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<p><b>ESTIMATES NOTE (2012)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Budget Overview</b></p>
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### KEY MESSAGES

- **Key message #1 – The Conservation Officer Service (COS) has an annual budget of \$16,714,000 for Fiscal Year 2013/14.**
- **Key message #2 – Overall, the COS budget has remained the same from fiscal year 2012/13.**

### **CURRENT STATUS:**

#### ***Key message #1:***

- The COS is staffing to 100% of its sworn officer complement (148 full time positions).
- Budget breakdown
  - 75 % allocated to salary and benefits;
  - 13 % allocated to vehicle and equipment amortization and operations;
  - 8 % allocated to travel and materials/supplies;
  - 5 % allocated to training, information systems, PEP Call Center and RCMP Operations Center;
  - -1 % recovered through partnership agreements.

#### ***Key message #2:***

- A significant portion (75%) of the budget is allocated for salary and benefits. Approximately 21% of the budget is allocated for operational costs to deliver services. Costs that are outside the control of the COS, such as fuel, can potentially negatively impact the COS service delivery.
- Coordination of operational activities between the COS and Compliance and Enforcement staff from the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) continues in order to ensure the effective deployment of resources on the landbase.
- Efficiencies related to training, development of policy and procedure and staffing actions will also be explored with MFLNRO in 2013/14.
- Lag times inherent in staffing vacancies will be used to offset any salary pressures.

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<p>ESTIMATES NOTE (2012)  <b>Confidential</b></p> <p>Ministry of Environment  Date: June 2013</p>	<p>ISSUE TITLE:</p> <p><b>Conservation Officer  Service Overview</b></p>
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### KEY MESSAGES

- **Key message #1 – There are 156.5 positions in the Conservation Officer Service (COS), of which 148 are sworn Conservation Officer (CO) positions and 8.5 are civilian positions:**
  - **Provincial Operations: 115 positions comprised of 87 Field Officers (including 1 newly established CO 21 position on Haida-Gwaii, being staffed with preference to representative from Haida FN), 19 Sergeants (including new position in Haida-Gwaii), 8 Inspectors and 1 Chief Superintendent. Primarily responsible for public safety including response to human-wildlife conflicts, first responders to reports of violations in progress, and enforcement of environmental regulations.**
  - **Provincial Investigations Branch: 25 positions comprised of 15 Detective Sergeants, 2 Staff Sgts and 1 Inspector in the Major Investigations Unit (MIU), 5 Detective Sergeants and 1 Inspector in the Intelligence and Special Investigations Units, and 1 Superintendent. Primarily responsible for investigating environmental and forest crimes, those of significant impact upon human health, the environment and government revenue.**
  - **Headquarters and Program Support: 15.5 positions comprised of the Chief Conservation Officer, 1 Chief Superintendent) [position currently vacant due to hiring freeze), 2 Inspectors, 1 Staff Sergeant, 2 Sergeants and 8.5 civilian positions. Primarily responsible for providing strategic leadership, policy and procedures, personnel development and training, and COS resource management.**
- **Key message #2 - The Conservation Officer Service saw an increase in staff as a result of government's October 2010 realignment of the natural resource sector ministries:**
  - **Seventeen staff positions from the Ministry of Forests and Range's Special Investigations Unit were transferred to the COS. These positions were amalgamated into the Provincial Investigations Branch. One vacant position was transferred to the Staff Development, Training and Recruiting Section to build capacity to address staff development and training needs.**

### CURRENT STATUS:

#### ***Key Message # 1:***

- The COS is a natural resource law enforcement agency that specializes in public safety as it relates to human-wildlife conflict, commercial environmental and industrial investigations, and compliance and enforcement services. COs have responsibilities to enforce 33 federal and provincial statutes.

The COS undertakes investigations and enforcement in response to violations detected through internal compliance verification activities, reports from the public and other agencies, and proactive enforcement patrols. COs are also appointed as Special Provincial Constables under the Police Act and have unlimited appointments to enforce all Acts and Statutes, and protect the public and preserve the peace.

- COs are located in 46 communities in the province. Deployment of officers within the province is based upon a number of criteria including, call demand for public safety and enforcement concerns, population size, level of industrial/commercial and recreational activity, number of existing officers within the area, emerging environmental trends, and partnership opportunities.

### **Key Message # 2:**

- The COS saw an increase in staff as a result of government's October 2010 realignment of the Natural Resource Sector ministries. Seventeen staff positions from the Ministry of Forests and Range's Special Investigations Unit were transferred to the COS; one of these positions (BL Inspector) has since been discontinued when the incumbent transferred back to FLNRO. The position was reduced in order to provide FTE offset for upgrading of two DSgt positions to SSgt. The remaining 16 positions were amalgamated into the Provincial Investigations Branch. One vacant position was transferred to the Staff Development, Training and Recruiting Section to build capacity to address staff development and training needs.
- The COS Provincial Investigations Branch conducts large-scale industrial or commercial environmental crime investigations. The very nature of these investigations is complex, labour intensive and is at the criminal standard for prosecution by Provincial Crown Counsel.
- Provincial Investigations Branch has seen a significant increase in workload (32 cases in 2010, 48 cases in 2011, and 72 cases in 2012). The file load has increased concurrent with periods of limited PIB augmentation of Field Operations during peak times for human-wildlife conflicts and staffing shortages, compounding the remaining workload.

- Examples of Recent Major Case Investigations:

Investigation	Nature	Outcome
Testalinden Lake	Dam failure	Case has been completed: decision to not proceed with charges was supported.
Coldstream	Contaminated drinking water	Before the Courts.
Tech Cominco	Intentional Contamination Chemical Pollution	Before the Courts.
Cheakamus Creek	Train derailment, Chemical Pollution	Guilty plea. Fine \$400k plus reparations.
Lillooet	Fatal attack by Black Bear	Bear responsible for fatal attack destroyed.
Kinder Morgan Canada Inc., Cusano Contracting Inc, R.F. Binnie and Associates Ltd.	Burnaby Oil Spill	Each party fined \$1,000 and ordered to each pay \$149, 000 to the Habitat Conservation Trust Fund.

### **Conservation Officer Service Positions (FTEs)**

<b>Type of position</b>	<b>2013/ 2014<sup>1</sup></b>	<b>2012/ 2013</b>	<b>2011/ 2012</b>	<b>2010/ 2011</b>	<b>2009/ 2010</b>	<b>2008/ 2009</b>
Uniform/patrol Conservation Officer and Sergeant	106	105	105	105	104	98
Plainclothes Investigation Sergeant and Detective Sergeant	22	22	24	25	11	11
Seasonal Conservation Officer	0	0	0	0	0	8 <sup>2</sup>
<i>Subtotal – boots on the ground (FTEs)</i>	<i>128</i>	<i>127</i>	<i>129</i>	<i>130</i>	<i>115</i>	<i>117</i>
Inspector and Executive Officer	16	17	17	17	17	17
Training Sergeant	2	2	2	1	1	1
Predator Conflict Reduction and Response Coordinator	1	1	1	1	0	0
Staff Sergeant, Quality Control	1	1	1	1	0	0
Civilian	8.5	8.5	9.5	11.5	11.5	11.5
Total Conservation Officer Service positions (sworn officer and civilian)	156.5	156.5	159.5	161.5	144.5	146.5

**\*Notes:**

Positions are reported as of the end of each fiscal year;

\*indicates seasonal positions (FTEs) that equated to approximately 14 staff employed for 8 month terms;

Increase in field conservation officers in 09/10 resulted from the demising of the seasonal program;

In October of 2010, seventeen positions (FTEs) were transferred to the COS from the former Ministry of Forests and Range.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The COS is responsible for ensuring public safety as it relates to human-wildlife conflicts, environmental crimes, e.g. Controlled Alien Species (CAS) and forest crimes, such as arson, and recreational activities such as hunting in close proximity to urban settings. The COS is responsible for investigating environmental and forest crimes that impact upon human health, the environment, and government revenue, e.g. fraudulent forest scaling practices. The COS enforces a variety of environmental regulations related to recreational activities, e.g. fishing and hunting regulations.
- The COS has adopted the Incident Command System for managing responses to high

<sup>1</sup> Positions are reported as of the end of each fiscal year, except for 13/14

<sup>2</sup> Indicates seasonal positions (FTEs) that equated to approximately 14 staff employed for 8 month terms; increase in field conservation officers in 09/10 resulted from the suspension of the seasonal program.

risk and sensitive issues such as the CAS regulation and attacks by predators on humans. Quick response teams have been established and regularly train and exercise to maintain the necessary skill levels. These occurrences generate significant media interest, and have significant impact upon the individuals and communities. The COS has successfully managed responses to these incidents and will continue to do so, including timely senior-level liaison with Branch and MoE Executive.

- The COS delivers a number of its services through partnerships with other agencies and partners. The COS will continue to establish new partnerships and relationships to work collaboratively to protect the environment and the public. Examples of these partnerships include:
  - In 2011, a partnership MOU was signed with the Regional District of the East Kootenay to provide an additional conservation officer to address environmental issues resulting from recreational use in sensitive habitats. This position was recently staff from within the COS.
  - Staff is involved in negotiations being led by the Ministry of Aboriginal Affairs and Reconciliation and the Maa-Nulth First Nations regarding providing services to enforce Maa-Nulth First Nations treaty laws. The Maa-Nulth First Nations would be responsible for providing funding for any enforcement services delivered by the COS.
  - In 2011/12, COS optimized its service delivery where feasible. These initiatives included livestock protection services (education and predator mitigation) in partnership with livestock producers, the Ministry of Agriculture and Lands, the MFLNRO, the BC Agriculture Research and Development Corporation; Community Environmental Restorative Justice program (Recipient of Premier's Award – Regional). The COS is also exploring the use of civil forfeiture for assets and property used in the commission of environmental and forest crimes through the Civil Forfeiture Office of the Ministry Justice and Attorney General.
- The number of case files, tickets and warnings has seen a gradual increase over the past nine years.

Year	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13
Total Case Files	5,261	6,081	7,139	6,743	8,207	8,937	8706	8171	9375
Tickets	1,463	2,062	2,436	1,989	2,096	2,190	1961	2220	2271
% change over previous FY	n/a	41%	18%	-18%	5%	4%	-10%	13%	2%
Warnings	1,862	2,293	3,067	2,466	2,441	2,598	2452	2623	2843
% change over previous FY	n/a	23%	34%	-20%	1%	6%	-6%	7%	8%

- The Conservation Officer Service is responsible for enforcing 33 federal and provincial Acts and associated regulations. The COS undertakes investigations and enforcement in response to violations detected through internal compliance verification activities, reports from the public and other agencies, and proactive enforcement patrols.
- The level of effort to investigate and take enforcement action varies depending upon the nature of the activity. Investigations into violations of environmental protection and human health regulations require a significant investment in resources as compared to enforcement of fishing and hunting regulations. Typically, an environmental investigation will take an average of 70 person days to complete with some taking as much as 100 person days, and may result in several charges being laid. In contrast, a one day enforcement patrol to address fishing or hunting activities may result in numerous violation tickets being issued.
- The number of charges laid does not reflect the level of effort or priority the COS places on these activities. The COS plans its activities to address public safety and human health concerns, environmental and forest crimes, property damage caused by dangerous wildlife, and regulations regulating the use of natural resources. The *Wildlife Act* is administered by the FLNRO; enforcement of the *Act* and regulations is jointly undertaken by the COS and FLNRO Compliance and Enforcement Staff.
- The COS is using Community Environmental Justice Forums to address non-compliance as an alternative to issuing tickets or taking an offender to court.
- In 2012/13 the COS received approximately 29,615 calls regarding human-wildlife conflicts compared to 30,750 in 2011/12. Of those calls in 2012/13, approximately 18,975 involved human-bear conflict, compared to 21,250 in 2011/2012. These numbers are similar to conflict levels from previous years. The COS received another 5,204 calls regarding environmental violations in 2012/13.

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<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>COS Capacity</b></p>
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### KEY MESSAGES

- **Key message #1 – Responses to address calls for service from commercial livestock producers to protect livestock from predators has resulted in Conservation Officer Service (COS) resources being re-directed. Feedback from the livestock producers has generally been favorable; however, as the success of the program increases, further pressure will be placed on the COS due to limited capacity to address the calls for service.**
- **Key message #2 – Regulations such as the Controlled Alien Species (CAS) Regulation and the proposed Off Road Vehicle Regulation require deployment of resources to ensure public safety is maintained. There has been no increase in resources to enforce the CAS regulation.**
- **Key message #3 - The COS mandate and scope expanded as a result of an Order in Council 652/2010 which transferred the responsibility for investigating forest crimes (arson, large scale theft and revenue fraud) from the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO). Eighteen staff positions from MFLNRO were transferred from MFLNRO to the COS.**
- **Key message #4 – The COS mandate and scope includes enforcement presence to deter offenders who poach fish and wildlife.**

### CURRENT STATUS:

#### ***Key message #1:***

- In 2012-13 the COS responded to 449 of the 802 calls received regarding livestock damage by large predators. There have been 158 confirmed verifications of cattle losses and several more for other livestock types. Ranchers have submitted 15 of these verifications. In response to verified attacks, officers have removed 57 wolves, 56 Black bears, 21 Grizzly bears, 52 cougar, and 20 coyotes. COS is participating in Regional Predator Conflict Committees to promote the program and is currently managing the program within its existing resources, which impacts on its service delivery.



***Key message #2:***

- Changes to the Controlled Alien Species (CAS) legislation in April, 2010 required the creation of response teams requiring specialized training and equipment to respond to CAS non-compliance involving species such as lions, tigers, alligators, and poisonous snakes. CAS has been prioritized as a work activity amongst the COS other mandated activities. Response to human/wildlife conflicts and enforcing environmental regulations may be impacted due to reduced operational capacity.

***Key message #3:***

- COS mandate expanded due to government re-organization in 2010. As a result of the transfer of 18 positions, of which 17 were staffed, the COS has capacity to address high risk environmental and forest crimes within its Provincial Investigations Branch. Staff was added to the Intelligence Unit and Special Investigations Branch to enhance capacity to address these crimes.

***Key message #4***

- The COS undertakes patrols throughout the Province to provide an enforcement presence to deter offenders who poach fish and wildlife, and take enforcement action when offenders are encountered.
- Through its partnership with the Provincial Emergency Program, the COS operates a 24 hour Report a Poacher/Polluter tip line for the public to report suspected violators. The call center receives over 5000 reports of violations a year which are addressed by Conservation Officers.
- The COS has a dedicated Intel Unit and Special Investigations Unit that also gathers information about poaching. The COS uses this information to investigate serious poaching incidents through its uniformed officers, as well as undertaking plainclothes and undercover investigations to address poaching.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- There are 13 locations that are staffed with one Conservation Officer. During peak call demand periods (June to October), officers in these location do not have adequate relief or assistance. In other high call demand areas in the province, fatigue is a concern during this period resulting in elevated risks to officer and public safety.
- The COS has deployed technology such as iPhones (March, 2011) and rugged laptops in vehicles (spring, 2012) which reduces the amount of time officers spend in the office providing greater presence on the landbase.

- The creation of new regulations without providing additional funding, impacts upon the ability to maintain existing service delivery. This means that the COS has reduced call response capacity, minimal officer presence for deterrence, and has to focus on moderate to high risk violations.
- The COS mandate and priority call assessment criteria in order of priority is as follows:
  1. Response to human health and safety issues
  2. Response to reports of environmental and property damage (including predator-livestock conflicts)
  3. Investigations (other than human health and safety)
  4. Proactive patrols.
- The COS works with partners to reduce human-wildlife conflict by providing public education through a number of community based programs such as Bear Aware, Coexisting with Coyotes and Deer Conflict Reduction programs. The Provincial Emergency Program call centre manages calls to the RAPP line (Report All Poachers and Polluters line) and provides general information to the public when human-wildlife conflict is determined to be low risk.
- Further discussions with partner agencies are underway to identify potential solutions to address capacity concerns. Coordinated planning with FLNRO Compliance and Enforcement is a priority.

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<b>ESTIMATES NOTE (2013)</b> <b>Confidential</b> <b>Ministry of Environment</b> <b>Date: June 2013</b>	<b>ISSUE TITLE:</b> <b>Major Investigations</b>
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### KEY MESSAGES:

- **Key message #1 - The Ministry of Environment (MoE) Conservation Officer Service is the lead agency for investigating major violations of natural resource laws. The COS Provincial Investigations Branch Major Investigations Unit is responsible for the majority of major investigations which are often high profile incidents that attract media attention.**
- **Key message #2 – The COS Major Investigations Unit manages large complex files by utilizing a major case management system (MCM) that allows the tracking large volume of evidence, staff time and financial resources allocated to these major investigations.**
- **Key Message #3 – The COS utilizes a joint team approach with other agencies to address major investigations and also considers and utilizes alternative resolutions to the criminal courts such as Community Environmental Justice Forums and civil forfeiture.**

### CURRENT STATUS:

#### ***Key message #1:***

- The COS has approximately 1600 open case files that range from tickets to major investigations of environmental non-compliance that threaten human health and safety. The COS Provincial Investigations Branch addresses these major investigations by utilizing the plain clothes detectives in the Major Investigations unit, the undercover detectives of the Special Investigations Unit and the detectives in the Intelligence Unit usually in a lead role or as a support to uniformed Conservation Officers.

#### ***Key message #2:***

- The COS Provincial Investigations Branch developed a Major Case Management system in conjunction with the RCMP Office of Investigative Standards & Practices and the Combined Forces Special Investigations Unit that is reviewed and updated annually by the parties.
- The MCM system allows the COS investigative files to provide the same high standard product as RCMP and Police Major Crimes Units for submission to Crown counsel in regards to major files.

- Major investigations can require investigators to gather, document, review and account for at times many thousands of pages or items of investigative evidence and track the officer effort and costs associated to major investigations. The MCM system results in all of that information being accountable and available for disclosure as required by court standards as well as internal and third party audits in an electronic format.

***Key message #3:***

- The COS Provincial Investigations Branch approach to major investigations is to where ever possible conduct a joint team investigative approach. The approach leverages the advantage of staff resources, experts and other enforcement options from our partner agencies to address major investigations which often require considerable resources. Our most common partners are the Ministry of Forests, Lands, and Natural Resource Operations Compliance and Enforcement division, the RCMP, Environment Canada, and the Department of Fisheries and Oceans.
- The COS has worked with the Civil Forfeiture Office to apply the Civil Forfeiture Act to natural resource major investigations where appropriate. The result has been the court forfeiture of items used in violation of natural resource law, which has a significant deterrence effect.
- The COS developed and implemented the Community Environmental Justice Forum process which is an alternative measures resolution to the over burdened criminal court system. CEJF is modeled similar to the Restorative Justice system utilized in First Nations communities. The CEJF has been successful and is recognized and endorsed by the Ministry of Attorney General Crown Counsel as an alternative to the criminal justice system.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Major investigations can be conducted proactively; however the majorities are unpredictable reactive responses, making them hard to plan and budget for.
- Major investigations are complex often requiring varying expert opinion on cause and impacts of the events that result in the longer time frames to conclude the investigations.

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<b>ESTIMATES NOTE (2013)</b> <b>Confidential</b> <b>Ministry of Environment</b> <b>Date: June 2013</b>	<b>ISSUE TITLE:</b> <b>Compliance and Enforcement in the Natural Resource Sector</b>
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### KEY MESSAGES:

- **Key message #1 – Compliance and enforcement in the natural resource sector is primarily undertaken by the Ministry of Environment (MoE) Conservation Officer Service and BC Park Rangers and the Ministry of Forest Lands and Natural Resource Operations (MFLNRO) Compliance and Enforcement staff with approximately 482 staff between the three groups.**
- **Key message #2 – The volume and scope of compliance and enforcement work in the natural resource sector requires a collaborative approach to addressing the pressures in the sector.**
- **Key Message #3 – Further operational efficiencies are being developed between the groups to address information sharing, joint business planning and harmonized recruiting and training.**

### CURRENT STATUS:

#### ***Key message #1:***

- The key natural resource compliance and enforcement agencies are comprised of approximately 482 full and part time officers (COS148 sworn officers, BC Parks 167 , FLNRO C&E 165). Additional support is provided by Ministry of Energy and Mines with approximately 30 investigators, and the Oil and Gas Commission with 19 investigators.

#### ***Key message #2:***

- While each C& E agency has a specific mandate, training and legal authorities there are a number of issues where collaboration between the agencies and the various enforcement options available to each group are combined to optimize the groups' ability to address non-compliance that impacts the natural resource sector.
- Collaboration has been occurring for several years to improve effective delivery of inspection, investigation and enforcement services. Generally major investigations or investigations that would be heard in the criminal justice system requiring the legal test of "beyond a reasonable doubt" are lead by the COS. FLNRO C&E generally lead compliance work that fits in with the legal test of "balance of probabilities" and is best addressed through administrative actions or hearing under the Forest and Range Protection Act.

- COS and FLNRO leadership teams are further refining their ability to collaborate within the natural resource sector. Natural resource legislation is being assessed to determine which group is best suited to provide C&E function to aspects of each act.

***Key message #3:***

- Capital investments in technology will allow better access to inspection and compliance information across the sector to provide a better understanding of approach to those person's or entities in non-compliance with natural resource legislation.
- COS and FLNRO C&E training sections are working at harmonizing core required training for all the C&E groups and developing future opportunities to provide specialized training such as COS defensive tactics instructors providing self defence and conflict disengagement training to FLNRO C&E staff.
- Opportunities to have a joint natural resource C&E hiring stream are being explored to save on duplication of recruitment process costs and time.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Assessment to identify the best agency to address C&E aspects of each act is being conducted by risk a risk ranking tool that looks at economic, public and environmental impacts of the activity. The ranking also assesses the risk to government staff conducting the work identifying known risk such as tenured or permit holders being the lowest and work done with the general public as the highest risk and reaction to C&E is unknown.

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### KEY MESSAGES

- **Key message #1 – Implementation of a single-designation Natural Resource Officer for the natural resource sector will provide sector based employees clarity and consistency, and the ability to take independent enforcement actions.**
- **Key message #2 – With the sector based designation of Natural Resource Officer; Government will realize efficiencies and increase its enforcement presence in the natural resource sector.**
- **Key message #3 – By designating natural resource sector enforcement staff as Natural Resource Officers, government will expand its ability to take enforcement action on a sector base rather than restricting enforcement staff to enforcement activities based on their ministry *statutes, Acts and Legislation*.**

### CURRENT STATUS:

#### ***Key message #1:***

- Conservation Officers, Ministry of the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) staff and Park Rangers all have specific duties they undertake regarding provincial statutes. There are a number of activities where collaboration between the staff is beneficial to resolve non-compliance that impacts upon one or more of the mandates of the agencies. Processes to optimize collaboration have been in place for several years and work is underway to make improvements to ensure the effective delivery of inspection, investigation and enforcement services.
- Implementing this single-designation process means that staff will have the ability (by way of legislative changes) to take action on violations that span more than one natural resource act.
- The single-designation of Natural Resource Officer for natural resource sector officers will make it easier for the public to understand the role and the diversity of their provincial-level authorities within the sector. FLNRO staff will be the first to receive the designation of Natural Resource Officer.



### **Key message #2:**

- A single Natural Resource Officer will have the ability to take action quickly and efficiently with violations that span more than one natural resource act rather than three or four staff that may have been required previously. As it relates to the Ministry of Environment's legislation, this creates an opportunity for Natural Resource Officers to take enforcement action when encountering violations of the ministry's legislation.
- Overall, enhanced enforcement authorities will result in an increased enforcement presence on the land. Increased presence and enforcement will result in higher levels of compliance and improved protection of the environment and natural resources.

### **Key message #3**

- There are no new staff resulting from the *Natural Resource Compliance Act*. Existing staff in the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) have been designated as Natural Resource Officers. These staff will have enforcement authorities that enable them to issue tickets for those statutes they are authorized to enforce. Primarily, at this time, the Natural Resource Officers will be authorized to enforce legislation falling within the mandate of the MFLNRO. Previously, the majority of these staff had been given authority as Special Conservation Officers to enable them to enforce legislation within the mandate of the Ministry of Environment. These designations have since expired and are currently under review. Examples of this include issues around litter and open burning.
- Conservation Officers presently have the ability to issue tickets and investigate violations of legislation that falls within the mandate of the Ministry of Environment and FLNRO. The *Natural Resource Compliance Act* provides a reciprocal approach for FLNRO's Natural Resource Officers. It is not anticipated that Conservation Officers will require the designation of a Natural Resource Officer for existing legislation.

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## NEWS RELEASE

For Immediate Release  
2012FOR0028-000285  
March 15, 2012

Ministry of Forests, Lands and Natural Resource Operations

### **Enforcement streamlined for natural resource acts**

VICTORIA – The Natural Resource Compliance Act, introduced in fall 2011, is now in effect, making it easier for compliance and enforcement officers to hold offenders accountable for violating natural resource legislation.

The act establishes a new designation — natural resource officer — and authorizes ministry personnel to enforce a broader range of legislation across the natural resource sector. Compliance and enforcement officers can enforce only those acts that they are specifically designated to uphold, but now there is a single, streamlined process for making those designations.

Implementing this single-designation process means that staff will be able to take action more quickly and efficiently to deal with violations that span more than one natural resource act. A single natural resource officer can now respond to such incidents, instead of the three or four staff that may have been required previously.

Officials from other areas of government, such as BC Parks staff, will also be able to assist in enforcing Ministry of Forests, Lands and Natural Resource Operations legislation, resulting in better on-the-ground coverage.

Concurrently, amendments have been made to the Special Accounts Appropriation and Control Act and the environmental remediation sub-account. These changes make it easier for ministry staff to allocate funding for complex investigations or cover environmental remediation costs for infractions in the natural resource sector.

#### **Quote:**

**Minister of Forests, Lands and Natural Resource Operations, Steve Thomson –**

“The Natural Resource Compliance Act builds on government’s vision of an integrated approach to land-based management and expands the work we’ve already done to streamline our inspection and enforcement procedures.”

“Natural resource officers can now enforce a wider range of regulations and improve our response in the field.”

**Quick Facts:**

- The Natural Resource Compliance Act applies to identified acts in the natural resource sector, such as the Forest and Range Practices Act, the Forest Act, the Wildfire Act, the Wildlife Act, the Park Act and the Water Act. Additional acts may be added over time.
- The Ministry of Forests, Lands and Natural Resource Operations currently has 172 compliance and enforcement officers, of which 155 are dedicated to carrying out inspections and investigations.
- More than 11,000 inspections are completed each year, covering various provisions within the Ministry of Forests, Lands and Natural Resource Operations' mandate.

<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Bear Aware Funding</b></p>
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### **KEY MESSAGES**

- **Key message #1 – This fiscal year (2013/14), through the funding of 24 Bear Aware coordinators, we support Bear Aware programs in 112 communities in B.C.**
- **Key message #2 – We were very pleased to provide funding to Bear Aware in the amount of \$225,000 for 2012/13.**
- **Key message #3 – Bear Aware™ is an educational program, coordinated by the BC Conservation Foundation (BCCF). It is designed to prevent and reduce conflicts between people and bears in our communities.**
- **Key message #4 – The Ministry recently partnered with the BC Conservation Foundation to launch WildSafe BC program to help communities address growing issues with deer, coyotes, cougars and other wildlife.**

### **CURRENT STATUS:**

#### ***Key message #1:***

- All of the communities that received funding also committed to the program both through cash and in-kind support. Communities and regions benefitting from the 2013/14 funding are: Bella Coola, Castlegar, Elk Valley, Fernie, Fraser Valley Regional District, Golden, Invermere/Radium, Kamloops, Kaslo, Maple Ridge, Nelson, New Denver, Prince George, Regional District of Okanagan-Similkameen, Revelstoke, Rossland-Trail, Rural areas between Nelson, Cranbrook and Creston, Squamish, Sunshine Coast Regional District, Thompson Nicola Regional District, Vernon, Capital Regional District, Kitimat, and Alberni – Clayoquot Regional District.

#### ***Key message #2:***

- For fiscal year 2013/14 COS/MoE contracted \$225,000 to the BC Conservation Foundation to fund the 2013 Bear Aware program. In partnership with municipalities, regional districts, the Habitat Conservation Trust Fund, Gaming, private trust funds and volunteer support from private individuals, 24 Bear Aware coordinators, in addition to a network of volunteers, is delivering programs to 112 Communities throughout the province.
- For fiscal year 2012/13 COS/MoE contracted \$225, 000 to the BC Conservation Foundation to fund the 2012 Bear Aware program. By funding 25 Bear Aware coordinators in addition to a network of volunteers, Bear Aware delivered programs to nearly 100 communities throughout the province. In partnership with municipalities, regional districts, the Habitat Conservation Trust Fund, Gaming, private trust funds

and volunteer support from private individuals, Bear Aware was able to create a program valued at over \$600K for the fiscal year 2012/13 Season.

- For 2011/12, \$181,400 of Ministry funding was used to support 22 community coordinators in 24 communities. Further funding was also provided through a BC Gaming grant, the Columbia Basin Trust, and the Grizzly Bear Trust Fund.

### **Key Message #3:**

- The mission of the Bear Aware program is to reduce the number of bear-human conflicts in communities through education, innovation and cooperation. This reduction is accomplished by providing information about attractant management and providing education, and assistance about the tools available to secure those attractants.

### **Key Message #3**

- In May 2013, MoE, in partnership with the BC Conservation Foundation, launched WildSafe BC. WildSafe BC is an expansion of the highly successful Bear Aware program expanding the focus from reducing human-bear conflicts to reducing human-wildlife conflicts. This will allow the utilization of the existing infrastructure and delivery models to help communities address their growing problems with deer, coyotes, cougars and other wildlife.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Bear Aware Program provides a consistent educational package to those communities that wish to pursue "Bear Smart" status. This ensures that communities do not have to "re-invent the wheel" when implementing an education program and the content follows government standards. Bear Aware Education has proven to be an effective tool to decrease conflicts and an integral component of the Ministry's "Bear Smart" Community Program. The program is administered by the BC Conservation Foundation (BCCF). The program was runner-up for a Premier's Award in Partnership for 2006.
- The "Bear Smart" Community program is a voluntary, preventative conservation measure that encourages communities, businesses and individuals to work together. The goal is to address the root causes of bear-human conflicts to reduce the risks to public safety and private property, as well as the number of bears that have to be destroyed each year.
- Bear Aware Education is one criterion that must be met for a community to obtain Bear Smart status.
- Over 20 communities in BC are actively pursuing "Bear Smart" and four communities, Kamloops, Squamish, Lions Bay and Whistler have successfully attained official "Bear Smart" status.

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<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Christina Lake Bears</b></p>
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### KEY MESSAGES

- **Key message #1** – In 2011, the Conservation Officer Service (COS) had to destroy 24 severely habituated, and food conditioned, bears due to public safety concerns.
- **Key message #2** – In 2011, the COS provided funding towards a Bear Aware kit for Christina Lake, and worked with local volunteers to educate residents on attractant management in order to reduce human-wildlife conflicts. COS continues this education to date. As a result of the COS strategy addressing this issue, COS had received few complaints of habituated black bears in the immediate area throughout 2012 to present. Only 1 bear was destroyed in the immediate area in April, 2012 bringing the total to 25.
- **Key message #3** – The property owner (Allan Piche) was charged under the *Wildlife Act* Section 33.1 on two counts for feeding dangerous wildlife and pled guilty to both. Allan Piche was sentenced on May 24, 2012 to a \$6,000 fine. Kathleen Piche was also charged under the *Wildlife Act* Section 33.1 on one count of feeding dangerous wildlife and pled guilty on March 12, 2013 resulting in a consent order that she pay a \$500 fine.

s.15

s.15

### CURRENT STATUS:

#### ***Key message #1:***

- The COS conducted an investigation and determined that Mr. Piche has been feeding bears at the property for about 10 years. The number of bears regularly visiting the property was estimated at 24. To date, 25 bears have been destroyed due to public safety concerns; however, there may be more habituated bears in the immediate vicinity. COS will continue to monitor bear activity closely to ensure public safety.

#### ***Key message #2:***

- This situation is a good example of why it is against the law in B.C. to feed dangerous wildlife. Feeding these animals threatens public safety and results in their needless destruction.



- COS continues to be hopeful that any remaining bears will revert to their natural environment and avoid conflict with people, however, considering the level of habituation and food conditioning, there may be more bears that need to be destroyed especially if public safety is at risk. Each bear will be evaluated on a case-by-case basis but considering the length of time these bears have been fed, it is unlikely all of these animals will revert back to natural behaviours. It is also difficult to predict how many bears will return to and/or stay at the property if feeding is no longer taking place.
- COS will continue to work with the Christina Lake Stewardship Society and the community of Christina Lake to educate residents on Bear Aware principles to help avoid future conflict with dangerous wildlife.

**Key message #3:**

- s.13, s.15, s.16  
s.13, s.15, s.16 COS will investigate any future non-compliance if feeding continues.

**KEY FACTS/BACKGROUNDER/OTHER AGENCIES:**

- The success rate for translocation of black bears is low, and bears may starve or die once relocated, as opposed to being humanely euthanized. In general, relocating wildlife is neither viable nor a long-term solution to managing human-wildlife conflicts. When wildlife is relocated, it most often returns to conflict situations or does not survive, as it has to compete with already established populations.
- Under the *Wildlife Act*, penalties for feeding dangerous wildlife can be as high as \$100,000 for a first offence, or a term of imprisonment not exceeding one year, or both. Subsequent convictions for the same offence can result in a fine of not more than \$200,000 and not less than \$2,000, or a term of imprisonment not exceeding two years, or both.
- s.13, s.15

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Pages 23 through 30 redacted for the following reasons:

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S.3

<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Urban Deer (Ungulates)</b> <b>Review and Report</b></p>
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### **KEY MESSAGES**

- **Key message #1** – There has been growing concern within some B.C. communities with respect to deer populations in urban areas. It is a challenging problem that requires a long-term solution.
- **Key message #2** – We continue to work with local communities and the Union of British Columbia Municipalities (UBCM) as any successful resolution will involve co-operation and partnerships between all parties involved.
- **Key message #3** – The Ministry is concerned with deer-human conflicts in communities and, in partnership with MFLNRO developed and posted a report on urban conflicts with ungulates ([www.env.gov.bc.ca/cos/info/wildlife\\_human\\_interaction/UrbanUngulates.html](http://www.env.gov.bc.ca/cos/info/wildlife_human_interaction/UrbanUngulates.html)) and developed a strategy to address the issue. Both MoE and MFLNRO are participating in community-led Deer Management Committees.
- **Key message #4** – Several communities had initiated development of deer conflict management plans and 3 Kootenay communities (Cranbrook, Kimberley, and Invermere) have been issued permits from MFLNRO allowing deer to be culled.

### **CURRENT STATUS:**

#### ***Key message #1:***

- Some BC communities are experiencing increasing numbers of human-deer conflicts in urban and rural areas. Increasing vehicle collisions and human conflicts with deer are impacting public safety. While deer are not classified as dangerous wildlife, they can act aggressively to protect themselves or their fawns from perceived threats from pets or humans.
- The Conservation Officer Service will respond to deer conflicts if public safety is at risk, but control is often difficult. Conservation Officers have attended reports of aggressive deer incidents on several occasions. In most cases, the offending deer had moved on, could not be identified, or could not be safely captured or shot.
- It is incumbent upon landowners to make reasonable efforts to protect their properties from deer damage prior to action by Ministry staff.

#### ***Key message #2:***

- Staff from both the MoE and MFLNRO will play an active role in the process of developing urban ungulate strategies through participation on committees and, as capacity allows, involvement in delivery of management options.

- Staff can commit to providing biological and technical expertise and permitting services, but cannot provide funding to support committees nor to writing the Deer Conflict Management Plans. Also, staff cannot commit to participating in deer conflict reduction activities, such as translocation or lethal control.
- Staff have developed Fact Sheets regarding issues such as Fertility Control, Translocation, Hazing with Dogs, Culling, and Utilization of Meat to assist deer conflict committees in developing effective management strategies.

**Key message #3:**

- The “British Columbia Urban Ungulate Conflict Analysis” was released by MoE in March 2010 and recommended communities set-up Community Deer Management Committees and that these committees develop comprehensive management strategies using consensus-based decision-making.

Summary of the report:

- Increasing numbers of ungulates (primarily deer) living in urban areas has led to increased conflict with the human residents of those areas.
- Urban ungulate populations are challenging to manage for biological, jurisdictional and social reasons. Deer are very adaptable to human altered environments and thrive in urban areas. The overlapping roles and responsibilities of municipal and provincial governments complicate management decisions.
- Urban ungulate management strategies should focus on the reduction of conflicts and management of populations to an acceptable level, not the complete elimination of the problem or herd.
- Management options fall into four categories: conflict reduction, population reduction, fertility control and administrative options.
- An overview of the reasons why ungulates are present in urban environments and summarizes the consequences of overabundance.
- Management options including discussions of costs, human health and safety, animal humaneness, and project advantages and disadvantages.

**Key message #4:**

- The MFLNRO Kootenay regional office committed \$15,000 to purchase equipment such as Clover deer traps and bolt guns that are being loaned to communities when population reduction activities have been permitted.
- Cranbrook was the first community to initiate a cull and successfully removed 25 deer in Fall 2011 and 24 deer in Winter 2013. Invermere and Kimberley also had permits approved to remove 100 deer each. Kimberley killed 64 deer in January 2012. Invermere has not yet initiated a cull program.

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<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Human-Wildlife</b></p> <p><b>Conflict Information</b></p>
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### KEY MESSAGES

- **Key message #1 – The Conservation Officer Service (COS) is the primary responder to human-wildlife conflicts where there is a risk to public safety, conservation concerns or where significant property damage has occurred.**
- **Key message #2 – The simple message is: If there is no food or shelter available to attract wildlife, there will be little or no reason for wildlife to continue frequenting an area.**
- **Key Message #3 – The COS response to attacks on humans is led by a Predator Attack Incident Management Team. The Predator Attack Incident Management Team uses the Incident Command System. The system is designed to achieve the coordination necessary for an effective, efficient and provincially consistent response to predator attacks on humans.**

### CURRENT STATUS:

#### ***Key message #1:***

- In 2012/13 the COS received approximately 29,615 calls regarding human-wildlife conflicts compared to 30,750 in 2011/12. Of those calls in 2012/13, approximately 18,975 involved human-bear conflict, compared to 21,250 in 2011/2012. These numbers are very similar to conflict levels from previous years.

#### ***Key message #2:***

- Amendments to the *Wildlife Act* give Conservation Officers (COs) the ability to issue tickets or appearance notices for a court appearance to deal with people who repeatedly and negligently fail to secure attractants. These tools compliment existing tools and are expected to reduce the number of bears that come into conflict with people.

#### ***Key message #3:***

- The COS is accountable and responsible for investigating all incidents involving wildlife attacks on humans led by a Predator Attack Incident Management Team using the Incident Command System. The system is designed to achieve the coordination necessary for an effective, efficient and provincially consistent response to predator attacks on humans. The total number of responses involving either a reported injury (15) or fatality (0) for the 2012 calendar year was 15.

In 2011 the total response costs were \$159,298.63, response costs will vary year to year based on the severity, number and location of attacks. In 2012/13 the estimated response cost is \$50,000.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- It is not operationally possible for COs to attend every call. As a result, when public safety is not deemed to be at risk, or if the behaviour of wildlife is considered to be natural or normal, callers are provided information to help prevent conflict situations by properly managing attractants like garbage, compost, bird seed and pet food stored outdoors.
- COs assess each call based upon its own individual merits, giving consideration to the seriousness of the incident, time delay in calling, likelihood that the offending wildlife is still in the area, risk to people or property, or the availability of an officer in relation to distance required to attend.
- As a result of discussions with stakeholders and MoE on how to manage mitigation of livestock predation in 2011 and onward, a commitment was made by the COS to coordinate response for suspected predator attacks on livestock. This has resulted in increased predator conflict response (particularly for wolf, coyote and cougar) by the COS over the last 2 years.
- A CO will usually attend a **human-wildlife** conflict call if:
  - Dangerous wildlife appears to be sick, injured or is acting in an unusual manner.
  - Dangerous wildlife is causing or has caused serious and ongoing property damage, and the landowner has taken reasonable steps to avoid conflict.
  - Public safety is at risk due to a bear, or other large predator, becoming accustomed to human food or garbage and associates people with food (i.e., food conditioned).
  - Large or dangerous wildlife are sighted in a confined/urban area which may lead to a human safety incident or injury/death to the animal.
- Recent amendments to the *Wildlife Act* provide Conservation Officers improved enforcement authority to deal with people who repeatedly and negligently leave out or fail to secure attractant material such as garbage and/or food. The amendments are expected to reduce the number of animals conditioned to negligently managed attractants, leading to increased public safety.
- Relocating wildlife is neither viable nor a long-term solution to managing human-wildlife conflicts. When wildlife is relocated, it most often returns to conflict situations or does not survive, as it has to compete with established populations.

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### Appendix: List of Wildlife Incidents

<b>GRIZZLY BEARS</b>					
<b>Year</b>	<b># of Calls</b>	<b>Attended</b>	<b>Killed by CO</b>	<b>Relocated</b>	<b>Cubs to Rehab</b>
2008-09	527	197	15	25	n/a
2009-10	301	92	13	7	0
2010-11	615	197	30	10	6
2011-12	455	158	12	9	0
2012-13	514	198	35	12	0
<b>Average</b>	<b>482</b>	<b>168</b>	<b>21</b>	<b>13</b>	<b>1.2</b>

<b>BLACK BEARS</b>					
<b>Year</b>	<b># of Calls</b>	<b>Attended</b>	<b>Killed by CO</b>	<b>Relocated</b>	<b>Cubs to Rehab</b>
2008-09	20646	2186	499	121	n/a
2009-10	11986	1280	254	68	16
2010-11	22625	2630	645	110	24
2011-12	20794	2514	506	30	34
2012-13	18421	2469	509	59	34
<b>Average</b>	<b>18894</b>	<b>2216</b>	<b>483</b>	<b>78</b>	<b>22</b>



### COUGARS

Year	# of Calls	Attended	Killed by CO	Relocated
2009-10	2242	386	57	0
2010-11	1854	214	38	1
2011-12	3069	610	57	4
2012-13	2930	568	90	2
<b>Average</b>	<b>2524</b>	<b>445</b>	<b>61</b>	<b>1.8</b>

### Appendix: List of Wildlife Incidents continued

### WOLVES

Year	# of Calls	Attended	Killed by CO	Relocated
2009-10	316	29	4	0
2010-11	327	26	2	1
2011-12	480	130	79	0
2012-13	568	161	70	1
<b>Average</b>	<b>423</b>	<b>87</b>	<b>39</b>	<b>0.5</b>

### COYOTES

Year	# of Calls	Attended	Killed by CO	Relocated
2009-10	741	119	15	1
2010-11	1016	62	17	0
2011-12	1390	179	66	0
2012-13	1150	194	64	0
<b>Average</b>	<b>1074</b>	<b>139</b>	<b>41</b>	<b>0.25</b>

<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Livestock Protection Program</b></p>
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### KEY MESSAGES

- **Key message #1** - As a result of discussions with stakeholders and MoE on how to manage mitigation of livestock predation in 2011 and onward, a commitment was made by the Conservation Officer Service (COS) to coordinate response for suspected predator attacks on livestock. It is expected that COS will not have the capacity to respond in every case and will be relying on producers and other qualified individuals to perform verifications and predator control when required.
- **Key message #2** - The COS continues to partner with stakeholders that have an interest in this issue – local livestock producers and producer groups (BC Cattlemen’s Association, BC Dairy Foundation, BC Sheep Federation, BC Sheep Breeders Association, etc.), industry (Agriculture and Research Development Corporation, BC Agriculture Council, etc), the Ministry of Agriculture, the BC Wildlife Federation, the BC Guide/Outfitters Association, the BC Trappers Association and local hunters and trappers on coordinating monitoring, verification, mitigation, compensation and outreach efforts.
- **Key message #3** – The COS will liaise with the Ministry of Forests, Land and Natural Resource Operations to review wolf management regulations, identify and amend wolf mitigation activities that can be scientifically supported, such as more liberal deer and predator harvesting seasons and examine the allocation of resources in relation to reported predation.
- **Key message #4** – The COS and FLRNO recently partnered to form a committee for the review of the use of neck snares. Three members of each the COS and FLNRO were involved.

### CURRENT STATUS:

#### ***Key message #1:***

- The COS has provided a dedicated coordinator position to oversee responses to livestock depredation. This position plays a key role in educating, training and equipping all agencies and individuals involved in livestock predator interactions.
- The COS receives and investigates reports of livestock-predator interaction. If the loss is verified, a Conservation Officer may also remove the predator(s) involved.

Other people such as producers, trappers and hunters may also be authorized to remove predators through a license or permit if qualified.

- To date, 105 COs have received Level 1 Predator Response training and 57 COs have received Level 2 training. Level 1 provides basic mitigation strategy training for five predators: grizzly and black bears, cougar, wolf and coyote; behavior traits, safety and tools. Level 2 provides advanced mitigation and trapping strategies for all five predators. Regional Predator Conflict Committees have been established in Grand Forks Cranbrook (including Creston producers), Lilloette, Vernon, Kamloops, Clearwater Williams Lake, Prince George, Smithers and Fort St John regions. The COS has also delivered 20 verification training courses to 317 producers throughout the province.
- In 2012-13 the COS received 802 calls regarding livestock damage by large predators and attended 449 complaints. There have been 158 confirmed verifications of cattle losses and several more for other livestock types. Ranchers have submitted 15 of these verifications. In response to verified attacks, officers have removed 57 wolves, 56 black bears, 21 grizzly bears, 52 cougar, and 20 coyotes.
- Between April 2011 and January 2012, the COS has received 579 calls regarding wildlife-livestock interactions and attended 312 complaints. There have been 84 confirmed verifications of cattle losses and several more for other livestock types. In response to verified attacks, officers have removed 60 wolves, 34 Black bears, 3 Grizzly bears, 22 cougar, 27 coyotes, and 2 bobcats.
- The COS did not receive any additional resources to assist in delivering on livestock-predator conflicts. In 2012/13, the COS did not have available resources to respond to every incident. It is anticipated this will continue to be the case in 2013/14.

***Key message #2:***

- The COS will coordinate an across-ministry working group bringing scientific management and expertise dealing with conflict resolution associated to predator response.
- The Agriculture Research and Development Corporation (ARDCorp), in partnership with the Ministry of Environment, the Ministry of Agriculture, the BC Cattlemen's Association and the BC Sheep producers, has developed a series of documents that outline best management practices for reducing predator conflicts when raising cattle and sheep, and a guide for livestock producers on options available for targeted predator control.
- This initiative demonstrates that government is partnering with industry to collectively resolve agriculture-wildlife conflict issues and the resulting impacts on the industry.

