Ministry of Environment and The Environmental Assessment Office

2012/13 – 2014/15 SERVICE PLAN

February 2012



For more information on the British Columbia Ministry of Environment, see Ministry Contact Information on Page 44 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 present the 2012/13 - 2014/15 Service Plan for the Ministry of Environment and the Environmental Assessment Office.

The B.C. government's key priorities – Families First, Jobs and the Economy – rely on a clean, healthy and naturally diverse environment. To achieve this, the Ministry's key priorities include environmental health and sustainability, parks and protected areas management, action on climate change and open, transparent and timely environmental assessments on major projects.

One thing I'm really proud of is that British Columbia is showing the world we can balance the need to grow our economy while protecting the environment. In a province with vast natural resources, that just makes sense.

The BC Jobs Plan affirms that "our province is, and will remain, a climate change leader." We have a revenue neutral carbon tax, which puts a price on carbon emissions, and we are now a carbon neutral government – the first in North America. We will continue to deliver on a number of actions across government as part of our <u>Climate Action Plan</u>¹ and play a pivotal role in helping shape government's Green Economy sector strategy.

Key to our climate leadership is the ability to drive our economy as we promote the clean energy and technology sectors and stimulate growth in these markets both in B.C. and abroad. The Ministry supports the use of liquefied natural gas because it provides a low-carbon energy alternative and potentially can reduce millions of tonnes of GHG emissions globally while increasing the number of new clean-energy jobs. That's why B.C. is promoting clean technology as part of the Green Economy Sector. In addition, we are continuing to engage on carbon neutral government and are looking at ways to improve the policy to make it more effective.

One thing we know is that our valuable water resources are facing increasing demands. The Ministry is in the process of modernizing British Columbia's century-old *Water Act* and last winter the Ministry invited comments on a policy proposal for a new Water Sustainability Act. The new Act will update and build on the existing *Water Act*, respond to current and future pressures on water, and position B.C. as a leader in water stewardship.

Our parks and protected areas help define who we are as British Columbians and I was proud to have participated in events across B.C. as we celebrated the 100th anniversary of our world-renowned parks system. As we move forward, we want to harness the enthusiasm and pride that fostered a successful centennial year by enhancing volunteer opportunities and experiences as well as region-specific capital projects. Through these activities and others, we are striving to maximize visitation to our parks, and the tourism and job creation spinoffs that are so vital to communities across the province.

¹ <u>www.livesmartbc.ca/attachments/climateaction_plan_web.pdf</u>

Protecting the air we breathe is a priority for the Ministry. The Province is providing financial support to expand the successful woodstove exchange program. New high-efficiency woodstoves are proven to reduce emissions into the air by up to 70 per cent, protecting overall airshed health while reducing the cost of burning wood.

Last year, B.C.'s Species at Risk Task Force released its recommendations, which included addressing legislation, environmental management and First Nations and public engagement. These are complex issues and that is why the Province invited public comments and is carefully reviewing recommendations to help determine priorities for the conservation of species and ecosystems at risk. All British Columbians can be proud of the work done by the Task Force.

B.C. is also a leader in product stewardship and recycling so we continue to work with our partners to expand the number of products that are collected and recycled. Sustainable environmental management practices not only protect the environment, they reduce costs by using resources and energy more efficiently.

The Environmental Assessment Office (EAO) conducts thorough and timely environmental assessments of large, complex and economically significant projects. The potential capital investment for projects currently undergoing environmental assessment is more than \$35 billion. A key focus for the EAO is to enhance cooperative environmental assessments with the federal government to avoid duplication and improve the timeliness of reviews – one project, one environmental assessment. Compliance and effectiveness are also priorities for the Environmental Assessment Office and it is making good progress on the recommendations in the July 2011 Auditor General's report on the EAO's oversight of certified projects.

The 2012/13 year promises to be defining for the Ministry as we work to stimulate B.C.'s economy while protecting the environmental values citizens hold dear. We will continue to demonstrate leadership in many areas such as climate action, environmental stewardship and environmental assessments while providing excellent service to British Columbians – everything from responding to environmental emergencies and human-wildlife conflicts to maintenance and restoration of ecosystems, habitats and native species.

I want to thank Ministry staff for their continued hard work and diligence. It is a privilege to work with so many who care so much about the province we share.

The *Ministry of Environment and the Environmental Assessment Office 2012/13 – 2014/15* Service Plan was prepared under my direction in accordance with the *Budget Transparency and* Accountability Act. I am accountable for the basis on which the plan has been prepared.

Hahe

Honourable Terry Lake Minister of Environment February 21, 2012

Table of Contents

Message from the Minister and Accountability S	tatement

Ministry of Environment

Purpose of the Ministry	
Strategic Context	
Goals, Objectives, Strategies and Performance Measures	
Resource Summary	
Ministry of Environment Resource Summary Table	

Environmental Assessment Office

Purpose of the Office	
Strategic Context	
Goals, Objectives, Strategies and Performance Measures	
Resource Summary	
Environmental Assessment Office Resource Summary Table	
Appendix	
Ministry of Environment Contact Information	
Environmental Assessment Office Contact Information	

Purpose of the Ministry

The Ministry supports government goals and initiatives by:

- supporting government's priorities, Families First, Jobs and the Economy, providing leadership in ensuring our natural legacy for future generations, and supporting positive economic outcomes for B.C.;
- leading the world in sustainable environmental management by ensuring clean and safe water, land and air, ensuring healthy and diverse native species and ecosystems, and protecting and restoring parks and habitats;
- taking action on climate change by leading the implementation of the B.C. Climate Action Plan;
- working with the Province's partners to ensure the environmental health and sustainability of B.C.'s environmental resources;
- openly sharing useful and informative environmental data with the public;
- creating environment-related jobs through opportunities within the public service and through the development of programs with Ministry partners and with industry; and
- promoting outdoor recreational opportunities for families and other visitors in B.C. parks and protected areas.

The Ministry promotes stewardship and sustainability by:

- establishing partnerships and sharing responsibility by engaging citizens, First Nations and stakeholders in policy, legislation and program development;
- enhancing environmental protection, public health and safety, and stewardship by monitoring air and water quality, reducing and removing wastes and toxins from the environment, promoting and supporting voluntary compliance activities, regularly and actively verifying compliance with regulatory requirements, and using enforcement options where appropriate;
- acquiring the most up-to-date information on species and ecosystems, and engaging citizens to determine priorities for the conservation of species and ecosystems at risk; and
- enabling British Columbians to reduce impacts on environmental resources by openly providing up-to-date environmental information based on sound science, creating economic incentives, and supporting voluntary compliance.

The Ministry serves its clients in a responsible way by:

- taking effective action on climate change, continuing to improve air and water quality and reducing contamination from toxins and waste;
- providing unique outdoor experiences in B.C.'s parks system to support healthy families, tourism and the B.C. economy;
- conserving, maintaining, and enhancing native species and ecosystems; and
- working collaboratively with all provincial ministries and related agencies involved in the management of land and natural resources to ensure environmental standards are met, environmental health and sustainability are achieved, and economic development and community resilience is supported.

The Ministry develops innovative partnerships by:

- adopting an inter-ministry approach to promote streamlined authorization processes and enhanced access to public services across the province. Government's structure to manage Crown land and natural resources was reconfigured in the fall of 2010, creating an improved arena for coordination and integration.² Under the direction of the Natural Resources Board, these ministries are making bold changes to service delivery in the natural resource sector. The reconfiguration facilitates more consistent engagement and consultation with industry, stakeholders, partners and clients. It also enhances inclusion of Aboriginal, economic and environmental considerations into decision making;
- participating in cross-government initiatives and working to establish collaborative relationships with First Nations, non-governmental organizations, communities, academia and industry;
- leveraging resources, knowledge and capacity from non-government and industry partners, including the Habitat Conservation Trust Foundation, Freshwater Fisheries Society, BC Conservation Foundation, Bear Aware, the BC Lung Association, BC Hydro, FORREX, Ducks Unlimited, Stewardship Centre for BC, and individuals such as park facility operators; and
- working with partners in other jurisdictions to advance the Province's commitments to taking action on climate change, and working with the federal government to ensure coordinated and effective approaches to air quality management and greenhouse gas reduction in B.C.

