

Ministry of Environment  
and the  
Environmental Assessment Office

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2013/14  
Annual Service Plan Report

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## Message from the Minister and Accountability Statement



I am pleased to present *the Ministry of Environment and the Environmental Assessment Office 2013/14 Annual Service Plan Report*.

2013/14 saw the Ministry take a number of important steps in oil spill prevention and response, liquefied natural gas (LNG) development, water protection, and numerous environmental protection issues. As the Minister of Environment, I am committed to having the best strategies in place to ensure economic development proceeds in an environmentally sound manner.

The Province has made it clear that it will only consider supporting a heavy-oil pipeline proposal if it satisfies our five conditions. In April 2014, we released the Province's second intentions paper on one of those conditions, the establishment of world-leading land based oil spill prevention and response. Three major policies are being proposed to ensure timely and effective response to heavy oil and other hazardous material spills: new requirements for spill preparedness, response and restoration based on the most stringent in the world; a new provincial preparedness and response organization; and an enhanced provincial Environmental Emergency Program.

The development of a globally competitive LNG industry in B.C. is a priority for our government. In November 2013, an important step was taken to streamline environmental assessments and permitting for LNG projects by reducing duplication and improving timeliness. A Memorandum of Understanding now allows the BC Oil and Gas Commission and the Environmental Assessment Office to work together to coordinate their work and share information in order to manage a single, predictable regulatory regime for LNG projects, from inception through closure. The Memorandum of Understanding includes measures to strengthen compliance and enforcement efforts, ensuring environmental protection will be maintained and even enhanced.

A key focus for the Environmental Assessment Office in 2013/14 was to implement initiatives related to my [mandate letter](#) and bring clarity and transparency to the environmental assessment process. We have looked at ways of doing business differently in order to build capacity within the office without undermining the integrity of the environmental assessment process. We are also continuing to implement the recommendations of the Auditor General regarding compliance and enforcement inspections.

In March 2014, we introduced the *Water Sustainability Act*, and on April 29<sup>th</sup> it was passed by the Legislature. The new Act is an historic achievement for British Columbia. It will respond to

## Ministry of Environment and the Environmental Assessment Office

current and future pressures on our fresh water - including groundwater - and position our province as a leader in water stewardship. It has taken a long time to get to this point, but we wanted to get our new water legislation right, and I believe we have. The new Act delivers on government's commitments to modernize B.C.'s water laws, regulate groundwater use and strengthen provincial water management in light of growing demands for water and a changing climate. Water is our most precious resource, and the *Water Sustainability Act* will ensure our supply of clean fresh water is sustainable and will meet our needs today and for generations to come.

In March 2014, I announced that public hospitals, colleges and universities will be joining K-12 schools in receiving funding for capital investments dedicated to reducing energy costs, demonstrating clean technology and lowering carbon emissions. Given the success of the program in the K-12 education sector, the Carbon Neutral Capital Program was expanded to \$14.5 million and now includes health authorities and post-secondary institutions. The K-12 part of the program remains unchanged, with \$5 million continuing to be available to school districts from the Ministry of Education. B.C. is a world leader in climate action: since 2008, B.C.'s revenue neutral carbon tax has raised more than \$4.8 billion, all reinvested into tax reductions for businesses, individuals and families.

In response to small business concerns about province-wide plans for packaging and printed paper recycling, we worked with the business community on a set of recycling rules that makes sense for small businesses while still achieving our shared environmental goals. As a result, in May 2014 we passed a new regulation which exempts small businesses from any packaging and printed paper reporting or recycling costs if they meet certain criteria. The Recycling Regulation was originally amended in March 2011 to include all packaging and printed paper following a two year consultation with industry, and an industry-led stewardship plan was approved in April 2013.

None of these accomplishments would have been possible without the Ministry's dedicated staff, and I'd like to thank them for their continued hard work.

The *Ministry of Environment and the Environmental Assessment Office 2013/14 Annual Service Plan Report* compares the actual results to the expected results identified in the June 2013 *Revised Ministry of Environment and the Environmental Assessment Office 2013/14 - 2015/16 Service Plan*. I am accountable for those results as reported.



Honourable Mary Polak  
Minister of Environment

June 26, 2014

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# Highlights of the Year

## Progress on Minister's Mandate Letter Objectives

All members of the B.C. Executive Council were provided [letters from the Premier](#) outlining their key responsibilities as part of their mandates. For the Ministry of Environment, this includes continuing B.C.'s leadership on climate action and supporting the Province's opportunity to develop the liquefied natural gas sector. Progress made on the Minister's mandate letter objectives includes:



*Nairn Falls Provincial Park*

1. **Balance the ministry budget in order to control spending and ensure an overall balanced budget for the Province of British Columbia:** The Ministry of Environment budgets were balanced for the 2013/14 budget year.
2. **Complete the marine and land-based heavy oil spill response studies for our government's five conditions for proposed heavy oil pipeline projects in B.C.:** Following up on the 2013 intentions paper and symposium; receipt of the West Coast Spill Response Study; and substantial consultation with industry, First Nations, local governments and other stakeholders, the Ministry released its second intentions paper, which is the next step in government's work to strengthen the spill response regime in the province.
3. **Review the Environmental Assessment Office and ensure timelines are appropriate for both economic development and environmental protection objectives, making recommendations for improvement as necessary:** The review of the Environmental Assessment Office is continuing. Recommendations have already been made and are being implemented to ensure timelines are appropriate for both economic development and environmental protection objectives. Additionally, the Environmental Assessment Fees Regulation was implemented to improve capacity for service enhancements. See *Environmental Assessment Office*, page 32, for more information.
4. **Review the Pacific Carbon Trust and provide options for reform:** After several years building a significant offset market in British Columbia, the Pacific Carbon Trust transitioned to government as the new Climate Investment Branch in the Ministry's Climate Action Secretariat to achieve savings, support government's commitment to carbon neutrality and continue developing the carbon market.
5. **Work with the Minister of Natural Gas Development and ensure liquefied natural gas operations in B.C. are the cleanest in the world:** Over the past year we have developed an innovative strategy to support our commitment to deliver the cleanest LNG facilities

in the world. This strategy is now part of a broader proposed comprehensive competitiveness framework that also includes LNG taxation. Discussions with industry on the comprehensive framework are well underway, with a goal of ensuring LNG proponents can make final investment decisions as early as the end of this year.