***Key message #3:***

- Predator hunting seasons, trapping seasons and quotas have been increased on private property in the Peace and Cariboo regions where livestock predator conflicts are high.
- Depending on specific circumstances, landowners may receive a permit authorizing targeted predator control on private land or Crown land from the Ministry of Natural Resource Operations.
- The COS works with MLFRNO to develop permit conditions for private contractors, and supports MLFRNO in monitoring permittees.

#### ***Key Message #4***

- The COS and FLNRO recently engage in a review of the use of neck snares (defined as a metal cable and associated hardware designed to capture an animal by the neck, hold and kill it by asphyxiation), during the interim, the COS suspend their use. A committee was formed, consisting of 3 COS and 3 FLNRO employees from region and headquarters.
- The Committee determined that traditional foot hold traps used for wolves during cold weather may not work effectively and can result in freezing injuries of trapped animals. Neck snares have proved to be an essential alternative in BC (and other settings) as they are less affected by temperature, relatively easier to set and less costly to use. However, they must be used with a clear set of criteria to avoid trapping of non-targeted animals, particularly bears, and ensure as humane a death as possible. Snares should include a powerful tension spring to quickly apply pressure and be equipped with a “break away” device that breaks when a large animal (i.e. an ungulate) is caught to allow the animal to escape unharmed.
- By applying these additional criteria the COS ensures the best methods/equipment and training is available to reduce animal suffering and to avoid incidental captures.

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<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Wildlife Attractant Amendment</b></p>
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### KEY MESSAGES

- **Key message #1** – The mismanagement of wildlife attractants such as garbage and food is a long-standing issue for a number of communities. This results in human-wildlife conflicts with dangerous wildlife such as bears.
- **Key message #2** – In November 2011, amendments to the *Wildlife Act* were approved providing Conservation Officers (COs) the ability to take enforcement action, issue tickets or appearance notices for a court appearance to deal with people who repeatedly and negligently fail to secure attractants.
- **Key messages #3** – The new enforcement tools complement existing tools and are expected to reduce the number of animals that become conditioned to negligently managed attractants, leading to increased public safety.

### CURRENT STATUS:

#### ***Key message #1:***

- The mismanagement of wildlife attractants such as garbage and food is a long-standing issue for a number of communities that results in human-wildlife conflicts with dangerous wildlife such as bears.
- Despite education initiatives, or other methods of raising awareness, some individuals consistently fail to take reasonable measures to manage certain attractants that attract dangerous wildlife (grizzly bear, black bear, cougar, wolf and coyote).
- This is why recent amendments to the *Act* have introduced:
  - A new offence when a person provides, places or leaves an attractant accessible to dangerous wildlife and in a place where there are or likely to be people around;
  - A new continuing offence provision which means that the fine or penalty can be increased according to the number of days the offence has continued
- While the *Act* already addresses intentional feeding or attempting to feed dangerous wildlife, the new amendments allow COs to focus on the actions that an individual has taken or failed to take, rather than motive and proof of intent.

**Key message #2:**

- The intent behind the amendments and associated fines is to deal more effectively with negligent behaviour and to create a deterrent effect to help reduce the need for repeat visits by COs, thereby freeing up resources for other duties.
- COs will now be able to take targeted enforcement action against individuals who carelessly or negligently mismanage their attractants. The compliance strategy is to target those who “should know better” (i.e. they have been given previous (repetitive) warnings, advice or have been ordered through a Dangerous Wildlife Protection Order (‘DWPO’) to clean up the same kind of attractant on a different occasion – but the individual has not changed their behaviour or shown willingness to effectively manage known attractants).
- It is anticipated that a \$230 ticket will be the appropriate first level enforcement response for the majority of these offenders. In the event the offence continues, a person may have to pay more in ticket fines.
- However, there may be times when further penalties are necessary and a person may face charges in court. If successfully convicted, the court would refer to the tier 3 penalty provisions of the *Act* (up to \$50,000 and/or up to 6 months imprisonment), as well as the continuing offence provision to determine the appropriate penalty.

**Key message #3:**

- The new offence provisions will build on existing legislation to help provide a more comprehensive framework. The policy intent is that the amendments will augment other education and awareness tools to improve overall effectiveness in changing behaviours to prevent human-wildlife conflicts.
- In communities where bylaws do not exist, or where local enforcement officers who enforce municipal bylaws have not been able to successfully resolve attractant issues, COs may intervene and enforce the legislation under the *Wildlife Act*. Local governments would not be expected to change their existing garbage/solid waste services or bylaws to accommodate the changes (e.g., by requiring all garbage to be placed in certain types of containers or only at certain times etc.).
- The proposed amendments are not intended to restrict any hunting or trapping activities currently allowed.

**Key message #4:**

- Further work and policy analysis is ongoing to engage First Nations to address concerns that the amendments might impact long standing cultural practices related to wildlife harvesting.
- While further consultation is necessary, it is hoped that an operational understanding with concerned First Nations can be reached to avoid dangerous wildlife conflict and safeguard public safety.

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<b>ESTIMATES NOTE (2013)</b> <b>Confidential</b> <b>Ministry of Environment</b> <b>Date: June 2013</b>	<b>ISSUE TITLE:</b> <b>Controlled Alien Species (CAS)</b>
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### KEY MESSAGES:

- **Key message #1 - The Ministry of Environment (MoE) and Ministry of Forest Lands and Natural Resource Operations (MFLNRO) are working to ensure compliance with the Controlled Alien Species (CAS) regulation through the Permit and Authorization Service Bureau (MFLNRO) and by responding to reports of alleged non compliance made to the Conservation Officer Service.**
- **Key message #2 - Enforcement actions are being managed by the Ministry of Environment's Conservation Officer Service (COS) in response to those situations where there is the highest risk to public safety.**
- **Key Message #3 - In December 2012 an amendment was made to the CAS regulation to include invasive species that could impact BC waters if introduced.**

### CURRENT STATUS:

#### ***Key message #1:***

- The Ministries are using an Incident Management Team (IMT) approach to respond to CAS non-compliance. The IMTs consist of Conservation Officers, MFLRNO staff and members from the academic and scientific community.

#### ***Key message #2:***

- Quick Response Teams (QRTs) which have a core group of 16 officers trained in CAS handling respond to CAS non-compliance. QRTs are based in the North, the Coast and the Interior and are made up of COs trained in dealing with CAS.
- The QRTs respond in a prioritized manner to CAS non-compliance where public safety is at risk. The Major Investigations Unit Detective Sgts have also received training in CAS investigations.
- Not all reported non-compliance will be pursued immediately as it takes time to verify whether non-compliance is taking place. Numerous ads on the internet for the sale of CAS are hoaxes or in other jurisdictions.



- Compliance and enforcement of the *Act* must also be balanced against other public safety concerns such as human wildlife conflicts.
- As of June 2013, 16 Conservation Officers across B.C. have received CAS training. Only these officers will be responding to CAS non-compliance to ensure that staff safety is protected. Training will continue to be delivered.
- As of Feb 7, 2012; MFLNRO had approved 67 permit applications covering approx. 327 CAS animals (includes multiple animals of the same species).

***Key message #3:***

- In December of 2012 an amendment was made to the CAS regulation to include invasive species that could impact BC waters if introduced. These species include snakeheads, Asian Carp, goby, Oriental weatherfish, bullheads, western mosquitofish, other cyprinids, zebra mussels, quagga mussels, and Conrad's false mussel.
- The added Aquatic Invasive CAS species will require additional COS effort to intercept and inspect vessels that enter into BC from Provinces and States where the mussel species exist and to focus on both the pet trade and live fish food trade that can bring in the aquatic invasive fish species. The impact of the introduction of any of these species in BC would be very high both environmentally and economically. The United States Congress estimated that the cost of mussel infestation to the US power industry alone is 3.1 billion dollars for the period from 1993-1999. Ontario hydro estimates a cost of \$376,000.00 spent annually per generating stations to mitigate mussel impacts on facilities and has spent \$20,000,000.00 installing and maintaining chlorine applicators on Great Lakes facilities to deter mussels.
- As of May 2013 Conservation Officers in key entry areas into the Province have been trained in the identification of the invasive mussel species. Training is being delivered to the rest of the COS, FLNRO C&E and Dept of Fisheries and Oceans staff by the end of June to increase the ability to intercept and inspect for the new invasive aquatic species.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- No new positions or funding were provided to support the implementation of CAS. Instead, CAS has been prioritized as a work activity amongst the Ministries' other mandated activities.
- The CAS regulation controls the possession, breeding, shipping and releasing of animals not native to B.C. that pose a risk to the health or safety of people.
- The CAS regulation amendment protects BC waters from the introduction of foreign

invasive species that pose both environmental and economic risks.

- Approximately 1,300 species are currently designated as CAS.
- Effective April 1, 2010, individuals cannot possess, breed, release or transport CAS with the exception of individuals who possessed a CAS prior to April 1, 2010 who can keep the animal until its death subject to being granted a permit from the ministry.
- The regulation ensures that recognized institutions and industries can continue to possess these animals under specific circumstances.
- Research, educational institutions and accredited zoos require a permit (and in some cases management plan) to acquire, breed and possess CAS. The film industry requires a permit to temporarily bring CAS into B.C.

**Contact:** Kelly Larkin, Chief Conservation Officer, Conservation Officer Service  
(250) 356-9100

# Environmental Sustainability and Strategic Policy - 2013

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<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Status of 2013/14 Budget</b>  <b>Environmental Sustainability and</b>  <b>Strategic Policy Division</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – The Environmental Sustainability and Strategic Policy Division was restructured in October 2010, with staff, budget and business functions coming together from across the Ministry of Environment, Ministry of Health Services and from the former Ministry of Forests and Range. Division resources include \$21.241M base budget (Environmental Sustainability Working Budget \$19.083M; Strategic Policy Working Budget \$2.158M) and 159 full time staff positions (ES 137; SP 22).**
- **Key message #2 – The Division’s focus is on environmental health, diversity and resilience for air, water, species and ecosystems which support government’s objectives for environmental, economic and social sustainability. The Division carries out its responsibilities through four branches: the Ecosystems Protection and Sustainability Branch; Water Protection and Sustainability Branch; Knowledge Management Branch; and the Strategic Policy Branch.**
- **Key message #3 – Integrated business planning (across the Ministry and the natural resource sector) is ensuring the highest priorities are identified and resourced in 2013/14, with lower priorities being deferred or scaled back due to resource constraints.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

##### **Vulnerabilities**

- Continuing staff attrition is endangering some business areas and increasing risks to economic certainty and the environment.
- Extent of durable conservation outcomes (i.e. species at risk recovery) are completely dependent on Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) resourcing (staff and \$) decisions under the new Natural Resource sector re-organization. Current alignment of business plans with MFLNRO is tenuous due to resource constraints and competing demands.

##### ***Key message #2:***

- The Division carries out its responsibilities through four branches: the Ecosystems Protection and Sustainability Branch; Water Protection and Sustainability Branch; Knowledge Management Branch; and Strategic Policy Branch.

***Key message #3:***

- Activities and operational costs reduced to minimum threshold.
  - Divisional salary targets will constrain hiring opportunities.
  - Staff travel limited to critical program delivery.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Environmental Sustainability and Strategic Policy Division was created in October 2010, with staff, budget and business functions coming together from across the Ministry of Environment, Ministry of Health Services and from the former Ministry of Forests and Range.

**Contact:** Mark Zacharias, Assistant Deputy Minister, Environmental Sustainability and Strategic Policy Division, (250) 387-9831.

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Resources for Environmental Management</b></p>
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#### KEY MESSAGES:

- **Key message #1 – Despite budget pressures, the Province remains committed to minimizing and mitigating environmental impacts, and providing world class environmental management.**
- **Key message #2 – The Ministry of Environment is finding ways to adapt to economic realities, introducing innovative solutions to make environmental management more effective and efficient.**
- **Key message #3 – Ensuring compliance with environmental regulatory requirements is a key priority for the Ministry.**

#### CURRENT STATUS:

##### ***Key message #1:***

- More than ever, there is a strong recognition of the need to find a balance between the social, economic and environmental outcomes that are important to British Columbians.
- While there is growth in many of B.C.'s natural resource sectors, all activities are still expected to meet our strict environmental standards.
- Pressures facing the Ministry are not just economic. Greater demands on the land base, changing demographics, increased recreational and resource activity and climate change is why our work is, by nature, about continuous improvement and adaptation.
- The Province has responded to these challenges with an integrated, Natural Resource Sector (NRS) approach that supports effective and timely decision-making, and improves the efficiency of its service delivery.

##### ***Key Message #2:***

- Examples of innovative approaches to promote more efficient and effective natural resource management include:
  - Integrated Area-Based Decision Making: this inter-agency project is developing a framework and tools for considering cumulative effects in natural resource decision-making.
  - Mitigation and Offsets Policy: will support a consistent approach to mitigating environmental impacts from development projects or activities.

- One Window, One Process: better aligns NRS processes and decision-making, allowing better use of limited resources.
- The Ministry leads shared environmental stewardship to leverage resources, capacity and encourage public and stakeholder engagement. Examples include:
  - Our nationally recognized industry-led and funded Product Stewardship Program.
  - Through *Water Act Modernization*, the Ministry pioneered the use of social media to support public policy development. The process generated 2,250 submissions and 50,000 visits to the Living Water Smart blog and website.
  - In line with a results-based approach, Ministry biologists and environmental protection staff develop guidelines and standards that provide industry with clear, consistent direction on acceptable development practices.

### ***Key message #3***

- The ministry takes a targeted, problem-focused approach to compliance. Staff focus resources on areas of highest concern first. Where cost-effective, we coordinate with other agencies, share resources and information (e.g. reducing the number of site visits by separate ministries, sharing helicopter travel, etc).
- The ministry has had great success in using the public's "eyes and ears". For example, a mine was convicted and fined \$20K in 2011 after a local First Nations reported a spill which had not been reported by the company. The court also earmarked most of the fine for environmental projects in the area.
- In 2011, improvements were made to the ministry's public reporting program. The ministry launched a new online environmental violations database. The public can search by violators' names, dates or types of infractions.
- Since 2006, the number of orders, administrative sanctions, tickets and court convictions has neither decreased nor increased significantly.
- The Conservation Officer Service has been piloting Community Environmental Justice Forums to address environmental offences. Fines are consistent with what would be awarded in court, but the process takes a fraction of the cost and time. Fines are directed to environmental projects in the affected community.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Government's NRS sector still retains a high level of professional expertise with Professional Foresters and Biologists still prominently part of the organization.
- NRS agencies have been working towards a coordinated, integrated approach for a long time, through initiatives like the Integrated Land Management Bureau, GeoBC and FrontCounter BC, as well as the internal re-alignment of the natural resource ministries.
- Area-based management under a single land and resource management team improves our ability to focus limited resources on government priorities.

**Contact:** Anthony Danks, Executive Director, Strategic Policy Branch, Environmental Sustainability and Strategic Policy Division, 250.387.8483



<p>ESTIMATES NOTE 2013  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Division of Responsibilities between  the Ministry of Environment /  Ministry of Forests, Lands and Natural  Resource Operations (MFLNRO)</b></p>
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#### KEY MESSAGES

- **Key message #1 – The division of responsibilities between the Ministry of Environment (Ministry) and Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) are associated with water, habitat, species at risk, fish and wildlife protection and sustainability.**
- **Key message #2 – The Ministry’s role in these areas is to develop policy, legislation, standards and undertake effectiveness monitoring. In addition, the Ministry coordinates the provincial ambient monitoring for these business areas as well as air quality and snow pack levels for use in MFLNRO operational decision making.**
- **Key message #3 – MFLNRO is accountable for delivery of legislation, policies, standards and programs for the activities mandated by the: *Water Act, Wildlife Act, Fish Protection Act, Fisheries Act, Forest and Range Practices Act*, and portions of *The Ministry of Environment Act*.**
- **Key message #4 – The overall accountability for the *Oil and Gas Activities Act* resides with the Ministry of Energy and Mines (MEM). The Minister of Environment has delegated authorities under this *Act*.**
  - **The Ministry authorities under this *Act* include setting objectives pertaining to water quality, aquifers and ground water recharge areas, watersheds, species and habitat and other natural values (OGAAR sec 103) and for undertaking audits (OGAA sec10). MFLRNO and MEM’s role is to implement these objectives**
- **Key message #5 – The Conservation Officer Service, Parks and Protected Areas and Environmental Protection legislation, policy and business lines are entirely the responsibility of the Ministry.**

#### **CURRENT STATUS:**

- The Ministry works collaboratively with MFLNRO in these areas. MFLNRO staff provide advice to the Ministry in the development of policy and legislation. Ministry staff also provide technical support to MFLNRO in the implementation of legislation and programs

- The Conservation Officer Service (COS) provides government with environmental enforcement services. Compliance and administrative penalties are still provided by the parent ministry who holds the legislative accountability. An example being administrative penalties under the *Wildlife Act* which are the responsibility of the Director responsible for wildlife. If there are enforcement actions associated with those administrative responses, they fall to the COS. This is status quo with how decisions were made previously.
- For policy development and application; policy work such as provincial grizzly bear management (or caribou management) is led by Ministry staff with assistance of MFLNRO field biologists. Once approved, policy work is applied in regions by MFLNRO regional staff with technical support from Ministry policy specialists.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

Specific Accountabilities by Legislation are as follows:

Function	Environment	Forest, Lands and Natural Resource Operations
<b>Fish and Wildlife Act and Management</b>		
<i>Guide outfitting/trapping</i>	Establish legislation, policy and standards related to the sustainability, conservation and recovery of species and ecosystems.	Apply and administer the <i>Wildlife Act</i> including all statutory decisions pertaining to licensing and administration of Guide Outfitting, recreational hunting trapping and angling.
<i>Species assessment and utilization</i>	<p>Conduct status assessments on all provincial species and ecological communities.</p> <p>e.g. making determinations if a species population is healthy, of special concern, threatened.</p> <p>Grizzly bear populations have been listed as a species of concern; Mountain, boreal and northern caribou population have been listed as a</p>	<p>Establish and administer policy for the utilization and allocation of wildlife.</p> <p>Make determinations on the annual allowable harvest.</p> <p>Managing licensing programs for angling and hunting. Work with other levels of government and stakeholders in the development of hunting and angling regulations and allocation.</p>

	threatened species. MoE develops objectives, strategies and management frameworks for the recovery of these species and the protection of habitat.	Gather data on game species and statistics on recreational use/success.  MFLNRO implements strategies for the management of species and habitats.
<i>International Trade in Animals</i>	Scientific authority for CITES (Convention on International Trade in Endangered Species) and COSEWIC (Committee on the Status of Endangered Wildlife in Canada).	Issues CITES permits.
<i>Decision Making/Enforcement</i>	Enforce the <i>Wildlife Act</i> through the Conservation Officer Service.  Enforce CITES Permits.	Determine season length and types of opportunities.  Make statutory decisions on license suspensions and or removal.
<i>Park Management hunting and fishing</i>	Apply and administer the <i>Park Act, Ecological Reserve Act, Environment and Land Use Act</i> as it applies to provincial protected areas and fish and wildlife harvest.	Apply Parks policy as it pertains to game harvest timing and location.
	Develop and approve parks and protected areas policy and management plans which guide the management of all activities occurring within protected areas, including hunting as it pertains to other protected area management objectives.	Apply Parks policy as it pertains to game harvest timing and location.
<i>Wildlife and Fisheries Health</i>	Monitor Species Health trends.	Provincial Veterinarian Policy and decision making on fish and wildlife trans-regional/provincial transplants.
<i>Invasive Species</i>	Provide policy and scientific expertise on Invasive plants and animals. Represent the	Implement policy; deliver invasive species management program.

	province in national and international forums.	
<i>Riparian Area Regulation</i>	Update regulation as required Policy development; effectiveness monitoring.	Implement and monitor regulation; Work with qualified professionals. Authorize exceptions.
<i>Species At Risk</i>	Establish policy, and planning framework; legislation; provide scientific expertise; undertake assessments; maintain species listings and make statutory decisions on the provincial listing of species and identified wildlife. Undertake monitoring and effectiveness monitoring. Liaise and coordinate with Federal Government on species listings.	Lead the implementation of planning and species recovery programs.  Leading stewardship initiatives; stakeholder engagement.
<i>Fish and Wildlife Management Monitoring</i>	Establish monitoring networks; synthesize data provided by MFLNRO; produce trend data.	Establishing spatial features on the landscape to protect legally identified species.  Establishing operational policy.  Monitoring for compliance with Standards.  Providing regional knowledge, advice and expertise on species/habitat condition and management.  Providing mitigation and offset advice on major projects Gather data and submit for trend monitoring; develop management strategies based on data synthesis and trends.
<b>Forest and Range Practices Act (MFLNRO) /Oil and Gas Activity Act (MEM)</b>		
<i>Forest, Range, Oil and Gas Environmental Management</i>	Developing Environmental component of Forest, Oil and Gas legislation and policy.	Contributing to environmental Legislation and Policy.

		Implementing Legislation and policy.
<i>Natural Values Management</i>	<p>Identifying and legislating identified species.</p> <p>Developing management standards for species to apply spatially on the landscape.</p> <p>Support MFLNRO operational policy development for implementing strategic policy and legislation.</p> <p>Conduct effectiveness monitoring.</p>	<p>Establishing spatial features on the landscape to protect legally identified species.</p> <p>Establishing operational policy.</p> <p>Monitoring for compliance with Standards.</p> <p>Providing regional knowledge, advice and expertise on species/habitat condition and management.</p> <p>Providing mitigation and offset advice on major projects.</p>
<b>Water Act and Management</b>		
<i>Policy and Legislation</i>	Establish legislation, policy and standards related to the sustainable use, protection and governance framework for water.	<p>Provide input on strategic policy direction and legislative development.</p> <p>Develop operational policy for implementation.</p>
<i>Dams and Dikes</i>	Draft Legislation; Assist in legislative updates.	Dam and dike safety, flood management, drought management policy development, implementation, and management.
<i>Water Authorizations Surface and Ground water</i>	<p>Draft legislation; Assist in legislative updates.</p> <p>Set strategic policy framework for water governance and use.</p>	<p>Apply and administer the <i>Water Act</i> including all statutory decisions pertaining to licensing and administration of activities authorized under the act including water use licensing, groundwater protection, and establishing water use committees.</p> <p>Establish and administer</p>

		policy for the utilization and allocation of water.
<i>Water Science</i>	Provide water science expertise on ground and surface water.	Issues identification, data gathering and monitoring.
<i>Drought Management</i>	Set strategic policy frame work for water conservation.	Work with other levels of government and stakeholders in the development of water use, drought management plans.
<i>Flood Management</i>	Provide snow pack information.	Develops policy management framework; leads/coordinates flood management.
<i>Enforcement</i>	Enforce the <i>Water Act and Fish Protection Act</i> through the Conservation Officer Service.	Issues order under the <i>Fish Protection Act</i> .
<i>Water/Snow Monitoring</i>	Establish monitoring networks; synthesize data provided by MFLNRO; produce trend data.	Gather data and Submit; develop management strategies based on data synthesis and trends.

<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Wellness Centre: 2975 Jutland</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – I’ve looked into the matter carefully as the wellness room was established well before my appointment as Minister of Environment.**
- **Key message # 2 - This government supports employee wellness for example through government preferred rates at gyms as part of the workplace wellness.**
- **Key message # 3 – The ministry will be extending the lease of the wellness room given the high use of the room for wellness activities combined with the fact that Gorge Fitness (a local gym facility) recently closed**

#### **CURRENT STATUS:**

**Key message #1:** The Wellness Centre opened in December 2008. It was originally equipped with a big-screen TV, a Wii brand gaming console, ping pong tables, a pool table and a foos ball table plus various pieces of fitness equipment. There was extensive, ongoing media coverage primarily from Michael Smyth, legislative reporter for The Province. We have removed the big screen TV and the brand gaming console to allow for more room for physical activities eg; yoga.

**Key message #2:** Options for using the space for meeting rooms or other business-focused uses were explored but the City of Victoria zoning bylaw does not allow for this.

**Key message #3:** The government supports employee wellness in a number of ways – for example the recent launch of “My Good Health” and preferred rates for government employees and their families.

#### **On Government’s Commitment to Wellness:**

- **We are committed to supporting our employee’s health and attracting and retaining talented, skilled people to the public service.**
- **The PSA has launched a tool “My Good Health” which is a health management system that can help employees and their families make informed decisions to positively impact their health now and in the future.**
- **Employee Fitness Club Memberships - As a Province of BC Employee, you may access Fitness Club Memberships by choosing a supplier from the pre-qualified supplier list, and directly making arrangements with the supplier**

**Contact:** Mark Zacharias, ADM, Environmental Sustainability and Strategic Policy Division, 250-356-0121

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Development of the BC Environmental Mitigation Policy (EMP)</b></p>
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#### KEY MESSAGES:

- **Key message #1-** MoE, in partnership with other natural resource sector agencies, is leading the development of an Environmental Mitigation Policy (EMP) and associated Procedures. The Policy and Procedures promote a consistent approach to mitigating adverse impacts to the environment through guidance to natural resource sector proponents and government staff.
- **Key message #2-** The short-term vision is to use the Policy and Procedures as a targeted tool where the need for a mitigation plan is identified by either a willing proponent or by government. The Policy and Procedures are also linked closely to other government initiatives to ensure compatibility and assist broader application in the long term.
- **Key message #3-** Working documents are being finalized with input from external engagement, trial applications, and comments from several qualified professionals.

#### CURRENT STATUS:

##### **Key message #1:**

- MoE, in partnership with other natural resource management agencies, is developing the EMP to support a consistent approach to mitigating adverse impacts to the environment from development projects and activities.
- The policy is not legislation and does not establish any new legal or regulatory requirements. It is intended to be applied within the existing regulatory framework.
- The policy fosters the application of an Environmental Mitigation Hierarchy with the intent to encourage and enable willing proponents to avoid and minimize environmental damage, and to offset residual adverse impacts on environmental values.
- The EMP and Procedures will help ensure appropriate consideration and identification of environmental values; mitigation actions for the potential impacts from proposed development; and the overall organization of this information in mitigation plans.

##### **Key message #2:**

- Specific criteria to inform the targeted application of the Policy and Procedures are currently being developed with input from the Ministry of Forests, Lands and Natural



Resource Operations Regional Management Teams, the Environmental Assessment Office, and other agencies and business areas that are supporting the EMP's development and implementation.

- These criteria will ensure consistent uptake and application by natural resource sector staff and statutory decision makers.
- Broader application and linkage to the Environmental Assessment process, Cumulative Effects Assessment Framework, Integrated Decision Making, and regulatory harmonization will support the long-term vision of integration of the EMP into natural resource sector business areas as appropriate.

***Key Message #3:***

- Completed working documents of the EMP and associated Procedures are expected by July 31, and will incorporate comments received during internal and external engagement, a trial application period, and from qualified professionals in the fields of environmental impact assessment and economics.
- A third external engagement period was committed to and comments will be solicited from stakeholders and First Nations through a web-based process this summer.
- Roll out to the natural resource sector is expected to take place in fall 2013 and will be supported with a training strategy.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

**Policy Drivers:**

- Concern about impacts on environmental resources from development projects and activities in the Province.
- Variation in the way that environmental impacts are being addressed. *Ad hoc* arrangements for mitigation and offsetting have taken place, and there are inconsistencies in negotiated environmental and mitigation agreements.
- With the exception of EAO Major Projects, there is a general lack of provincial guidance outlining government's expectations of proponents for avoiding and minimizing environmental impacts and for offsetting residual impacts.

**Integration with other Initiatives:**

- The Natural Resource Board endorsed the trial application period in June 2012.
- An Inter-Agency Policy Advisory Committee, with representation from all natural resource sector business areas, continues to ensure linkages with all relevant government initiatives and business areas.
- An EMP Leadership Team supports the short-term implementation and development of the long-term integration into natural resource sector business areas as appropriate.
- Links have also been made with federal agencies (DFO, CEAA).

***First Nations and Stakeholder Engagement:***

- Engagement with stakeholders and First Nations took place from November 2010 to March 2011 and again from January to March 2012 based on a draft Policy Framework and Discussion Paper.

- General feedback received during external engagement and during trial application was positive. The main areas where clarity was sought were 1) application of financial mechanisms for offsetting; 2) Crown/private land jurisdictional issues; and, 3) guidance for where, when, and by whom the Policy and Procedures would apply.
- A third and final round of engagement with stakeholders and First Nations is expected in July 2013. Engagement will focus on the final working documents of both the Policy and Procedures and will be completed prior to seeking endorsement from the Natural Resource Board for implementation as a targeted tool.

**Contact:** Alec Dale, Executive Director, Ecosystems Branch, Environmental Sustainability and Strategic Policy Division, (250) 387-9731

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Species at Risk Task Force and Five-Year Species at Risk Plan</b></p>
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#### KEY MESSAGES:

- **Key message #1** – The report of the BC Task Force on Species at Risk was released for public comment in July 2011. In response to the task force report, "*Protecting Vulnerable Species: A Draft Five-Year Plan for Species at Risk in British Columbia*", was developed.
- **Key Message #2** – BC's Draft Five-Year Plan for Species at Risk brings together the numerous activities that the Province undertakes for species at risk in a coherent program, establishes provincial leadership on a high profile issue, and helps respond to the February 2013 BC Auditor General's report on biodiversity conservation.
- **Key message #3** – Public input on the draft five-year plan demonstrates strong opinions, sometimes consistent and sometimes diverse, about management of species at risk in BC.

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#### CURRENT STATUS:

##### **Key message #1:**

- The report of the Species at Risk Task Force (posted for public comment in July 2011) recommended a shift to an ecosystem-based approach to managing species at risk and employing the integrated resource management process to implement conservation priorities.
- Other key recommendations included: strengthening legislation; supporting and improving information management and decision-support tools; investing in research, monitoring and evaluation; establishing consistent funding mechanisms; engaging First Nations, the public and stakeholders in decision-making; and engaging private landowners in conservation through development of incentives.
- Public input on the task force report (39 submissions from individuals and stakeholder associations) included broad support for: an ecosystem-based approach to species at risk; a careful review of legislation to strengthen legal protection for species and ecosystems at risk or establish strong ecosystem-based legislation; and increased coordination, clarity and collaboration across governments and organizations.

**Key message #2:**

- "*Protecting Vulnerable Species: A Draft Five-Year Plan for Species at Risk in British Columbia*" establishes provincial leadership on a high profile issue and brings together the numerous activities that the Province undertakes for species at risk in a coherent program that will:
  - improve species conservation through management at the ecosystem and landscape scale;
  - provide the best available information to support identification, management and recovery of species at risk;
  - encourage British Columbians to embrace stewardship of species at risk across all lands;
  - apply protection for species at risk consistently across all sectors; and
  - measure and report on government's investments in species at risk.

**Key message #3:**

- The draft five-year plan was posted for public comment for 24 days (from 19 March to 12 April 2013).
- Public input on the draft five-year plan (153 submissions from individuals, various industry sectors, environmental organizations, professional organizations and three levels of government) indicated: strong support for stewardship approaches to protecting species at risk; strong support for legal protections, especially stand-alone species-at-risk legislation; a preference for landscape-scale, ecosystem-based management; and a balance in favour of environmental protection over social and economic benefits.
- There was also concern about the lack of detail of the plan, the lack of identified resources to implement the plan, and a perceived lack of government commitment to implement the plan.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- BC currently lacks legislation providing for legal listing of the full suite of species at risk (including plants and invertebrates) and subsequent protection of their habitats.

**Contact:** Alec Dale, Executive Director, Ecosystems Branch, Environmental Sustainability and Strategic Policy Division, (250) 387-9731

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Species at Risk Act / Federal-Provincial Relations</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 — BC is committed to cooperate with the federal government on the recovery and protection of species at risk, as a signatory of the Accord for the Protection of Species at Risk in Canada (1996) and the Canada-BC Agreement on Species at Risk (2005).**
- **Key message #2 — Over 200 species listed under the federal *Species at Risk Act* (SARA) occur in BC. The influence of federal legal challenges on federal priorities and SARA policy has resulted in bilateral tension due to differing priorities and differing approaches to identifying and protecting habitat for these species in BC.**
- **Key message #3 — Despite differences with federal partners, BC will continue to support an approach to protecting species at risk and their habitats through decision-making informed by the best available science and consideration of socio-economic implications as appropriate.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- British Columbia fulfills its commitments to the Accord for the Protection of Species at Risk in Canada (1996) and the Canada-BC Agreement on Species at Risk (2005).by preparing recovery strategies for species under provincial management authority and making these available for adoption under SARA.
- BC also provides national leadership on the assessment of species at risk, through the BC Conservation Data Centre and through participation on the Committee for the Status of Endangered Wildlife in Canada (COSEWIC).

##### ***Key message #2:***

- The federal government continues to experience legal pressure to complete recovery strategies overdue for posting on the SARA registry. The most recent law suit, filed in September 2012, challenges the federal government's failure to complete recovery strategies for four species (Pacific Humpback Whale, Nechako White Sturgeon, Marbled Murrelet, and Southern Mountain Caribou). The applicants contend that habitat for these four species would be impacted by the construction and operation of the Northern Gateway pipeline.

- SARA is one of several drivers that may influence provincial priorities for species recovery, but it is not (and should not be) the sole driver.
- Federal agencies' attempts to address the backlog of federal recovery and management planning documents overdue for posting on the SARA registry, has created pressure on Ministry capacity to fulfill our bilateral commitments to review federal recovery documents prior to posting.
- Other legal challenges under SARA have created additional tension, as federal recovery planning documents must identify critical habitat if information is available to do so. Current federal policy is that identification of critical habitat cannot include social or economic considerations.
- Once identified in a final recovery strategy posted on the SARA public registry, critical habitat must be 'legally' (aquatic species, nests of migratory birds, and federal lands) or 'effectively' protected (all other species and lands). Critical habitat has been identified in a final recovery strategy for approximately 20 species in BC.
- The process of evaluating "effective protection" for the critical habitat of these species is expected to create additional pressure on provincial capacity and additional bilateral tension.

**Key message #3:**

- The Province has repeatedly articulated the position that it views recovery documents as science advice, and that decisions regarding subsequent protection of habitat must include full consideration of socio-economic factors and consultation with those who may be directly affected by those decisions.
- BC has utilized existing provincial tools and processes to protect significant amounts of habitat for a number of SARA-listed species, including Spotted Owl, Northern Goshawk, Marbled Murrelet, and caribou.
- BC has established 1605 Wildlife Habitat Areas under the *Forest and Range Practices Act* for a total of over 1.4 million hectares to protect 59 different species and ecosystems at risk: a portion of these species are federally listed under SARA. Protection of Wildlife Habitat Areas now extends to the oil and gas sector through provisions in the Oil and Gas Activities Act.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

**Table:** Statistics on SARA listed species in BC

SPECIES AT RISK IN BC	NUMBER
SARA-listed species in Canada	501
SARA-listed species in BC	207+3 extinct = 210
SARA-listed species for which BC has management responsibility	142

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Mountain Caribou: Recovery Implementation Plan</b></p>
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#### KEY MESSAGES:

- **Key message #1 – Mountain caribou are listed as threatened under the federal *Species at Risk Act* (SARA) and red-listed (Threatened) in BC.**
- **Key message #2 – In October 2007, government approved the Mountain Caribou Recovery Implementation Plan (MCRIP). The Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) is responsible for the MCRIP's operational delivery.**
- **Key message #3 – The MCRIP is expected to meet the intent of caribou population recovery under the SARA. Unlike other caribou conservation programs in BC, the MCRIP is delivered through government base budgets.**

#### CURRENT STATUS:

##### ***Key message #1:***

- Mountain caribou in BC are the southernmost remaining population of caribou in the world. They are listed as threatened under the federal *Species at Risk Act* (SARA) and red-listed (Threatened) in BC.
- Mountain caribou in British Columbia (BC) have been declining for more than a decade. This decline can be attributed to extensive industrial development (e.g., forestry) in caribou habitat that facilitates increased predation and caribou mortality.
- For 2013-14, the Ministry will continue to provide policy oversight on species at risk management and coordinate with the federal government on the management status, population outcomes, and habitat protections for mountain caribou.

##### ***Key message #2:***

- To address population declines of mountain caribou, government in 2007 endorsed a provincial implementation plan for mountain caribou, known as the MCRIP. An implementation plan outlines the response of the provincial government to the need to manage species at risk for which management and/or recovery in BC may have significant socioeconomic implications.
- The goals of the plan are to halt the decline of mountain caribou within 7 years (2014) and recover the population of more than 2,500 within 21 years.



The goals of this plan are expected to be achieved through the implementation of various management actions that include habitat protection, predator control, and herd augmentations.

- The MFLNRO is responsible for the plans operational delivery. For 2013-14, the Ministry will work with the MFLNRO to provide species at risk policy support and oversight on the implementation of the MCRIP.

***Key message #3:***

- The federal government is in the process of developing a recovery strategy for caribou within the federal designated Southern Mountains National Ecological Area, which includes mountain caribou. The MCRIP is expected to support and advise that process.
- The MCRIP has been funded through government base budgets. Since 2007, the MCRIP budget has been reduced as it competes with other priority government programs. A reduced MCRIP budget has constrained implementation activities like caribou transplants.
- For 2013-14, the Ministry will work with the MFLNRO to ensure government budgets to implement the MCRIP are allocated appropriately. The Ministry will also coordinate with the federal government on the management status, population outcomes, and habitat protections for mountain caribou.

s.13

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- All caribou in BC are woodland caribou (*Rangifer tarandus caribou*).
- BC caribou are classified into three ecotypes of Mountain, Northern, and Boreal.
- Approximately 1500 mountain caribou within 15 herds reside in the interior of BC from the US border near Creston to north of Prince George.
- The primary threat to mountain caribou is habitat fragmentation and alteration which leads to increased mortality from predators such as wolves and cougars. Habitat fragmentation occurs due to road building and timber harvesting associated with industrial forest practices.
- Since 2007, government has had some implementation success by closing areas to forestry and recreational activities across 2.2 million hectares of mountain caribou habitat.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: July 5, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Boreal Caribou Management</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 — Protecting boreal caribou is a priority for our government and we are committed to meeting the necessary objectives and goals for recovering this species.**
- **Key message #2 — In 2011, our government published the *Implementation Plan for the Ongoing Management of Boreal Caribou in British Columbia* (BCIP), which sets out actions to manage all six boreal caribou herds in B.C. over the next 50 years.**
- **Key message #3 — The population and distribution goals of B.C.'s implementation plan are intended to decrease the expected rate of decline in the boreal caribou herds and reduce the risk of population extirpation in certain herds over the next 50 years.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- Boreal caribou are in decline in British Columbia (BC) and are listed as threatened under the federal *Species at Risk Act* (SARA) and red-listed (Threatened) in BC. The Ministry is committed to meeting government's objectives and goals for recovering this species.
- Environment Canada has released a national recovery strategy for declining boreal caribou across Canada. The strategy applies to the province under terms of the SARA and identifies the need to protect critical habitat and recover all six BC boreal caribou populations to self-sustaining population of more than 100 animals within each herd range.
- For 2013-14, the Ministry will coordinate with the federal government on the management status, population outcomes, and habitat protections for boreal caribou.

##### ***Key message #2:***

- Oil and gas development in northeast BC is implicated in facilitating the declines of BC's six boreal caribou herds. In order to ensure BC's oil and gas investments are considered in conjunction with conservation efforts for boreal caribou, government in 2011 endorsed a provincial implementation plan for boreal caribou. An implementation plan outlines the response of the provincial

government to the need to manage species at risk for which management and/or recovery in BC may have significant socioeconomic implications.

- The goals of the Plan are to decrease the expected rate of decline in the boreal caribou population, and to significantly reduce the risk of boreal caribou population extirpation in four of six herds. s.13
- The Ministry of Forests, Lands and Natural resource Operations (MFLNRO) is responsible for the Plan's operational delivery. For 2013-14, the Ministry will work with the MFLNRO to provide species at risk policy support and oversight on the implementation of government's plan for boreal caribou.

### **Key message # 3:**

- The Ministry and other Natural Resource Sector agencies signed a memorandum of understanding (MOU) in 2011 with the Canadian Association of Petroleum Producers (CAPP) to secure 10 million dollars over five years to support management, monitoring, and research activities associated with the BCIP.
- The 10 million dollars is being generated through a levy on oil and gas production in BC and managed by the Oil and Gas Commission under their Science and Community Environmental Knowledge (SCEK) fund.
- Distribution and allocation of the funds to support boreal caribou management, monitoring, and research activities is being overseen by members of the MOU, which includes Ministry staff.
- For 2013-14, the Ministry will continue to participate and oversee the distribution and allocation of funds for boreal caribou management, monitoring, and research activities, to ensure government's goals for boreal caribou are achieved.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- All caribou in BC are woodland caribou (*Rangifer tarandus caribou*).
- BC caribou are classified into three ecotypes of Mountain, Northern, and Boreal. s.12
- Approximately 1300 boreal caribou are distributed within 6 ranges in the northeast corner of BC. s.13
- All 6 provinces and 2 territories with boreal caribou are required, under SARA, to protect and recover declining populations.
- The primary threat to boreal caribou is habitat fragmentation that leads to increased mortality from predators such as wolves. The habitat fragmentation occurs due to road building and seismic lines from the development of oil and gas reserves.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>South Peace North Caribou Management</b></p>
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#### KEY MESSAGES:

- **Key message #1** — South Peace Northern Caribou, which includes 7 caribou herds located in the south Peace area of BC, are listed as threatened under the federal Species at Risk Act (SARA) and blue-listed (Special Concern) in BC.
- **Key message #2** — In November 2012, the Ministry and other agencies developed a government approved provincial implementation plan published as the *Implementation Plan for the Ongoing management of South Peace Northern Caribou in British Columbia (PNCP)*. The Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) is responsible for the Plan's operational delivery.
- **Key message #3** — Implementation of the plan is expected to meet the intent of caribou population recovery under the SARA and First Nations treaty right to hunt caribou. Funding of the plan will be delivered through mitigation offset funding from industry.

#### CURRENT STATUS:

##### **Key message #1:**

- Seven caribou herds in the south Peace (a.k.a., South Peace Northern Caribou (SPNC)) have declined over the last decade. This decline can be attributed to extensive industrial development (e.g., forestry and coal mining) in caribou habitat that facilitates increased predation and caribou mortality.
- SPNC are listed as threatened under the federal *Species at Risk Act* (SARA), requiring population recovery and habitat protection. The Province is responsible for managing species at risk on Crown Lands for population recovery.
- For 2013-14, the Ministry will coordinate with the federal government on the management status, population outcomes, and habitat protections for SPNC.

##### **Key message #2:**

- To address population declines of SPNC, government in 2012 endorsed a

provincial implementation plan for SPNC. An implementation plan outlines the response of the provincial government to the need to manage species at risk for which management and/or recovery in BC may have significant socioeconomic implications.

- The goal of the plan is to increase the SPNC population from 1,000 to > 1,200 animals within 21 years. The goal is expected to be achieved by implementing various management actions such as habitat protection, predator control and herd augmentation.
- For 2013-14, the Ministry will work with the MFLNRO to provide species at risk policy support and oversight on the implementation of government's plan for SPNC.

**Key message #3:**

- The federal government is in the process of developing a recovery strategy for caribou within the federal designated Southern Mountains National Ecological Area, which includes SPNC. The completion of a provincial implementation plan for SPNC is expected to support and advise that process.
- The implementation plan for SPNC is also expected to accommodate local First Nations (FNs) treaty right to hunt caribou and allow certain industrial activity (e.g., coal mining) to move forward under certain conditions.
- The implementation plan for SPNC will be funded from the application of the Ministry's Mitigation and Offset Policy for those industrial activities that have been identified to move forward within the south Peace region. It is expected that the implementation plan will cost > \$1 million annually to implement.
- For 2013-14, the Ministry will work with the MFLNRO to provide policy support and oversight on the application of the Ministry's Mitigation and Offset Policy to fund the plan for SPNC.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- All caribou in BC are woodland caribou (*Rangifer tarandus caribou*).
- BC caribou are classified into three ecotypes of Mountain, Northern, and Boreal. s.12
- Approximately 1,000 caribou distributed within seven herds make up the SPNC population. These herds are part of a larger population of northern caribou in BC, which are distributed among 31 herds across the province totaling approximately 17,000 animals.
- SPNC are listed as threatened under the federal *Species at Risk Act* (SARA) requiring population recovery and habitat protection.

- In 2010, West Moberly First Nation near Chetwynd sought litigation against the BC government for inadequate consultation and accommodation of the approval of permits associated with mining tenures within the Burnt Pine caribou herd range, one of seven SPNC herds.
- In 2010, the BC Provincial Court ruled in favour of West Moberly First Nation, ordering the BC Government to develop a plan for the protection and augmentation of the Burnt Pine herd and six adjacent herds, cumulatively known as SPNC.
- In November 2012, The Ministry, MFLNRO and Ministry of Natural Gas Development, and Ministry of Energy and Mines developed a government endorsed implementation plan to meet the intent of the BC Provincial Court ruling
- The goal of the implementation plan is to increase SPNC from 1,000 to over 1,200 animals in 21 years and to accommodate FNs treaty right to hunt caribou.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Predator Control for Protection of Species at Risk</b>
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#### KEY MESSAGES:

- **Key message #1 – The Ministry supports the control of native species where there is sufficient evidence or reason to believe that they represent a threat to the viability or recovery of a species of conservation concern.**
- **Key message #2 – Current programs to support recovery of species at risk include: control of wolves and cougars in support of caribou recovery; control of Barred Owls in support of Spotted Owl recovery; and translocation of Golden Eagles in support of Vancouver Island Marmot recovery.**
- **Key message #3 – Control programs are carefully managed by Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) staff to achieve their conservation benefit while ensuring the conservation of all species involved are adequately considered.**
- **Key message #4 – The Ministry has accountability to set priorities, provide scientific support, and provide approvals for control of native species to support species at risk recovery.**

#### CURRENT STATUS:

##### ***Key message #1:***

- Control of native species can be an important component of management efforts to protect and conserve species at risk. The Province has well established policy and procedures to ensure that control efforts remain a viable management tool while not adversely impacting the conservation status of the controlled species' population.