² Participating ministries include: Aboriginal Relations and Reconciliation; Energy and Mines; Environment; Forests, Lands, and Natural Resource Operations; and Jobs, Tourism and Innovation.

The Ministry administers legislation and sets standards by:

- providing strategic planning, policy and legislative research and coordination for the development of effective and efficient statutes and regulations for the natural resource sector;
- negotiating Memoranda of Understanding, protocol agreements and environmental cooperation agreements with neighbouring governments, and actively participating in the Canadian Council of Ministers of the Environment, Canadian Council of Ministers of Resource Management Biodiversity Steering Committee, Council of the Federation Water Stewardship Council, National Advisory Committee under the *Canadian Environmental Protection Act*, Union of British Columbia Municipalities, the New West Partnership Trade Agreement, the Species at Risk Steering Committee, and other forums; and
- promoting, verifying, and enforcing compliance with regulatory requirements through the provision of information, education, inspections, and other compliance verification activities, and using public reporting to account for environmental results. Where necessary, Ministry staff undertake activities to enforce the Province's environmental and public safety legislation.



Hakai Luxvbalis Conservancy

Strategic Context

Economy

The Economic Forecast Council estimates that British Columbia's real GDP grew by 2.2 per cent in 2011 and projects that the rate of real GDP growth will remain at 2.2 per cent in 2012, before increasing to 2.5 per cent in 2013. Risks to British Columbia's economic outlook include a return to recession in the US; the European sovereign debt crisis threatening the stability of global financial markets; slower than anticipated economic growth in Asia dampening demand for BC exports; and a weakening of the US dollar disrupting the financial markets and raising the cost of BC exports abroad.

Population Growth

The population of B.C. is expected to increase by up to 1.4 million by the year 2035. As the population increases, environmental pressures around the province will increase accordingly. Population increases result in higher levels of transportation activities, increased pressure on waste management systems, increased potential for human-wildlife conflict, and additional housing and industrial development. As industry grows, so do pressures on ecosystems resulting from changes to the land base, natural resources, and species.

Climate Change

In 2007, the Intergovernmental Panel on Climate Change (IPCC)³ released its Fourth Assessment Report, concluding that warming of the earth's climate is certain, the increase in global average temperatures since the mid-20th century is very likely caused by human activity, and continued greenhouse gas emissions at or above current rates would induce larger changes in the climate system than have been observed recently. In October 2011, the independent Berkeley Earth Study confirmed the rise in average world land temperature of approximately 1°C since the mid-1950s, validating findings of additional studies by various U.S. and U.K. scientific agencies. The current and future risks to B.C. associated with some of these predicted changes are substantial.

Reducing greenhouse gas emissions and preparing for unavoidable climate change will help to minimize impacts in British Columbia and globally. B.C. is reducing emissions through various policies such as the carbon tax. The extent to which other nations and jurisdictions are effective in reducing emissions will influence the extent of climate impacts in B.C. Many of B.C.'s key trading partners are implementing actions, including California, Australia, China and other Asian countries. Reducing emissions in B.C., and using and exporting clean technologies and low carbon fuels, demonstrates climate leadership on an international scale.

³ A scientific intergovernmental panel that assesses scientific, technical and socio-economic information relevant to the understanding of climate change.

Goals, Objectives, Strategies and Performance Measures

The following sections provide an overview of the Ministry's key goals and their supporting objectives, strategies and performance measures.

Goal 1: Effective action on climate change

Climate change has broad global, regional and local significance. Changes in climate drive changes in natural systems that affect economic, environmental and social interests. 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. Population growth is also contributing to the impact. How we respond to climate change will shape our economy, the environment, our society, our communities and our way of life.

The government has made a strong commitment to tackle climate change by addressing its causes (mitigation) and preparing the province for the unavoidable consequences of climate change (adaptation). The Ministry of Environment leads the government's cross-ministry climate change mitigation and adaptation initiatives.



Cathedral Provincial Park and Protected Area

Objective 1.1: Reduced provincial greenhouse 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

- coordinating the development and implementation of citizen engagement initiatives to mobilize the public and Ministry partners to reduce provincial greenhouse gas emissions;
- a whole of government approach to developing climate action policy and providing advice, research and planning documents that integrate with and support broader government plans and initiatives;
- working with partners to promote the BC's Jobs Plan, including liquefied natural gas exports to Asia that provide a new low-carbon energy alternative that will help avoid potentially significant increases in global greenhouse gas emissions;
- promoting Clean Transportation Initiatives that provide clean energy vehicle purchase incentives and new charging infrastructure, as well as programs to improve heavy duty vehicle efficiency and converting vehicle fleets to natural gas;
- guiding the implementation of the B.C. Climate Action Plan across government;
- developing, and assisting other ministries in developing, policy, legislation and/or regulations, as needed;
- leading and coordinating climate aspects of provincial and local government initiatives to reduce emissions, create jobs and grow the economy;
- reporting on greenhouse gas emissions at the provincial, local government and industrial levels; and
- working with international, national and regional partners to advance B.C.'s climate action commitments.

I CITUI Mance Micasure 1.	Keuucuon 0	i gi cennouse	gas chiissions	
Performance Measure	2011	2012	2013	2014
	Target ²	Target	Target	Target
Annual level of greenhouse gas emissions in British Columbia relative to 2007 levels ¹	6% reduction by 2012 ³ (64.3 megatonnes)	6% reduction by 2012 (64.3 megatonnes)	18% reduction by 2016 (56.1 megatonnes)	18% reduction by 2016 (56.1 megatonnes)

Performance Measure 1: Reduction of greenhouse gas emissions

Data Source: Ministry of Environment

¹ Emissions levels for 2007, 2008 and 2009 were 68.5, 69.2 and 66.9 megatonnes, respectively. Greenhouse gases are measured in units of tonnes of carbon dioxide equivalent. See the *British Columbia Greenhouse Gas Inventory Report 2008*, pages 4–5, for details at <u>env.gov.bc.ca/cas/mitigation/ghg_inventory/index.html</u>. Emissions estimates for 2007 can be expected to differ slightly with the release of each inventory report due to refined calculation methods. The next *British Columbia Greenhouse Gas Inventory Report* will be released in 2012 and will report on 2010 emissions.

² Data collection, target setting and progress are on a calendar-year basis. The *Greenhouse Gas Reduction Targets Act* requires the Minister of Environment to report on progress towards legislated targets in 2012.

³ The data required for assessing the 2012 greenhouse gas emission target is expected to be available in 2014.

Discussion

The *Greenhouse Gas Reduction Targets Act*, brought into effect January 1, 2008, put into law B.C.'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 are reflected in the table above. The Ministry is legally mandated to report on greenhouse gas emissions released into the atmosphere from activities in B.C., including those resulting from transportation, heating, industry, landfills, agriculture and net deforestation.

B.C.'s Climate Action Plan, released in June 2008, details a suite of climate action policies designed to make progress towards B.C.'s greenhouse gas emission reduction target for 2020. The Climate Action Secretariat coordinates Climate Action Plan initiatives across government and communicates about climate change to the broader public, communities and businesses.

The data for this performance measure are taken from the *British Columbia Greenhouse Gas Inventory Report 2008.* This report in turn is based on Environment Canada's National Inventory *Report: Greenhouse Gases and Sinks in Canada,*⁴ which is prepared every year to meet Canada's obligations under the *United Nations Framework Convention on Climate Change.*⁵ Baseline data also may be revised due to methodological improvements.