6. **Complete consultation on the modernization of the *Water Act* and introduce and pass legislation as committed in *Strong Economy, Secure Tomorrow*:** The *Water Sustainability Act*, which modernizes the *Water Act*, was passed by the legislature in April 2014.
7. **Consult with communities, First Nations and industry to potentially develop a provincially designated protected area in the Klappan (Sacred Headwaters):** In September 2013, the Province and the Tahltan agreed to the Klappan Strategic Initiative, a shared approach on future decisions about conservation and protection in the area. The Klappan Strategic Initiative reaffirms commitments to an effective, respectful, and enduring relationship, as well as a government-to-government approach toward development in the Tahltan territory. The initiative includes the establishment of a technical working group and plans for consultation with the Tahltan Nation, communities and stakeholders.
8. **Create a new roundtable of representatives from communities, industry, labour, First Nations and the environmental sector to provide guidelines on how to balance environmental protection with economic development:** In March 2014, the Roundtable on the Environment and the Economy was established. The Roundtable members include representatives from communities, industry, labour, First Nations and the environmental sector. It provides an opportunity for stakeholder groups to work with the B.C. government on environmental policy priorities to strike a balance between sustainable resource development and the protection of human health and the environment. The Roundtable will meet every three to four months, and meeting summaries will be posted to the Ministry website.
9. **Ensure all revenues from fishing licenses are provided to the Freshwater Fisheries Society for conservation purposes no later than 2015/16:** The Ministry of Environment is working with the Ministry of Forests, Lands, and Natural Resource Operations and the Freshwater Fisheries Society to determine the range of services and activities that the Society will deliver under this mandate direction.
10. **Create an annual water use report for companies involved in hydraulic fracturing to ensure public awareness of the water conservation strategies being undertaken by upstream natural gas companies:** Under the new *Water Sustainability Act*, large water users will be required to regularly measure and report their water use. The new Act will also strengthen the need to use water wisely by including requirements that support water conservation. [Oil and gas operators are already required to submit annual water use](#), including water used for hydraulic fracturing, on a quarterly basis.

### **Airshed study to assess effects of LNG in Kitimat**

The recently completed Kitimat Airshed Impact Assessment Project looked at the cumulative effects of existing and proposed industrial air emissions sources in the airshed. Those included emissions from an existing aluminum smelter, three proposed LNG terminals, a proposed oil refinery, a crude-oil export facility and gas-turbine-powered electrical generation facilities. The study focused on sulphur dioxide and nitrogen dioxide emissions from those facilities. It also assessed the impact of emissions through a number of scenarios, including potential effects on water and soil, as well as on vegetation and human health from direct exposure. Conclusions from the study will be used to inform environmental assessment work and regulatory decisions for LNG and other industrial proponents in Kitimat and other airsheds where clusters of LNG export facilities are being proposed.

### **Tsunami debris removal funding**

In March 2014, B.C. awarded \$270,000 to the Great Canadian Shoreline Cleanup to expand its tsunami debris removal project along the west coast of Vancouver Island. The funding will be used for tsunami debris cleanup efforts including training and education about debris identification and disposal, transportation of volunteers, and collected debris in and out of remote areas and cleanup supplies. The funding was made available through the one-time grant of approximately \$1 million the Government of Japan presented to the Government of Canada last year to help clean up tsunami debris. To date, more than \$646,000 has been awarded to successful applicants to put toward their collaborative efforts in developing plans for managing and cleaning up tsunami debris along B.C.'s coastline.

### **Intervenor application in Kinder Morgan pipeline expansion**

In February 2014, the Province filed an application to be an intervenor in the National Energy Board's review of Kinder Morgan's Trans Mountain Expansion project. As an intervenor, the Province will be able to take an active role at the panel's hearings to ensure we represent the interests of the people of B.C. As with all proposed heavy oil pipeline projects in B.C., the Province will not support the Trans Mountain Expansion project unless its five conditions are met.

### **BC Parks Quadra Island park land deal**

In March 2013, the Province acquired 395 hectares of private property on Quadra Island, linking two provincial parks to further protect unique and sensitive ecosystems. The Province secured the lands worth \$5.85 million from Merrill & Ring Forestry L.P. utilizing a combination of cash, a land exchange, a donation of \$350,000 from the forest company, and over \$1.5 million in donations from local residents and stakeholders.

## Purpose of Ministry

British Columbia's water, land, air and plant and animal life are among the most diverse in all of Canada, and provide British Columbians with an abundance of valuable economic and social benefits. The Ministry of Environment is responsible for encouraging and maintaining the effective protection, management and conservation of B.C.'s water, land, air and living resources. It administers the province's parks and protected areas, and monitors and enforces compliance with environmental laws and regulations. It is also responsible for providing leadership to minimize the effects of climate change and ensuring that British Columbians and industry are prepared to adapt to the effects of a changing climate. The Ministry was created and is governed by the *Ministry of Environment Act*.

B.C.'s environment is a natural resource that is entrusted to every B.C. resident. To help British Columbians protect their water, land and air, the Ministry has developed environmental reporting tools such as Environmental Reporting BC and the on-line searchable Environmental Violations Database. The Ministry also uses the Report All Poachers and Polluters (RAPP) line to acquire important information from British Columbians on what they see happening in all parts of the province. The Ministry takes a leadership role in engaging with stakeholders, First Nations and industry in sharing the stewardship of our environment.

Monitoring, assessing and reporting on environmental conditions are critical services provided by the Ministry, and delivering those services requires extensive scientific data. The Ministry collects, stores, retrieves, analyzes and sets standards for environmental data, and makes key data available to the public as part of the government's Open Data initiative. The Ministry also undertakes, commissions and coordinates environmental studies.

Threats to the environment are inherently threats to public safety. Incidents such as oil spills can threaten habitats and drinking water and require rapid and diligent responses. To this end, the Ministry manages a comprehensive emergency response program in order to protect the welfare of the public from environmental emergencies and disasters. The Conservation Officer Service provides critical public safety services, human-wildlife conflict response, and natural resource sector compliance and enforcement to the citizens of B.C.

Through leadership, expertise and sound scientific practices, the Ministry provides services and support necessary to enable government to meet its environmental goals while supporting positive economic outcomes for B.C. The successful delivery of key cross-government initiatives such as the BC Jobs Plan and the Climate Action Plan depend heavily on the knowledge and hands-on planning expertise of Ministry staff. The Ministry's services are delivered by staff across B.C. by way of a province-wide regional service delivery model.

# Strategic Context

## Economic Forecast

British Columbia's real GDP increased by 2.0 per cent in 2013 (according to preliminary GDP by industry data from Statistics Canada), following growth of 1.5 per cent in 2012. Annual gains were observed in consumer spending, manufacturing shipments and exports, while modest declines occurred in employment and housing starts. Several risks to British Columbia's economy remain, including slowing domestic activity, weakness in the US economic recovery, the ongoing sovereign debt situation in Europe, slowing Asian demand and exchange rate volatility.



*Simpson Lake East Conservancy*

## Climate Change

The climate is warming. In its most recent report released in September 2013 the Intergovernmental Panel on Climate Change<sup>1</sup> stated warming is an unequivocal, human influence on the climate system and continued emissions of greenhouse gases will cause further warming and other changes. Within B.C. winter and summer temperatures have increased and the number of frost days has decreased since 1900. Further changes are projected as greenhouse gas emissions continue to rise. The risks to B.C. associated with these changes are substantial.

Reducing greenhouse gas emissions and preparing for unavoidable climate change will help to minimize impacts within the province 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. Many of B.C.'s key trading partners and neighboring jurisdictions are implementing actions, including Alberta, California, Washington, Oregon, China and other Asian countries. Reducing emissions, using and exporting clean technologies and low-carbon fuels and developing an innovative clean energy sector all demonstrate climate leadership on an international scale.

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<sup>1</sup> A scientific intergovernmental panel that assesses scientific, technical and socio-economic information relevant to the understanding of climate change.

In 2013, B.C. placed a five year freeze on the carbon tax to allow other jurisdictions to catch up to B.C.'s leadership position. This was made possible by the Province's considerable progress on climate change initiatives and ensures B.C. industries are not placed at a competitive disadvantage for playing their part in addressing climate change.