##### ***Key message #2:***

- Control of wolves and cougars is a key component of the Mountain Caribou Recovery Implementation Plan (MCRIP). The intent is not to remove all cougars or wolves from the landscape, but rather to selectively reduce their densities to reduce predation pressure on these critically endangered herds of Mountain Caribou. Since 2007, wolf sterilization programs have been undertaken and more than 150 wolves and one cougar have been removed



through increased harvesting. These programs have not been effective at reducing predation risk on caribou across BC.

- Barred Owls have been identified as a competitive (habitat & food) and potential predation threat to Spotted Owls. Since 2007, over 90 Barred Owls (a non-native species in Spotted Owl habitats) have been removed via translocation or lethal removals with the bulk occurring in 2010 & 2011.
- Successful translocation of several individual Golden Eagles identified as preying on Vancouver Island Marmots has occurred over the past few years.

***Key message #3:***

- Policy and procedures exist to ensure that control efforts: achieve their intended conservation benefits without causing adverse side-effects of greater impact; are justifiable and likely to succeed; ensure the welfare of all species involved is adequately considered; and ensure appropriate review and assessment.

***Key message #4:***

- By policy, the regional Director of Resource Management (MFLNRO) and the Executive Director of Ecosystems (MOE) must approve any proposal for lethal control of native species in support of species at risk recovery. If the controlled species is also a harvested species, then the Director of the Fish, Wildlife, and Habitat Branch (MFLNRO) must also approve the proposal.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The primary threat to Mountain Caribou is habitat fragmentation that leads to increased mortality from predators such as wolves and cougars. Habitat fragmentation occurs due to road building and timber harvesting associated with industrial forest practices.

- The primary threat to Spotted Owls is habitat loss and fragmentation. A secondary threat is the spreading population of non-native Barred Owls, a superior competitor for habitat and food as well as a potential predator.

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Managing for Cumulative Effects</b></p>
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**KEY MESSAGE:**

- **Key message #1 - The Province recognizes increasing demands on the land base and that understanding the cumulative effects of resource development and use is important. The Ministry of Environment initiated an inter-agency Natural Resource Sector project to develop a framework and tools for assessing and considering cumulative effects in integrated natural resource decision-making.**
- **Key message #2 – The Ministries of Environment (MOE) and Forests, Lands and Natural Resource Operations (MFLNRO) co-lead an interagency Natural Resource Sector project to develop a Cumulative Effects Assessment Framework (CEAF) to support more durable Natural Resource decision-making.**
- **Key message #3 - The Cumulative Effects Assessment Framework will provide a consistent, comprehensive approach to assessing economic, social and environmental values in natural resource decision making.**

**CURRENT STATUS:**

**Key message #1:**

- There has been increasing pressure for the Province to consider the cumulative effects of resource decisions and development, including:
  - Recent court decisions (*West Moberly v. BC* (2011); *Canadian Forest Products Inc. v. Sam*, (2011); *Tsilhqot'in Nation v. BC* (2007)) have held that the historical context and cumulative effects are relevant when assessing the impacts of a proposed activity on a First Nation's Treaty or aboriginal rights.
  - A Forest Practices Board report (2011) entitled "*Cumulative Effects: From Assessment Towards Management*", which concluded that cumulative effects of resource development in BC are not well known, largely unmanaged, and that the assessments for major projects have limited utility.
  - The Office of the Auditor General has advised that it is planning an audit of government's management of cumulative effects of resource development.

**Key message #2:**

- MOE and MFLNRO are currently co-leading a multi-year project to develop and test a Cumulative Effects Assessment Framework (CEAF) for the natural resource sector.

- Three demonstration projects (West Okanagan-Nicola, Northwest and Northeast) have served as important ‘learning labs’ for the proposed framework and tools.

s.12

### ***Key message # 3:***

- The expected benefits of the Cumulative Effects Assessment Framework are:
  - streamlined decision-making, reduced demands on government staff and support for a shift to results-based management;
  - reduced uncertainty and costs along with ‘social license’ for project proponents, by providing consistent, upfront guidance and easily accessible information to support cumulative effects assessment;
  - improved response to First Nations’ requests and prevention of legal challenges concerning the cumulative impacts of development on aboriginal and treaty rights; and
  - consistent and transparent assessment of a full suite of values that will facilitate better resource management decisions and improve outcomes for environmental, social, and economic values.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Province recognizes the importance of assessing and managing the cumulative effects of resource development and is addressing this in a number of ways:
  - Creating FLNRO as an integrated resource management ministry to better manage the cumulative effects of expanding resource development on the land base;
  - Developing an Integrated Decision Making (IDM) model for the natural resource sector to increase the consistency, efficiency and effectiveness of decision-making.
  - Exploring options for establishing a cumulative effects assessment framework across the natural resource sector as a part of the IDM model.
- Treasury Board funding (Climate Action and Clean Energy Fund reallocation) was provided to MoE (\$235K for 2011/12) and MFLNRO (\$435K for 2011/12 and \$450K for 2012/13) to support the project, recognizing its importance in environmental sustainability and in removing barriers to future economic development and resource authorizations.
- The CEAF project is testing tools for cumulative effects assessment that will support government’s goals for cumulative effects management.
- Input and guidance of First Nations and key stakeholders has been solicited within three demonstration project areas – West Okanagan-Nicola, Northwest and Northeast and through provincial level consultations.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Status of Research at the Ministry of Environment</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – Science-based knowledge is a core component in managing BC’s natural resources for sustainable environmental, economic, and social benefits. The Ministry of Environment employs a range of science expertise to support the development of policies, legislation and natural resource decisions.**
- **Key message #2 – MOE takes a leadership role in acquiring new knowledge through a modest applied research program that leverages its capacity through effective partnerships with academia, other levels of government, industry, and other research institutes.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- There is often significant uncertainty related to natural resource management decisions and decision makers depend on science staff to assemble and interpret the best available information to evaluate the likely outcomes related to alternative decision scenarios. This often requires the development of predictive models and other science-based tools to evaluate risks and uncertainties.
- Internal expertise is necessary to fulfill this role and MOE staff have expertise in a wide range of physical and biological disciplines including: climate, air and water quality, toxicology and contaminant management, hydrology, soil science, geomorphology and watershed processes, fisheries and wildlife sciences, species-at-risk and biodiversity, ecosystem science, conservation biology and cumulative effects.

##### ***Key message #2:***

- Research is a structured process to fill knowledge gaps and resolve uncertainty. Applied research focuses on practical questions, many of which are of only marginal interest to traditional academia. MOE requires in-house research expertise to ensure that key areas of uncertainty can be addressed in a timely fashion.
- MOE’s research activities are highly integrated with MFLNRO and are focused on joint priorities including: cumulative effects management,

- evaluating the effectiveness of forest practices to ensure desired outcomes are achieved (e.g. soil productivity, fish and riparian habitat), evaluating watershed processes (e.g. slope stability and channel structure), instream flow requirements to maintain healthy fish populations, species-at-risk management and recovery (e.g. caribou, white sturgeon, amphibians, fisher) and invasive species management.
- The capacity of MOE's research activities are greatly enhanced through the development of research partnerships and external funding agreements.
    - Funding agreements often leverage financial capacity by a factor of 10 or more;
    - Many research staff have adjunct appointments at various Universities, giving them access to institutional resources and the opportunity to develop research partnerships.
    - MOE staff also effectively use graduate students to undertake relevant research (which is very cost-effective) while mentoring the next generation of research scientists. This provides a positive experience which may create more interest in students for pursuing a government science career.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

##### ***Key message #1:***

- The NRS Sector as a whole has committed to using best available science to inform decisions. The scientific approach provides a formal and consistent means of evaluating management alternatives with respect to outcomes and ensures uncertainties are explicitly described and evaluated during the decision making process.
- A strong science program establishes credibility for management actions and natural resource decisions.

##### ***Key message #2***

- MOE has worked closely with MFLNRO on the development and implementation of a Natural Resource Sector Strategic Science Framework.
- The two Ministries are currently developing a process to establish Sector-wide research priorities to ensure that the available financial and human resources are used in the most effective manner to deliver relevant research products.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Invasive Species</b></p>
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#### KEY MESSAGES:

- **Key message #1 - Invasive species are a major threat to BC's environment, economy, and society.**
- **Key message #2 - The Ministry of Environment is involved in a number of initiatives to manage and restrict the spread of invasive species in BC.**

#### CURRENT STATUS:

##### **Key message #1:**

- Invasive species are the second largest threat to species and ecosystems, after habitat loss.
- Invasive species also impose substantial economic and social impacts, including loss of productivity to agriculture, aquaculture, and forestry; impacts on infrastructure; hazards to human health and safety; and degradation of recreational areas such as parks.
  - The ministry recently commissioned a study on the potential economic impacts in BC of several invasive animal species. The study found that zebra and quagga mussels could impose annual damages of over \$21M to infrastructure and recreational boating, while European fire ants could impose annual damages of \$100M to public and private property.
- Successful management of the risks associated with invasive species depends on ongoing collaboration and partnerships with all levels of government, academia, and non-government organisations.

##### **Key message #2:**

- MoE is leading on the implementation of the Dec. 2012 amendments to the Controlled Alien Species Regulation (under the *Wildlife Act*) which now prohibit the possession, transportation and sale of a number of aquatic invasive species including snakeheads, Asian carps as well as zebra and quagga mussels.
- The Inter-Ministry Invasive Species Working Group (IMISWG) is the coordinating body for invasive species management and has representation from all resource and land management ministries, including Environment.
- Options for improving the overall regulatory framework for invasive species are currently being developed by the IMISWG for consideration by the ADM committee that oversees the group. One of the key needs identified by



stakeholders in the Invasive Species Strategy for BC (2012) was for more effective invasive species legislation.

- Public education and media attention are potent tools in the control of invasive species, as evidenced by recent successful efforts to remove snakeheads and other non-native species from a Burnaby pond, and media attention on the introduction of European fire ants in Vancouver and Victoria.
- Invasive species do not respect borders, hence cross border / jurisdictional collaboration is a key to success. For example, in 2009, BC (led by MoE) joined neighbouring US states as well as federal and tribal agencies by signing onto the Columbia Basin Rapid Response Plan designed to prevent the invasion of zebra and quagga mussels into the Columbia Basin.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Since 2009, the MoE has taken an increasingly active role in addressing invasive species impacts, in particular for aquatic species and terrestrial non-plant species.
- The IMISWG is working across ministries to address all invasive species (terrestrial and aquatic plants and animals) by developing joint strategies, collaborating across government and sharing knowledge and resources.
- Through the IMISWG, MoE is coordinating and providing linkages into other key program areas such as the environmental mitigation policy, cumulative effects framework, and species and ecosystems at risk.
- Illegal introductions of non-native fish pose a risk to BC's freshwater fisheries and are being addressed under a non-native fish policy through research, management, and eradication programs- within the limits of available resources.
- Bullfrogs impact native amphibian species through predation and competition. Provincially endorsed eradication efforts are underway in areas in the Province (e.g. Okanagan) where eradication is deemed feasible. Where eradication is not feasible habitat restoration may allow the coexistence of bullfrogs and native amphibians.
- MoE is working with Fisheries and Oceans Canada and FLNRO to monitor for zebra and quagga mussels across BC and with the Invasive Species Council of BC on a major project (under the Take Action Initiative) to reduce the risk of these species introductions by promoting 'Clean, Drain, and Dry' with recreational boaters.
- Partnerships with academia fill knowledge gaps about invasive species distribution, impacts, and removals (e.g. snakeheads, European fire ants, grey squirrels, bullfrogs, smallmouth bass, and yellow perch).
- MoE is working with FLNRO, Ducks Unlimited, Port of Vancouver and other groups to fulfill BC's commitment to eradicate invasive intertidal cordgrass (*Spartina spp*) from our coastline.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: July 5, 2013</b>	<b>ISSUE TITLE:</b>  <b>OAG Audit of Biodiversity Conservation</b>
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#### KEY MESSAGES:

- **Key message #1 – The B.C. government recognized that effectively managing to conserve biodiversity in the 21<sup>st</sup> century required a fundamental shift to how we manage natural resources in B.C.**
- **Key message #2 – Government is in the process of implementing a shift from a ministry-by-ministry approach to a coordinated, natural resource sector approach that will incorporate biodiversity objectives (along with other social, economic and environmental objectives) into all natural resource decisions.**
- **Key message #3 – The audit focused only on habitat protection measures under the *Forest and Range Practices Act* and the Conservation Framework. However, there are many other measures in place in B.C. that help conserve biodiversity.**
- **Key message #4 – That said, this audit and its six recommendations – which the Province responded to in the audit with a series of specific actions and associated timelines – will help support our ongoing efforts to manage and conserve British Columbia’s biodiversity.**

#### CURRENT STATUS:

##### **Key message #1:**

- In 2011/12 the Office of the Auditor General (OAG) conducted an audit titled “Audit of Biodiversity in B.C.: Assessing the Effectiveness of Key Tools”
- The OAG will assess government’s initial performance in meeting their recommendations early in 2014 (January or February).
- This assessment will not review government’s actions to implement their response to the biodiversity audit. It will review government’s actions to address deficiencies noted within the audit, regardless of whether they were a component of the government response to the audit.

##### **Key message #2:**

- The OAG concluded that significant gaps exist in the understanding of biodiversity, ability to determine if government actions are conserving biodiversity, and government monitoring and reporting on biodiversity.

- Government's general response to the audit included a description of the suite of management tools and designations currently in place that contribute to the management of biodiversity, but that were not included within the scope of the tools assessed within the audit. These designations (e.g., protected areas, wildlife habitat areas, wildlife management areas, other conservation lands) and tools (e.g., Integrated Decisions Making, Cumulative Effects Analyses) are critical components of government's ongoing management of biodiversity.

**Key message #4:**

- Government's response to the 6 recommendations included 12 specific actions. Some of these are currently underway and will have significant achievements prior to the January 2014 review. Others are in planning stages and have much longer time frames for completion.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

**Key message #1:**

- The audit focused on conservation of biodiversity on Crown land (excluding B.C. Parks), and focused on the habitat protection actions of the Ministry of Environment and the Ministry of Forests, Lands and Natural Resource Operations – the two ministries with primary responsibility for conserving biodiversity in the province.

**Key message #2**

- The legislation to conserve key components of biodiversity (species, ecosystems and habitats) is found in a number of different acts including: The Ministry of Environment Act, Wildlife Act, Forest and Range Practices Act, Oil and Gas Activities Act, Fish Protection Act and the Land Act and consideration of these values are mandated within the Environment and Land Use Act
- The audit included case studies on habitat protection measures under the Forest and Range Practices Act to evaluate government's effectiveness in meeting its goals. This evaluation featured habitat protection measures, such as Wildlife Habitat Areas, Ungulate Winter Ranges, and Fisheries Sensitive Watersheds that apply to specific industrial sectors (forestry, oil & gas). BC has limited protection measures that apply across all sectors and land types.

**Key message #4**

- The audit resulted in 6 recommendations to government:
  1. Make a long-term commitment to collect sufficient and reliable information about the status of biodiversity in BC and apply this information to make informed decisions about the conservation of biodiversity;
  2. Review its legislative framework to ensure that any significant gaps, inconsistencies or barriers to achieving conservation of biodiversity are identified and addressed;
  3. Assign responsibilities and timelines for its conservation actions and demonstrate how the prioritization of these actions is

- conserving biodiversity;
4. Establish goals, objectives, targets and timelines to fully implement its habitat designation tools and determine whether other tools are necessary to achieve its objective of conserving biodiversity;
  5. Complete sufficient monitoring to assess the effectiveness of its actions in the conservation of biodiversity; and
  6. Report periodically to the Legislative Assembly and the public on how its actions are impacting the status of biodiversity and how it is meeting its provincial, national and international commitments to biodiversity.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Northern Goshawk Management</b>
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#### KEY MESSAGES:

- **Key message #1 – Coastal Northern Goshawk are listed as threatened under the federal Species at Risk Act (SARA) and red-listed (Threatened) in BC.**
- **Key message #2 – In spring 2013, the Ministry of Environment (MOE) and the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) developed a government approved *Management Plan for the Northern Goshawk, laingi subspecies in British Columbia*. The MFLNRO is responsible for the Plan's operational delivery.**
- **Key message #3 – Government intends to set objectives for goshawk recovery implementation. This will require balancing habitat protections and population recovery with development opportunities for BC's coastal forestry industry.**

#### CURRENT STATUS:

##### ***Key message #1:***

- In British Columbia (BC), the coastal Northern Goshawk occurs on Vancouver Island, Haida Gwaii, and along the mainland coast (Central Coast/North Coast and South Coast).
- The decline in Northern Goshawk (NoGo) habitat has been attributed to industrial forestry activities.
- The loss of habitat is believed to be resulting in NoGo population declines. As such, NoGo are listed as threatened under the federal *Species at Risk Act* (SARA) and red-listed in BC, requiring population recovery and habitat protection. The Province is responsible for managing species at risk on Crown Lands for population recovery.
- For 2013-14, the Ministry will coordinate with the federal government on the management status, population outcomes, and habitat protections for NoGo.

##### ***Key message #2:***

- To coordinate conservation actions effectively, MOE and MFLNRO developed a government approved provincial management plan published as the *Management Plan for the Northern Goshawk, laingi subspecies in British Columbia*.

- The plan identifies a set of coordinated conservation activities and land use measures needed to ensure, at a minimum, that targets for NoGo for population recovery can be achieved. No population targets have been set for NoGo in BC. The MFLNRO is responsible for delivering this plan.
- For 2013-14, the Ministry will work with MFLNRO to provide species at risk policy support and oversight on NoGo management.

***Key message #3:***

- For 2013-14, the Ministry will work with the MFLNRO to develop an implementation plan for NoGo. An implementation plan outlines the response of the provincial government to the need to manage species at risk for which management and/or recovery in BC may have significant socio-economic implications.
- The federal government has released a draft recovery strategy for NoGo that identifies the amount of critical habitat to be protected, but does not consider the socio-economic implications to BC's coastal forestry industry.
- Once the federal plan is finalized, the Province will need to demonstrate that the identified critical habitat for NoGo will be "effectively protected".
- There are significant gaps between the proposed federal recovery strategy and BC's management plan for NoGo, specifically around the amount of critical habitat to be protected and identified population targets.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The federal government has released a draft recovery strategy for NoGo under SARA, which identifies approximately 550,000 hectares of critical habitat (includes breeding and foraging areas) to be protected. The federal strategy does not include the socio-economic implications of protecting critical habitat.
- The province currently protects ~10,000 hectares (50%) of the proposed breeding critical habitat and ~10,500 hectares (2%) of the ~514,000 hectares proposed for foraging critical habitat through provisions of the *Forests and Range Practices Act* (Wildlife Habitat Areas), the Haida Gwaii Land Use Order (schedule 12) and the *Parks Act*.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Marbled Murrelet Management</b>
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#### KEY MESSAGES:

- **Key message #1 — Marbled Murrelet (MAMU) was listed as Threatened on Schedule 1 of the *Species at Risk Act* in June 2003. Environment Canada is the lead agency responsible for developing a recovery strategy for Marbled Murrelet. The province has been participating in this planning effort.**
- **Key message #2 — Marbled Murrelet nesting habitat is managed under the Identified Wildlife Management Strategy of the *Forest and Range Practices Act*, as well as through protected areas and provisions for ecosystem-based management under BC's Strategic Land and Resource Plans.**
- **Key message #3 — Approximately 36% of remaining suitable Marbled Murrelet nesting habitat in BC is currently protected in parks and other protected areas. Government has implemented additional protection for coastal old-growth habitats, including Marbled Murrelet nesting habitat, under the Coast Land Use Decision and the Haida Gwaii Land Use Agreement.**

#### CURRENT STATUS:

##### **Key Message #1:**

- Marbled Murrelet (MAMU) is a migratory bird under the *Migratory Bird Convention Act*, and falls under the jurisdiction of the federal government. MAMU was listed as Threatened on Schedule 1 of the *Species at Risk Act* in June 2003. The Committee on Status of Endangered Wildlife in Canada (COSEWIC) has recently confirmed Threatened status due to habitat loss and other threats. Old-growth habitat loss has been estimated at over 20% in the last 30 years.
- Environment Canada (Canadian Wildlife Service) has taken the lead on MAMU recovery planning from the start, including the development of the recovery strategy and any identification of critical habitat.
- In September 2012, ENGO's challenged, in court, the federal government's failure to complete overdue recovery strategies for four species, including Marbled Murrelet (due June 2007). The applicants contend that habitat of MAMU and three other species would be impacted by the construction and operation of the Northern Gateway pipeline.



- The Federal government intends to have a draft MAMU recovery strategy for federal and provincial review by July 31, 2013. The strategy makes recommendations for an increase in protection of critical nesting habitat in British Columbia (BC) to approximately 70% of remaining habitat.
- For 2013-14, MOE will coordinate with the federal government on the management status, population outcomes, and habitat protections for MAMU.

**Key message #2:**

- In BC, management of MAMU nesting habitat is the responsibility of the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO). MOE is responsible for providing science and policy advice on the management of MAMU.
- Habitat management for MAMU occurs through a combination of Old Growth Management Areas established under BC's Strategic Land and Resource Plans and Wildlife Habitat Areas (WHAs) and General Wildlife Measures (i.e., special management practices) established under the *Forest and Ranges Practices Act*.
- MFLNRO continues to implement WHAs for MAMU habitat protection under the Central/ North Coast Land Use Decisions. For instance, there are 138 MAMU WHA proposals in progress in West Coast Region and 15 in South Coast Region. Presently, government direction is not focused on legalizing Old Growth Management Areas (OGMAs), but if initiated, could make a significant contribution to MAMU habitat protection.

**Key message #3:**

- A total of 36% of suitable habitat for MAMU is legally protected in six conservation regions in BC. Haida Gwaii has the highest at 68%, while the East Coast of Vancouver Island Conservation Region has the lowest at 23% protected.
- Additional MAMU nesting habitat could be protected immediately as a result of implementing BC's ecosystem-based management regimes under the Central Coast, North Coast, and Haida Gwaii Land Use Plans.
- The Province believes that science advice is an important component to informing government decisions on habitat protection for MAMU and other species at risk. However, socio-economic implications need to be considered, as well as consulting with directly affected parties.
- If significant additional MAMU habitat needs to be protected to meet federal expectations under SARA, additional protection will need to undergo a socio-economic analysis to determine the impacts to the forest industry and government revenues.



- For 2013-14, MOE will continue to provide policy support and work with MFLNRO to determine if additional habitat protections for MAMU are required.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- MAMU was assessed as Threatened by COSEWIC in 1990 and again in 2000, and 2013 and was assessed as a 'red-list' species by the BC CDC, based on a historical decline in nesting habitat in old coniferous forests, as well as additional threats from oil spills and gill-net fishing.

<b>Conservation Region</b>	<b>% Protected MAMU Nesting Habitat</b>
Northern Mainland Coast	31
Haida Gwaii	68
Central Mainland Coast	32
Southern Mainland Coast	27
West and North Vancouver Is.	37
East Vancouver Is.	23
<b>British Columbia Total</b>	<b>36</b>

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Fish and Wildlife Compensation Program (BC Hydro) - Governance</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – MOE and MFLNRO work closely with BC Hydro and federal partners to develop and implement programs to mitigate impacts to fish, wildlife and their supporting ecosystems related to BC Hydro facilities and operations.**
- **Key message #2 – The Fish and Wildlife Compensation Program (FWCP) provides long term funding to restore and enhance environmental values in watersheds impacted by dam and reservoir development.**
- **Key message #3 – The FWCP is implemented under a governance structure that facilitates local decision making and creates a partnership between the provincial agencies, BC Hydro, DFO, First Nations and the public.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

BC Hydro's environmental mitigation programs are organized into three main categories:

- Footprint impacts (e.g. flooding lands for reservoir creation) are addressed through the Fish & Wildlife Compensation Program (FWCP);
- Operational impacts associated with hydro generation (e.g. low flows affecting fish productivity) are addressed through Water Use Planning (WUP);
- Operational impacts associated with the maintenance of transmission lines and other structures addressed through a Protocol Agreement on Approved Work Practices;

##### ***Key message #2:***

- The FWCP covers all BC Hydro facilities and is organized as 3 'basin-level' regions: the Peace, the Columbia and the Coast (which includes all of the Vancouver Is., lower Mainland and Fraser watershed facilities).
- The FWCP implements more than \$7M in conservation-based projects annually across the three areas. Since its inception in 1988, the program has invested over \$110M to deliver more than 1500 projects.

**Key message #3:**

- Policy oversight and long-term strategic direction to all of BC Hydro's environmental programs is provided by a 3-person committee representing the Province (MOE), BC Hydro and DFO (the agency partners).
- Annual decisions on project investments are made by 3 local Boards (one for each region) with representation from the agency partners, local First Nations and local public stakeholders.
- Program implementation is guided by a common vision and set of principles (established by the Policy Committee) and local priorities established through basin-level strategic plans (developed with oversight of the Regional Boards).

**KEY FACTS/BACKGROUND/OTHER AGENCIES:****Key message #1:**

- The structure provided through this partnership arrangement has proved to be highly successful at implementing a series of complex programs and proactively managing potential conflicts. This has provided significant operational certainty to BC Hydro and better environmental outcomes for BC.
- Changes to the federal Fisheries Act and to DFO's organizational structure creates some uncertainty for the future but DFO remains committed to the collaborative approach.

**Key message #2**

- Participation by provincial staff on regional Boards and on technical review committees has helped to insure that FWCP projects are well aligned with provincial priorities.
- Example investments include funding of estuary restoration work in the Campbell River, support for species at risk recovery (ranging from Vancouver Island marmots and mountain caribou to leopard frogs) and whole-lake restoration projects (Kootenay and Arrow lakes).

**Key message #3**

- Prior to October 2011, a significant portion of the FWCP in Columbia and Peace basins was delivered by dedicated BC Hydro staff whose salaries were paid through the compensation funds. These positions were all cut when BC Hydro downsized, reducing their overall environmental staff by 40%.
- Stakeholder reaction to these staffing cuts was significant in the Kootenays where stakeholders felt valuable local expertise was lost. Some groups (such as the BC Wildlife Federation) called for 3<sup>rd</sup> party administration of the FWCP.
- The Ministry worked closely with BC Hydro to engage First Nations and stakeholders on principles and options for a renewed delivery model and governance structure. This resulted in a renewed delivery model, endorsed by local Boards in November 2012.
- Operating principles include a confirmation that historic funding levels will be maintained; a strengthened role for the local Boards in setting strategic direction, program administration and decision making and; a flexible delivery

approach including an intake of external project proposals, Board directed RFPs and the option for long-term agreements for delivery of core projects (such an agreement has now been established between the Board and MFLNRO in the Columbia region).

- In the Peace region a new collaborative working relationship has been established with First Nations and 9 Bands have signed onto an MOU with MOE and BC Hydro.
- In the Columbia, a 2013 partnership agreement with the Columbia Basin Trust will see an additional \$3M in funding administered by the FWCP and directed specifically to restoration and enhancement activities in the Koocanusa area of the basin.

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Section 7 Notices: Legal Proceedings</b></p>
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**KEY MESSAGE:**

- **Key message #1 - The Ministry of Environment (MOE) is the lead agency for issuing section 7 notices (“Notices”) for species at risk under the Forest Planning and Practices Regulation of the *Forest and Range Practices Act*. Issuing a Notice triggers the requirement to include results or strategies for the management of that species’ habitat within Forest Stewardship Plans and is one of many tools used to manage habitat for species at risk.**
- **Key message #1 – The Minister of Environment (or delegate) has the power to decide whether or not to issue a section 7 Notice at any time, if the regulatory tests can be met and it is deemed an appropriate conservation action. Several policies guide the considerations to support the decision and it has not been implemented as a statutory obligation.**
- **Key message #3 - Ecojustice, on behalf of the Wilderness Committee and Forest Ethics, is interpreting that section 7 of the FPPR creates a statutory duty to issue Notices and is demanding that the Minister of Environment issue a Notice for Douglas-Fir / Dull Oregon Grape plant community through a petition to the Supreme Court.**

**CURRENT STATUS:**

**Key message #1:**

- The *Forest and Range Practices Act*, and its regulations, establishes a regulatory framework used to manage habitat of species at risk. This regulatory framework includes a number of tests that are intended to ensure a balance among social, economic, and environmental values.
- The Minister of Environment has been delegated as the decision maker to issue section 7 Notices (“Notice”) under the Forest Planning and Practices Regulation (FPPR).
- If a Notice is issued, it triggers the requirement for persons required to prepare Forest Stewardship Plans (FSPs) to address the Notice through results or strategies to the extent that their plan area overlaps the habitat identified in the Notice. Issuing

Notices was intended as a short-term measure to maintain habitat options for the establishment of Wildlife Habitat Areas (WHAs) under FRPA's Government Actions

- Regulation. WHAs are spatially specific and include practice requirements that all persons conducting activities governed by the FRPA must comply with, not just those required to prepare a FSP.

***Key message # 2:***

- A Notice may be made if information is known for the amount, attributes and distribution of the habitat of the species at risk; if it is deemed that a WHA is ultimately the best tool to manage the threats to the habitat of the species at risk; and if regulatory tests governing the establishment of the Notice are met and it is reasonable to expect that the regulatory tests governing establishment of WHAs may be met.
- Policies and information guiding the issuance of Notices include the Identified Wildlife Management Strategy, the Government Actions Regulation: Policy and Procedures Manual, recovery strategies for the species, and the implementation priority of the species, as guided by the Conservation Framework. Consideration would also be given to the context of the suite of species at risk that occur within the area and the impacts of all these species on the Province's timber supply.
- Other tools available for the management of habitat of species at risk may be implemented if forest or range practices are not the main threats or the species occurs off crown land.

***Key message # 3:***

- The petition from EcoJustice is seeking:
  - A declaration that the Province (Minister of Environment) is required to provide notice pursuant to section 7 of the Forest Planning and Practices Regulation;
  - A declaration that the Province (Minister of Environment) knows the amount, distribution, and attributes of habitat sufficient for survival of the Douglas-fir/Dull Oregon Grape plant community (a plant community listed as a species at risk under the FRPA framework); and
  - An order of mandamus for the Minister to provide notice pursuant to section 7 for Douglas-fir/Dull Oregon Grape plant community.
- The provision to issue notices in Section 7 is not intended as a mandatory obligation of the decision-maker, and the regulation does not say that a notice "must" be made in any particular circumstance.

**Next Steps:**

- The Province's response to the petition is currently being filed with the court.

- Staff in Ministries of Justice and Environment are working on an affidavit that outlines the Province's position and this will be presented to the court prior to a hearing.
- The intent is to schedule a two-day court hearing in October in Vancouver, although this cannot be scheduled with the court until August 1.
- The hearing should conclude in October but could be delayed for a variety of reasons. It is difficult to say when we will receive a decision from the court. While technically a judge can give an oral ruling from the bench, that is unlikely with a two day hearing.
- The court will let MOJ staff know the day before the decision is being released and MOJ staff will inform MOE at the same time.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The Coastal Douglas Fir ("CDF") ecosystem encompasses a wide range of species and includes the Douglas-Fir/dull Oregon grape plant community.
- Less than 1% of the CDF remains in old growth forest condition. This 1% is home to 29 endangered plant communities, two of which have been designated as species at risk under the FRPA. Only 9% of the CDF is owned by the Province, of which approximately 40% is protected or under management for conservation. Approximately 80% of the CDF ecosystem is privately owned and the remaining portion is owned by other levels of government.
- There are many threats to the CDF ecosystem including the effects of residential development, agriculture, transportation and utility corridors, logging, mining, human intrusion and disturbance, and invasive and problem species.
- Given that only 9% of the CDF ecosystem is owned by the Province, conservation success depends largely upon partnerships with other levels of government, environmental non-government organizations and the public, including private land owners.
- The Province led the establishment of the Coast Douglas Fir and Associated Ecosystems Conservation Partnership in 2012. The partnership is working towards developing a strategic plan to address the threats to Coastal Douglas Fir Ecosystems and prioritize actions for the management and protection of Coastal Douglas Fir ecosystems.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Hydrometric Network</b>
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#### KEY MESSAGES:

- **Key message #1 - The Province recognizes the importance of the hydrometric network to economic development and public safety and in providing information vital to understanding the impacts of climate change.**
- **Key message #2 - Funding levels for the hydrometric network remain unchanged in Fiscal Year 13/14.**
- **Key message #3 - The Province remains committed to working with our partners and stakeholders to optimize the hydrometric network in B.C..**

#### CURRENT STATUS:

##### ***Key message #1:***

- Hydrometric (water quantity) information is critical to understanding water availability, and in forecasting floods and water scarcity.
- Our water resources are at risk as human (e.g., population growth and development) and natural influences (e.g., extreme weather events and climate change) affect both water quality and quantity. Affects include altered hydrologic cycles and impacts on surface and groundwater due to changes to river, wetland, lake and ocean ecosystems.

##### ***Key message #2:***

- Funding for BC's hydrometric and climate networks has been unchanged since the 2008/09 budget. While the existing hydrometric network has been maintained, cost increases have constrained maintenance and the ability to respond to growing demands for network enhancement and augmentation.
- Stakeholders from across the province rallied under the lobby group "Water Highway BC" prior to the 2008/09 budget increase which stabilized funding for the hydrometric and climate networks. Their efforts would likely resume should there be any significant change in the commitment to maintain the hydrometric network.

##### ***Key message #3:***

- The hydrometric network is part of the National Hydrometric Program and has been managed in partnership with Environment Canada under a *Memorandum of Agreement* since 1975. Authority to renew the agreement was provided under OIC #047 (January 31, 2013). The corresponding federal OIC expires on December 31, 2013 creating a limited window for sign-off of the renewed agreement.



- Renewal of the agreement will ensure continuation of the 38 year partnership with Canada and diverse stakeholders (i.e., BC Hydro, First Nations, local governments, and industry) to deliver a hydrometric monitoring program that is consistent with provincial and national standards, and supports public and infrastructure safety, economic development and sustainable resource management.
- Given the existing funding constraints, expansion or augmentation of the hydrometric network will depend on financial commitments from external partners (e.g., Canadian Association of Petroleum Producers members; Okanagan Basin Water Board) who have an interest in establishing and maintaining additional monitoring sites.

#### KEY FACTS/ BACKGROUNDER/ OTHER AGENCIES:

- BC's network of approximately 450 hydrometric stations provides long-term stream flow and water level data for resource management and public safety uses through a federal-provincial agreement. The stations are operated and maintained by the Water Survey of Canada, Environment Canada.
- The hydrometric network and the associated funding model have been under pressure since the mid-1990's following Environment Canada reductions. Those reductions resulted in a decrease in the network from its 1993/94 peak of 601 stations to the current network, with an associated loss of information critical to economic development opportunities and informed resource management.
- The costs for the hydrometric network were originally shared between the Province and the federal government on a 50:50 basis. Currently, the Ministry administers the Hydrometric program on behalf of the Province, covering over two thirds of the annual costs of approximately \$6.5M. Significant funding contributions come to the Province from a variety of external partners (e.g., BC Hydro, local governments). In recent years, much of this funding has been subject to budget pressures and competing priorities.
- The cost/benefit ratio for the hydrometric network was determined to be 19:1 in a seminal 2003 Business Review. While operating costs have increased since 2003, it is safe to assume that for every dollar spent on the operation of the network, there remains a substantial return on the investment.

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Air Quality Monitoring in Northern B.C.</b></p>
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#### KEY MESSAGES:

- **Key message #1** – With continued oil and gas development in the northeast and anticipated development of LNG facilities in the northwest, local public demand for air quality information continues to grow. The Ministry is currently collaborating with the Canadian Association of Petroleum Producers (CAPP), Oil and Gas Commission (OGC), Ministry of Natural Gas Development and other local partners to establish an air quality assessment program in the northeast and is participating in preliminary airshed work in the northwest.
- **Key message #2** – Phase 1 of the Northeast BC air quality monitoring initiative focused on impacts to rural air quality from oil and gas activities. Three monitoring stations are now ready for deployment at rural locations identified through scientific analysis and guidance from a local advisory group. Funding for Phases 2 and 3 is pending further negotiations with CAPP.
- **Key message #3** – Expansion of industrial development in the north will increase the demands for comprehensive air quality monitoring across the region. The network design and its governance will be guided by information collected during the initial assessment and collaboration with local stakeholders.

#### CURRENT STATUS:

##### **Key Message #1:**

- As oil and gas development in the Northeast continues to grow, the Ministry and its partners are re-evaluating air quality monitoring to ensure that there is adequate air quality information for public health and pollution management.
- Funding for Phase I was provided by CAPP members, OGC, MOE and MEMNG. The Ministry is currently in negotiations with CAPP to continue project development.
- Proposed development of LNG facilities and other industrial activities in the Kitimat and Prince Rupert airsheds has heightened interest and concerns about air quality. Baseline air quality monitoring has been initiated or expanded in response to these activities.

**Key message #2:**

- The Ministry of Environment has operated five (5) permanent air quality monitoring stations in the Northeast region since 1993, including Fort St. John, Taylor and Pine River/Hasler. The majority of these stations are operated under industry permits. Data from these stations are available on the BC Air Quality Website.
- Phase 1 will include deployment of three new relocatable monitoring stations to better understand the emissions impacts to rural populations and the environment. Stations will be located near rural population nodes that are in close proximity to oil and gas development.
- Phase 2 (including long term governance, technology options and network design) and Phase 3 (information sharing, network expansion and ongoing operation) and are pending confirmation of details and funding commitments from all partners.

**Key message #3**

- The NE initiative multi-stakeholder advisory group was formed to provide guidance and information relevant to the geographical scope of the project, specific monitoring objectives, and sharing information with the public.
- This program is being applied in parallel with the Northeast Human Health Risk Assessment contracted by the Ministry of Health Services. Data from this project will support decision making that stems from the health assessment outcomes.
- The Ministry and its partners will continue to engage local communities and industry on the final design of the NE network. Cost estimates are forthcoming.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Since 1993, The Ministry of Environment has operated (under industry permits) five (5) permanent air quality monitoring stations in the Northeast region, including Fort St. John, Taylor and Pine River/Hasler. Data from current air quality sites are available at [www.bcairquality.ca/readings](http://www.bcairquality.ca/readings).
- MOE and OGC partnered in 2010/2011 to conduct very short-term monitoring studies with MOE's mobile monitoring air laboratory. These studies are available at: [http://www.bcairquality.ca/reports/region\\_Peace.html](http://www.bcairquality.ca/reports/region_Peace.html).
- Phase 1 of the northeast initiative includes establishment of three new relocatable monitoring stations to better understand the emissions impacts to rural populations and the environment. Stations will be located near rural population nodes that are in close proximity to oil and gas development and can be relocated following a reasonable study period. The stations will provide hourly averages of sulphur dioxide (SO<sub>2</sub>), total reduced sulphur (TRS), wind speed and direction, temperature, and relative humidity. Data collected will be available on the BC Air Quality website.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Water Act Modernization – Current status</b></p>
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#### KEY MESSAGES:

- **Key message #1** - The proposed *Water Sustainability Act* will update and replace the existing Water Act, respond to current and future pressures on water, and position B.C. as a leader in water stewardship.
- **Key message #3** - In *Strong Economy, Secure Tomorrow*, Government has committed to consult on the *Water Sustainability Act* in 2013 with the intention of passing legislation in 2014.
- **Key message #3** - To date, the Province has received suggestions and ideas on an unprecedented scale and quality with over 2,250 written submissions from individual citizens, First Nations organizations and stakeholder groups, and over 50,000 visits to the Living Water Smart Blog and website. Stakeholders are expecting further engagement on the WSA legislative proposals in 2013.

#### CURRENT STATUS:

##### **Key message #1:**

- Modernizing the *Water Act* will fill key regulatory gaps to better protect our water resources and help keep our environment, economy and communities strong.
- The proposed new *Water Sustainability Act* will benefit all British Columbians – our communities and families, our environment and our economy.

##### **Key message #2:**

- *Strong Economy, Secure Tomorrow* commits to consult on the WSA in 2013 with the intention of passing legislation in 2014.
- The Request for Legislation (RFL) has been prepared and is working its way through the government review and approval process.
- Preparation of a Treasury Board submission is also underway. The *Water Sustainability Act* includes new business with new costs and benefits. The effect of these costs on government, stakeholder, First Nations and the public will need to be carefully evaluated. This is of particular importance as Government focuses on implementation of the *BC Jobs Plan* and balancing the budget.

- Draft legislation will be presented to British Columbians through a White Paper. This will provide an opportunity to respond to the call from all sectors to see the details of the proposed *Act* so they can evaluate the implications of the *Water Sustainability Act*. Part of the engagement process will include discussion of the proposed new pricing structure.

### ***Key message #2:***

- MoE's engagement process on *Water Act* Modernization included a moderated blog, website, discussion paper and submission process, and 12 regional workshops. MOE concluded a second stage of public engagement in March 2011 in response to repeated requests for continued involvement in *Water Act* modernization.
- Response was high with more than 50,000 Blog/website visits, 1100 YouTube views, and over 2250 written submissions and Blog comments. MoE spent much of the summer and fall 2011 assessing the input from the public, stakeholders and First Nations.
- Analysis indicates broad support for the proposed *Water Sustainability Act*, in particular for greater ecosystem protection, improved governance, and regulation of groundwater. There was also continued interest in protection of drinking water, food security and water for agriculture.
- Stakeholder and First Nations submissions have expressed a desire to review draft legislation before introduction into the Legislature.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- In developing proposals, MoE has also conducted sector-level meetings and/or conference calls with representatives from various sectors including agriculture, power, oil and gas, mining, real estate, local government, forestry and environmental organizations.
- The proposed *Water Sustainability Act* will replace the existing *Water Act* and establish a provincial framework for water, based on response to risk, competing demands and scarcity. It will enable an area-based approach for water management so that those areas with water supply, quality and watershed health issues will have access to the right tools to help manage and resolve the issues.
- The proposed *Act* will also support government's shift in the natural resource sector to an area-based model and a more integrated approach to natural resource management and decision-making.

**Contact:** Lynn Kriwoken, Executive Director, Water Protection and Sustainability Branch, Environmental Sustainability and Strategic Policy Division, (250) 387-9481.

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b><i>Water Act Modernization (WAM)</i></b> <b>&amp; First Nations</b>
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#### KEY MESSAGES:

- **Key message #1 – First Nations in B.C. bring a unique perspective to *Water Act Modernization (WAM)* due to their strong cultural and economic interests in water, as well as the legal framework associated with aboriginal treaty and constitutional rights.**
- **Key message #2 –The Province has provided a range of opportunities for First Nations participation in the WAM process through regional workshops including 3 specifically for First Nations, a discussion paper and policy proposal, as well as a moderated blog and website.**
- **Key message #3 – As part of discussions between the First Nations Leadership Council (FNLC), and the Office of the Premier on re-engagement in the *New Relationship*, the Province is expected to continue to work with the FNLC to discuss First Nation’s interests in water.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- Key concerns and interests expressed at workshops and in submissions include:
  - First Nations assert treaty and aboriginal rights and title related to water.
  - First Nations have expressed a desire to participate in drafting legislation and have an interest in co-management of the water resource.
  - First Nations are dissatisfied with the WAM engagement process and indicate it is too compressed and inconsistent with the *New Relationship*.

##### ***Key message #2:***

- MoE has distributed formal invitations and copies of documents to all 203 First Nations organizations at regular intervals throughout the WAM process. To-date, MoE has received about 24 formal submissions on WAM from First Nations organizations.
- Opportunities specifically for First Nations to participate have included:



- 12 regional workshops including three sessions specifically for First Nations during March and April 2010. About 60 First Nations participants attended these sessions.
- The Senior Policy Officials Group (SPOG) consisting of representatives of the Union of BC Indian Chiefs, First Nations Summit and BC Assembly of First Nations has been briefed several times in the early stages of WAM.
- A number of First Nations participate as Technical Advisors to the policy development process.

**Key message #3:**

- The FNLC has met twice (July 13/12 and Oct. 5/12) with Deputy Minister John Dyble, the Office of the Premier, and a Deputy's Committee regarding re-engagement in the New Relationship and key issues including WAM. It is expected that DMs will continue to meet with the FNLC to discuss FN issues including water.

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**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- In a February 25, 2011 letter to the Minister of Environment, the FNLC proposed entering into a Memorandum of Understanding with the Province *"to help move dialogue on the range of issues in an appropriate and comprehensive way, including convening a Water Forum to bring First Nations and the provincial government together for discussion"*.
- The FNLC met with Minister Lake on April 6, 2011 and with Ministers Lake and Polak on December 14, 2011. In a subsequent letter to the FNLC Minister Lake agreed to work with the FNLC to develop a MOU and support a First Nations Water Forum.
- In a May 28, 2012 letter to the FNLC, Minister Lake deferred further discussion on the MOU/Forum after being informed that the FNLC was in discussions with John Dyble, Premiers Office, regarding re-engagement in the New Relationship and key issues including *Water Act Modernization*. In the Letter, Minister Lake indicated that discussions with the Premier's Office" may help to inform further discussions" on the MOU/Forum.
- Recently, the First Nations Fisheries Council (FNFC) hosted a series of water workshops which culminated in a two-day Summary Water Forum (June 19 & 20/13). The purpose of the workshops/Forum was to provide guidance to the FNFC on the development of strategies and actions for BC freshwater management. It is likely that the strategies and actions will inform First Nations input into WAM.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 21, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Bilateral Water Management Agreements &amp; Site C</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – British Columbia is committed to complete a bilateral water management agreement with Alberta on the Peace River. BC looks forward to the completion of bilateral water management agreements with all of British Columbia's neighbours in the Mackenzie Basin.**
- **Key message #2 – Negotiation of a bilateral water management agreement on the Peace River will be completed parallel to but separate from the Site C regulatory review phase.**
- **Key message #3 – British Columbia is committed to displacing fossil fuel-generated electricity with clean, renewable and affordable power typified by the Site C development opportunity.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- Ministry of Environment (MOE), Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) and BC Hydro are currently negotiating a BC/Alberta bilateral water management agreement.
- These discussions are part of a larger multilateral process of developing three bilateral agreements associated with the Peace, Athabasca, and Slave sub-basins of the Mackenzie River Basin.

##### ***Key message #2:***

- Development of the BC Alberta bilateral agreement is running concurrently with the regulatory review phase and environmental assessment for the Site C Clean Energy Project (Site C).

##### ***Key message #3:***

- The Site C Clean Energy Project (Site C), announced in April 2010, entered the pre-application stage of the environmental assessment process in August 2011. An Environmental Impact Statement was submitted in January 2013, triggering a public comment period and resultant response by BC Hydro. The Pre-Panel Stage is expected to be complete by the end of July 2013; the Joint Review Panel is expected to start in August; and public hearings are expected in November/December, 2013. A final decision is approximated for September, 2014.



