster sustainable environmental management, the ministry promotes improved science for decision-making. To safeguard and

improve British Columbia's airsheds, the ministry monitors air quality and takes steps to limit air pollution. To protect our precious water and land resources, the ministry takes action aimed at ensuring safe, high quality drinking water, reducing and removing toxins and wastes from the environment, and responding to and reducing risks from and to the environment. To provide exemplary fisheries management, the ministry champions the province's freshwater fisheries through innovative stewardship initiatives, and works with the federal and other governments, stakeholders and industry to ensure sustainable marine fisheries, marine protected areas and ocean resources.

### *Ministry Vision*

*A clean, healthy and naturally diverse environment.*

In the past year, the ministry's ongoing leadership in addressing climate change issues has been strengthened by the government's commitment to a new climate change action plan, which will tackle the challenge of global warming. Almost all parts of the ministry, many areas of government, and stakeholders and society at large will be engaged in this critical effort.

The success of the ministry's work relies heavily on the ability to form effective relationships with other government bodies, First Nations, industry, associations, communities and environmental groups. Some programs and services are provided by third-party delivery agents such as park facility operators, and the ministry supports organizations such as the Habitat Conservation Trust Fund, the Freshwater Fisheries Society of BC, the Living Rivers Trust Fund, the BC Trust for Public Lands and the Pacific Salmon Endowment Fund Society, which in turn help to fund local programs that enhance the ministry's ability to fulfill its mandate.

*"Taking action on climate change benefits  
British Columbia's environment, economy, and  
future generations."*

— Honourable Barry Penner

The ministry actively encourages and supports the efforts of all British Columbians to do their part in the protection and stewardship of the province's natural environment to help ensure the benefits that are enjoyed today will be available for future generations.

Please see Appendix A for links to the ministry's organizational chart, glossary of terms, a list of the legislation administered by the ministry and the ministry's risk management framework.

# Strategic Context

## Introduction

The Ministry of Environment plays a critical role in fulfilling the government's environmental objectives. Trends and events within British Columbia and beyond our borders are intricately linked to the achievement of these objectives. Environmental issues require not only good science, but good planning and management practices. The ministry uses various strategies to identify emerging opportunities, mitigate potential risks and address changing environmental, economic and societal factors. Throughout the year, the ministry reviews and adjusts existing programs, adapts approaches, develops new initiatives and seeks opportunities for partnership.

## Environmental Factors

Pressures on the environment pose constant challenges to the ministry. To meet these challenges, the ministry must anticipate environmental trends and events such as the following:

- changes in population, land use, water supply and demand;
- dispersal of human-caused and naturally occurring contaminants and toxins;
- unforeseen events such as forest fires, drought, insect infestations, diseases affecting our food sources and spills of hazardous substances into our air, land or water.

In 2006/07, the ministry worked on a variety of initiatives with multi-agency partners to address events that threatened both ecosystems and environmental values. These events required that the ministry respond, shifting its resources from other activities.

Climate change is one of the most important challenges confronting the global community, with implications for the environment, the economy and society. In British Columbia, climate change is already having far-reaching effects, impacting ecosystems and increasing the risks from volatile weather patterns, warming conditions, forest fires, flooding and pest outbreaks. Freshwater supply, agriculture, hydroelectric generation and ocean resources are also affected by the changing climate. There is growing concern within some communities that available water supplies could be insufficient to meet fish, human and agricultural demands. The 2007 Speech from the Throne reinforced the government's renewed commitment to take aggressive action toward reducing greenhouse gas emissions. The ministry, together with public and private organizations, is concentrating on actions to reduce provincial greenhouse gas emissions and improve the assessment of climate change impacts on B.C.

British Columbia is responding to an unprecedented mountain pine beetle epidemic. The beetle is also found in the western United States, and is thought to be a serious threat to other Canadian provinces. The ministry has been actively involved in a multi-agency working group established to implement *British Columbia's Mountain Pine Beetle Action Plan 2006–2011* under the

leadership of the Ministry of Forests and Range. The objectives of this plan are to stop the spread of the beetle, particularly toward Alberta; salvage economic value from the dying forests; and mitigate the environmental and economic damage through industry, government and community cooperation. Funding from the federal government will enable the ministry to meet its direct and indirect responsibilities outlined in the plan.

Unforeseen events such as flooding, fire, wind and rain storms, oil spills, and contamination of food and water supplies require an immediate response and mitigation activities from the ministry. In July 2006, a Canadian Pacific Railway train derailed near Lytton and dumped an estimated 800 tonnes of metallurgical coal into the Thompson River. The ministry and federal government agencies worked with affected First Nations to monitor the clean up of the spill. The following month, ministry staff responded to a bunker oil spill in the Squamish estuary from the freighter *Westwood Anette*. Ministry staff continue to work on protecting the areas affected by the spill.

In late August, ministry staff responded to the drought conditions in Tofino. Staff identified water conservation options, worked with district staff on a response plan, oversaw monitoring of the creeks used for water supply and provided improvement recommendations for monitoring the water supply.



The blow-down caused by the severe winter storms of 2006/07 resulted in a number of closures of provincial parks. Ministry staff worked to evaluate the damage to trails and facilities, and assessed trees that may pose a danger to the public. These storms were responsible for near-record snow packs over the winter. As a result the threat of flooding was a serious concern in many parts of the province.

### **Societal Factors**

The success of the ministry's programs and initiatives depends on the willingness of all segments of society to assess how their actions affect the environment. British Columbians have long known that the products they use in their homes, yards and vehicles are major contributors to environmental pollution and climate change. Using and discarding these products irresponsibly can have lasting effects on B.C.'s land, air and water resources. Since the mid-1990s, the ministry has worked with local governments, producers, industries and the public to develop and implement sound environmental stewardship practices. In 2006/07 that work continued.

Increasingly, society expects businesses to be responsible for their actions — changing their behaviour while meeting consumer demands. As a result, producers are beginning to reap the benefits, and consumer demands for “greener” products are creating new market niches. There is an opportunity to effectively build on this growing trend and, in 2006/07, the ministry supported efforts by the private sector to meet the demand for greener fuels, greener vehicles and greener power.

### **Workforce Demographics**

British Columbia is enjoying a strong employment rate. However, this, and an aging workforce has led to a shortage of qualified people available to business and government. For the ministry and other parts of government, it is becoming increasingly difficult to attract and retain younger, skilled people, a problem that is expected to worsen as older workers retire over the coming years. The human resource capacity issue has significant implications for the ministry and its ability to meet organizational goals and objectives. However, trends in the environmental business sector are encouraging. In 2000, over 800 environmental firms employed over 22,000 people and generated annual revenues in excess of \$1.8 billion.<sup>3</sup> In 2006/07, the ministry, through successful programs such as the BC Conservation Corps, continued to support projects aimed at providing young people with valuable work experience in the environmental field.

---

<sup>3</sup> Globe Foundation of Canada. *An Assessment of British Columbia's Environmental Business Sector*. November 2003. Available at [http://www.globe.ca/attachments/BC\\_Enviro\\_Report.pdf](http://www.globe.ca/attachments/BC_Enviro_Report.pdf).



# Report on Performance

The *Budget Transparency and Accountability Act* sets out government's accountability framework and planning and reporting requirements. The Annual Service Plan Report provides an overview of actual results compared to planned results from the previous year's Service Plan. The Performance Measurement Summary Table summarizes the ministry's progress in relation to its performance targets.

## Performance Plan Summary Table

<b>Goal 1: Clean and safe water, land and air</b> For greater detail see pages 20 to 29	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>1.1 Enhanced protection and stewardship of our water resources</b> Percentage of water bodies monitored under the Canada – B.C. Water Quality Monitoring Agreement with stable or improving water quality trends	96% or greater by 2015/16	96% ON TRACK
<b>1.3 Healthy air quality</b> Percentage of monitored communities achieving the Canada-wide standard quality objective for:		
• Particulate matter (PM <sub>2.5</sub> )	100% by 2010	93% NOT ON TRACK
• Low level ozone	100% by 2010	95% ON TRACK
<b>1.4 Effective responses to climate change</b> <i>Per capita greenhouse gas emissions relative to other provinces</i>	*	*

\* The performance measure “Per capita greenhouse gas emissions relative to other provinces” was discontinued. A new measure and targets will be developed to reflect the government’s commitment to reduce B.C.’s greenhouse gas emissions by at least 33 per cent below current levels by 2020.

<b>Goal 2: Healthy and diverse native species and ecosystems</b> For greater detail see pages 29 to 33	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>2.3 Protected, maintained and restored native species and ecosystems</b> Number of completed designations under the <i>Forest and Range Practices Act</i> :		
• Wildlife Habitat Areas	350	917 EXCEEDED
• Ungulate Winter Ranges	38	48 EXCEEDED
• Fisheries Sensitive Watersheds	27	31 EXCEEDED

<b>Goal 3: British Columbians understand that they share responsibility for the environment.</b> For greater detail see pages 34 to 40	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>3.1 British Columbians understand the benefits of healthy living and the effect of their actions on the environment</b> <i>Kilograms per capita of municipal solid waste disposal</i>	Under development	n/a**
<b>3.2 Shared stewardship</b> Number of Parks Collaborative Management Agreements and Regional Fish and Wildlife Processes with First Nations	23	25 EXCEEDED

\*\* This performance measure is under development.

<b>Goal 3: British Columbians understand that they share responsibility for the environment.</b> For greater detail see pages 34 to 40	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>3.3 Industry and client groups are knowledgeable and implement best environmental management practices</b> Number of product categories with industry-led product stewardship programs	9 by 2008/09	ON TRACK
<b>Goal 4: Sustainable use of British Columbia's environmental resources.</b> For greater detail see pages 40 to 49	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>4.1 Sustainable use and continued benefits of water and air</b> Number of water or watershed management plans completed and implemented	6 by 2010	ON TRACK
<b>4.2 Optimized public, outdoor and commercial opportunities from British Columbia's parks, fish and wildlife</b> Number of recorded parks visits and visitor satisfaction level:		
• Park visits	20% increase by 2010	5.0% increase ON TRACK
• Visitor satisfaction level	Maintain or improve	83% ACHIEVED
Number of basic hunting and angling licences sold:		
• Hunting licences	100,000 by 2014/15	96,142 ON TRACK
• Angling licences	400,000 by 2014/15	339,805 ON TRACK
<b>4.3 Sustainable and collaborative management and use of marine and ocean resources</b> Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process	4	4 ACHIEVED
<b>Goal 5: A high performance organization</b> For greater detail see pages 50 to 54	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>5.1 A client-focused organization that supports high quality service</b> Changes in satisfaction of client groups	Baseline data to be collected	Baseline established ACHIEVED

## Goals, Objectives, Strategies and Performance Results

The following sections provide an overview of each ministry goal, the supporting objectives and strategies, and performance measures. For each performance measure, there is a discussion of results, future direction, and the ministry's response if there is significant variance between the target and the actual result.

### 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 B.C.'s water resources, reduced contamination of water, land and air, and effective responses to climate change and environmental emergencies. Achievement of this goal is vital 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.



#### Objective 1.1: 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.

#### Strategy

A key strategy for this objective is implementing B.C.'s water action plan. Components of this plan include:

- 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 and mountain pine beetle);

- encouraging local governments to include water stewardship and long-term sustainability in their planning and development programs;
- continuing to ensure safe and secure drinking water sources through the ministry's source water protection program;
- continuing to lead the development of water use plans and monitoring of water licence requirements;
- ensuring well-managed and accessible water resource information to support effective decision-making informed by science;
- identifying and improving collaboration among government, academia and industry on science, research and monitoring to ensure continuous improvement in our knowledge of the provincial water resources.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Percentage of water bodies monitored under the Canada – B.C. Water Quality Monitoring Agreement with stable or improving water quality trends	96%	96%	96% or greater by 2015/16	96% ON TRACK

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** The ministry's measure reflects the government's measure for water quality trends and its 2015/16 target as presented in the *Province of British Columbia Strategic Plan 2007/08 – 2009/10*.

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.

In 2003/04 and 2002/03, 90 per cent of the monitoring stations in 30 water bodies had stable or improving water quality trends.

## Discussion of Results

### Rationale for the Performance Measure

This measure monitors trends in surface water quality based on the presence of environmentally significant variables, such as metals, nutrients, pH, temperature, dissolved gases and flow, within 30 water bodies monitored under the Canada–B.C. Water Quality Monitoring Agreement. The purpose of the agreement is to provide coordination and integration of surface water quality monitoring activities within Canada and B.C., and to develop joint, cost-shared, comprehensive assessments of water quality. 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 for the water quality of those water bodies. In total, 42 stations are

monitored. However, 12 of these are new monitoring stations that have been added in the past three years and water quality trends cannot be determined at sites until data have been collected for a minimum of five years. This is expected to occur some time after the 2009/10 fiscal year.

The results of this measure provide a good indication of the outcomes of water protection efforts and stewardship of the province's water resources. In addition, the information helps inform authorizations for water use and helps establish further water monitoring requirements.

