Ministry of Environment and Environmental Assessment Office

2010/11 Annual Service Plan Report



Ministry of Environment and Environmental Assessment Office

For more information on how to contact the British Columbia Ministry of Environment, see Ministry Contact Information on Page 57 or contact:

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

or visit our website at *www.gov.bc.ca/env/*

Published by the Ministry of Environment

Message from the Minister and Accountability Statement



I am pleased to report that in 2010/11 the Ministry of Environment demonstrated leadership in ensuring our natural legacy for future generations and supporting positive economic outcomes for British Columbia. This annual report outlines our many accomplishments during the past year.

BC Parks 100 celebrations began in the summer of 2010. In partnership with the Strathcona Centennial Expedition, the Ministry re-enacted the original 1910 expedition that led to the establishment of B.C.'s first provincial park and celebrated its 100th birthday. In addition, both the 100 Years of

Adventure program, made up of 12 outdoor adventure community events held in various locations across the province, and Share Your BC Parks began and will continue in 2011/12. More community and family events will take place in the coming year as we continue to celebrate this important milestone.

The Ministry acquired land next to Stawamus Chief Park, providing an important access point for rock climbers and protecting important wildlife habitat. This land holds spiritual, historical and cultural values for people of the Squamish Nation, and demonstrates the Ministry's commitment to healthy and diverse native species and ecosystems. The Ministry also announced the protection of 750 hectares of ecologically sensitive lands on Denman Island through an innovative public-private partnership.

The Ministry focused resources to enhance the protection and stewardship of our water resources. *Living Water Smart: British Columbia's Water Plan*, continued to be a major focus for the Ministry. Significant progress was made on modernizing the *Water Act*, a key commitment in the plan. First Nations, stakeholder organizations and the public participated in workshops, engaged in blog-based conversations and provided over 2,200 written submissions to the Ministry. The Ministry then released a Report on Engagement and a Policy Proposal on B.C.'s new Water Sustainability Act. The new Act will build on and replace the existing *Water Act*, respond to current and future pressures on water and position B.C. as a leader in water stewardship. A major symposium that is informing the development of a provincial Water Science Strategy was also sponsored by the Ministry.

B.C. has also continued to meet its commitments as a leader in efforts to take effective action on climate change and to prepare for the impacts. Climate change is a problem that will touch many aspects of the lives of British Columbians for generations to come. In 2010, the B.C. government became the first carbon neutral government in North America. The public sector set an example on greenhouse gas reductions and continues to work to reduce and offset its emissions in recognition of the environmental impact of its operations. The B.C. government encourages the reduction of carbon dioxide emissions through the carbon tax and \$200 Northern and Rural

Homeowner benefit. The Ministry also works in partnership with 179 local government signatories to implement the Climate Action Charter and support local governments in reducing their emissions.

B.C. made progress on key elements of a linked regional cap and trade program with its Western Climate Initiative Partner jurisdictions (California, Ontario, Quebec and Manitoba). As each jurisdiction assesses its options for moving forward, California, B.C. and Quebec continue to work toward a proposed 2012 start date. The Climate Action Secretariat consulted with B.C. industry and the public on proposed regulations for emissions trading and offsets and the feedback is being considered in regulatory development.

Environmental stewardship is the responsibility of all British Columbians and contributes to the health and welfare of all families. The Ministry worked with all sectors to promote and share the responsibility of achieving a clean, healthy and naturally diverse environment. Some of the events that the Ministry both promoted and supported during the year focused on energy and water conservation, waste reduction, clean air, effective action on climate change, marine environment protection and avalanche safety. The Ministry participated in and supported Earth Hour, Earth Day, World Ocean Day, Canada Water Week and World Water Day. The level of participation in these events demonstrates the increased awareness of British Columbians that they have a part in and benefit from environmental protection.

World Ocean Day was an opportunity to talk about ways to help protect the marine environment – one of our most precious natural assets. Related to this, the Ministry approved the Capital Regional District's proposed wastewater management strategy. The strategy outlines the region's plan to treat up to 40 billion litres of sewage per year before it is discharged into the Strait of Juan de Fuca.

The Ministry continued to release Quarterly Compliance and Enforcement Summaries on compliance and enforcement actions undertaken by Ministry staff. The Ministry expanded its reporting in 2010 to include the names of individuals who are issued violation tickets under the Ministry's legislation. The names of all companies and individuals issued orders, administrative sanctions, ticketed or convicted in court are now included in the summaries. The first court conviction was made under the new alien species regulation.

In 2010/11, the Environmental Assessment Office continued its work assessing proposed major developments for their potential environmental, economic, social, heritage, and health effects. The Environmental Assessment Office strives to complete reviews effectively and in a timely manner. Only those developments that can be undertaken in a sustainable manner are certified to proceed. For those developments that are certified to proceed, environmental assessment results in significant improvements to project design and proponent commitments that are intended to avoid, prevent or minimise adverse effects. For example, during the review of Northwest Transmission Line project, concerns were raised about the project's potential impact on Skeena River Sockeye spawning habitat. As a result of these concerns, the assessment resulted in the relocation of approximately 60 kilometres of transmission right of way in order to avoid

spawning habitat. The Environmental Assessment Office managed environmental assessments of 76 proposed major developments in 2010/11. Of these, six assessments were completed, representing a total potential capital investment of \$4.3 billion.

A key priority of the Environmental Assessment Office is to consult First Nations to address, and, where appropriate, accommodate potential effects of major developments on established or asserted Aboriginal rights and title. The Environmental Assessment Office is guided by evolving case law and government policy related to the obligations of the Crown to consult with First Nations. In support of government's goals for greater openness and accessibility for citizens, the Environmental Assessment Office also provides a number of opportunities for public input into reviews, and is trying different approaches to increase public engagement in environmental assessment. For example, a public engagement pilot is being implemented for the proposed Raven Underground Coal Project. As part of its efforts to ensure continuous improvement, the Environmental Assessment Office is developing a quality assurance and compliance and enforcement program for environmental assessment. This program will ensure that environmental assessments are accessible, rigorous and transparent and result in sustainable major development.

The Environmental Assessment Office works with the Canadian Environmental Assessment Agency and other federal agencies to coordinate federal-provincial reviews. A key priority of the provincial government is to work with the federal government to develop a single, comprehensive environmental assessment for each major development. I will continue pursuing this objective with the goal of reducing duplication and overlap in environmental assessment, while ensuring sustainable major development.

The Ministry of Environment and Environmental Assessment Office 2010/11 Annual Service Plan Report compares the actual results to the expected results identified in the Ministry's 2010/11 - 2012/13 Service Plan. I am accountable for those results as reported.

Hale

Honourable Terry Lake Minister of Environment

June 20, 2011

Table of Contents

Message from the Minister and Accountability Statement	3
Ministry of Environment	
Highlights of the Year	7
Purpose of Ministry	11
Strategic Context	13
Report on Performance	16
Performance Plan Summary Table	17
Goals, Objectives, Strategies and Performance Results	18
Report on Resources	39
Ministry of Environment Resource Summary Table	39
Environmental Assessment Office	
Highlights of the Year	42
Purpose of Office	46
Strategic Context	48
Report on Performance	49
Performance Plan Summary Table	49
Goals, Objectives, Strategies and Performance Results	50
Report on Resources	56
Environmental Assessment Office Resource Summary Table	56
Annual Service Plan Report Appendix	57
Ministry of Environment and Environmental Assessment Office Contact Information .	57

Highlights of the Year

Integrated Pest Management

The B.C. government committed to consult British Columbians on "new statutory protections to further safeguard the environment from cosmetic chemical pesticides." More than 8,000 comments, signatures on petitions or submissions were received between December 2009 and the end of February 2010 in response to the Ministry's request for comments on the cosmetic use of pesticides in British Columbia. All comments have been reviewed by the Ministry and are being considered to determine how to address the non-essential use of pesticides in British Columbia.

Environmental Regulation and Penalties

In April 2010, responsibility for the new alien species regulation was assigned to the Ministry's Conservation Officer Service. An Incident Management Team and a response protocol were developed. Members underwent training, simulation exercises and several operations related to alien species. Major case management principles were applied to the operations enabling the Conservation Officer Service to determine time and cost for each operation. Numerous successful operations resulted, including prosecutions before the courts.

In 2010/11, the Conservation Officer Service obtained \$1.5 million in out-of-court settlements and voluntary commercial environmental penalties. This was achieved through effective investigation, enforcement actions and the restorative justice process, and by the high quality law enforcement work carried out by the Conservation Officer Service.

The District of Squamish was awarded Bear Smart Status in September 2010, a significant achievement and only the second B.C. community after Kamloops to gain this standing. Both the Resort Municipality of Whistler and the Village of Lions Bay submitted applications to be considered for Bear Smart Status in December 2010.

The former Ministry of Forests and Range Special Investigation Unit was transferred to the Ministry's Conservation Officer Service and amalgamated with the Conservation Officer Service Commercial Environmental Investigations Unit in October 2010. This saw an increase not only in the capacity of the Commercial Environmental Investigations Unit, but also in its mandate that now includes forestry crime. The result is a more robust and diverse investigative unit targeting environmental violators and offenders, and providing increased assistance to field staff with complex and time-consuming investigations.

Invasive Species

The Ministry provided funds and support for Spartina removal in the Boundary Bay area. Spartina species are invasive aquatic intertidal grasses on the Pacific Coast that modify natural tidal mudflats over a relatively short period of time, converting naturally sloping areas into elevated Spartina meadows with a steep seaward edge. As a result, water circulation patterns change (increasing the risk of flooding) and mudflats are converted into single species grass stands (resulting in loss of migratory bird and salmon habitat, as well as loss of economically important shellfish). Boundary Bay is an important and internationally recognized habitat for fish and migratory birds, and supports Canada's highest density of wintering waterfowl, shorebirds and raptors on the Pacific coast.

In partnership with the Invasive Plant Council of BC, over 1,700 sites in parks and protected areas were inventoried or treated for invasive plants. The Council was able to do a tremendous amount of work on the ground with money provided for Hot Spot crews by the Ministry.

Agreements and Partnerships

The Ministry has worked, and continues to work, in cooperation with the Ministry of Jobs, Tourism and Innovation on ways to reduce possible trade barriers in environmental legislation. British Columbia, Saskatchewan and Alberta launched the New West Partnership in April 2010, creating an economic powerhouse of nine million people with a combined GDP of more than \$550 billion. The Partnership is an ambitious agreement that creates Canada's largest interprovincial barrier-free trade and investment market.

B.C. made significant progress on the Ocean Conservation Action Plan, a plan agreed to by leaders of British Columbia, Washington, Oregon and California. The Ministry partnered with the Northwest Straits Initiative of Washington State on a pilot project to recover lost and abandoned fishing gear from the Salish Sea, restoring important habitat and reducing entanglement risk for marine life. Derelict fishing gear is a form of ocean-based marine debris that can unintentionally kill hundreds, even thousands, of animals that get trapped or entangled. The pilot project recovered 218 crab pots and a portion of a large purse seine net that has been passively fishing for nearly a decade.