Objective 1.2: Preparing for unavoidable climate change and its impacts

Taking action to reduce greenhouse gas emissions now will reduce the impacts of future climate change and provide human and natural systems more time to adjust. However, the greenhouse gases already in the atmosphere will continue to influence the global climate for decades to come, and some impacts are unavoidable. A comprehensive climate change action plan, therefore, includes preparing for such impacts, or "adapting." Adaptation will help maximize the opportunities and reduce the risks related to climate change and its impacts on society and the natural environment.

⁴ This report is available at <u>ec.gc.ca/Publications/default.asp?lang=En&xml=A07097EF-8EE1-4FF0-9AFB-6C392078D1A9</u>.

⁵ For more information, see <u>unfccc.int</u>.

Strategies

- leading the implementation of government's Climate Change Adaptation Strategy⁶ by:
 - building a strong foundation of knowledge and tools to help decision makers across B.C.
 prepare for a changing climate, for example, through supporting and collaborating with research institutions and organizations, and developing expertise and experience in adaptation;



Redfern Lake, Redfern-Keily Provincial Park

- ensuring that actions on climate change are considered in policies, planning and decision making across government; and
- engaging citizens and Ministry partners, including federal agencies, local governments, First Nations, industry and non-governmental organizations, in preparing for climate change and its impacts.
- integrating adaptation into the Ministry's internal business areas, including developing policy, setting standards, and managing land, air, water, species, ecosystems and parks and protected areas by:
 - developing new approaches to water management that address the impacts from a changing water cycle, such as legislation to address water sustainability;
 - connecting with stakeholders in the oil and gas sector to help further our climate change goals;
 - maintaining robust observation networks that contribute to increased understanding of the direction and pace of climate change in B.C.; and
 - planning for species, ecosystem and landscape conservation and restoration in a way that maximizes resilience to changing conditions.

⁶ For more information on the Climate Change Adaptation Strategy, please go to <u>livesmartbc.ca/attachments/Adaptation_Strategy.pdf</u>.

Performance Measure 2: Number of provincial ministries considering climate adaptation in business planning and delivery

Performance Measure	2011/12	2012/13	2013/14	2014/15
	Actual	Target	Target	Target
Number of provincial ministries including climate adaptation in business planning and implementation	8 ¹	All ministries	All ministries	All ministries

Data Source: Ministry of Environment

¹ Ministries of Agriculture; Community, Sport and Cultural Development; Education; Energy and Mines, Environment; Forests Lands and Natural Resource Operations; Public Safety and Solicitor General; and Transportation and Infrastructure.

Discussion

This performance measure tracks government's progress in identifying and addressing key vulnerabilities related to climate change. A variety of indicators will be used to assess progress, including:

- the number of ministry service plans that include a goal, objective or strategy on climate adaptation;
- the number of ministries that have initiated a process to assess risks to and opportunities for their business arising from a changing climate;
- new or amended legislation, regulation or policy that considers climate change impacts and adaptation; and
- new programs or other initiatives designed to increase resilience to a changing climate.

A discussion of results will be available in the Ministry's Annual Service Plan Report.

Goal 2: Clean and safe water, land and air

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. This can be achieved through effective legislation, innovative approaches to water governance and coordinated watershed-based planning.

Strategies

Key strategies for this objective include:

• encouraging shared water stewardship by leading and coordinating the implementation of the actions and commitments in *Living Water Smart: British Columbia's Water Plan* (LivingWaterSmart.ca);

- working with the ministries of Health and Forests, Lands and Natural Resource Operations to protect drinking water;
- engaging with First Nations, stakeholders and the public to develop new water sustainability legislation to protect stream health and aquatic environments, improve water governance arrangements, introduce more flexibility and efficiency in the water allocation system, and regulate groundwater use in priority areas and for large withdrawls;



Swan Lake / Kispiox River Provincial Park

- supporting decision making in permitting and environmental assessment processes by:
 - setting water quality objectives for Bamfield Inlet, Osooyos Lake, and Vernon Creek, and developing water quality guidelines for selenium and sulphate levels; and,
 - creating guidance documents, including water monitoring for mine proponents, groundwater modelling, and assessment of large groundwater extraction from deep saline aquifers;
- assessing the health of water resources through collaborative science and monitoring programs, including:
 - the provincial biomonitoring program, which will assessing 53 sites and provide new online GIS support tools through the provincial biomonitoring program;
 - the federal-provincial water quality network, which will assess water quality in 30 major rivers and streams; and
 - the groundwater observation wells network, where over 140 wells provide ongoing information about the health of provincially significant groundwater aquifers;⁷
- chairing and actively contributing to the Council of the Federation's Water Stewardship Council, and engaging other governments and external stakeholders in implementing the Water Charter;⁸ and

⁷ Information from these networks provides overall trends on water quality and quantity, directly supports authorizations and regulations and helps local decision-makers manage water resources.

• recognizing water flow requirements for ecosystems and species, and using that information to inform policies and guidelines.

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

Performance Measure	2011/12	2012/13	2013/14	2014/15
	Forecast	Target	Target	Target
Percentage of water bodies monitored under the Canada – B.C. Water Quality Monitoring Agreement with stable or improving water quality trends	96%	96% or greater	96% or greater	96% or greater

Data Source: Ministry of Environment

Discussion

Under the Canada – B.C. Water Quality Monitoring Agreement, 30 provincially significant rivers and streams, including the Fraser, Columbia and Peace, are monitored in B.C. 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 results of this measure provide a good indication of the outcomes of water protection efforts and stewardship of the province's water resources. In addition, the information helps inform authorizations for water use and helps establish further water monitoring requirements.

In 2012/13, the Federal-Provincial Surface Water Monitoring Group will complete a report on the Fraser River Basin. This report will include the status and trends in water chemistry from 11 federal-provincial stations in the Fraser River Basin which will assist in the management of water resources and the development of mitigation strategies in the Basin.

Two new trend stations were established in early 2011 in the Shuswap and Bulkley rivers. The Shuswap River station is considered important for the management of Shuswap Lake's water quality, while the Bulkley River station will monitor impacts from agriculture, urbanization and mining around the Smithers area. Additionally, a new water quality monitoring buoy was installed in Osoyoos Lake. This project was led by Environment Canada in partnership with the Ministry of Environment, the Department of Fisheries and Oceans and the Okanagan Basin Water Board. This buoy will report real-time water quality information at the lake surface as well as at various lake depths, and will assist in the management of fisheries and water resources in Osoyoos Lake.⁹

Through the Federal-Provincial Water Quality Monitoring Group, stations have been proposed for northeast B.C. to monitor coal mining and oil and gas development. Logistical, site and sampling details are under examination to ensure stations can be operated in the long term.

 ⁸ For more information on the Water Charter, see <u>councilofthefederation.ca/pdfs/Water Charter Aug 4 2010.pdf</u>.
 ⁹ For more on this data, see <u>waterquality.ec.gc.ca/WaterQualityWeb2/DataOnline/RealTime/osoyoosBuoy.aspx</u>

Data collected from the Federal-Provincial Surface Water Monitoring Program are used in a variety of reports. One example is the annual report of the Canadian Environmental Sustainability Indicators program on the Water Quality Index developed by the Canadian Council of Ministers of the Environment.¹⁰

Objective 2.2: Reduced contamination from toxins and waste

By reducing contamination from toxins and wastes efficiently and effectively, the Ministry will enhance public health and safety and mitigate impacts to water, land and air.