### **Achievements and Key Issues**

The 2006/07 target was to maintain or improve water quality trends in the 30 water bodies monitored under the federal/provincial agreement. This target was met. Since the 2006/07–2008/09 Service Plan, the target year for this measure was changed to reflect the government's measure for water quality trends and its 2015/16 target, as presented in the *Province of British Columbia Strategic Plan 2007/08–2009/10*. This target is on track with 96 per cent of the monitoring stations having stable or improving water quality trends. Elk River continues to experience levels of selenium that are higher than the selenium water quality guideline.



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. 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 (usually a minimum five years), interpreters can start looking for trends that show changes in the water quality. However, it should be realized that even when trends appear to be stable or improving at a particular site, further work may be required in order to ensure that the water quality is suitable for different water uses. There are six categories of water use that are looked at when measuring the status of water quality at a particular site. These water-use categories are source water for drinking, recreation and for the protection of aquatic life, wildlife, irrigation water supply and livestock water supply.

In addition, the accuracy of water quality data relies on accurate water sampling and analysis. 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 as well. However, errors can still occur.

Similarly, the data analysis relies upon the accuracy of the technology and interpretation of the data. 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**

The trend for water quality stability and improvement has been consistently increasing over the years in B.C. However, this trend may slow as the number of water bodies having stable or improving water quality trends nears 30 out of 30, or 100 per cent. If the number of monitoring sites changes, or if some sites that have stable trends are replaced by other sites, the actual calculated percentages may vary slightly in years to come.

Water quality monitoring will continue at this network of sites and changes in water quality over time will be presented in future reporting. The ministry will also continue to provide the information on trends in order to track whether these trends are indicating improvement in the suitability of the water for different water uses.

### **Objective 1.2: Reduced contamination from toxins and wastes**

Disposing of the toxins and wastes generated each year is expensive. These costs 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:

- exploring new ways to reduce municipal solid waste disposal;
- increasing the number of products requiring industry-led product stewardship programs;
- supporting the development of a brownfields<sup>4</sup> strategy for B.C.;
- promoting the development and adoption of integrated pest management practices;
- developing a results-based regulatory regime that provides clear roles for government and stakeholders.

---

<sup>4</sup> Brownfields are abandoned, vacant, derelict or underutilized commercial or industrial property where past actions have resulted in actual or perceived contamination and where there is an active potential for redevelopment.

### Objective 1.3: Healthy air quality

A key focus for the ministry is protecting the quality of the air — healthy air quality means healthy people and a healthy environment. Taking action to reduce air pollution will help improve the health of British Columbians, address the government’s air quality targets, preserve our environment and enhance our economic competitiveness.



### Strategy

A key strategy for this objective is leading the implementation of B.C.’s air action plan. Components of this plan include:

- ensuring well-managed and accessible air resources information to support science-based decision-making;
- continuing to reduce emissions from industry, transportation and urban growth;
- working with partners to reduce emissions from ports and marine vessels;
- continuing to develop and support airshed management.



## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Percentage of monitored communities achieving the Canada-wide standard quality objective for particulate matter (PM <sub>2.5</sub> ) and low level ozone	PM <sub>2.5</sub> — 88%	88%	100% by 2010	93% NOT ON TRACK
	low level ozone — 96%	95%		95% ON TRACK

**Data Source:** Ministry of Environment

**Explanatory/Benchmark Information:** Due to an increase in the number of monitored communities having sufficient data to generate the statistics needed to determine the Canada-wide standard, the number of communities reported on for PM<sub>2.5</sub> has generally increased over time. In 2006/07, 26/28 communities met the PM<sub>2.5</sub> Canada-wide standard objective, whereas this figure was 21/24 communities in 2005/06 and 14/16 communities in 2004/05. In 2006/07, 22/23 communities met the low level ozone Canada-wide standard objective, whereas this figure was 22/23 in 2005/06 and 25/26 in 2004/05.

## Discussion of Results

### 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 2.5 microns (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 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.



The ministry, in conjunction with regional districts and industry, collects PM<sub>2.5</sub> data from approximately 50 air quality monitoring sites from over 30 communities across the province. The ministry also collects ozone data from approximately 36 monitoring sites from over 25 communities. Use of this performance measure is designed to help the ministry determine how effectively it is achieving its air quality improvement targets.

### Achievements and Key Issues

Based on 2005 data, Vancouver is ranked second best in Canada, with respect to its air quality, among major metropolitan areas of similar size and population. The government's 2015/16 target for PM<sub>2.5</sub> concentrations in major metropolitan areas is to achieve first place. As more communities meet the CWS, the better the air quality — and the cleaner and healthier the environment.

Activities undertaken in 2006/07 to improve local air quality included the following:

- increased support for biodiesel use in the province;
- pilot study in the Bulkley Valley–Lakes District to assess the most effective way to encourage exchange of conventional wood stoves with new low emission-certified woodstoves;
- woodstove exchange programs in the Cariboo and the Okanagan regions;
- continued support for airshed planning in B.C. communities, with new plans completed for Williams Lake and the Regional District of Okanagan-Similkameen in 2006, and plans being drafted for the Sea-to-Sky airshed, Merritt and the Regional District of Central Okanagan;
- ongoing support to implement airshed plans in the Bulkley Valley–Lakes District and Quesnel, and to complete scientific studies in Golden, Kelowna and Prince George, the results of which will guide future airshed decisions;
- co-sponsor of the Clean Air Toolkit (<http://www.cleanairkit.ca>), an online tool to help local governments develop emission reduction programs in their communities.

Related activities that support the use of common tools and the sharing of air quality information included:

- release of a working version of the *Guidelines for Air Quality Dispersion Modelling in British Columbia* ([http://www.env.gov.bc.ca/air/airquality/pdfs/aq\\_disp\\_model\\_06.pdf](http://www.env.gov.bc.ca/air/airquality/pdfs/aq_disp_model_06.pdf));
- ongoing development of a geographic information system-based tool to produce local emission inventories;
- support of the Fraser Basin Council's 2007 Clean Air Forum, which provides community, government and industrial organizations with an opportunity to discuss common air quality issues and potential solutions;
- support of the BC Lung Association's 2006 *State of the Air Report in British Columbia* and the BC Lung Association's 2006 Workshop on Air Pollution and Public Health.

## Ministry Response

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 of 100 per cent by 2010. Historically, sampling efforts tended to focus on those areas experiencing air quality problems related to particulate matter. More recently, the PM<sub>2.5</sub> monitoring network has expanded into communities where there was no previous data. This community-based monitoring in populated areas has resulted in the ministry finding higher PM<sub>2.5</sub> concentrations in some areas. Future changes are anticipated regarding the methods used to measure PM<sub>2.5</sub>. Thus, achievement of the PM<sub>2.5</sub> target will be difficult and trend results should be interpreted carefully to determine if trends reflect actual changes to air quality, changes in the extent and nature of the monitoring network or other factors. Based on the last three years of data (2004 to 2006), the communities of Vanderhoof and Valemount exceeded the CWS target for PM<sub>2.5</sub><sup>5</sup> and Hope exceeded the CWS target for ozone.

## Future Direction

In 2006/07, the ministry led the development of initiatives designed to meet government's goal of the best air quality. The B.C. government's 2007 budget allocated \$14 million over the next three fiscal years to achieve air quality improvements in communities throughout the province. Planned initiatives include retrofitting diesel buses, providing incentives to reduce the use of conventional wood stoves and encouraging industry to adopt better emission technologies.

In addition, the ministry will continue to support local airshed planning efforts to improve air quality by offering technical expertise and resources, providing information sharing, and encouraging partnership-building.

Climate change is a serious issue that has broad local, regional and global significance. All jurisdictions, including British Columbia, have a responsibility to demonstrate their commitment to reverse the trend of rapidly rising greenhouse gas emissions that contribute to climate change.

---

<sup>5</sup> The Canadian Council of Ministers of the Environment's National Guidance Document on Achievement Determination clarified that Canada-wide standard achievement was to be based on daily measurements of PM<sub>2.5</sub>. However, to put air quality from all monitored communities into perspective, communities that did not measure air quality on a daily basis have been included here.

## Objective 1.4: Effective responses to climate change

As lead agency for the provincial government's response to climate change, the ministry's 2006/07–2008/09 Service Plan identified “per capita greenhouse gas emissions relative to other provinces” as a measure for monitoring B.C.'s progress in this area. Data received from Environment Canada indicates that British Columbia now has the second-lowest per capita greenhouse gas emissions in Canada.

This comparative measure was appropriate at the time but has been discontinued as a result of the government's announcement in February 2007 to reduce B.C.'s greenhouse gas emissions by at least 33 per cent below current levels by 2020. A Climate Action Team will be established to work with First Nations, other governments, industry, environmental organizations, and the scientific community to determine sector targets for 2012 and 2016. A longer-term emissions reduction target for 2050 will also be established for British Columbia, as has been done for California and Oregon.



*The B.C. provincial government offers a \$2,000 exemption from Provincial Sales Tax on the purchase of a hybrid car.*

The cost of climate change is directly related to consumption. For the government's goals to be met, citizens must take individual responsibility and make appropriate choices. Over the next year, the government will consider the range of possibilities aimed at encouraging personal choices that are environmentally responsible.

*“Everyone can help, and no step is too small. Being part of the solution can take many forms: turn your thermostat down; pick up litter in your community; support local farmers' markets; drive less or carpool and use biodiesel if you can; turn off your computer at night; plant a tree. Every single one of us can do something.”*

— Honourable Barry Penner

## Objective 1.5: Effective management of environmental risks

Events 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:

- preparing for and responding effectively to high risk environmental emergencies such as oil spills, hazardous material spills, gas leaks and flood and debris flows;
- 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;
- providing effective and timely forecasting of floods and droughts;
- reducing the risk to public safety through effective human-wildlife management and response programs;
- reducing the risk to the environment and human health and safety through effective compliance and enforcement strategies and actions, including development of a commercial environmental investigation unit;
- remediation of high risk contaminated sites.

## 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.



Photo Credit: Elke Wind

## **Objective 2.1: 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;
- communicating 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;
- assessing the conservation status of plants, animals and ecosystems and related risks and threats within parks and protected areas.

## **Objective 2.2: Well-managed 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, designate and manage parks and protected lands;
- undertaking parks and protected lands planning and management to ensure long-term protection of natural, cultural and recreational assets;
- maintaining and promoting partnerships for securing and managing parks and protected lands;
- continuing to evaluate the assets of protected areas to support sound decision-making;
- incorporating the Healthy by Nature<sup>6</sup> messages into BC Parks communications;
- adopting best business practices to optimize parks system management.

---

<sup>6</sup> Healthy by Nature is a concept developed by the Canadian Parks Council, with active participation of the Ministry of Environment, and is consistent with the goals of ActNow BC. Healthy by Nature emphasizes the link between parks, personal health and the health of families, communities and the environment.

## Objective 2.3: 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 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:

- continuing to work with and expand partnerships, including those with First Nations, to identify, protect and restore species and ecosystems;
- continuing to assess and monitor fish and wildlife populations and ecosystems to support improved resource management;
- continuing to assess, monitor and manage wildlife health;
- continuing to develop guidelines, policies and standards for the protection and conservation of species and ecosystems;
- continuing to monitor the effectiveness of and compliance with fish and wildlife guidelines;
- developing and implementing an enhanced legal and policy framework and regional-based planning programs;
- providing scientific advice to decision-makers and those responsible for developing and implementing resource use policies and land use planning initiatives;
- providing leadership in species at risk ranking and designation, and preparation and implementation of recovery plans;
- developing and implementing a provincial policy that balances water flow requirements for species, ecosystems, communities and industries;
- leading, in collaboration with the federal government, the development of a marine protected area system for the Pacific coast;

*“British Columbia is Canada’s most biologically diverse province. Our government is identifying and protecting those species and ecosystems that are most vulnerable.”*

— Honourable Barry Penner

- developing and implementing a provincial human-wildlife conflict policy and response program to provide maximum wildlife protection consistent with public safety;
- developing and implementing sustainable fish and wildlife harvest policies that balance conservation, public safety and user demand;
- partnering with resource agencies on provincial access management;
- reducing risk to native species and ecosystems by responding to offences with effective compliance and enforcement strategies and actions, including implementation of Seasonal Conservation Officers.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of completed designations under the <i>Forest and Range Practices Act</i> ; including Wildlife Habitat Areas (WHAs), Ungulate Winter Ranges* (UWRs), and Fisheries Sensitive Watersheds (FSWs)	WHAs — 320	414	350	917
	UWRs — 28	35	38	48
	FSWs — n/a	17	27	31
				EXCEEDED

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** \*The number for UWRs specifies the number of ungulate winter range 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 to also consider the amount of area designated.

March 31, 2007:	917 WHA designations approved covering 743,863 hectares	48 UWR designations approved covering 3,601,200 hectares
March 31, 2006:	414 WHA designations approved covering 668,424 hectares	35 UWR designations approved covering 2,658,725 hectares
March 31, 2005:	320 WHA designations approved covering 658,935 hectares	28 UWR designations approved covering 2,284,917 hectares
March 31, 2004:	160 WHA designations approved covering 49,120 hectares	15 UWR designations approved covering 913,462 hectares

## Discussion of Results

### Rationale for the Performance Measure

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





native species. It is important to measure ministry progress in establishing environmental standards for the protection and restoration of species and their habitats under the Act.