The Province also signed an agreement with the Nature Conservancy of Canada and The Nature Conservancy in the United States to sustain environmental values in the Flathead Valley. This will allow the environmental protection provisions (such as compensation for current coal and mineral tenure holders for their past exploration) of the 2010 Memorandum of Understanding on Environmental Protection, Climate Action and Energy with the State of Montana to be implemented.

Sea Level Rise and Coastal Sensitivity

BC Parks has developed a model that describes the sensitivity of the entire B.C. coast to sea level rise. Sea level rise is one of the most certain outcomes of climate change. The present estimates are from one to two metres by the end of the century. The model results are being used by the Ministry's parks staff in relation to park planning, facility planning, conservation projects, infrastructure maintenance and strategic removal of facilities. The results have also been shared with Parks Canada.

Parks

In 2010/11, the B.C. government established eight new "Class A" provincial parks and one new conservancy, as well as making additions to 13 existing parks, encompassing more than 27,500 hectares. These changes were the result of the Lillooet and Kamloops land and resource management plans; an agreement with the Lil'wat First Nation; private land acquisitions; compensatory lands; and mitigation for the Sea to Sky Highway.

Camping reservations in BC Parks were up almost 10 per cent in July compared to the previous year.

Water Act Modernization

During 2010/11, the Ministry engaged with a broad range of British Columbians on ways to modernize the *Water Act*, a key commitment of *Living Water Smart: British Columbia's Water Plan*. Pioneering the use of social media to help develop policy, the process generated over 2,250 submissions from First Nations, stakeholder organizations and the public and included blogbased conversations, Twitter, YouTube, dedicated email and websites, online surveys, as well as face-to-face workshops. In total, over 50,000 participants visited the Living Water Smart blog and website.

Climate Action

B.C.'s Apps 4 Climate Action contest challenged Canadian software developers to use data that was made publicly available to create new applications for web and mobile devices that inform the public and inspire action to reduce climate change. Contestants developed apps ranging from Save the Rain, which calculates the amount of rain water that can be harvested from your roof, to Velo, which allows an organization to continually monitor its emissions. Apps 4 Climate Action brought together eight private sector sponsors, 150 contest registrants, 15,000 visitors to the website, 150 Twitter followers, and 132 Facebook followers. The project won silver at The Institute of Public Administration of Canada Deloitte Public Sector Leadership Awards and charted a course for the exploration of new avenues of citizen engagement.

Public Sector Energy Conservation Agreement Program

B.C. invested \$25 million in 82 energy efficiency projects in public buildings through the third round of the Public Sector Energy Conservation Agreement program. Projects included heating, ventilation and air-conditioning retrofits, and solar, thermal and district energy projects. Many of these projects took place in public schools. This provided a valuable opportunity for education about energy efficiency and conservation while producing real greenhouse gas reductions (vs. reductions through offsets) to fight climate change, and contributed to B.C.'s carbon neutral government commitment. In total, over three years of this program, B.C. improvements to public sector buildings have produced annual energy cost savings of close to \$20 million, greenhouse gas reductions of over 61,860 tonnes and conservation of 51.9 gigawatt hours of electricity.

Climate Change Partnerships

B.C. is active in several international climate change partnerships, and was Chair of the International Carbon Action Partnership in 2010. B.C. attended the United Nations Climate Change Conference in Cancun as a member of the Canadian delegation. B.C. signed agreements with Washington State to share information on achieving carbon neutrality in the public sector, and through joint efforts such as the King Tide Photo Initiative, strengthens engagement about how sea level rise threatens critical shoreland areas and communities.

Greenhouse Gas Emissions

The first year of submissions under the *Reporting Regulation of the Greenhouse Gas Reduction (Cap and Trade) Act* was in 2010/11. Emitters submitted their emissions data through the One Window Reporting System, developed in a partnership between B.C. and Environment Canada, allowing both federal and provincial reporting requirements to be fulfilled. These emissions data from medium and large industrial and commercial facilities will support policy and programs, including emissions reduction projects and cap and trade development.

Progress on Minister of State for Climate Action Accountabilities

Throughout 2010, the Minister of State for Climate Action fulfilled the duties of Vice-Chair of the Cabinet Committee on Climate Action and Clean Energy. The above information on climate action initiatives demonstrates that all 2010/11 Service Plan Accountabilities for the Minister of State for Climate Action were met.

Purpose of Ministry

The Ministry supports government goals and initiatives

The Ministry's mission is to demonstrate leadership in ensuring our natural legacy for future generations and support positive economic outcomes for British Columbia. This includes effective action on climate change; clean and safe water, land and air; healthy and diverse native species and ecosystems; and outdoor recreational opportunities – all of which are critical to the health of British Columbia's families.

The Ministry promotes stewardship and sustainability

The Ministry promotes and supports environmental stewardship by working with other governments, First Nations, business and organizations, encouraging them to take responsibility for actions aimed at ensuring a sustainable environment. To accomplish these objectives, the Ministry works collaboratively with all of its stakeholders to develop legislation, regulations, policies and memorandums of understanding. The Ministry also promotes and supports shared environmental stewardship through public outreach initiatives.

The Ministry serves its clients in a responsible way

The Ministry understands the diversity of its clients, which include other governments, business, organizations, First Nations and individuals. Providing exemplary client service requires careful consideration of economic, social and environmental issues. Making decisions based on science (natural, economic and social) is a priority for the Ministry. Such decisions are outcome focused, inclusive, innovative and transparent to citizens.

The Ministry develops innovative partnerships

To continue to provide effective leadership in environmental management, the Ministry forges partnerships with organizations and individuals outside the Ministry. These include nonprofit organizations, other governments, business, First Nations and citizens. The Ministry recognizes that innovative partnerships are critical to the success of its many programs. By working with third-party partners such as Park Facility Operators, Habitat Conservation Trust Foundation, Bear Aware, BC Lung Association and BC Hydro, the Ministry explores new ways to provide services and attain conservation science information.

The Ministry administers legislation and sets standards

The Ministry provides strategic planning, policy and legislative research and coordination for the development of Ministry statutes and regulations. Memorandums of Understanding, protocol agreements and environmental cooperation agreements with neighbouring governments are negotiated. The Ministry actively participates in the Canadian Council of Ministers of the

Environment, Council of the Federation Water Stewardship Council, National Advisory Committee under the *Canadian Environmental Protection Act*, Union of British Columbia Municipalities and other organizations.

To promote and verify voluntary compliance, the Ministry uses education, compliance strategies and public reporting. Where necessary, Ministry staff undertake activities to enforce the Province's environmental and public safety legislation.

Strategic Context

Trends and events within British Columbia and beyond our borders are intricately linked to the achievement of provincial goals and objectives. These major trends, and the internal and external context in which the Ministry operated last year, posed both challenges and opportunities.

Significant and often conflicting economic and societal pressures had an impact on how we managed our environment. A sustainable environment is key to the prosperity of our province and our families. The following issues provided the context for the Ministry's work in 2010/11.

Environment

- Climate change will impact many aspects of the lives of all British Columbians for generations to come by affecting freshwater supply; species, ecosystems and habitats; weather patterns; warming conditions; flooding; and drought. Challenges faced by the Ministry in 2010/11 on climate change will continue into the future. The Ministry worked to take effective action on climate change and to prepare for these impacts, including reducing greenhouse gas emissions through a carbon tax and working to develop a cap and trade program.
- Current and future demands on water require enhanced protection and stewardship of our water resources. The Ministry worked to meet these pressures through beginning the modernization process of the *Water Act*, supporting the development of a provincial water science strategy, updating Living Water Smart and providing and participating in outreach initiatives such as World Water Day.
- Many species, ecosystems and habitats in British Columbia are at risk due to factors such as increasing population and climate change. The B.C. Government convened a Species at Risk Task Force to provide the Province with recommendations for conservation of species and ecosystems at risk. The task force completed its final report on January 31, 2010. The Ministry is currently reviewing this report.
- British Columbians are becoming more aware that environmental stewardship is the responsibility of all. We understand that we both rely on and benefit from a sustainable environment. The Ministry worked with every sector in the province to promote, support and share in this responsibility of environmental stewardship. In 2010/11, the Ministry championed many outreach initiatives, such as sharing our environmental knowledge and developing partnerships to support environmental stewardship.

Economy

• British Columbia's real GDP increased by 4.0 per cent in 2010, following a decline of 1.8 per cent in 2009. Indicators of economic performance in 2010 show that B.C.'s economy is recovering from the period of severe weakness it experienced in late 2008 and early 2009. Improvements in the domestic economy were observed in employment, consumer spending

13

and housing, while external gains were made in exports and shipments of manufactured goods. However, several risks to B.C.'s economy remain, including ongoing weakness in the US, the European sovereign debt crisis, continued strength in the Canadian dollar, and geopolitical uncertainty and its impact on global commodity markets.

- Diminishing government resources mean the Ministry has to look for more effective and efficient ways to provide its services. Opportunities for efficiencies exist as technology continues to evolve. In 2010/11, the Ministry continued work on streamlining its processes and working collaboratively with other ministries, government, business, organizations, First Nations and the public to increase efficiency and effectiveness.
- The accelerating number of retirements by senior staff means an increased shortage in the specialized skills and qualifications that the Ministry requires to deliver its programs and services. The Ministry collaborated with other ministries and agencies to implement a human resource plan.

Society

- Rising population and urbanization continued to result in greater demands for natural resources such as water, land and energy. As well, emissions and effluents in the form of pollution are increasing which negatively impact the quality of air, land and water.
- The demographics of British Columbia continued to change, including culture, age and general knowledge about the environment and health. Public expectations for clean and safe water, land and air, environmental information and outdoor recreational experiences continue to rise.
- Compliance with the Ministry's legislation and regulations is a priority for the Ministry. The Ministry worked to ensure compliance with these regulations through voluntary incentives, the release of public compliance and environment summaries and enforcement.

Government-wide Reorganization

- In the fall of 2010, a government-wide reorganization resulted in some responsibilities of the Ministry being moved to the Ministry of Forests, Lands and Natural Resource Operations and Ministry of Agriculture. Responsibilities moved included marine fisheries, watershed restoration, fish and wildlife and habitat management, drought management, floodplain management and dam and dyke safety and regulation. This resulted in new collaborative natural resource management, legislative changes and staff reorganization.
- New responsibilities for the Ministry included enhanced water and air reporting; technical services and enforcement; and biophysical science from the former Ministry of Forests, and provision of advice, policy, guidelines and standards for air and water quality related to human health from the former Ministry of Healthy Living and Sport. The new responsibilities will allow the Ministry to take a more comprehensive approach in these areas.

Coordinated Resource Management

The Ministry is working collaboratively with the ministries of Aboriginal Relations and Reconciliation; Agriculture; Energy and Mines; Forests, Lands and Natural Resource Operations; and Jobs, Tourism and Innovation to promote integrated and timely delivery of services to clients in all regions across B.C. Such collaboration is designed to support the competitiveness of natural resource enterprises and reinforce sustainable environmental management. Collaborative efforts offer the opportunity for alignment of government resources to advance economic development and community resiliency. Improving the efficiency of service delivery will also help address the budget realities and demographic challenges facing the province.