Strategies

Key strategies for this objective include:

- continuing to work with industry to develop, implement and continuously improve industry-led product stewardship programs;¹¹
- regulating the remediation of contaminated sites in order to protect human and environmental health and facilitate economic development;
- ensuring that the generators, carriers and receivers of hazardous waste handle, store, transport, treat and dispose of it according to the Hazardous Waste Regulation and in a manner that does not compromise the safety of human health and the environment;
- collaborating with communities, public organizations, industry and other agencies and private parties to protect human health and the environment by promoting the safe use and management of hazardous waste; and
- revising the Hazardous Waste Regulation and developing training and guidance materials to promote 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 on public health and safety and environmental sustainability. Reducing emissions of some pollutants has benefits for both air quality and climate change.

Strategies

- leading the implementation of policies and initiatives designed to avoid, minimize and offset emissions from industry, transportation, urban growth, ports and marine vessels;
- maintaining coverage of the air quality monitoring network to ensure that it meets or exceeds National Air Pollution Surveillance standards;¹²

¹⁰ This report is available at <u>ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=68DE8F72-1</u>.

¹¹ As per the Canada-Wide Action Plan for Extended Producer Responsibility (<u>ccme.ca/assets/pdf/epr_cap.pdf</u>). See also Objective 4.3.

¹² The standards are available at <u>ec.gc.ca/rnspa-naps/</u>.

- continuing to develop new industrial air emissions standards that require using the cleanest available practices;
- continuing to introduce tools, guidance materials and other resources to support the development and implementation of airshed plans;
- developing ambient air quality objectives, standards and guidelines to support airshed planning and decision making in permitting and environmental assessment processes;
- collaborating with the federal and provincial governments to develop a national Air Quality Management System that will include national emission standards, national ambient air quality standards and be delivered through an air zone management approach;
- effectively managing of prescribed forestry burns. This includes revising the Open Burning Smoke Control Regulation to ensure air quality is protected especially within areas of the province that are heavily populated, and experience deteriorated air quality due to topography and the presence of other air discharge sources; and
- collaborating with the Oil and Gas Commission, Ministry of Energy and Mines and local partners in the northeast to monitor, report out to the public, assess and reduce impacts of oil and gas development on air quality.

Performance Measure	2011/12	2012/13	2013/14	2014/15
	Forecast	Target	Target	Target
Number of air emission standards incorporating current Best Achievable Technology practices	6	7	8	9

Performance Measure 4: Clean air standards for industry

Data Source: Ministry of Environment Note: Targets are cumulative.

Discussion

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, and support the government's goal to protect air quality and human health. Standards for the slaughter and poultry processing industries, biomass-fired electrical power generation, wood-burning boilers used in agricultural operations, pellet plant manufacturing operations, wood residue burners, and waste-to-energy from municipal solid waste have been developed over the past several years.¹³ Each year, the Ministry plans to complete one air emissions standard for an industrial sector, based on the Ministry's Best Achievable Technology policy.

¹³ More information on industrial regulations and codes of practice is available at <u>env.gov.bc.ca/epd/industrial/regs/</u>.

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 minimize and offset the impact of these risks. The Ministry anticipates, responds to and manages the consequences of risks to the environment.

Strategies

- continuing to prevent, prepare for, mitigate and respond to spills that effect human health and the environmental quality of the province's water, land and air resources along with the flora and fauna they contain by establishing policies and procedures, response plans, operational guidelines, cooperative agreements and technical guidance on emergency response;
- promoting stewardship with other provincial agencies, industry, First Nations, local government, federal government and other stakeholders to protect the public and the environment in the event of an emergency or disaster;
- implementing new approaches to the management of compliance verification data to allow the Ministry to improve its response to environmental risks and provide increased public accountability;
- collaborating with the Ministry of Forests, Lands and Natural Resource Operations to manage the public safety risks of human-wildlife interactions, including awareness programs and, in severe conflicts, employing a specialized Predator Attack Team composed of specially trained conservation officers and the Provincial Veterinarian from the Ministry of Forests, Lands and Natural Resource Operations;
- providing policy guidance to support staff in delivering consistent input into environmental impact assessments and the mitigation of environmental impacts;
- managing the remediation of high-risk contaminated sites and regulating the remediation of all contaminated sites; and
- managing fire interface and fuel loading in parks and protected areas, especially near communities and other infrastructures.



Emergency response to an oil spill

Goal 3: Healthy and diverse native species and ecosystems

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



Northern Red-Legged Frog (rana aurora) at Dionisio Provincial Park, Galiano Island

The collection, storage, management and open distribution of scientific information on species and ecosystems enables effective science and policy development, contributes to the understanding of the status of native species and ecosystems, and leads to greater certainty in land use decision making.

Strategies

Key strategies for this objective include:

• developing data systems to support the acquisition and management of data and information, and providing open access to that information in support of science, policy development and shared stewardship;

- employing the B.C. Species and Ecosystems Explorer (<u>a100.gov.bc.ca/pub/eswp/</u>) and the Conservation Framework (<u>env.gov.bc.ca/conservationframework</u>/) websites to make available information on species and ecosystems at risk, including their conservation status, associated threats, priority score and progress in implementing recommended actions;
- assessing the conservation status of plants, animals and ecosystems and related risks and threats throughout B.C., including parks and protected areas; and
- providing enforcement services under the *Wildlife Act* and using a specialized conservation officer service response team to control alien species.

Objective 3.2: Conserved, maintained and enhanced native species and ecosystems

Many Ministry programs support the conservation of biodiversity and the maintenance and enhancement of native ecosystems to achieve a balance between the needs of wildlife and the needs of people. The Ministry encourages and supports others to accept a greater role in environmental stewardship, and facilitates community initiatives to protect and restore native species and ecosystems.

Strategies

- setting priorities for species and ecosystem recovery and management action through B.C.'s Conservation Framework (<u>env.gov.bc.ca/conservationframework/</u>);
- continuing to work with and expand partnerships, including those with First Nations, to identify, protect and restore species and ecosystems;
- implementing plans informed by B.C.'s Species at Risk Task Force recommendations to continue to improve conservation of species and ecosystems;
- implementing applied research programs to support species and ecosystem conservation;
- providing guidelines and standards for the protection and conservation of species and ecosystems, including inventory, monitoring and reporting on achievements;
- providing leadership in provincial species at risk status ranking and legal designation, and preparing and implementing recovery plans;
- collaborating with partners on strategies to address invasive species;
- developing new tools for analyzing the cumulative effects of different resource uses within a defined area in order to assist with natural resource decision making; and
- leading the development of an environmental mitigation policy and associated procedures to help support natural resource decision making and to foster avoidance, minimization and offsetting of impacts to the environment.

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

Performance Measure	2011/12	2012/13	2013/14	2014/15
	Projected	Target	Target	Target
Changes in the conservation status of species	Net decline	Net improvement	Net improvement	Net improvement

Data Source: Ministry of Environment

Note: This measure reflects the net change in the conservation status of species in B.C.

Discussion

Changes in the status of native species of plants and animals in B.C. is an important indicator of how well the Ministry is meeting its objective to conserve, maintain and enhance native species and ecosystems. The United Nations established the years 2011–2020 as the UN Decade on Biodiversity. One component of this declaration is to "improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity." The Ministry's performance measure coincides with this declaration and will give insight into B.C's contribution to the United Nation's goal as the decade progresses.

The Conservation Data Centre conducts rank assessments throughout the year; therefore, not all assessments for the 2011/12 fiscal year have been completed. BC has one of the most diverse

assemblages of species of any Canadian province. To date, 950 species¹⁴ have had their status ranks reviewed this year. Of those, 17 have had a decline in status and 6 improved. We are thus projecting a net decline in species' status for the fiscal year 2011/12.