The ministry's legal designations are for Wildlife Habitat Areas (WHAs), Ungulate<sup>7</sup> Winter Ranges (UWRs) and Fisheries Sensitive Watersheds (FSWs).

### **Achievements and Key Issues**

The ministry exceeded all targets for this performance measure. In 2006/07, 503 WHA designations were approved for a total of 917 WHAs covering 743,863 hectares; 13 UWR designations were approved for a total of 48 UWRs, covering 3,601,200 hectares; and 14 FSW designations were approved for a total of 31 FSWs. Fisheries sensitive watersheds ranged from 2,700 to 71,000 hectares. An FSW designation requires forest and range licensees to apply special management practices in order to ensure the protection of fish habitat.

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. The targets also provide only a count of the number of designations, and the size of the designations will vary depending on the species involved. An additional risk is in ensuring that the conservation goals for designated areas are being achieved. Reporting out on monitoring initiatives in the plan would help to address this issue.

### **Future Direction**

The large number of WHA designations in 2006/07 was primarily due to 330 WHAs being established on B.C.'s mid-coast for grizzly bear. The establishment of these WHAs fulfilled a portion of the requirements for Ecosystem-Based Management<sup>8</sup> and was the result of long-term planning.

The targets for approval of UWR designations will remain stable over the next three years, reflecting an expected decrease in UWR plans remaining for approval when compared with the period from 2003/04 to 2006/07.

For the Fisheries Sensitive Watersheds program, designations in fiscal 2005/06 and 2006/07 have been driven by official government land use policy (e.g., Land and Resource Management Plans). As the FSW program is fully implemented across the province in 2007/08, and as the designation process will no longer be predicated entirely on land use policy, the level of evaluation required to meet the regulatory requirements will involve a higher level of rigour. Consequently, it is expected that designation numbers will remain stable over the next year or two as evaluations take place, and then begin to increase thereafter.

---

<sup>7</sup> An ungulate is a hoofed mammal such as a caribou, moose, bison or goat.

<sup>8</sup> Ecosystem-Based Management is a management approach that considers all ecosystem components, including humans and the environment, rather than managing one issue or resource in isolation. Please see <http://www.cbmtools.org/> for more information.

## **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.

### **Objective 3.1: 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.

#### **Strategies**

Key strategies for this objective include:

- implementing and supporting a comprehensive and integrated ministry stewardship outreach strategy;
- promoting outdoor activities as beneficial for a healthy lifestyle.

#### **Discussion of Performance**

To monitor progress in this area, the ministry is in the process of developing a performance measure and targets that measure the reduction of municipal solid waste disposal per capita. The measure will reflect the commitment by businesses and the public to reduce their impact on the environment and to support a healthy economy and healthy communities. Improved environmental practices, reduction in consumption or use of raw materials in production, reuse of materials collected through blue box programs, recycling of beverage containers and composting kitchen and yard waste all contribute to a reduction in municipal solid waste disposal.

## Achievements and Key Issues

Provincial municipal solid waste disposal is governed under the *Environmental Management Act*. Under the Act, the province requires local governments to prepare municipal solid waste management plans designed to minimize waste going to landfills and maximize reuse and recycling initiatives. The ministry sets the policy direction for waste reduction, but reduction and disposal of municipal solid waste is the responsibility of the province's 27 regional districts. Regional districts weigh the amount (in kilograms) of municipal solid waste disposed of in municipal landfills annually. The waste being tracked is generated by residents, businesses and institutions.

In 2006, the ministry commissioned the Recycling Council of British Columbia to collect municipal solid waste data from all regional districts for the period between 2003 and 2005. The information contained in the report showed waste disposed of into landfills; however, it did not capture the material that was being diverted from municipal recycling, composting and industry-led stewardship programs.

## Future Direction

By 2008/09, the ministry intends to make significant improvements in measuring waste disposal, diversion and recycling. The ministry plans to collect more comprehensive data from local governments to enhance the waste disposal baseline data already collected. A more comprehensive baseline data set that includes recycling and organics diversion, and a breakdown of other waste types will help the Province establish a new waste reduction target and sub-targets.

## Objective 3.2: 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.



Photo Credit: Elke Wind

## Strategies

Key strategies for this objective include:

- recognizing, promoting, and enhancing shared stewardship through consultative processes and volunteer initiatives that engage stakeholders, clients and partners;
- promoting sustainable natural resource management through collaborative management and decision-making processes;
- pursuing opportunities for the Conservation Officer Service to provide shared compliance and enforcement activities through partnerships with other agencies;
- enhancing and promoting shared stewardship through effective and timely communication of compliance activities taken to protect the environment.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of Parks Collaborative Management Agreements (PCMAs) and Regional Fish and Wildlife Processes (RFWPs) with First Nations	15 PCMAs 5 RFWPs	16 5	2 additional (23 total)	4 additional (25 total) EXCEEDED

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** In 2003/04, there were 14 Parks Collaborative Management Agreements and two Official Wildlife Processes with First Nations.

In 2002/03, there were 12 Parks Collaborative Management Agreements and two Official Wildlife Processes with First Nations.

## Discussion of Results

### 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 promote the New Relationship and help build government-to-government relationships between First Nations and the ministry.

*“The government-to-government Collaborative Management Agreement between the Province and the ‘Namgis will allow us to work together to manage parks as effectively as possible. In keeping with the spirit of the New Relationship, the agreement paves the way for future discussions between First Nations and the Province regarding the collaborative management of parks in First Nations’ traditional territories...”*

— Honourable Barry Penner

Parks Collaborative Management Agreements with First Nations define how the province and First Nations will work together to manage specific B.C. 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.'s 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 Processes typically include the participation of a number of First Nations in a defined region 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.

### **Achievements and Key Issues**

The target has been met and exceeded. Four new Parks Collaborative Management Agreements were signed, bringing the total number of Collaborative Management Agreements in place to 25, with another 20 Collaborative Management Agreements in draft stage. As a result, 98 of 203 First Nation bands in British Columbia are engaged in Parks Collaborative Management Agreements and/or Regional Fish and Wildlife Processes with the ministry.

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.

### **Future Direction**

The ministry regularly reviews the development and implementation of Parks Collaborative Management Agreements and Regional Fish and Wildlife Processes to improve the effectiveness of the processes and meet the changing needs of First Nations and regional operations. As a result, the ministry may consider establishing new targets for the measure of these advisory processes.

### Objective 3.3: 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.

*“We strive to strike a balance between compliance and enforcement. Our goal is to encourage compliance to prevent damage before it occurs and apply the appropriate response if individuals or businesses do not comply with our environmental standards.”*

— Honourable Barry Penner

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:

- continuing to work with industry to develop, implement and continuously improve industry-led product stewardship programs;
- continuing to research and collaborate with key stakeholders on product categories suitable for inclusion in the B.C. Recycling Regulation;
- encouraging compliance by reporting those in non-compliance and those exceeding environmental standards.

#### Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of product categories with industry-led product stewardship programs	—	7	9 by 2008/09	ON TRACK

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** British Columbia currently has seven product categories with industry-led product stewardship programs in place: paint, used oil products, beverage containers, pharmaceuticals, solvents and flammable liquids, domestic pesticides, and gasoline. Two additional product categories, tires and electronic products, were added to the B.C. Recycling Regulation in 2006/07.

## **Discussion of Results**

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

For this measure, the ministry is counting the number of post-consumer product categories with industry-led product stewardship programs. Currently, stewardship programs are in place for paint, used oil products, beverage containers and four other post-consumer residuals, all of which provide significant reduction in waste and positive benefits to the environment.

Industry-led stewardship programs demonstrate producer responsibility for a product by managing that product across its entire life cycle and reducing the environmental impact when the product is safely disposed of. The result of these stewardship programs is less household hazardous waste in landfills, less total waste in landfills and reduced burden on local governments to manage this waste. Stewardship programs are, and will continue to be, an important example of how B.C. industry works with the ministry and its clients and is implementing effective and responsible environmental management practices.

### **Achievements and Key Issues**

The ministry is on track for meeting the 2008/09 target of a total of nine product categories with industry-led product stewardship programs. Two additional product categories were added to the B.C. Recycling Regulation: electronic products and tires. The tire program was implemented in January 2007 and the electronic products program is scheduled to be implemented in August 2007.

Two potential 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 ministry intends to develop a prioritized list of future product categories to add to the B.C. Recycling Regulation. To develop this list, the ministry will consult with provincial stakeholders and collaborate with other provinces and the federal government in a task group formed by the Canadian Council of Ministers of the Environment. In addition, the British Columbia Used Oil Management Association, the steward for the used oil product category under the B.C. Recycling Regulation, will be submitting a revised stewardship plan in October 2007 for review by the ministry. This plan will include consultation with stakeholders prior to submission.

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.

### **Objective 4.1: 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 these resources provide, the ministry ensures that wise and prudent management of our water and air resources will continue to provide benefits to British Columbians in the future.

### **Strategies**

Key strategies for this objective include:

- seeking public consensus on a new water allocation model and modifying and streamlining the *Water Act* and related legislation;
- exploring shared governance frameworks to promote increased community and stakeholder involvement at the local level;
- 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;





- continuing the effective management and operation of water management projects for diverse economic, environmental and social values such as the Okanagan Lake Regulation System and the Nicola Lake Dam;
- promoting and facilitating multi-stakeholder watershed management plans;
- promoting and facilitating multi-stakeholder airshed management plans.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of water or watershed management plans completed and implemented	1	1	6 by 2010*	ON TRACK

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** \*The target is three plans by 2007/08 and six plans by 2009/10. In June 2004, Trepanier Creek Watershed Plan was completed.

## Discussion of Results

### Rationale for the Performance Measure

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.

### Achievements and Key Issues

The ministry is on track to meet the 2010 target for this measure. Since the 2006/07–2008/09 Service Plan, a number of water and watershed management plans have been initiated, completed and/or implemented. Plans have been led by communities and supported by the Province. The Trout Creek water use management plan, which guides community reservoir management

*“Community water management plans are consistent with our government’s mandate to promote sustainability and ensure secure access to water supplies.”*

— Honourable Barry Penner

during low flow periods for downstream fish habitat protection, has been completed and implemented. The Cowichan River water management plan, also drafted to address multiple uses, including downstream fish habitat requirements, is awaiting implementation, whereas the Nicola Valley water use management plan, which seeks solutions to long-standing water issues, is nearing completion of its Present and Future Water Demand Study. In addition, storage and water supply studies are underway. The Kiskatinaw River and Pine River watershed management plans have been developed to address land use impacts on water quality.

The Township of Langley water management plan, which is the first water management plan in British Columbia to be initiated in accordance with the *Water Act*, is being undertaken to address declining groundwater levels and the risk of contamination that could impact community groundwater supply and supplies used for drinking water, agriculture and industry. It will be completed by December 2007.

### **Future Direction**

This performance measure assesses both the number of water management plans designated under the *Water Act* as well as plans with no statutory basis. The Province will seek to promote and facilitate the development 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 4.2: 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, marine and freshwater 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 B.C.'s 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, marine and freshwater angling and wildlife viewing opportunities;
- providing a diverse range of outdoor recreation and commercial opportunities in the parks system to respond to visitor trends;
- maximizing opportunities for partnerships with First Nations, local communities, non-profit groups, private land owners and others;
- developing and implementing marketing strategies to promote healthy living through park visitation;
- improving and expanding the quality of park recreation opportunities and services;
- streamlining the provision of hunting and angling licences, permits and commercial licences through the development and delivery of electronic business applications;
- creating a community engagement program to provide local stewardship and economic opportunities.

## Performance Results

Performance Measures	2004/05 Actual (baseline)	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of recorded park visits and visitor satisfaction level				
Park visits	18.0 million	18.3 million	20% increase by 2010	5.0% increase ON TRACK
Visitor satisfaction level	80%	81%	Maintain or improve	83% ACHIEVED

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:**

**Recorded park visits:** The number of recorded visits to B.C. parks was approximately 18.9 million as of May 2007 (this number may change pending final year-end quality control of the data).

**Visitor satisfaction:** The satisfaction rating is based on an extensive satisfaction survey that is conducted in campgrounds and day use areas around the province and is based on nearly 5,000 respondents. The five-year rolling average for 2004/2005 was approximately 80 per cent, which is based on the Visitor Satisfaction Index rating of the reporting years of 2000/01 to 2004/05. The five-year rolling average for 2003/04 was approximately 80 per cent, which is based on the Visitor Satisfaction Index rating for the reporting years of 1999/2000 to 2003/2004.

## Discussion of Results

### 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. Park uses encourage travel and significantly contribute to local, regional and provincial economies.<sup>9</sup> The number of visitors to provincial parks is used to measure the contribution of parks to the government's priorities of health, tourism and economic goals. 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. The results of this survey are used by ministry staff and park facility operators to better assess which services are being provided well and which services require improvements.