Greenhouse Gas Emission Reduction in Ministry

The Ministry is participating in carbon neutral government by reducing greenhouse gas emissions from its operations, where possible, and purchasing offsets to cover the remaining emissions. Some of the 2010/11 operational greenhouse gas reducing projects include:

- reduced travel using conference calls, Live Meeting web conferencing, and purchase of three round-table conference web cameras to facilitate virtual meetings;
- replacement of an existing fleet vehicle with a hybrid model;
- an upgrade of BC Parks facilities' for lighting and hot water efficiency;
- installation of on-demand hot water at headquarters and reduction of hot water temperature by one degree;
- reprogramming of heating, ventilation, air conditioning and lighting in two ministry buildings (including headquarters) for energy conservation; and
- adoption of a ministry-wide Sustainable Procurement Policy which addresses office products under \$5,000, travel, and meetings, and directs staff to make sustainable purchasing decisions.

Additionally, staff were encouraged to personally improve sustainability through various engagement initiatives. The results below highlight some of the achievements from 2010/11:

- 20 per cent of staff participated in the energy-saving *Hibernation Challenge*;
- 12 per cent of staff made low carbon commuting choices during *Target: Green Streets*, preventing the release of 0.5 tonnes of emissions; and
- 2,180 pounds of office supplies were collected for re-use during Spring Greening.

Report on Performance

As a result of the government-wide reorganization that took place in the fall of 2010, the area that monitors performance measure 8, "Fisheries in the eco-certification process," is now in the Ministry of Agriculture, which will be reporting on this measure. Some strategies in goals 4 and 5 have been deleted as the Ministry is no longer responsible for those areas.

Performance Plan Summary Table

	1: Effective action on climate change r greater detail see pages 18 to 22	2010/11 Target	2010/11 Actual
		Turget	Avtual
1.1	Reduced provincial greenhouse gas emissions	C0/	DATA NOT
	Annual level of greenhouse gas emissions in British Columbia	6% reduction by 2012	A VAILABLE
	relative to 2007 levels		
1.2	Preparing for unavoidable climate change and its impacts		
	Number of provincial ministries that include a strategy on climate	6	6
	change adaptation in their Service Plans		ACHIEVED
Goal	2: Clean and safe water, land and air	2010/11	2010/11
Fo	r greater detail see pages 22 to 26	Target	Actual
2.1	Enhanced protection and stewardship of our water resources		
	Percentage of water bodies monitored under the Canada – B.C.	000/	000/
	Water Quality Monitoring Agreement with stable or improving water	96% or greater	96%
	quality trends		ACHIEVED
2.3	Enhanced protection and stewardship of our air		
2.0	Number of air emission standards incorporating current Best		5
	Achievable Technology practices	5	
Goal	3: Healthy and diverse native species and ecosystems	2010/11	2010/11
	r greater detail see pages 27 to 31	Target	Actual
10	1 910ator dotali oce payes 21 to 51	i ui got	Improved: 4
			•
3.3	Conserved, maintained and enhanced native species and		Declined: 2
	ecosystems		Unchanged: 57
	Changes in the status of five groups of species over five years	No decline	Awaiting assessment:
			100
			NOT ACHIEVED
	4: British Columbians share responsibility for the environment	2010/11	2010/11
Fo	r greater detail see pages 31 to 33	Target	Actual
4.3	Industry and client groups implement best environmental		
	management practices		
	Number of product categories with industry-led product stewardship	11	11
	programs		ACHIEVED
Goal	5: Sustainable use of British Columbia's environmental	0040/44	0040/44
	resources	2010/11	2010/11 Actual
Fo	r greater detail see pages 34 to 38	Target	Actual
5.2	Optimize outdoor and economic opportunities from British Columbia's parks, fish and wildlife Number of recorded park visits and visitor satisfaction level:		
	Park visits	19.8 million	19.5 million
			SUBSTANTIALLY
			-
			ACHIEVED
		Maintain or improvo	80%
	Visitor satisfaction level	Maintain or improve	
		(from 80%)	ACHIEVED

Goals, Objectives, Strategies and Performance Results

The following sections present the Ministry's goals and provide an overview of their supporting objectives, strategies and performance measures. The performance reporting is based on the Ministry's 2010/11 - 2012/13 Service Plan. Each performance measure has a discussion of the results, and the Ministry's response if there is significant variance between the target and the actual result.

Goal 1: Effective action on climate change



Cape Scott Provincial Park

Climate change has broad global, regional and local significance. Changes in climate drive changes in natural systems that affect economic, environmental and social interests. Many agree that the current rapid rate of change is of serious concern and is linked to the burning of fossil fuels and other human activities that release greenhouse gases into the atmosphere. How we respond to climate change will shape our economy, our society, our communities and our way of life.

The government has made an aggressive commitment to address climate change by addressing its causes (mitigation) and preparing the province for the unavoidable consequences of climate change (adaptation). The Ministry of Environment leads government's cross ministry climate change mitigation and adaptation initiatives through the important work of the B.C. Climate Action Secretariat.

Objective 1.1: Reduced provincial greenhouse gas emissions

Reducing the amount of greenhouse gases that are released into the atmosphere is an important step in addressing the causes of climate change and minimizing its impacts on generations to come.

Strategies

Key strategies for this objective include:

- developing climate action policy and providing advice, research and planning documents as directed by Cabinet committees;
- guiding the successful delivery of the Climate Action Plan across government;
- developing, and assisting other ministries in developing, policy, legislation and/or regulations as required;
- leading and coordinating the carbon neutral public sector initiative;
- working with international, national and regional partners to forward climate action goals;
- developing and facilitating the implementation of a cap and trade system and standardized offsets program; and
- coordinating the development and implementation of a public outreach and strategic engagement program to mobilize citizens and partners to reduce provincial greenhouse gas emissions.

Performance Measure 1: Reduction of greenhouse gas emissions

Performance Measure	2007 Actual ²	2008 Actual	2009 Actual	2010 Target	2010 Actual
Annual level of greenhouse gas emissions in	68.0	68.7	66.8	6% reduction	DATA NOT
British Columbia relative to 2007 levels ¹	megatonnes	megatonnes	megatonnes	by 2012	AVAILABLE ³

Data Source: Ministry of Environment

¹ Greenhouse gases are measured in units of tonnes of carbon dioxide equivalent. One megatonne equals 1,000,000 tonnes of carbon dioxide equivalent greenhouse gas. See the *British Columbia Greenhouse Gas Inventory Report 2008*, pages 4-5, for details at www.env.gov.bc.ca/cas/mitigation/ghg_inventory/pdf/pir-2008-full-report.pdf.

²Data collection, target setting and progress are on a calendar-year basis.

³ Actual data for 2010 will be available in April 2012.

Discussion of Results

The *Greenhouse Gas Reduction Targets Act*, brought into effect on January 1, 2008, put into law British Columbia's target of reducing greenhouse gas emissions by at least 33 per cent below 2007 levels by 2020, and by at least 80 per cent below 2007 levels by 2050. Interim targets have been set for 2012 and 2016, and the former is reflected in the table above. The Ministry of Environment is responsible for reporting on greenhouse gas emissions released into the

atmosphere from a comprehensive array of activities in British Columbia, including those resulting from industry, transportation, buildings, landfills, agriculture and net deforestation.

The data for the performance measure are taken from Environment Canada's *National Inventory Report*, which is prepared to meet Canada's obligations under the United Nations Framework Convention on Climate Change. The report is published annually with an approximate 16-month lag relative to the reported year. British Columbia publishes a Provincial Inventory Report with B.C. data only. The report has B.C. data from the Environment Canada inventory, as well as provincial greenhouse gas emissions from afforestation and deforestation, and by-product greenhouse gas emissions from certain gases from the industrial and electricity sectors. These additional emissions are reported by Environment Canada in national totals but are not broken down by province.

Greenhouse gas emissions decreased from 68.7 megatonnes in 2008 to 66.8 megatonnes in 2009, a change of 2.8 per cent. Most of this decrease was due to reduced energy use from stationary combustion sources in manufacturing and from on-road diesel transportation, reflecting decreases in goods shipments. Reduced energy use is a result of the severe economic recession that occurred in 2009, which strongly affected economic activity across most sectors in B.C. Climate change policies are expected to have a strengthening role in reducing energy use and greenhouse gas emissions going forward.

British Columbia's greenhouse gas emissions were 0.9 and 20.0 per cent higher in 2009 compared to 2000 and 1990, respectively. The increase in greenhouse gas emissions since 1990 is largely due to population growth, but some of it can also be attributed to increased activity in mining, oil and gas extraction and transportation. The *British Columbia Greenhouse Gas Inventory Report 2008¹* shows that most of this increase occurred between 1990 and 2001. The greenhouse gas per capita (tonnes/person) has decreased from 15.1 in 1990 to 14.3 in 2009.

Objective 1.2: Preparing for unavoidable climate change and its impacts

Taking action to reduce greenhouse gas emissions now will reduce the impact of future climate change and provide human and natural systems more time to adjust. However, the greenhouse gases already in the atmosphere mean that some ongoing climate change and some impacts are unavoidable. A comprehensive climate change action plan must therefore include preparing for such impacts or "adapting." Adaptation will help maximize the opportunities and reduce the risks related to climate change and its impacts on ecosystems, communities and the built environment. Through the Climate Action Secretariat, the Ministry is coordinating development and implementation of the provincial Adaptation Strategy, which includes initiatives to enhance knowledge and tools, mainstream adaptation into government business, and address adaptation in key sectors. The Ministry of Environment is integrating adaptation into its own business areas, including the management of water, land, air, species, ecosystems and parks and protected areas.

¹ See pages 13 and 15 of the Inventory Report.

Strategies

Key strategies for this objective include:

- leading the implementation of government's Climate Change Adaptation Strategy;
- supporting and collaborating with research institutions and organizations to develop and deliver the knowledge and tools decision makers need to facilitate adaptation;
- collaborating with Ministry partners, including other ministries, federal agencies, local governments, First Nations, private industry and non-government organizations in preparing for climate change and its impacts;
- developing new approaches to water management that address the impacts from a changing water cycle, including increased risk of flood and drought;
- continuing to build robust observation networks that contribute to increased understanding of the direction and pace of climate change in British Columbia; and
- conducting species, ecosystem and landscape level conservation and restoration efforts in a way that anticipates adaptation requirements, maximizes resilience and improves future options.

Performance Measure 2: Number of provincial ministries that include a strategy on climate change adaptation in their Service Plans

Performance	2009/10	2010/11	2010/11
Measure	Actual	Target	Actual
Number of provincial ministries that include a strategy on climate change adaptation in their Service Plans	4	6	6 ¹ ACHIEVED

Data Source: Ministry of Environment

¹ Formerly named ministries of Agriculture and Lands; Community and Rural Development; Forests and Range; and Housing and Social Development; and ministries of Environment and Transportation and Infrastructure.

Discussion of Results

The Ministry of Environment, through the Climate Action Secretariat, is responsible for leading and coordinating climate change adaptation across government. The new Climate Change Adaptation Strategy, which was released by government in February 2010, aims to accomplish the following:

- Build a strong foundation of knowledge and tools to help public and private decision makers across British Columbia prepare for a changing climate;
- Make adaptation a part of the B.C. government's business, ensuring that climate change impacts are considered in planning and decision making across government; and
- Assess risks and implement priority adaptation actions in key climate sensitive sectors.