## KEY FACTS/BACKGROUND/OTHER AGENCIES:

### ***Key message #1:***

- Bilateral water management agreements are water quality and quantity commitments at key transboundary river crossing points in the Mackenzie River Basin.
- A Peace River bilateral water management agreement could address principles, water quality, flood and ice management, ground water, water allocation and aquatic ecosystem health on the Peace River and its tributaries, water consumption and flow management. Flood and ice management on the Peace River are already managed under a joint BC/Alberta task force.
- Completion of the bilateral water management agreement with Alberta and the broader Peace, Athabasca and Slave Watershed discussions including Saskatchewan and the Northwest Territories are scheduled for early in 2014..

### ***Key message #2:***

- In Site C is not expected to alter water quantity or quality downstream of the BC/Alberta border. Despite this, both Alberta and the Northwest Territories have stressed the importance of an agreement being in place before final decisions are made regarding Site C.

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### ***Key message #3:***

- The existence of bilateral agreements will not affect the right of any party to propose a new development (e.g., Site C) or to participate in a regulatory proceeding (e.g., Site C Environmental Assessment). However, the impacts of such developments must not cause a jurisdiction to default on a commitment made in a bilateral agreement.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2012</b></p>	<p><b>Living Water Smart: BC's Water Plan - Accomplishments</b></p>
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#### KEY MESSAGES:

- **Key message #1 – Living Water Smart is helping change the way British Columbians do business around water. Healthy water and watersheds are vital to B.C.'s economy.**
- **Key message #2 – Living Water Smart is helping communities adapt to change, including climate change, by planning, designing and building our communities in harmony with water.**
- **Key message #3 - Living Water Smart is improving water-demand management to help reduce water use. It also recognizes the importance of getting the science and information we need to make good water decisions.**

#### Current Status Highlights:

- The *Water Sustainability Act*, to be introduced in 2014, will deliver on 19 of the 45 Living Water Smart actions.

#### **Key message # 1:**

- *Living Water Smart* provides a clear vision for water in BC.
- In the five years since its release many of the targets and actions have been completed. More importantly, we are seeing a water ethic developing in BC that is guiding how British Columbians do business around water.
- Delivery of the *Water Sustainability Act* as committed in *Strong Economy, Secure Tomorrow* will contribute to the completion of 19 of the 45 actions in *Living Water Smart*.

#### **Key message #2:**

- The *Water Sustainability Act* will support and further watershed planning, drought response planning, and drinking water protection planning.
- The government also continues to collaborate on wetland protection through the Wetland Stewardship Partnership, which released Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in British Columbia. The draft guidelines and best practices are currently being field tested.

**Key message #3:**

- Science remains integral to fulfilling the Living Water Smart commitments. Work is continuing on a Water Science Strategy framework.

**Key Facts/ Background/ Other Agencies:**

- Living Water Smart: BC's Water Plan outlines government's vision and commitment to ensuring our water stays healthy and secure now and for future generations.
- The Plan commits to 45 actions and targets, and uses regulatory change, public education strategies, monitoring and improved information to protect and enhance B.C.'s water.
- Living Water Smart is about collective water stewardship, which includes citizens, the private sector and other stakeholders. What government does is only part of the solution.
- British Columbians are invited to visit the Living Water Smart website at [www.livingwatersmart.ca](http://www.livingwatersmart.ca) for updates on the progress of the plan.
- British Columbians are also invited to post comments or ideas on the Living Water Smart Blog, at <http://blog.gov.bc.ca/livingwatersmart/>.

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## Living Water Smart Implementation Update (to June 30, 2012)

Status:

Complete – Commitment has been achieved

WSA – Completion of commitment is contingent upon implementation of the WSA

Continuous – Commitment implies continuous effort; no defined end point

In progress – Activities currently occurring to achieve commitment

Deferred – No action towards achieving this commitment at this time

\*\*No update available for #12, 13, 41

Commitment	Progress delivered	Status
1. By 2012, all land and water managers will know what makes a stream healthy, and therefore be able to help land and water users factor in new approaches to securing stream health and the full range of stream benefits.	<ul style="list-style-type: none"> <li>Government staff have spoken about the plan at more than 50 events and distributed more than 7800 hard copy plans and 18,000 brochures. The website has received more than 25,000 visitors and the plan was downloaded more than 4000 times.</li> <li>Within government, cross agency workshops and working groups are improving the understanding among agencies of each other's business and how to contribute to this commitment. Regional resource management co-ordination activities are also assisting with the delivery of this action.</li> <li>The Collaborative Watershed Governance Initiative through the Fraser Basin Council has formed to advocate for a shift in governance and management. Through this initiative, an accord on collaboration through governance has been signed.</li> <li>The <i>Water Sustainability Act</i> is proposing Provincial Water Objectives that would be considered by statutory decision makers in decisions affecting land and water.</li> </ul>	WSA
2. By 2012, water laws will improve the protection of ecological values, provide for more community involvement, and provide incentives to be water efficient.	<ul style="list-style-type: none"> <li>A modernized Water Act, entitled the <i>Water Sustainability Act</i>, which focuses on meeting this commitment is under development.</li> <li>Engagement on policy directions was available to the public for comment with the Blog as the focus for ongoing</li> </ul>	WSA

Commitment	Progress delivered	Status
	conversation about the proposed <i>Water Sustainability Act</i> . This closed in March, 2011 and staff have completed assessment of the feedback.	
3. Legislation will recognize water flow requirements for ecosystems and species.	<ul style="list-style-type: none"> <li>Environmental flow needs are a key component of a <i>Water Sustainability Act</i>.</li> <li>International best practices have been reviewed and considered in the BC context.</li> </ul>	WSA
4. Government will require all users to cut back their water use in times of drought or where stream health is threatened.	<ul style="list-style-type: none"> <li>Proposals to manage water during times of drought and scarcity are being considered as part of the <i>Water Sustainability Act</i>. Clear authority will be enabled to protect critical flows during these times.</li> <li>Section 9 of the <i>Fish Protection Act</i> was brought into force to enable temporary reductions of water use to protect flows for fish. Through the use of Section 9 of the <i>Fish Protection Act</i> a 2009 order to reduce water use was issued to an irrigator on the Nicola River. This order enabled sufficient flow for fish during critical spawning times. This authority will continue to exist as part of the <i>Water Sustainability Act</i>.</li> <li>Most new water licences are being issued with "Fish Clauses" that provide the ability to regulate water licences for the benefit of aquatic values.</li> </ul>	WSA
5. Government will limit all new licences to 40-year terms in areas where there is high demand and pressure on water.	<ul style="list-style-type: none"> <li>All water power licences are being limited to 40 years.</li> <li>30 year licence terms (except for water power) are being considered as part of the modernized <i>Water Act</i>.</li> </ul>	WSA
6. The Ground Water Protection Regulation will protect the quality and quantity of our groundwater	<ul style="list-style-type: none"> <li>Inclusion of the Ground Water Protection Regulation (phase 2) is part of <i>Water Act</i> modernization.</li> </ul>	WSA

Commitment	Progress delivered	Status
7. By 2012, government will regulate groundwater use in priority areas and large groundwater withdrawals	<ul style="list-style-type: none"> <li>Groundwater regulation will be part of the proposed <i>Water Sustainability Act</i>.</li> <li>Existing and new large groundwater users (e.g., &gt;10m<sup>3</sup>/day) will be required to obtain a licence. Small users will be exempt, but will be given the opportunity to participate voluntarily. Deep saline groundwater will be exempt.</li> <li>The MOE is currently reviewing options to fund this new licensing work.</li> </ul>	WSA
8. By 2012, government will require all large water users to measure and report their water use	<ul style="list-style-type: none"> <li>The <i>Water Sustainability Act</i> will include measuring and reporting requirements.</li> </ul>	WSA
9. Government will secure access to water for agricultural lands	<ul style="list-style-type: none"> <li>Agricultural water reserves are proposed in the <i>Water Sustainability Act</i>.</li> <li>The Partnership Committee on Agriculture and the Environment is reviewing options for securing access to water for agricultural lands.</li> <li>The Agricultural Water Demand Model is now operational for the Okanagan Basin, the Bonaparte and Nicola basins and the Similkameen Valley.</li> <li>A report on water use in these basins has been completed.</li> </ul>	WSA
10. Government will continue to work toward preserving First Nations' social and cultural practices associated with water	<ul style="list-style-type: none"> <li>Government continues to consult First Nations on decisions that could affect their social and cultural practices associated with water, including on the proposed <i>Water Sustainability Act</i>.</li> <li>The Province is considering a First Nations Water Forum.</li> </ul>	Continuous/ WSA
11. Government and First Nations' treaty water negotiations and other related agreements	<ul style="list-style-type: none"> <li>The Province (Ministry of Aboriginal Relations and Reconciliation) is working with some First Nations organizations to develop Shared</li> </ul>	Continuous

Commitment	Progress delivered	Status
support providing a clean and safe domestic, agricultural and industrial water supply for First Nation communities.	<p>Decision-Making Agreements. These agreements will include decisions related to water.</p> <ul style="list-style-type: none"> <li>Water is an important component of treaty negotiations.</li> </ul> <p style="text-align: center; color: red;">s.16</p> <ul style="list-style-type: none"> <li>Completed final agreement with Water chapter: (the Maa-nulth treaty – negotiated with Nuu-chah-nulth First Nations) and the Tsawwassen First Nations.</li> </ul>	
12. By 2020, water use in B.C. will be 33 percent more efficient. (Brian Bedford)	<ul style="list-style-type: none"> <li>Water efficiency and conservation are being explored as part of the proposed <i>Water Sustainability Act</i>.</li> <li>Bill 27 (Green Communities) has been implemented. The legislative amendments provide local governments with a variety of tools to help them reduce GHG emissions, conserve water and energy, and work towards creating more compact, complete and sustainable communities.</li> <li>Water Demand Management Planning guidance and a Water Conservation Calculator <a href="http://waterconservationcalculator.ca/">http://waterconservationcalculator.ca/</a> have been developed through the Ministry of Community, Sport and Cultural Development.</li> <li>Living Water Smart produced a self-guided home water assessment to assess residential water use and behaviour. LWS Home Water assessment was included with Live Smart BC's home energy assessment, which was undertaken in 40,000 homes.</li> </ul>	In Progress
13. Fifty percent of new municipal water needs will be acquired through	<ul style="list-style-type: none"> <li>Progress towards this target is being made through the conservation actions noted above and changes to</li> </ul>	In Progress

Commitment	Progress delivered	Status
conservation by 2020. (Brian Bedford)	<p>infrastructure grant criteria.</p> <ul style="list-style-type: none"> <li>The Partnership for Water Sustainability is helping to implement the Living Water Smart and Green Communities initiatives through shared responsibility in delivering the Water Sustainability Action Plan. The Partnership primarily works in the local government context, with a focus on community and regional planning systems, to influence uptake of strategies that will integrate decisions about use and conservation of land with water sustainability outcomes.</li> </ul>	
14. Government will look at new ways to help promising water conservation technology succeed.	<ul style="list-style-type: none"> <li>Government provided guidance to those who plan, design and fund infrastructure to encourage the uptake of new technologies that find ways to turn our wastes into resources. Government hosted a series of workshops on water reclamation and reuse across the province.</li> <li>The B.C. Real Estate Association has volunteered to be a partner to create incentives to make homes water efficient.</li> <li>The BC Building Code was updated (2012) to enable non-potable water use</li> <li>Infrastructure Grant Assessment criteria is a points based system. Applicants achieve more points if they can show that they are thinking in an integrated manner (e.g., about energy, climate change adaptation, water conservation, new approaches to “waste as a resource”.</li> </ul>	Continuous
15. Government will fund household evaluations of water, energy and transportation use.	<ul style="list-style-type: none"> <li>Information about how to be more water smart was provided to over 40,000 homes around BC as part of the successful LiveSmartBC program. Certified Energy Advisors deliver the water information and home water</li> </ul>	Complete



Commitment	Progress delivered	Status
	assessment as a part of the Low Carbon Lifestyle Guide and Consultation. This program is now complete.	
16. The Green Building Code will require water conservation plumbing fixtures such as low flush toilets. (Jarrett Hutchinson or Christine Webb)	<ul style="list-style-type: none"> <li>• The new Green Building Code took effect in 2008. Ultra low-flow toilets (6 L) and other water-saving plumbing fixtures and fittings are now mandatory in new construction and renovations.</li> <li>• Further work on requiring high efficiency toilets and urinals is complete. A Minister's Order was signed April 6, 2010, amending the BC Building Code to require 4.8-litre or dual-flush toilets in residential buildings, effective October 4, 2011. The 18 month period prior to the effective date is a result of implementation concerns that arose from industry such as supply of product, current inventories and coordination to national installation standards.</li> </ul>	Complete
17. By 2010, government will mandate purple pipes in new construction for water collection and reuse. (Jarrett Hutchinson or Christine Webb)	<ul style="list-style-type: none"> <li>• The upcoming 2012 BC Codes will include new provisions to enable non-potable water use for certain plumbing fixtures and underground irrigation systems.</li> <li>• Note: purple pipes will not be mandated, but will be enabled</li> </ul>	Complete
18. In partnership with industry, government will develop a water efficiency labelling system for water consuming products. (Ted White)	<ul style="list-style-type: none"> <li>• The Council of the Federation has endorsed Canada-wide water efficiency labelling. Environment Canada developed an agreement with the US EPA to bring its WaterSense program to Canada. The steering committee for Canadian water efficiency labelling will be a key delivery agent for the Canadian side of the program.</li> <li>• In October 2011, the BC Ministry of Environment became a Promotional Partner of the US EPA WaterSense</li> </ul>	Continuous

Commitment	Progress delivered	Status
	<p>Program. The primary responsibility of promotional partners is to help educate consumers on water efficiency and the WaterSense brand. In the signed agreement, BC has committed to promote water efficiency and WaterSense labeled products and programs, encourage participation by constituents, and provide an annual report.</p>	
<p>19. Government will require more efficient water use in the agriculture sector.</p>	<ul style="list-style-type: none"> <li>• The Irrigation Scheduling Calculator is live and operational. The calculator provides users with an irrigation schedule using real time climate data and will help irrigators to be more water efficient. It works for both agricultural and landscaping irrigation systems.</li> <li>• Government support continued the delivery of irrigation Industry Association of BC Certified Irrigation Designer and Certified Irrigation Technician Programs</li> <li>• Further work on this commitment will be advanced through the <i>Water Act</i> modernization.</li> </ul>	Continuous/ WSA
<p>20. Government will award a youth water-science prize or scholarship for excellence in water stewardship.</p>	<ul style="list-style-type: none"> <li>• Through the Ministry of Education and Living Water Smart government supported the development of BC Green Games – a digital competition to inspire environmental action in schools. Year one prizes have been awarded and the competition had recently opened for the 5th year (2012).</li> </ul>	appears to be ongoing
<p>21. Government will celebrate examples of successful water stewardship by awarding annual water awards to individuals or groups.</p>	<ul style="list-style-type: none"> <li>• Living Water Smart website has profiled “Water Heroes” in the past and provided rewards to those who submit results from home water assessments (water bottles).</li> <li>• Local government excellence in water stewardship was recognised through the green cities awards presented at the 2008 UBCM convention.</li> </ul>	Deferred

Commitment	Progress delivered	Status
	<p>Reduction of water use was one of the criteria.</p> <ul style="list-style-type: none"> <li>• Further action on this commitment is deferred.</li> </ul>	
22. The government of B.C. will work with our Olympic partners to use sports and the Olympic Games spotlight to engage British Columbians and support smarter water choices.	<ul style="list-style-type: none"> <li>• Government has worked with VANOC to influence water smart action at and during the Olympics.</li> <li>• 2010 Educational material and websites prepared by government include actions for sustainability.</li> </ul>	Complete
23. By 2010, a strategy to set the direction for water science for B.C. will be implemented. (Celine Davis)	<ul style="list-style-type: none"> <li>• The development of the water science strategy is underway.</li> <li>• The BC Water Symposium, held in three simultaneous locations (Victoria, Kelowna and Prince-George) from August 30 to September 1, 2010, marked the beginning of the dialogue to create a Water Science Strategy (WSS). Developing a WSS is a collaborative process with multiple partners to produce a strategy that can be used by organizations across the province to facilitate the exchange of water related knowledge between those that create and hold this knowledge and those that use it to make decisions, support policy development and create operational procedures.</li> <li>• Input from the BC Water Symposium will be used to generate a framework for the WSS. A webpage (<a href="http://livingwatersmart.ca/watersciencestrategy">livingwatersmart.ca/watersciencestrategy</a>) will host information on the development of the WSS.</li> <li>• MOE developed a draft Water Science Strategy framework. This will be reviewed by the Phase 2 Advisory Group.</li> <li>• Next step is public engagement.</li> </ul>	In Progress
24. Government is expanding	<ul style="list-style-type: none"> <li>• In 2008 the governance structure</li> </ul>	In Progress

Commitment	Progress delivered	Status
British Columbia's hydrometric and other climate-related networks. (Wynn Hays-Byl)	<p>supporting the hydrometric network, and its agreements including funding support, was renewed.</p> <ul style="list-style-type: none"> <li>• A Review of the Hydrometric Network in BC was completed (2012).</li> <li>• We are continuing to co-deliver the Hydrometric Agreement with Environment Canada, and are looking for opportunities to improve the functionality and cost-effectiveness of the network.</li> <li>• We are also examining opportunities to expand the water monitoring network (hydrometric; ground and surface quality) particularly in areas experiencing high development demand.</li> </ul>	
25. Government will publish a report on the state of our water by 2012 and every five years after that. (Stephanie Hazlett)	<ul style="list-style-type: none"> <li>• The Ministry of Environment is leading the development of a new model for State of the Environment Reporting, which will include the State of BC's Water.</li> <li>• A template for the new model, including information on water indicators, will be completed in 2012</li> </ul>	In Progress
26. Government will work with other provinces to share ideas and resources to improve water conservation and collectively help communities adapt to climate change.	<ul style="list-style-type: none"> <li>• The Western Water Stewardship Council was established in May 2008 to assist collaboration and partnerships on water stewardship initiatives among Canada's seven western-most provinces and territories. Two meetings were held with specific deliverables on water governance and water efficiency labelling.</li> <li>• The Council of the Federation is now moving forward with a national Water Stewardship Council which will replace the western council.</li> </ul>	Continuous
27. Tools to incorporate traditional ecological knowledge into information and decision	<ul style="list-style-type: none"> <li>• Natural resource agencies across government have met on including traditional ecological knowledge in decision making. There is enthusiasm</li> </ul>	In Progress / WSA

Commitment	Progress delivered	Status
making will be developed by 2015. (Ian Graeme)	<p>to work together and link this work with the First Nation Regional Coordination teams.</p> <ul style="list-style-type: none"> <li>• Inter-Agency Working Group has made some progress internal to government but has identified the need for funding to facilitate engagement with First Nations to being development of tools.</li> <li>• Developing tools to incorporate Traditional Ecological Knowledge is under development.</li> </ul>	
28. By 2012, all students in B.C. will have completed at least one stream-health assessment.	<ul style="list-style-type: none"> <li>• A project charter and initial working group with partners already working with students in water education was formed to achieve this project. Initial work on approach and fit with the school curriculum is completed.</li> <li>• This project is now deferred.</li> </ul>	Deferred
29. Government will support communities to do watershed management planning in all priority areas.	<ul style="list-style-type: none"> <li>• Government continues to support watershed planning processes in the province with information and resources.</li> <li>• Government support to the Cowichan Valley Regional District enabled the establishment of the Cowichan Basin Water Advisory Council to oversee implementation of the Cowichan Water Plan.</li> <li>• Government has supported the Township of Langley Water Management Plan which is the first plan being developed under Part 4 of the Water Act. (approval pending)</li> <li>• The province supported the development of the Water Balance Model to promotes rainwater management and integrate planning and engineering to achieve sustainability objectives and minimize impacts on water.</li> <li>• Watershed planning is being proposed as part of <i>Water Act</i></li> </ul>	WSA

Commitment	Progress delivered	Status
	modernization.	
<p>30. By 2012, new approaches to water management will address the impacts from a changing water cycle, increased drought risk and other impacts on water caused by climate change.</p>	<ul style="list-style-type: none"> <li>• The Province's River Forecast Centre has provided a definition of drought based on classification schemes used by the USDA and NOAA in the United States.</li> <li>• Drought response management workshops were held between Jan-May 2010. Input from workshops incorporated into BC Drought Response Plan. This plan builds on existing tools and outlines the actions taken preceding, during, and immediately following a drought to reduce impacts. It includes communication steps required to ensure timely and appropriate action.</li> <li>• The BC Drought Response Plan was implemented in summer 2010 and will be periodically reviewed and updated based on experiences and input from stakeholders.</li> <li>• The <i>Water Sustainability Act</i> will include measures to manage water resources in times of scarcity and will inform the Drought Response Plan.</li> </ul>	Continuous/ WSA
<p>31. Government will improve the quality and protection of drinking water sources. (Vicki Carmichael – GW; Brenda Janke – Health)</p>	<ul style="list-style-type: none"> <li>• Work is underway to encourage the development of drinking water protection plans.</li> <li>• Planning guidance documents are being developed to better support those interested in developing source water protection plans.</li> <li>• This commitment will also be supported by <i>Water Act</i> modernization.</li> <li>• Current DW Protection Plans (for DW capture zones) have been digitized and added to the government's EcoCat</li> <li>• A layer of DW capture zones has been added to iMAP and the Water Resources Atlas</li> </ul>	Continuous / WSA

Commitment	Progress delivered	Status
	<ul style="list-style-type: none"> <li>DW capture zones in the Northeast are in the process of being delineated</li> <li>Provincial Drinking Water Officers continue to work with water suppliers to complete a <a href="#">Drinking Water Source to Tap Assessment</a> as required and/or requested</li> </ul>	
32. The government will cooperate with Canada to ensure the quality of drinking water in all Aboriginal communities will meet the same provincial standards applied across British Columbia by 2015.	<ul style="list-style-type: none"> <li>Deferred.</li> </ul>	Deferred
33. Government will provide summer jobs for youth between the ages of 16 to 22, to undertake 20 stream restoration projects across the province.	<ul style="list-style-type: none"> <li>The BC Conservation Corps and Living Rivers Trust have supported this commitment in past.</li> <li>The Living Rivers Trust continues its work.</li> </ul>	Complete
34. Government will work with the private sector and support communities to conserve and restore stream function.	<ul style="list-style-type: none"> <li>Government supports ongoing efforts to protect and restore stream function through the Living Rivers Trust Fund.</li> <li>Government and several non-governmental organizations have formed the Wetland Stewardship Partnership (WSP) to collaborate on wetland protection.</li> <li>MOE has initiated development of an Environmental Mitigation Policy. The intent of the policy is to avoid, minimize, and/or offset environmental impacts associated with developments and activities on Crown land. It will be piloted in 2012.</li> <li>MOE is developing a Cumulative Effects policy to address environmental effects resulting from activities</li> </ul>	Continuous
35. Wetland and waterway function will be protected	<ul style="list-style-type: none"> <li>The Wetland Stewardship Partnership released Wetland Ways: Interim</li> </ul>	Continuous/ WSA



Commitment	Progress delivered	Status
and rehabilitated (Ted Pobran)	<p>Guidelines for Wetland Protection and Conservation in British Columbia. The draft guidelines and best practices promote best management practices for wetlands. The guidelines are currently (2012) being field tested and will be updated based on experiences and feedback from user groups</p> <ul style="list-style-type: none"> <li>• The completed Green Bylaws toolkit for wetland protection and informed development activity. Completed workshops that gave an overview of the toolkit to local governments and other stake holders</li> <li>• MOE ,the Wetland Stewardship Partnership and the UVic Environmental Law Clinic have developed a draft discussion paper to support a no net loss of wetlands policy</li> <li>• MOE has initiated development of an Environmental Mitigation Policy. The intent of the policy is to avoid, minimize, and/or offset environmental impacts associated with developments and activities on Crown land. It will be piloted in 2012.</li> </ul>	
36. Government and partners will restore ecological health to 30 km of stream between Vaseux Lake and Osoyoos Lake. (Tara White for updates)	<ul style="list-style-type: none"> <li>• The Okanagan River Restoration Initiative is underway.</li> <li>• Phase 1 is complete</li> <li>• Entering Phase 2 and Phase 3 (conducted late summer/fall 2012)</li> <li>• Phase 2 will provide fish passage at the drop structure and Phase 3 will reconnect a historic oxbow side channel</li> </ul>	In Progress
37. Government will fund the Mount Washington mine remediation project with \$4.5 million, restoring the health of the Tsolum River.	<ul style="list-style-type: none"> <li>• The Tsolum River Restoration project is underway.</li> </ul>	Complete



Commitment	Progress delivered	Status
38. To enhance some watersheds, government will examine the potential of decommissioning dams.	<ul style="list-style-type: none"> <li>• After considerable review with the Okanagan Nation Alliance, DFO, MOE (water and stewardship) and the Town of Oliver a decision was made to retain the existing McIntyre dam structure as a dam and to modify it to make it more fish friendly, replacing the existing roller gates with overshot gates.</li> <li>• List of abandoned dams compiled.</li> <li>• The Province has accelerated some its work on dams. Further dams will be reviewed as they are identified.</li> </ul>	Complete
39. Community development strategies will be developed to recognize the important role riparian areas play in adapting to climate change.	<ul style="list-style-type: none"> <li>• Working with partners, including the Real Estate Association and BCWWA to extend message and develop new standards.</li> <li>• Wetland partnership, Riparian Areas Regulation, and green bylaws toolkit are also facilitating delivery of this goal.</li> </ul>	Continuous
40. Adapting to climate change and reducing our impact on the environment will be a condition for receiving provincial infrastructure funding.	<ul style="list-style-type: none"> <li>• Government is continually updating the provincial criteria for infrastructure grants. Government now requires a council endorsed water demand management plan before municipalities can apply for water related infrastructure funding.</li> <li>• Infrastructure Grant Assessment criteria is a points based system. Applicants achieve more points if they can show that they are thinking in an integrated manner (e.g., about energy, climate change adaptation, water conservation, new approaches to “waste as a resource”.</li> </ul>	Complete
41. Where new development on flood plains is unavoidable, it will be flood-proofed to high provincial standards. (Jeysal Shah)	<ul style="list-style-type: none"> <li>• New design standards are being developed for buildings in flood prone areas due to sea level rise</li> </ul>	In Progress
42. Government will provide	<ul style="list-style-type: none"> <li>• A component of the province-wide</li> </ul>	In Progress

Commitment	Progress delivered	Status
<p>\$100M for flood protection over the next 10 years to help communities minimize flood losses.</p>	<p>long term Flood Protection Program is the availability of a fund to assist communities and diking authorities to address public safety concerns due to flooding hazards and to reduce future infrastructure damage potential.</p> <ul style="list-style-type: none"> <li>• Project identification is through an application process from communities and diking authorities and includes Federal participation through the Build Canada Plan and local government participation with the capital costs.</li> </ul>	
<p>43. Government will provide incentives for the restoration of streams or wetlands. (Ted Pobran)</p>	<ul style="list-style-type: none"> <li>• MOE is developing an Environmental Mitigation Policy for wetlands and other ecosystems.</li> <li>• This commitment could be advanced by the ability to develop a broader range of incentives under the proposed WSA</li> </ul>	<p>In Progress/ WSA</p>
<p>44. Green developments waiting for provincial environmental approvals will be fast-tracked and given priority.</p>	<ul style="list-style-type: none"> <li>• Criteria for green development will be developed (Community Service)</li> <li>• BC Building Code was updated in 2012 to enable the use of purple pipes/ non-potable water sources</li> <li>• Note: approvals will not be 'fast-tracked', but clarity on expectations for green developments will be provided</li> </ul>	<p>Continuous</p>
<p>45. Government will develop new protocols for capital planning that will look at the lifecycle costs and benefits of buildings, goods and services.</p>	<ul style="list-style-type: none"> <li>• The Province has committed to having all new government buildings being built to a minimum LEED (Leadership in Energy and Environmental Design) gold standard or equivalent.</li> </ul>	<p>Complete</p>

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 21, 2013</b>	<b>ISSUE TITLE:</b>  <b>Township of Langley Water Management Plan</b>
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#### KEY MESSAGES:

- **Key message #1 – The Township of Langley is dependent upon groundwater both for the municipal drinking water supply and for the rural, largely agricultural, water supply. Without proactive measures to reduce extractions and protect groundwater quality, these aquifers are in jeopardy and there may be economic impacts on the agricultural, development and other sectors.**
- **Key message #2 – The aim of the Water Management Plan is to protect local groundwater resources for sustainable community and agricultural use and to promote healthy habitats through new policies, local government bylaws, and provincial regulations**
- **Key message #3 – The Province has invested \$300,000 to fund the development of the Plan, and at least \$100,000 in staff time. The Township has also provided significant funding.**
- **Key message #4 – Responsibility for approval of the plan rests with the Minister of Forests, Lands and Natural Resource Operations (MFLNRO). The Plan's recommendations are being reviewed by MFLNRO and the Ministry of Environment for their financial, legislative and policy implications including the Province's proposed new *Water Sustainability Act*.**

#### CURRENT STATUS:

##### ***Key message #1:***

- Commencing in 2006, the Township of Langley, in collaboration with the Ministry of Environment (MoE) and the (then) Ministry of Agriculture and Lands (MAL) undertook a three-year planning process that included comprehensive rounds of consultation involving several mechanisms for the exchange of ideas (public open houses, focus groups, telephone surveys, etc.)

##### ***Key message #2:***

- The Water Management Plan was approved by Township of Langley Council and submitted to the Minister of Environment in November 2009.

**Key message #3:**

- The Plan is now being assessed for its resource, legislative, and policy implications for the BC Government. Initially, costs to implement the Plan were estimated at about \$650,000/year. Plan implementation priorities need to be defined and costs reassessed to determine what elements of the plan can move ahead.

**Key message #4:**

- The recommendations in the Plan are being assessed vis à vis policy initiatives and legislative provisions related to *Water Act* Modernization. There is some overlap between the Plan and the proposed *Water Sustainability Act* creating opportunities for implementing and resourcing the two under one process.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- MFLNRO staff provided a written update on the status of the plan to the Township of Langley staff in June 2013.

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- It is not yet clear to what extent costs of the Plan would be shared between the provincial government and the Township of Langley where implementation of a recommendation is a joint responsibility. Cost estimates for each recommendation will be refined during the Plan's phased implementation.
- Investing in the Plan will yield savings in the future; including avoided municipal water supply and sewage system charges, longer life expectancy for private wells, and avoided rehabilitation costs in the event of a contamination event. These investments will also promote water security for agriculture and help to sustain the local economy.
- During the development of the plan, the local Kwantlen and Katzie Bands were asked how they wanted to be consulted and were kept informed as planning proceeded in accordance with their wishes for consultation.

**Contact:** Lynn Kriwoken, Executive Director, Water Protection & Sustainability Branch, Environmental Sustainability and Strategic Policy Division, (250) 387-9481.

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE</b></p> <p><b>Office of the Auditor General  Report: Management of  Groundwater Resources in BC</b></p>
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#### KEY MESSAGES:

- **Key message #1 – The audit report presents valuable information on the importance of groundwater. Government recognizes the need to protect the quality and quantity of our groundwater.**
- **Key message #2 – Government is addressing audit recommendations through the review of the Groundwater Program, the commitments in *Living Water Smart: British Columbia's Water Plan*, the current work to modernize the *Water Act*, and Phase 2 of the Ground Water Protection Regulation.**
- **Key message #3 - Government has made progress addressing the audit recommendations in 2011 and 2012. Many of the recommendations have been implemented, are underway or will be examined through various government initiatives.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The Office of the Auditor General (OAG) report states that “government is not effectively ensuring the sustainability of the province’s groundwater resources”.
- The report includes seven recommendations for MOE that deal with knowledge and scientific data and analysis needs; protection of groundwater and aquatic ecosystems; and roles and responsibilities in the management of groundwater.

##### ***Key message #2:***

- MOE initiated in 2011 a review of the Groundwater Program in collaboration with the Ministry of Forest Lands and Natural Resource Operations.
- MOE is working to modernize the *Water Act*, which will better protect groundwater from depletion and contamination, and clearly define the roles and responsibilities of the various agencies involved in the protection and management of groundwater.
- Phase 2 of the Ground Water Protection Regulation (not yet enacted) includes additional measures to protect groundwater, such as siting of new wells, stopping artesian flow, and mandatory submission of well records to better protect groundwater.

### **Key message #3:**

- Government made progress in many of the recommendations in 2011 and 2012, including the installation of new observation wells, aquifer classification and data management. Self-assessed progress reports were completed for the OAG in February 2012 and 2013. The reports are available on-line.

### **KEY FACTS/ BACKGROUND/ OTHER AGENCIES:**

- The Office of the Auditor General presented the audit findings at the February 10, 2011 meeting of the Public Accounts Committee (PAC). The main points raised by PAC included:
  - Need for additional information on groundwater aquifers in BC
  - Costs associated with aquifer remediation if preventative action is not taken
  - Lack of legal rights to access groundwater
- Over 1 million British Columbians rely on groundwater for domestic supply. Demand for groundwater is rising significantly because of steady population growth and increasing resource development, including development of oil, gas and mineral resources in B.C.'s north.
- For more than 50 years the provincial Groundwater Program has been assessing and monitoring groundwater, collecting water well data and making it accessible to the public, inventorying and mapping aquifers, and providing sound, professional advice to decision makers to protect the resource.
- Continuing to prioritize improved knowledge of groundwater will allow the resource to be managed effectively and efficiently. Public access to quality data supports sustainable development and protection of groundwater.
- Historically, the government has focused only on non-regulatory activities (e.g., assessment and monitoring). Standards for well construction only became law in 2004. B.C. remains the only jurisdiction in Canada that does not regulate the extraction and use of groundwater. The proposed *Water Sustainability Act* will significantly improve the regulatory framework for groundwater by regulating the extraction and use of groundwater in B.C.

**Contact:** Lynn Kriwoken, Executive Director, Water Protection and Sustainability Branch, Environmental Sustainability and Strategic Policy, (250)387-9481.

ESTIMATES NOTE (2013) <b>Confidential</b> Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Shale Gas Hydraulic Fracturing (Fracking)</b>
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#### KEY MESSAGES:

- **Key message # 1 – *Strong Economy, Secure tomorrow*, and the *BC Jobs Plan* identify natural gas as central to long-term economic prosperity. Unconventional gas, as part of BC’s Liquefied Natural Gas (LNG) industry, will contribute to BC’s leadership in the transition to a low carbon global economy.**
- **Key message #2 – The Province continues to assess, and is committed to minimizing and mitigating, the possible adverse impacts of unconventional gas production.**
- **Key message #3 – BC’s *Oil and Gas Activities Act*, the *Water Act* and the *Environmental Management Act* require the protection of environmental values, including water.**

#### CURRENT STATUS:

##### **Key message #1:**

- As part of ensuring energy security and development, BC’s Energy Plan has established that the province: “be among the most competitive oil and gas jurisdictions in North America”.
- BC’s Natural Gas Strategy builds on the foundation of the BC Jobs Plan to create long-term economic prosperity and will support a clean, safe and secure energy future for all British Columbians.
- Unconventional gas, which includes shale and tight gas, represents 50 percent of current natural gas production and a significant majority of known reserves in BC.<sup>1</sup> Unconventional production is forecasted to be up to 85-90% by 2020.
- BC views its liquefied natural gas (LNG) industry as a key contributor to the Province’s leadership in transitioning to a low carbon global economy.
- LNG development in BC can have lower lifecycle greenhouse gas emissions by promoting the use of clean electricity to power liquefied natural gas facilities.

<sup>1</sup> Estimated unconventional resources are 1,400 trillion cubic feet (Tcf) compared to approximately 91 Tcf in conventional resources. Source MEMNG.



**Key message #2:**

- The Province continues to review potential adverse impacts of recovering unconventional gas. Areas of focus include:
  - Cumulative environmental effects of past, present, and future unconventional gas activity;
  - Impacts on wildlife, such as moose, and particularly on boreal caribou – a threatened species and federally-listed species at risk; and
  - Water quality and volume of water used in association with hydraulic fracturing operations in northeast BC.
- Finding solutions to minimize and mitigate adverse impacts of unconventional gas production is a priority for the government. Examples of current initiatives include:
  - A Ministry of Health study that will assess the potential health risks of oil and gas development in BC. The Ministry of Environment (MOE) is participating in this study and will review the results closely;
  - Studies in the Horn River Basin and the Montney area (Kiskatinaw watershed) that will further the collective understanding of the relationship between water and natural gas development; and
  - Building on the regulatory foundation put in place in 2010 under the *Oil and Gas Activities Act* (OGAA) such as launching a mandatory public disclosure registry for hydraulic fracturing fluid composition ([fracFocus.ca](http://fracFocus.ca)) to increase natural gas sector transparency.
- MOE is participating in the development of a Shale Gas Hydraulic Fracturing Water Strategy. In addition, MOE is currently working with other agencies to develop a Northeast Water Stewardship Coordination Plan. The plan will help better coordinate ongoing multi-agency water management initiatives.

**Key message #3:**

- MoE contributed to the development of the OGAA, which includes the authority to designate areas for protection and to establish environmental objectives – for such features as aquifers, watersheds as well as fish and wildlife habitats.
- OGAA's accompanying Environmental Protection and Management Regulation provides regulatory requirements for surface-based oil and gas activities on Crown land. The Drilling and Production Regulation provides protection of fresh water aquifers by establishing stringent drilling and pipe casing requirements.
- Under the *Environmental Management Act*, the Oil and Gas Regulation requires that produced water or recovered fluids from fracking, be discharged to underground formations through injection into deep wells that trap and lock



in waste material.

- BC's *Water Act* establishes that the right to use surface water must be granted by a licence or a short-term use approvals, which contain conditions of water use. The Act also allows for Water Management Plans to be established by the Minister (by the Ministry of Forests, Lands and Natural Resource Operations), if significant conflicts arise between water users.
- MOE is leading development of a new *Water Sustainability Act* which will build on and replace the *Water Act*. Proposed policies under consideration include: expanded protection of stream health and aquatic environments; provincial water objectives; and licensing of groundwater use.

#### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Montney and the Horn regions contribute significantly to western Canada's natural gas resources. These regions are key components of the Province's Natural Gas Strategy and Liquefied Natural Gas Strategy.
- The OGC is the single-window regulatory agency with responsibilities for regulating oil and gas activities in BC. The Commission's core services include reviewing and assessing applications for industry activity, consulting with First Nations, cooperating with partner agencies, and ensuring industry complies with provincial legislation and all regulatory requirements.
- Oil and gas developers are required to report on their water use quarterly and this information is available on the OGC's website.
- In late summer of 2010 and again in 2012 the Northeast experienced drought conditions. MOE responded by issuing water supply and stream flow advisories, while the OGC responded with Directives to cease water use for certain watersheds entirely.
- Under the Province's Climate Action and Clean Energy (CASE) Fund, MOE, in collaboration with the new Ministry of Natural Gas Development and GeoScience BC and industry, is continuing to: enhance and improve aquifer mapping; install and monitor observation wells; and develop guidelines around groundwater use.
- CASE projects will ensure stakeholders have access to timely and high quality information about their groundwater resources. More specifically:
  - The observation well network in the Northeast (Montney Play) has been tripled;
  - MOE also is working with industry to install and monitor observation wells in the Horn River area; and
  - Improvements to government databases will ensure stakeholders and government have timely access to information on the location and construction of groundwater wells.

**Contact:** Lynn Kriwoken, Executive Director, Water Protection and Sustainability Branch, Environmental Sustainability and Strategic Policy Division, (250) 387-9481.

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE</b></p> <p><b>Water Quality Guidelines  Development and Permitting  of Mining Discharges</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 - Emerging science is pointing to significant environmental challenges facing some existing and proposed mining projects with respect to water quality parameters.**
- **Key message #2 - The B.C. government supports the implementation of updated water quality guidelines in a manner that protects the environment, while maintaining and fostering a thriving, globally competitive mining industry.**
- **Key message #3 – The mining industry wants to have a greater understanding of how the Ministry of Environment will incorporate new water quality guidelines into waste discharge permits and to ensure the consistent application of policies and guidelines across the province.**
- **Key message #4 - Government supports improved communication and information exchange with the Mining Association of British Columbia on the development of water quality guidelines and permitting.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- Emerging science has identified sulphates and selenium as significant water quality issues for the mining industry. A water quality guideline (WQG) is a benchmark which indicates the concentration at which a substance can be expected to produce detrimental environmental effects, and is taken into consideration by the statutory decision-makers under the *Environmental Management Act* in determining whether to issue a discharge permit. The emerging science for sulphate and selenium indicated a need to re-examine the WQGs for these substances.

##### ***Key message #2:***

- The Ministry of Environment has updated WQGs for sulphate and selenium. The sulphate guideline was reviewed by the mining sector and formally approved on April 15, 2013. Draft selenium guidelines are expected to be ready for final approval later this summer. Scientific studies conducted by MABC relating to sulphate and selenium were considered in the development of the new WQGs. The Ministry of Environment is also updating the cadmium WQG.

**Key message #3:**

- The Mining Association of British Columbia (MABC) has raised concerns with the process for determining water quality guidelines. The industry is also concerned about the business risks and uncertainties for existing and future mining operations posed by the proposed new Selenium WQG. The larger issue is the potential for water quality impacts from new and possibly existing mine developments.
- The mining industry wants to have a greater understanding of how the ministry will incorporate new WQG into permit decisions, and to ensure policies and guidelines will be applied consistently across the province.
- The Ministry of Environment has been working to improve both internal and external communications by developing guidance documents for staff and the mining industry.

**Key message #4:**

- The Ministry of Environment has been discussing technical aspects of WQG development with the MABC through the MOE-MABC Communication Forum, and these discussions have been well received.
- The Ministry of Environment has recently updated operational policies for the review of environmental assessments to support permitting decisions. The updated policies will help ensure consistency in the effluent permit decision making process.

**KEY FACTS/ BACKGROUND/ OTHER AGENCIES:**

- When making decisions regarding permit applications, statutory decision-makers at the Ministry of Environment are legally-bound to protect the environment. While economic or social factors can be considered in the decision-making process under the *Environmental Management Act*, environmental considerations are paramount.
- WQGs are just one tool used in determining the potential for impact on the environment. While WQG are not binding, they do represent an important piece of information that factors into decisions as to whether to issue an authorization to discharge. The issuance of a permit by the ministry is appealable to the Environmental Appeal Board.
- The Environmental Protection Division approved Operational Policy 6.01.25, MOE Manual for Reviewing Environmental Impact Assessments to Support Effluent Permitting, on March 1, 2013.

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ESTIMATES NOTE 2013 <b>Confidential</b>  Ministry of Environment  <b>Date: June 19, 2013</b>	<b>ISSUE TITLE:</b>  <b>Changes to the Federal <i>Fisheries Act</i>  (Bill C-38 and C-45)</b>
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#### KEY MESSAGES

- **Key message #1 –B.C. has a strong interest in ensuring habitat protection, maintaining the health and conservation of all our fish stocks, and creating a clear and consistent regulatory environment.**
- **Key message #2 – Ministry staff have coordinated a provincial review and response to changes related to the *Fisheries Act*.**
- **Key message #3 – BC is actively engaged with the federal government to ensure a regime is in place to protect fish and fish habitat in B.C.**

#### **CURRENT STATUS:**

##### ***Key message #1***

- B.C. has provided strong advice to the Federal Government to ensure changes to the *Fisheries Act* are compatible with B.C.'s approach to environmental management.
- The federal government has said it wants to focus on greater efficiency and to eliminate redundancy in the permitting process – this should have positive impacts for jobs in B.C. as it aims to reduce unnecessary red tape.

##### ***Key message #2***

- MoE is working with provincial agencies (FLNRO, EAO, EM, LNG, OGC, ABR, AG, IGR and CSCD) to ensure a coordinated provincial position and a thorough interagency review of all federal communications on changes related to the *Fisheries Act*.
- On behalf of BC, the Ministry of Environment has provided comprehensive comments outlining provincial concerns with the proposed legislative, regulatory, and policy changes, as requested by the Department of Fisheries and Oceans (DFO) Canada.
- DFO has responded positively to the feedback we have sent them and we are confident they are working to address the issues we have identified.

### **Key message #3**

- In 2012, BC proactively requested engagement with DFO on the changes to the *Act*. We have continued our dialogue through regular meetings with DFO on this issue.
- BC now has an appreciation of structural changes across DFO and has established working relationships with DFO's Pacific Region staff. The province is confident that we have a solid foundation for managing through this transition period.
- We will continue to communicate with our federal partners to understand how changes related to the *Act* will affect fisheries management in BC so that our province is prepared as possible prior to implementation.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- In 2012 two federal bills that include several changes to federal natural resources legislation, and significant amendments to the federal *Fisheries Act* were introduced in the House of Commons:
  1. **The Jobs, Growth and Long-term Prosperity Act (Bill C-38).**  
Implementation is through two phases of amendments. Stage 1 received Royal Assent on June 29, 2012. Stage 2 is proposed to come into force in October 2013.
  2. **The Jobs and Growth Act (Bill C-45).** All amendments will come into force when Stage 2 of Bill C-38 comes into force (October 2013).
- On April 13, 2013 the proposed regulation titled 'Application for Authorization under Paragraph 35(2)(b) of the *Fisheries Act* Regulations' was posted to Canada Gazette 1. It was open for comment for 30 days and will come into force following minor revisions in the Fall 2013.
- On May 6, 2013 DFO released a policy discussion paper "Implementing the New Fisheries Protection Provisions under the Fisheries Act." DFO asked for formal comments on the discussion paper for consideration in a revised version. Provincial comments were consolidated by MOE and submitted to DFO on May 29<sup>th</sup> 2013.
- On June 6, 2013 DFO updated provincial and territorial ADMs on the implementation of the *Fisheries Act*. DFO indicated that due to feedback received, their summer schedule for implementation of the changes to the *Fisheries Act* was being postponed. DFO now projects an October date for implementation of all regulatory and policy changes, following additional consultation over the summer period.

- On June 17, 2013, DFO launched a new Recreational Fisheries Conservation Partnerships Program designed to support restoration of recreational fishing habitat through partnerships with local organizations. While not directly related to the changes to the *Fisheries Act*, this program will assist local groups in leveraging money for additional habitat protection.