## **Population Growth**

The population of B.C. is expected to increase by up to 1.4 million people 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.

## **Resource Management Coordination**

Under the direction of the Natural Resource Board, natural resource ministries have adopted a sector approach which promotes streamlined authorization processes and enhanced access to public services across the province. This facilitates more consistent engagement and consultation with industry, stakeholders, partners and clients. It also enhances inclusion of First Nation, economic and environmental considerations into decision making. The ministries are working together to make these improvements and meet the commitments of the *BC Jobs Plan*.



*Coquihalla Canyon Provincial Park*

# Report on Performance

## Performance Results Summary Table

Goal 1: Effective action on climate change For greater detail see pages 13 to 17	2013/14 Target	2013/14 Actual
<b>1.1 Reduced provincial greenhouse emissions</b> Reduction of greenhouse gas emissions	18% reduction by 2016 (54.1 megatonnes)	DATA NOT AVAILABLE
<b>1.2 Preparing for unavoidable impacts of climate change</b> Review B.C. Government policies, strategies and operational activities to ensure that they will deliver the desired objectives for their sectors in a changing climate	4	4 ACHIEVED
Goal 2: Clean and safe water, land and air For greater detail see pages 17 to 22	2013/14 Target	2013/14 Actual
<b>2.1 Enhanced protection and stewardship of our water resources</b> Water quality trends monitored under the Canada – B.C. Water Quality Monitoring Agreement	96%	96% ACHIEVED
<b>2.3 Enhanced protection and stewardship of our air</b> Clean air standards for industry	8	8 ACHIEVED
Goal 3: Healthy and diverse native species and ecosystems For greater detail see pages 22 to 25	2013/14 Target	2013/14 Actual
<b>3.2 Conserved, maintained and enhanced native species and ecosystems</b> Changes in the conservation status of native species	Net Improvement	Stable NOT ACHIEVED
Goal 4: British Columbians share responsibility for the environment For greater detail see pages 25 to 28	2013/14 Target	2013/14 Actual
<b>4.3 Industry and client groups implement best environmental management practices</b> Completion of the Canada-wide Action Plan for Extended Producer Responsibility	68%	68% ACHIEVED
Goal 5: Sustainable use of British Columbia's environmental resources For greater detail see pages 28 to 30	2013/14 Target	2013/14 Actual
<b>5.2 Optimize outdoor and economic opportunities from British Columbia's parks, fish and wildlife</b> Park visitation and visitor satisfaction		20.7 million
Number of recorded park visits	20.9 million	SUBSTANTIALLY ACHIEVED
Park visitor satisfaction	Maintain or improve (from 80%)	81% ACHIEVED

# Goals, Objectives, Strategies and Performance Results

## Goal 1: Effective action on climate change

### Objective 1.1: Reduced provincial greenhouse emissions



Ts'ili?os Provincial Park

Climate change has 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.

### Strategies

Key strategies for this objective include:

- providing emissions inventory at the provincial, community and industrial level to assist British Columbians in understanding their greenhouse gas emissions and informing them of strategies to reduce them;
- advising Government and reporting to British Columbians on B.C.'s progress in delivering on the commitments in the *Climate Action Plan* and their expected results in reaching B.C.'s greenhouse gas reduction targets;
- establishing government leadership on climate action by leading B.C.'s Carbon Neutral Government commitment, and assisting local governments in meeting their own commitments, including working towards carbon neutrality, under the Climate Action Charter; and

- proposing policies and programs across government to reduce emissions, including carbon pricing, regulatory measures and incentives.

### Performance Measure 1: Reduction of greenhouse gas emissions

Performance Measure	2007 Baseline <sup>2</sup>	2012 Actual <sup>3</sup>	2013 Target	2013 Actual	2014 Target	2015 Target	2016 Target
Annual level of greenhouse gas emissions in British Columbia relative to 2007 levels <sup>1</sup>	66 megatonnes	DATA NOT AVAILABLE	18% reduction by 2016 (54.1 megatonnes)	DATA NOT AVAILABLE	18% reduction by 2016 (54.1 megatonnes)	18% reduction by 2016 (54.1 megatonnes)	18% reduction by 2016 (54.1 megatonnes)

Data Source: Ministry of Environment

<sup>1</sup> 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](http://www.env.gov.bc.ca/cas/mitigation/ghg_inventory/pdf/pir-2008-full-report.pdf).

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

<sup>3</sup> Emissions data for 2012 was unavailable at publication, and is scheduled to be published by July 2014.

### Discussion of Results

The *Greenhouse Gas Reduction Targets Act*, brought into effect on January 1, 2008, put into law B.C.'s target of reducing greenhouse gas (GHG) 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 GHG emissions released into the atmosphere from a number of activities in B.C., 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

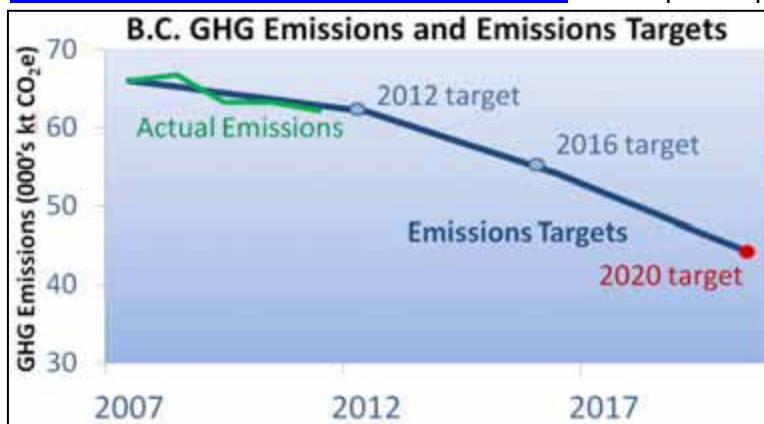


Figure 1 - B.C. GHG Emissions and Emissions Targets

Data Source: Ministry of Environment

approximate 16-month lag relative to the reported year. B.C. publishes a [Provincial Inventory Report](#) with B.C. data only. The report includes B.C. data from the Environment Canada inventory, as well as provincial GHG emissions from afforestation, deforestation and by-product GHG emissions from certain gases from the industrial and electricity sectors.



**Seven Sisters Provincial Park & Protected Area**

GHG emissions decreased from 63.3 megatonnes in 2010 to 62.2 megatonnes in 2011, a change of 1.7 per cent. From 2010 to 2011, emissions decreased due to a decrease in electricity and heat generation and fossil fuel production and refining energy use, and decreased emissions from off-road diesel vehicles. Increases in emissions were seen in coal mine and oil and natural gas fugitive emissions, residential, commercial and institutional buildings, and

heavy duty diesel vehicles. Going forward, climate change policies are expected to have a strengthening role in reducing energy use and GHG emissions. B.C.'s 2011 emissions were 5.8 per cent lower compared to 2007, which puts the province on pace to meet the 2012 interim target of a 6% reduction compared to 2007.

Both the *British Columbia Greenhouse Gas Inventory Report 2012* and the *Progress to Targets Report* required by the *Greenhouse Gas Reduction Targets Act* are due to be released by the ministry in the summer of 2014. GHG emissions data for 2012 was not available at the time of publication of this report.