A core deliverable under the second bullet above is that ministries will consider climate change impacts by incorporating adaptation strategies into their service plans and business planning, where relevant. This performance measure was introduced in the 2010/11 - 2012/13 Service *Plan*. It is intended to support the government's increased focus on identifying and addressing key vulnerabilities related to climate change.

Four ministries had already included commitments to climate change adaptation in their service and/or business plans prior to the introduction of the service plan measure in 2010/11 – the Ministry of Environment and the formerly named ministries of Forests and Range, Agriculture and Lands, and Community and Rural Development. Following the introduction of the performance measure in 2010/11, two additional ministries – the Ministry of Transportation and Infrastructure and the formerly named Ministry of Housing and Social Development – committed to actions in their service plans that will help them prepare for a changing climate.

For more information on the Climate Change Adaptation Strategy please go to <u>www.livesmartbc.ca/attachments/Adaptation_Strategy.pdf</u>.

Goal 2: Clean and safe water, land and air



Tuya Mountains Provincial Park

Objective 2.1: 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. Achievement of this objective through effective legislation, innovative approaches to water governance and coordinated watershed-based planning is critical to the environment.

Strategies

Key strategies for this objective include:

- motivating shared water stewardship by leading and coordinating the implementation of the actions and commitments in *Living Water Smart: British Columbia's Water Plan* (<u>http://livingwatersmart.ca/</u>);
- working with the Ministry of Health (previously Ministry of Healthy Living and Sport) to protect sources of drinking water;
- modernizing water laws in collaboration with partners, including First Nations and other levels of government; and
- recognizing water flow requirements for ecosystems and species.

Performance Measure 3: Water quality trends monitored under the Canada – B.C. Water Quality Monitoring Agreement

Performance	2008/09	2009/10	2010/11	2010/11
Measure	Actual	Actual	Target	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	96% ACHIEVED

Data Source: Ministry of Environment

Discussion of Results

Under the Canada – B.C. Water Quality Monitoring Agreement, 32 provincially significant rivers and streams, including the Fraser, Columbia and Peace, are monitored in British Columbia. This performance measure relies on data collected from 40 monitoring stations to determine whether water quality is stable or improving in each of these key water bodies. By measuring the concentration of variables such as metals, nutrients, pH, temperature and dissolved oxygen, the Ministry is able to identify trends in overall water quality. The target was once again achieved in 2010/11.

The Federal-Provincial Surface Water Monitoring Group conducted a review to make improvements to the monitoring network. The review resulted in the establishment of a framework to ensure that the network is meeting its goals and is operating efficiently and effectively. This network review and optimization exercise relies heavily on the results of station assessment reports, which are conducted on a five-year rotation. In 2010/11, a station on the

Bulkley River, a tributary to the Skeena River, and a station on the Shuswap River were established as part of this network review, and a station on the Koksilah River was deactivated due to close proximity to another station on the Cowichan River. These new stations enhance the geographic coverage of the network, while allowing water quality managers to assess the contributions of these rivers to the Skeena and Shuswap Lake watersheds.

The Federal-Provincial Surface Water Monitoring Group is currently assessing 10 water quality monitoring stations in the Fraser River watershed. Assessment will continue into 2011/12 due to the number of stations and amount of data. The results of these assessments will be compiled into a larger report on water quality trends in the Fraser River, which is expected to be drafted in early 2012. The results of these assessments will be included in future calculations of this performance measure and will provide insight into emerging water quality trends in the Fraser River.

Data collected from sites under the Canada – B.C. Water Quality Monitoring Agreement are used for a variety of reports, including the annual Canadian Environmental Sustainability Indicators Water Quality Index at <u>www.ec.gc.ca/indicateurs-indicators</u>.

Objective 2.2: Reduced contamination from toxins and waste

By reducing contamination from toxins and wastes efficiently and effectively, the Ministry will minimize impacts to water, land and air.

Strategies

Key strategies for this objective include:

- exploring new ways to reduce municipal solid waste disposal;
- supporting the Brownfield² Renewal Strategy for British Columbia;
- promoting the development and adoption of integrated pest management practices; and
- promoting increased accountability for hazardous waste management.

Objective 2.3: Enhanced protection and stewardship of our air

By encouraging the use of clean technologies and supporting the establishment of effective emissions standards, the Ministry strives to reduce the impacts of air pollution.

² Brownfields are abandoned, vacant, derelict or underutilized commercial or industrial properties where past actions have resulted in actual or perceived contamination and where there is active potential for redevelopment.

Strategies

Key strategies for this objective include:

- leading the implementation of the BC Air Action Plan, which is aimed at continuing to reduce emissions from industry, transportation, urban growth, ports and marine vessels;
- expanding the coverage of the air quality monitoring network³, to ensure that it meets or exceeds National Air Pollution Surveillance standards and delivers the real-time Air Quality Health Index to the public to make decisions on their daily exposure to air pollution;
- maintaining and enhancing the B.C. Air Quality website (<u>www.bcairquality.ca</u>), as the provincial government portal for all air quality data, information, resources and tools, and which includes the BlueSky Western Canada Smoke Forecasting System;
- introducing policies that support the use of the cleanest available practices and technologies in all new or expanding industrial facilities; and
- continuing to support, in partnership with other ministries and agencies, the development and implementation of local airshed management plans.

Performance Measure 4: Clean air standards for industry

Performance Measure	2008/09 Actual	2009/10 Actual	2010/11 Target	2010/11 Actual
Number of air emission standards				Б
incorporating current Best Achievable	3	4	5	3 ACHIEVED
Technology practices				ACHIEVED

Data Source: Ministry of Environment

Note: Target figures are cumulative.

Discussion of Results

The government works with industry to ensure that business practices support British Columbians' environmental and health priorities, while ensuring economic sustainability. The Best Achievable Technology approach encourages new and expanding industry to use the cleanest available practices and technologies. The standards for air emissions are set through guidelines, policies, codes of practice and regulations. Standards developed in past years have been for the slaughter and poultry processing industries;⁴ biomass-fired electrical power generation;⁵ and wood-burning boilers used in agricultural operations.⁶

⁵ More information about emissions standards is available at

 $^{^{3}}$ Two sites were added to the network in 2010/11.

⁴ More information on the code of practice for the slaughter and poultry processing industries is available at <u>www.env.gov.bc.ca/epd/industrial/regs/codes/slaughter/index.htm</u>.

www.env.gov.bc.ca/epd/industrial/pulp_paper_lumber/wood_fired.htm.

⁶ More information on the Agricultural Waste Control Regulation (Part 6–Agricultural Emissions) is available at www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_131_92.

In 2010, a guideline for emissions from pellet plant manufacturing operations was finalized based on an independent study by Envirochem.⁷ In March 2011, the Ministry completed, based on a Best Achievable Technology study by Stantec,⁸ a new Guideline for Emissions from Municipal Solid Waste Combustion. These guidelines support the Ministry's work to protect air quality and human health.

Objective 2.4: Effective management of environmental risks

Events such as oil spills and catastrophic fires can present risks to public health and safety, property and the environment. Although not all environmental risks are avoidable, effective management can help to reduce the impact of these risks. The Ministry anticipates, responds to and manages the consequences of risks to the environment.

Strategies

- responding effectively to high-risk environmental emergencies;
- reducing the risk to public health and safety and the environment through effective management and response programs, and compliance and enforcement strategies and actions;
- collaborating with the formerly named Ministry of Natural Resource Operations to manage the environmental risks of human-wildlife interactions through proactive and reactive strategies;
- managing the remediation of high-risk contaminated sites and regulating the remediation of all contaminated sites; and
- managing fire interface in communities adjacent to parks and protected areas.

⁷ Emissions and Air Pollution Controls for the Biomass Pellet Manufacturing Industry, available at www.env.gov.bc.ca/epd/industrial/pulp_paper_lumber/pdf/moe-pellet-industry-051410.pdf.

⁸ Waste to Energy: A Technical Review of Municipal Solid Waste Thermal Treatment Practices, available at www.env.gov.bc.ca/epd/mun-waste/reports/pdf/bcmoe-wte-emmissions-rev-mar2011.pdf.

Goal 3: Healthy and diverse native species and ecosystems



Ruffed Grouse, Charlie Lake

Objective 3.1: Well-managed, integrated and accessible information on species and ecosystems

The collection, storage, management and distribution of scientific information on native species and ecosystems provide for effective research and contribute to the understanding of the status of native species and ecosystems.

Strategies

- employing the Conservation Framework (<u>www.env.gov.bc.ca/conservationframework/</u>) to collect, assess and distribute information on species and ecosystems, including their conservation status, associated threats, priority ranking and progress against recommended management activities;
- assessing the conservation status of plants, animals and ecosystems and related risks and threats within parks and protected areas; and
- providing guidelines and standards for the protection and conservation of species and ecosystems, including inventory, monitoring and reporting on achievements.

Objective 3.2: Well-managed parks and protected areas

Parks and protected areas help to ensure the protection of native species and ecosystems, provide outstanding outdoor recreation opportunities, and contribute to meeting our environmental, social and economic goals. Our world-class parks system provides a legacy for future generations.

Strategies

Key strategies for this objective include:

- collaborating with First Nations and communities in protected areas planning and management to ensure long-term protection of natural, cultural and recreational assets;
- providing high-quality outdoor recreational opportunities and experiences;
- increasing and promoting partnerships to expand the opportunities and involvement in stewardship initiatives;
- addressing high-priority conservation framework and ecosystem management issues; and
- strengthening the role of parks and protected areas in adapting to climate change.

Objective 3.3: Conserved, maintained and enhanced native species and ecosystems

Ministry programs 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 native species and ecosystems.

Strategies

- leading the implementation of the Conservation Framework to set priorities for species and ecosystem recovery and management action;
- continuing to work with and expand partnerships, including those with First Nations, to identify, protect and restore species and ecosystems;
- continuing to develop and implement guidelines, policies, standards and legislation for the protection, conservation and management of species and ecosystems; and
- providing leadership in species at risk status ranking and legal designation, and preparing and implementing recovery plans.

Performance Measure	2009/10 Actual (breeding birds)	2010/11 Target (mammals)	2010/11 Actual (mammals)
Changes in the status of five groups of species over five years	Improved: 8 Declined: 32 Unchanged: 182 Awaiting assessment: ¹ 84	No decline	Improved: 4 Declined: 2 Unchanged: 57 Awaiting assessment: ¹ 100 NOT ACHIEVED

Performance Measure 5: Changes in the conservation status of native species

Data Source: Ministry of Environment

¹ "Awaiting assessment" means the number of species within the taxonomic group (e.g., mammals) that have not been assessed at the time of reporting. For any species within a group not assessed in a single fiscal year, assessment continues until it is complete. The number of species in a particular group, the complexity of the assessments and B.C. Conservation Data Centre capacity all contribute to the number of species assessed within a year.

Discussion of Results

Changes in the status of native species of plants and animals in British Columbia is an important indicator of the Ministry's efforts to protect biodiversity and conserve native species. The year 2010 was declared the International Year of Biodiversity by the United Nations, and this performance measure coincides with indicators and targets set by the World Conservation Union to reduce the current rate of global biodiversity loss.