Every species in the province has a conservation status ranking, which is a measure of its risk of becoming extinct. Status rankings are assigned on a scale of one to five: 1) critically imperiled; 2) imperiled; 3) vulnerable; 4) apparently secure; or 5) secure. Rankings are assigned by the B.C. Conservation Data Centre¹⁵ using internationally recognized methods developed by NatureServe¹⁶ and



A grizzly feasts on a wild salmon on the Atnarko River.

adopted by jurisdictions throughout Canada, the U.S. and Latin America. Status ranks are assigned on the basis of scientific criteria and factors such as rarity, trends in populations or habitat, and threats. These status rankings are foundational to B.C.'s Conservation Framework, which prioritizes species for conservation and recommends conservation actions.

Each year, the B.C. Conservation Data Centre reviews the rankings for a different subset of species. This performance measure reports on the numbers of species assessed that had improved or deteriorated status since the previous assessment. It is important to note that sequential yearly reports do not constitute a trend, as the sample of species that are assessed is different each year. Rather, it is an accumulation of information that each year gives us a better picture of how the status of biodiversity is changing. It is also important to realize that the changes reported for a subset of species in one year are not necessarily representative of the changing state of the status of all species.

Species status changes slowly and this measure may require time to show a response to environmental change or management actions. Furthermore, the role of the Ministry is to establish effective management frameworks that facilitate shared stewardship of the province's biodiversity. The trend in this measure reflects the work of the Ministry in the context of shared stewardship with other governments, First Nations, industry and others. Factors outside of B.C., such as those that affect the status of migratory birds, also influence the biodiversity within the province's borders.

¹⁴ This is an exceptionally high number of rank reviews for a single year, and reflects a complete review of the moss status ranks that occurred in 2011.

¹⁵ The B.C. Conservation Data Centre (<u>env.gov.bc.ca/cdc/</u>) collects and disseminates information on plants, animals, and ecosystems at risk in B.C.

¹⁶ NatureServe (<u>natureserve.org</u>) is a non-profit organization that represents an international network of biological inventories. NatureServe collects and manages information on plants, animals and ecosystems, and also provides conservation services.

Objective 3.3: Well-managed parks and protected areas

Parks and protected areas help to ensure the protection of native species and ecosystems, provide families with outstanding outdoor recreation opportunities, and contribute to meeting our environmental, social and economic goals. British Columbia has the third largest parks system in North America and largest provincial/territorial system in Canada protecting over 14% of the province. Our world-class parks system provides a legacy for future generations.



Aerial view of Tow Hill, Naikoon Provincial Park, Haida Gwaii

Strategies

- protecting, restoring and managing high-priority habitat and ecosystems including invasive species, forest health impacts, species at risk, and landscape connectivity;
- collaborating with First Nations and communities in protected areas planning and management to ensure long-term protection of natural, cultural and recreational assets;
- collaborating with local, regional and federal governments and other partners to establish new terrestrial and marine protected areas such as the Southern Strait of Georgia;
- strengthening the role parks and protected areas play in climate change adaptation; and
- increasing and promoting partnerships to expand the opportunities and involvement in stewardship initiatives.

Goal 4: British Columbians share responsibility for the environment

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

- promoting the sharing of the responsibility for protecting the environment, human health, and public safety through initiatives such as the Parks 100 Celebration,¹⁷ Community Stewardship Initiatives, and the Bear Smart and Urban Ungulate¹⁸ programs;
- continuing to work with stewardship organizations to increase environmental awareness;
- promoting outdoor activities to foster a connection to and an appreciation for the natural environment;
- developing and openly delivering information on critical issues like climate change, environmental policies and water stewardship to targeted audiences through innovative communication tools, such as social media; and
- maintaining and enhancing the B.C. Air Quality website (BCAirQuality.ca) as the provincial government portal for the open sharing of air quality data, information, resources and tools.¹⁹



Scuba diving in B.C. coastal waters

¹⁷ env.gov.bc.ca/bcparks/BCParks100/ ¹⁸ env.gov.bc.ca/cos/info/wildlife_human_interaction/UrbanUngulates.html

¹⁹ Including access to real-time air quality data and an interactive map-based interface for the Air Quality Health Index and the BlueSky Western Canada Smoke Forecasting System.

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 engage citizens and 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;
- enhancing and promoting shared stewardship through effective and timely communication of compliance activities to protect the environment;
- leading industry engagement on planning and regulatory development that supports and encourages the transition to a low-carbon economy, and ensures international partners are apprised of B.C.'s progress;
- fostering sustainable natural resource management through collaborative approaches with the public, non-profit groups, communities, First Nations governments, academia and industry;
- using social media, such as the <u>LiveSmartBC.ca</u> Twitter feed (<u>@LiveSmartBCca</u>), to engage British Columbians on current environmental issues;
- using online resources to foster collaboration on climate action among engaged stakeholders; and
- promoting shared water stewardship through the *Living Water Smart* blog (LivingWaterSmart.ca).

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

Sustainable environmental management practices not only protect the environment, they reduce costs through more efficient use of resources and energy, and lay the foundation for good corporate citizenship.

Strategies

- continuing to work with industry to develop, implement and continuously improve industry-led product stewardship programs;²⁰
- encouraging compliance by reporting those in non-compliance with Ministry environmental standards and regulatory requirements, and posting the names of those in non-compliance in the quarterly compliance and enforcement reports;²¹

²⁰ As per the Canada-wide Action Plan for Extended Producer Responsibility (<u>ccme.ca/assets/pdf/epr_cap.pdf</u>).

- continuing to explore opportunities to reduce regulatory burden²² through changes such as implementing codes of practice to streamline authorization processes; and
- promoting best environmental management practices and maintaining high environmental standards.

Performance Measure 6: Completion of the Canada-wide Action Plan for Extended Producer Responsibility

Performance Measure	2011/12	2012/13	2013/14	2015/16
	Baseline	Target	Target	Target
Percentage of product sub-categories ¹ in the Canada-wide Action Plan for Extended Producer Responsibility fully covered by industry-led recycling programs in British Columbia	53%	68%	68%	79%

Data Source: Ministry of Environment

¹ The Canada-wide Action Plan places a number of products into different categories. The Ministry divides these categories into sub-categories. For example, one category is packaging, which the Ministry divides into two subcategories: beverage containers and packaging and printed paper. Some product categories include a large number of products and require multiple industry-led stewardship programs in order to attain complete coverage.

Discussion

In October 2009, the Canadian Council of Ministers of Environment endorsed the Canada-wide Action Plan for Extended Producer Responsibility²³. Industry-led product stewardship requires producers (manufacturers, distributors and retailers) to be responsible for the life cycle management of their products, including collection and recycling. This places the responsibility for end-of-life product management on the producers and consumers of a product rather than on general taxpayers and local governments. B.C. is committed to the Canada-wide Action Plan for Extended Producer Responsibility and is the North American leader in developing producer responsibility programs, having more programs and covering more products than any other jurisdiction. The website recycling.gov.bc.ca has the complete list of products with industry-led stewardship programs in B.C.

The target for this measure is to have comprehensive coverage of the products in all subcategories by 2017/18.

²¹ See <u>env.gov.bc.ca/main/compliance-reporting/</u> for the *Quarterly Environmental Compliance and Enforcement Summaries*.

²² 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. Between 2001-2010, the Ministry reduced its regulatory requirements by 42 per cent while continuing to maintain stringent environmental standards.

²³ The plan is available at <u>ccme.ca/assets/pdf/epr_cap.pdf</u>.

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

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, which are crucial to the health and sustainability of our environment.

Strategies

Key strategies for this objective include:

- developing an environmental mitigation policy and associated procedures to foster avoidance, minimization and offsetting of impacts to the environment;
- operating the hydrometric network²⁴ to obtain information to support water management;
- acquiring, interpreting and openly sharing environmental science and information;
- supporting communities engaged in multi-stakeholder air and watershed management plans;

Objective 5.2: Optimize outdoor and economic opportunities from British Columbia's parks, fish and wildlife

British Columbia's parks, fish and wildlife provide families and visitors with a variety of unique outdoor opportunities 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, while supporting economic opportunities.