### Achievements and Key Issues

**Number of park visits:** The ministry is on track for meeting the 2010 target for number of recorded park visits. In 2006/07, the total recorded visits increased approximately 3 per cent from 2005/06. Camping attendance, which contributes approximately 12 per cent to the total recorded visits, increased approximately 4 per cent, while day use, which contributes approximately 87 per cent to the total recorded visits, increased approximately 3 per cent.

BC Parks has seen a steady increase in park attendance over the last few years, and a consistently high level of visitor satisfaction. New strategies will focus on ensuring that services and programs are responsive to visitor needs and demographic trends, and that BC Parks continues to provide outstanding recreation opportunities in one of the most beautiful, extensive and varied parks systems in the world.

---

<sup>9</sup> Ministry of Environment and PricewaterhouseCoopers. *Economic Benefits of British Columbia's Provincial Parks*. September 2001. The report shows that the economic contribution of parks to the provincial Gross Domestic Product was estimated at approximately \$521 million annually.

**Park satisfaction survey results:** In 2006/07, the ministry’s park Visitor Satisfaction Index was 83 per cent. 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 per cent for 2006/07 was met. One of the services that contributed to the slight increase in

the overall index was an increase in the rating of control of noise from 73 per cent in 2005/06 to 78 per cent in 2006/07. The rating for sense of security also increased from 82 per cent in 2005/06 to 85 per cent in 2006/07. Over the past 10 years, these services have been rated by many park visitors as being important to their stay in the campground. The ratings for the other three services continued to be similar to the previous year.



**Figure 1.** Visitor satisfaction index from 1996/97 to 2006/07

The index of visitor satisfaction for the past 10 years is shown in Figure 1. In 2004/05, the index was increased from 75 per cent in previous years to 80 per cent in 2004/05 to reflect recent performance. The measure provides an indication of how effective service improvements have been throughout the past 10 years.

### 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 per cent by 2010, the ministry will continue to upgrade facilities to ensure they are safe, clean and operational. The Parks for People Strategy, developed by the ministry in 2006, identifies world class, high quality recreation, tourism and stewardship opportunities. Activities include increasing visitor attendance and satisfaction, investing in facility upgrades, working with partners such as the Society of Park Facility

*“Government’s vision for parks is founded on a central principle — to maintain the ecological and conservation role and integrity of our parks. With the safeguards that have been put in place, we can expand recreational opportunities and increase visitation without detracting from that vision.”*

— Honourable Barry Penner

Operators and Federation of BC Naturalists to offer interpretation services, expanding partnerships with communities and stakeholders to encourage visitation, and continuing to administer the visitor satisfaction surveys to understand and effectively respond to client needs.

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 Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of basic hunting and angling licences sold				
Hunting	89,934	92,020	100,000 by 2014/15	96,142 ON TRACK
Angling	316,380	319,363	400,000 by 2014/15	339,805 ON TRACK

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:**

2006/07: Hunting – 89,532 resident and 6,610 non-resident.	Angling – 266,961 resident and 72,844 non-resident.
2005/06: Hunting – 85,633 resident and 6,387 non-resident.	Angling – 251,993 resident and 67,370 non-resident.
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.

## Discussion of Results

### Rationale for the Performance Measure

This measure reflects the number of resident and non-resident hunters and anglers taking advantage of the freshwater fishing and hunting opportunities in British Columbia. BC Stats reports that resident and non-resident hunting accounts for approximately \$50 million per year of the provincial Gross Domestic Product (GDP), whereas freshwater recreational angling accounts for approximately \$115 million per year of the GDP.<sup>10</sup> Although the measure does not account for differences in the experiences and economic contributions of individual licence holders, it does provide a good indication of the overall economic contributions from hunting and angling opportunities.

<sup>10</sup> Based on 2003 BC Stats reports for hunting and 2004 BC Stats reports for angling.

Programs within the ministry endeavour to monitor and conserve British Columbia's rich biological diversity and the health of native species and their habitat, while providing a variety of opportunities for the sustainable use and enjoyment of freshwater fisheries and wildlife in B.C. In addition to the economic contribution provided by hunting and angling, these activities offer residents and visitors opportunities to experience the B.C. wilderness and contribute to a healthy lifestyle.

### **Achievements and Key Issues**

The ministry is on track to meet the 2014/15 targets for this measure.

The ministry strives to ensure the continuation of healthy fish and wildlife populations. To do this, a number of wildlife inventory and fish-stocking projects occur throughout the province. Surveying and population modelling for big game species, as well as developing management strategies continued through 2006/07.

The total number of hunting and angling licences, both for residents and non-residents increased last year. There was a 4.5 per cent increase in resident hunting licence sales from 2006/07 to 2005/06, compared with a 1.9 per cent increase from 2005/06 to 2004/05. There was a 6.4 per cent increase in resident angling licence sales from 2006/07 to 2005/06, compared with a 0.9 per cent increase from 2005/06 to 2004/05.

### **Future Direction**

In the last couple of years, there have been small increases in annual licence sales for both hunting and angling. It is believed that some of this increase is due to incomes rising faster than inflation across western Canada.

However, if the average rate of annual increase for the past two years (3.2 per cent) for basic hunting licence sales continues for the next eight years, the 2015 target of 100,000 licences sold will be exceeded. As well, if the average rate of annual increase for the past two years (3.6 per cent) for angling licence sales continues for the next eight years, the 2015 target of 400,000 licences sold will be exceeded.

### **Objective 4.3: 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 a fair share of federal and cross government programs, initiatives and activities to promote research, exports and investment for our seafood sector;
- undertaking initiatives to enhance the competitiveness and sustainability of B.C.'s seafood products in domestic and international markets.

*“The global seafood market is increasingly calling for proof that seafood products are harvested from environmentally sustainable fisheries. We are working with Canada’s federal government and industry partners to obtain internationally recognized, third-party certification for a number of fisheries, including sockeye salmon, halibut and hake.”*

— Honourable Barry Penner

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Number of marine-based commercial and recreational fisheries managed through a collaborative decision-making process	3	3	4	4 ACHIEVED

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** The three fisheries managed through a collaborative decision-making process in 2004/05 and 2005/06 are hake, herring and tuna. The fourth fishery in 2006/07 is Strait of Georgia rockfish and lingcod.

## Discussion of Results

### Rationale for the Performance Measure

Economic sustainability is dependent on the level and certainty of access to resources. The federal government has the constitutional authority for the management and regulation of B.C.'s marine fisheries. The government actively participates in marine fisheries management to represent the province's interests, and is a key partner in federal management activities and decision-making processes. Measuring the increase in the number of B.C. marine fisheries that are managed



collaboratively and include provincial government and stakeholder participation will determine if B.C.'s interests concerning fair allocation and certainty of access to resources are represented.

### Achievements and Key Issues

During 2006/07, the Strait of Georgia rockfish and lingcod fishery joined the herring, hake and tuna fisheries that are now governed with a collaborative management regime that includes strong stakeholder and ministry participation.

Together, hake, herring, tuna, rockfish and lingcod generate over \$220 million<sup>11</sup> in wholesale value to the B.C. economy.

### Future Direction

Over the past 10 years, the Pacific sardine stocks have begun to rebuild to the point where a sustainable commercial fishery may again be viable. The Province is working actively with the federal government and industry to promote similar collaborative management arrangements to develop a commercial harvesting plan for 2007 that will maximize economic opportunities from this potential fishery.



<sup>11</sup> B.C. Ministry of Environment. *2005 British Columbia Seafood Industry Year in Review*. September 2006. Available at <http://www.env.gov.bc.ca/omfd/reports/YIR-2005.pdf>

## Goal 5: A high performance organization

A high performance organization is reflected in its leadership, people, corporate operating systems, decision-making processes, 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 for staff, promotes learning and is committed to continuous improvement.



Since the 2006/07–2008/09 Service Plan, the objectives supporting this goal have been clarified and reduced from five objectives to four, and the key supporting strategies have been refocused. We believe this change shows our commitment to continuous review and improvement.

### Objective 5.1: A client-focused organization that supports high quality service

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 and decision-making, and timely information systems.

#### Strategies

Key strategies for this objective include:

- continuing to foster collaborative and productive relationships with clients;
- identifying and implementing continuous improvements in client business processes.

## Performance Results

Performance Measures	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Changes in satisfaction of client groups				Baseline established
1. Client Satisfaction Index	—	—	Baseline data to be collected	1. 79%
2. Communication of shared stewardship				2. 55%
3. Consultation with stakeholders				3. 49%
				ACHIEVED

**Data Source:** Ministry of Environment.

**Explanatory/Benchmark Information:** The first client satisfaction survey was conducted in 2006 to establish baseline data. This survey will be repeated every two years beginning in 2008. This performance measure looks at three main indicators. The first indicator, the Client Satisfaction Index, comprises four focus areas — professional competence, reliability of information, availability of staff and timeliness of staff response. The second indicator measures how effectively the ministry is at communicating its goal of encouraging B.C. residents to share in the responsibility of taking care of the environment through shared stewardship. The final indicator measures the effectiveness of the ministry's consultation processes on proposed government policy and legislation.

## Discussion of Results

### Rationale for the Performance Measure

High performance organizations place a special emphasis on the delivery of appropriate, effective and responsive client-based services. This performance measure serves as an indicator of the level or extent to which client expectations are being met. The measure is meant to reflect client satisfaction levels with professional staff competencies, the ministry's and BC Parks' Internet services, and how well the ministry communicates and achieves shared stewardship initiatives. The measure also rates client satisfaction with the ministry's consultation processes on policy and legislation.

### Achievements and Key Issues

In September 2006, a survey was conducted with 400 representatives from business, industry, government, First Nations, non-governmental organizations and academia. The intent of the survey was to establish the level of satisfaction of clients who have regular contact with staff and an interest in the programs and services provided by the ministry. The client satisfaction level identified by the survey results is a baseline from which new performance targets have been established.

Results from the survey showed that the ministry is doing well in terms of overall staff services, in particular, courtesy, professional competence, helpfulness and reliability of information. The ministry also did well on providing accurate information on the ministry's website and usability of the BC Parks website. Areas for improvement included the wait times for

client requests, staff availability, client access to relevant data, the communication of the ministry's objectives and goals for shared stewardship and the consultation on policy and proposed legislation.

The following performance targets have been established as part of the 2007/08–2009/10 Service Plan:

- |  |                     |
|--|---------------------|
| 1. Client Satisfaction Index           | Maintain or Improve |
| 2. Communication of shared stewardship | Improve             |
| 3. Consultation with stakeholders      | Improve             |

### **Future Direction**

As a result of the information provided by our clients, the ministry has undertaken a cross ministry review of the services and practices identified in the survey as needing improvement. Discussions are underway with ministry staff to determine what changes can be made to better meet client needs. Improvements will be implemented and monitored over the coming year. In 2008, the ministry will conduct another survey, to measure changes in satisfaction of client groups.

Asking the ministry's clients how we are doing is an ongoing process and one that will give us a better understanding of our clients' needs and expectations, helping us to improve our services and programs. Building a reputation for quality service, objectivity and knowledge will also build clients' confidence and trust in the capacity and abilities of the organization.

### **Objective 5.2: A healthy working environment that supports and motivates staff, promotes innovation, and attracts and retains high performance employees**

The ministry strives to ensure that it is a desirable, well-respected and innovative place to work. Acknowledging 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 positive social relationships.

### **Objective 5.3: An integrated cross ministry framework that supports ministry goals and objectives**

Leadership and a coordinated approach to legislation and policy development, planning, performance management and reporting, 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 and objectives;
- providing support and streamlined outcomes through effective intergovernmental relations;
- facilitating a strategic and integrated approach to planning, measurement, evaluation and accountability;
- linking ministry resources with planning and results;
- tracking performance and reporting results toward the achievement of provincial environmental objectives;
- providing leadership and service in support of a strategic ministry compliance approach and maintaining strong and effective compliance and enforcement services.

### **Objective 5.4: Information resources that support effective decision-making**

Science, socio-economic analysis and technology are fundamental tools for effective ministry decision-making. Application of the best available science and sound economic analysis are key components of setting and evaluating the effectiveness of environmental standards. Well-managed, accurate and accessible information is critical to making informed environmental and business management decisions.

## Strategies

Key strategies for this objective include:

- maintaining access to the best available science through in-house expertise and partnerships with research agencies and universities;
- monitoring the effectiveness (i.e., the impact) of standards of environmental values such as water and air quality and health of ecosystems;
- providing tools to better integrate scientific information with the social and economic factors considered in resource management decisions;
- developing effective information resources to facilitate effective environmental decision-making;
- pursuing opportunities to maximize the use of technology and best practices in the management of information resources.

# Report on Resources

## Introduction

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 2006/07–2008/09 Service Plan presented the ministry's performance plans — goals, objectives and strategies — and identified the resources required to achieve the planned outcomes over three years. The following sections detail the fiscal performance of the ministry by providing an overview of ministry funding, reporting the resources consumed over the 2006/07 fiscal year and comparing actual expenditures against estimated expenditures.

## Ministry Funding

The total net funding available for ministry operations in fiscal year 2006/07 was \$190.43 million. This funding was derived from the following sources:

- Voted appropriation<sup>12</sup> — this is the largest source of ministry funding, which provided \$152.56 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 \$2.17 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 \$22.86 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 \$24.51 million.