### **Objective 1.2: Preparing for unavoidable climate change and its impacts**

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.

#### **Strategies**

Key strategies for this objective include:

- working across government to integrate climate change adaptation into government business so that investments made today are informed by the conditions of tomorrow;
- working with partners, such as the Pacific Climate Impacts Consortium, to develop tools to inform B.C. decision makers on the potential impacts of climate change and assist them in making the decisions necessary to prepare for them;

- undertaking studies in key sectors such as agriculture, mining, and coastal infrastructure to highlight vulnerabilities and opportunities for strategic investment; and
- providing options to improve the financing of adaptation efforts and establishing liabilities and accountabilities to meet them.

**Performance Measure 2:** **Review B.C. Government policies, strategies and operational activities to ensure that they will deliver the desired objectives for their sectors in a changing climate**

Performance Measure	2012/13 Baseline	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Completion of sector based policy, strategy, or operational reviews for climate sensitive business areas. <sup>1,2</sup>	2	2	4	4 ACHIEVED	4	5	6

Data Source: Ministry of Environment

<sup>1</sup> See the B.C. Forest Stewardship Action Plan for Climate Change Adaptation at [for.gov.bc.ca/het/climate/actionplan/index.htm](http://for.gov.bc.ca/het/climate/actionplan/index.htm) and the BC Agriculture Climate Change Adaptation Risk + Opportunity Assessment at [pics.uvic.ca/research-pages/affiliated-projects/bc-agriculture-climate-change-adaptation-risk-and-opportunity](http://pics.uvic.ca/research-pages/affiliated-projects/bc-agriculture-climate-change-adaptation-risk-and-opportunity)

<sup>2</sup> Targets are cumulative.

## Discussion

Government's adaptation strategy recognizes the importance of working with stakeholders in climate sensitive sectors, such as natural resources, health care, agriculture, tourism and transportation, to assess risk and prioritize actions to reduce the risk of adverse impacts to the sector from climate change. This performance measure assesses progress towards this commitment by tracking initiatives to review B.C. Government policies, strategies and operational activities to ensure that they will deliver the desired objectives for their sectors in a changing climate.

In 2013-14, the Ministry of Environment worked with the Ministry of Energy and Mines to complete a mining sector assessment. With the Ministry of Forests, Lands, and Natural Resource Operations; Emergency Management BC; and the Ministry of Community, Sport and Cultural Development, the Ministry of Environment also completed an assessment of coastal flood protection policy.

These efforts complement earlier initiatives to conduct a climate change risk and opportunity assessment for the agriculture sector, to develop an action plan for climate adaptation in the forest sector and to assess the vulnerability of highway infrastructure to climate change.

### **Objective 1.3: Promote innovative approaches to grow the Green Economy**

B.C.'s leadership on climate change has sparked innovation across B.C.'s economy to develop business solutions to address environmental problems. By accelerating how we develop and demonstrate new clean energies and technologies here in B.C., our businesses have a strong foundation to export to a growing international market.

#### **Strategies**

Key strategies for this objective include:

- leading cross-government efforts on the Green Economy elements of the *BC Jobs Plan*;
- working with large industrial emitters, such as Liquefied Natural Gas exporters, to develop greenhouse gas management strategies to limit their carbon liability while providing new opportunities to reduce energy costs and access new markets;
- expanding the range of tools to attract investments in innovation such as offsets and government capital spending;
- working across government to promote demonstration projects that showcase B.C. clean energy and technologies as business solutions to environmental problems; and
- coordinating provincial relations with federal and international partners on climate actions to ensure coordinated and effective approaches for B.C. businesses, as well as developing new relationships with export markets.

## **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



*Khutzeymateen Provincial Park*

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](http://LivingWaterSmart.ca));*

- working with the Ministry of Forests, Lands and Natural Resource Operations, the ministries of Health and Agriculture, and the Oil and Gas Commission to protect surface and groundwater resources;
- 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 withdrawals;
- assessing the health of surface and groundwater resources through collaborative science and monitoring programs; 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](#).

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

Performance Measure	2011/12 Actual	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
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	96% or greater	96% or greater	96% or greater

Data Source: Ministry of Environment

## Discussion of Results

Under the Canada – B.C. Water Quality Monitoring Agreement, 31 provincially significant rivers and streams, including the Fraser, Columbia and Peace, are monitored in British Columbia. This performance measure relies on data collected from 38 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 96% target was once again achieved in 2013/14, with 388 of 404 measured variables showing stable or improving water quality trends.

The Federal-Provincial Surface Water Quality Monitoring Group (SWQMG) focused much of their work this year on the development of statistical tools. These tools will assist with the

assessment and interpretation of water quality data, and with the development of future water quality monitoring projects to ensure sampling efforts are maximized.

SWQMG has established a new trend station in Pettitot River to monitor the effects of natural gas extraction (hydraulic fracturing) activities in northeast B.C., and plans to establish a new station on the Quesnel River to assess impacts from heavy metal mining. These new stations will increase the geographic coverage of the network and allow the Province to monitor for cumulative impacts from resource extraction activities. The SWQMG will also focus on developing new reporting tools, including improved web reporting and water quality indicators.

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](#).

### **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;<sup>2</sup>
- regulating the management of waste, remediation of contaminated sites, and development of brownfields (underutilized former industrial/commercial sites) in order to protect human and environmental health and facilitate economic development;



*Francois Lake Provincial Park*

- ensuring 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

<sup>2</sup> As per the Canada-wide Action Plan for Extended Producer Responsibility ([ccme.ca/assets/pdf/epr\\_cap.pdf](http://ccme.ca/assets/pdf/epr_cap.pdf)).

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. Emission reduction actions, cleaner technology and shifts in behaviour have all contributed to downward trends in pollutants such as nitrogen dioxide and fine particulate matter over the past decade.

#### **Strategies**

Key strategies for this objective include:

- leading the implementation of policies and initiatives designed to avoid, minimize and offset emissions from industry, transportation, urban growth, ports and marine vessels;
- continuing to develop new industrial air emissions standards that require using the best achievable technology practices;
- developing ambient air quality objectives, standards, guidelines, and other resources 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; and
- collaborating with the Oil and Gas Commission, Ministry of Energy and Mines, the Ministry of Natural Gas Development 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 4: Clean air standards for industry**

Performance Measure	2008/09 Baseline	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Number of air emission standards incorporating current Best Achievable Technology practices	3	7	8	8 ACHIEVED	9	10	11

Data Source: Ministry of Environment

Note: Target figures are cumulative.

## Discussion of Results

The government works with industry to ensure 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. The seven standards developed in past years have been for the [slaughter and poultry processing industries](#); [biomass-fired electrical power generation](#); [wood-burning boilers used in agricultural operations](#); [pellet plant manufacturing operations](#); [waste to energy facilities](#); [emission from biomass boilers](#); and [beehive burner phase out](#) (by 2016).

In 2014, gas turbine emissions guidelines were developed in order to provide clarity for proponents of LNG facilities. Once finalized, the guidelines will be used to inform the environmental assessment application process for, and authorizing emissions from, gas turbines used in LNG plants and associated electrical power generation.