**Contact:** Anthony Danks, Executive Director, Strategic Policy Branch,  
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## Environmental Protection Division - 2013

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19.	Brownfields
20.	Watson Island Site Contamination

ESTIMATES NOTE (2013) <b>Confidential</b> Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Status of 2013/14 Budget Environmental Protection Division</b>
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#### KEY MESSAGES:

- **Key message #1 – The Environmental Protection Division will potentially experience a budget reduction of \$ 1.3M in FY 2013/14. Additionally, some programs are experiencing budget pressures. Division resources include \$25.954M budget (\$ 8.324M Base budget and \$ 17.630M SEF), which includes \$ 21.131M salaries, \$ 4.483M operating and approximately 256 full time staff positions.**
- **Key message #2 – The Division's focus is on protecting human health and the environment from pollution which supports government's objectives for environmental, economic and social sustainability. The Division carries out its responsibilities through three branches: the Environmental Management Branch; Environmental Standards Branch; and Regional Operations Branch.**
- **Key message #3 – Business planning is ensuring the highest priorities are identified and resourced in 2013/14 in order to support the BC Jobs Plan, with lower priorities being deferred or scaled back due to resource constraints.**

#### CURRENT STATUS:

##### **Key message #1:**

##### Vulnerabilities

- Continuing staff attrition is significantly affecting some business areas/regions and increasing risks to economic certainty and the environment.
- Environmental Emergency and spill response has been acknowledged previously as inadequate to meet the increasing risk of spills presented by expansion of the energy sector and its associated pipeline and rail transport sectors.

##### *Environmental Protection Core Business Analysis (\$000s)*

	Estimates 2011/12	Restated 2011/12	Estimates 2012/13	Restated 2012/13	Estimates 2013/14	Planned 2014/15
Environmental Protection	\$7,054	\$6,954	\$6,954	\$6,954	\$8,324	
SEF	\$19,000	\$19,000	\$19,000	\$19,000	\$17,630	s.17
<b>Total Operating:</b>	<b>\$26,054</b>	<b>\$25,954</b>	<b>\$25,954</b>	<b>\$25,954</b>	<b>\$25,954</b>	

##### **Key message #3:**



- Activities and operational costs reduced to minimum threshold.
  - Division staffing strategy identifies the need to shift resources to address key operational needs and government priorities.
  - Staff travel limited to critical program delivery.

**Contact:** Jim Standen, Assistant Deputy Minister, Environmental Protection Division, (250) 387-1288.

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Sustainable Environment Fund</b>
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#### KEY MESSAGES:

- **Key message #1 – The Sustainable Environment Fund is an important source of funding for core Ministry of Environment functions including preventing pollution and supporting remediation of existing contamination.**

#### CURRENT STATUS:

##### **Key message #1:**

- The Sustainable Environment Fund (SEF) Special Account was created in 1990 under the Sustainable Environment Fund Act and subsequent amendments. It provides for:
  - the protection of the air, land and water;
  - environmental renewal by preventing pollution and controlling pollutants; and
  - undertaking remediation activities through administration of the Environmental Management Act (EMA), Integrated Pest Management Act and related regulations.
- Revenue is derived from environmental levies, fees, licences under EMA, and contributions from federal and provincial governments and other organizations.
- Initiatives supported under SEF are primarily aligned with the Environmental Protection, including: clean-up of contaminated sites, hazardous waste management, soil and water remediation projects, monitoring the environment, education and pollution prevention, and waste reduction.
- Due to the removal of accumulated pesticide (\$8.566M) revenues in 2011/12 and declining EMA revenues as a result of the economic downturn the expenditure budget was reduced by \$1.37M in 2013/14 to fix a structural deficit.
- Through the collection of revenue estimated at \$19.53M in 2013/14, SEF provides funding for Environmental Protection (68% of its budget or \$17.63M) and Climate Action (\$1.305M).

**Contact:**     **Name, title**  
                      **Phone**

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Land Based Spill Response Policy Work</b></p>
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#### KEY MESSAGES:

- **Key message #1 –The Environmental Emergency Program is working with stakeholders on development of an industry-funded model for enhanced terrestrial spill prevention and response.**
- **Key message #2 – Our goal is to develop a world-class industry-funded spill regime with the right mix of prevention, planning, response and recovery.**
- **Key message #3 – To be clear, pipelines are just one focus of any land-based spill preparedness and response plan – the goal is develop policy for all non-marine hazardous spills, including: oil tank leaks, overturned tanker trucks/railcars, and chemical spills.**

#### CURRENT STATUS:

##### ***Key message #1 and 2:***

- Our plan is built on three key principles intended to strengthen spill preparedness and response for all hazardous material spills in B.C. These are:
  - Establishing a world-class regime for land based spill preparedness and response.
  - Developing effective and efficient rules for restoration of the environment following a spill.
  - Ensuring effective government oversight and coordination of industry spill response.

##### ***Key Message #3:***

- The safe transportation and use of hazardous materials – including petrochemicals, such as oil and natural gas – is critical to British Columbia's economy and way of life. Whenever hazardous materials are present the possibility of a spill into the environment exists. While public interest focuses most heavily on the risks posed by oil tankers at sea, there are risks that exist in the terrestrial environment as well; an area where the province has significant management responsibilities.
- Major resource developments in the province's northeast, coupled with proposals to open new and expand existing transportation corridors for petrochemicals and other hazardous materials, is resulting in increased attention and expectations for preparedness and response to spills in British Columbia

## KEY FACTS/BACKGROUND:

- The Ministry of Environment - as the ministry responsible for preparedness, prevention, response and recovery for spills - is not adequately staffed and resourced to meet the existing and emerging expectations to address spills. Even a moderate-sized spill would overwhelm the province's ability to respond and could result in a significant liability for government.
- Major resource developments in the province's Northeast, coupled with several proposals to open new and expand existing transportation corridors for petrochemicals and other hazardous materials is resulting in increased attention and expectations for spill response.
- Increasing preparedness through regulation commensurate with risk is not "development vs the environment" but rather something all levels of government and industry agree upon.
- A terrestrial spill preparedness and response policy intentions paper was released in November 2012 which spoke to three critical areas of interest to the Ministry:
  - Identifying and developing alternative funding mechanisms for BC's environmental emergency program;
  - Supporting development and implementation of an industry funded provincial scale terrestrial spill prevention and response body; and,
  - Establishing a mechanism to ensure fair and timely natural resource damage assessment and reparation.
- The public comment period ended in February 2013.
- The ministry held a symposium on terrestrial spill preparedness and response from March 26-28, 2013 in Vancouver. The symposium brought together about 200 individuals with spill preparedness and response expertise to provide input into the elements of a world class terrestrial spill response regime. The following key recommendations emerged:
- There must be sustainable communication, cooperation and collaboration between communities, First Nations, government, industry and responders.
- B.C. needs to work with other government agencies to ensure there are clear roles and responsibilities for all parties engaged in spill preparedness and response.
- Appropriate funding to support spill prevention, preparedness and response.
- A working group with representation from industry, First Nations, local government, the federal government and other stakeholders has been created to assist the Ministry in expanding on policy options and developing recommendations to government.

**Contact:      Graham Knox, Manager, Environmental Emergencies  
                     (250) 356-8383**

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Tanker Traffic and Oil Spill Response</b></p>
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#### KEY MESSAGES:

- **Key message #1 – The Ministry is committed to protecting British Columbia's coastal environmental resources from harmful oil spills from marine vessels, industrial facilities or inland sources.**
- **Key message #2 – In the event of a spill, the Ministry of Environment's highly trained response professionals would immediately begin implementing the province's comprehensive spill response plan and protocols.**
- **Key message #3 – The Ministry response would be integrated with the Responsible Party and participating federal agencies, local governments, First Nations and other stakeholders. The Canadian Coast Guard is the lead federal agency for ship source oil spills in marine waters.**
- **Key message #4 – The Ministry is working diligently with our federal partners to advocate for a truly world class spill preparedness and response regime in B.C.**

#### CURRENT STATUS:

##### **Key message #1:**

- During a marine spill, the Ministry of Environment would:
  - Ensure the availability of equipment, expertise and trained personnel;
  - Provide the public with accurate and timely information, and
  - Ensure the safety of the public and response personnel.
- The Ministry currently has 10 full-time and 3 backup Environmental Emergency Response Officers (EEROs) located in 10 offices around the province. EEROs are highly trained in hazardous materials assessment and response.
- At any given time, two EEROs are on call to provide swift response to environmental emergencies.
- The Ministry may also deploy our Incident Management Team comprised of over 15 Technical Specialists to provide additional support.

##### **Key Message #2:**

- The proposed Northern Gateway and Kinder Morgan pipelines, if approved, would result in an increase in tanker visits to B.C. ports.
- A response to a spill from the proposed Enbridge pipeline or oil tanker traffic would follow our established spill response protocols. Government could also request international support based on agreements with neighbouring jurisdictions such as the Pacific States-British Columbia Oil Spill Task Force which includes Washington, Oregon, California, Alaska, and Hawaii.
- In all spill incidents the Ministry establishes an integrated response with lead federal agencies, local governments, First Nations and other key stakeholders to ensure a coordinated, effective and efficient response.
- The Province will take an active role in coastal resource identification and, in the event of an oil spill, the protection and cleanup of the intertidal shoreline and seabed, which are under the jurisdiction of the Province.

#### KEY FACTS/BACKGROUND:

- Enbridge is seeking approval for its \$6 billion Northern Gateway pipeline project to meet growing demands for Alberta oil sands oil in Asian and U.S. markets. Built in the same right of way, one pipeline would flow west and move over 500,000 barrels of crude oil per day out of Alberta's oil sands to tankers in Kitimat and another would flow east and move 193,000 barrels of condensate from tankers in Kitimat to Alberta to dilute oil sands bitumen for transport. If approved, the pipelines would extend across 670 km of northern B.C., crossing a variety of geographic conditions; key habitats for woodland caribou and grizzly bears, as well as fish habitats; near to provincial parks and protected areas; and crossing hundreds of streams and rivers. It would open B.C.'s coastal waters to an additional 220 tankers annually.
- Environmental impacts associated with the construction and operation of the pipelines are the subject of review by a National Energy Board panel. The Province has official intervenor status in the hearing process.
- Through the cross-examination phase of the NEB hearings, the province has been seeking answers from Northern Gateway related to:
  - Mitigating/minimizing the risk of a spill to terrestrial or marine environments
  - Spill preparedness including the ability to mount a timely and adequate response to a spill given the unique weather and terrain in northern BC; and
  - The degree to which BC taxpayers are protected from financial impacts of a spill.
- B.C.'s final argument was submitted on May 31, 2013 and oral arguments were delivered June 16-21 in Terrace.
- The severity of a spill from the Northern Gateway pipelines would depend on the spill location, response efforts and size. For example, at several points in the Coast Mountains, a significant spill could put 1,000 – 2,000 cubic metres of unrecoverable oil into a fast-moving river system. Contamination would travel 60 to 100 kilometres within 20 hours. There are additional risks of a spill from a

tanker navigating B.C.'s coastal waters. Weather conditions and the remoteness of the pipeline's route in B.C. could cause cleanup delays, leading to broader water, land and wildlife contamination. Sensitive habitats, local economies (fisheries and tourism, for example) and First Nations along the route could be affected.

- In light of proposed and advancing resource projects, B.C. is working diligently to ensure it has world class spill response. As part of this effort, the province has engaged Nuka Research – recognized experts in spill response – to build on our understanding of what it would take to strengthen Canada's existing west coast regime. The Ministry will have all three draft final reports by July 19, 2013. Together the three volumes of the *West Coast Spill Response Study* will provide us with:
  - An assessment of the current regime (Volume I)
  - A detailed vessel traffic study (Volume II)
  - An understanding of what it would take to be world class (Volume III)

**Contact:     Graham Knox, Manager, Environmental Emergencies  
                     (250) 356-8383**

<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Environmental Emergencies: Cost Recovery</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – The Ministry is committed to ensuring an adequate response to all spills.**
- **Key message #2 – Responsibility for all spills rests with the spiller.**
- **Key message #3 – Ministry staff attend and oversee the response to high risk spills.**
- **Key message #4 – The *Environmental Management Act* establishes a polluter pay model under which spillers are held accountable for costs associated with spills.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- The Ministry, as the lead provincial agency for spill response, provides support to the spiller and other responding jurisdictions (federal, local and First Nations).
- For spill related emergencies, the three primary roles of the Ministry are to:
  - Monitor the incident to ensure adequate response;
  - Establish provincial environmental protection priorities;
  - Augment the response with provincial resources as required, and
  - As an action of last resort, take over the management of the response.

##### ***Key message #2:***

- Legislation is in place which enables the province to recover from spillers both its own response costs and actual clean-up costs if the spiller fails to affect a clean-up.

#### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Emergency Program Management Regulation under the *Emergency Program Act* identifies the Ministry of Environment as the lead ministry for planning for, preventing, responding to, and recovery from hazardous material incidents.



- Under the *Environmental Management Act*, the Ministry is empowered to assess a spill situation, issue pollution abatement orders, seek cost-recovery, and to take mitigative actions. The Minister may also declare an Environmental Emergency to access consolidated revenue or other required resources.
- The Spill Cost Recovery Regulation further elaborates how provincial response costs can be recovered.
- A significant spill would have substantial and widespread environmental, economic and social repercussions for the province. With current liability limits that exist, the province may not be able to recover the province's full costs from the responsible party or other sources.
- Several incidents over the past few years have resulted in the Ministry incurring significant costs in responding to spills. Cost recovery was pursued in most cases, with the following results:

<b>Incident</b>	<b>Spiller</b>	<b>Costs Invoiced</b>	<b>Costs Recovered</b>
Queen of the North	BC Ferries	\$161K	\$48K to date
Cheakamus Caustic spill	CN Rail	\$242K	\$242K
Westwood Annette bunker spill	Gearbulk Shipping	\$99K	\$99K
Kinder Morgan Burnaby Pipeline spill	Kinder Morgan	\$87K	\$87K
CPC hazardous waste clean-up	CPC	\$850K	Not recoverable
Robson Bight	Ted Leroy Trucking	\$1.5M Note 1	Claim denied by the federal Ship Source Oil Pollution Fund

Note 1 - The spiller has been put on notice that they are responsible for costs incurred in cleaning up this spill (the spiller has declared bankruptcy).

**Contact:** Graham Knox, Manager, Environmental Emergencies, (250) 356-8383

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Tsunami Debris</b>
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#### KEY MESSAGES:

- **Key message #1 – The province is working with the federal government, local governments and the volunteer sector as members of a Tsunami Debris Coordinating Committee. The committee developed a Tsunami Debris Management Plan that can be implemented and updated as circumstances change.**
- **Key message #2 – Our goal is to ensure funding is being used to support on-the-ground cleanup and recycling/disposal efforts for affected coastal communities and First Nations.**
- **Key message #3 – So far, the volume of debris is lower than anticipated although it is difficult to quantify how much to expect or when it will arrive. Tsunami debris will likely continue to arrive for a number of years, with the volume diminishing over time.**

#### CURRENT STATUS:

##### ***Key message #1:***

- A revised joint federal-provincial Tsunami Debris Management Plan was released on December 21, 2012. The revised plan updates and adds information to Phase 1 of the plan which was posted publically in August, 2012.
- The Phase 2 framework was released at the annual UBCM meeting in September and the current plan is the result of consultation by regional director of tsunami debris, Jonn Braman, and ministry staff with First Nations, local governments, and non-government agencies.
- The plan is a living, scalable document and will be added to as circumstances change.
- The province will maintain capacity to deal with debris that poses a public safety threat – particularly related to hazardous materials, while the federal government, will maintain its responsibility to manage derelict vessels and aquatic invasive species threat.
- No one agency or group has the sole responsibility or jurisdiction for responding to this challenge. It requires the resources and collaborative efforts of all.

##### ***Key Message #2:***

- On March 13, 2013, the Government of Japan presented a one-time grant of \$1 million to the Government of Canada to support clean-up work associated with tsunami debris.
- The Canadian grant will flow through Environment Canada to the B.C. Ministry of Environment for fiscal 2013/14 and 2014/15 and will be directed to three areas:
  - Local governments and First Nations to support clean-up efforts (the process for this is being developed).
  - Parks Canada and BC Parks to support volunteer and other efforts to address clean up in coastal parks.
  - A portion will be held back to address removal costs and management of invasive species risks when and if large objects arrive. This portion would be released for other uses as the risk of large objects arriving diminishes with time.
- Distribution to coastal communities will be through an application-based process for larger grants based on actual need (amount of debris and proposed community effort). Residual funds in the large object holdback pool will be distributed, if available, using the same process.
- The application process will ensure the bulk of the money is directed to where the effort is most needed as tsunami debris arrives.

***Key Message #3:***

- Marine debris is common on B.C.'s coast, and it is difficult in most cases to differentiate between tsunami-related debris and normal debris. A few pieces have been confirmed by registration or other identification numbers, however the additional volume and difference in type of debris, particularly arriving last year, suggests the tsunami was the source for the unusual material.
- The largest piece of confirmed tsunami debris to-date was reported on January 1st, 2013 – a long steel cylindrical tank (8' x 35') from a Japanese cement company that washed ashore on a beach in Naikoon Provincial Park, Haida Gwaii.
- Federal and provincial officials investigated the tank, determined there was no immediate threat to human health or the environment; however there was concern that the tank could refloat, or become permanently lodged on the beach.
- A contractor was hired by BC Parks to remove the tank from the beach on January 13, 2013 and towed to Masset where the contractor removed the tank from the ocean and cut it up for recycle or disposal.
- Other confirmed pieces of tsunami debris have washed up on B.C. shores: a shipping container with a motorcycle inside and a number of small fishing boats.

**Contact: Jonn Braman, Regional Manager  
Tsunami Debris Preparedness  
(604) 537-4565**

<b>ESTIMATES NOTE (2013)</b> <b>Confidential</b> <b>Ministry of Environment</b> <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b> <b>New Air Emissions Guideline for Waste to Energy Operations</b>
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#### **KEY MESSAGES:**

- **Key message #1 – The Ministry of Environment has updated its air emissions guidelines for Municipal Solid Waste combustion. The standards reflect current international best practices.**
- **Key message #2 – Local governments and private companies in BC are increasingly interested in waste-to-energy as a way of disposing of municipal solid waste while generating energy and heat.**
- **Key message #3 – The Ministry of Environment will scrutinize any proposal for burning of Municipal Solid Waste to ensure that air quality is protected. A large-scale project in the metro Vancouver or Fraser Valley area will go through a full Environmental Assessment process.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- The Ministry of Environment has developed operational policy that enables regional solid waste management plans to include Waste to Energy (WTE) as an energy recovery option. The policy sets a 70% waste diversion target and identifies a minimum 60% energy conversion efficiency for local governments proposing WTE facilities.
- In March 2011, the Ministry of Environment updated its “Guideline for Emissions from Municipal Solid Waste Combustion”. The standards reflect current international best practices and were recommended by a Stantec/Ramboll consulting report.
- The revised guideline contains specific criteria for various contaminants that are more stringent than or comparable to the Ministry’s previous (1991) criteria.
- The revised guideline will assist ministry staff in evaluating WTE and other municipal solid waste incineration authorization requests.
- A fact sheet summarizing the guideline in plain language is available on the Ministry’s website.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The BC BioEnergy Strategy and Climate Action Plan support use of waste biomass as a fuel, such as may be possible through burning municipal solid waste.
- Local governments and private companies in British Columbia are increasingly interested in burning municipal solid waste in order to dispose of it and generate energy and heat. This practice, known as Waste to Energy (WTE), is an allowable activity under the *Environmental Management Act*.
- At present, Metro Vancouver's Burnaby incinerator is the only large scale WTE facility in BC that processes municipal solid waste. Covanta has proposed a new Green Island Energy Facility in Gold River to combust municipal solid waste from Metro Vancouver. The Ministry issued an air emissions permit for this proposed facility on November 28, 2011. The emissions limits in the permit are protective of human health and the environment and are generally consistent with the Ministry's revised air emissions guideline.
- Metro Vancouver's new solid waste management plan allows them to pursue waste-to-energy as an option for disposing of solid waste.
- The Ministry will use the revised air emissions guideline as a basis for evaluating any proposed WTE facilities in Metro Vancouver or elsewhere.

**Contact:** Tyler Keith, A/Manager, Air Protection  
(250) 387-9933

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>AirCare</b>
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#### KEY MESSAGES:

- **Key message #1 – The province has announced the phasing out of the AirCare light duty vehicle inspection program as of Dec 31, 2014.**
- **Key message #2 – We are taking action to reduce heavy duty diesel particulate emissions because of their significant multiple human health impacts.**
- **Key message #3 – We are working with partners including the Ministry of Transportation and Infrastructure and Metro Vancouver to develop a coordinated plan of action to reduce diesel particulate emissions.**

#### CURRENT STATUS:

##### ***Key message #1:***

- On May 24, 2012 the B.C. government announced that the AirCare program in the Lower Mainland and the Fraser Valley would end on Dec. 31, 2014, for light duty passenger cars and trucks.
- Most cars on the road now run a lot cleaner than the vehicles rolling off the line when AirCare started in 1992 and newer cars are designed to meet more stringent emissions standards.
- Failing an emission test can result in costly repairs. The Ministry has asked AirCare to reduce, to the extent practical, the fee to inspect vehicles in 2014 to make it fair for car owners requiring an inspection in the final year of the program.
- Phasing the program out at the end of 2014 gives us time to carry out a well planned and orderly transition and time to study non-point sources of emissions so we can determine where we need to put our efforts going forward.
- Although many individuals and groups had demanded eliminating the AirCare program, both the Metro Vancouver and Fraser Valley regional district boards support retaining the AirCare program through 2020.

##### ***Key Message #2:***

- As part of the AirCare phase out government committed to explore options to reduce emissions from on-road diesel engines.
- Diesel engines are a significant source of fine particulate.

- Fine particulate is a contaminant of heightened concern due to its multiple human health impacts.
- Metro Vancouver calls diesel particulate one of its “most pressing environmental issues.”
- Heavy duty diesel vehicles are currently not captured under the fixed station AirCare emissions testing program.
- Currently, enforcement for heavy duty diesel vehicles is done through the Ministry of Transportation and Infrastructure’s mobile AirCare on Road program.
- Metro Vancouver recently completed on-road testing of emissions from thousands of heavy-duty vehicles.
  - The report concluded newer vehicles (post 2007) are significantly cleaner than older ones, and that “gross emitters – the dirtiest 10 per cent of vehicles” emit 4 to 11 times more pollutants than properly operating vehicles of the same year.

***Key Message #3:***

- MoE and MoTI are working with a team of partners including Metro Vancouver on a report that will further explore potential options to reduce emissions from on-road heavy duty diesel vehicles. Results are expected by December 31, 2013.
- Both the Metro Vancouver and Fraser Valley regional district boards have recommended to the Province that it focus on programs to reduce significant sources of diesel particulates.

**Contact:     Duncan Ferguson, Environmental Management Officer  
                     Environmental Standard Branch  
                     (250)387-9942**

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Air Quality and Proposed LNG Facilities</b></p>
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#### KEY MESSAGES:

- **Key message #1** – The Ministry is aware of the specific challenges facing the Kitimat airshed; we are looking at the cumulative effects of air emissions from the aluminum smelter and proposed LNG terminals and will be developing a plan to address public health.
- **Key message #2** – The Ministry is working closely with the new Ministry of Natural Gas Development, the Environmental Assessment Office and the Oil and Gas Commission to ensure LNG emissions remain within what the Kitimat airshed can safely accommodate.
- **Key message #3** – Any new industrial operation proposed for Kitimat will be subject to an Environmental Assessment and will need to submit detailed emissions modelling data to the ministry as part of the process.

#### CURRENT STATUS:

##### **Key message #1:**

- The Ministry has started discussions with LNG proponents regarding the studies and data needed to properly predict potential environmental effects from air emissions at LNG facilities.
- The Ministry is developing information requirements that are based on a cumulative effects approach for the environmental assessment of liquefied natural gas (LNG) facilities. This approach takes into account all other existing and reasonably foreseeable projects that could impact air quality in an affected air shed.
- The Ministry held an inter-agency workshop in early June to start developing a framework for assessing cumulative effects of air emissions from LNG facilities. This framework includes assessment of secondary effects such as deposition of acidifying compounds (i.e. acid rain) and ozone formation.
- The Ministry has contracted a team of consultants who are specialists in air dispersion modelling, human health effects, and ecosystem impacts (aquatic, soil, and vegetation) to assist in the air emissions framework development.
- The initial focus of the air emissions assessment framework is on the Kitimat Valley, but it will be applied to other areas with LNG proposals (such as Prince Rupert).



- The Ministry is also in the process of establishing world-leading emission standards (NO<sub>x</sub> and carbon monoxide) for the natural gas turbines used in the LNG industry.

### ***Key Message #2:***

- The Ministry is actively participating in the environmental assessment process (provincial and federal) for the various LNG terminal facilities, pipelines, and gas processing plants.
- The Ministry has met with one of the Kitimat-based proponents (LNG Canada) regarding the type of baseline data collection needed (air, soil, and water samples) for environmental assessment purposes and is starting similar discussions with the Prince Rupert-based proponents.
- The Ministry is providing support on air quality issues to the Oil and Gas Commission (OGC), who will be the responsible agency for LNG air permits, as well as contributing information and expertise to the new Ministry of Natural Gas Development.

### **KEY FACTS/BACKGROUND:**

- The Kitimat Valley continues to receive attention regarding current and proposed industrial developments that include:
  - The Rio Tinto Alcan (RTA) aluminium smelter modernization project
  - Three LNG facilities: KM LNG, LNG Canada and the much smaller BC LNG
  - The proposed Northern Gateway pipeline between Alberta and Kitimat
  - Kitimat Clean Ltd's oil refinery proposal
- The RTA smelter modernization will reduce most emissions, such as particulate matter, by nearly 50 per cent, but will increase sulphur dioxide (SO<sub>2</sub>) emissions. Accordingly, the air permit was recently amended to allow a maximum limit of 42 tonnes per day of SO<sub>2</sub> (from 27 tonnes per day).
- The key air emissions from LNG facilities are SO<sub>2</sub>, NO<sub>x</sub>, and fine particulate. The key emission sources are natural gas turbines and acid gas incinerators.
- First Nations and public groups in Terrace and Kitimat are well informed and concerned about potential impacts from SO<sub>2</sub> and NO<sub>x</sub>. This concern is expected to grow as LNG proponents enter the regulatory processes.
- It is possible that ozone could form downwind of LNG facilities due to the additional presence of turbine NO<sub>x</sub> emissions. As a first step, a screening level exercise will be used to estimate if ozone concentrations could be significant (i.e. measurable) in the Kitimat-Terrace air shed.

- To date only preliminary rough estimates of air emissions from the proposed LNG terminal facilities have been available. Facility-specific data are needed to make definitive statements regarding air shed impacts.

**Contact:     Ed Hoffman, Regional Director**  
**250-565-6443**

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>RioTinto Alcan Permit Amendment</b></p>
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#### KEY MESSAGES:

- **Key message #1 – In evaluating the application, the ministry considered a large volume of scientific assessments, technical information, First Nations input, community feedback and other information. The decision maker was satisfied there is sufficient information to set requirements for the protection of the environment and human health.**
- **Key message #2 – The extensive air quality assessment of the Kitimat airshed, undertaken as part of the RioTinto Alcan smelter upgrade, has increased the understanding of the capacity and characteristics of that airshed and the potential impacts of increased industrial activity.**
- **Key message #3 –Kitimat has one of the densest air quality monitoring networks in the province; real time air quality information from five Kitimat air quality monitoring stations can be accessed 24 hours a day, seven days a week at [www.bcairquality.ca](http://www.bcairquality.ca)**

#### CURRENT STATUS:

##### **Key message #1:**

- Overall, the modernization will reduce emissions by nearly 50 per cent including significant reductions in fluoride, particulate matter, polycyclic aromatic hydrocarbons, and greenhouse gases. The increased production will, however, result in higher sulphur dioxide (SO<sub>2</sub>) emissions and on April 23, 2013, the Ministry of Environment granted a permit amendment, under the Environmental Management Act, to RTA allowing increased SO<sub>2</sub> emissions at their Kitimat smelter as part of the modernization process.
- The ministry consulted with the Northern Health Authority and will work closely with the health authority as the SO<sub>2</sub> increase is phased in.
- Comprehensive analysis conducted by a qualified professional concludes that SO<sub>2</sub> does not cause new disease and may lead to an increase of less than one per cent in the number of restricted airway events among residents with existing airway conditions.
- The Ministry's review included consideration of two primary documents submitted by Rio Tinto Alcan (RTA) in support of the application: a technical assessment report (TAR) and appendices, and a consultation report. The TAR included reporting of findings by RTA's qualified professional team on four lines of inquiry: human health, vegetation, terrestrial acidification, and aquatic acidification. The

consultation report summarized the consultation process and feedback from stakeholders.

**Key Message #2:**

- As part of the amendment, RTA must submit an Environmental Effects Monitoring (EEM) program to the ministry for review and approval by December 30, 2013.
- The EEM program is to include effects monitoring along four lines-of-evidence: human health, vegetation, and terrestrial and aquatic environments. The program will also include criteria that would trigger emission reduction and/or other mitigation.
- The impact assessment work done by RTA, in support of the amendment to increase SO<sub>2</sub> emissions from the Kitimat smelter, are site-specific and do not determine the capacity of the airshed for other potential emission sources.

**KEY FACTS/BACKGROUND:**

- The Kitimat Modernization Project (KMP) is a \$3.3 billion project by Rio Tinto Alcan (RTA) designed to modernize and increase production at the company's aluminium smelter in Kitimat.
- The project was first announced in 2007 and given the formal notice to proceed in 2011 by RTA's Board of Directors.
- The decision was made by ministry staff, as the statutory evidence-based decision maker, which keeps the decision at arm's length from the political process.
- As part of the proposed upgrade, the ministry required RTA to hold public consultations and complete monitoring and impact assessment studies evaluating the potential impacts to soil, water, vegetation and human health in the airshed.
- The permit amendment has increased the sulphur dioxide emission limit from a maximum of 27 tonnes per day to a maximum of 42 tonnes per day. The SO<sub>2</sub> emissions are expected to increase progressively with implementation of full aluminium production capacity under KMP in 2015, and then gradually over time after full production is reached in 2015 due to increasing sulphur content of the petroleum coke used in the process.
- As with all decisions of this nature, there is an appeal process. Eight appellants have alleged nine grounds for appeal, but none of the appellants asked for a "stay" of the permit amendment. RTA has been granted an expedited appeal, given the smelter modernization project is underway. It is likely the appeal hearing will occur in the fall.

**Contact:     Jim Standen, ADM  
                    250 387-1288**

<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Open Burning and Smoke Control</b></p>
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#### **KEY MESSAGES:**

- **Key Message #1 – The Open Burning Smoke Control Regulation (OBSCR), under the Environmental Management Act, needs revision to better protect human health and improve enforceability and fairness.**
- **Key Message #2 – The Ministry of Environment conducted substantial public consultation in 2008 and 2010 and, based on the results of that feedback, Ministry staff will provide recommended revisions to the regulation in the summer of 2013**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- Smoke generated by open burning of woody debris contains fine particulate matter that can reach deep into the lung tissue and cause symptoms such as coughing, wheezing, chest pain and shortness of breath.
- These pollutants can irritate the eyes, noses and throats of even healthy individuals.
- These pollutants also increase the risk of heart and lung diseases such as asthma and emphysema.
- There is no safe level of smoke.
- Open burning is one of the largest sources of fine particulate matter in BC.
- The majority of the health issues related to smoke are due to extended exposure to low levels of fine particulate matter.
- A policy assessment of the proposed changes to the OBSCR concluded that they will secure health benefits through reduced exposure to particulate matter pollution via certain limitations on open burning practices. The changes will improve the flexibility of the regulation to accommodate local conditions for smoke management through area-based smoke management planning and property or tenure-based prescriptions. It is anticipated that there will be an increased cost to dispose of debris from land clearing and timber harvesting for a limited number of parties located near population centres. The proposed OBSCR allows for several options to facilitate this debris management.
- The new regulation will reduce smoke impacts from open burning, which will help to build up a social license for woodlots, community forests, agriculture and other forest companies that operate near populated areas and will allow them to demonstrate environmentally responsible operations. It will also support air

quality management in airsheds where the cumulative effects of various industries (such as existing and proposed developments in the Kitimat-Terrace valley corridor) are a factor for environmental regulatory approvals.

**Key Message #2:**

- British Columbia's Open Burning Smoke Control Regulation (OBSCR) was enacted in 1993, under the *Environmental Management Act*.
- OBSCR was designed to control smoke primarily from open burning of forestry and land-clearing debris.
- With increased understanding of the health impacts of particulate matter, OBSCR is no longer considered adequate to manage smoke, its effects on local air quality and its impacts on the communities of BC.
- The proposed update of the regulation is a product of six years of cross-ministry collaboration with the Ministries of Forests, Lands and Natural Resource Operations and the Ministry of Agriculture and extensive stakeholder consultation. It is designed to achieve government's objective to 'reduce health risks by minimizing human exposure to smoke from biomass burning' while including measures that take into account specific circumstances where variances to the general rules are justified, particularly as concerns flexibility for industry in supporting this objective.
- A 2004 program audit of OBSCR also identified issues around enforceability, applicability (populated areas vs. working forests), consistency, cumulative impacts and venting index.
- A review of OBSCR was initiated in 2007.
- Public consultation was conducted in 2008 and again in 2010 with a second Intentions Paper. Substantial input was received from industry stakeholders, health authorities, community groups, individuals, and government staff.
- In 2012 and 2013 consultation drafts of the proposed new regulation were shared with industry stakeholders for detailed feedback.

**KEY FACTS/BACKGROUND/OTHER AGENCIES**

- Review of the regulation was conducted in collaboration with the Ministry of Forest, Lands and Natural Resource Operations, and the Ministry of Agriculture.
- The Ministry of Environment is committed to maintaining the use of burning as an effective tool to achieve other policy goals, while at the same time minimizing human exposure to smoke.

**Contact:** Tyler Keith, Manager, Clean Air, 250-953-3417

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Industry Product Stewardship (Recycling)</b></p>
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#### KEY MESSAGES:

- **Key message #1 – Extended Producer Responsibility (EPR) programs are one of the most successful methods of waste reduction, putting the onus on producers to take full responsibility for the collection and recycling of their products and packaging.**
- **Key message #2 – B.C. has more programs than any other jurisdiction in North America and continues to be an innovative leader in EPR. In July 2012, B.C. was awarded the highest ranking (A-) in the country for EPR programs on EPR Canada's national report card.**
- **Key message #3 – The Ministry's role is to review and approve stewardship plans, and to monitor their performance. Eco-fees are not mandated by government but if one is charged, independently audited financial statements are required to be submitted to government for review.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The objective of these programs is to remove the costs from the local taxpayer and shift them to the producers and actual consumers of the products. EPR provides an incentive to manufacturers to redesign products so they are less toxic and more durable, reusable, and recyclable – extending product life spans.
- To date, EPR programs in B.C. have:
  - Created more than 1,600 direct employment positions in B.C. and a further 500 indirectly related to EPR programs.
  - Diverted over 121,000 tonnes of solid materials and over 51 million litres of used oil, solvents, flammables, pesticides and gasoline from landfills in B.C.
- A 2013 study projects that by 2022, B.C.'s EPR programs as identified in the CCME Action Plan will:
  - Reduce garbage collection and landfilling costs by \$146.8 million;
  - Save 3,322,979m<sup>3</sup> of landfill space across B.C.;
  - Reduce net greenhouse gas (GHG) emissions by 1,107,993 tonnes of eCO<sub>2</sub> (i.e., equivalent to removing 246,500 cars from the roads a year);
  - Save approximately million 12,929 GJ of energy (i.e., the energy content of over 2 million barrels of oil) from the reduction in

- extraction/processing of virgin materials and avoided landfilling; and
- Have a significant positive net impact on job creation, creating approximately 7,700 jobs.

**Key Message #2 and 3:**

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- Waste composition studies for the province show that PPP still accounts for approximately 25 per cent (by weight) of the waste disposed in landfills.
- In 2009, the Canadian Council of Ministers of the Environment (CCME) agreed to develop a Canada-wide Action Plan for Extended Producer Responsibility and called for all jurisdictions to implement an EPR program for packaging and printed materials by 2015.
- As required under the B.C. Recycling Regulation, producers were required to submit a stewardship plan to MoE by November 19, 2012 and implement their approved stewardship plan by May 19, 2014.
- Two stewardship plans were received on November 19, 2012. Multi-Materials British Columbia (MMBC) is the stewardship agency that was been appointed by the majority of producers of PPP. Brewers Distributor Limited (BDL) submitted a stewardship plan on behalf of the majority of beer secondary packaging generated in the B.C. marketplace.
- MMBC's plan was approved by the Director of Waste Management on April 15, 2013. BDL's plan is currently undergoing regulatory review and a decision is pending.
- In accordance with the approved plan, local governments are being offered first right of refusal to continue to operate as collectors of PPP under the MMBC program.

**Contact: David Lawes, Manager of Community Waste Reduction  
250 387-3588**



<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 20, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Metro Vancouver</b></p> <p><b>Solid Waste Management Plan</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – Metro Vancouver’s solid waste management plan was approved with a number of conditions that recognize the importance of safeguarding air quality if they pursue waste-to-energy.**
- **Key message #2 – There are a number of steps, including additional consultation and EMA authorization required before any new facility could be constructed.**
- **Key Message #3 - The Ministry is investigating approximately 1,800 tonnes of potentially hazardous ash shipped to the Cache Creek landfill from the Burnaby waste-to-energy facility.**
- **Key Message # 4 – Metro Vancouver is proposing a waste flow bylaw to limit municipal solid waste collected from multi-family residences from leaving the region for cheaper disposal alternatives.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- Minister Lake conditionally approved Metro Vancouver’s solid waste management plan on July 21, 2011 (see Appendix A for approval letter).
- The Minister included conditions to address concerns expressed by the Fraser Valley Regional District on the potential impact to the airshed if additional waste-to-energy (WTE) capacity were built in the region.
- Those conditions require a joint working group to develop emission standards, monitoring requirements, and resolve other related issues.
- Former Minister Lake also committed that any WTE facility serving Metro Vancouver would require a full EAO review.

##### **Key Message #2**

- To be able to establish a new WTE facility, Metro Vancouver must achieve high recycling rates (70%) and consider the full range of possible options both in and out of region in an equal and fair manner.
- Metro Vancouver’s Board has approved a multi-phase WTE procurement process that will continue into 2014.
- The first stage, recently completed, pre-qualified the types of technology that will be considered. Twenty-two submissions were short-list to 10 options, including variations on three general categories of WTE technology: mass-burn, gasification & refuse-derived fuel.

- The next stage will invite shortlisted respondents to identify possible locations for their proposal. Metro Vancouver has engaged a third party expert panel and a fairness advisor to oversee the procurement process.
- Ministry of Environment staff are monitoring the procurement process, keeping in mind that subsequent to a decision on technology, location and proponent authorization under EMA will be required for any new facility.

### **Key Message #3**

- The existing Burnaby WTE facility is owned by Metro Vancouver and operated by Covanta Renewable Energy (Covanta). The facility incinerates approximately 285,000 tonnes of solid waste annually and generates 170,000 MWh of electricity which is sold to BC Hydro. The facility also produces 12,000 tonnes of fly ash.
- The fly ash is stabilized and shipped to the Cache Creek landfill for disposal in a special mono-cell designed exclusively for fly ash.
- July/August 2012 fly ash laboratory test results for cadmium exceeded the allowable limits causing the ash to be categorized as hazardous waste. Hazardous waste is not authorized to be disposed at the landfill.
- The Conservation Officer Service launched an investigation into the July/August fly ash shipped to the landfill.
- To assist in the investigation, the Ministry has finalized a terms of reference for an independent consultant to conduct a review of the fly ash stabilization, sampling and analytical processes and to make recommendations to the Ministry by August 31, 2013. MV has budgeted up to \$200,000 for this contract.

### **Key Message #4**

- MV is proposing a bylaw to limit waste from bypassing Metro Vancouver's waste management system to adjacent jurisdictions for disposal.
- These haulers are avoiding the regional tipping fees that pay for Metro Vancouver's waste management system and waste reduction initiatives, as well as the material prohibitions that encourage recycling and local recycling-related businesses and jobs.
- Haulers are concerned that the proposed bylaw will prevent multi-family residential waste from being processed at material recycling facilities.
- The bylaw will need approval from MV Board (estimate summer 2013) and then submitted to the Minister for approval.

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**Contact:** Jim Standen, Assistant Deputy Minister, EPD (250) 356-9545  
**Appendix A - July 21, 2011 Minister's SWMP Conditional Approval Letter**



The Best Place on Earth

Reference: 130465

Lois E. Jackson, Chair  
Metro Vancouver Board  
4330 Kingsway  
Burnaby BC V5H 4G8

Dear Mayor Jackson:

I am writing in response to Metro Vancouver's letter of August 30, 2010, with attached Solid Waste Management Plan (SWMP), the Board resolutions for adopting the SWMP and a summary of Metro Vancouver's consultation process. A summary of endorsements confirming each member municipality's commitments was received on March 23, 2011.

Ministry staff have reviewed your submission and accompanying documents. I am satisfied that there has been an adequate public review and consultation process with respect to the development of the new SWMP. The SWMP reflects strategies to address the specific areas of concern identified by Metro Vancouver through the Solid Waste Management Plan review process; however, the SWMP as submitted does not fully meet my requirements. Therefore, pursuant to Section 24(5) of the *Environmental Management Act*, I hereby approve Metro Vancouver's SWMP titled, *Integrated Solid Waste and Resource Management: A Solid Waste Management Plan for the Greater Vancouver Regional District and Member Municipalities* dated July 2010 subject to the following conditions:

1. Metro Vancouver must ensure that any new facility and/or modification to an existing facility managing municipal waste follow a process for authorizing a facility in the SWMP. This process shall include:
  - a. Appropriate consultation with the Ministry of Environment;
  - b. All new facilities may be required to have a license issued in accordance with the Greater Vancouver Sewerage and Drainage District's Municipal Solid Waste and Recyclable Material Regulatory Bylaw No. 181, 1996 as amended by Bylaw No. 183, 1996, and any subsequent amendments;
  - c. The Ministry of Environment, at the discretion of the Director, may commence the process to issue an operational certificate for a facility, upon authorization under the SWMP; and
  - d. If a facility's only purpose is managing municipal solid waste and/or recyclable materials under a provincial Stewardship Program and/or is already fully governed by a specific provincial regulation or Code of Practice for that industry, it shall be considered authorized by the SWMP.

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Ministry of  
Environment

Office of the  
Minister

Mailing Address:  
Parliament Buildings  
Victoria BC V8V 1X4

Telephone: 250 387-1187  
Facsimile: 250 387-1356

## Appendix A (continued)

2. Metro Vancouver must ensure, to the satisfaction of the Director, that the competitive process for establishing any new or upgrading any existing waste-to-energy (W2E) capacity and/or establishing contingency landfill as identified in the SWMP for up to 500,000 tonnes of additional disposal capacity considers the full range of possible options both in and out of region in an equal and fair manner. Furthermore, Metro Vancouver must provide a consultation plan on the selected option(s).
3. Recognizing that the Fraser Valley Regional District (FVRD) and Metro Vancouver share a common and critically important air shed, if Metro Vancouver pursues establishing additional in-region W2E capacity, it shall consult with the FVRD to address air quality concerns prior to beginning construction of a new or expanded facility. As a minimum, Metro Vancouver must establish a working group with the FVRD on the potential impact to the air shed due to additional W2E capacity. The working group may include the local health authority(s) and must, within one year of any Metro Vancouver decision to pursue in-region W2E:
  - a. Develop recommendations for W2E emission standards that do not conflict with Provincial or Federal policy and/or legislation;
  - b. Develop recommendations for an environmental monitoring program for any new or expanded in-region W2E facility(s);
  - c. Establish mitigation measures that address reasonable concerns of the FVRD with respect to additional W2E in-region;
  - d. Include any other reasonable related issue agreed to by the parties;
  - e. If the parties are unable to reach consensus within the timeframe, they will submit their respective positions to an arbitrator who will render a recommendation and report to the Director for consideration in any concurrent or subsequent regulatory process;
  - f. Be supported and resourced by Metro Vancouver; and
  - g. Provide quarterly updates to the Regional Manager, Environmental Protection.
4. Metro Vancouver's Burnaby W2E facility will operate under the conditions set forth in Appendix A until December 31, 2013, at which time, the Director may issue an operational certificate pursuant to section 28 of the *Environmental Management Act*.
5. Metro Vancouver shall consult with the Ministry of Environment, member municipalities and all other applicable parties in identifying active and closed municipal landfills located within the regional district. Metro Vancouver and its member municipalities shall:
  - a. Generate, by December 31, 2012, a list of all known municipal and regional landfills within the region and submit it in the subsequent SWMP biennial report;
  - b. Determine the closure status for all landfills identified in (a) above by December 31, 2013;

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## Appendix A (continued)

- c. Ensure closure plans are in place by December 31, 2016, for all landfills identified in (a) above with appropriate Ministry authorizations; and
  - d. Submit, in the 2017 biennial report, a status summary.
- 6. Metro Vancouver shall ensure that methane gas from solid waste management facilities, as identified in Strategy 3.2, can be used as an alternative fuel in addition to the provision for generating clean electricity or heat. Processed clean-burning methane may be an alternative vehicle fuel.
- 7. Any role or function that Metro Vancouver, member municipalities and/or any other party contracted by either the municipality or regional district may offer or deliver for products that are managed within an approved industry product stewardship plan under the Recycling Regulation will be undertaken on a voluntary and independently agreed basis between said parties.
- 8. Metro Vancouver shall establish a Plan Implementation Dispute Resolution Procedure in accordance with Section 32 of the Guidelines. The Procedure shall be submitted within three months from the date of this letter to the Regional Manager.
- 9. Metro Vancouver must establish a Plan Monitoring Advisory Committee, or a suitable alternative, to facilitate ongoing public involvement during the implementation of the new SWMP in accordance with Section 35 of the "Guide to the Preparation of Regional Solid Waste Management Plans by Regional Districts," and provide Terms of Reference for this Committee, or alternative, to the Regional Manager within 60 days of approval of the SWMP.
- 10. Metro Vancouver shall submit, to the satisfaction of the Regional Manager, the following reports:
  - a. An SWMP progress report by September 30 of every second year that includes details of Municipal Solid Waste disposed as per Subsection 36 (1) of the Guidelines. The first report must be submitted by September 30, 2013;
  - b. The SWMP performance review by September 30, 2016; and
  - c. A full SWMP review by September 30, 2021.
- 11. Metro Vancouver must include in the five-year performance review report an annual summary of the recovery and/or disposal solution for the nominal 30 percent residuals identified in the SWMP. This summary must include:
  - a. Annual actual percentage relative to the performance of the SWMP;
  - b. Name and location of each facility receiving the nominal 30 per cent residuals, whether for recovery and/or residual disposal;

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## Appendix A (continued)

- c. Annual quantity (in tonnes) sent to each facility;
- d. Annual quantity, if greater than 1,000 tonnes, of any consequential residuals from any facility in (c) above (e.g. ash) recycled and/or sent for disposal;
- e. Name and location of any facility receiving consequential residuals as per (d) above; and
- f. Records of non-compliance to Ministry legislation or other appropriate legislation in the jurisdiction for any facility identified above.