Strategies

- promoting sponsorship and donation opportunities through the Park Enhancement Fund to enhance conservation and recreation opportunities in BC Parks;
- implementing a volunteer strategy that will engage British Columbians in conservation and recreation activities throughout BC Parks;
- targeting capital investment to accessibility improvements such as wheelchair accessible picnic tables and trails;

²⁴ The B.C. hydrometric network is an environmental monitoring system that collects stream flow data from over 450 locations in British Columbia. The data are essential for hydroelectric power production, infrastructure, as well as for flood forecasting, agriculture and other purposes.

- working with partners both inside and outside government to implement strategies and programs that promote exceptional outdoor opportunities while ensuring the long-term protection of natural resources;
- offering the public increased opportunities for park recreation by providing high-quality outdoor recreational opportunities and experiences;
- working with the Ministry of Forests, Lands and Natural Resource Operations to coordinate the provincial regulatory, social and economic support needed for new recreational fishing



A BC Parks ranger patrolling the lakes in Tweedsmuir South Provincial Park

opportunities, as identified and initiated by B.C. municipalities and the federal government; and

• optimizing stewardship and economic opportunities with First Nations, local communities, non-profit groups, private land owners and others.

r er tor mance wieasure /:	r ark visitation and visitor satisfaction				
Performance Measure	2011/12	2012/13	2013/14	2015/16	
Performance measure	Forecast	Target	Target	Target	
Number of recorded park visits	19 million	20.5 million	20.9 million	21.3 million	
	Maintain or	Maintain or	Maintain or	Maintain or	
Park visitor satisfaction level	improve (from	improve (from	improve (from	improve (from	
	80%) ¹	80%)	80%)	80%)	

Performance Measure 7: Park visitation and visitor satisfaction

Data Source: Ministry of Environment

Note: The satisfaction rating is based on a satisfaction survey that is completed by users of campgrounds around the province. In summer 2011, more than 2,000 people responded to the survey.

¹Based on 2010/11 baseline of 80% satisfaction.

Discussion

The parks and protected areas system in B.C. covers approximately 13 million hectares (or 14.3 per cent of the province), including both provincial and national parks. Provincial parks provide protection for representative landscapes and habitat for native species. Parks also provide recreational services and opportunities that contribute to local economies, promote active living and support an appreciation for the environment. A recent national report of economic contribution of parks to national, provincial, and territorial economies determined that for British

Columbia, every dollar invested in the protected areas system generates \$8.42 in spin off economic activities.

B.C.'s parks system is the single largest recreation enterprise in the province. The number of visitors to provincial parks is used to measure the contribution of parks to the government's priorities of healthy communities, tourism and the economy. This performance measure is intended to provide a reasonable indication of the trend in the level of use of public outdoor recreation opportunities available in B.C.'s parks.

Since 1985, the Ministry has monitored the effectiveness of services provided in provincial park campgrounds and day-use areas by conducting an annual satisfaction survey with a random sample of park visitors. The Ministry employs an online survey that increases cost-effectiveness and reduces the use of paper. The results of this survey are used by Ministry staff and park facility operators to assess and improve park services.

The Ministry has targeted an approximate 800,000 visitor increase in park attendance between 2012/13 and 2015/16. However, there are many factors outside of the Ministry's control that influence park visitation: weather conditions; major construction projects; natural events (such as forest fires); and the economy. The extent that these factors influence attendance levels may cause park use to fluctuate by as much as 10 per cent annually. The Ministry therefore recommends that the park visitation performance measure be assessed over a three-year term to account for any significant annual fluctuations.



The mountains of Mount Assiniboine Provincial Park provide the picturesque backdrop for this paraglider

Resource Summary

Ministry of Environment Resource Summary Table

Core Business Area	2011/12 Restated Estimates	2012/13 Estimates	2013/14 Plan	2014/15 Plan
	Operating Expe	enses (\$000)		
Environmental Protection	6,954	6,954	6,954	6,954
Environmental Sustainability	19,429	19,429	19,429	19,429
Parks and Protected Area	30,122	30,122	30,122	30,122
Conservation Officer Service	16,736	16,714	16,714	16,714
Climate Action Secretariat	5,123	4,123	4,123	4,123
Executive and Support Services	22,024	22,024	22,024	22,024
Sub Total	100,388	99,366	99,366	99,366
Sustainable Environment Fund	20,305	20,305	20,305	20,305
Park Enhancement Fund	500	500	500	500
Total	121,193	120,171	120,171	120,171
Ministry Capit	al Expenditures (Con	solidated Revenue F	und) (\$000)	
Executive and Support Services	11,939	17,415	18,694	20,913
Park Enhancement Fund	400	400	400	400
Total	12,339	17,815	19,094	21,313

Environmental Assessment Office

Purpose of the Office

The Environmental Assessment Office's vision is to support vibrant communities, a healthy environment, and a prosperous economy. This vision is pursued by ensuring that proposed major projects meet provincial environmental, economic and social goals, and that the interests and concerns of BC's families and communities, First Nations, government agencies and other interested parties are considered in each assessment. Proposed projects currently undergoing assessment in B.C. represent thousands of potential jobs and approximately \$35 billion in potential capital investment.

The Environmental Assessment Office was established in 1995 to administer the *Environmental Assessment Act* (Act) and its regulations. The Act gives authority to the Environmental Assessment Office to evaluate proposed projects that are reviewable under the Act for potential adverse environmental, economic, social, heritage and health effects that may occur during the life of the project, and to verify and enforce compliance with the conditions of environmental assessment certificates.

The Environmental Assessment Process

A broad range of proposed projects are reviewable if they meet or exceed certain thresholds defined in the Reviewable Projects Regulation.²⁵ This regulation identifies thresholds for industrial, mining, energy, water management, waste disposal, food processing, transportation and tourist destination resort projects. Proposed projects that exceed identified thresholds are generally those with a higher potential for adverse environmental, economic, social, heritage or health effects.

The Minister of Environment can also designate any project as reviewable if it has not been substantially started, if the Minister believes the project may have a significant



Flagging environmentally sensitive areas prior to the start of construction on the Quality Wind Project.

adverse effect, and if an environmental assessment would be in the public interest. In addition, proponents of projects may apply to the Environmental Assessment Office to request that their projects be accepted for review.

Environmental assessment includes several cycles of back-and-forth discussions between the Environmental Assessment Office, technical government experts, local government representatives, First Nations, and the public in order to identify and assess the potential for

²⁵ For example, the threshold for a new coal mine is a production capacity of \geq 250,000 tonnes of coal per year. If a proposed coal mine is projected to produce \geq 250,000 tonnes of coal per year, it would be automatically reviewable.

significant effects of proposed projects and potential mitigation measures. Consequently, projects that complete environmental assessment are often designed and implemented much differently from how they are proposed at the beginning of the environmental assessment process. Based on the input provided by various parties, environmental assessment results in changes to proposed projects that avoid or mitigate significant adverse effects and enhance the benefits of development. This back-and-forth analysis is one of the great strengths of provincial environmental assessment because it allows for the identification of major issues and resolution of many of these issues through project design changes.

The Environmental Assessment Office fulfills the Province's legal duty to consult with First Nations throughout the environmental assessment process. Where appropriate, the Environmental Assessment Office identifies measures to accommodate the interests of First Nations in relation to potential effects on established or asserted Aboriginal rights and on treaty rights.