---

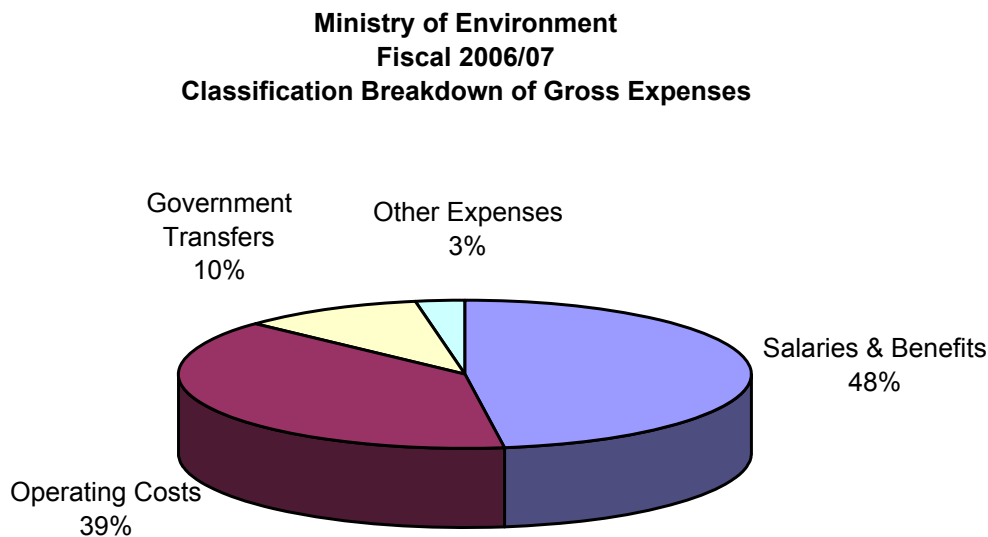
<sup>12</sup> Voted appropriation — the *Supply Act* as represented in the estimates.

- External recoveries — Recoveries from outside the Consolidated Revenue fund were estimated at \$8.50 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 \$6.88 million.

**Ministry Expense (see Figure 2)**

- Salaries and benefits — \$105.63 million — the largest expense for the ministry, accounted for 48 per cent of annual spending.
- Operating costs — \$86.27 million — includes professional services, parks operating and other contracts, building occupancy and materials and supplies costs, accounted for 39 per cent of gross expenditures.
- Government transfers — \$22.24 million — includes grants and transfers under agreement, accounted for 10 per cent of gross expenditures.
- Other expenses — \$6.33 million total — includes costs not attributable to other categories, such as water rental remissions, accounted for 3 per cent of gross expenditures.

**Figure 2.** *Gross expense for fiscal 2006/07 (Source: B.C. Draft Public Accounts, 2006–2007)*





## Resource Summary Table

The 2006/07 Resource Summary Table 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 the table.

### Core Business Areas

The ministry manages and delivers a wide range of programs and services that support the environmental goals and objectives of the Province. Five of its core business areas are aligned with and delivered by five ministry divisions: Environmental Stewardship Division, Water Stewardship Division, Oceans and Marine Fisheries Division, Environmental Protection Division and Compliance Division. The sixth core business area, Executive and Support Services, is the responsibility of the Deputy Minister's Office, Strategic Policy Division and Corporate Services Division. The Corporate Services Division also provides support services to the Ministry of Agriculture and Lands and the Integrated Land Management Bureau.

**Environmental Stewardship** — This core business area is led by the Environmental Stewardship Division. Key programs and services focus on the effective management and stewardship of fish and wildlife species, ecosystems, parks and protected areas. Environmental Stewardship is responsible for the collaborative development of standards for the use and protection of species and habitats and allocation of natural resources for hunting, angling, trapping and wildlife viewing. Key functions include collecting, maintaining and managing the scientific information necessary to ensure these standards and the decisions that support them are informed by the best available science. Environmental Stewardship is also responsible for the provision of healthy, outdoor recreation opportunities in parks and protected areas for British Columbians. This business area works to ensure that the economic potential of B.C.'s natural resources is realized in an enduring and sustainable way. The division is responsible for establishing legislation (e.g., the *Park Act*, *Protected Areas of British Columbia Act* and *Wildlife Act*), policies and procedures that provide direction for the protection and conservation of our natural environment.

**Water Stewardship** — This core business area is led by the Water Stewardship Division. Key programs and services focus on providing provincial leadership, ensuring that British Columbia's water resources and aquatic ecosystems 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. Key functions include developing innovative approaches to water governance, advancing science-based decision-making and providing information critical to understanding and managing B.C.'s water resources. Other key functions include creating legislation and non-regulatory tools and carrying out statutory and public safety functions that support fair and sustainable water allocation, protect groundwater resources and minimize the risk of floods

and droughts. Other important 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* and, through the Inspector of Dikes, administers the *Dike Maintenance Act*. This core business area's work places a high priority on fostering water stewardship through public awareness, education, partnerships and capacity building.

**Oceans and Marine Fisheries** — This core business area is led by the Oceans and Marine Fisheries Division. Key programs and services focus on the development and implementation of the province's ocean resources, marine fisheries and seafood development initiatives. These initiatives are based on the integrated management and sustainable use of B.C.'s ocean resources. Stable and diverse marine fisheries that can compete in strong domestic and global markets will ensure long-lasting social and economic benefits for British Columbians. Key functions include the collaborative development of provincial oceans and marine fisheries interests; joint provincial-federal marine resource management strategies and management of B.C. marine fisheries and ocean resources; supporting seafood traceability and third-party certification programs and marketing the sustainability and quality of B.C.'s seafood industry in the domestic and global marketplace.

**Environmental Protection** — This core business area is led by the Environmental Protection Division. Key programs and services focus on protecting human health and safety and environmental quality. These objectives are achieved by setting high environmental standards for the protection of water, land and air; promoting sustainable environmental practices through education and outreach; and regulating, monitoring and reporting on compliance. Key functions include the development and implementation of the industry-led stewardship program for the reuse and recycling of post-consumer products; effective management of high risk environmental emergencies; and leading the provincial climate change initiative. This area is responsible for the development and implementation of results-based legislation (e.g., the *Environmental Management Act* and the *Integrated Pest Management Act*). Results-based legislation provides clear roles for governments and stakeholders and sets clear performance standards for the protection of human health and safety and environmental quality.

**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 activities. Services include providing expertise in environmental investigation and enforcement, wildlife/human conflict response and preventative programs, and compliance policy and planning 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, reporting on compliance and enforcement actions through quarterly public reporting, 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.

**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; tools to support effective decision-making; State of the Environment reporting; economic analysis; and service planning, reporting, evaluation and performance management. Key functions cover a full range of financial, human resource, administration and information management and technology systems and services.

## Resource Summary Table 2006/07

Core Business Areas	Estimated <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
Environmental Stewardship .....	69,987	709	70,696	74,815	4,119
Water Stewardship .....	28,457	183	28,640	21,939	(6,701)
Oceans and Marine Fisheries .....	2,149	20	2,169	2,588	419
Environmental Protection .....	40,485	381	40,866	43,396	2,530
Compliance .....	17,797	228	18,025	18,527	502
Executive and Support Services <sup>3</sup> .....	29,389	649	30,038	27,825	(2,213)
<b>Total<sup>4</sup> .....</b>	<b>188,264</b>	<b>2,170</b>	<b>190,434</b>	<b>189,090</b>	<b>(1,344)</b>
<b>Full-time Equivalents (FTEs)</b>					
Environmental Stewardship .....	471		471	522	51
Water Stewardship .....	122		122	129	7
Oceans and Marine Fisheries .....	13		13	13	0
Environmental Protection .....	256		256	265	9
Compliance .....	152		152	144	(8)
Executive and Support Services .....	391		391	369	(22)
<b>Total .....</b>	<b>1,405</b>		<b>1,405</b>	<b>1,442</b>	<b>37</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)<sup>5</sup></b>					
Environmental Stewardship .....	43,123		43,123	34,958	(8,165)
Water Stewardship .....	246		246	432	186
Oceans and Marine Fisheries .....	0		0	7	7
Environmental Protection .....	1,032		1,032	1,347	315
Compliance .....	2,258		2,258	1,702	(556)
Executive and Support Services .....	3,374		3,374	3,316	(58)
<b>Total .....</b>	<b>50,033</b>		<b>50,033</b>	<b>41,763</b>	<b>(8,270)</b>

<sup>1</sup> The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly in February 2006.

<sup>2</sup> "Other Authorizations" include access to Operating Contingencies for the Negotiating Framework for \$2.17 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> This summary does not include a \$50 thousand *ex gratia* payment from the Contingencies and New Programs Vote to establish a Brian Grant Bursary.

<sup>5</sup> Capital Expenditures in fiscal 2006/07 included \$7.3 million on the Myra Canyon trestles, \$15.9 million in park and protected area land, \$9.3 million in park facilities, \$4.3 million for capitalized vehicle leases and \$3.3 million for information systems.

## **Operating Expenses**

Overall, the ministry's actual expenses were less than the total estimated expenses by \$1.34 million or 0.7 per cent. Any core business surpluses were redirected within the ministry to address priorities. The surplus variance in Water Stewardship was due to lower than anticipated water rental remissions.

The Executive and Support Services variance resulted primarily from delays in staffing.

## **Full-time Equivalents**

Overall, the ministry utilized 37 FTEs more than estimated. Environmental Stewardship used 51 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 partially offset through recruitment lag in Executive and Support Services.

## **Capital Expenditures**

Overall, the ministry's capital expenditure was under total estimates by \$8.27 million or 16.5 per cent, primarily in Environmental Stewardship due to delays in implementing the Central Coast/North Coast Land and Resource Management Plan.

## **Comparison of 2006/07 and 2005/06 Expense**

The ministry's gross expense in 2006/07 increased by \$26.46 million from 2005/06 primarily as a result of the transfer of the Corporate Services Division from the Ministry of Agriculture and Lands, and the annualization of the transfer of Land and Water BC in 2005/06.

The breakdown of these expenses is as follows:

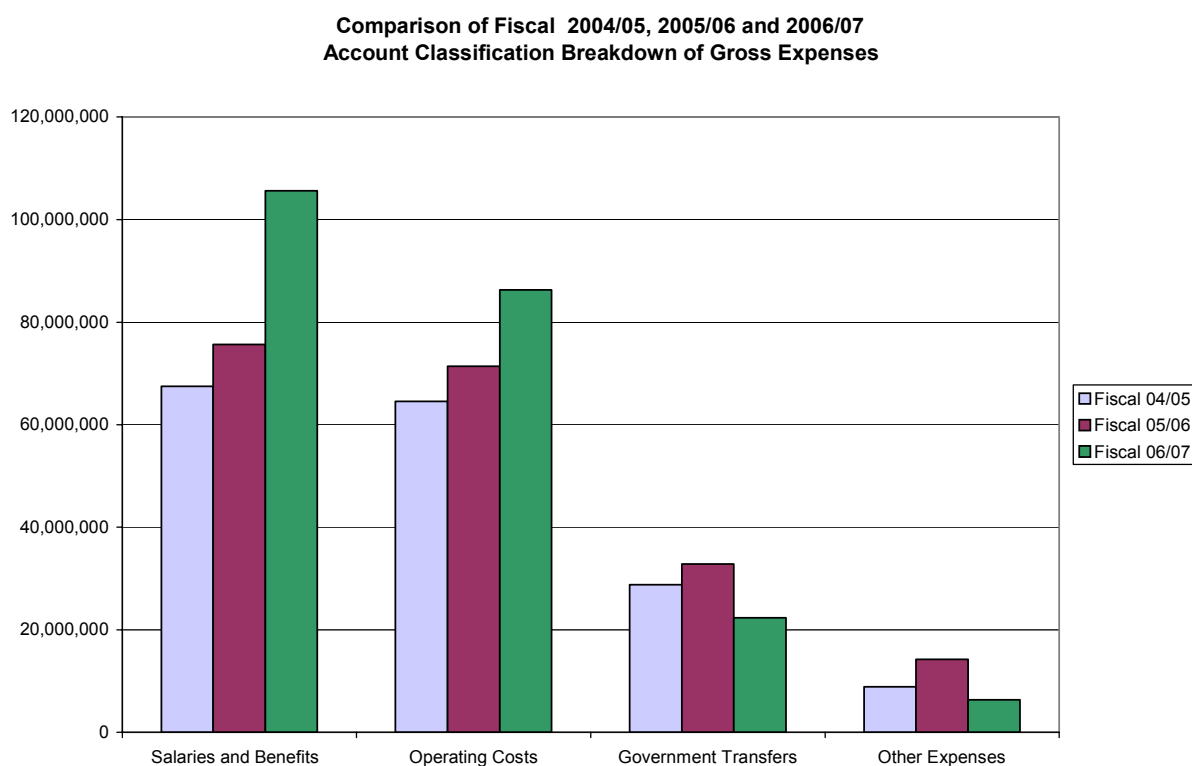
- Salaries and benefits increased by \$30.00 million. This is due to the transfers noted above, a budget lift to permit the Conservation Officer Service to carry out effective, timely and responsive compliance and enforcement activities and to create a commercial/industrial investigation unit, the conversion of contract funding to staff, an increase in work done through recoveries from other ministries and outside agencies, and a negotiating framework wage increase.
- Operating costs increased by \$14.86 million, primarily as a result of increases in park operating expenditures and the program transfers noted above.
- Government transfers decreased by \$10.54 million. This is mainly due to a one-time payment to the Living Rivers Trust Fund in 2005/06.