### Objective 2.4: Effective management of environmental risks

Events such as 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, as well as risks to public safety involving human-wildlife conflict.



*Botanical Beach Provincial Park*

### Strategies

Key strategies for this objective include:

- ensuring the prevention, preparation, mitigation and response to spills that affect 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;

- issuing permits to minimize the creation of future contaminated sites and manage the remediation of high-risk contaminated sites; and
- 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 wildlife veterinarian from the Ministry of Forests, Lands and Natural Resource Operations.

## **Goal 3: Healthy and diverse native species and ecosystems**

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

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 information in support of science, policy development and shared stewardship;
- employing the [B.C. Species and Ecosystems Explorer](#) to make available information on species and ecosystems at risk, including their conservation status, associated threats, and conservation priorities; and
- assessing the conservation status of plants, animals and ecosystems and related risks and threats throughout B.C., including parks and protected areas.

### **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 the public and stakeholders to accept a greater role in environmental stewardship, and facilitates community initiatives to protect and restore native species and ecosystems.

## Strategies

Key strategies for this objective include:

- implementing applied science and research programs to support continued improvement in the conservation of species and ecosystems;
- providing leadership in overall program coordination for species at risk, including preparing and implementing recovery plans, legal listing, and intergovernmental relations;
- 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;
- addressing invasive species by collaborating with partners on strategies, providing enforcement services under the *Wildlife Act*, and using a specialized Conservation Officer Service response team to control alien species; and
- supporting natural resource integrated decision making through the development of consistent approaches, tools, and policies.



*Mount Robson Provincial Park*

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

Performance Measure	2011/12 Actual	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Changes in the conservation status of species	Net Decline	Net Decline	Net Improvement	Stable TARGET NOT MET	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 of Results

B.C. has some of the most diverse species of any Canadian province. Changes in the status of native species of plants and animals are important indicators of the ministry's efforts to promote shared stewardship of B.C.'s ecosystems and native species. This performance measure coincides with a similar indicator used 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 \(CDC\)](#). Every species or subspecies in the province is given a conservation status rank, which is a measure of its risk of becoming extinct in B.C., using



Purden Lake Provincial Park

internationally recognized methods and science-based criteria and factors such as rarity, trends in populations or habitat, and threats.

In 2013/14 the CDC conducted reviews of 368 species status ranks; 295 of these reviews were of previously unranked species. Of the 73 previously ranked species, 26 remained unchanged from previous assessments, 37 species status ranks improved, and 10 species status ranks

worsened. Only 4 species had changes in status rank that reflected real changes in abundance or distribution (2 improved, 2 worsened). Other changes in ranking were not reflective of changes in populations, but were due to improvements in inventory information, knowledge of species taxonomy and threats, or ranking procedures.

While the target of a net improvement in the status of ranked native species and ecosystems was not met, the results nevertheless indicated relative stability over the reporting period. The net improvement overall of 27 out of all 368 species assessed represents a modest 7% improvement, and the low number of species status changes (4) due to real population changes indicates some level of stability.

### **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.

#### **Strategies**

Key strategies for this objective include:

- 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;
- fostering collaboration with local, regional and federal governments and other partners to advance the establishment of new terrestrial and marine protected areas;
- 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**

Key strategies for this objective include:

- promoting the sharing of responsibility for protecting the environment, human health, and public safety, community stewardship Initiatives, and the Bear Smart and [Urban Ungulate](#) 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
- providing open access to scientific data and information about the state of environment through websites such as [Environmental Reporting BC](#) and [BCAirQuality.ca](#).

### **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 that 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; and
- using social media, such as the [LiveSmartBC.ca](#) and Environmental Reporting BC Twitter channels ([@LiveSmartBCca](#) and [@EnvReportBC](#)), to engage British Columbians on current environmental issues.



*Fintry Provincial Park& Protected Area*

## 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

Key strategies for this objective include:

- continuing to work with industry to develop, implement and continuously improve industry-led product stewardship programs;<sup>3</sup>
- encouraging compliance by reporting those in non-compliance with Ministry environmental standards and regulatory requirements, and publishing the names of those in non-compliance in the [Quarterly Environmental Enforcement Summaries](#);

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<sup>3</sup> As per the Canada-wide Action Plan for Extended Producer Responsibility ([ccme.ca/assets/pdf/epr\\_cap.pdf](#)).

- expanding the role of qualified and approved professional delivery and reliance, such as the [Contaminated Sites Approved Professional Society](#);
- continuing to explore opportunities to reduce regulatory burden through changes 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 Baseline	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Percentage of product sub-categories <sup>1</sup> in the Canada-wide Action Plan for Extended Producer Responsibility fully covered by industry-led recycling programs in British Columbia	53%	68%	68%	68% ACHIEVED	79%	84%	95%

**Data Source:** Ministry of Environment

<sup>1</sup> 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 of Results

B.C.'s industry-led product stewardship programs require producers of designated products to take Extended Producer Responsibility (EPR) for the life cycle management of their products, including collection and recycling. EPR initiatives have been proven to yield substantial economic and environmental benefits, including generating job opportunities, reducing the amount of packaging on the market, lowering energy consumption and greenhouse gas production levels and increasing recycling rates.

B.C. is a participant in the Canada-Wide Action Plan for EPR, and in 2012, EPR Canada, a non-partisan group, ranked B.C. first among the federal, provincial and territorial governments for its development of EPR policies and programs. In 2013, [B.C. took top honours a second time in a tie with Quebec](#).

Currently, B.C. has 23 operational stewardship programs, covering 68% (13 of 19) of the product sub-categories identified in the Canada-wide Action Plan for EPR. As planned in the 2013/14 Service Plan, no product categories or subcategories were added to the Recycling

Regulation during 2013/14. The program remains on target to meet the Canada-Wide Action Plan for EPR timelines.

The EPR approach remains a ministry priority and is recognized as a good policy approach to support superior environmental results. More information on B.C.'s approach to product stewardship, a complete list of products with industry-led stewardship programs and listing of products which are being evaluated for possible regulation in the future can be found on the [Ministry of Environment's product stewardship website](#).

## **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 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:

- operating the hydrometric and air monitoring networks<sup>4</sup> to obtain information to support water and airshed management;
- acquiring, interpreting and openly sharing environmental science and information; and
- 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.

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<sup>4</sup> 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.



*A pair of sockeye salmon (*oncorhynchus nerka*)*

## Strategies

Key strategies for this objective include:

- promoting sponsorship and donation opportunities through the Park Enhancement Fund to enhance conservation and recreation opportunities in BC Parks;
- implementing a volunteer strategy to engage British Columbians in conservation and recreation activities throughout BC Parks;
- 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; and
- optimizing stewardship and economic opportunities with First Nations, local communities, non-profit groups, private land owners and others.

## Performance Measure 7: Park visitation and visitor satisfaction

Performance Measure	2011/12 Actual	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Number of recorded park visits	19.3 million	20.5 million	20.9 million	20.7 million SUBSTANTIALLY ACHIEVED	21.3 million	21.7 million	22.0 million
Park visitor satisfaction level	82%	79%	Maintain or improve (from 80%) <sup>1</sup>	81% ACHIEVED	Maintain or improve (from 80%)	Maintain or improve (from 80%)	Maintain or improve (from 80%)

Data Source: Ministry of Environment, BC Parks Visitor Satisfaction Survey and Parks Attendance and Revenue System

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

**Note:** The satisfaction rating is based on a satisfaction survey that is completed by users of campgrounds around the province. In 2013, over 2,400 people responded to the survey.