Any new in-province W2E facility and/or landfill must comply with the *Environmental Assessment Act*.

The implementation of this SWMP will require the development of Operational Certificates for the authorization of existing and future municipal solid waste landfills, W2E facilities and possibly other waste management facilities. Ministry staff in our Surrey office will be preparing Operational Certificates based on the detailed operating and environmental protection requirements for the solid waste management facilities specified in the SWMP. The regional plan, together with the required Operational Certificates, will form the basis of the authority to operate these facilities.

In closing, I commend the Metro Vancouver Board and staff on their success in developing a comprehensive SWMP to manage the Greater Vancouver Sewage and Drainage District's solid waste for years to come by conserving resources, creating new job opportunities and reducing greenhouse gas emissions

Sincerely,



Terry Lake  
Minister of Environment

cc: Jonn Braman, Regional Manager, Environmental Protection Division, Ministry of  
Environment



<p><b>ESTIMATES NOTE (2013)</b></p> <p><b>Confidential</b></p> <p><b>Ministry of Environment</b></p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE</b></p> <p><b>Capital Regional District Wastewater Treatment</b></p>
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#### **KEY MESSAGES:**

- **Key Message #1 – The evidence is clear that the practice of dumping sewage into the Strait of Juan deFuca is not sustainable.**
- 
- **Key Message #2 – The Capital Regional District (CRD) is implementing a sewage treatment strategy that also addresses resource recovery, source control, and sewer overflows.**
- **Key Message #3 – This approach will protect the environment, give taxpayers value for their money, and provide a practical and cost-effective system.**
- **Key Message #4 – The Contribution Agreement for the provincial funding contribution to the CRD Core Area Wastewater Treatment project was signed by the Province and the CRD in March 2013. The Ministry of Community, Sport and Cultural Development is responsible for infrastructure funding provided by the Province. Any questions related to funding should be directed to the Ministry of Community, Sport and Cultural Development.**

#### **CURRENT STATUS:**

##### **Key Message #1:**

- In 2006, the Society of Environmental Toxicology and Chemistry (SETAC) concluded that reliance on dilution is not a long term answer and that scientific risk, public values and regulations argue for the CRD to improve treatment.
- Also in 2006, contamination of the seabed near the outfalls was shown to exceed contaminated sites standards for a number of toxic metals and polyaromatic hydrocarbons.
- The current practice does not meet provincial and federal regulatory standards. These are evidence based, scientific standards, established to ensure protection of human health and the environment. The new facilities will be designed to satisfy British Columbia standards and the new federal Wastewater Systems Effluent Regulations, which require treatment by 2020. This constrains the CRD's timeline for infrastructure.

**Key Message #2:**

- The decision by the CRD Board to site a treatment plant at McLoughlin Point follows four years of planning, engineering, consultation, and social-economic-environmental impact assessments, at an estimated cost of \$12.9 million.
- The proposed system configuration involves:
  - McLoughlin Point Esquimalt Treatment Plant;
  - Saanich East Storage Tanks;
  - Clover and Macaulay Point Grit Chambers, and
  - West Shore Treatment Plant in 2030.
- Engineering studies commissioned by the CRD conclude that the McLoughlin Point site size is adequate for the proposed treatment equipment. The plan provides an opportunity to economically redevelop an existing industrial site, reducing the potential for disruption of natural and archaeological resources.
- The CRD recognizes the need to address potential noise, odour concerns and visual aesthetics, as well as issues related to storms, tsunamis, earthquakes, and sea level rise.
- CRD received Request for Qualifications (RFQ) submissions on May 10, 2013 and a short list will be announced early July with issuance of Request for Proposal (RFP) to 3 short list proponents.

**Key Message #3:**

- The Province is committed to work with the CRD to find the best, lowest cost solution for sewage treatment in the Capital Region and to finalize the procurement planning activities, subject to the proponent continuing to work with Government by reviewing the business case.
- The CRD's proposed system will be a carbon neutral operation with the potential for carbon offset revenue.

**Key Message #4:**

- The Provincial contribution of up to \$248 million is 1/3 of the 2010 capital cost estimate of \$743 million and meets the Provincial public commitment for funding 1/3 of the best, lowest-cost solution (subject to PPP consideration) made at UBCM 2006 and in the 2007 Throne Speech.

**Contact:** Hubert Bunce, A/ Regional Director  
250-751-3254

**Attachment:** History: Highlights



## APPENDIX: HISTORY -- Highlights

- In July 2006, the Minister directed the Capital Regional District board to submit an amendment to the CRD Core Area Liquid Waste Management Plan (LWMP) detailing a fixed schedule for the provision of sewage treatment by June 30, 2007. The amendment was to include options related to the type, number and location of facilities as well as preliminary costs of treatment and a proposed implementation schedule.
- On June 27, 2007 the CRD submitted Amendment # 6 to the Core Area LWMP that provided a fixed schedule for sewage treatment by December 31, 2016.
- On June 26, 2009, the CRD submitted the second of two progress reports to the Minister as requested in a letter to the CRD from the Minister on July 8, 2008. The progress report provides information on how the CRD is moving forward to address six key objectives of the plan amendment process the Minister identified in a letter to the CRD in December 2007.
- On August 26, 2009, the Minister responded to the CRD's progress report by encouraging the CRD to minimize costs to the taxpayer and establish resource recovery opportunities. It was noted that consultation and marine environmental assessment work will continue into 2010, however this work should not delay site selection and providing detailed capital and operating costs for the sewage facilities.
- On August 25, 2010 the Minister approved the CRD's LWMP Amendment #8 consisting of: McLoughlin Point Esquimalt treatment plant; Saanich East Storage Tanks; Clover and Macaulay Point Grit Chambers and a Westshore treatment plant in 2030. The CRD strategy provides a practical, cost effective system that meets regulatory objectives and incorporates currently viable resource recovery opportunities (including biogas generation, heat recovery, phosphorus fertilizer recovery, and generation of offsetting revenues), and facilitates future resource recovery opportunities. The CRD was encouraged to reconsider the opportunities to beneficially use biosolids as a fertilizer and soil amendment. The Minister recognized the effort to reduce inflow and infiltration with specific attention to the elimination of combined sewers.

The CRD submitted in December 2010:

- Resource Recovery and Use Plan,
- First Nations and Public Consultation report, and

In December 2011:

- Inflow and Infiltration Management Plans, and
- Complete business cases for specific resources recovery facilities and engaging resource use agreements with prospective customers and partners

In October 2012:

- Capital Regional District Revised Wastewater and Marine Monitoring Program for The Macaulay Point and Clover Point Outfalls report
- Discussions are ongoing between MoE's Environmental Protection regional staff and CRD staff regarding an Amendment No. 9 to the LWMP to consider:
  - An extension of the date from 2016 to 2018 for CRD to provide provisions for secondary wastewater treatment. Extension attributed to delay in funding (March 2013);
  - An extension of the date from 2015 to a date to be determined for CRD to provide for the separation of sewers (combined sewers) in Oak Bay;
  - The downsizing of Saanich East Storage Tanks; and
  - An alternate site for the biosolids processing and resource recovery facility to a site near McLoughlin Point Esquimalt Treatment Plant (Valleyview).

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Mining in British Columbia/ CACE Funding</b></p>
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#### KEY MESSAGES:

- **Key message #1** – The mining sector growth in BC has also resulted in an increase in applications for waste discharge permits under the *Environmental Management Act*.
- **Key message #2** – Access to contingency funds supported the Environmental Protection Division effort to ensure environmental standards are in place for all new mining developments.
- **Key message #3** – Environmental Protection Division focus has been on mining activities while other sector applications have continued to accrue.

#### CURRENT STATUS:

##### **Key message #1:**

- All mines typically require at a minimum an effluent discharge permit under the *Environmental Management Act* (EMA).
- In 2013, there are 34 mining applications in the Environmental Assessment review process plus an additional 25 sub-EA threshold mine development projects which require direct involvement of EPD staff to assess environmental impacts of the proposed projects.

##### **Key Message #2:**

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- 6.8 FTEs were hired in 2012/13 and 5 FTEs were hired in 2013/14; these are auxiliary staff. The recruitment process was challenged to find suitably qualified candidates who were located in the regions where the work is and who were available for short-term employment.

**Key Message #3:**

- As of December 2011, the backlog was 66 EMA applications related to mining activities.
- As of March 31, 2013, the backlog was reduced by 50% to 33 applications. The target for 2013 is to achieve a further reduction in the application backlog to a balance of 18 applications.
- The application intake from mining proponents remains steady. Since April 1 2012, the ministry has received over 400 applications for EMA authorizations; 37 applications are related to mining activities.
- As the BC economy grows, there is need to ensure there is a balance between sustainable development and a healthy environment. The attached graphs illustrate the increase in environmental protection authorizations even with efforts to de-permit sectors.
- Non-mining development has responded positively to the economic growth and prosperity in the province. The non-mining application backlog is rapidly accruing.

**Contact: Jennifer McGuire, Executive Director, Regional Operations Branch  
250-356-6027**

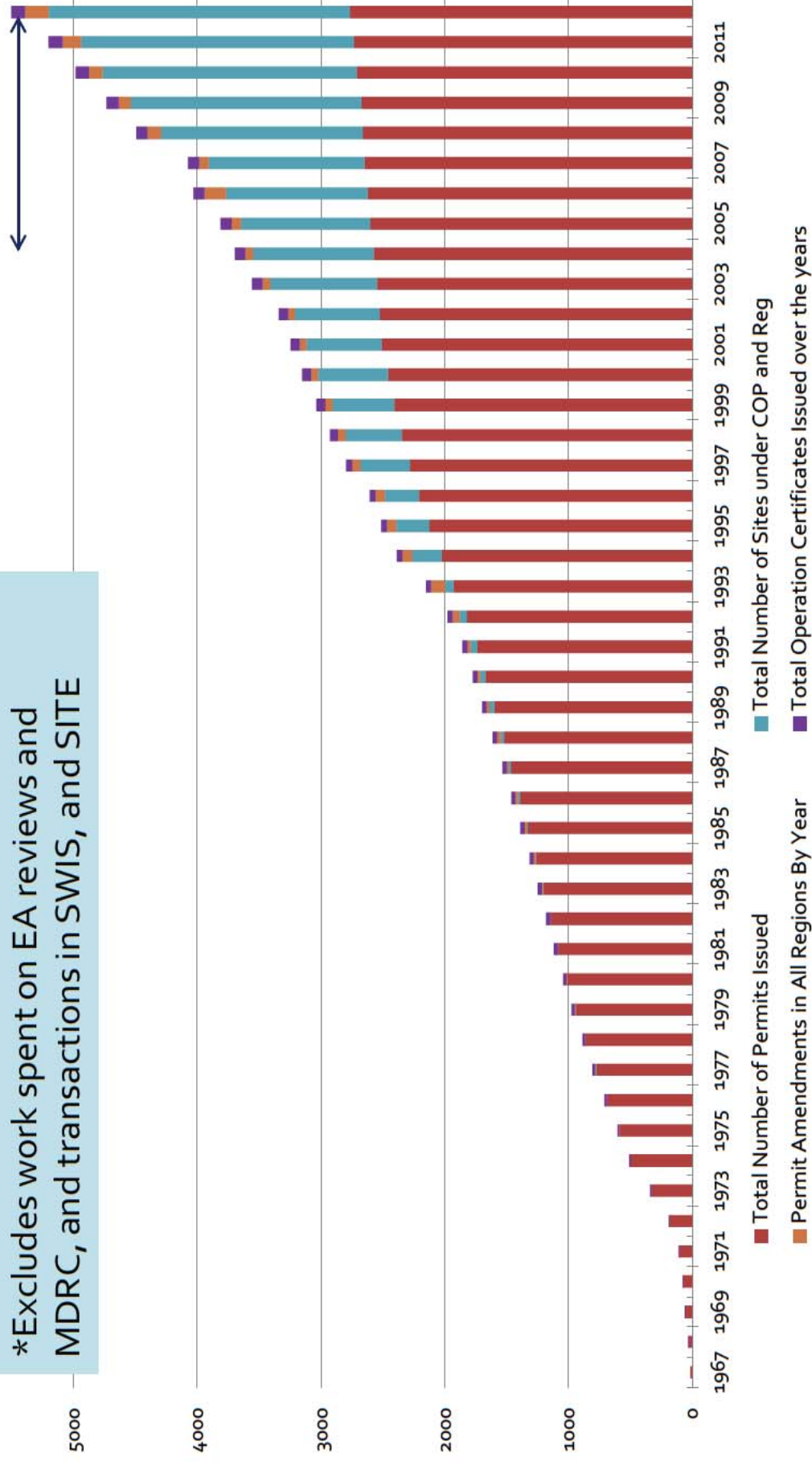
SEE APPENDIX A: Application volumes

# Annual Cumulative Total of EMA Authorizations 1967 - 2012 \*

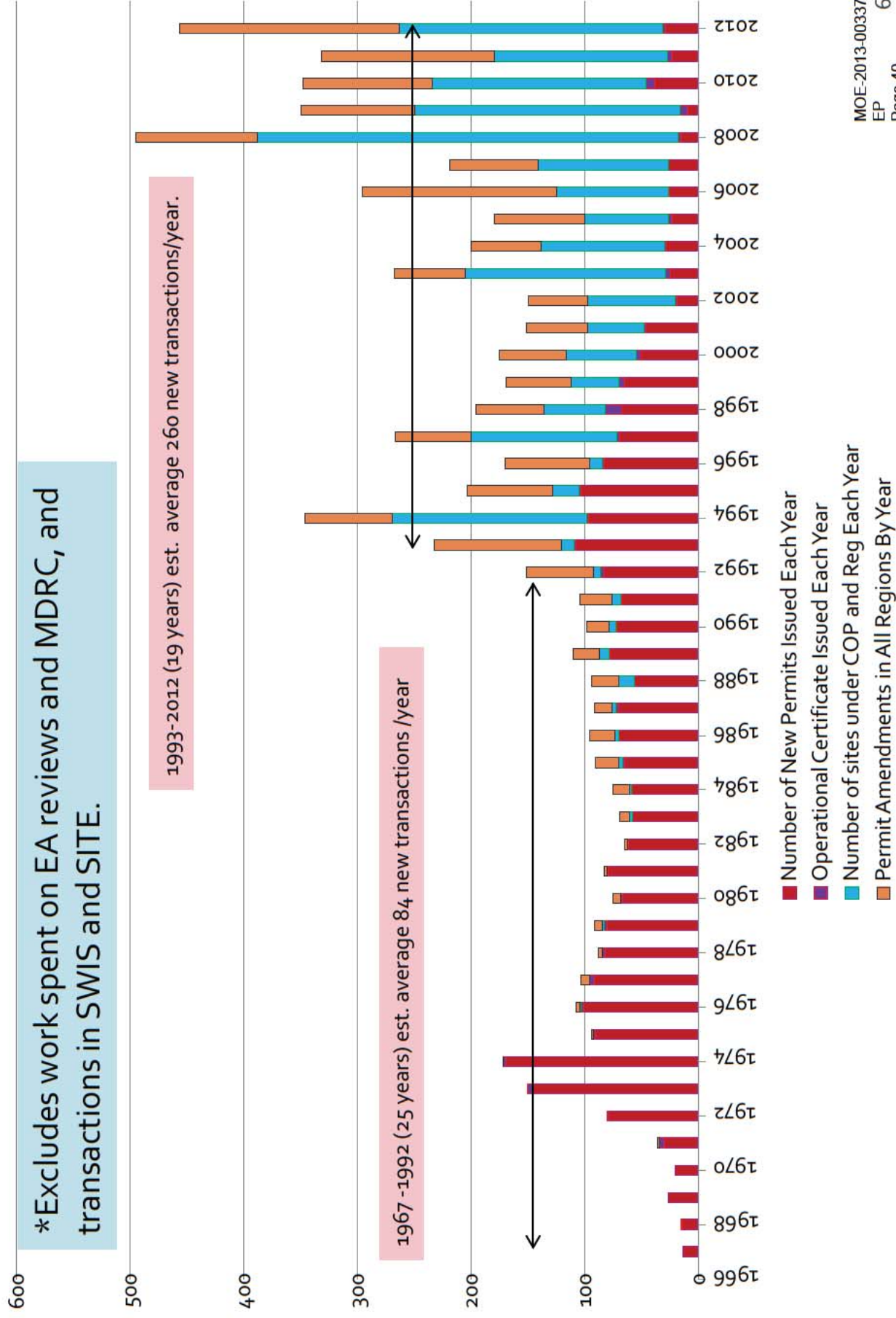
(includes abandoned, cancelled, expired, suspended, withdrawn transaction in AMS)

\*Excludes work spent on EA reviews and MDRC, and transactions in SWIS, and SITE

Avg. growth rate since 2004 = 14%/year.



## Number of New EMA Transactions Issued Each Year\*



<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Elk Valley Area-Based  Management Plan and  Permitting for Line Creek</b></p>
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#### KEY MESSAGES:

- **Key message #1 – B.C. takes the issue of selenium and other contaminants in our water very seriously and, by way of this order, is taking action to invoke immediate change in the region's water quality trends so we can ensure the environment, wildlife, and the health of British Columbians is protected.**
- **Key message #2 – The B.C. government's solutions to address selenium and other contaminants in the valley include: revised selenium guidelines, amendments to current permits, and issuing an order to Teck to develop an area based plan to address water quality in the Elk Valley.**
- **Key message #3 – Statutory decisions on the Line Creek Phase Two project will be made in advance of completion of the area based plan, and will be made in consideration of balancing the ongoing health of the watershed while allowing for continued sustainable mining activities.**

#### CURRENT STATUS:

##### ***Key message #1:***

- This order clearly articulates our expectations regarding environmental management in the Elk Valley and lays out a requirement for Teck to establish short-term, medium-term, and long-term water quality targets. To achieve these targets, Teck will work collaboratively with stakeholders, First Nations and various levels of government on the development and implementation of the plan.

##### ***Key Message #2:***

- In October 2012, the ministry released updated draft selenium water quality guidelines for external review. Water quality guidelines incorporate the latest science and are one of the factors considered in government authorizations.
- Ministry staff are participating in the development of a comprehensive water quality monitoring program for Lake Koocanusa led by the Montana Department of Environmental Quality. Other partners include the US Army Corps of Engineers, USEPA and Montana Fish, Wildlife and Parks.



- Monitoring was initiated in April 2013, and includes sampling of water, sediment and fish in the U.S. portion of the lake. The ministry will be working with Teck Coal to initiate complementary monitoring in the Canadian portion of the lake.

***Key message #3:***

- The regional economy of the Elk Valley and surrounding areas is heavily dependent on mining and related activities.
- Teck is addressing management of waste rock and water and deploying new and emerging water treatment technologies.
- The BC government understands that it will take time for Teck to remediate water quality impacts resulting from many decades of mining. Regulatory decisions will be made in consideration of balancing the ongoing health of the watershed while allowing for continued sustainable mining.

**KEY FACTS/BACKGROUND:**

- The Elk River has seen selenium levels rise as a result of existing coal mines in the area. Teck Coal Ltd. owns and operates five coal mines in the Elk River Valley. Selenium is released from the weathering of mining waste rock, which contaminates rain water flowing through the waste rock piles and into the tributaries and main stem of the Elk River, and into the trans-boundary Lake Koocanusa. Selenium is a naturally occurring and essential element that bio-accumulates, where high levels of selenium are known to be harmful to birds, fish and other aquatic life and may be harmful to human health.
- On April 15, 2012, a ministerial order was issued to Teck requiring the company to submit a plan to address the high levels of selenium and other water quality contaminants in the Elk Valley watershed. The order defines specific environmental objectives and outcomes such as protection of aquatic ecosystems, protection of human health and protection of groundwater.
- The order requires Teck to immediately stabilize and reverse water quality concentrations for selenium, cadmium, nitrate and sulphate. Medium and long-term targets will also be identified in the plan. The long-term targets will consider: 1) current contaminant concentrations, 2) current and emerging economically achievable treatment technologies, 3) sustained balance of environmental, economic and social costs and benefits and 4) current and emerging science regarding the fate and effects of contaminants.
- Under Section 89 of the Environmental Management Act, Teck is responsible for preparing and submitting terms of reference for approval to the Minister of Environment by July 15, 2013. Teck must then complete the plan and submit it for the Minister's approval within 12 months of the terms of reference being approved.

**Contact: Robyn Roome, Regional Director, Kootenays  
250 354-6362**



ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Cosmetic Use of Pesticides</b>
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#### KEY MESSAGES:

- **Key message #1 – We know people want change and the changes to the Integrated Pest Management Act, passed earlier this year, are the first step in reducing unnecessary cosmetic pesticide use in B.C.**
- **Key message #2 – This legislation will allow government to design the necessary regulations to reduce unnecessary pesticide use and ensure cosmetic pesticides are being used safely and responsibly on private landscaped areas.**
- **Key message #3 – Our government consulted with the public, taking into account over 8,000 comments, and received recommendations from a special bi-partisan committee which examined and reported out on the issue.**

#### CURRENT STATUS:

##### ***Key message #1 and 2:***

- The B.C. government passed legislation to amend the Integrated Pest Management Act (IPMA) during the Spring 2013 session. Work is now underway to develop regulations to support the legislative change. As the new legislation will be brought into force by the regulation, the policy changes will not be realized until these regulations are completed and in place – s.12, s.13
- Under the IPMA, the minister prescribes in regulation when a licence is required to use pesticides. The recent amendment will allow the minister to specify certain situations or specific pesticides where a licence is not needed. s.13

s.13 The amendments focus on restricting the use of pesticides but not banning the sale of pesticides.

- Currently, no registered pesticide, or pesticide use, is banned outright and no licence is required for land owners to use pesticides on private land (except for certain industrial applications).

##### ***Key Message #3:***

- The Special Committee on Cosmetic Pesticides released its report on May 17, 2012 which came to the conclusion that regulations restricting the use of

cosmetic pesticides should be tightened but that there was not enough evidence to support an outright ban on the sale of pesticides.

- Advocacy groups and individuals were lobbying for province-wide prohibition on the sale and/or use of pesticides for cosmetic purposes. The Union of BC Municipalities had asked the province to ban the sale of pesticides used for cosmetic purposes. Industry groups involved in pesticide application (for both landscape and industrial purposes) are opposed to further restrictions on pesticides used for cosmetic purposes.

#### KEY FACTS/BACKGROUND:

- In Canada, pesticides, including herbicides, fungicides and insecticides, are regulated by federal, provincial, and municipal governments. Health Canada evaluates and registers pesticides before they can be used. They establish conditions and limitations for the use of pesticides which are stated on the product labels. Provinces impose additional restrictions on pesticide sale or use. This is achieved through the licensing of companies, and by requiring training and certification of pesticide applicators.
- Approximately 40 B.C. municipalities have bylaws restricting the use of pesticides on municipal and private residential land. Seven provinces - Québec, Ontario, New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador - have implemented restrictions on the use of lawn and landscape pesticides.
- Currently, the Integrated Pest Management Act regulates the sale and use of pesticides. An authorization (a license, a confirmation or a permit) is required for the use of pesticides:
  - on public land (e.g., in public parks, on school grounds or to manage noxious weeds);
  - for specified industrial applications (e.g. forestry, railways); and/or
  - when the application is conducted as a service (e.g. landscape contractors and pest control operators).

**Contact: Daphne Dolhaine, Manager of Integrated Pest Management  
250 356-5274**

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>South Island Aggregates</b>
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#### KEY MESSAGES:

- **Key message #1 – Ministry staff are the statutory evidence-based decision makers and, as such, the decision is kept at arm's length from the political process**
- **Key message #2 – As a result of additional concerns raised during the consultation period, the proponent agreed to additional measures including treating discharge water to provincial drinking water standards and public review and posting of monitoring information and reports.**
- **Key message #3 – As a result of concerns raised by the public, Ministry of Health, CVRD and local VIHA officials regarding the geology/hydrogeology of the site, the British Columbia Geological Survey (BCGS) has conducted its own geological assessment in relation to the application. This information is now being shared with the groups listed above.**
- **Key Message #4 – The ministry continues reviewing and responding to the numerous enquiries from the public and agencies as part of the application review process and intends to complete this prior to a decision.**
- **Key Message # 5 - Samples of soil moving into the CVRD from the CRD has indicated movement of soil in non-compliance with the requirements of the CSR. This concerns local government and residents regarding the ability of the ministry to enforce existing and future environmental requirements.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The ministry had a legal obligation to consider the application from South Island Aggregates to treat and discharge contaminated soil.

##### ***Key Message #2 and 3:***

- Staff reviewed and carefully considered all comments and suggestions made by both the health authority and the provincial medical health officer as part of the consultation on the draft permit.
- As a result of the additional concerns raised, the proponent has agreed to a number of additional measures including:
  - Treating discharge water to provincial drinking water standards
  - Additional water sampling
  - Additional site management confirmation systems to ensure the integrity of soil receiving, treatment, landfilling and subsequent treatment of site effluent and monitoring
  - Public review and posting of monitoring information and reports.

**Key message #4:**

The ministry has met with VIHA, CVRD and a local concerned geologist to provide the findings of the BCGS geological review. This information is now being considered as part of the permit application assessment process.

- The Cowichan Tribes is opposed to the movement of contaminated soil in its territory and is requesting a further meeting to discuss the SIA application details.
- While the ministry has responded to a large number of the public enquires there remain a substantial number requiring response

**Key message #5:**

The Land Remediation office is following up on the specific sites determined to be in non-compliance with the CSR.

**KEY FACTS/BACKGROUND:**

- The public and local government have expressed ongoing concern regarding the relocation of contaminated soil to the Cowichan Valley Regional District (CVRD), under both the Contaminated Sites Regulation soil relocation agreements and at specific facilities permitted under the *Environmental Management Act* (EMA).
- Concerns are primarily related to potential impact on surface and ground water in the Shawnigan Lake Community watershed serving approximately 4,000 water connections.
- On March 19, 2013 the ministry released a draft permit to South Island Aggregates (SIA) to “receive, treat, utilize and landfill contaminated soil and ash to the cavity created by an advancing hard rock quarry.” SIA had originally applied for this permit in the fall of 2011.
- Public consultation, including formal notifications and public information sessions on the application, has been ongoing since April 2012. A public meeting to hear

details of discharge application and related process was attended by an estimated 250 concerned citizens.

- Ministry staff coordinated a technical assessment assessing the potential environmental impacts of the proposal, including impact on surface water, groundwater, air quality, and potential impact to wildlife.
- Those impacts and protective measures were compared against the ministry's standards for protecting human health and the environment and a draft permit was made based on whether the proposal will provide an adequate level of treatment and environmental protection.
- Once a final decision is made on the permit, an appeal by one or more groups of either a positive or negative decision is expected.

#### VIHA/MoH involvement

- VIHA received a request for an investigation under the *Drinking Water Protection Act* in connection with the South Island Aggregates application under consideration by EPD.
- VIHA's Medical Health Officer (MHO) wrote a letter as part of the public consultation outlining his concerns on the permit's conditions and suggestions to improve the permit to address concerns around drinking water and ensuring water quality standards are met.
- On April 15, Dr. Perry Kendall, Provincial Medical Health Officer, in a letter to the Deputy Minister of Health, pointed to diverging expert opinions on risks to water quality from the SIA proposal as an area of concern and recommended a final independent review. This review would build on the current information by providing more detailed evidence and assessment related to potential human health risks.
- On May 13, the proponent made a presentation to VIHA's MHO regarding the level of protection they feel they are providing to surface and ground water drinking sources. Ministry of Energy and Mines staff and a BC Geologic Survey geologist were also present and explained their understanding of the local geology.
- A similar meeting was held with the CVRD June 19 and a conference call with a local concerned geologist was held June 14
- The additional geological assessment completed for the ministry indicated risk to drinking water sources is very low.

**Contact:     Hubert Bunce, A/Regional Director**  
**250 751-3254**

ESTIMATES NOTE (2012) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Brownfields</b>
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#### KEY MESSAGES:

- **Key message #1 – The Ministry of Environment is a key partner in the Province’s Brownfield Renewal Strategy which aims to reduce barriers and provide incentives to the investigation, remediation and redevelopment of underutilized, former industrial and commercial properties known as brownfields.**
- **Key message #2 – The Strategy supports the BC Jobs Plan by encouraging economic development in communities across the province.**
- **Key message #3 – The province’s contaminated sites regulatory framework ensures that potentially contaminated properties are investigated and, where necessary, remediated to protect human health and the environment, prior to redevelopment and reuse.**

#### CURRENT STATUS:

##### **Key message #1:**

- Included in the Brownfield Renewal Strategy is the ongoing review and streamlining of the provincial contaminated sites (brownfields) legislation overseen by the Ministry of Environment. The goal is to continue increasing certainty in both (i) business processes, and (ii) environmental protection outcomes.

s.12

- The Ministry of Environment works closely with the Ministry of Forests, Lands, and Natural Resource Operations to both develop and implement the four-pillar strategy which targets (i) improved public policy on risk management and liability, (ii) strategic financial incentives, (iii) education and capacity building, and (iv) leading by example on Crown-owned sites.
- The B.C. Brownfield Renewal Strategy has been recognized by urban development associations at both the provincial and national level. In 2010 it was awarded the Canadian Urban Institute’s “Brownie Award” for Communications and Public Engagement for a series of local government focussed workshops delivered across B.C.

**Key Messages #2 and #3:**

- The Ministry of Environment recognizes the importance of balancing economic and environmental factors in delivering its environmental protection mandate. The province's contaminated sites regulatory framework provides a flexible, polluter-pay-based regime that ensures that potentially contaminated properties are investigated, and where necessary remediated to ensure protection of human health and the environment, prior to redevelopment and reuse.
- The Ministry of Environment remains committed to ongoing initiatives that provide for greater regulatory process certainty, and has increased the use of external-to-government qualified professionals who make direct recommendations to ministry decision makers for issuance of approvals and certificates.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Brownfields are defined as abandoned, vacant, derelict or underutilized commercial and industrial properties where past actions have resulted in actual or perceived contamination.
- Brownfields are often located in or near established communities and can include decommissioned refineries, former railway yards, old industrial waterfronts and riverbanks, abandoned gas stations, and former drycleaners.
- Left as they are, brownfields can pose threats to human health and environmental quality, and they have little economic value; however, redeveloped and returned to productive use, brownfield sites can generate significant economic, social and environmental benefits and more sustainable communities overall.

**Contact:     Alan McCammon, Manager, Remediation Assurance & Brownfields  
                  (604) 582-5280**

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Watson Island Contamination and Chemical Storage</b></p>
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#### KEY MESSAGES:

- **Key message #1 – The Ministry of the Environment is the statutory regulator, with the role of ensuring activities are conducted by the owner in accordance with the regulatory requirements set out in EMA.**
- **Key message #2 – Our goal is to manage the environmental risks of the site while minimizing any impact on taxpayers.**
- **Key message #3 – The Province is currently awaiting a contractor's report on the sampling and testing of the chemical content of a number of priority tanks. This information will help inform government on potential disposal options and disposal costs.**

#### CURRENT STATUS:

##### ***Key message #1:***

- Responsibility for the maintenance of the tanks rests with the owner of the site and the tanks. The Province is not the owner; however, due to the high volumes of hazardous chemicals present on the site, ministry staff has undertaken two inspections of the site in the past year.
- In 2012, MoE had to take emergency action to prevent and clean up a 60,000 litre spill from the sulphuric acid tank on the site. Costs for this were \$455,000.
- If an imminent risk were to present itself, the Ministry and the Minister have the discretion under the Environmental Management Act (EMA) to take necessary action to address those threats.

##### ***Key Message #2:***

- The City of Prince Rupert seized the site for back taxes and has met with provincial representatives to discuss the city obtaining relief from the financial burden of maintaining Watson Island infrastructure, and proceeding with redevelopment of the site. The existing chemical inventory and contamination of the site is a barrier to its future sale and redevelopment.

##### ***Key Message #3:***

- In discussions with the Ministries of Finance; Justice; Forests, Lands and Natural Resource Operations (FLNRO); and, Jobs, Tourism and Skills Training (JTST) it



was agreed that it may be prudent to remove, dispose of or neutralize the highest risk chemicals on the site as opposed to waiting until there is another spill and the province incurs emergency response costs.

- It was agreed that the Ministry of Environment would undertake an assessment to determine the costs and options to remove, dispose of or neutralize the highest risk chemicals on the site. In March 2013, MoE contracted a \$25,000 tactical scoping of the site, to confirm and assess quantities and states of stored chemicals, visually inspect tanks, prioritize a list of tanks and chemicals for removal and, to estimate costs for removal work. The contractor's report was submitted on March 31, 2013.
- The contractor's report identified the chemical tanks of greatest concern and identified preliminary options for disposal or treatment of the chemicals. The viability and availability of some of the options and costs were tempered by the lack of knowledge on the chemical composition and integrity. Following discussions and advice from the other ministries involved, MoE re-engaged the contractor to sample and test the contents of the priority tanks and to provide more certainty on disposal options and disposal costs. Sampling of the tanks was completed in May and a final report is due to the Ministry on June 30, 2013. Costs for the chemical testing and disposal options analysis will be \$63,000.

#### KEY FACTS/BACKGROUND:

- Watson Island, at Prince Rupert, is the location of a former, bleached kraft pulp mill. The site contains a significant amount of aging infrastructure and equipment as well as hazardous chemicals that pose a threat to the environment and potentially to human health
- There are approximately 27 above-ground tanks and associated pipes containing approximately 24 million litres of hazardous pulp mill chemicals of various kinds. Several tanks are in an advanced state of deterioration and positioned on the ground such that the integrity of the bottoms cannot be assessed.
- In December 2012, the Ministry of Environment sent staff to inspect the remaining tanks and distribution lines at the mill site. Staff's assessment concluded that the condition of the mill is poor and it is slowly degrading. Failure of the tanks, their containment or the associated piping cannot be predicted with any certainty but would not be unexpected.
- There are six tanks and associated piping that are of highest priority for spill prevention action. They are: sodium chlorate tank, one strong black liquor tank, one 48% black liquor tank and three weak black liquor tanks.
- The recommendations from the June report will be tabled with the Ministries of Finance, Justice, FLNRO and JTST for further discussions with the City. Any removal or disposal actions would be in partnership with the City and funded from a portion of the existing funding envelope of \$7.4M held by FLNRO from previous remediation at the site.

**Contact: Mike Macfarlane, Manager of Land Remediation  
250 356-0557**



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# Climate Action Secretariat 2013

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2.	Making Progress on BC's Climate Action Plan
3.	Climate Action Legislation and Regulation
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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p>ISSUE TITLE:</p> <p><b>Climate Action Secretariat 2013/14 Budget</b></p>
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#### KEY MESSAGES:

##### **Key message #1**

- CAS 2013/14 budget is estimated to be \$3.271million. CAS receives \$1.305M funding from the Sustainable Environment Fund resulting in a total budget of \$4.576M.

##### **Key message #2**

- Our BC Jobs Plan commits that BC “is and will remain” a climate change leader.
- The Climate Action Secretariat will continue to provide a whole of government approach to BC’s Climate Action Plan in reducing greenhouse gas emissions adapting to the impacts of climate change and developing the world carbon economy.

#### CURRENT STATUS:

##### **Key message #1**

Budget 2013/14 reductions, announced as part of fiscal plans in prior years, result in a net impact of an \$852,000 reduction for CAS from 2012/13 to Budget 2013/14.

##### **Key message #2**

- Strategies for reducing greenhouse gas emissions include:
  - Developing climate action policy, research and planning documents that integrate with and support broader government plans and initiatives.
  - Guiding implementation of BC’s Climate Action Plan across government.
  - Assisting other ministries in developing policy, legislation and/or regulations as required.
  - Leading and coordinating the carbon-neutral public sector initiative.
  - Working with international, national and regional partners to forward BC’s climate action commitments.
  - Coordinating a public outreach and engagement program to mobilize citizens and partners to reduce provincial greenhouse gas emissions
- Strategies for adapting to the impacts of climate change include:
  - Leading the implementation of the Climate Change Adaptation Strategy.

- Collaborating with research organizations to develop and deliver the knowledge and tools decision-makers need to facilitate adaptation.
- Collaborating with ministries, federal agencies, local governments, First Nations, private industry and non-government organizations in preparing for climate change and its impacts.
- Developing water management approaches that address the impacts from a changing water cycle, including increased risk of flood and drought.
- Maintaining observation networks that increase understanding of the direction and pace of climate change in British Columbia.
- Conducting species, ecosystem and landscape level conservation and restoration efforts in a way that anticipates adaptation requirements, maximizes resilience and improves future options.

#### KEY FACTS/BACKGROUND

- As with most areas in government, changes were made within the budget to account for fiscal restraint.
- The Climate Action Secretariat will find savings in by reducing administrative and discretionary costs in addition to travel and business expenses while building internal capacities and professional expertise.
  - Travel is reduced by \$74,000 by using teleconferencing, Live Meeting and Webcasts wherever feasible
  - Office and business expenses are reduced by \$273,000
  - Contracts are reduced by \$463,000
  - CAS has ceased contributing to international governmental partnerships resulting in a budget reduction of \$42,000

**Contact:** James Mack, Head, Climate Action Secretariat

s.17

cell

## Appendix 1:

### Consolidated Revenue Fund Summary (\$000)<sup>1</sup>

	Total Operating Expenses 50-90	Total Salaries and Benefits 50-54	Total Operating Costs 55-75	Total Government Transfers 77-80	Total Other Expenses 81-85	Total Internal Recoveries 86-88	Total External Recoveries 89-90	Total Capital Expenditures
<b>Budget 2007/08</b>	<b>4,000</b>							
<b>Budget 2008/09</b>	<b>15,458</b>	2,204	11,824	1,433	—	(1)	(2)	—
<b>Budget 2009/10 (February)</b>	<b>14,594</b>	2,691	10,610	1,075	221	(1)	(2)	<b>3</b>
<b>Budget 2009/10 Update*</b>	<b>7,132</b>	3,439	3,456	—	1,545	(1,306)	(2)	—
<b>Budget 2010/11</b>	<b>6,487</b>	3,583	3,070	_931_	211	(1,306)	(2)	—
<b>Budget 2011/12 (February)</b>	<b>5,123</b>	3,406	2,814	—	211	(1,306)	(2)	—
<b>Budget 2011/12 Updated</b>	<b>5,123</b>	3,406	2,814	—	211	(1,306)	(2)	—
<b>Budget 2012/13</b>	<b>4,123</b>	3,506	1,714	---	211	(1,306)	(2)	---
<b>Budget 2013/14</b>	<b>3,271</b>	3,506	904	---	169	(1,306)	(2)	---

\*In 2009/10 the Climate Change Branch was merged from Ministry of Environment into the Climate Action Secretariat. This budget figure includes the funding for both programs (the Climate Change Branch budget is 2008/09 was \$1.5M with 13 FTEs, including \$264,000 contract)

### Resource Summary: Operating Expenses (\$000)<sup>2</sup>

Core Business Area	2012/13 Restated Estimates	2013/14 Estimates	2014/15 Plan	2015/16 Plan
<b>Climate Action</b>	3,523	3,271		s.17

<sup>1</sup> Source: Supplement to the Estimates.

<sup>2</sup> Source: Ministry of Environment Service Plan 2010/11 – 2012/13

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Making Progress on BC's Climate Action Plan</b>
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#### KEY MESSAGES:

- **Key message #1 – BC's Greenhouse gas (GHG) emissions for 2011 are 5.8% lower than 2007 levels, putting BC within reach of the 2012 interim target of 6% below 2007 levels. The BC Government is committed to remaining a climate action leader and moving towards targets set in the *Greenhouse Gas Reductions Targets Act (2007)* – reductions of provincial greenhouse gas emissions by at least 33% by 2020 and 80% by 2050.**
- **Key message #2 – BC has implemented strong policy and is a recognized climate action leader. There are now indications that the policies implemented through the Climate Action Plan are having the desired effect in reducing emissions. BC continues to implement new policy since the Climate Action Plan to make progress toward the targets.**
- **Key message #3 – Actions that move us towards targets are creating new economic opportunities for businesses and families in BC's low-carbon economy while making communities healthier and safer.**

#### CURRENT STATUS:

##### **Key message #1:**

- BC's 2011 emissions were 62.2 million tonnes, which is a 5.8% reduction from 2007 levels, and within reach of the 2012 interim target.
- BC's consumption of fossil fuels, one of the main drivers of climate change, has gone down across fuel types and in each case by more than the Canadian average, which suggests that something different is going on in BC beyond the common factors that all have experienced such as the recession.
- BC's *Greenhouse Gas Reduction Targets Act* requires the Province to report every two years on emissions and progress to targets. BC's next Provincial Inventory Report will be released spring 2014, reporting on 2012 GHG emissions. This report will be the first opportunity to assess whether the 2012 target has been achieved.
- To meet legislated targets, BC will need to reduce total emissions to 44 million tonnes by 2020, and 13 million tonnes by 2050.
- BC's total GHG emissions:
  - 2007 66.1 million tonnes (benchmark year for legislated targets)
  - 2008 66.8 million tonnes



- 2009 63.3 million tonnes (decline from 2008 due in large part to the global recession)
- 2010 63.3 million tonnes (emissions not increasing again with economic recovery)
- 2011 62.2 million tonnes (continuing to follow path to 2012 target)
- While progress has been good up to 2012, there are a few serious risks to attainment of the other targets, including new industrial development, forest carbon fluctuations, and diesel transport. More actions are needed to meet the 2016 and 2020 targets.

**Key message #2:**

- Government's Climate Action Plan (2008) sets out the path for achieving greenhouse gas reduction targets.
- Commitments in the 2008 Plan are either complete or substantially underway. Highlights:
  - Establishing an adaptation strategy to prepare for the impacts of climate change.
  - Investing \$94.5 million in the Pacific Institute of Climate Solutions supporting policy, technology and scientific developments.
  - Creating a revenue neutral carbon tax reduces emissions and stimulates investment.
  - Implementing various market-based standards, including those for fuels and vehicles (Canada-wide but based in part on BC's initiative), and ones for landfill gas management and community action.
  - Demonstrating leadership through Carbon Neutral Government.
- Since the 2008 Climate Action Plan, key new actions have been implemented:
  - The Clean Energy Act sets a 93% clean or renewable energy target and a commitment to meet the majority of BC Hydro's incremental demand from conservation by 2020.
  - The \$14.3 million Clean Energy Vehicle program will provide incentives for clean energy vehicles and new vehicle charging infrastructure.

**Key message #3:**

- Climate action creates new economic opportunities for businesses and families in BC's low-carbon economy. Energy efficiency and alternative transport help families to save money. The Globe Foundation reports the green economy could grow to between \$20.1 and \$27.4 billion in 2020 in BC, supporting 225,000 jobs.
- Climate action helps make communities healthier. Actions that encourage walking and cycling, and that deliver more efficient equipment and cleaner fuels, improve health and decrease doctor visits.
- Climate action helps make communities safer. BC will continue to be impacted for decades to come by GHG emissions already released into the atmosphere. Integrating potential impacts in community planning, such as increased incidence of forest fires and floods, makes communities more resilient and safer.

**Contact:** James Mack, Head, Climate Action Secretariat s.17 cell  
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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Climate Action Legislation and Regulation</b>
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#### KEY MESSAGES:

- **Key message #1 – The Province has a comprehensive suite of climate legislation – the strongest in Canada.**
- **Key message #2 – Legislation falls within the responsibilities of five different ministries, but is implemented across government and public sector organizations.**
- **Key message #3 - The Ministry, through the Climate Action Secretariat, supports other ministries in implementing climate action legislation and is actively implementing the legislation and regulations within its mandate.**

#### CURRENT STATUS:

##### ***Key message #1***

See appendix for full list of legislation.

##### ***Key message #2***

- Climate action legislation in other ministries primarily addresses carbon pricing, clean energy, energy efficiency, and community climate action.
- Ministry of Environment legislation establishes the following:
  - Greenhouse gas (GHG) reduction targets;
  - Reporting requirements for industry;
  - Obligations for carbon neutral government;
  - Requirements for credible offsets;
  - Framework for a cap and trade regime;
  - Requirements for landfill gas methane capture;
  - Authority to set vehicle GHG emission standards and zero emission vehicle mandates.

##### ***Key message #3***

- Most Ministry of Environment legislation is in place; some pieces are on hold. Key elements are highlighted here:
  - Progress to targets is measured by BC's greenhouse gas inventory. The Provincial Inventory Report on BC's 2010 emissions was released 2012. An

update on 2011 emissions will be posted early fall 2013. The next full report will cover 2012 emissions and be released in 2014.

- In June 2012, BC released “Making Progress on BC’s Climate Action Plan.” The next making progress report will be released in 2014, and will be the report that identifies whether BC met its 2012 interim target.
- In June 2013, the Carbon Neutral Government (CNG) public report will be issued, accounting for how BC met its carbon neutral requirements for the public sector for 2012.
- Pacific Carbon Trust has acquired offsets meeting CNG obligations 2008 - 2011, and is in the final stages of meeting the 2012 obligations.
- Reporting Regulation obligations for GHG reporting and verification for 2012 from BC facilities emitting over 10,000 tonnes have been met. Emission and verification reports are required annually. Emission report summaries for 2011 were published in January 2012; 2012 summaries will be published fall 2013.
- Operators of large landfills have submitted landfill gas assessments to the Ministry’s Environmental Protection Division. Those generating over 1,000 tonnes annually are required to prepare landfill gas capture facilities by 2016.
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s.12, s.13

The federal government subsequently adopted tailpipe standards for 2010 through 2016 that are equivalent to those for BC and California, and are applied to all of Canada. In these circumstances BC specific regulations are deemed unnecessary.