- Other expenses decreased by \$7.87 million, primarily due to the transfer of Corporate Services Division from the Ministry of Agriculture and Lands, offset by an increase in water rental remissions.

### Year-Over-Year Resource Changes

Figure 3 provides a year-over-year description of the changes to the ministry’s resources. Previous fiscal periods have not been restated for comparative purposes to reflect the transfer of Corporate Services Division and the annualization of Land and Water BC into the ministry.

**Figure 3.** *Three-year comparison of gross expense (Source: B.C. Draft Public Accounts, 2006–2007)*



### 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 *Wildlife Act*. For 2006/07, the Board received approximately 43 appeals against 42 orders/permits/decisions.

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 2006, the Commission received 100 appeals against 97 orders/permits/decisions.

The Board<sup>13</sup> and Commission<sup>14</sup> each produce an annual report, which is provided to their ministers for tabling in the legislature.

## Resource Summary Table 2006/07

	Estimated <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
Environmental Appeal Board and Forest Appeals Commission .....	1,961	18	1,979	1,271	(708)
<b>Total .....</b>	<b>1,961</b>	<b>18</b>	<b>1,979</b>	<b>1,271</b>	<b>(708)</b>
<b>Full-time Equivalents (FTEs)</b>					
Environmental Appeal Board and Forest Appeals Commission .....	11		11	9	(2)
<b>Total .....</b>	<b>11</b>		<b>11</b>	<b>9</b>	<b>(2)</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>					
Environmental Appeal Board and Forest Appeals Commission .....	15		15	0	(15)
<b>Total .....</b>	<b>15</b>		<b>15</b>	<b>0</b>	<b>(15)</b>

<sup>1</sup> The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly in February 2006.

<sup>2</sup> "Other Authorizations" include access to Operating Contingencies for the Negotiating Framework for \$18 thousand.

<sup>13</sup> Go to <http://www.eab.gov.bc.ca> for more information on the Environmental Appeal Board.

<sup>14</sup> Go to <http://www.fac.gov.bc.ca> for more information on the Forest Appeals Commission.

# Ministry of Environment Contact Information

Regional Office	Telephone	Fax	Website
<b>Victoria – Headquarters</b>	250 387-1161	250 387-5669	<a href="http://www.gov.bc.ca/env">http://www.gov.bc.ca/env</a>
<b>Vancouver Island Region</b>			
<i>Main Regional Office:</i> Nanaimo	250 751-3100	250 751-3103	<a href="http://wlapwww.gov.bc.ca/vir/">http://wlapwww.gov.bc.ca/vir/</a>
Other offices: Black Creek, Duncan, Goldstream Park, Parksville, Port Alberni, Port Hardy, Ucluelet			
<b>Lower Mainland Region</b>			
<i>Main Regional Office:</i> Surrey	604 582-5200	604 930-7119	<a href="http://wlapwww.gov.bc.ca/sry/">http://wlapwww.gov.bc.ca/sry/</a>
Other offices: Brackendale (Squamish), Cultus Lake, North Vancouver, Powell River			
<b>Thompson/Okanagan Regions</b>			
<i>Main Regional Offices:</i> Kamloops (Thompson) Penticton (Okanagan)	250 371-6200 250 490-8200	250 828-4000 250 490-2231	<a href="http://wlapwww.gov.bc.ca/sir/">http://wlapwww.gov.bc.ca/sir/</a>
Other offices: Clearwater, Grand Forks, Kelowna/Oliver, Lillooet, Merritt, Princeton/Manning Park, Vernon			
<b>Kootenay Region</b>			
<i>Main Regional Offices:</i> Cranbrook Nelson	250 489-8540 250 354-6333	250 489-8506 250 354-6332	<a href="http://wlapwww.gov.bc.ca/kor/">http://wlapwww.gov.bc.ca/kor/</a>
Other offices: Castlegar, Creston/West Creston, Fernie, Invermere, Revelstoke			
<b>Cariboo Region</b>			
<i>Main Regional Office:</i> Williams Lake	250 398-4530	250 398-4214	<a href="http://wlapwww.gov.bc.ca/car/">http://wlapwww.gov.bc.ca/car/</a>
Other offices: 100 Mile House, Bella Coola/Hagensborg, Quesnel			
<b>Skeena Region</b>			
<i>Main Regional Office:</i> Smithers	250 847-7260	250 847-7591	<a href="http://wlapwww.gov.bc.ca/ske/">http://wlapwww.gov.bc.ca/ske/</a>
Other offices: Atlin, Burns Lake, Dease Lake, Queen Charlotte City, Terrace/Lakelse Lake			
<b>Omineca/Peace Regions</b>			
<i>Main Regional Offices:</i> Fort St. John (Peace) Prince George (Omineca)	250 787-3411 250 565-6135	250 787-3490 250 565-6629	<a href="http://wlapwww.gov.bc.ca/nor/">http://wlapwww.gov.bc.ca/nor/</a>
Other offices: Chetwynd/Moberly Lake Park, Dawson Creek, Fort Nelson/Liard Hot Springs, Mackenzie, Vanderhoof			



# Environmental Assessment Office

## Highlights of the Year

### Overview

In 2006/07, the Environmental Assessment Office effectively managed an unprecedented 63 reviewable projects representing over 20 billion dollars in potential investment in British Columbia and a 26 per cent increase in last year's record project volumes. The 11 projects referred to ministers was the highest number of environmental assessments ever completed in one fiscal year.

### Projects Update

During 2006/07, a total of 63 projects were in the environmental assessment process. Of the 11 projects the Environmental Office referred to ministers for a decision, 10 projects were certified during the fiscal year. The Environmental Assessment Office also reviewed and approved requests from four proponents for amendments to their respective environmental assessment certificates. Under the *Environmental Assessment Act*, the Environmental Assessment Office may decide 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 the upgrade of the GM Shrum Generating Station Project did not require an environmental assessment certificate. The proponent must still obtain all relevant permits and meet all regulatory requirements for the project. Further information about the projects can be reviewed in Appendices B to E. 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

In 2006/07, 75 per cent of all projects under review by the Environmental Assessment Office were also confirmed by the federal government as subject to or likely subject to review under the federal *Canadian Environmental Assessment Act*. In 2006/07, the Environmental Assessment Office completed the environmental assessment of the Galore Creek Copper-Gold-Silver Project, which was subject to review under the British Columbia *Environmental Assessment Act* and was a comprehensive study under the *Canadian Environmental Assessment Act*. The Environmental Assessment Office and the Canadian Environmental Assessment Agency effectively piloted a project-specific agreement to optimize the harmonization of federal and provincial environmental assessment requirements and identify mechanisms for timely resolution of issues.

### **First Nations**

Initiatives in 2006/07 to build relationships with First Nations included the signing of a Letter of Understanding with the Taku River Tlingit First Nation, which establishes a process for consultation and accommodation discussions between the province and the Taku River Tlingit First Nation on the proposed Ruby Creek Molybdenum Project. The Environmental Assessment Office participated in several forums and workshops organized by the First Nation Environmental Assessment Technical Working Group, such as a forum to discuss how First Nations are managing cumulative effects, a forum to provide information on impact benefits agreements, and a workshop to discuss incorporating traditional knowledge into environmental assessment reviews. These forums and workshops also provided an opportunity for networking and relationship-building.

# Purpose of the Environmental Assessment Office

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 review 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 2006/07, 15 new projects entered the environmental assessment process because they equalled 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. The Minister may also order an assessment even though a project is not automatically reviewable if the Minister is convinced the project has potential for significant adverse effects and the designation is in the public interest. Sixty-two of the sixty-three projects in the environmental assessment process in 2006/07 were automatically reviewable by regulation and one project (Evergreen Light Rail Transit Project) was previously designated reviewable by the Environmental Assessment Office 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 Tourism, Sport and the Arts, 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;
- 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.

The Environmental Assessment Office encourages First Nation involvement in project 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. The Environmental Assessment Office actively encourages proponents to meet with and learn about First Nation communities, to listen to First Nation perspectives, and consider First Nations' interests in decisions about project design.

Where ministers grant an environmental assessment certificate for a project, the approval of the project includes conditions that ensure a proponent carries out, monitors and reports the results of measures proposed during the environmental assessment to avoid or mitigate the potential adverse effects. Not all projects that enter the environmental assessment process actually receive an environmental assessment certificate. Since 1995, 15 per cent of applications for an environmental assessment certificate were either withdrawn by the respective proponent or were put on hold by the proponent.

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.

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

# Strategic Context

## Introduction

The steady growth of the provincial economy in recent years increased demand for energy and energy self-sufficiency. High commodity prices account for the unprecedented volume of project activity in 2006/07. 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 economy is performing at an exceptional level. Growth in GDP for 2006 is estimated to have been 3.6 per cent. Strong consumer spending and investment helped make British Columbia's economic growth rate the second highest among provinces in 2006, behind Alberta. B.C.'s economic growth was accompanied by a marked drop in the unemployment rate and strong personal income growth. We have the lowest unemployment rate (4.8 per cent) and the lowest youth unemployment rate (8.2 per cent) in 30 years.

## Energy Sector Development

Government initiatives created numerous market opportunities in the energy sector and an influx of new projects. In 2006/07, seven 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, 21 energy projects were in either the pre-application or application phase of the environmental assessment process as of March 31, 2007. Six other energy projects (Kitimat LNG Terminal, Cascade Heritage Hydro, Dokie Wind Energy, Upper Harrison Water Power, Wartenbe Wind Energy, and Vancouver Island Transmission Reinforcement) referred to ministers in the fiscal year received an environmental assessment certificate in 2006/07. A seventh energy project, the East Toba River Montrose Creek Hydroelectric Project was referred to ministers at the end of March 2007 for a decision. Five of seven energy projects either certified or before ministers for a decision represent potential new investment in over 700 megawatts of clean energy supporting provincial goals for energy self-sufficiency and reductions in greenhouse gas emissions.

## Mining Sector Development

Increased metal and coal prices meant increased investment in mining exploration and development. Four new mining projects entered the environmental assessment process in 2006/07 for a total of 19 mining projects in either the pre-application or application

phase of the environmental assessment process as of March 31, 2007. Three mine projects (Swamp Point Aggregate, Brule Mine and Galore Creek Copper-Gold-Silver) received an environmental assessment certificate in 2006/07.

### **Provincial Infrastructure Development**

The Lower Mainland is a major international gateway for the global economy. The Port of Vancouver, Canada's busiest port, handled 79 million tons of cargo in goods in 2006. Vancouver International Airport is Canada's second busiest airport and the second largest international passenger gateway on the west coast of North America. In 2006/07, the Port Mann/Highway 1 Project and the Evergreen Light Rail Transit Project entered the pre-application stage of the environmental assessment process, the South Fraser Perimeter Road Project moved into the application review stage, and ministers issued an environmental assessment certificate for the Deltaport Third Berth Project.

### **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. In 2006/07, the Environmental Assessment Office continued to build constructive working relationships with First Nations founded on reconciliation, mutual respect and trust, in keeping with the principles of the New Relationship. The Environmental Assessment Office was engaged in consultations with over 140 First Nations during 2006/07.

### **Federal Government's Role**

Seventy-five per cent of all projects in the environmental assessment process in 2006/07 were also confirmed by the federal government as subject to or likely subject to review 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. In the past year, the Environmental Assessment Office and the Canadian Environmental Assessment Agency conducted a workshop on measures to improve environmental assessment cooperation and work continues to develop and implement the ideas identified during the workshop. This includes an action plan for improving information and communications, a stronger commitment to early and coordinated engagement, and additional efforts to identify and achieve greater efficiencies on cooperative environmental assessments.

## **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 2006/07 from the rapid increase in project volumes. Federal agencies involved in harmonized project environmental assessments also experienced resourcing challenges as they tried to respond to the increased project work load.