Tracking the status and occurrences of species and ecosystems at risk is done by the B.C. Conservation Data Centre.⁹ Every species in the province is given a conservation status rank, which is a measure of its risk of becoming extinct in British Columbia. Status ranks are assigned on a scale of one to five: (1) critically imperiled, (2) imperiled, (3) vulnerable, (4) apparently secure, or (5) secure. Ranks are assigned by the B.C. Conservation Data Centre using science-based criteria and factors such as rarity, trends in populations or habitat, and threats. Status ranks are publicly available on BC Species and Ecosystems Explorer,¹⁰ along with more information relating to species and ecosystems in British Columbia. These status ranks are foundational to the Conservation Framework, which prioritizes species and ecosystems for conservation and recommends conservation actions. This performance measure reports on a different group of species each year over a five-year period, following the Conservation Data Centre schedule that re-assesses each species on an approximate five-year cycle. For 2010, the status of mammals is reported.

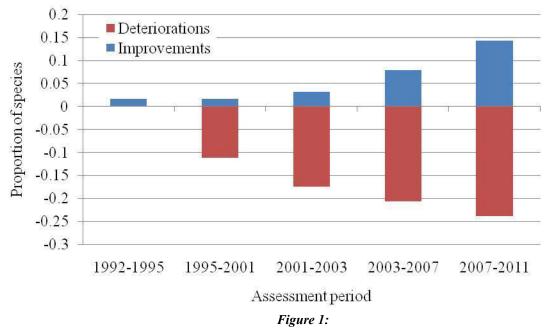
In 2010, the review of the mammal ranks was initiated; however, it was not completed by yearend. Assessment of the remaining species will continue in 2011/2012 until they are complete. The ranks of 63 mammal species were reviewed in 2010/11: six species had a genuine change in conservation status; four improved (wood bison, Roosevelt elk, sea otter, and bighorn sheep) and two declined (caribou – northern mountain population and the Arctic shrew). During the past few

⁹ B.C. Conservation Data Centre Home is at.<u>http://www.env.gov.bc.ca/cdc/index.html</u>.

¹⁰ BC Species and Ecosystems Explorer is at <u>http://www.env.gov.bc.ca/atrisk/toolintro.html</u>.

Ministry of Environment and Environmental Assessment Office

decades, many mammal species have been recovering from being harvested to extremely low levels in the past. Simply removing or decreasing the hunting threat has led to improvement. Roosevelt elk, sea otter, and wood bison are typical examples of such recoveries. However, most current declines in species' status are due to more complex threats, such as habitat loss and alteration, increases in invasive species, and changes in natural systems. The declines in status of both caribou (northern mountain population) and the Arctic shrew are a result of these types of threats. Figure 1 shows the cumulative proportion of mammal species that improved or declined with each assessment since the B.C. Conservation Data Centre began assessing species' status in 1992. The figure includes only the 63 species that have been assessed so far in the 2010/11 assessment period. It does not distinguish status changes due to factors over which the Ministry has only partial influence (e.g., human activities on the landscape such as forestry, energy development, etc.).



Cumulative proportion of mammalian species with conservation status improving or declining in B.C. (1992-2011)

Ministry Response

B.C.'s growing population and increasing demands on our province's land and water has had an impact on British Columbia's biodiversity. As a result, the Ministry continues to work with partners to explore new ways to integrate conservation science information (e.g., high priority species and ecosystems, and cumulative effects of land development) more effectively into decision making.

The Province works with partners to develop common approaches to mitigate and compensate for environmental impacts, and has demonstrated an interest in updating its vision for the conservation of species and ecosystems in B.C. by striking a provincial Species at Risk Task Force, which completed its work in 2010/11. The Ministry continues to assess the risk to the

province's species and ecosystems. It develops plans and strategies for conservation and establishes priorities for work and investment, working with partners, such as the Ministry of Forests, Lands and Natural Resource Operations.

The Ministry is not the sole custodian of the province's biodiversity; the trend in this measure reflects the work of the Ministry in the context of shared stewardship with other agencies, governments, First Nations, industry and others – all whom share responsibility for maintaining B.C.'s diversity of species and ecosystems. Species status changes slowly, and this measure may require time to show a response to environmental change or management actions. Factors outside British Columbia, such as those that affect the status of migratory birds, also influence the biodiversity within the province's borders.

Goal 4: British Columbians share responsibility for the environment



Naikoon Provincial Park

Objective 4.1: British Columbians understand the effect of their actions on the environment

In order to foster an environmentally conscious society, people must understand the relationship between their actions and their health, as well as how their actions affect the health of other people, species and ecosystems. As British Columbians continue to make the connection between their activities and environmental impacts, they are much more likely to set a higher environmental standard for their actions and those of others.

Strategies

Key strategies for this objective include:

- continuing to work with stewardship organizations to increase environmental awareness; and
- promoting outdoor activities to foster a connection to and an appreciation for the natural environment.

Objective 4.2: Shared environmental stewardship is a priority for all British Columbians

The Ministry recognizes that in order for shared stewardship to be successful, it is necessary to work in partnership with First Nations, industry, communities, environmental groups and other government bodies.

Strategies

Key strategies for this objective include:

- recognizing, promoting and enhancing shared stewardship through communication, consultative processes and volunteer initiatives that engage stakeholders, clients and partners;
- promoting sustainable natural resource management through collaborative management;
- using the Living Water Smart blog (<u>http://livingwatersmart.ca/</u>) to promote shared water stewardship;
- maintaining the Our Environment website to inform, engage and support clients, partners and staff in environmental stewardship initiatives (<u>www.env.gov.bc.ca/OurEnvironment/</u>); and
- enhancing and promoting shared stewardship through effective and timely communication of compliance activities to protect the environment.

Objective 4.3: Industry and client groups implement best environmental management practices

Sustainable environmental management practices not only protect the environment, they reduce costs (by using resources and energy more efficiently), and lay the foundation for good corporate citizenship.

Strategies

- continuing to work with industry to develop, implement and continuously improve industryled product stewardship programs;
- continuing to research and collaborate with key stakeholders on product categories suitable for inclusion in the B.C. Recycling Regulation;

- continuing to explore opportunities to reduce regulatory burden¹¹ through changes such as implementing codes of practice to replace permit-based authorization frameworks, while promoting best environmental management practices and maintaining stringent environmental standards; and
- encouraging compliance by reporting those in non-compliance with Ministry environmental standards and/or regulatory requirements.

Performance Measure 6: Industry-led stewardship programs

Performance	2008/09	2009/10	2010/11	2010/11
Measure	Actual	Actual	Target	Actual
Number of product categories with industry-led product stewardship programs	9	10	11	11 ACHIEVED

Data Source: Ministry of Environment

Note: Target figures are cumulative. The target is two new categories every three years.

Discussion of Results

In 2010/11, the Ministry's target of having 11 product categories with industry-led product stewardship programs was reached. The 11 product categories are: paint; used oil products; beverage containers; lead acid batteries; antifreeze; pharmaceuticals; pesticides; solvents and flammable liquids; gasoline; tires; and electronic and electrical products.

Product categories can include a large number of products. For example, the electronic and electrical product category includes a wide variety of products such as small appliances, computers, cell phones and televisions. New programs within the electronic and electrical product category were introduced by industry for thermostats, fluorescent lamps, batteries and information technology and telecommunications. The public now has more options to recycle these products at no charge for drop off.

For more information about Industry Product Stewardship programs in B.C., please visit our website at <u>www.env.gov.bc.ca/epd/recycling/</u>.

¹¹ British Columbia continues to make regulatory reform a priority across government, making it easier for businesses to operate and succeed in B.C., while still preserving regulations that protect public health, safety and the environment. Regulatory reform has been, and will continue to be, undertaken throughout the Ministry as the organization pursues its move to a results-based regulatory approach. Since 2001, the Ministry has reduced its regulatory requirements by 42 per cent, while continuing to maintain stringent environmental standards.

Goal 5: Sustainable use of British Columbia's environmental resources



Kayakers on Chilliwack Lake

Objective 5.1: Wise management and continued benefits of water and air

British Columbia's water and air resources sustain a full range of economic, community and ecosystem needs. The Ministry seeks to ensure that all British Columbians will continue to benefit from the wise and prudent management of these resources.

Strategies

- promoting increased community and stakeholder involvement at the local level;
- operating the hydrometric network¹² to obtain information to support water management;
- reviewing water laws to improve the protection of stream health and aquatic environments, provide opportunities for community involvement and provide incentives for efficient water use;
- regulating ground water use in priority areas and for large withdrawals;
- supporting communities engaged in multi-stakeholder watershed management plans;

¹² The B.C. hydrometric network is an environmental monitoring system that collects river and lake level data from over 450 locations in British Columbia. The data are essential to good planning for hydroelectric power production, dams, dikes, roads, bridges, floodplain areas and pipeline crossings.

- promoting and facilitating multi-stakeholder airshed management plans; and
- continuing to support local air quality projects.

Objective 5.2: Optimize outdoor and economic 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. Engaging in these activities promotes an appreciation of B.C.'s landscape, native species, ecosystems and the environment as a whole.

Strategies

- optimizing stewardship and economic opportunities with First Nations, local communities, non-profit groups, private land owners and others;
- developing strategic plans for parks, fish and wildlife management that promote exceptional outdoor opportunities, while ensuring long-term protection of natural resources;
- developing and implementing marketing strategies to promote active living through park visitation;
- offering the public increased opportunities for park recreation; and
- promoting awareness of contributions to the Park Enhancement Fund.

Performance Measure	2008/09 Actual	2009/10 Actual	2010/11 Target	2010/11 Actual
Number of recorded park visits and visitor satisfaction level:				
 Park visits¹ 	19.6 million	20.2million ³	19.8 million	19.5 million⁵ SUBSTANTIALLY ACHIEVED
 Visitor satisfaction level² 	82%	78%4	Maintain or improve (from 80%)	80%⁵ ACHIEVED

Performance Measure 7: Park visitation and visitor satisfaction

Data Source: Ministry of Environment

¹ The number of recorded park visits to B.C. parks is based on attendance data submitted from, for example, April 2010 through March 2011, and are approximations. The figures for that time period are reconciled in late May 2011.

² The visitor satisfaction level is based on a satisfaction survey that is conducted in campgrounds around the province and is based on nearly 2,000 respondents. Prior to 2009/10, a paper survey was distributed to both day users and campers, resulting in nearly 5,000 respondents.

³ The 2009/10 Annual Service Plan Report shows an actual of 19.7 million, which was an estimate. The final figure calculated in late May 2010 is 20.2 million, which did not quite meet the 20.6 million target. The 20.6 million target was developed in 2004/05 and shown to be overly optimistic once improvements to data collection and analysis were made. New attendance targets have since been modified.

⁴ The 2009/10 Annual Service Plan Report shows an actual of 80%, which was an estimate. The final figure calculated in late May 2010 is 78%, which did not quite meet the 80% (maintain or improve) target. Changes in the survey methodologies (paper-based to online) led to not quite meeting the target.

⁵ The final figures will be included in the 2011/12 Annual Service Plan Report.