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Legislation	Purpose	Status
<b>MINISTRY OF ENVIRONMENT</b>		
Greenhouse Gas Reduction Targets Act (Bill 44)	<ul style="list-style-type: none"> <li>establishes targets – 33% reduction by 2020; 80% by 2050</li> <li>sets obligations for public reporting on BC's provincial greenhouse gas (GHG) emissions progress towards targets</li> </ul>	Active
Carbon Neutral Government Regulation	<ul style="list-style-type: none"> <li>defines the reporting and measurement obligations for government operations</li> </ul>	Active
Emission Offsets Regulation	<ul style="list-style-type: none"> <li>ensures the quality of GHG reductions achieved through offsets.</li> </ul>	Active
Reporting Regulation	<ul style="list-style-type: none"> <li>establishes GHG reporting and verification obligations for BC facilities emitting over 10,000 tonnes</li> </ul>	Active

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#### MINISTRY OF ENERGY AND MINES

Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act (Bill 16)	<ul style="list-style-type: none"> <li>enables regulation that sets renewable (5% for ethanol; 4% for diesel) and low carbon fuel intensity requirements (10% reduction by 2020 relative to 2010) for BC fuel suppliers</li> </ul>	Active
2008 Utilities Commission Amendment Act (Bill 15),	<ul style="list-style-type: none"> <li>enables Demand Side Measures Regulation which sets legislative context for utilities, facilitating the reduction of GHG emissions, reduction of demand, introduction of more renewable resources, provision of transmission infrastructure and introduction of more clean technology</li> </ul>	Active

s.12, s.13

#### MINISTRY OF COMMUNITY, SPORT AND CULTURAL DEVELOPMENT

Local Government (Green Communities) Statutes Amendment Act (Bill 27)	<ul style="list-style-type: none"> <li>sets requirements for GHG targets in official community plans and regional growth strategies and enables local government flexibility in instituting bylaws for parking and development cost charges with lower environmental impacts</li> </ul>	Active
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#### MINISTRY OF FINANCE

Carbon Tax Act (Bill 37)	<ul style="list-style-type: none"> <li>sets a price on GHG emissions from burning fossil fuels: currently at \$30 per tone</li> </ul>	Active
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#### MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS

s.12, s.13

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Provincial Greenhouse Gas Emissions</b>
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#### KEY MESSAGES:

- **Key message #1 – Environment Canada’s estimate for BC 2011 greenhouse gas emissions is 59.1 million tonnes, a 5.6% decline relative to the 2007 level of 62.6 million tonnes. Environment Canada’s data, which was released in April, do not include net deforestation, which is included in BC’s targets.**
- **Key message #2 – BC’s own inventory is not published in odd-numbered years. Summary update tables for BC for the 2011 year will be released in early fall, 2013. Preliminary work shows that BC’s 2011 emissions were 62.2 million tonnes, or 5.8% below 2007 levels.**
- **Key message #3 – BC is preparing for changes to international GHG accounting rules that take effect for 2013 emissions (reported in 2015). Updates to global warming potentials and forest carbon accounting methodologies are expected. BC will have to determine how to integrate these changes into measurement of progress toward our targets.**

#### CURRENT STATUS:

##### **Key message #1:**

- Environment Canada released overall Canadian greenhouse gas (GHG) data, including provincial estimates, in April 2013 as required under the UN Framework Convention on Climate Change.
- The estimate for BC’s 2011 greenhouse gas emissions is 59.1 million tonnes (Mt), a 1.3% decline relative to 2010 emissions and a 5.6% decline relative to base-year 2007.
- BC uses Environment Canada data in tracking progress towards its greenhouse gas reduction targets. *The British Columbia Greenhouse Gas Inventory Report 2007*, released in July 2009, established the baseline for these targets.
- These estimates are based on Environment Canada’s *National Greenhouse Gas Inventory Report*, a scientifically credible third-party source used for Canada’s international reporting obligations.
- The published *BC Greenhouse Gas Inventory Report* under the *Greenhouse Gas Reduction Targets Act* legislation includes the addition of net deforestation data to the published Environment Canada data.

- Adding net deforestation, BC's 2007 and 2011 GHG estimates are 66.1 Mt and 62.2 Mt, respectively.
- Forestry and agricultural land use are presented in the *BC Greenhouse Gas Inventory Report* as memo items and are currently not counted towards provincial totals or targets. Integration of memo items into core inventories is expected as part of international accounting rule changes.

**Key Message #2:**

- Federal data for 2011 became available in April this year. This data release will be followed early this Fall by the release of the provincial data tables. The next iteration of the BC Greenhouse Gas Inventory Report will be released in 2014, which will have detailed information about BC emissions and estimate methods.
- BC's 2012 interim emissions target is 6% below 2007 levels. The 2011 preliminary provincial emission total of 62.2 Mt confirms statements made in June, 2012, in Making Progress on BC's Climate Action Plan that BC is "within reach" of its 2012 interim target. We will not be able to report on whether this target has been achieved until the summer of 2014.
- Most of the 2010 to 2011 decrease is due to decreased fossil fuel based electricity production, as well as a small reduction in emissions from a selection of transport sub-sectors, including domestic marine.
- Climate action policies have been implemented in all sectors. These policies will continue to see effects in emissions reductions as the policies take effect over time. However, some sectors are still expected to see emissions growth under current policy.

**Key Message #3:**

- Changes to international accounting rules applied at the national level are expected to bring forest carbon into national inventories in 2015.
- International rules are also changing with respect to how other greenhouse gases are counted relative to carbon dioxide in emissions inventories. The effect of this change will be to increase the relative importance of methane and decrease the relative importance of nitrous oxide.
- BC is working to understand the implications of the accounting changes, their benefits, as well as risks of future emissions liabilities in advance of their coming into force.

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Large Industrial Emissions</b></p>
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#### KEY MESSAGES:

- **Key message #1 – In January 2013, the Ministry of Environment published its annual greenhouse gas emissions reports for calendar year 2011 for industrial operations in the province.**
- **Key message #2 – The reports provide a comprehensive and accurate picture of GHG emissions from BC industrial operations, which benefits companies and government by providing the foundation for emission management measures.**

#### CURRENT STATUS:

##### **Key message #1:**

- Annual reporting for industrial operating emitting 10,000 tonnes of GHG or higher is a requirement of the Greenhouse Gas (Cap and Trade) Act Reporting Regulation.
- Publication of reported emissions provides open and transparent information to industry and the general public and is in keeping with commitments to open government.
- Facilities must report previous year's emissions by March 31.
- 2012 emissions data is currently being processed and emission report summaries are scheduled to be released in early fall, 2013.
- Operations that emit 25,000 tonnes or more must have reports verified by an accredited verification body by March 31 to ensure accuracy and consistency in the data across industries and over time.

##### **Key Message #2:**

- There are 98 companies with 202 facilities over 10,000 tonnes reporting.
- The total 2011 GHG emissions from all industrial operations in B.C. over 10,000 tonnes are 19.3 megatonnes (Mt) of carbon dioxide equivalent, which is 31 percent of total provincial emissions.
- For facilities that reported in 2010, the total emissions in 2011 were the same as in 2010. Oil and gas, and cement sector emissions increased while emissions from electricity and heat generation decreased.
- Total electricity import emissions were reported to be 1.9 Mt; and, are additional to the 19.3 Mt of industrial emissions occurring within B.C.



- Companies with the largest emissions in 2011:
  - Spectra Energy Transmission: 4.8 Mt
  - Teck Coal: 1.4 Mt
  - Canadian Natural Resources Limited: 1.2 Mt
- Individual facilities with the largest emissions in 2011:
  - Fort Nelson Gas Plant - Spectra Energy Transmission: 1.7 Mt
  - Pine River Gas Plant – Spectra Energy Transmission: 1.1 Mt
  - Kitimat Works – Rio Tinto Alcan: 0.82 Mt
- Data on industry emissions is important because:
  - it provides valuable baseline and progress data for the Province and for industry;
  - is used by B.C. companies to develop energy-savings plans; and ,
  - the provincial government is using the information to help inform existing and potential climate and energy policies.
- B.C. companies report through the One Window B.C.-Canada website that allows them to provide data only once, meeting both governments' GHG reporting requirements

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- An industrial reporting operation can encompass more than one individual facility in the case of electricity transmission and oil and gas extraction, processing and transmission.
- The reported data would serve as a foundation for a cap and trade program, if such a program were to be implemented in the future.
- Consistent with international GHG accounting rules:
  - Electricity import emissions are not included in the provincial inventory as they occur outside of B.C. However, they are reported to B.C. as they would be in scope of a cap and trade system; and, B.C. can influence reductions in these emissions.
  - Carbon dioxide emissions from wood biomass emissions currently do not count to provincial and national greenhouse gas emissions totals. However, these emissions are scheduled to be included as line items in national inventories for the 2013 inventory year, reported in 2015, when new international forest carbon accounting rules come into effect.
  - Including biomass emissions will have a significant impact on facility emissions totals. For example, Prince George Pulp and Paper and Intercontinental Pulp Mills (Canfor Pulp) would be BC's largest individual facility emitter at 2.2 Mt; and, several other pulp and paper mills would also have very high emissions.

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 21, 2013</b></p>	<p>ISSUE TITLE:</p> <p><b>BC's Adaptation Strategy</b></p>
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#### KEY MESSAGES:

- **Key message #1 – The climate is changing, and it is reasonable to expect long-term trends to continue for the foreseeable future.**  
*Preparing for Climate Change: British Columbia's Adaptation Strategy* outlines steps the provincial government is taking to improve how we manage the risks associated with Climate Change.
- **Key message #2 – The Climate Action Secretariat supports the initiatives of other ministries to ensure that government investments in infrastructure and programs and our management of natural resources address current climate hazards and anticipate future climate risks.**

#### CURRENT STATUS:

##### **Key message #1:**

- Adaptation involves making adjustments in our decisions, activities and thinking because of observed or expected changes in climate, in order to moderate harm or take advantage of new opportunities.
- The Climate Action Secretariat (CAS) is responsible for coordinating the overall government approach to managing adaptation, which focuses on:
  - sustaining and enhancing regionally relevant climate science and decision support tools
  - ensuring government can continue to deliver on its priorities as the climate changes
  - collaborating with other levels of government, the private sector and civil society to enhance B.C.'s resilience to weather and climate.
- The Climate Action Secretariat has partnered with other ministries and organizations across BC to leverage federal funding for adaptation projects worth \$2.8 million on issues relating to coastal management and natural resources.
- Ministry efforts to modernize the water act will introduce more flexibility and efficiency in the water allocation system, which will allow us to be more responsive to increasingly variable water flows expected as a result of climate change.

## Key message #2:

- Other ministries are developing their own understanding of how climate change might impact their priorities and are planning their response accordingly. Key accomplishments to date include:
  - The Ministry of Forests, Lands and Natural Resources Operations (FLNRO) is implementing the B.C. Forest Stewardship Action Plan for Climate Change Adaptation, released in 2012, with a vision that “*BC’s forests provide a broad suite of goods and services that benefit society now and in a changing climate.*”
  - The Ministry of Agriculture is supporting the efforts of industry to develop innovative products, tools and processes to reduce and mitigate greenhouse gas emissions and adapt to climate change.
  - The Ministry of Transportation and Infrastructure examines highway safety and reliability issues considering climate forecasts and the adaptive capacity of transportation infrastructure and addresses and revises standards where appropriate from results of studies on climate and highway infrastructure interactions.

## KEY FACTS/BACKGROUND/OTHER AGENCIES:

- A 2011 report from the National Roundtable on the Environment and Economy concluded that average costs of climate change in Canada could be equivalent to up to 1% of GDP by 2050. In British Columbia major impacts analyzed included timber supply and coastal areas. The study also found that proactive measures to prepare for climate change can save money by reducing physical and economic impacts.
- Local governments have a significant role to play in ensuring that British Columbia is prepared for unavoidable climate change impacts. Several local governments in B.C. have invested effort into climate change assessment and identification of hazards. The province’s investments in improving climate science support local level adaptation planning.
- The Government of Canada is spending \$150 million over 5 years (2011-2016) to help Canada adapt to climate change. The funding covers 9 departments and agencies in the areas of health, first nations, environment, natural resources, fisheries and oceans, parks and transport. The Climate Action Secretariat works closely with relevant Federal Government departments to enhance program delivery in B.C.

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC's Revenue Neutral Carbon Tax</b></p>
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#### **KEY MESSAGES:**

- **Key message #1 – Tax policy decisions are the prerogative of the Minister of Finance. The Carbon Tax Review concluded that the carbon tax at current rates does not appear to have significant impact on BC's overall economic growth, and the best way to protect growth is to continue to provide the broad-based tax reductions for businesses, individuals, and families that have been in place since the carbon tax was introduced.**
- **Key message #2 - BC's broad-based, revenue neutral carbon tax is the foundation policy for BC's climate action. It provides a signal in the economy to reduce greenhouse gas emissions and encourages sustainable economic activity and green jobs. Emerging data is showing that BC is seeing reductions in demand for carbon tax-covered fuels.**
- **Key message #3 – The carbon tax covers combustion emissions from both individuals and industry, and returns these revenues to both groups.**

#### **CURRENT STATUS:**

##### ***Key message #1:***

- A review of all aspects, positive and negative, of the carbon tax was announced in Budget 2012. It included an assessment of competitiveness of all sectors, and revenue neutrality. The Review concluded:
  - Revenue neutrality is working to provide protection for economic growth and will be maintained.
  - There will be no increase in carbon tax rate or scope unless other jurisdictions begin to achieve BC's level of carbon pricing leadership.
  - Relief for the agriculture sector will include the continuation of the greenhouse growers relief program that returns part of carbon taxes paid to greenhouse operators, and a new carbon tax exemption for marked agricultural fuels.
- In considering BC's continued leadership in this area, BC has to take into account the competitiveness of its trade exposed industries given that key jurisdictions, such as the US, do not have climate plans as strong as BC's.
- There has been good progress on carbon pricing internationally, with Australia, California, and Quebec all having implemented new programs in the past year.

##### ***Key Message #2:***

- BC continues to have a leadership position on climate action, and its carbon tax is a key component of this position.
- The carbon tax rate is \$30/tonne of greenhouse gas emissions (since July 1 of 2012). Budget 2013 announced that no further rate increases are planned.
- The tax provides a clear signal to emitters to take many of the environmental and social costs of their emissions into account in their decision making. The resulting energy efficiencies reduce costs for business and households.
- The carbon tax encourages growth in the clean technology, alternative energy, and other low-carbon sectors.
- From 2007-2011 BC has seen demand reductions for all of the main fossil fuel types. In each case these reductions have been greater than for the rest of Canada. It is not yet possible to attribute these reductions to the carbon tax, but it is clear that something different is happening to fossil fuel demand in BC.

### ***Key message #3***

- Both industry and individuals pay carbon tax on their combustion emissions and both receive tax cuts as part of the Revenue Neutral Carbon Tax Plan.
- Combustion emissions are covered at the same rate per tonne of greenhouse gas emissions regardless of the fossil fuel burned, the sector, the region, the use etc. This increases the efficiency of the tax. (The new exception will be coverage of marked agricultural fuels, which have different treatment from other fuel under the *Motor Fuel Tax Act*.)
- The carbon tax does not cover non-combustion emissions. The Carbon Tax Review concluded that there would be no scope expansion at this time.
- Tax cuts include targeted measures such as the Northern and Rural Homeowner Benefit, and the Low income climate action tax credit.

### **BACKGROUND:**

- The carbon tax applies to emissions from the combustion of fossil fuel in BC, which account for roughly 68% of BC's total emissions.
- The carbon tax was introduced in 2008 at \$10/tonne, and with annual \$5/tonne increases, reached \$30/tonne on July 1, 2012.
- The carbon tax is expected to generate \$1.2 billion in revenues in 2013/14. The same amount will be to British Columbians through tax cuts.
- Industrial emissions not from combustion (e.g. process, venting and fugitive emissions – totaling 7 million tonnes) were not included in the carbon tax scope, mainly because of inadequate emissions data at the time. This issue has since been resolved by BC's *GHG Reporting Regulation* for many emissions types.

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### **APPENDIX**

### Tax Cuts Funded through the Revenue Neutral Carbon Tax Plan (2013/14)

Low Income Climate Action Tax Credit	\$194M
Personal Income Tax Reductions (5% from first two rates)	\$246M
Northern and Rural Homeowner Benefits (\$200/household)	\$69M
BC Seniors Home Renovation Tax Credit	\$27M
Children's Fitness Credit and Children's Arts Credit	\$9M
Small Business venture capital tax credit	\$3M
Training tax credit – individuals	\$20M
Corporate Income Tax (reduced to 11%)	\$159M
Small Business Corporate Income Tax Reductions	\$225M
Industrial Property Tax Credit (50% of school property tax)	\$43M
Farm property tax reduction (50% of school property tax)	\$2M
Interactive Digital Media Tax Credit	\$35M
Training Tax Credit – businesses	\$11M
Scientific Research and Experimental Development Tax Credit	from 2014
Film Incentive tax credit	\$70M
Production Services Tax Credit extension	\$123M

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: July 3, 2013</b>	<b>ISSUE TITLE:</b>  <b>Clean Energy Vehicle Programs</b>
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#### KEY MESSAGES:

- **Key message #1 - BC is taking a comprehensive approach to reducing greenhouse gas (GHG) emissions from the transportation sector. Moving towards our long term climate change and clean air objectives will require strong policies and programs that target fuel efficiency of vehicles, carbon content of transportation fuel, and vehicle kilometers travelled.**
- **Key message #2 – Three clean transportation initiatives: the Clean Energy Vehicle Program; SCRAP-IT; and the Carbon Offset Aggregation Cooperative have been implemented. Of the \$18.8M allocated to the program, \$13.8M has been spent to date on providing approved vehicle purchase incentives, charging infrastructure deployment, incentives to take older vehicles off the road, and efficiencies in heavy transport. These initiatives have helped position BC as a leading jurisdiction in accelerating the adoption of clean transportation technology.**
- **Key message #3 – Transportation accounts for 37% of provincial GHG emissions, and as such emissions reductions in this area are a crucial part of achieving BC's greenhouse gas targets.**

#### **Key message #1:**

BC has taken a comprehensive approach, with policies addressing each of the contributing factors to transport emissions:

##### **Vehicle fuel efficiency:**

- BC has successfully advocated for strong national greenhouse gas emissions standards for light duty passenger vehicles, which came into effect in 2011.
- BC is supporting Environment Canada to develop more stringent standards for 2017 through 2025; and, new standards for heavy duty vehicles to take effect in 2014.
- Light duty emissions standards are projected to reduce emissions from passenger cars and light duty trucks in BC by approximately 14% by 2020 and about 45% by 2050.
- The Clean Energy Vehicle (CEV) program provides incentives for the purchase of approved plug-in electric, extended-range electric, hydrogen, and compressed natural gas vehicles.
- The Scrap-it program provides incentives for owners of older, less efficient vehicles,



to scrap (rather than sell) functional, but higher emitting vehicles, improving the efficiency of the overall vehicle stock.

- The Carbon Offset Aggregation Co-operative (COAC) provides members low interest funding for fuel saving devices, and training in efficient vehicle operation, helping to reduce emissions from heavy duty transport (trucking).
- **Vehicle fuels intensity:** The BC Renewable and Low Carbon Fuel Requirements regulation will drive emissions reductions by reducing the carbon intensity and increasing the renewable content in transportation fuel. The requirement is expected to reduce the overall carbon intensity of transportation fuels by 10 by 2020.
- **Kilometers travelled:** Investments in transit (such as the Evergreen Line) and cycling infrastructure will be instrumental in getting more vehicles off the roads.

### **Key Message #2:**

- The CEV for BC™ Point of Sale Incentive Program, administered through the New Car Dealers Association of BC, provides up to \$5,000 off of the pre-tax sticker price per eligible vehicle.
- The CEV Program has received broad support and there has been significant uptake. As of May 31<sup>st</sup>, 2013, 535 incentives have been issued since program introduction in Dec. 2011. Only 275 CEVs were sold across the rest of Canada in all of 2011.
- Up to 625 charging stations will be deployed across the province by June, 2013 with additional charging stations added throughout the year.
- Of the \$18.8M allocated out of approved contingencies for the three clean transportation initiatives - CEV, Scrap-it, COAC, \$13.8M has been expended, and program objectives have been met.
- Approved funding for the Clean Energy Vehicle Program was not fully expended on the consumer incentive programs in 2012. This was primarily due to a delayed start. \$2.5M in unspent contingencies has been carried over into this fiscal year to extend CEV incentive programs through March 2014.
- COAC is projecting emission reductions in the order of 55,000 tonnes over the first 3 years, but with potential of exceeding 200,000 tonnes per year by year 5 as the program gains momentum with its expanding membership

### **Key Message #3:**

- Transportation emissions account for 23 million tonnes out of BC's total 62 million tonnes of emissions. 14 million tonnes are from industrial and commercial transport, and 9 million tonnes are from light-duty, mainly personal transport.
- Personal transportation emissions have seen small decreases since 2007. Industrial and commercial transportation emissions have been on an upward trajectory.

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**Appendix A:**

Clean Transportation Initiatives: Expenditures and Results

		Approved Funding (\$M)	Expenditures to date (\$M)	Results
Clean Energy Vehicle Program	CEV for BC Incentive Program	7.46	2.88	- 535 vehicle incentives provided - Program extended with \$2.5M provided to New Car Dealers Assn. for 460 more vehicle incentives through March 2014
	Electric Charging Infrastructure Deployment	6.28	6.28	- 450 Level 2 charging stations operational, plus 34 in City of Vancouver - Upgraded hydrogen fuelling station in Surrey - Installation of 13 DC Fast Charging stations underway to be operational by November 2013) - Installation of 14 Level 2 charging stations in multi unit residential buildings with 125 additional stations targeted by March 2014
	LiveSmart Residential Rebates (Charging stations)	0.56	0.10	- 160 rebates provided - Program extended to March 2014 with funding for 200 more stations - \$100k re-allocated for use in the current fiscal year
COAC		2.0	2.0	- membership growing representing 154,455L annual diesel consumption. Retrofits and driving training will achieve 10% reduction in fuel consumption
SCRAP-IT		2.5	2.5	- 3119 vehicles scrapped between Nov 2011 and March 2013
TOTAL		18.8	13.8	

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC's Efforts to Promote Climate Action Internationally</b>
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#### KEY MESSAGES:

- **Key message #1 – BC is involved with several strategic regional and international climate action organizations enabling the province to leverage broader action and promote successful policies like the Revenue Neutral Carbon Tax.**
- **Key message #2 – BC remains supportive of federal efforts on climate action, and supports Canada's international negotiations as needed. The former premier attended COP 15 in Copenhagen, and the former Minister of the Environment attended COP 17 in Durban, South Africa.**

#### KEY FACTS/BACKGROUND:

- BC is involved with several key strategic regional and international climate action organizations. Through these organizations, we have been able to leverage broader action as a group, that otherwise may not have happened without the Province's participation. Some examples include:
  - Carbon Tax: The Province is receiving interest on a national level from the US Republican Party, as well as at the state level, with both Washington and Oregon looking to adopt similar systems;
  - Western Climate Initiative: Through the Western Climate Initiative, BC has been instrumental in regional collaboration to amplify climate actions and encourage other governments to adopt similar policies. As most policy initiatives have been completed, WCI is now largely focused on the implementation of cap and trade in California and Quebec;
  - Low Carbon Fuel Standards: BC was the first jurisdiction in North America to introduce a low-carbon fuel standard, with California following soon after;
  - Tail Pipe Emissions Standards: First adopted in California, US and Canadian federal governments have modeled their vehicle tailpipe standards after this; and
  - The creation of a standardized reporting system for GHG emissions: Currently running in 4 States/Provinces. Environmental Protection Agency has adopted a similar system based on this.
- Involvement in the Pacific Coast Collaborative has allowed the province to participate in a framework for cooperative action and sharing of information on best practices on issues facing California, Oregon, Washington, Alaska and BC. The Collaborative has been active on initiatives such as developing the green economy, promoting Clean Energy Vehicles, and investing in adaptation measures.

- BC has the opportunity to further develop intergovernmental relationships to promote BC's policies to reduce GHG emissions as well as develop the green economy.
- Interest from Washington State, Oregon, and the US Republican Party in BC's Revenue Neutral Carbon Tax is growing and opportunities to promote this policy will exist in 2013.
- The Canadian government is accelerating efforts to regulate industry and may seek greater provincial participation in regulatory design. When the design is complete in late 2014 the federal government is expected to be seeking provinces interested in managing provincial emitters through equivalency agreements. BC will need to evaluate options to integrate the Revenue Neutral Carbon Tax with a federal approach.
- Intergovernmental relationships built on climate action could be enhanced to support growth in BC clean technology and energy exports.
- Within Canada there have been growing discussions regarding the need for a national energy strategy. On July 19, 2012 the Standing Senate Committee on Energy, the Environment and Natural Resources released a report outlining recommended priorities for Canada's energy future. It is in the interest of BC to have a strong role or leadership role in setting the context and process for any discussion or strategic development in Canada's potential energy strategy.
- BC did not actively participate in COP18 given there were no priority issues related to BC. The inability of the international negotiations to result in an inclusive, binding commitment beyond 2012 highlights the economic opportunity of providing regulatory certainty at the provincial or regional level and the importance of attention to potential competitiveness issues in implementing regional climate policy.
- BC's actions contribute to Canada's actions and the province will continue to work proactively and constructively with the Government of Canada to ensure that the Province's positions and priorities continue to be reflected in the federal negotiating positions and to demonstrate BC's ongoing commitment to climate action.
- The 2013 UN Climate Change Conference, COP 19 will take place in Warsaw, Poland from November 11<sup>th</sup> – November 22<sup>nd</sup>, 2013. The Government of Canada has not yet indicated whether it will be inviting provincial participation in the next federal delegation.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Federal Development of Greenhouse Gas Regulations</b>
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#### KEY MESSAGES:

- **Key message #1 – BC has an excellent working relationship with the federal government and our provincial actions contribute towards shared climate action goals.**
- **Key message #2 – BC and Canada are mutually committed to finding effective means to reduce emissions while ensuring any regulations maintain the competitiveness of our industries. This is especially true for Canada's next proposed regulation on the oil and gas sector.**
- **Key message #3 – As the first Canadian jurisdiction to support California's vehicle emission standard, we were happy to see this approach later adopted nationally in both the US and Canada. It is our hope that innovative policies at the provincial level help leverage broader action federally in Canada.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The Canadian federal government is regulating industrial GHG emissions under the Canadian Environmental Protection Act (CEPA). Environment Canada is leading 13 sector-by-sector regulations. Working groups for each sector provide provincial and industry input.
- Coal-fired electricity was the first sector to be regulated. The regulation gradually phases out traditional coal-units and is forecast to result in a decline in the absolute level of GHG emissions from electricity generation by 31 million tonnes carbon dioxide equivalent between 2005 and 2020. Provincial governments and stakeholders expressed concern over the lack of consultation in the federal approach.
- Standards for the oil and gas sector are now under development. In fall 2011, Environment Canada established an Oil and Gas Steering Committee to consult on that sector's standards. The Steering Committee is comprised of the Alberta provincial government and industry stakeholders. BC is not able to participate in the Steering Committee.
- After a number of provinces requested to be on the Steering Committee, the federal government agreed to set up a federal-provincial-territorial Consultations Steering Committee. It is still unclear how the previous Oil and Gas Steering Committee and its members interact with the proposed Consultation Steering Committee. The only meeting of the Consultation Steering Committee occurred February 6, 2012.

- BC has an equivalency agreement in principle covering the regulation of GHG emissions that was signed April 6, 2010. It is the first step towards a formal Equivalency Agreement under the Canadian Environmental Protection Act, 1999, which would ensure that BC's industries were fairly treated and BC would have a say in the regulation of BC facilities.
- The timelines for regulatory development in Canada are uncertain and are largely tied to circumstances in the US. In the US, efforts by House Republicans to cut the US Environmental Protection Agency's budget and remove its ability to regulate greenhouse gases, has lead to regulatory uncertainty and delays. (See Status of US Federal Legislation on Climate Change Estimates Note for more information).
- BC officials also represent the Province on the Federal Government's Federal/Provincial/Territorial Working Group on the International Climate Change plan.
  - BC accepted an invitation to be an official member of the Canadian delegation at COP15, COP16 and COP 17 and will continue to foster the strong working relationship during this critical period for climate policy development.

#### **Key Message #2:**

- Our two governments signed an Agreement in Principle on Equivalency under the *Canadian Environmental Protection Act* in 2010 that commits us to work together to ensure there is no regulatory overlap between provincial and federal initiatives.
- BC and Canada have implemented a "single-window" reporting system for industry to enter GHG data in a simple way that satisfies the requirements of both Canadian and British Columbian reporting regulations. This is an example of both governments' commitment to avoid regulatory overlap.
- BC will continue working with the federal government to ensure effective regulation on BC's industry, respect the efforts of the carbon tax and make progress towards BC's legislated targets.

#### **Key Message #3:**

- BC has global solutions in energy and materials and BC has the experience and expertise working on climate with each industry sector that can contribute to broader action.
- BC's actions to reduce emissions at home are not simply shifting those emissions to other jurisdictions. BC supports federal and international action to address competitiveness and level the playing field.
- If done right, climate action can enhance the export competitiveness of BC industry and create new job opportunities in the green economy.

**Contact:** James Mack, Head, Climate Action Secretariat s.17 cell  
 Tim Lesiuk, Executive Director, Business Development s.17

**KEY MESSAGES:**

**Key message #1**

- BC has been clear that although it supports the development of cap and trade with the Western Climate Initiative, it will not implement this system on the same timelines as California and Quebec.
- BC has been instrumental in the design of a regional system and supported California and Quebec during the incorporation of their cap and trade programs.
- BC remains a leader in climate action leader, and BC's revenue neutral carbon tax remains the most comprehensive carbon price in North America.

**Key message #2**

- Continued engagement with WCI allows BC to maintain strategic relationships with leading sub-national organizations.

**CURRENT STATUS:**

***Key Message #1***

- Though BC has not implemented a cap and trade system, the province has been instrumental in the design of a regional system and supported California and Quebec during the incorporation of their cap and trade programs.
- California and Quebec have recently linked their systems and will begin trading between jurisdictions in 2014. It is likely that they could be looking to BC as the next likely member of their cap and trade system.
- Cap and trade may benefit the economy, create jobs and help BC meet its targets; therefore government will take the necessary time to examine whether the WCI cap and trade system is the right decision for BC going forward.
- It's important to note that BC already has North America's most comprehensive carbon price because of the revenue neutral Carbon Tax. We have options and need to ensure that a cap and trade program would be right for the province should we reconsider it in the future.
- The existing carbon tax is a clean and clear system that is already providing a consistent price signal. If the province moves to cap-and-trade we must be sure that it will not affect competitiveness in addition to helping achieve greenhouse gas reduction targets.

**Key Message #2:**

- Through the Western Climate Initiative, BC has been instrumental in regional collaboration to amplify climate actions and encourage other governments to adopt similar policies. WCI partner jurisdictions continue to be key allies for complementary climate policy initiatives
- Two provincial representatives currently sit on the WCI, Inc. Board of Directors and as a WCI partner the province was involved in the implementation of both the 2008 *Design Recommendations for the WCI Regional Cap and Trade Program* and the 2010 *Design for the WCI Regional Program*.
- Continued engagement with the WCI allows BC to maintain strategic relationships with leading sub-national organizations and encourages better information sharing across regions.

**Contact:** James Mack, Head, Climate Action Secretariat s.17 cell  
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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC's Jobs Plan and Climate Action (Green Economy)</b></p>
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#### KEY MESSAGES:

##### Key message #1

- The BC Jobs Plan states that our province is, and will remain, a climate change leader.
- As part of the BC Jobs Plan, the Premier and Minister of Environment launched a Green Economy document at GLOBE in March 2012. A follow-up document; BC's Green Economy Update was released in March 2013 to expand on progress being made in many sectors across the province.

##### Key message #2

- Climate action, from a Green Economy perspective is about incenting investment in innovation and technologies that create new economic opportunities for growth.
- The CleanTech sector in BC is becoming increasingly more important to the success of BC's climate action objectives and our Green Economy.

#### CURRENT STATUS:

##### ***Key message #1:***

- The Green Economy is creating jobs all across BC and has made us a leader in sustainable economic development. As part of the BC Jobs Plan, the Green Economy approach is the defining policy and communications framework for continued climate action in BC. It reaffirms BC's ongoing leadership on climate change and realizes that climate action policies are a driver of innovation and economic outcomes.
- At the Globe conference in March 2012, Premiere Clark announced the Green Economy report that:
  - Highlights the environmental commitments made across the various BC Jobs Plan sector strategies; and
  - Sets out an approach to promote the development of the Clean Technology sector as a means to connect BC's natural resource sectors to new Green Economy opportunities.
- In March 2013, BC released an update to its Green Economy work profiling successes in area such as:
  - Accelerating the adoption of natural gas and electric vehicles;
  - Building with low-emission cement;



- Adopting solar power, biomass, biomethane, and geoechange technologies in BC communities; and,
- Developing new opportunities to generate offsets in areas such as technology adoption by greenhouse growers and restoring marine ecosystems.

**Key Message #2:**

- Climate action, from a Green Economy perspective is fundamentally about incenting investment in innovation and technologies that create new economic opportunities for growth. An independent report by the Globe Foundation indicates that in 2008 the Green Economy accounted for 10% of BC's GDP and was responsible for 166,000 jobs. The Globe Foundation identified the potential to double the BC Green Economy to \$27.4 billion and 225,000 jobs by 2020.
- A Green Economy approach accelerates technology adoption, leading to emission reductions without impacting industry competitiveness. The two main components of a Green Economy approach are;
  - Accelerating commercialization of technology in BC by de-risking early investment; and,
  - Aligning government resources for investment and market development, focusing those resources on a few key markets.
- The CleanTech sector in BC is becoming increasingly more important to the success of BC's climate action objectives and the Green Economy plan. In BC the technology and CleanTech sector accounts for 92,000 jobs, with a doubling of this number forecast to 2020. According to the KPMG Technology Report Card, BC's annual CleanTech revenue was \$1.7 billion in 2012. Given the right business environment CleanTech jobs can increase by 200% by 2020 (BC Technology Strategy).
- The CleanTech sector has identified some priority areas for future work including:
  - providing better economic indicators of the sector's performance and importance to BC's economy;
  - establishing opportunities for the clean tech sector to collaborate with major natural resource companies on green innovation opportunities;
  - accelerating the adoption of clean energy and technologies by the provincial public sector and local governments; and,
  - exploring opportunities to develop new technology investment funds that can bridge BC's current strength in fossil fuel exports to becoming a globally significant exporter of clean energy and technology.

<b>Contact:</b>	James Mack, Head, Climate Action Secretariat	s.17	cell
	Tim Lesiuk, Executive Director, CAS	s.17	cell

## Examples of Green Economy Successes

- **Liquefied Natural Gas (LNG)** is driving clean tech innovations across BC and companies are finding new ways to use this cleaner burning fuel. Fortis BC and Vedder Transport worked together to construct Western Canada's first LNG fueling station.
- **BC forestry sector** is leading our nation in biomass electricity generation, representing half of Canada's total biomass generation capacity. The City of Enderby is now using the first small business funded biomass district energy system operating in Western Canada.
- **BC transportation sectors** have been making reductions in emissions and upgrades to infrastructure through the BC Clean Energy Vehicles Program. BC has sold over 394 vehicles to date and the installation of 13 DC Fast Charging stations underway to be operational by November 2013.
- **The mining sector** has continued to find innovative ways to incorporate sustainability through programs such as Teck's recycling of waste, through Canada's first provincial Lead Acid Battery Collection Program and the Towards Sustainable Mining Initiative.
- **The agrifood sector** helps to reduce GHGs through cleaner fuel options such as biogas upgraded into renewable natural gas biomethane. FortisBC Biogas projects have helped to reduce 5,500 tonnes of GHG's.
- The T'souke **First Nations clean energy** solar project, originally developed for tourism, has benefited the community with a three year, 12 million dollar partnership with the City of Colwood to become net zero energy users.

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Forest Carbon Offsets</b></p>
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#### KEY MESSAGES:

- **Key message #1 - BC is putting forests on the front lines of the climate change fight while enhancing BC's long term timber supply.**
- **Key message #2 – The Forest Carbon Offset Protocol guides activities that remove greenhouse gases from the atmosphere.**
- **Key message #3 – The Forest Carbon Offset Protocol development process built upon the international best practices of leading forestry protocols and sought broad public input from stakeholders.**
- **Key message #4 - Reforesting land and restoring forests ravaged by the pine beetle can re-energize the forest based economies of rural BC.**

#### CURRENT STATUS:

##### ***Key message #1:***

- Forests absorb carbon dioxide from the atmosphere through photosynthesis. It is one of the few ways that carbon dioxide emissions can be removed from the atmosphere. With two-thirds of BC being forest and range land where carbon is sequestered in the trees, plants, roots and soils, we can make a significant contribution to global climate action.
- One offset represents a reduction of one metric ton of carbon dioxide from the atmosphere. By buying offsets, companies and individuals invest in projects that reduce carbon dioxide in one location to compensate for, or "offset:", their own emissions. Offsets are one tool for taking action on climate change that may otherwise be out of reach.

##### ***Key message #2:***

- The Forest Carbon Offsets Protocol is designed to encourage carbon sequestration in BC's forests through high quality offset projects that use a consistent approach. The Protocol covers a wide range of forest-based activities on private and public lands. The protocol provides detailed instructions on how offset projects can be designed, developed, quantified and verified to meet domestic and international quality standards.

- The protocol was designated for use under the BC Emission Offset Regulation in August 2011. All new forest carbon offset projects approved by the Ministry of Forests, Lands and Natural Resource Operations must use the protocol.

**Key message #3:**

- BC developed the Forest Carbon Offset Protocol by building upon existing forestry protocols in the Verified Carbon Standard and Climate Action Reserve systems that adhere to international best practices.
- The protocol has been submitted to the Verified Carbon Standard (VCS) public review and validation process. The public review has been completed and the first round of validation by two auditors has been completed. Recognition under this standard would enable B.C. developers to sell offsets into an international market.

**Key message #4:**

- The protocol is supporting the development of BC's carbon offset industry, creating jobs, and unlocking new streams of revenue for the province, First Nations, forest companies and private land owners. The first forest project to use BC's Forest Carbon Offset Protocol (FCOP) is located on 26,000 ha of old growth forest free-hold property on Vancouver Island, with a total of 600,000 offsets over 3 years.
- Ministry of Forests, Lands and Natural Resources Operations has identified as much as 800,000 hectares of Crown land available for afforestation and reforestation. Reforesting land, restoring forests ravaged by the pine beetle will re-energize the forest base economies of rural BC. In 2011/12 more than 199 million trees were planted on crown land and another 36 million were planted over 3 years in areas devastated by the pine beetle.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- BC has vast amounts of land suitable for the development of high quality forest offsets.
- International interest is growing in forestry as a low cost source of offsets.
- Having a made-in-BC protocol that standardizes processes, sets the requirements for project viability and meets domestic and international standards means project developers will have lower project development costs and greater assurance of profitability.

**Contact:** James Mack, Head, Climate Action Secretariat      s.17      cell  
 Tim Lesiuk, Executive Director, CAS      s.17      cell

## Appendix A:

### **Forest Carbon Offset Protocol : Project Status**

#### **The Great Bear Rainforest Carbon Project (Coastal First Nations)**

The project is an Improved Forest Management project type as defined in the BC Forest Carbon Offset Protocol. This project generates emissions reductions by protecting forest areas that were previously designated, sanctioned or approved for commercial logging.

#### **TimberWest Strathcona Ecosystem Conservation Program Project**

This project is an Improved Forest Management project. The project will result in conservation of 26,000 hectares of select old growth stands on TimberWest's free-hold property on Vancouver Island. This is the first forest project to use BC's Forest Carbon Offset Protocol. The project led to conservation of a forest that would otherwise have been harvested and avoided use of trucks and logging equipment.

#### **Darkwoods Forest Carbon Project**

This project is a Conservation project avoiding the harvest of timber in a region. The Nature Conservancy of Canada acquired the fee simple 54,792 ha (135,394 acre) Darkwoods Property near Creston, BC from the Pluto Darkwoods Corporation in April of 2008, with the objective of managing the land for ecological conservation.

#### **The Carbon Offset Aggregation Cooperative (COAC)**

COAC has signed a 100 year Master License of Occupation agreement with the province. COAC will undertake restoration and rehabilitation of hundreds of thousands of hectares of BC's Crown Land forests impacted by the mountain pine beetle and wildfires. COAC is now the official "coordinating entity" for carbon projects on Crown Land and will finance the restoration work with carbon offset revenue. This project is COAC's second carbon offset aggregation program dedicated to helping the environment. Their first venture is reducing diesel consumption and greenhouse gas emissions in heavy trucks and on-road equipment, to reduce

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Liquefied Natural Gas (LNG) and BC's Climate Leadership</b></p>
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#### KEY MESSAGES:

- **Key message #1 – We are working to ensure that LNG operations in B.C. are the cleanest in the world.**
- **Key message #2 – Discussions are ongoing with LNG proponents. There are challenges in meeting targets, but we continue to move towards our 2020 and 2050 greenhouse gas emissions targets.**
- **Key message #3 – Climate change is a global issue. By exporting natural gas, B.C. will supply growing markets with the cleanest burning fossil fuel.**

#### CURRENT STATUS:

##### **Key message #1:**

- In 2012, the natural gas sector contributed 2.9% of total BC GDP, and generated \$500 million in government revenue. Exporting BC LNG is an attractive opportunity since Asian natural gas prices are currently 4X higher than North America's.
- LNG proponents are preparing for a series of growing investment decisions on whether to locate LNG export facilities in BC.
- In the February, 2013 Throne Speech, it was estimated that, over the next thirty years, LNG could, cumulatively add up to \$1 trillion to provincial GDP and contribute up to \$260 billion to government revenues.

##### **Key Message #2:**

- Extraction, processing, transmission and liquefaction GHG emissions cumulatively could add as much as 72 million tonnes of CO<sub>2</sub>e to provincial emissions.
- BC adjusted the *Clean Energy Act* to exclude natural gas fueled electricity for LNG facilities from the 93% clean and renewable energy requirement. Several proponents have indicated that they plan to use natural gas for LNG compression—an option that will increase GHGs.
- There are challenges to meeting BC's emission reduction targets, but BC continues to move towards its 2020 and 2050 targets.

### **Key message #3**

- A pillar of BC's LNG strategy is to maintain BC's leadership in climate change and clean energy. By exporting natural gas, BC will supply growing markets with the cleanest burning fossil fuel.
- The province has acted boldly in pricing carbon ahead of other natural gas producing jurisdictions and is using the revenue to reduce income taxes to continue to be a competitive place to invest.
- A non-public independent analysis determined that utilizing grid electricity for LNG compression would greatly reduce emissions, making a BC facility the "world's cleanest LNG facility". BC is examining the feasibility of this option with LNG proponents.
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### **BACKGROUND:**

- BC's carbon tax rose to \$30/tonne on July 1, 2012 and will remain at this level for the next five years.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Carbon Neutral Government</b></p>
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#### KEY MESSAGES:

- **Key message #1 – As a leader in climate action, BC became the first major jurisdiction to achieve carbon neutrality across the provincial public sector.**
- **Key message #2 – BC’s public sector has taken strides to save energy, reduce costs and emissions, and create clean, healthy communities in BC.**
- **Key message #3 – Total emissions have increased slightly across the public sector, but there has been an improvement in energy efficiency. Moving forward, the focus of the program will be on assisting the public sector to further reduce greenhouse gas emissions.**

#### CURRENT STATUS:

##### **Key message #1:**

- Carbon neutral government creates an incentive for greenhouse gas (GHG) emissions reductions, improves energy and asset management, and demonstrates leadership in creating a green economy and clean, healthy communities.
- Public sector organizations (PSOs) follow a four-step process to achieve carbon neutrality: (1) measure their GHG emissions; (2) reduce their emissions as much as practicable; (3) offset any remaining emissions by purchasing high-quality, made-in-BC carbon offsets; and (4) report publicly on progress. Government is reviewing and collating the reports from PSOs on 2012 activity and performance and will release a government-wide report by June 30 of 2013.
- For 2012, the public sector will pay \$18.8 million to purchase offsets for 752,298 tonnes of GHG emissions. This compares with \$416 million spent by the public sector on energy and fuel costs in 2012.

##### **Key Message #2:**

- Carbon Neutral Government demonstrates, in a concrete way, Government’s commitment to taking action on climate change in its own operations. It allows the public sector to:
  - Be a part of creating clean, healthy communities by deploying clean energy and new technologies in public buildings across BC
  - Save on energy costs that can be reinvested in public services such as education and health care.



- Engage 300,000 public servants in taking action on climate change, and in turn reach out to the two million British Columbians who work, learn or visit government buildings each year.
- Since 2008/09, BC has committed \$75 million through the Public Sector Energy Conservation Agreement (PSECA), and spent to date \$60 million to support energy-retrofits in schools, hospitals and post-secondary buildings.
- The PSECA program is expected to achieve annual energy cost savings of over \$12.6 million, annual GHG reductions of 35,600 tonnes, and create 10-15 new direct and indirect jobs per million dollars invested (BC Stats).

**Key Message #3:**

- Since 2010, BC's population and GDG have both increased, but total GHG emissions have decreased.
- The Government of BC is beginning to bend the GHG emission curve downward.
- Moving forward, the focus of Carbon Neutral Government will be to further support public sector organizations in managing their carbon footprint, and in realizing reduced energy and operating costs. A key part of this work will be improving public sector capital planning to consistently account for climate risks. Equally, the program will demonstrate the business case for technologies that reduce emissions and/or assist the public sector in adapting to a changing climate.