# Report on Performance

## Performance Plan Summary Table

<b>Goal 1: The environmental assessment process is streamlined and clear</b> For greater detail see pages 72 to 75	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>1.1 The environmental assessment process is easy to follow</b> Proponents' overall level of satisfaction with the assessment process (on a scale of 1 to 10)	8 out of 10	100% ACHIEVED
<b>1.2 Harmonized federal/provincial assessment processes</b> Percentage of applications in harmonized review completed within provincial timelines	80%	79% SUBSTANTIVELY ACHIEVED

<b>Goal 2: Environmental assessment reports and recommendations are comprehensive and timely</b> For greater detail see pages 75 to 79	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
<b>2.1. Applications for environmental assessment certificates are complete and thorough</b> Percentage of applications in the B.C. environmental assessment process completed within 180 days	90%	54% (Average number of days 193) NOT ACHIEVED
Percentage of environmental assessment reports that identify and consider all potential significant environmental, social, economic, heritage and health effects raised during the project review	100%	100% ACHIEVED
<b>2.2 Meaningful consultation with First Nations occurs during environmental assessment reviews</b> Percentage of project assessments with First Nations engaged in working group(s)	Establish baseline	75% ACHIEVED

## Goals, Objectives, Strategies and Performance Measures

### Goal 1: The environmental assessment process is streamlined and clear

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 1.1: 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 ways to ensure increased public understanding of the process and opportunities for public participation. The Environmental Assessment Office continually evaluates and refines its assessment guidelines and policies to ensure the review process is clear and accessible for proponents, to facilitate the delivery of good quality environmental assessment applications, and to streamline regulatory requirements wherever possible.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Proponents' overall level of satisfaction with the assessment process (on a scale of 1 to 10)	8 out of 10	8 out of 10	Maintain or exceed	100% ACHIEVED

Data Source: Environmental Assessment Office and BC Stats.

### Discussion of Results

Environmental assessments require significant human and financial resources from proponents and government. Every two years, BC Stats conducts an independent and neutrally administered survey of proponents for the Environmental Assessment Office to measure client satisfaction with the delivery of environmental assessments and gauge whether the process is clear, timely and effective. While the next formal survey will be in 2007/08, the Environmental Assessment Office continually seeks proponents' views on the delivery of the environmental assessment process. Telephone interviews and meetings with proponents conducted this year by the Environmental Assessment Office indicated that, as determined in the previous formal survey, proponents continue to rate the Environmental Assessment Office at eight out of ten for client service and are generally satisfied with the work of the Environmental Assessment Office. Some proponents did express a growing concern that timely provincial and federal review of projects may soon be compromised by the steady increase in the sheer number of projects entering the environmental assessment process.

## Objective 1.2: 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. The challenge is to integrate into the provincial process and associated time limits, federal review steps and timeframes for federal decision-making under the *Canadian Environmental Assessment Act*, in particular where a project is subject to a comprehensive study under the federal process.

### Strategy

To ensure that joint federal/provincial environmental assessments meet all requirements of the Canada/British Columbia Agreement on Environmental Assessment Cooperation (2004), the Environmental Assessment Office works with the Canadian Environmental Assessment Agency to draft, implement and evaluate operational policies and procedures for coordinated environmental assessment. The Environmental Assessment Office also collaborates with federal environmental assessment staff to develop, on a project-by-project basis, work plans and schedules for each environmental assessment and steps for regular communication to monitor and address coordination issues.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Percentage of applications in harmonized review completed within provincial timelines	100%	75%	80%	79% SUBSTANTIVELY ACHIEVED

Data Source: Environmental Assessment Office.

### Discussion of Results

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 2006/07, fifteen projects subject to review under the *Environmental Assessment Act* were also subject to the *Canadian Environmental Assessment Act*. The assessment for one of these projects, the Kemess North Copper-Gold Mine, is being conducted as a joint federal/provincial panel review and sets its own timelines. Nine of the fifteen projects were referred to ministers for a decision of which six were screening-level assessments and three were comprehensive studies

under 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. The Environmental Assessment Office achieved a 79 per cent success rate in meeting the performance measure target, improving on the 75 per cent success rate in 2005/06. Where time limits for completion of steps under the *Environmental Assessment Act* were not met, the main reason for the variance was the need during the application review stage to allow more time for resolution of complex project issues or to allow additional time for consultation with First Nations.

## **Goal 2: 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. Environmental assessment reports are based on a thorough review of all relevant issues and include representation of the interests of those affected by a proposed project. This provides the basis for balanced decisions by government on whether a project should proceed and results in decisions that also consider the broader public interest.

### **Objective 2.1: 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. The Terms of Reference describe the range of data, analyses and reporting the application will contain. The Environmental Assessment Office convenes multi-disciplinary working groups to assist with this task and also issues a draft of the Terms of Reference for public review and comment.

This ensures that final Terms of Reference are thorough, identify the technical and scientific information required for a good quality environmental assessment application and benefit from the perspectives obtained through discussions and consultations with stakeholders and First Nations.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Percentage of applications in the B.C. environmental assessment process completed within 180 days	100%	75%	90%	54% (Average number of days 193) NOT ACHIEVED

**Data Source:** Environmental Assessment Office.

## Discussion of Results

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. Once an application is accepted for formal review, the Environmental Assessment Office strives to complete the environmental assessment within this 180-day time limit. In 2006/07, the Environmental Assessment Office completed environmental reviews of 11 projects and referred these projects to ministers for a decision. The average number of days per review was 193 days. Many of the projects in the environmental assessment process are large, complex, involving many First Nations, and often require a harmonized federal/provincial assessment. The Environmental Assessment Office completed six project reviews within 180 days, while five projects required more than 180 days.

Three project reviews completed in fiscal year 2006/07 were comprehensive studies (Kitimat LNG Terminal, Galore Creek Copper-Gold-Silver and Deltaport Third Berth) and six review projects were screening-level assessments (Cascade Heritage Hydro, East Toba River Montrose Creek Hydroelectric, Upper Harrison Water Power, Dokie Wind Energy, Wartenbe Wind Energy and Vancouver Island Transmission Reinforcement) under the *Canadian Environmental Assessment Act*. Projects subject to comprehensive studies under the *Canadian Environmental Assessment Act* are typically more complex and can prove challenging to fully harmonize with the British Columbia environmental assessment process in 180 days.

Experience shows that projects subject to comprehensive studies may require extra time to address complex issues or provide additional opportunity for consultation with First Nations or with public stakeholders. For example, the environmental assessment of the Deltaport Third Berth required extra time to address issues associated with the assessment of project effects and to formulate mitigation to reduce or avoid adverse effects and to resolve complex issues

to the satisfaction of federal and provincial agencies. The assessment of the Cascade Heritage Hydroelectric Project had the complexity of being transitioned from the former *Environmental Assessment Act* and required additional time to allow First Nations to review documentation on the potential effects of the project on First Nations' interests.

## Office Response

The Environmental Assessment Office and the Canadian Environmental Assessment Agency are working to resolve harmonization challenges through the Environmental Assessment Office/ Canadian Environmental Assessment Agency Harmonization Working Group. This initiative includes: an action plan for improving information and communications; a stronger commitment to early and coordinated engagement; and additional efforts to identify and achieve greater efficiencies on cooperative assessments. Experience from the pilot implemented for the Galore Creek Copper-Gold-Silver project review indicates that while harmonized reviews for larger, complex projects can meet established time limits, the process is highly resource intensive. The Environmental Assessment Office and the federal government will examine the lessons learned from the Galore Creek Copper-Gold-Silver review and apply these lessons to other harmonized reviews.

The Environmental Assessment Office will also continue its focus on early engagement with First Nations and encourage First Nations' participation as early as possible after a project enters the pre-application stage of the environmental assessment process. Early identification of First Nations' interests provides more opportunity to address First Nations' interests within the 180-day time limit for the review of an application for an environmental assessment certificate.

## Performance Results

Performance Measure	2004/05 Actual	2005/06 Actual	2006/07 Target	2006/07 Actual
Percentage of environmental assessment reports that identify and consider all potential significant environmental, social, economic, heritage and health effects raised during the project review	N/A	100%	100%	100% ACHIEVED

**Data Source:** Environmental Assessment Office.

## Discussion of Results

The environmental assessment reports for ministers provide the findings of an environmental assessment, a thorough review of all relevant issues, and the basis for balanced decisions by government on whether a project should proceed. The Environmental Assessment Office works with proponents to ensure information to assess a project's potential environmental, economic,

social, heritage and health effects is identified, collected, and then shared and reviewed by government, First Nations and the public. The environmental assessment process is an iterative process in which a proponent may refine the project design to address effects identified during the review. Environmental assessment reports carefully document these and other measures proposed or adopted by a proponent in response to potential effects. Through these steps, the Environmental Assessment Office ensures assessment reports describe the range of perspectives and issues on a project along with measures developed by a proponent to mitigate potential adverse effects. The Environmental Assessment Office continues to ensure all environmental assessment reports identify and consider all potential significant issues.

### **Objective 2.2: Meaningful consultation with First Nations occurs during environmental assessment reviews**

Government has an obligation to consult with First Nations and, where indicated, accommodate established and asserted Aboriginal rights and titles. The Environmental Assessment Office engages First Nations in the assessment process to fully understand and report on the potential effects of proposed projects on First Nations’ interests, and propose ways to address those effects. This enhances the quality of reporting and recommendations to government on whether a project should proceed, and supports consistency and procedural certainty.

#### **Strategies**

Strategies adopted by the Environmental Assessment Office to achieve this objective include requiring proponents to develop plans for consultations with First Nations, and seeking active First Nations’ involvement in project reviews, including representation on project technical working groups. A primary tool for ensuring thorough and comprehensive environmental assessments is the establishment of technical working groups. These groups consist of representatives of key federal, provincial and local government agencies, and typically seek active representation from First Nations affected by a project. The direct engagement of First Nations in working groups is the most effective way of building relationships, identifying First Nations’ issues, and initiating processes and project design changes that assist in accommodating First Nations’ rights, title and other project-related issues.

### **Performance Results**

<b>Performance Measure</b>	<b>2004/05 Actual</b>	<b>2005/06 Actual</b>	<b>2006/07 Target</b>	<b>2006/07 Actual</b>
Percentage of project assessments with First Nations engaged in working group(s)	N/A	New measure	Establish baseline	75% ACHIEVED

**Data Source:** Environmental Assessment Office.

## **Discussion of Results**

In 2006/07, the Environmental Assessment Office developed and implemented enhanced consultation initiatives on several projects and continued to provide funding in support of First Nations' participation in the environmental assessment process. In particular, the Environmental Assessment Office negotiated a Letter of Understanding with the Taku River Tlingit First Nation with respect to consultation and accommodation discussions for the proposed Ruby Creek Molybdenum Mine.

This is a new measure for the Environmental Assessment Office. The benchmark has been established based on the First Nations that may be impacted by a project and have chosen to sit on the technical working group for the project. Although the Environmental Assessment Office cannot control whether First Nations choose to participate in working groups, the Environmental Assessment Office makes every effort to seek their participation. First Nations' perspectives on a project are important and can only be brought to the process through active participation.

## Report on Resources

The continued expansion of British Columbia's economy, supported by initiatives related to the government's goals to create jobs, contributed to the increased number of projects entering the environmental assessment process and continues to put budget pressures on the Environmental Assessment Office. As well, more funding was required to assist First Nations with the capacity to participate in the environmental assessment process in 2006/2007.

### Resource Summary Table

Major Project Environmental Assessments and Corporate Operations	Estimated <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
<b>Total.....</b>	<b>5,575</b>	<b>57</b>	<b>5,632</b>	<b>5,628</b>	<b>(4)</b>
<b>Full-time Equivalents (FTEs)</b>					
<b>Total.....</b>	<b>38</b>		<b>38</b>	<b>39</b>	<b>1</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>					
<b>Total.....</b>	<b>146</b>		<b>146</b>	<b>87</b>	<b>(59)</b>

<sup>1</sup> The "Estimated" amount corresponds to the *Estimates* as presented to the Legislative Assembly in February 2006.

<sup>2</sup> "Other Authorizations" include access to Operating Contingencies for the Negotiating Framework for \$0.057 million.

### Capital Expenditures

In 2006/07, the Environmental Assessment Office made several enhancements to the electronic Project Information Centre, including updating the site to meet the B.C. government's format requirements and providing better layout and access to information through the Environmental Assessment Office's website.



# Environmental Assessment Office

## Contact Information

For more information on the Environmental Assessment Office:

### Environmental Assessment Office

First Floor  
836 Yates Street  
PO Box 9426 Stn Prov Govt  
Victoria V8W 9V1

### General Inquiries

Telephone: 250 356-7441 and [eaoinfo@gov.bc.ca](mailto:eaoinfo@gov.bc.ca)  
Fax: 250 356-7440  
Website at: <http://www.eao.gov.bc.ca>

# Annual Service Plan Report Appendices

## Appendix A — Ministry of Environment Website Links

The Ministry of Environment's **glossary of terms** can be found here:

[http://www.env.gov.bc.ca/sp/ar/2006\\_glossary.pdf](http://www.env.gov.bc.ca/sp/ar/2006_glossary.pdf)

A listing of the **legislation administered by the Ministry of Environment** can be found here:

[http://www.env.gov.bc.ca/sp/ar/2006\\_leg.pdf](http://www.env.gov.bc.ca/sp/ar/2006_leg.pdf)

The Ministry of Environment's **organizational chart** can be found here:

[http://www.bcbudget.gov.bc.ca/2006/sp/env/Overview\\_orgchart.htm](http://www.bcbudget.gov.bc.ca/2006/sp/env/Overview_orgchart.htm)

The Ministry of Environment's **risk management framework** can be found here:

[http://www.env.gov.bc.ca/sp/ar/2006\\_riskmgmt.pdf](http://www.env.gov.bc.ca/sp/ar/2006_riskmgmt.pdf)

## Appendix B — Environmental Assessment Office: Certified Projects from April 1, 2006 – March 31, 2007

The table below details the 10 projects that were issued an Environmental Assessment Certificate by the Minister during the fiscal year 2006/07.