At the end of an environmental assessment, the Environmental Assessment Office prepares a comprehensive assessment report identifying the potential environmental, economic, social, heritage and health effects associated with the proposed project, and evaluates the extent to which any adverse effects would be avoided or mitigated. This report is provided to the ministers who decide whether or not to issue an environmental assessment certificate. If the ministers issue a certificate, proponents are required to implement certain conditions to avoid or mitigate adverse effects. After a project is certified, the Environmental Assessment Office works with other government agencies to ensure that proponents comply with certificate conditions.



Figure 1: The environmental assessment process.

Strategic Context

Environmental Assessment Activity

The demand for environmental assessment of proposed projects is anticipated to remain strong. Currently, the potential capital investment for projects in the environmental assessment process is over \$35 billion.

Of the projects under review by the Environmental Assessment Office, approximately half are energy projects – primarily hydroelectric and wind power – and one-third are metal or coal and aggregate mining projects. Oil and gas, destination resorts, waste disposal, water management and industrial projects comprise the remainder of projects undergoing assessment.

Evolving Practice of Environmental Assessment

The practice of environmental assessment, including compliance and effectiveness management, is evolving as scientific knowledge increases and societal standards and government regulations change. To understand and incorporate current practices and emerging trends in environmental assessment, the Environmental Assessment Office engages with a broad community of practitioners, including an association of federal and provincial government experts (e.g., federal and provincial Environment Assessment Administrators), the International Association for Impact Assessment, and the Environmental Assessment Advisory Committee.

Federal-Provincial Coordination

Approximately two-thirds of proposed projects in British Columbia require assessment under both provincial and federal legislation. In these cases, the Environmental Assessment Office works closely with the Canadian Environmental Assessment Agency to minimize duplication of effort and resources and to maximize efficiencies wherever possible. Although significant progress has been made, the Environmental Assessment Office continues to recommend federal legislative changes in the pursuit of a single environmental assessment for each reviewable project.

Outreach

It is important that the parties participating in environmental assessment (e.g., the public, impact assessment professionals, industry, environmental organizations and others) understand B.C's environmental assessment process. The Environmental Assessment Office engages in outreach activities to increase awareness and knowledge of environmental assessment.

First Nations

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. The Environmental Assessment Office seeks First Nations' input on 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. It 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. As well, First Nations are provided opportunities to include their own submissions in the materials given to ministers to inform ministers' decisions on whether to issue an environmental assessment certificate.



Construction on the Sea-to-Sky Highway Improvement Project in the Lower Mainland

Goals, Objectives, Strategies and Performance Measures

Goal 1: Respected Environmental Assessment

Objective 1.1: Ensure desired outcomes related to provincial environmental, social and economic goals are delivered to the people of British Columbia

The environmental assessment process is an integrated and iterative process in which the Environmental Assessment Office works with the proponent, government agencies, First Nations, potentially affected parties, and the public to ensure that the potential adverse environmental, economic, social, heritage and health effects of a proposed major project are identified and avoided or mitigated so that if the project is to proceed, it will do so in a sustainable manner. The Environmental Assessment Office ensures that once an assessment has been completed, Ministers are informed of both the potential benefits and adverse effects of the proposed project before they decide whether or not to issue an environmental assessment certificate.

Strategy

The key strategy for this objective is to maintain and continually improve the effectiveness of the environmental assessment process by developing a quality assurance program that includes:

- continuous improvement and ongoing enhancement of the environmental assessment process before an Environmental Assessment Certificate is issued;
- a compliance management program to ensure that projects comply with certificate conditions and commitments; and
- an effectiveness management program to evaluate whether environmental assessments are avoiding or mitigating the potentially significant adverse effects of certified projects.

Performance Measure	2011/12	2012/13	2013/14	2014/15
	Forecast	Target	Target	Target
Number of compliance inspections completed on certified projects	New measure	10 inspections (100%)	To be determined*	To be determined*

Performance Measure 1: Compliance inspections completed on certified projects

*Note: These targets will be determined following a review and analysis of the compliance and effectiveness program in the year 2012/13.

Discussion

The Environmental Assessment Office strives to continually improve the environmental assessment process, and works with provincial government agencies to ensure that the legally binding conditions and commitments in environmental assessment certificates are met. In July 2011, the Office of the Auditor General published a report on the Environmental Assessment Office's oversight of certified projects and concluded that oversight was insufficient to ensure that potential significant adverse effects are avoided or mitigated. As a result, the Environmental Assessment Office has created this new performance measure to respond specifically to the Auditor General's recommendations.

The Environmental Assessment Office is developing partnerships with compliance management and monitoring programs from other provincial agencies to ensure its enhanced program makes the most effective and efficient use of government's compliance management and monitoring expertise and resources. For example, a partnership with the Compliance and Enforcement Branch of the Ministry of Forests, Lands and Natural Resource Operations has been established to assist in conducting inspections of certified projects under the enhanced compliance and effectiveness model currently being



East Toba Montrose hydroelectric facility taken during a compliance inspection in August 2011.

developed. This new performance measure will provide an initial measure of progress towards the development of the enhanced compliance and effectiveness model; as this is the first year this performance measure has been implemented, the target of 10 inspections was selected to provide a broad, representative cross-section of both the sectors and geographic regions where environmental assessments are conducted in B.C. The results of the 10 inspections will be used to inform future targets and additional performance measures may be developed as the program evolves.

Objective 1.2: Build upon a strong legislative framework

British Columbia's *Environmental Assessment Act* has been in place since 1994. The Act was subsequently amended to allow for more flexible procedures and a greater role for proponents. One of the major strengths of B.C.'s environmental assessment legislation is its requirement that project reviews be completed within specific timelines.

While the Act provides a strong and rigorous framework for environmental assessment in the province, the Environmental Assessment Office undertakes regular study and analysis of other legislative frameworks to ensure that B.C. remains a leader in environmental assessment standards.

Strategies

Key strategies for this objective include:

- ensuring that environmental assessment decisions occur within a predictable and timely regulatory framework;
- using legislative tools, such as entering into delegation agreements with other levels of government, to eliminate duplication of environmental assessment efforts conducted by more than one level of government on the same proposed project;
- working with other provincial agencies to coordinate necessary authorizations for a proposed project to provide better service to clients and to improve the natural resources sector's internal administration efficiency; and
- ensuring that comprehensive environmental assessments are completed within legislated timelines.

Performance Measure 2: Application reviews in the B.C. environmental assessment process are completed within 180 days

Performance Measure	2011/12 Forecast	2012/13 Target	2013/14 Target	2014/15 Target
Percentage of application reviews in the B.C. environmental process completed within 180 days:				
B.C. process only	100%	100%	100%	100%
Joint B.C./Canada process	100%	100%	100%	100%

Data Source: Environmental Assessment Office

Discussion

The legislated timelines in the Act include a 180-day limit for the Environmental Assessment Office's review of applications for environmental assessment certificates. This timeline offers

certainty for the public, government, First Nations, other potentially affected parties and proponents in understanding the duration of steps in environmental assessment and supports timely planning for all parties.

Goal 2: Successful Partnerships

Objective 2.1: Ensure effective partnerships with provincial agencies are established, maintained and enhanced

One of the key functions provided by the Environmental Assessment Office is the coordination and assessment of technical input from various provincial agencies into environmental assessments of proposed projects. In this role, building positive relationships and effective communication networks is a major function undertaken by the Environmental Assessment Office.

Strategies

Key strategies for this objective include:

- working with other provincial ministries to support the "one process" initiative to identify and address efficiencies for projects before, during and after environmental assessment;
- providing clear direction to working group members on their roles and the type of information and input required to support the EAO;
- ensuring that other provincial agencies are aware of the work of the Environmental Assessment Office through outreach and relationship building; and
- partnering with other provincial agencies where possible (for example, undertaking compliance inspections).