Discussion of Results

British Columbia's parks system is the single largest recreation enterprise in the province and one of the best in the world. The number of visitors to provincial parks is used to measure the contribution of parks to the government's priorities of families and jobs. These data are intended to provide a reasonable indication of the trend in the level of use of public outdoor and commercial facilities and services available in B.C.'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 and day-use areas by conducting an annual Ministry of Environment satisfaction survey with a random sample of park visitors. 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.

Number of park visits: The preliminary estimate shows that the target for the number of park visits will not reach 19.8 million, a figure chosen as a target in 2008/09. Interim targets were set at a 100,000 visitor increase per year. Between April 2010 and March 2011, the number of recorded park visits was approximately 19.5 million. Final park visitor information will not be available until late June.

Park visitor satisfaction survey: The Visitor Satisfaction Index is calculated as an average provincial rating of five services considered by park visitors to be important to their stay in a campground: cleanliness of restrooms; cleanliness of grounds; condition of facilities; a sense of security; and control of noise. The rating is based on the number of "excellent" and "above average" responses.

Ministry Response

Park visitation continues to be a priority for the Ministry. The Ministry revised its targets in the 2010/11 - 2012/13 Service Plan based on improved data collection and analysis methods. The new targets better represent anticipated projections. Attendance can fluctuate by +/- one million visitors annually. Weather patterns are the main contributor of this change. With the high number of sunny days during the 2009/10 summer season, a spike in attendance was observed. The 2010/11 attendance fell back to 2008/09 levels.

A different methodology was piloted for the 2009 Visitor Satisfaction Survey. The online survey reduced material costs by 90 per cent and reduced the use of paper. The survey was distributed between July and August instead of between May and September, the sampling period that had been used in the past.

The increase in satisfaction scores from 2009 to 2010 was expected for two reasons. The first is that the sampling was done over a longer period of time (i.e., May to September), which balances out the lower scores that tend to occur during the peak operating months (July and August) when maintenance demands are at their highest. During this time, the quality of service may be perceived to be lower. By contrast, maintenance demands are less during the shoulder seasons (May and September) when the 2010 survey was distributed, and the perceived quality of service during this period may be higher.

The second reason for the increase in the satisfaction scores is the change in surveying procedures. The response rate for an online survey has been proven to be considerably lower compared to paper surveys. Park visitors may be less likely to complete an online questionnaire unless they have had a less than satisfactory experience. A new theory was tested by BC Parks in 2010 that determined whether sending out follow-up emails as a reminder to visitors would increase response rates. It was proven that response rates could be increased between 20 and 30 per cent depending on the number of follow-up emails sent. Higher response rates allowed BC Parks to obtain a better representative sample of its park users, thus decreasing the proportion of responses from visitors who had a less than satisfactory experience.

With the longer sampling period and the new survey procedure, the number of responses increased from approximately 1,300 in 2009 to 1,800 in 2010, thus improving result accuracy.

Objective 5.3: Collaborative management and use of marine and ocean resources

British Columbia's ocean resources provide great economic and social benefits to the citizens of the province. The Ministry works with provincial, federal, First Nations and local government partners and stakeholders on oceans-related issues and activities, such as coastal planning and habitat conservation.

The *Ministry of Environment 2010/11 – 2012/13 Service Plan* included a performance measure, "Fisheries in the eco-certification process." The results of this measure can be found in the Ministry of Agriculture *2010/11 Annual Service Plan Report*.

Strategies

Key strategies for this objective include:

- developing a cross-government approach to managing B.C.'s ocean and coast;
- representing B.C.'s interests in the federal decision-making process to ensure a fair share of federal and cross-government programs and sustainable management of B.C.'s ocean and marine resources; and
- collaborating with neighbouring jurisdictions to enhance the value and success of ocean conservation actions.

Report on Resources

Vinistry of Environment Resource Summary Table							
	Estimated ¹	Authorizations ²	Estimated	Actual	Variance		
Operating Expenses (\$000)							
Environmental Stewardship ³	28,281	(21,377)	6,904	7,428	524		
Parks and Protected Areas	30,831	0,000	30,831	30,999	168		
Water Stewardship	15,164	(9,764)	5,400	5,663	263		
Environmental Protection	9,304	0,000	9,304	8,044	(1,260)		
Compliance	15,327	0,000	15,327	15,002	(325)		
Climate Action	6,487	0,000	6,487	5,487	(1,000)		
Executive and Support Services ⁴	29,710	(5,674)	24,036	23,719	(317)		
Transfers from other Ministries							
Forest and Range Resource Management⁵	0,000	3,177	3,177	3,210	33		
Compliance and Enforcement ⁵	0,000	1,817	1,817	1,812	(5)		
Population and Public Health ⁶	0,000	1,310	1,310	1,202	(108)		
Executive and Support Services ⁶	0,000	90	90	90	0,000		
Subtotal	135,104	(30,421)	104,683	102,656	(2,027)		
Park Enhancement Fund	500	663	1,163	1,163	0,000		
Sustainable Environment Fund	22,555	0,000	22,555	20,908	(1,647)		
Adjustment of Prior Year Accrual	0,000	0,000	0,000	(299)	(299)		
Total	158,159	(29,758)	128,401	124,428	(3,973)		
Ministry	Capital Expend	itures (Consolidated	Revenue Fund)	(\$000)7			
Environmental Stewardship	0,000	0,000	0,000	2	2		
Parks and Protected Areas	0,000	0,000	0,000	10,992	10,992		
Water Stewardship	0,000	0,000	0,000	130	130		
Environmental Protection	0,000	0,000	0,000	763	763		
Conservation Officer Service	0,000	0,000	0,000	83	83		
Forest and Range Resource Management⁵	0,000	0,000	0,000	53	53		
Executive and Support Services	12,810	(57)	12,753	115	(12,638)		
Subtotal	12,810	(57)	12,753	12,138	(615)		
Park Enhancement Fund	400	0,000	400	82	(318)		
Total	13,210	(57)	13,153	12,220	(933)		
	Other Fir	nancing Transaction	s (\$000)³				
Habitat Conservation Trust							
Receipts	6,000	(6,000)	0,000	0,000	0,000		

Ministry of Environment Resource Summary Table

2010/11 Annual Service Plan Report

Ministry of Environment and Environmental Assessment Office

Habitat Conservation Trust					
Disbursements	(6,000)	6,000	0,000	0,000	0,000
Net Cash Source (Requirements)	0,000	0,000	0,000	0,000	0,000
Total Receipts	6,000	(6,000)	0,000	0,000	0,000
Total Disbursements	(6,000)	6,000	0,000	0,000	0,000
Total Net Cash Source (Requirements)	0,000	0,000	0,000	0,000	0,000

¹ The "Estimated" amount corresponds to the Estimates as presented to the Legislative Assembly in March 2010.

² Other Authorizations include transfers to the ministries of Agriculture, and Natural Resource Operations, and from the ministries of Forests and Range, and Healthy Living and Sport, in October 2010; an approved increase to spending in the Park Enhancement Fund based on increased revenues to the Fund; and a one time capital transfer to the Ministry of Agriculture.

³ The \$0.524 million deficit in Environmental Stewardship includes unanticipated salary costs and lower than anticipated recovery agreements.

⁴ Executive and Support Services include expenses for the Offices of the Minister, the Minister of State, the Deputy Minister, Strategic Policy Division, Corporate Services provided by the Ministry of Forests, Lands and Natural Resource Operations, Corporate Overhead costs and shared administrative/financial staff in the regional offices.

⁵ Transfer from the Ministry of Forests and Range.

⁶ Transfer from the Ministry of Healthy Living and Sport.

⁷ Capital Expenditures in fiscal 2010/11 included \$0.082 million in the Park Enhancement Fund, \$10.395 million for parks and recreational areas, \$0.592 million for land acquisition, \$0.07 million for eLicencing, and \$1.067 million in specialized equipment including \$0.884 million in air and water monitoring equipment, and \$0.115 million for vehicles.

Operating Expenses

The Ministry had an overall surplus of \$3.973 million in 2010/11. This was due to savings in salaries, operating and other expenses, partially offset by reduced internal and external recoveries.

Capital Expenditures

All of the capital expenditures, except for those related to the Park Enhancement Fund, are now budgeted in Executive and Support Services. Overall, the Ministry had a surplus of \$0.933 million due primarily to lower than anticipated spending on specialized equipment and lower than anticipated spending through donations to the Park Enhancement Fund.

Comparison of 2010/11 and 2009/10 Expenses

In the October 2010 government reorganization, the Ministry transferred:

- \$35.852 million in front line staff and related funding to the new Ministry of Natural Resource Operations, as part of the amalgamation of legislative authorities in land and resource agencies to provide clients with a single point of access to natural resource authorizations and resource management, and
- \$963 thousand for the Marine Fisheries program to the Ministry of Agriculture.

The Ministry received:

- \$4.994 million for biophysical science, technical services and enforcement from the Ministry of Forests and Range, and
- \$1.4 million for Water and Air Monitoring from the Ministry of Healthy Living and Sport.

The Ministry of Environment has retained responsibility for environmental legislation, together with environmental assessment, environmental protection, ecosystems, science, monitoring, enforcement and climate action programs.

The position of Minister of State for Climate Action was eliminated in March 2011.

Environmental Assessment Office

Highlights of the Year

In 2010/11, the Environmental Assessment Office effectively managed 76 reviewable developments representing over \$31 billion in potential investment in B.C.'s economy. Six of the 76 reviewable developments were referred to ministers for decision in the 2010/11 fiscal year.

Projects Update

Of the six developments referred to ministers for decision during 2010/11, five were certified within the fiscal year. The sixth proposed project, Garibaldi at Squamish, was referred back to the proponent and further information was requested in order for a certification decision to be made. Four of the developments referred to ministers for decision were in the energy sector, one was in the tourist destination resorts sector, and one was in the transportation sector.

Project Name	Sector	Potential Capital Investment (\$M)	Certification Date
Evergreen Line Rapid Transit Project	Transportation	\$1,400	February 3, 2011
Garibaldi at Squamish Project	Tourist destination resorts	\$900	Not certified – further information required
Mica Generating Station Unit 5	Energy	\$556	April 8, 2010
Mica Generating Station Unit 6	Energy	\$560	April 8, 2010
Northwest Transmission Line Project	Energy	\$400	February 23, 2011
Quality Wind Project	Energy	\$455	July 12, 2010

 Table 1: Assessments completed in the fiscal year 2010/11

Data Source: Environmental Assessment Office

The Environmental Assessment Office also reviewed and approved requests from proponents for eight amendments to environmental assessment certificates for previously approved developments.

In total, the developments that completed environmental assessment this fiscal year represent \$4.3 billion in potential investment. This represents a \$2.1 billion decrease compared to the potential investment from assessments completed in 2009/10. This decrease is likely a reflection of the impact of continuing global economic challenges.

Policy and Continuous Improvement

The Environmental Assessment Office seeks First Nations' input on its project-scoping decisions and procedural orders, encourages and helps fund First Nations' participation in technical working groups, and makes provisions for First Nations' discussions outside of working groups where necessary, including government-to-government consultation. The Environmental Assessment Office also actively encourages proponents to meet with First Nations at their earliest opportunity to learn about First Nations' communities and First Nations' interests and concerns. The Environmental Assessment Office provides First Nations the opportunity to include their submissions in the materials that the Office provides to ministers to support their decision making.