## Discussion of Results

B.C.'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. This data provides 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.

Preliminary estimates of park visitation shows the number of park visits will be very close to the target of 20.9 million.

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. The actual visitor satisfaction level in 2013/14 was 81 per cent; one per cent higher than the target. The increase in visitor satisfaction can be mostly attributed to higher scores given for the cleanliness of restrooms and condition of facilities.



*Bugaboo Provincial Park*

# Report on Resources: Summary Table

	2013/14 Estimates <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
<b>Environmental Protection</b>	8,324	160	8,484	9,973	1,489
<b>Environmental Sustainability</b>	19,083	0	19,083	17,451	(1,632)
<b>BC Parks</b>	31,422	0	31,422	30,979	(443)
<b>Conservation Officer Services</b>	16,714	0	16,714	17,894	1,180
<b>Climate Action</b>	3,271	0	3,271	2,989	(282)
<b>Executive and Support Services</b>	21,132	0	21,132	20,820	(312)
<b>Sub-Total</b>	<b>99,946</b>	<b>160</b>	<b>100,106</b>	<b>100,106</b>	<b>0</b>
<b>Park Enhancement Fund</b>	1,500	153	1,653	1,653	0
<b>Sustainable Environment Fund</b>	18,935	0	18,935	18,935	0
<b>Adjustment of Prior Year Accrual<sup>3</sup></b>	0	0	0	(510)	(510)
<b>Total</b>	<b>120,381</b>	<b>313</b>	<b>120,694</b>	<b>120,184</b>	<b>(510)</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>					
<b>Executive and Support Services</b>	18,227	1,936	20,163	20,369	206
<b>Park Enhancement Fund</b>	400	0	400	194	(206)
<b>Total</b>	<b>18,627</b>	<b>1,936</b>	<b>20,563</b>	<b>20,563</b>	<b>0</b>

<sup>1</sup> Estimates amounts correspond to the Estimates as presented to the Legislative Assembly in June 2013.

<sup>2</sup> Other Authorizations are approved contingencies based on actual usage, including capital contingencies for land purchase.

<sup>3</sup> The “Adjustment of Prior Year Accrual” is a reversal of accruals in the previous year.

# Environmental Assessment Office

## Highlights of the Year

The Environmental Assessment Office is conducting environmental assessments of 75 projects representing over \$110 billion in potential capital investment to B.C.'s economy. Four of those projects were referred to ministers for decision with all receiving an environmental assessment certificate and approval to proceed to the permitting process.

**Table 1: Assessments completed in the fiscal year of 2013/14**

Project Name	Sector	Potential Capital Investment (\$M)	CEAA Coordinated EA <sup>5</sup>	Certification Date
Fortune Creek	Energy	350.00	No	October 7, 2013
Line Creek Operations Phase II	Mining	140.00	No	September 25, 2013
Vancouver Airport Fuel Delivery	Energy	210.00	Yes	December 11, 2013
Narrows Inlet Hydro Project	Energy	70.00	No	January 20, 2014

The Environmental Assessment Office also conducted amendments to 13 certified projects for a variety of reasons, including changes in ownership, relocation and reduction in the length of a transmission line, project name change, pipeline route refinements, and maximum diversion flow for a hydroelectric project. While amendments are not governed by legislated timelines, they take time and resources for the Environmental Assessment Office to manage.

## Coordination with the Federal Government

The Environmental Assessment Office has continued to realize major advancements in coordination with the federal government after signing the [Memorandum of Understanding](#) to implement substitution in March 2013. Substitution is a tool enabled by the *Canadian Environment Assessment Act, 2012* (CEAA 2012) that supports B.C.'s longstanding goal of "one project, one environmental assessment." This includes commitments of the Environmental Assessment Office to meet CEAA 2012 requirements in order for the federal government to grant substitution. Substitution means where both federal and provincial environmental assessments are triggered, there will be one process – the provincial one – and two decisions –

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<sup>5</sup> In some cases, the Canadian Environmental Assessment Agency reviews proposed projects that are also undergoing review by the Environmental Assessment Office. In 2012, federal legislation was amended to introduce new triggers for determining which proposed projects must undergo federal environmental assessment. The projects are listed in this table.

federal and provincial. British Columbia is the first and only jurisdiction in Canada to request substitution.

In 2013/14, the EAO successfully secured federal agreement for a substituted process for seven projects (Carbon Creek Coal Mine, Sukunka Coal, Echo Hill Coal, LNG Canada Export Terminal, Arctos Anthracite, and Woodfibre LNG Projects), and by doing so, will eliminate the duplication involved in having two assessments for a single project.

## Review of the Environmental Assessment Process

The mandate letter provided to the Minister of Environment by the Premier on June 10, 2013 called for a review of the Environmental Assessment Office, to ensure timelines are appropriate for both economic development and environmental protection objectives, and to make recommendations for improvement as necessary. In October 2013, the Environmental Assessment Office developed a workplan that outlined the approach and steps the office would take to meet the commitment of the review. The review objectives are to:

- shorten the duration of environmental assessments, from beginning to end;
- provide greater certainty and transparency for proponents and participants in environmental assessments;
- increase the efficiency and effectiveness of the Environmental Assessment Office; and
- strengthen the Environmental Assessment Office's capacity and collaboration with government agencies.

The Environmental Assessment Office implemented the following early deliverables under the EAO review in 2013/14:

- [First Nation Proponent Guidelines](#) to ensure consistency with provincial policy and to improve clarity, transparency and certainty for proponents and stakeholders. The guidelines were developed with input from the Mining Association of BC, BC Business Council, Canadian Association of Petroleum Producers and Clean Energy BC.
- Environmental Assessment Advisory Working Group Terms of Reference for all members of provincial environmental assessment working groups to ensure greater clarity and consistency for working group participants including roles, responsibilities, and expectations related to environmental assessment milestones.
- [Guideline for the Selection of Valued Components and Assessment of Potential Effects](#) is used by EAO project staff to appropriately scope the assessment of a specific project, including focusing on issues with the highest potential for adverse effects, at an earlier stage.

## Purpose of the Office

The Environmental Assessment Office's vision is to support vibrant communities, a healthy environment and a prosperous economy. The Environmental Assessment Office ensures proposed major projects meet provincial environmental, economic and social goals, and the interests and concerns of B.C.'s families, businesses and communities and First Nations are considered in each assessment.

The Environmental Assessment Office evaluates proposed projects that are reviewable under the [Environmental Assessment Act](#) for potential adverse environmental, economic, social, heritage and health effects and verifies and enforces compliance with the conditions of environmental assessment certificates.



*Cabin gas plant project*

## Strategic Context

The workload for the Environmental Assessment Office continued to remain high due to the number of projects being assessed in 2013/14. The Office effectively managed environmental assessments of 75 reviewable projects which represented over \$110 billion in capital investment to British Columbia. The majority of projects reviewed were in the energy and mining sector. A major focus for the Office was on proposed liquefied natural gas projects. The Office realigned its resources to support the increase in proposed liquefied natural gas and natural gas developments and established a dedicated team to work on these projects.