Project (proponent)	Location	Investment (\$million)	Jobs (Operating)	Date Certified
Kitimat LNG Terminal (Kitimat LNG Inc.)	14 km south of Kitimat	500	50	June 1, 2006 (196-day review)
Swamp Point Aggregate Mine (Ascot Resources Ltd.)	50 km south of Stewart	25	30	June 21, 2006 (155-day review)
Brule Coal Mine (Western Canadian Coal)	57 km south of Chetwynd	200	150	July 4, 2006 (182-day review)
Cascade Heritage Hydro (Powerhouse Developments Inc.)	Near Christina Lake	24	3	August 3, 2006 (229-day review)
Dokie Wind Energy (Dokie Wind Energy Inc.)	South of W.A.C. Bennett Dam	600	30	August 8, 2006 (175-day review)
Upper Harrison Water Power (Cloudworks Energy Inc.)	50 km northwest of Harrison Hot Springs	262.5	20	September 21, 2006 (180-day review)
Deltaport Third Berth (Vancouver Port Authority)	Lower Mainland — Roberts Bank	272	360	September 28, 2006 (270-day review)
Wartenbe Wind Energy (Dokie Wind Energy Inc.)	10 km southeast of Chetwynd	140	9	October 5, 2006 (175-day review)
Vancouver Island Transmission Reinforcement (British Columbia Transmission Corporation)	Delta to Duncan	248	N/A	February 12, 2007 (180-day review)
Galore Creek Copper-Gold-Silver (SpectrumGold Inc.)	150 km northwest of Stewart	1,600	500	February 16, 2007 (182-day review)

## Appendix C — Environmental Assessment Office: Projects in the Application Review Stage from April 1, 2006–March 31, 2007

The table below outlines the 15 projects under review in the 180-day period during the fiscal year 2006/07.

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)	Status of Review
<b>Energy</b>					
Bear Mountain Wind Park (Bear Mountain Wind LP)	120 MW wind park.	16 km southwest of Dawson Creek	240	5	Expected to be referred to ministers for decision by July 2007.
East Toba River Montrose Creek Hydroelectric Project	Proposed hydroelectric project on the East Toba River, proposed hydroelectric project on Montrose Creek, and associated transmission line.	100 km north of Powell River	250	13	Referred to ministers in March 2007 — decision made on April 25, 2007.
Inland Pacific Pipeline Connector (Terasen Gas Inc.)	Proposing 237 km of pipeline.	Between Oliver and Huntington	495	15	Awaiting supplementary information from proponent.
Kwoiek Creek Hydroelectric (Kwoiek Creek Resources Inc.)	Construction of an 80 MW hydroelectric project and supporting infrastructure.	Fraser Canyon, 22 km south of Lytton	90	6	Awaiting additional information from proponent.
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	Referred to ministers in April 2007. Decision made on June 5, 2007.
Waneta Hydroelectric Expansion (2003) (Columbia Power Corporation)	Proposed 435 MW hydroelectric generation station on right bank of Pend d'Oreille River.	17 km south of Trail	400	5	Assessment suspended on February 6, 2007 pending completion of a recovery potential analysis for white sturgeon.

**Appendix C — Environmental Assessment Office: Projects in the Application Review Stage  
from April 1, 2006–March 31, 2007 (continued)**

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)	Status of Review
<b>Mining</b>					
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.
Hermann Mine (Western Canadian Coal Corporation)	Open-pit coal mine with a production of 1 million tonnes per year with an estimated mine life of 5 to 7 years.	16 km south of Tumbler Ridge	60	125	Application accepted on February 2007.
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	500	Panel's final report may become due any time between now and August 2007.
Prosperity Gold-Copper Mine (Taseko Mines Ltd.)	Construction of an open-pit gold and copper mine.	125 km southwest of Williams Lake	900	650	Awaiting supplementary information from proponent.
Ruby Creek Molybdenum Mine (Adanac Moly Corp.)	Open-pit molybdenum mine and a processing plant that would operate at 20,000 tonnes per day for over 20 years.	24 km northeast of Atlin	350	250	Expected to be referred to ministers for decision by July 2007.
<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	Application accepted in June 2007.
<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	Expected to be referred to ministers for decision by August 2007.

**Appendix C** — *Environmental Assessment Office: Projects in the Application Review Stage from April 1, 2006–March 31, 2007 (continued)*

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)	Status of Review
<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 4.54 million litre concrete reservoir.	Chemainus	3.62	N/A	Awaiting supplementary information from proponent.

## Appendix D — Environmental Assessment Office: Projects in the Pre-Application Stage from April 1, 2006–March 31, 2007

The table below outlines the 38 projects involved in pre-application during the fiscal year 2006/07.

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
<b>Energy</b>				
Europa Creek Hydroelectric (Plutonic Power Corp.)	Construction of a 230 kV transmission line from the project site to near Kermano and a 83 MW hydroelectric facility.	80 km SE of Kitimat	180	10
Glacier/Howser (3986314 Canada Inc.)	Two run of river hydroelectric projects at Glacier Creek (40.5 MW) and Howser Creek (50 MW) with a transmission line joining the two and crossing the Purcell mountain range.	50 km WSW of Invermere	N/A	N/A
Interior-Lower Mainland Transmission Reinforcement (BC Transmission Corporation [BCTC])	Construction of a 500 kV line running from Merritt area to Coquitlam.	Merritt to Coquitlam	300-400	N/A
Klinaklini Hydroelectric (Kleana Power Corporation Ltd.)	Development of a 280 MW run of river hydroelectric project on the Klinaklini River.	200 km northwest of Powell River	N/A	N/A
KSL Pipeline Looping (Pacific Northern Gas Inc.)	Construction of a 500 km, 24" natural gas pipeline.	Kitimat to Summit Lake	750	N/A
MacKenzie Green Energy Centre (MacKenzie Green Energy Corp)	Construction of a biomass cogeneration project capable of producing up to 65 MW of power.	Mackenzie	230	30
McGregor/Herrick Hydroelectric (TransCanada Energy Ltd)	49.8 MW hydroelectric facility on the McGregor River and a 33.2 MW hydroelectric facility on Herrick Creek and approximately 110 km of transmission line.	120 km northeast of Prince George	200	6
Nahwitti Wind Power Project (Nomis Power Corp.)	New wind farm, operating about 100 wind turbines.	50 km northwest of Port Hardy	300	7
Nai Kun Wind Farm (Nai Kun Wind Development Inc.)	700 MW wind turbine project.	Queen Charlotte Islands (Offshore)	1,000	40
Pembina Condensate Pipeline (Pembina Pipeline Corp.)	465 km pipeline from Kitimat to Summit Lake near Prince George.	Kitimat to Summit Lake	700	N/A

**Appendix D** — *Environmental Assessment Office: Projects in the Pre-Application Stage from April 1, 2006–March 31, 2007 (continued)*

<b>Project (proponent)</b>	<b>Description of Project</b>	<b>Location</b>	<b>Investment (\$million)</b>	<b>Jobs (operating)</b>
Princeton Wood Residue and Coal Power (Compliance Energy Corp.)	56 MW wood residue and coal power generation plant at the Similco mine site.	South of Princeton	200	40
South Meager Geothermal Project (Western Geopower Corp.)	Construction of a geothermal power generation plant with transmission line.	55 km northwest of Pemberton	276	45
Upper Pitt River Power (Northwest Cascade Power Ltd.)	Seven proposed run of river hydroelectric projects with a combined capacity of 161 MW.	35 km north of Pitt Meadows Upper Pitt River Watershed	330	N/A
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
Wapiti Power Development (CH2M Hill Inc.)	Comprises a 184 MW thermal electric power plant, a 35 km 230 kV transmission line and a surface coal mine with a production capacity of 750,000 to 850,000 tonnes per year.	30 km north northeast of Tumbler Ridge	300	100
<b>Industrial</b>				
Highland Valley Copper Refinery (Highland Valley Copper Corp.)	Hydrometallurgical copper refinery with production of up to 132,000 tonnes per year of finished copper cathode metal.	19 km west of Logan Lake	400	140
<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.)	Construction of a quarry and magnesium facility.	Hope	1,300	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	N/A	150-200
Gething Coal (Canadian Dehua International Mines Group Inc.)	Construction of a 2 million tonne per year metallurgical underground coal mine and load out.	25 km west of Hudson Hope	N/A	400
Hills Bar Aggregate Quarrying (Qualark Resources Inc.)	Construction of an aggregate quarry.	Hills Bar, near Yale	6.5	25



**Appendix D — Environmental Assessment Office: Projects in the Pre-Application Stage from April 1, 2006–March 31, 2007 (continued)**

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
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.	25 km southwest of Tumbler Ridge	30	200
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	200	300
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 N of the border with Montana	150	252
Morrison Copper Gold (Pacific Booker Minerals Inc.)	Copper and gold mine 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	275	200
Mt. Milligan Gold-Copper (Terrane Metals Corp.)	Proposed open-pit gold-copper mine.	90 km north of Fort St. James	N/A	300
Sechelt Carbonate (Pan Pacific Aggregates Ltd.)	Large carbonate rock resource to produce chemical (calcium/magnesium) rock.	15 km north of Sechelt	100	90
Schaft Creek Copper-Gold-Molybdenum-Silver Deposit (CopperFox Metals Inc.)	Proposed open-pit copper-gold-molybdenum-silver mine with an anticipated production capacity of up to 70,000 tonnes per day with a mine life of 20 years.	80 km southwest of Telegraph Creek	1.8	750
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>Tourist Destination Resorts</b>				
Juliet Creek/Coquihalla Resort (Westscapes Development Inc.)	An all-seasons resort consisting of a base village, golf course, ski lifts, spa and aquatic centre, and eco-cultural activities.	Coquihalla Highway summit	120	900

**Appendix D — Environmental Assessment Office: Projects in the Pre-Application Stage from April 1, 2006–March 31, 2007 (continued)**

Project (proponent)	Description of Project	Location	Investment (\$million)	Jobs (operating)
<b>Transportation</b>				
Evergreen Light Rail Transit (Greater Vancouver Transportation Authority [TransLink])	Construction of a low-floor Light Rail Transit (LRT) connecting Coquitlam City Centre, Port Moody, Burquitlam and Lougheed Town Centre.	Burnaby to Coquitlam	900	120-210
Port Mann/Highway 1 (Ministry of Transportation)	Construction of a 4-lane bridge plus an additional 2 to 4 traffic lanes to the existing Highway 1 for a distance of 37 km.	Vancouver to Langley	1,500	N/A
<b>Waste Management</b>				
Babkirk Secure Landfill (Babkirk Land Services Inc.)	Construction of a secure landfill facility within the boundaries of its existing soil treatment facility to accept hazardous waste from oil and gas activities.	Mile 115 Alaska Hwy, near Wonowon	1	N/A
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.	75 km southwest of Kamloops	51	138
Northern Rockies Secure Landfill Project	Construction of a secure landfill to accept contaminated soils from spill cleanups, drilling waste from oil and gas exploration and production, industrial waste and forestry waste.	Near Fort Nelson	N/A	N/A
Peejay Secure Landfill (Doig River Environmental)	Construction of a secure landfill facility to accept hazardous waste from oil and gas activities.	70 km northeast of Fort St. John	1	2
<b>Water Management</b>				
Terrace Green Street Well Project (Municipality of Terrace)	Development of a municipal groundwater supply.	Terrace	1.6	N/A

## Appendix E — Environmental Assessment Office: Amendments to Projects from April 1, 2006–March 31, 2007

The table below outlines the six amendments that were made to the Environmental Assessment Project Approval Certificates during the fiscal year 2006/07.

Project (proponent)	Location	Description	Date
Canada Line (Canada Line Rapid Transit Inc.)	Lower Mainland	Amendment #3 to show Canada Line Rapid Transit Inc. as holder of the certificate.	April 10, 2006
		Amendment #4 adds letter regarding proposed change in station location for the Alderbridge Station in Richmond.	April 10, 2006
		Amendment #5 adds letter regarding proposed change to allow twin bored tunnels to be extended north to Pender Street.	October 12, 2006
Wolverine Coal (Western Canadian Coal Corp.)	Northwest of Tumbler Ridge	Amendment adds summary of effects of production increase on First Nations and Kelly Lake Communities.	April 11, 2006
Sea-To-Sky Highway Upgrade (Ministry of Transportation)	West Vancouver to Whistler	Amendment #1 to construct 2 km of new highway near Daisy Lake and convert an existing section of the Sea-to-Sky Highway near Pinecrest/Black Tusk to a service road.	April 24, 2006
Forrest Kerr Hydroelectric (Coast Mountain Hydro Corp.)	100 km northwest of Stewart on the Iskut River	Amendment #3 to allow a total of 20 km of divergences along a 135 km length of project transmission line corridor between Bob Quinn Lake and Meziadin Junction.	August 28, 2006