As part of its commitment to continuous improvement, the Environmental Assessment Office established a dedicated strategic policy team to focus efforts on monitoring and capturing of results, outcomes and evolving research to learn and continuously improve approaches to environmental assessment in B.C.

The Environmental Assessment Office supported several government goals, including increased openness and accessibility for citizens and communities, greater coordination in the natural sector, and continued partnerships with the federal government. The Environmental Assessment Office provides opportunities for the public and communities to provide input on each review, and is trying different approaches to increase public engagement in environmental assessment. In 2010/11, the Environmental Assessment Office held 22 open house meetings across B.C. to share information with and hear from communities about specific projects undergoing assessment. During these meetings, thousands of comments were received by the public. In addition, different approaches to increase public engagement in environmental assessment were undertaken. For example, a public engagement pilot was initiated for the proposed Raven Underground Coal Project.

Project Name	Open House Location	Open House Date
McLymont Creek Hydroelectric Project	Iskut	February 12, 2011
	Telegraph Creek	February 13, 2011
	Dease Lake	February 14, 2011
Nahwitti Wind Farm Project	Holberg	March 23, 2011
	Port Hardy	March 24, 2011
Shovel Creek Waterpower Project	Chilliwack	November 3, 2010
Statlu Creek Waterpower Project	Chilliwack	November 3, 2010
Tretheway Creek Waterpower Project	Chilliwack	November 3, 2010
Upper Lillooet Hydro Project	Pemberton	November 30, 2010
Kitsault Mine Project	Terrace	March 15, 2011
Line Creek Operations Phase II	Elkford	March 24, 2011
	Sparwood	March 25, 2011
Roman Coal Mine	Tumbler Ridge	May 19, 2010
	Telegraph Creek	October 12, 2010

Table 2: Open Houses held by the Environmental Assessment Office in 2010/11

Project Name	Open House Location	Open House Date
	Dease Lake	October 13, 2010
Schaft Creek Mine Project	Iskut	October 14, 2010
	Terrace	October 19, 2010
	Stewart	October 20, 2010
CCS Sunrise Secure Landfill Project	Dawson Creek	May 6, 2010
Heritage Secure Landfill Project	Tupper	May 22, 2010
Bevan Avenue Wells Project	Abbotsford	November 3, 2010
Vancouver Airport Fuel Delivery Project	Richmond	March 7, 2011
Total Number of Open Houses:		22

Data Source: Environmental Assessment Office

During 2010/11, the Environmental Assessment Office continued to work with other natural resource ministries to foster information sharing and greater coordination and efficiencies. In addition, the Environmental Assessment Office supported a number of initiatives to strengthen key areas of British Columbia's approach to environmental assessment, including assessment methodology, compliance and enforcement, social impact assessment and public consultation.

Cooperation with the Federal Government

British Columbia strongly supports and continues to pursue efforts to eliminate duplication and overlap. In 2010/11, 65 per cent of all developments under review by the Environmental Assessment Office were also confirmed by the federal government as subject to, or likely subject to, review under the *Canadian Environmental Assessment Act*.

Many of the benefits of environmental assessment result from the combined efforts of the federal and provincial governments. The two governments work together to ensure that benefits of development are optimized and that all potential environmental impacts are documented, prevented and/or reduced.

Under the *Canadian Environmental Assessment Act*, the federal government can delegate authority for conducting federal environmental assessments to British Columbia. In 2010/11, the Environmental Assessment Office completed its review of the federally delegated Northwest Transmission Line Project, and the project received a provincial certificate for development in February 2011, and a federal approval decision in May 2011. The federal government has also delegated the federal environmental assessment to B.C. for the proposed Line Creek Mine Expansion Project, which is in the early stage of environmental assessment. Though the federal environmental assessments were delegated to the Province, the federal government retained decision-making authority, and Aboriginal consultation obligations.

During 2010/11, the Environmental Assessment Office and the Canadian Environmental Assessment Agency also undertook joint training and work planning for projects undergoing harmonized review. Harmonized review refers to environmental assessments conducted cooperatively by the federal and provincial governments for the purpose of achieving greater

efficiency and effectiveness. For example, for the proposed Ajax gold and copper mine near Kamloops, the Environmental Assessment Office is carrying out a pilot project to harmonize with the Canadian Environmental Assessment Agency's new public comment period for comprehensive studies with the intention of working cooperatively with the federal government and engaging the public earlier in the environmental assessment process. In addition, a joint federal-provincial team charter was developed that sets out roles and responsibilities for both agencies to achieve a unified environmental assessment.

Purpose of Office

The Environmental Assessment Office was created in 1995 to coordinate the assessment of proposed major development in British Columbia in accordance with the requirements of the *Environmental Assessment Act*. This role continued for the Environmental Assessment Office when government proclaimed the new *Environmental Assessment Act* in December 2002.

Environmental assessments examine the potential for environmental, economic, social, heritage and health effects from the construction, operation and, where required, decommissioning stage of major development. For any project requiring an environmental assessment certificate under the *Environmental Assessment Act*, the proponent must successfully complete an environmental assessment and receive a certificate from the Environmental Assessment Office before other provincial agencies can issue permits and approvals for the project.

There are three ways a proposed development can be designated reviewable under the *Environmental Assessment Act*:

- Projects in the following sectors that meet or exceed the size thresholds established by the Reviewable Projects Regulation (B.C. Reg. 370/2002) are automatically subject to the *Environmental Assessment Act:* industrial, mining, energy, water management (dams, dykes and groundwater extraction), waste disposal, food processing, transportation and tourism (destination resorts).
- If the Executive Director refers a project to the Minister of Environment, the Minister may order the assessment of a development if the Minister believes the project has the potential for significant adverse effects and where it is in the public interest to do so.
- Project proponents may also apply to the Environmental Assessment Office to have their project reviewed under the *Environmental Assessment Act*.

Environmental assessments administered by the Environmental Assessment Office include:

- consultation with First Nations to address and, where appropriate, accommodate potential effects on established or asserted Aboriginal rights and title;
- an accountable and transparent process with easy access to key assessment information;
- technical studies, strategies and measures to identify, avoid, prevent and reduce any potential environmental, economic, social, heritage or health effects of a proposed project; and
- preparation of a comprehensive assessment report at the conclusion of the process that summarizes issues and includes recommendations to ministers on whether to issue an environmental assessment certificate for a project. These recommendations assign conditions and compliance reporting requirements to the proponent in an environmental assessment certificate.

46

Ministry of Environment and Environmental Assessment Office



Figure 1: Participants in environmental assessment in B.C.

Environmental assessment is an iterative process that ensures that poorly designed projects are identified as early as possible, and that those projects are either redesigned or do not proceed. Since 1995, 18 projects have been terminated, withdrawn or refused certification. At the conclusion of the 2010/11 fiscal year, 37 projects were inactive. This may be due to a number of reasons, including project design issues that were identified during the environmental assessment. These projects became inactive and may eventually be withdrawn from environmental assessment because the proponents may not be able to overcome challenges in avoiding or mitigating effects.

Proposed projects are often significantly improved during the course of environmental assessment through the participation of the working group, the public and stakeholder groups. Typical improvements to proposed projects include adjustments to project design or layout and additional or enhanced mitigation measures to avoid, prevent or minimize effects. For example, the Northwest Transmission Line assessment, which was completed during 2010/11, resulted in the creation of a wetland compensation framework to ensure that any loss of extent or function of any wetland as a result of the proposed project would be replaced. Also in 2010/11, the Environmental Assessment Office led a working group for the Kokish River Hydroelectric project to examine how in-stream flows could be altered to provide for whitewater kayaking, based on input from the Vancouver Island Whitewater Paddling Society.

Strategic Context

The Environmental Assessment Office's workload remained high as the global economic recession continued its recovery in 2010/11. The potential capital investment value for active and inactive projects undergoing environmental assessment during 2010/11 totalled \$31.8 billion. Development proposals in the energy and mining sectors continued to comprise the majority of projects undergoing environmental assessment. Projects in other sectors, such as oil and gas, tourism, transportation and waste management, were also undergoing assessment during 2010/11.

There is increasing pressure for one environmental assessment process from the public, communities and proponents. Because a significant number of projects require assessment under both provincial and federal law, the Environmental Assessment Office works closely with the Canadian Environmental Assessment Agency and leads provincial efforts to minimize duplication and overlap, and to maximize efficiencies wherever possible. Considerable progress has been achieved and more remains to be done.

Because the Environmental Assessment Office conducts assessments on environmental, economic, social, heritage and health impacts of proposed development, it is increasingly important for the Office to strengthen relationships with ministries with mandates related to communities, health, economic development and natural resources.

Because rigorous environmental assessments rely on significant and effective input from the public, it will be increasingly important for the Environmental Assessment Office to investigate the use of technology as a way of engaging citizens and communities.

In conducting its assessments, the Environmental Assessment Office will continue to be guided by the evolving case law and government policy related to the obligations of the Crown to consult with First Nations.



The CSL Acadian at the Orca Sand and Gravel Quarry Marine Terminal near Port McNeill, Vancouver Island

Report on Performance

Performance Plan Summary Table

Goal 1: The environmental assessment process is effective and efficient	2010/11 Target	2010/11 Actual
For greater detail see pages 50 to 53	ruigot	Altau
1.1 Ensure the process is easy to understand and complexity is		
minimized		
Percentage of application reviews in the B.C. environmental proces completed within 180 days:	S	
B.C. process only	100%	100%
		ACHIEVED
 Joint B.C./Canada process 	80%	100%
		EXCEEDED
that First Nations are engaged in environmental assessments Percentage of potentially affected First Nations:		
	100%	100%
Given the opportunity to engage in environmental assessments	100%	100% ACHIEVED
	100% 80%	
Given the opportunity to engage in environmental assessments		ACHIEVED
Given the opportunity to engage in environmental assessments		ACHIEVED 85%
 Given the opportunity to engage in environmental assessments Engaged in environmental assessments 	80%	ACHIEVED 85% EXCEEDED
 Given the opportunity to engage in environmental assessments Engaged in environmental assessments Goal 2: The environmental assessment process is valued	80% 2010/11	ACHIEVED 85% EXCEEDED 2010/11
 Given the opportunity to engage in environmental assessments Engaged in environmental assessments Goal 2: The environmental assessment process is valued For greater detail see pages 54 to 55 	80% 2010/11	ACHIEVED 85% EXCEEDED 2010/11
 Given the opportunity to engage in environmental assessments Engaged in environmental assessments Goal 2: The environmental assessment process is valued For greater detail see pages 54 to 55 2.2 Ensure that the benefits of environmental assessment are 	80% 2010/11	ACHIEVED 85% EXCEEDED 2010/11

Goals, Objectives, Strategies and Performance Results

Goal 1: The environmental assessment process is effective and efficient

Given its comprehensive nature, environmental assessment necessarily requires a significant investment of time and resources by all participants. As a result, it is essential to ensure that the process is effective and efficient. The Environmental Assessment Office has a strong, national reputation for conducting effective and efficient assessments, and it is important to preserve and build upon that success. In particular, it is essential to continue work with the federal government to truly eliminate duplication where possible, and to harmonize processes in those cases where both federal and provincial assessments are undertaken.