## Federal Statutory Amendments

The Environmental Assessment Office has worked closely with the Canadian Environmental Assessment Agency to determine how the two governments can best coordinate on environmental assessments of proposed projects in British Columbia. Through this dialogue, the two governments have reaffirmed their commitment to maintaining the rigor of environmental assessment and First Nations consultation while eliminating or minimizing duplication of the assessment process.

## First Nations

Consultation with First Nations is a critical component of the environmental assessment process. For each proposed project under review, the Environmental Assessment Office contacted all potentially affected First Nations early in the environmental assessment process, provided the opportunity to engage, and offered capacity funding to participate. Not all First Nations chose to participate in reviews of potential projects.

# Report on Performance

## Performance Results Summary Table

Goal 1: Respected Environmental Assessment For greater detail see pages 37 to 41	2013/14 Target	2013/14 Actual
<b>1.1 Ensure desired outcomes related to provincial environmental, social and economic goals are delivered to the people of British Columbia</b>		
Compliance inspections completed on certified projects	17	23 EXCEEDED
Timely response to compliance reports received from Environmental Certificate holders	80%	95% EXCEEDED
Application reviews in the B.C. environmental assessment process are completed within 180-days	100%	100% ACHIEVED

# Goals, Objectives, Strategies and Performance Results

## 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 potentially adverse effects of a proposed project are identified and avoided or mitigated so if the project is to proceed, it will do so in a sustainable manner. The Environmental Assessment Office ensures that once an environmental assessment has been completed, Ministers are informed of both the potential benefits and adverse effects of the proposed project before they decided whether or not to issue an environmental assessment certificate.

### Strategies

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; and
- a compliance management program to ensure that projects comply with certificate conditions and commitments.

### Performance Measure 1: Compliance inspections completed on certified projects

Performance Measure	2012/13 Baseline	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Number of compliance inspections completed on certified projects	17	17	23 EXCEEDED	21	23	25

Data Source: Environmental Assessment Office compliance staff, manually compiled.

## Discussion of Results

The Environmental Assessment Office conducts inspections of environmental assessment certified projects to promote compliance and to verify legally binding certificate conditions are being followed. This compliance oversight contributes to the goal of a respected environmental assessment process by providing certainty that the mitigations developed during the environmental assessment will be implemented. The Environmental Assessment Office has a dedicated compliance and enforcement team who work closely with other compliance agencies to provide compliance oversight.

In 2013/14, the Environmental Assessment Office focussed on expanding formal and informal partnerships with other compliance agencies. For example, the Environmental Assessment Office and the Oil and Gas Commission signed a Memorandum of Understanding that includes a collaborative approach to compliance and enforcement on oil and gas projects. A similar agreement exists between the Ministry of Forests, Lands and Natural Resource

Operations. Approximately 150 people across the Province in the Ministry of Forests, Lands and Natural Resource Operations and the Oil and Gas Commission are authorized under the *Environmental Assessment Act* to inspect environmental assessment projects. The Environmental Assessment Office also works with compliance staff at the Ministry of Energy and Mines, and the Ministry of Environment (Conservation Officer Service and the Environmental Protection Division).



**Bear Mountain Wind Park Project – Compliance Inspection**

Each year, the Environmental Assessment Office prioritizes which projects will be inspected and when, based on risk assessment including project location, type, complexity and phase. The Environmental Assessment Office exceeded its target of 17 inspections, completing 23 field inspections in 2013/14. The Environmental Assessment Office did more inspections than originally planned as follow up inspections were required to address emerging compliance issues and to ensure previously noted problems were addressed. In addition to the Environmental Assessment Office inspections, other compliance agencies also conducted many inspections on EA projects.

Through the review on the Environmental Assessment Office, the compliance and enforcement team is developing policy and procedures to ensure a robust, consistent and risk-based approach to compliance oversight. This includes guidance to assist with the development of clear, measurable and enforceable conditions in environmental assessment certificates. Strong conditions and compliance oversight by the Environmental Assessment Office and other agencies provide certainty that projects are constructed and operated consistent with legally-binding environmental assessment certificates.

Compliance and enforcement for environmental assessment projects is a core business requirement for the Environmental Assessment Office. As the Environmental Assessment Office's compliance program continues to expand and increases efficiency through program and policy improvements, the Environmental Assessment Office has increased its target number of compliance inspections in future years. The revised targets are reflected in the 2014/15-2016/17 Ministry of Environment and Environmental Assessment Office Service Plan.

**Performance Measure 2: Timely response to compliance reports received from Environmental Certificate holders.**

Performance Measure	2013/14 Baseline	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Percentage of compliance reports submitted by Environmental Assessment Certificate holders that are reviewed by staff and posted online within six weeks of receipt.	New measure	80%	95% EXCEEDED	95%	95%	95%

**Data Source:** Environmental Assessment Office compliance staff, manually compiled

### Discussion of Results

Environmental Assessment certificates include conditions that require companies to submit periodic self-assessments on the compliance with all requirements in their certificate. These reports are one of many sources of information used by compliance staff from the Environmental Assessment Office to inform compliance oversight. Self-monitoring and reporting supplements the field and administrative (i.e. desk-based) inspections and compliance promotion activities undertaken by the Environmental Assessment Office and other compliance agencies.

Environmental Assessment Office compliance staff review all self-reports and post them online once any outstanding issues have been resolved. This contributes to the goal of a respected environmental assessment process by ensuring companies are reporting as required and in a timely manner.

The Environmental Assessment Office exceeded its target of reviewing and posting 80% of self-reports within six weeks in 2013/14. As this was a new measure in 2012/13 targets were selected based on the Environmental Assessment Office's expectations of the issues resolution that would be required before posting these reports. Certain cases require the review, investigation and resolution of non-compliance before the self-report can be posted.

Experience over the last two years has shown 95% of the time, the Environmental Assessment Office is able to resolve issues within six weeks so the self-reports can be posted within that timeframe.

By posting the compliance self-reports, the Environmental Assessment Office ensures transparency and accountability to the public. Making this information publicly available also assists with compliance promotion and helps industry develop similar projects in a responsible manner.

Providing public information about compliance and enforcement continues to be a priority for the Environmental Assessment Office. Based on experience over the last two years, the Environmental Assessment Office has increased its targets for reviewing and posting self-reports. The revised targets are shown in the 2014/15-2016/17 Ministry of Environment and Environmental Assessment Office Service Plan.



*Upper Harrison Hydroelectric Project – Intake and headpond.*

**Performance Measure 3:** **Application reviews in the B.C. environmental assessment process are completed within 180-days**

Performance Measure	2013/14 Baseline	2012/13 Actual	2013/14 Target	2013/14 Actual	2014/15 Target	2015/16 Target	2016/17 Target
Percentage of application reviews in the B.C. environmental process completed within 180-days:	100%	100%	100%	100%	100% ACHIEVED	100%	100%

Data Source: Environmental Assessment Office staff, manually compiled

## Discussion of Results

The legislative timelines in the *Environmental Assessment Act* include a 180-day limit for the Environmental Assessment Office to review applications for environmental assessment certificates. These timelines offer process certainty to stakeholders and are important for effective planning and decision making.