Objective 2.2: Enhance efforts to coordinate environmental assessment with the federal government

Approximately two-thirds of proposed projects undergoing a provincial review also require a federal environmental assessment. Given the magnitude of federal environmental assessments in B.C. and the significant contribution of these projects to the Canadian and British Columbian economy, the Environmental Assessment Office has identified greater coordination with the federal government as a top priority.

Despite best efforts to better align the federal and provincial environmental assessments, two separate processes result in inefficiencies and duplication. As such, the Environmental Assessment Office continues to recommend that the federal government pursue the concept of one project, one environmental assessment.

Strategies

Key strategies for this objective include:

- ongoing efforts to enhance the efficiency and effectiveness of environmental assessments undertaken by both the federal and provincial governments;
- working closely with the Canadian Environmental Assessment Agency and other government agencies to develop new and innovative project management tools, such as joint work plans, team charters and a collaborative approach to First Nations' consultations; and
- continuing to recommend federal legislative changes in the pursuit of a single environmental assessment for each reviewable project.

Goal 3: Meaningful Engagement

Objective 3.1: Communicate the value and benefits of environmental assessment

The Environmental Assessment Office seeks to deliver value by analyzing and making recommendations related to potential environmental, economic, social, health and heritage impacts and First Nations' asserted, treaty, or proven rights for each assessment. In addition, the Environmental Assessment Office informs ministers about both the potential benefits and adverse effects of proposed projects to support ministers in deciding whether or not to issue an environmental assessment certificate.

environmental assessment certificate.

Strategies

Key strategies for this objective include:

- delivering a transparent process and supporting decision making;
- communicating with the public, First Nations and interested parties about the benefits of environmental assessment; and
- developing a method to track beneficial changes to proposed projects that are a result of the environmental assessment process.



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

Objective 3.2: Ensure environmental assessment is meaningful to First Nations

First Nations play a critical role in environmental assessments. Proposed projects that enter into environmental assessment trigger the Crown's duty to consult with potentially affected First Nations about potential impacts to asserted, treaty, or proven rights, and, if appropriate, to accommodate those rights.

Strategies

Key strategies for this objective include:

- building respectful relationships;
- ensuring early communication and consultation with all First Nations potentially affected by a proposed project;
- acknowledging that First Nations' rights regarding consultation and accommodation are different from other participants in the environmental assessment process;
- providing First Nations with capacity funding to assist with participation in the environmental assessment process;
- providing First Nations with the opportunity for governmentto-government dialogue throughout the environmental assessment process (outside the technical working groups); and
- enhancing coordination of First Nations consultation with the federal government through joint initiatives, including staff training workshops, information sharing, and improvement of procedures and tools.



Stream considered for fish habitat compensation as part of the Harper Creek Project.

Performance Measure 3: Percentage of potentially affected First Nations engaged in the environmental assessment process

Performance Measure	2011/12 Forecast	2012/13 Target	2013/14 Target	2014/15 Target
Percentage of potentially affected First Nations:				
Given the opportunity to engage in the environmental assessment process	100%	100%	100%	100%
Engaged in the environmental assessment process ¹	80%	80%	80%	80%

¹ The Environmental Assessment Office strives to engage all potentially affected First Nations in the environmental assessment process, 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

The engagement of First Nations in the environmental assessment process is an effective way of building relationships, identifying First Nations' concerns, and initiating process and project design changes that can assist in accommodating potential impacts on First Nations' asserted,

treaty, or proven rights and other project-related issues. As such, the percentage of assessments where potentially affected First Nations are engaged is a key measure of the Environmental Assessment Office's ability to identify and address First Nations' concerns.

At the initiation of each environmental assessment, potentially affected First Nations are contacted by the Environmental Assessment Office and invited to participate. To determine the percentage of First Nations engaged in each environmental assessment, the Environmental Assessment Office considers the extent to which First Nations have communicated with the Environmental Assessment Office, participated in project working groups, shared comments or concerns, requested or received funding or grants to support participation, submitted studies or baseline information, or undertaken any other form of engagement or involvement in an environmental assessment.

Environmental assessment consultation activities are conducted in a manner consistent with current jurisprudence, including conducting a preliminary strength of claim assessment on potential impacts to First Nations early in the environmental assessment process. The Environmental Assessment Office takes numerous steps to facilitate First Nations' engagement, including:

- consulting with potentially affected First Nations at the outset of an environmental assessment to discuss the manner and degree of consultation to be undertaken;
- providing capacity funding;
- providing opportunities to participate in technical working groups, comment on key documents and engage in government-to-government dialogue;
- considering First Nations' input when developing measures to avoid or mitigate impacts on asserted, treaty, or proven rights; and
- providing the opportunity for First Nations to comment on the Environmental Assessment Office's draft consultation analysis at the conclusion of the environmental assessment process.

First Nations also have the opportunity to present their views on the project in the materials that the Environmental Assessment Office provides to assist ministers in making their decision on whether to issue an environmental assessment certificate.

Objective 3.3: Ensure the public consultation process is responsive to local needs

The Environmental Assessment Office is committed to transparency and accountability to the public. This commitment is described in detail in the Environmental Assessment Office's Fairness and Service Code.²⁶ This document provides information on the environmental assessment process and the Office's guiding principles, which include fairness, transparency, inclusiveness, comprehensiveness and efficiency.

²⁶ For more information, please visit <u>www.eao.gov.bc.ca/pdf/EAO_FairnessAndServiceCode_Jan09.pdf</u>.

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*;
- conducting research to enhance the Environmental Assessment Office's approach to social impact assessment;
- providing guidance to proponents about methods and tools for assessing potential social impacts; and
- soliciting feedback from the public, First Nations, project proponents and interested parties regarding opportunities for enhancement of the environmental assessment process.

Discussion

The Environmental Assessment Office continues to work towards improving its ability to assess the values of communities potentially impacted by proposed projects. Every proposed project undergoing environmental assessment is required to go through at least two public comment periods, including open houses in communities potentially affected by the proposed project.

Through its interactions with the public, the Environmental Assessment Office works to continually improve the environmental assessment process and outcomes. This emphasis on continual improvement is a key element of the Environmental Assessment Office's goal of supporting respected, quality environmental assessments that integrate and reflect community input.

Resource Summary

Environmental Assessment Office Resource Summary Table

Core Business Area	2011/12 Restated Estimates	2012/13 Estimates	2013/14 Plan	2014/15 Plan			
Operating Expenses (\$000)							
Environmental Assessment Office	8,754	8,754	8,754	8,754			
Total	8,754	8,754	8,754	8,754			

Appendix

Contact Information

Ministry of Environment Contact Information

Headquarters

Victoria Telephone: 250 387-1161 Fax: 250 387-5669 Website: <u>www.gov.bc.ca/env/</u> Additional contact information can be found at <u>www.gov.bc.ca/env/contacts.html</u>.

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: 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: www.env.gov.bc.ca/lower-mainland/ Other offices: Brackendale (Squamish), Cultus Lake, Maple Ridge, North Vancouver, Sechelt, Powell River

Southern Interior Region

Cariboo/Thompson

Kamloops Office: Telephone: 250 371-6200 Fax: 250 828-4000 Website: www.env.gov.bc.ca/thompson/

Cariboo/Thompson (continued)

Williams Lake Office:
Telephone: 250 398-4530
Fax: 250 398-4214
Website: www.env.gov.bc.ca/cariboo/
Other offices: Clearwater, Lillooet, Merritt, Kelowna, Oliver, Princeton, Vernon, 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: Castlegar, Creston/West 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>

Cranbrook Office: Telephone: 250 489-8540 Fax: 250 489-8506

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

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

Report all Poachers and Polluters

Telephone: Dial Toll-Free 1-877-952-7277 Website: <u>http://www.env.gov.bc.ca/cos/rapp/form.htm</u>

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