Objective 1.1: Ensure the process is easy to understand and complexity is minimized

Strategies

Key strategies for this objective include:

- entering into agreements with the federal government to minimize duplication, and to continue enhancing harmonization through joint work plans and joint staff training;
- engaging First Nations early in the process, providing capacity funding, and making procedural decisions that are timely and principled;
- ensuring that project information is made widely available through the electronic Project Information Centre (e-PIC) on the Environmental Assessment Office's website (www.eao.gov.bc.ca/) and through consultation activities such as open houses;
- reviewing and streamlining policy documents, practices and procedures;
- establishing clear service standards and commitments to proponents, First Nations and the general public, through the Environmental Assessment Office's Fairness and Service Code; and



Construction of the Port Mann Bridge-Highway 1 Project in the lower mainland

• pursuing innovative partnerships and initiatives as part of supporting continuous improvement.

Performance Measure 1: Application reviews in the B.C. environmental assessment process are completed within 180 days

Performance Measure	2008/09 Actual	2009/10 Actual	2010/11 Target	2010/11 Actual
Percentage of application reviews in the B.C. environmental process completed within 180 days:				
B.C. process only	100%	100%	100%	100% ACHIEVED
Joint B.C./Canada process	71%	80%	80%	100% Exceeded

Data Source: Environmental Assessment Office

Discussion of Results

The legislated time limits in the *Environmental Assessment Act*, including a 180-day limit for review of applications for environmental assessment certificates, offer process certainty and are important for effective planning and decision making. Once an application is accepted for review, the Environmental Assessment Office strives to complete the environmental assessment within the 180-day time limit. In 2010/11, the Environmental Assessment Office completed assessments of six projects and referred these projects to ministers for decision. Of the six reviews, five were solely provincial. The Environmental Assessment Office completed all five provincial reviews within the 180-day time limit.

One review was subject to both federal and provincial assessments (the Northwest Transmission Line Project). The Environmental Assessment Office completed this review within 180 days, and the federal government completed its review not long after.

Objective 1.2: Ensure the Crown's duties to First Nations are discharged and that First Nations are engaged in environmental assessments

Strategies

Key strategies for this objective include:

• ensuring early communication and consultation with all First Nations potentially affected by a proposed project;

- acknowledging that First Nations have rights regarding consultation and accommodation that are different from other participants in environmental assessment;
- providing First Nations with capacity funding;
- supporting the First Nations Environmental Assessment Technical Working Group; and
- enhancing coordination with the federal government on First Nations consultation through joint initiatives, including staff training workshops, information sharing, and tools and procedures improvement.



Barge landing at the East Toba River Montrose Creek Hydroelectric Project near Powell River

Performance Measure 2: Percentage of potentially affected First Nations engaged in environmental assessments

Performance Measure	2008/09 Actual	2009/10 Actual	2010/11 Target	2010/11 Actual
Percentage of potentially affected First Nations: • Given the opportunity to engage in environmental assessments	N/A	100%	100%	100%
Engaged in environmental assessments ¹	79%	80%	80%	ACHIEVED 85% EXCEEDED

Data Source: Environmental Assessment Office

¹ The Environmental Assessment Office strives to engage all potentially affected First Nations in environmental assessments, but it is the decision of the First Nations whether or not to participate. The target for First Nations engagement is based, in part, on historical engagement levels.

Discussion of Results

The Environmental Assessment Office is required to meet the Crown's consultation and accommodation duties to First Nations – duties which exist in addition to other opportunities First Nations may have as interested participants in an environmental assessment. For this reason, the Environmental Assessment Office consults First Nations at the outset of the assessment process, and discusses the manner and degree of consultation to be undertaken.

Although the Environmental Assessment Office cannot control whether First Nations choose to participate in an environmental assessment, First Nations' perspectives about proposed development are important, and the Environmental Assessment Office makes every effort to seek their participation.

In the 2010/11 - 2012/13 Service Plan, this performance measure was broken into two parts: (1) the percentage of potentially affected First Nations given the opportunity to engage in environmental assessment, and (2) the percentage of First Nations engaged in assessment. This recognizes that all First Nations potentially affected by a proposed project have the right to be consulted as part of the environmental assessment, though they may choose not to participate in the process.



Traditional fish drying racks at the Old Fort Lake Babine near the proposed Morrison Copper Gold Mine Project

Goal 2: The environmental assessment process is valued

In addition to being effective and efficient, environmental assessments must be valued. Value is achieved by ensuring the full range of issues and interests have been considered, and that ministers are duly informed when deciding about both the benefits and potential adverse effects of a project when deciding whether to issue an environmental certificate. This is particularly important in circumstances involving large-scale projects, for which there are often divergences of view and considerable public interest.

Objective 2.1: Demonstrate that all interests and perspectives are considered

Strategies

Key strategies for this objective include:

- ensuring that all assessment reports consider the potential environmental, economic, social, heritage and health effects of a project, as required by the *Environmental Assessment Act*; and
- meeting on a regular basis with the Environmental Assessment Advisory Committee to receive feedback and suggestions for improving environmental assessment to ensure it is valued.

Discussion of Results

Previous years' service plans included a measure for this goal that addressed the level of proponent satisfaction with environmental assessment by asking proponents of projects going through the process to rate the Environmental Assessment Office on a scale of 1 to 10, regardless of where they were in the process. This survey was undertaken every two years. This performance measure is longer used as it does not measure the satisfaction of all participants, including proponents, government regulatory agencies, First Nations, the public and other stakeholders, with environmental assessment.

The Environmental Assessment Office instead solicits ongoing feedback from interested parties, in particular, the Environmental Assessment Advisory Committee, on environmental assessment as part of its process of continuous improvement. The Environmental Assessment Advisory Committee is co-chaired by the Environmental Assessment Office and the Canadian Environmental Assessment Agency and includes a range of organizations representing environmental and industry interests, as well as the First Nations Environmental Assessment Technical Working Group. This committee currently meets semi-annually and provides a forum for discussion of issues of common interest relating to environmental assessment, in particular, refinements to policy and means of enhancing public and stakeholder participation in environmental assessment.

Ministry of Environment and Environmental Assessment Office

Based on feedback provided by the committee, the Environmental Assessment Office has recently produced the Environmental Assessment Office 2009 User Guide (available at: www.eao.gov.bc.ca/pdf/EAO_User_Guide_2009.pdf), which is intended to help improve proponent and stakeholder understanding of environmental assessment.

Objective 2.2: Ensure that the benefits of environmental assessment are recognized

Strategies

Key strategies for this objective include:

- demonstrating transparency in decision making and clarity of process; and
- engaging in outreach with First Nations, industry associations and the general public regarding the benefits of environmental assessment.

Performance Measure 3: Requests to opt in to environmental assessment

Performance	2008/09	2009/10	2010/11	2010/11
Measure	Actual	Actual	Target	Actual
Number of requests to opt in to the environmental assessment process	N/A	3	2 or more	0 NOT ACHIEVED

Data Source: Environmental Assessment Office

Discussion of Results

Requests to opt in to environmental assessment are not within the control of the Environmental Assessment Office. While this measure may provide an indication of the perceived value of environmental assessment, it is also influenced by a number of external factors, including B.C.'s economy, the global economy, market trends and demand, and business competition.



Construction of the East Toba River Montrose Creek Hydroelectric facility north of Powell River

Report on Resources

	Estimated ¹	Other Authorizations ²	Total Estimated	Actual	Variance
Operating Expenses (\$000)					
Environmental Assessment Office	8,816	0,000	8,816	7,748	(1,068)
Total	8,816	0,000	8,816	7,748	(1,068)

Environmental Assessment Office Resource Summary Table

¹ The "Estimated" amount corresponds to the Estimates as presented to the Legislative Assembly in March 2010.

² Other Authorizations include Supplementary Estimates, Statutory Appropriations and Contingencies. Amounts in this column are not related to the "estimated amount" under sections 5(1) and 6(1) of the *Balanced Budget and Ministerial Accountability Act* for ministerial accountability for operating expenses under the Act.

Annual Service Plan Report Appendix

Contact Information

Ministry of Environment Contact Information

Headquarters

Victoria Telephone: 250 387-1161 Fax: 250 387-5669 Website: www.gov.bc.ca/env/

Regional Offices

Coast Region

West Coast

Nanaimo Office: Telephone: 250 751-3100 Fax: 250 751-3103 Website: <u>www.env.gov.bc.ca/van-island/</u> Other offices: Bella Coola, Black Creek, Duncan, Goldstream Park, Queen Charlotte City, Parksville, Port Alberni, Port Hardy, Ucluelet

South Coast

Surrey Office: Telephone: 604 582-5200 Fax: 604 930-7119 Website: <u>www.env.gov.bc.ca/lower-mainland/</u> Other offices: Brackendale (Squamish), Cultus Lake, Maple Ridge, North Vancouver, Sechelt, Powell River

Southern Interior Region

Cariboo/Thompson

Kamloops Office: Telephone: 250 371-6200

Cariboo/Thompson (continued)

Fax: 250 828-4000 Website: <u>www.env.gov.bc.ca/thompson/</u> Other offices: Clearwater, Lillooet, Merritt

Williams Lake Office: Telephone: 250 398-4530 Fax: 250 398-4214 Website: <u>www.env.gov.bc.ca/cariboo/</u> Other offices: Hagensborg, 100 Mile House, Quesnel

Kootenay/Okanagan

Nelson Office: Telephone: 250 354-6333 Fax: 250 354-6332 Website: <u>www.env.gov.bc.ca/kootenay/</u> Other offices: Creston, Fernie, Grand Forks, Invermere, Golden, Revelstoke

Penticton Office: Telephone: 250 490-8200 Fax: 250 490-2231 Website: <u>www.env.gov.bc.ca/okanagan/</u> Other offices: Kelowna, Oliver, Princeton, Vernon

Cranbrook Office: Telephone: 250 489-8540 Fax: 250 489-8503

Northern Region

Skeena

Smithers Office: Telephone: 250 847-7260 Fax: 250 847-7728 Website: <u>www.env.gov.bc.ca/skeena/</u> Other offices: Atlin, Burns Lake, Dease Lake, Terrace/Lakelse Lake

Omineca

Environmental Protection Conservation Officer Service Prince George Office: Telephone: 250 565-6135 Fax: 250 565-6629 Environmental Sustainability Parks and Protected Areas Prince George Office: Telephone: 250 565-6135 Fax: 250 565-6940

Website: <u>www.env.gov.bc.ca/omineca/</u> Other offices: Vanderhoof, Mackenzie, Mount Robson, Fort St. James

2010/11 Annual Service Plan Report

Ministry of Environment and Environmental Assessment Office

Peace

Fort St. John Office: Telephone: 250 787-3411 Fax: 250 787-3490 Website: <u>www.env.gov.bc.ca/peace/</u> Other offices: Chetwynd/Moberly Lake Park, Dawson Creek, Fort Nelson/Liard Hotsprings

Environmental Assessment Office Contact Information

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

General Inquiries:

Telephone: 250 356-7479 Fax: 250 356-7440

Email: eaoinfo@gov.bc.ca Website: <u>www.eao.gov.bc.ca</u>