Once a proponent's project application is accepted for review, the Environmental Assessment Office strives to complete the environmental assessment with the 180-day time limit. However, within the 180-days, proposed projects may be suspended for various reasons, including allowing additional time for proponents to gather necessary information about potential

adverse effects. Of the four projects that were referred to ministers for decision in 2013/14, all were suspended at some point during the environmental assessment process; however, all were assessed within the 180-day timeline.

The Environmental Assessment Office also reviewed one project (Vancouver Airport Fuel Delivery) which did not trigger the *Reviewable Projects Regulation*; however, it was designated as reviewable at the request of Vancouver Airport Fuel Facilities Corp (proponent) due to the potential for significant adverse impacts, significant public interest, and the coordinated approach within the Environmental Assessment Office to maximize cooperation among multi-jurisdictional process. The project was also screened under the *Port Authority Environmental Assessment Regulations* of the *Canadian Environmental Assessment Act* (1992) reviewed by the Port Metro Vancouver. They announced approval of the project in December 2013.

## 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 identify and implement process 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 Environmental Assessment Office;
- Ensuring 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: Enhanced efforts to coordinate environmental assessment with the federal government**

Coordination with the federal government has been a top priority of the Environmental Assessment Office since the early 1990's and continues to be a priority in light of amendments to the *Canadian Environmental Assessment Act* that came into force in July 2012.

There are key opportunities to address inefficiencies in the review process and as such, the Environmental Assessment Office continues to pursue the goal of "one project, one environmental assessment" to reduce duplication and overlap while increasing certainty and predictability, and maintaining rigorous environmental standards.

### **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 understand and take advantage of new tools in the *Canadian Environmental Assessment Act*; and
- communicating with proponents, First Nations, and the public about how B.C. and Canada coordinate on environmental assessment.

## Report on Resources: Summary Table

	2013/14 Estimates <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
<b>Environmental Assessment</b>	8,754	1,498	10,252	10,252	0
<b>Sub-Total</b>	<b>8,754</b>	<b>1,498</b>	<b>10,252</b>	<b>10,252</b>	<b>0</b>
<b>Adjustment of Prior Year Accrual<sup>3</sup></b>	0	0	0	0	0
<b>Total</b>	<b>8,754</b>	<b>1,498</b>	<b>10,252</b>	<b>10,252</b>	<b>0</b>

<sup>1</sup> Estimates amounts correspond to the Estimates as presented to the Legislative Assembly in June 2013.

<sup>2</sup> Other Authorizations are approved contingencies based on actual usage.

<sup>3</sup> The Adjustment of Prior Year Accrual is a reversal of accruals in the previous year.

# Appendix A: Contact Information

## Ministry of Environment Contact Information

### Headquarters

Victoria

Telephone: 250 387-1161

Fax: 250 387-5669

Website: [www.gov.bc.ca/env/](http://www.gov.bc.ca/env/)

Additional contact information can be found at [www.gov.bc.ca/env/contacts.html](http://www.gov.bc.ca/env/contacts.html).

### Regional Offices

#### Coast Region

##### West Coast

*Nanaimo Office:*

Telephone: 250 751-3100

Fax: 250 751-3103

Website: [www.env.gov.bc.ca/van-island/](http://www.env.gov.bc.ca/van-island/)

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/](http://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/](http://www.env.gov.bc.ca/thompson/)

*Williams Lake Office:*

Telephone: 250 398-4530

Fax: 250 398-4214

Website: [www.env.gov.bc.ca/cariboo/](http://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: [www.env.gov.bc.ca/kootenay/](http://www.env.gov.bc.ca/kootenay/)

Other offices: Castlegar, Creston/West Creston, Fernie, Grand Forks, Invermere, Golden, Revelstoke

*Penticton Office:*

Telephone: 250 490-8200

Fax: 250 490-2231

Website: [www.env.gov.bc.ca/okanagan/](http://www.env.gov.bc.ca/okanagan/)

*Cranbrook Office:*

Telephone: 250 489-8540

Fax: 250 489-8506

## Northern Region

### Skeena

*Smithers Office:*

Telephone: 250 847-7260

Fax: 250 847-7591

Website: [www.env.gov.bc.ca/skeena/](http://www.env.gov.bc.ca/skeena/)

Other offices: Atlin, Burns Lake, Dease Lake, Terrace/Lakelse Lake

**Omineca**

*Environmental Protection Division  
Conservation Officer Service  
Water Stewardship Division  
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: [www.env.gov.bc.ca/omineca/](http://www.env.gov.bc.ca/omineca/)

Other offices: Vanderhoof, Mackenzie, Mount Robson, Fort St. James

**Peace**

*Fort St. John Office:  
Telephone: 250 787-3411  
Fax: 250 787-3490*

Website: [www.env.gov.bc.ca/peace/](http://www.env.gov.bc.ca/peace/)  
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: <http://www.env.gov.bc.ca/cos/rapp/form.htm>

## **Environmental Assessment Office Contact Information**

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PO Box 9426 Stn Prov Govt  
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Website: [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca)

### **LNG Facilities and South and Westcoast Region**

(Dams, Dykes and Diversions, Shoreline Modification, and Groundwater Projects)  
Scott Bailey – Executive Project Director  
250 356-1763  
[Scott.Bailey@gov.bc.ca](mailto:Scott.Bailey@gov.bc.ca)

**Coal and Aggregates Projects and Kootenays Region**

(Industrial mineral, construction stone, sand and gravel)

Karen Christie – Executive Project Director

250 387-2200

[Karen.L.Christie@gov.bc.ca](mailto:Karen.L.Christie@gov.bc.ca)

**Food Processing, Waste & Water Management, Destination Resorts and Transportation Projects and Northwest Region**

Chris Hamilton – Executive Project Director

250 387-5606

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**Power and Industrial Projects and Northeast Region**

Brian Murphy – Executive Project Director

250 387-9409

[Brian.Murphy@gov.bc.ca](mailto:Brian.Murphy@gov.bc.ca)

**Metal Mining Projects, Thompson Okanagan and Cariboo Region**

Shelley Murphy – Executive Project Director

250 387-2563

[Shelley.Murphy@gov.bc.ca](mailto:Shelley.Murphy@gov.bc.ca)

**Gas and Oil Projects and Omineca Region**

Trish Balcaen – Executive Project Director

250 387-1409

[Trish.Balcaen@gov.bc.ca](mailto:Trish.Balcaen@gov.bc.ca)

**EA Process and Communications**

Greg Leake – Director, Client Communications and Engagement

250 356-7479

[Greg.Leake@gov.bc.ca](mailto:Greg.Leake@gov.bc.ca)

**Policy, Legislation, Compliance & Enforcement, Intergovernmental Relations and First Nations**

Paul Craven – A/Executive Director, Policy and Quality Assurance

250 387-6758

[Paul.Craven@gov.bc.ca](mailto:Paul.Craven@gov.bc.ca)

## **Environmental Assessments**

Michelle Carr – Assistant Deputy Minister, Environmental Assessment Operations

250 387-9408

[Michelle.Carr@gov.bc.ca](mailto:Michelle.Carr@gov.bc.ca)

## **Associate Deputy Minister's Office**

Doug Caul - Associate Deputy Minister and Executive Director designated under the  
*Environmental Assessment Act*

250 356-7475