**Contact:**

James Mack, Head, Climate Action Secretariat s.17 cell

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Pacific Carbon Trust and Offsets</b>
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#### KEY MESSAGES:

- **Key message #1 – Carbon offset projects demonstrate BC’s growth as a climate action leader and clean technology innovator, and lead to real, permanent reductions in greenhouse gas emissions, providing cleaner air and healthier communities for all British Columbians.**
- **Key message #2 – All offsets purchased for Carbon Neutral Government are validated and verified by independent accredited professionals as meeting the requirements of BC’s Emission Offset Regulation.**
- **Key message #3 – By investing a small fraction of the project cost, offsets act as a catalyst for significant additional private sector investment that is enabling a transition to a green economy across BC.**

#### CURRENT STATUS:

##### ***Key message #1:***

- To demonstrate BC’s commitment to being a leader in energy conservation and greenhouse gas (GHG) emission reduction, all of BC’s provincial public sector organizations (PSOs) are required to be carbon neutral.
- The final step to becoming carbon neutral is to offset the balance of emissions remaining after reductions have taken place. To meet this requirement, PSOs invest in high-quality BC-based emission reduction offset projects from Pacific Carbon Trust, a Crown corporation with a mandate to purchase offsets to help the public sector meet its carbon reduction goals. These emission reduction projects are subject to rigorous third-party scrutiny.
- Several recent program innovations have improved the service to PSOs. These include:
  - Development of a diversified offset portfolio of 32 projects in all sectors of the economy and all regions of BC;
  - Completion of extensive engagements across the public sector, with offset professionals, and with academics and experts to improve the Carbon Neutral Government program;
  - Elimination of reporting costs to the entire public sector;

- Implementation of a new Carbon Neutral Capital program which has already provided \$10 million dollars over two years in new capital funding to the education sector;
- Creation of a Carbon Offset Advisory Panel to advise the Pacific Carbon Trust on the development of its offset portfolio;
- Provision of greater transparency by publicly releasing the purchase price of every offset in the Pacific Carbon Trust's portfolio; and,
- Initiation of a review to determine if the financial surplus we currently generate from offset purchases should be used to lower public sector costs or invested to further reduce emissions.

### **Key Message #2:**

- BC is recognized internationally as a climate change leader, and our offset system is based on international standards. BC is the chair of the Western Climate Initiative's offsets committee, and is referred to by the International Emissions Trading Association as a best practice for offsets internationally.
- A key feature of BC's offset program is that third party accredited professionals validate and verify projects to ensure they meet the requirements of the *Emission Offsets Regulation*. This approach is consistent with new offset systems now being implemented in Quebec, California, Australia, China, South Korea, and elsewhere.
- BC stands by the importance of having qualified and independent experts make the professional judgement calls necessary to determine whether a project can be considered an offset.
- The Climate Action Secretariat has been working with the Pacific Carbon Trust and the professional community to continuously improve BC's offset system. This has included increasing the number of CAS employees with ISO training in validation and verification of offsets.
- The Climate Action Secretariat will consult with the professional community and international experts and release formal procedures on how the Director's oversight role will be delivered in the future to provide additional oversight on the acquisition of offsets on Government's behalf.

### **Key Message #3:**

- The public sector offset investment required to be carbon neutral is not the total cost for the offset project – in essence the public sector portion acts as a catalyst to foster private sector investment.
- 2010 was the first year for which the public sector invested in offsets. At that time, the offset market was new and focused on a few large projects. Today, the BC Government has facilitated the development of a diversified offset portfolio of 32 projects in all sectors of the economy and in all regions of the province.
- A research project by PricewaterhouseCoopers (PwC) demonstrated that BC's offset projects have helped to stimulate an estimated \$320 million in capital spending, \$240 million in GDP, \$49 million in government revenue and supported over 2,800 jobs.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- A carbon offset represents one tone less of CO<sub>2</sub> in the atmosphere. It is created when an organization is supported to invest in real emission-reducing activities (an offset). Because climate change is a global issue, carbon emission reductions have an equal effect on climate change no matter where they occur. Offset projects can often drive down GHGs more cost-effectively than retrofitting buildings and equipment – but the result is the same.
- Offsets are largely purchased to assist the public sector in meeting its carbon neutral commitment, but they could also be used for voluntary purchasers and regulated industries.
- Pacific Carbon Trust invests in BC based projects located in every region of the province and in all sectors of the economy.
- Pacific Carbon Trust reports to the Minister of Finance and any questions about the management of PCT or its procurement decisions should be directed to that Minister.
- All offsets comply with the *BC's Emission Offsets Regulation* which is based on recognized, international standards for high-quality offsets.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Office of the Auditor General  Audit Report</b>
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#### KEY MESSAGES:

- **Key message #1 – In 2010, BC became the first Carbon Neutral Government in North America. This achievement was also met in 2011 and 2012. The Office of the Auditor General of British Columbia (OAG) has completed a performance audit of our first year as a Carbon Neutral Government and in particular two of the first offsets purchased by the Pacific Carbon Trust (PCT). The OAG concluded that the provincial government had not met its objective of achieving a carbon neutral public sector in 2010**
- **Key message #2 – Government accepted the recommendations in the report, but rejected the conclusion that carbon neutrality was not achieved in 2010.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The audit covered BC's first year (2010) as a carbon neutral government and two of the first offsets purchased by PCT.
- The audit did not reflect the changes made to BC's offset system as the market matured in 2011 and 2012.
- A key feature of BC's offset program is that third-party accredited professionals verify projects to ensure they meet the requirements of BC's Emissions Offsets Regulation. This approach is consistent with new offset systems now being developed and implemented in Quebec, California, Australia, China, South Korea and elsewhere.
- Every offset in PCT's portfolio has been twice audited by third-party experts, has passed those audits and has fully met the requirements of BC's Emission Offset Regulation (EOR).
- Four internationally accredited firms have provided statements of assurance that the offset projects examined by the audit fully comply with the EOR and are therefore credible.
- BC stands by the importance of having qualified and independent experts make the professional judgement calls necessary to determine whether a project can be considered an offset, but note that the OAG has a difference of opinion on the judgement calls made on two offset projects. We are working with the private audit firms involved, as well as the American National Standards Institute, to ensure that BC offsets are credible.

**Key Message #2:**

- BC is the first Carbon Neutral Government in North America. Program improvements we have made since 2010 underscore our commitment to be the best. Within that context, we have incorporated the OAG's recommendations into our strategic planning for carbon neutral government and committed to completing them prior to an anticipated follow-up audit in April 2014.
- The Climate Action Secretariat (CAS) has been working with the PCT and offset professionals to improve BC's offset system. In particular, to address the OAG's recommendation that CAS provide stronger oversight to ensure that offsets purchased on behalf of government are credible, the CAS Director with statutory authority has consulted with the professional community and developed more formal and rigorous procedures to ensure that the Director's oversight role is clear, clearly communicated to PCT and delivered consistently.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Carbon Neutral Government and School District 5</b>
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#### KEY MESSAGES:

- **Key message #1 – On May 17, 2013 School District 5 (S.E. Kootenay) announced that it is developing a reserve fund to reduce their carbon footprint instead of purchasing offsets from the Pacific Carbon Trust. To date, SD5 has fully paid their offset requirements.**
- **Key message #2 – The Government has already put in place a Carbon Neutral Capital program that provides up to \$5 million per year in funding for this purpose and the Ministry of Education is in contact with the School District.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The SD5 Board has directed staff to research the development of a SD5 reserve fund equivalent to the annual carbon credit offset purchase they are expected to pay to the Pacific Carbon Trust (PCT). This direction was informed, in part, by discussions the Board had with local area municipalities regarding similar funds.
  - For the 2012 year, School District 5 (SD5) paid \$71,400 to the PCT to comply with Government's *Greenhouse Gas Reduction Targets Act*.
- SD5 is fully compliant with the carbon neutral legislation and regulation for 2012 and the application of the reserve fund would apply to the 2013 year.
- Under the *Act*, school districts are required to offset carbon footprints by purchasing carbon offsets from the PCT at a fixed price of \$25 per tonne.
- It is important to note that school districts and municipalities are treated differently under the *Act* – municipalities may purchase offsets from PCT, but they are not required to; in contrast, school districts must purchase offsets from PCT. Further, municipalities' commitment to carbon neutrality is a voluntary one whereas school districts have a legislated obligation to be carbon neutral.
- The Ministry of Education responded to SD5 and indicated that if the district failed to purchase the requisite offsets to reduce its carbon footprint to zero, the Ministry would do so on its behalf and reduce the district's operating grant accordingly.
- According to SD5 Board Chair, Frank Lento, the strategic intent of the reserve fund is to keep money in the district and apply it towards carbon footprint reducing

measures within SD5 operations, as approved by the board, to be considered carbon neutral under Provincial Legislation.

- As carbon neutral government is presently structured, unless the annual investment of funds equivalent to what SD5 currently spends on offsets reduced the district's carbon footprint to zero, the district would be in non-compliance with the *Act*.

### **Key message #2**

- In April 2012, the BC government announced a \$5 million Carbon Neutral Capital Program (CNCP) for school districts for energy-efficiency projects that reduce their carbon emissions. The amount of available funding for this program has been set to be equal to or greater than the total paid by school boards each year for purchases of carbon offsets from Pacific Carbon Trust.
- For 2012-13, funding was allocated to 41 school districts that did not benefit proportionally from previous energy efficiency capital funding for school districts (i.e., Public Sector Energy Conservation Agreement and Energy Efficient Mechanical Upgrades Program).
- Carbon Neutral Capital Program funding for 2013-14 was allocated based on a "Call for Projects." This was the option preferred by the CNCP steering committee, made up of representatives from the BC School Trustees Association, BC Association of School Business Officials, Educational Facility Managers Association of BC, Climate Action Secretariat and Ministry of Education.
  - This means that not all school districts will receive Carbon Neutral Capital Program funding each year – only the projects best able to demonstrate significant carbon and energy savings will be approved. However, the Province has committed to ensuring that all school districts benefit from the program over a five-year period.
- The 25 successful projects for 2013-14 were announced on March 6, 2013 and funding will be available after April 1, 2013. As well, as part of the \$5 million provincial funding, 43 districts will receive about \$10,000 each to identify possible carbon neutral projects in the future.
- The CNCP disburses money based on project proposals, and SD5 qualified for \$9,765 in 2013-14

**Contact:** James Mack, Head, Climate Action Secretariat cell s.17  
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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 25, 2013</b>	<b>ISSUE TITLE:</b>  <b>Public Sector Energy Conservation Agreement</b>
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#### KEY MESSAGES:

- **Key message #1 – The Public Sector Energy Conservation Agreement started in 2007 and ended in 2010. A total of \$75 million was committed to support public sector organizations in undertaking energy efficiency and greenhouse gas emission reduction projects. Some projects did not advance and therefore full committed funds were not expended. To date, \$60 million worth of projects announced under PSECA are estimated to yield annual energy savings of \$12.6 million and greenhouse gas reductions of 35,600 tonnes.**
- **Key message #2 – The Public Sector Energy Conservation program resulted in projects that showcase innovative BC based clean technologies.**
- **Key message #3 – Government of BC and utility partners Fortis BC and BC Hydro continue to collaborate on efforts to support improved energy management across the public sector.**

#### CURRENT STATUS:

##### **Key message #1:**

- The following table outlines funding leveraged via PSECA

Year	PSECA	BC Hydro	Fortis	Federal/ Other**	TOTAL
08/09	\$26,107,119	\$6,378,000	\$145,000	\$7,329,000	\$39,959,119
09/10	\$17,074,149	\$2,045,000	None	\$928,000	\$20,047,149
10/11*	\$17,376,771	\$1,694,234	\$6,380,162	\$24,713,762	\$50,164,929
<b>TOTAL</b>	<b>\$60,558,039</b>	<b>\$10,117,234</b>	<b>\$6,525,162</b>	<b>\$32,970,762</b>	<b>\$110,171,197</b>

##### **Key Message #2:**

- UNBC's Biomass Gasification Plant saves the university \$500,000 annually and reduces the university's greenhouse gas emissions by 3,100 tonnes annually.
  - The Association for the Advancement of Sustainability in Higher Education highlighted UNBC's bioenergy project for its ability to connect teaching and research to campus operations, while serving as a model for communities and other campuses.

- The Penticton Regional Hospital (PRH) and Summerland Health Centre (SHC) have combined the power of the sun and cutting-edge technology by installing 140 solar thermal panels. The two projects achieved significant energy savings, with reductions in natural gas use of 49 per cent at PRH and 71 per cent at SHC.
  - Annually Interior Health Authority spends \$13 million on heating and lighting and these projects are a step in the right direction.

### ***Key message #3***

- Over 50 energy specialists and energy managers support public sector organizations, helping them to conserve energy and save money.
- CAS is working with Fortis BC, BC Hydro and Natural Resources Canada, to deliver targeted training for building operators, to help ensure small public sector organizations – including school districts – have skills and knowledge to support energy conservation.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Ending funding to reduce public sector GHG emissions has been criticized because: (1) these funds resulted in a positive return on investment from energy cost savings; and (2) government began collecting offset payments from public sector organizations the same year that PSECA funding ended.

**Contact:** James Mack, Head, Climate Action Secretariat s.17 cell  
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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 25, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Local Governments and the BC Climate Action Charter</b></p>
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#### KEY MESSAGES:

- **Key message #1 – Currently 182 of 190 local governments have signed the *BC Climate Action Charter* and receive the Climate Action Revenue Incentive – a 100% rebate of carbon tax paid. These communities join the Government of BC in taking steps to reduce energy use, save money and create clean, healthy, sustainable communities.**
- **Key message #2 - The Provincial Government and the Union of BC Municipalities have established a Joint *Green Communities Committee* to ensure that communities have the right tools and support to reduce emissions on a corporate and community-wide basis.**
- **Key message #3 – As part of their leadership commitment, local governments can invest in practical, credible GHG emission reduction projects within their community as a means of achieving carbon neutral status.**

#### CURRENT STATUS:

##### ***Key message #1:***

- The *BC Climate Action Charter* voluntarily commits local governments to:
  - be carbon neutral in respect of their corporate operations for 2012;
  - measure and report on their community's GHG emissions profile; and,
  - create complete, compact, more energy efficient communities.
- The Climate Action Revenue Incentive Program (CARIP) supports local governments' commitments under the *Charter*. Since 2008 the Province has paid local governments approximately \$7.8 Million under CARIP. CARIP reporting will be combined with carbon neutral reporting starting for 2012. By July 2013 the province will have CARIP reports including carbon neutral reporting ready for analysis.
- It is important to note that communities have a large influence over community-wide emissions and BC's ability to reach our GHG reduction targets.

**Key message #2:**

- Green Communities Committee plays a pivotal role in maintaining local government support for climate action and has provided the following:
  - The “*BC Climate Action Toolkit*” website, a comprehensive site to celebrate local success and support emission reduction and sustainability;
  - The ***Community Energy and Emissions Inventory*** (CEEI) which provides a community level greenhouse gas emissions baseline;
  - Modeling expertise to inform local government GHG targets, policies and actions based on the use of CEEI;
  - *Becoming Carbon Neutral* a guidance document and framework that outlines steps and options that enable local governments to achieve carbon neutrality under the *Charter*; and
  - *Methodology for Reporting BC Local Government GHG Emissions* for use by local governments who are creating their own emissions inventory.
- The Committee is supported by the Local Government Carbon Neutral Working Group, which includes UBCM and local government representatives.
- An annual Green Communities specific session, workshop or presentation at UBCM.

**Key message #3:**

- ***Becoming Carbon Neutral*** provides local governments three options to achieve credible carbon neutrality:
  - undertake a GCC framework supported local project;
  - developing an alternative project that meets GCC framework criteria; and,
  - purchasing offsets that meet high standards.

**Contact:** James Mack, Head, Climate Action Secretariat s.17 cell  
Rob Abbott, Executive Director, Carbon Neutral Government and  
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## **Appendix A: Difference between municipal and public sector carbon neutrality**

**Question:** Why does BC allow municipalities to meet carbon neutral goals through "emission reduction" projects rather than offsets as required for schools?

**Answer:** Local governments voluntarily committed to the *BC Climate Action Charter* – including both carbon neutrality and community-wide reductions. Local governments are unique in that they make significant infrastructure and program investments in their communities that can reduce community-wide emissions. School districts do not have the same investment opportunity.

### **Background:**

- Community-wide emissions make up roughly 40% of provincial GHGs and local government corporate emissions are relatively small comparatively.
- Both schools and local governments can invest in GHG reduction activities within their corporate boundaries. Although these projects reduce their GHGs, they will not likely get schools or local governments to true carbon neutrality or zero emissions.
- Under the Local Government (Green Communities) Statutes Amendment Act (Bill 27) local governments are required to include GHG emission targets, policies and actions in their Regional Growth Strategies and Official Community Plans. Local governments are setting targets that are meaningful and will lead to real community-wide emission reductions.
- With this dual responsibility, it makes sense to make investments that support community-wide reduction targets. Funds for offset projects outside the community are not likely to be voluntarily supported.
- At this time offset providers like Pacific Carbon Trust (PCT) or Offsetters are not able to guarantee that the funds they would receive from local governments would be invested back into those communities. As the offset market matures it will likely be able to support smaller community projects.
- PCT (and other offset providers that meet strict standards) can guarantee high quality investment in GHG reduction projects in BC. However, local governments want to invest in their immediate communities and many are well placed to implement their own projects.

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#### KEY MESSAGES:

- **Key message #1 – The Government is fostering awareness and understanding regarding the issue of climate change to encourage citizens to prepare for and prevent further climate change impacts.**
- **Key message #2 – British Columbians are taking action to conserve energy and create more sustainable communities and the Government is supporting their efforts and fostering collaboration.**
- **Key message #3 –Social media provides opportunities to reach new audiences and motivate positive behaviour change.**

#### CURRENT STATUS:

##### ***Key message #1:***

- In 2011 CAS partnered with the Pacific Institute of Climate Solutions to develop and release “Climate Insights 101” – a free, interactive and accessible online course on climate change. The provincial public service was the initial target audience; however this resource is available to local, national and international audiences.
- The Center for Interactive Research on Sustainability (CIRS) opened at UBC in November 2011. The BC Government sponsored the development of CIRS, which is now a cornerstone in UBC’s goal to transition its campus to a “living laboratory”. It demonstrates leading edge research on urban sustainability to the international community. The regular use of the CIRS building by the wider university community, local and provincial governments and energy utilities helps broaden and deepen the conversation on green and regenerative buildings and the technologies that enable a green economy.
- CAS celebrates success in climate action and provides support for the Community Energy Association’s local government awards presented at UBCM. For 2012 Surrey, Nakusp and the City of North Vancouver were recognized for their leadership on climate action.
- CAS also supports the work of the Green Communities Committee (GCC) and the annual UBCM award on climate action. Columbia Shuswap Regional District received the 2012 for climate leadership and innovation.

### **Key Message #2:**

- Momentum for change has grown and we are seeing diverse stakeholders begin to work together independently. Recently in Ladysmith, CAS set the tone and provided guidance for community members to identify avenues for the city – working with local business and public sector organizations – to meet its *BC Climate Action Charter* commitments.
- CAS, with the Ministry of Community, Sport and Cultural Development and UBCM has supported the BC Mayors' Climate Leadership Council by helping facilitate peer-to-peer leadership for elected officials in BC.
- With the achievement of Carbon Neutrality in 2010, the provincial public sector is demonstrating effective action on climate change. These successes, lessons and resources are shared with other sectors including local government and the business community. For example, David Thompson Secondary School in Invermere created a solar-heated greenhouse that puts energy back into the grid and provides an opportunity for students to gain experience growing their own food. It also serves as a demonstration project for new and available technology.
- CAS supports partners such as GoBEYOND, an organization of university campus sustainability leaders, to deliver outreach and engagement in communities across BC. In addition, CAS is involved in the wider healthy and resilient community discussion with other Ministries.
- CAS also presents regularly at a broad range of forums such as resort municipalities, local government finances and technical professional associations for engineers and actuaries.

### **Key message #3**

- The BC Climate Action Leaders online community continues to encourage networking, collaboration and sharing of resources. It has grown to nearly 2000 members and supports public sector carbon neutrality efforts, local governments and citizens involved in sustainability across BC.
- The LiveSmart BC Twitter and Facebook accounts create avenues for the public to access the wealth of resources offered by the BC Government and our partners such as the Pacific Institute for Climate Solutions.
- Targeted social media campaigns (e.g., King Tides Photo Initiative), engage British Columbians in a strategic conversation about climate change impacts and solutions.
- Social media helps leverage and extend the expertise offered by peers and partners and enables staff to remain aware of emerging issues and opportunities.

**Contact:** James Mack, Head, Climate Action Secretariat cell  
Rob Abbott, Executive Director, Carbon Neutral Govt & Outreach cell

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC Parks Budget Overview</b></p>
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### KEY MESSAGES:

- **Key message #1 – The 2013/14 BC Parks estimated operating budget is \$31.422 M, the same operating budget as in 2012/13.**
- **Key message #2 – Capital investment in BC Parks facilities remain at \$13.98M for 2013/14, same amount as in 2012/13. A 27% increase over the 2011/2012 budget.**
- **Key message #3 – The highest priority business needs have been identified and will be addressed.**

### CURRENT STATUS:

#### ***Key message #1:***

- BC Parks estimated operating budget of \$31.422M remains unchanged.
- Contributions made to BC Parks from donors are held within the Park Enhancement Fund. The Park Enhancement Fund was established in 2008 as a special account under the Special Accounts Appropriation and Control Act.
- Donations to the Park Enhancement Fund can be used to support enhanced BC Parks programming activities and services (e.g. Vancouver Island University Partnership, Mountain Equipment Coop).

#### ***Key message #2:***

- The \$13.98 million will be used to fulfill the following objectives:
  1. Meet regional health authority water safety priorities.
  2. Reduce identified high risks to visitor health and safety and park cultural values.
  3. Refurbish central buildings and facilities in day use areas and campgrounds, with particular emphasis on increasing accessibility.
  4. Improved accessibility in high attendance parks to central facilities, buildings and attractions.

5. Complete multiyear capital investment plans for those parks with high revenue and attendance (or, in exceptional circumstance, those parks with extremely high cultural values) and poor condition of facilities to:
  - Attract young families;
  - Offer new recreation opportunities;
  - Increase revenue and attendance;
  - Improve accessibility with new park furniture and easier to use facilities;
  - Modernize appearance;
  - Ensure investments are integral to natural and cultural values;
  - Ensure investments highlight the uniqueness of the park; and to
  - Lower operating costs.

***Key message #3:***

- In 2009/10 BC Parks made service reductions to address budget pressures. These include reduced operating seasons, trail maintenance and site servicing in 43 parks. These service level reductions save an estimated \$700,000 dollars annually. There were no new service reductions in last three years, and there will be no service reductions in 2013/14.
- Staff are reassigned to priority business functions and seasonal staff are being deployed in work pools (rather than a single park) to respond to priority work.
- Operating seasons and service withdrawals were made in lower use periods and parks. It is acknowledged that this will be an inconvenience to some park visitors.
- The division is continuing to look at ways to improve service delivery mechanisms that will lower administrative costs and eliminate inefficiencies.
  - A LEAN initiative has been started to streamline the procurement and contracting process for the BC Parks capital program.
  - The goals are to:
    - Decrease administrative time;
    - Increase number of competitive bids;
    - Improve response time to secure contracted services, and;
    - Enable more time on contracting monitoring and planning.
- High priority program initiatives are being focused to maintain service delivery on key deliverables. Including:
  - Volunteer Strategy
  - Park Management Planning
  - Legislation establishing new protected areas
  - Conservation of biodiversity and ecosystems
  - Delivering on Forest Health, Fire Interface and Invasive Plant Management
  - Supporting First Nations Agreement and Treaty processes
  - Management of moderate and high use recreation sites
  - Sponsorship/Partnership development
  - Continued investment in physical plant infrastructures with public safety as a priority

**Contact:** Lori Halls, Assistant Deputy Minister, BC Parks and Conservation Officer Division, (250) 387-9997.

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Park Enhancement Fund</b>
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### KEY MESSAGES:

- **Key message #1 – The Park Enhancement Fund (PEF) supports BC Parks in earning revenues and attracting donations which can be reinvested in the provincial parks system.**
- **Key message #2 – The PEF has allowed BC Parks to enter into a number of partnerships which are greatly benefiting protected areas in BC.**

### CURRENT STATUS:

#### Key message #1:

- From April 1, 2012 to March 31, 2013, the PEF earned approximately \$2.8 million. The majority of this was from the Discover Camping Reservation Service (\$2.3 million). The remainder was received from partnerships, donations, interest payments and protected areas stumpage (see appendix 1 for descriptions of partnership projects).
- Since its establishment in 2008, the PEF has contributed about \$8 million to parks and protected areas in BC. The table below shows the income and expenditures from 2008 to March 31, 2013 in key categories. (Please note, a large portion of the revenue generated by the Discover Camping Reservation Service is used to pay for its operation).

Category	Income	Expenditures
Directed partnerships & sponsorships	1,726,599	1,516,485
Seed money, interest, merchandising & other	169,634	191,122
Discover Camping Reservation Service	5,660,522	2,981,079
Stumpage	457,896	180,289
<b>TOTAL</b>	<b>8,014,652</b>	<b>4,868,975</b>

## Key message #2:

- The following bullets are examples of some of the larger projects and financial contributions made possible because of PEF:
- Approximately \$214,000 was received from an anonymous donor to fund a significant trail upgrade in Garibaldi Provincial Park.
- In 2011, BC Parks celebrated its Centennial Anniversary with over 250 community events hosted and funded primarily out of PEF (through the revenues earned from the Discover Camping Reservation Service) as well as a variety of partnership contributions (see Appendix 2).
- The Strathcona Centennial Expedition, highlighting the creation of BC's first provincial park, raised over \$25,000 cash (total over \$30,000 including in-kind donations) through sponsorships and donations. A long-term legacy fund has been established for Strathcona Park from the sponsorship & donation proceeds.
- Over 120 park benches have been sponsored by individuals, families and companies across the Province, resulting in over \$200,000 of facility upgrades to the provincial park system.
- A \$30,000 playground was sponsored in Gwillim Provincial Park by two local mining companies in the Peace region.
- The Get Outside BC youth leadership project is a partnership with CPAWS BC, MEC and Parks Canada to engage youth in B.C.'s parks. For the last three years, BC Parks has contributed \$40,000 from PEF to leverage a \$100,000 project benefiting youth and parks.
- Vancouver Island University sponsored nine interpretive signs, 25,000 individual park brochures, and 50,000 regional maps for Vancouver Island, with a total contribution of \$34,200.
- A donation of \$25,000 was received by Nyrstar mine to be invested into the adjacent Strathcona Provincial Park.

## KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The PEF was established in 2008 as a special account under the *Special Accounts Appropriation and Control Act*.
- The special account can include revenue from:
- The sale of promotional and educational products or services (e.g., BC Parks merchandise, Discover Camping Reservation Service, etc),
- Individual donations and bequests,

- Sponsorship and partnership contributions,
- Protected areas stumpage; and,
- Interest earned on unspent balances.
- The PEF can be used to support enhanced:
  - Information, education and interpretation programs delivered both within parks and outside,
  - Product/partnership development and merchandising,
  - Volunteer program support,
  - Regional and/or multi-jurisdictional planning projects (such as regional recreation management plans),
  - Capital investments (construction, repair and maintenance); and,
  - Natural and cultural resource assessment, research and restoration.

**Contact:** Bob Austad, Executive Director, Visitor Services 250-356-9241

## **Appendix 1: Descriptions of PEF Partnership Projects**

### **Cypress (VANOC)**

- Funding from VANOC for invasive species site remediation after the 2010 Winter Olympics at Cypress Provincial Park, as well as funding for trail reconstruction of the Howe Sound Crest Trail.

### **Anonymous Donation for Garibaldi Trail Upgrades**

- Funding for substantial trail upgrades from Elfin Lake to Mamquam Lake in Garibaldi Provincial Park. This project includes the installation of three bridges.

### **Joseph Cross Art Partnership**

- Artist, Joseph Cross, painted four different landscapes of Mt. Assiniboine Provincial Park. All proceeds from the sale of prints will go towards conservation and recreation projects in Mt. Assiniboine park.

### **Lucy Island Interpretation Signs**

- Funding from the Prince Rupert Rotary Club for interpretative signs at Lucy Island Provincial Park.

### **Newcastle Mooring Buoys**

- Funding from Pacific Yachting for the installation of additional mooring buoys at Newcastle Island Provincial Park.

### **100 Years of Adventure**

- Partnership with Mountain Equipment Coop to deliver 11 outdoor adventure events for the public which were run by community groups. Event activities included, climbing, running, hiking, surfing, paddling and snow shoeing.

### **Parks 100**

- 250 events all across the province. Key projects included: Arts in the Parks, BC Parks Passport, Share Your BC Parks contest, 100 Geocaches initiative, Community Legacy Program, Strathcona Centennial Expedition, Learn to Fish, Healthy by Nature, Get Outside Youth program, Great Ranger Experience videos, 100 Years of Adventure, BC Magazine special centennial edition, BC Day events, Symphony Splash, Take a Hike event and the Scouts Jamboree (see appendix 2 for a list of Parks 100 partners).

### **Sovereign Lake**

- Funding from the Sovereign Lake Nordic Centre for facility improvements and new signage.

### **Strathcona Expedition**

- Legacy funding raised by the Strathcona Centennial Expedition. This event raised awareness of BC Parks Centennial and was fully funded by sponsors.

### **Mt Robson**

- Funding from Tourism BC to construct a new viewing platform outside the Mt. Robson Visitor Centre.



### **Vancouver Island University**

- Funding from VIU to install nine interpretive signs, print 25,000 individual park brochures, and 50,000 regional maps for Vancouver Island.

### **Indian Arm**

- Payout from an insurance company after a boating accident damaged the dock at Indian Arm Provincial Park.

### **Brandywine Falls**

- Funding from VANOC to upgrade the pedestrian crossing over CN railway tracks, to CN's safety standards, on the trail leading to the main waterfalls viewpoint in the park.

### **Monashee**

- Funding to sponsor a print run of 1,000 posters of Monashee Provincial Park to celebrate its 50<sup>th</sup> anniversary in 2012. All proceeds from the sale of these posters will go towards enhancement projects in Monashee Park.

### **Naikoon**

- Funding that contributed to the completion of the wheelchair accessible boardwalk to the iconic "blowhole" in Naikoon Provincial Park.

### **Make your Mark**

- Funding raised from the sponsorship of park benches, picnic tables and tree planting projects in parks across BC. Note: these funds go towards maintenance costs of sponsored facilities.

### **Mothers Against Drunk Driving (MADD)**

- Funding received from MADD to install impaired boating awareness signs at 42 of BC Park's most popular boat launches. This project is a partnership with MADD, BC Parks, and various local RCMP detachments.

### **Gwillim Lake Playground Sponsorship**

- Funding received from Teck Coal Ltd. and Walter Energy to install a new playground at Gwillim Lake Provincial Park.

### **Marine Parks Forever Society**

- Marine Parks Forever Society (MPFS) raised money for marine facility development through the sale of BC Marine Park Guides at various yacht clubs across BC.

### **Donation Boxes**

- Donations were collected in drop boxes at various parks throughout BC.

## **Appendix 2: List of some of the key partners that contributed to BC Parks' 100 celebrations**

- Mountain Equipment Co-op
- Strathcona Centennial Expedition
- Canadian Parks and Wilderness Society
- BC Floatplane Association
- Society of Park Facility Operators
- BC Geocaching Association
- Scouts Canada
- Child and Nature Alliance
- Provincial Capital Commission
- BC Magazine
- Freshwater Fisheries Society of BC
- Visitor Centre Network
- Parks Canada
- Capital Regional District Parks
- Assembly of BC Arts Councils
- BC Campground and Lodging Association
- Camping and RVing Coalition
- Aboriginal Tourism BC
- Heritage BC
- BC Conservation Foundation
- Victoria Symphony
- Horne Lake Caves
- Tign na mara Resort
- Elders Council for Parks

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### KEY MESSAGES:

- **Key message #1 – British Columbians can be proud of their world-class parks and protected areas system.**
- **Key message #2 – Visitation numbers have been relatively stable around 19 million over the last few years, with some variability due largely to weather patterns.**
- **Key message #3 – We have the largest parks and protected areas system of any province or territory in Canada and have continued to add to it over the past decade.**
- **Key message #4 – BC Parks operating budget remains steady in 2013/14 at \$31.422 million and its capital budget increased since 2011/12 by 27% to \$13.98 million.**
- **Key message #5 – For 2013/14, there will be approximately 97 people working in Park Ranger positions in BC Parks. 10 positions are regular and 87 are seasonal.**
- **Key message #6 – BC Parks is a significant contributor to local economies around the province.**

### CURRENT STATUS:

#### ***Key message #2***

- Other jurisdictions have faced similar attendance trends, with some declines in recent years.
- **Ontario Parks – Attendance**

2007	2008	2009	2010	2011
10,377,359	9,537,636	9,447,413	9,541,366	9,595,051

Source: Ontario Parks Statistics Report 2011. 2012 report has not yet been released.

- **Parks Canada – Attendance**

2007-08	2008-09	2009-10	2010-11	2011-12
13,141,831	11,921,251	12,282,172	12,548,933	12,529,627

Source: Parks Canada Attendance 2007-08 to 2011-12.

- Our staff do a fantastic job of looking after our parks and protected areas for today's users and for future generations.

- The visitor satisfaction rate is 80 per cent and we are always working to raise it even higher.
- We have one of the best camping reservation systems available. In 2011 the reservation system was expanded to include backcountry registration.

***Key message #3:***

- Over the last decade, more than two million hectares of land have been added to the province's protected areas system through the establishment of 84 new parks, 156 conservancies, two ecological reserves, 13 protected areas and the expansion of more than 75 parks, 7 ecological reserves and 3 protected areas.
- There are 1030 parks, conservancies, ecological reserves and protected areas across British Columbia managed by BC Parks, covering nearly 14 million hectares or 14.4% of the provincial land base.
- The provincial system of parks and protected areas is the largest of all provincial and territorial systems in Canada. Across North America, only Parks Canada and the US National Park Service manage larger systems.
- We are ensuring these very special places are accessible for British Columbians today and preserved for the park users of tomorrow by looking at ways to support the management of these areas, such as enhanced partnerships, greater use of volunteers and stewardship groups, and engaging communities in the long-term protection of these special places.
- British Columbians can also be proud of the fact that many areas are free of facility development—98 per cent of the land within the system remains predominantly free from human alteration.

***Key message #4:***

- The BC Parks 2013/14 budget is \$31,422 million and is unchanged from 2012/13.

***Key message #5:***

- Park Ranger numbers have remained the same for the past three years.
- Park facility operators employ approximately 700 staff and have compliance responsibilities within their operating areas.

***Key message #6:***

- Every \$1 invested in the parks system generates \$8.42 in visitor spending on food, entertainment, transportation and other goods and services.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks Quick Facts</b>
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### KEY MESSAGES:

- **Key message #1 – Over 15% or nearly 14.3 million hectares of B.C.’s land base is dedicated to protected area status (this includes provincial and federal protected areas as well as publicly announced protected areas from land use plans).**
- **Key message #2 – As of June 1, 2013, there are 1,030 parks, conservancies, ecological reserves, recreation areas and protected areas covering approximately 14.4% or about 14 million hectares or about 140,000 km<sup>2</sup>, managed by BC Parks.**
- **Key message #3 – BC Parks has completed conservation risk assessments in 985 parks and protected areas – that’s 96% of our parks.**
- **Key message #4 – Since 2001, the Ministry has increased the number of protected area collaborative management agreements with First Nations from 13 to 37 collaborative management agreements. BC Parks is also involved in broader government-to-government agreements including 6 Strategic Engagement Agreements and 5 Reconciliation Protocol Agreements, bringing the number of strategic agreements to 48.**
- **Key message #5 – Over 300 parks offer facilities for recreation.**
- **Key message #6 – Front-country park operations are delivered under contract by Park Facility Operators.**
- **Key message #7 – BC Parks’ Discover Camping Reservation Service features reservations for 95 BC Parks and registration for 26 backcountry and marine parks.**

### CURRENT STATUS:

#### ***Key message #1:***

- Provincially designated protected areas (parks, conservancies, ecological reserves, recreation areas, protected areas) – approximately 14.4%;
- Federally designated protected areas (national parks, national park reserves, 1 national historic park) – approximately 0.6%; and
- A small percentage of provincially announced sites through land use planning processes that have not yet been designated.

**Key message #2:**

- The 1,030 figure only includes areas managed by BC Parks.
- There are presently:
  - 643 Provincial Parks, covering 10,493,960 ha or 104,939.6 km<sup>2</sup>
  - 156 Conservancies, covering 2,942,705 ha or 29,427.05 km<sup>2</sup>
  - 3 Recreation Areas covering 5,933 ha or 59.33 km<sup>2</sup>
  - 148 Ecological Reserves, encompassing 160,462 ha or 1,604.62 km<sup>2</sup>
  - 80 Protected Areas covering 383,820 ha or 3,838.2 km<sup>2</sup>

**Key message #3:**

- Conservation Risk Assessments (CRAs) identify high priority conservation values and risks so that management actions can be targeted to ensure the protection of natural and cultural values. We now have 985 parks and protected areas with completed CRAs – 96% of our parks.

**Key message #4:**

- The Ministry values strong relationships with First Nations regarding the management of protected areas. BC Parks is now directly involved with 48 strategic agreements: 37 collaborative management agreements and 11 broader strategic engagement agreements and/or reconciliation protocols. BC Parks expects to enter into or assist with potential negotiations on 3 other strategic agreements in the upcoming year.

**Key message #5:**

- More than 230 parks have facilities for those with disabilities.
- About 13,000 campsites – 10,700 vehicle accessible campsites & approximately 2000 walk in/ backcountry campsites.
- 39 group campgrounds and picnic areas that can be reserved.
- 126 boat launch areas.
- Approximately 6,000 kilometers of hiking trails.

**Key message #6:**

- 22 Park Facility Operators manage 28 'bundles' under contract with BC parks (which include 201 parks).
- 50 additional parks are operated under individual contracts.
- The direct cost of providing contracted park services across the province is currently \$20 million per year. About 80% of this amount is paid for through recreation user fees.

**Key message #7:**

- 106,926 reservations were made in the 2012 camping season, a 10.4% increase from 2011 which had 96,878 reservations.
- There are over 5,000 individual sites available for reservations including: frontcountry campsites, groupsites, yurts and cabins.
- Reservations can be made by call centre or internet or using mobile devices.
- Permits can be purchased on line through the DC Backcountry registration system for 26 backcountry and marine parks prior to visiting these sites.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- British Columbia has the highest percentage of its land base dedicated to protected areas of all provincial and territorial Canadian jurisdictions.
- BC Parks manages the third largest park system in North America, behind the US National Parks Service and Parks Canada.
- BC Parks 2012/13 attendance is estimated to be 20.6 million, approximately 1.2 million visits (6%) more than last year.
- Attendance trends in other jurisdictions are presented below:

**Ontario Parks – Attendance**

2007	2008	2009	2010	2011
10,377,359	9,537,636	9,447,413	9,541,366	9,595,051

Source: Ontario Parks Statistics Report 2011. 2012 report has not yet been released.

**Parks Canada – Attendance**

2007-08	2008-09	2009-10	2010-11	2011-12
13,141,831	11,921,251	12,282,172	12,548,933	12,529,627

Source: Parks Canada Attendance 2007-08 to 2011-12.

- Almost 90% of British Columbians have used a provincial park at some time.
- About six in ten British Columbians use a provincial park each year.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Economic Contribution of BC Parks</b>
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### KEY MESSAGES:

- **Key message #1** – In 2011, a national report on the economic value of parks to the economy was released.
- **Key message #2** – The report determined that in 2009, park agencies spent \$772 million and visitors to parks spent \$4.4 billion.
- **Key message #3** – For British Columbia, the report shows that \$47 million in 2009/10 operating and capital expenditures (excludes amortization) by BC Parks and Park Facility Operators led to \$394 million in expenditures by visitors. In other words, every \$1 invested in the parks system generates \$8.42 in visitor spending on food, entertainment, transportation and other goods and services.

### CURRENT STATUS:

#### ***Key message #1:***

- At the 1992 Earth Summit, participating governments agreed that a new vision for protected areas required an awareness and understanding of the economic values they generated.
- In 1998, the Canadian Parks Council (CPC) proposed the development of a common framework for measuring the economic value of protected areas within Canadian jurisdictions.
- The first national report was developed in 2003/04 and released in 2005. In 2006, the Ministers responsible for parks reviewed the report findings and asked the CPC to prepare periodic reports of this nature.
- In 2011, a new report, based on 2009 data, was released with updated figures demonstrating the economic contribution of parks and protected areas.

#### ***Key message #2:***

- The report determined that in 2008/09, park agencies spent \$772 million in capital and operating costs, and visitors to parks spent \$4.4 billion. This \$5.2 billion in combined direct spending by park agencies and visitors resulted in:
  - \$4.6 billion in Gross Domestic Product (\$2.9 billion of this is labour income);
  - Over 64,000 full time equivalents of employment; and
  - \$337 million in tax revenue (44% return on total costs)



- The report also notes that spending by visitors is almost six times that of government agencies. Visitor spending is a direct injection into Canada's tourism sector, making parks a major generator of tourism locally, regionally and nationally.

***Key message #3:***

- In British Columbia, the combined impact of spending by park organizations and visitors was a \$728 million increase to Gross Domestic Product and \$454 million in labour income. Close to 10,000 jobs were also derived from this spending, and \$54 million in sales and production taxes.
- BC Parks spent \$47M in 2008/09 to operate the provincial park system; visitors spent close to \$394 million in our parks. In other words, every dollar spent by BC Parks resulted in \$8.42 in spending by visitors. British Columbia ranks second amongst the provinces/territories in terms of visitor spending as a ratio to park agency spending. Our return on investment and value for money is greater than all other provinces and territories with the exception of Quebec.
- British Columbia has the second largest parks system in Canada, after Canada's national parks. As this report indicates, our investment in protecting the province's special natural places is sound, and provides an important stimulus to local, regional, and national economies.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Canadian Parks Council is comprised of park and protected area jurisdictions nationally, provincially and territorially.
- It has existed since 1962 and works towards cooperatively advancing park and protected area management.
- Key themes that the CPC currently focuses on are: economic impacts, youth engagement, climate change, human health benefits, and stewardship.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks: Eliminating Parking Fees</b>
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### KEY MESSAGES:

- **Key message #1 – Parking fees were eliminated in all BC Parks on May 3, 2011.**
- **Key message #2 – There was no impact to park services in 2011/12 as a result of the loss of parking revenue.**
- **Key message #3 – To date, BC Parks has provided a full refund for 311 annual parking passes holders.**

### CURRENT STATUS:

#### ***Key message #1:***

- On May 3, 2011 Premier Clark announced that parking fees will be eliminated in all provincial parks. This change was effective immediately.
- All machines that collected parking fees have been removed.

#### ***Key message #2:***

- Approximately \$650,000 of parking revenue was being retained by Park Facility Operators to help cover the cost of operating day use areas. Contractual obligations require that government compensate Park Facility Operators for the loss of revenues due to the elimination of these fees.
- Negotiations with PFOs ensured all labour, materials and maintenance costs associated with the parking program were captured. This resulted in final contract obligations of \$500,000 in compensation for net lost revenues due to the elimination of the parking program.
- For 2011/12 and 2012/13, the ministry was able to partially offset the cost of compensation to the PFOs by reducing payments to the Consolidated Revenue Fund from profitable operations. The Ministry of Environment faced pressures of \$370,000 for 2011/12, \$440,000 in 2012/13. Pressures moving forward are \$500,000 from 2013/14 onwards to cover the on-going revenue loss.
- There are also net one-time costs of \$1.45 million, \$ 1.18 million to write off the parking machines and \$0.27 million to decommission and remove the parking machines.
- BC Parks staff worked with the PFO's to ensure there were no service reductions in the park due to the removal of the parking machines.

***Key message #3:***

- The ministry offered a full refund for any parking passes sold since September 1, 2010. To date, 311 refunds, totaling nearly \$8000, have been issued. Information on requesting a refund can be found on the BC Parks website.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- None

**Attachment:** N/A

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks Capital Investment Strategy  2013/14</b>
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### KEY MESSAGES:

- **Key Message #1** – In 2012, BC Parks received an extra \$3 million for the 2012/13 operating year representing a 27 per cent increase over the previous year. Capital remains at this \$13.98 million level for 2013/14 with a planned 129 projects in 89 parks. Over the past five years, BC Parks has invested approximately \$56 million in park facilities in the province.
- **Key Message #2** – The replacement value of BC Parks buildings and land improvements is approximately \$700 million. The \$13.98 million annual capital investment represents approximately 2 % of plant value. Industry norms recommend this 2% as an annual reinvestment amount to maintain the integrity of the assets.
- **Key Message #3** – The strategic direction of the capital investment program is to offer park visitors a safe and welcoming environment that reflects the core conservation, recreation and cultural values of BC Parks. The \$13.98 million funds projects that will attract young families, offer new recreation opportunities, improve accessibility, protect visitor health and safety, and increase revenue and attendance.

### CURRENT STATUS:

#### ***Key message #1:***

The \$13.98 million in capital funds will be invested in 129 projects in 89 parks throughout the province. These projects focus on:

- Renovating facilities in day-use areas and campgrounds, with a major emphasis on improved accessibility;
- Delivering multi-year capital investments in parks with either high revenue and attendance, or significant cultural values;
- Addressing risks to visitor health and safety and cultural values; and
- Continuing to upgrade water systems to meet potable water standards.

The regional breakdown for funding is as follows:

Region	\$ (million)
Kootenay/Okanagan (KO)	4.92
Thompson/Cariboo (TC)	1.93
Northern (Skeena, Peace, Omenica) (N)	2.7
West Coast (Vancouver Island, Haida Gwaii) (WC)	2.13
South Coast (Lower Mainland, Sunshine Coast) (SC)	2.3

The following table provides further details:

Projects' Investment Priority	# of Projects	\$ (million)
Renovating central facilities	47	5.81
Restoring/upgrading high revenue parks	39	5.33
Addressing risks to visitors and cultural values	27	2.23
Drinking water requirements	16	0.61
<b>Totals</b>	<b>129</b>	<b>13.98</b>

### **Key message #2:**

Recently completed projects include :

- **Rath Trevor Beach (WC):** \$560,000 to reconstruct the campground and improve day-use areas such as benches and picnic tables. The project is multi year.
- **Liard River Hot Springs (NR):** \$700,000 project to build a new deck and change houses around the hot spring pool as well as improving accessibility for visitors for mobility issues. An official opening is scheduled for later this summer.
- **Wells Gray (TC):** \$275,000 was used for upgrades to the visitor centre and the road leading to the centre. A public competition is currently posted on BC Bid for the design of interpretative displays.
- **Kikomun Creek (KO):** \$53,000 funded the installation of accessible picnic tables, new signage and improvements to the trail system. The park has seen substantial improvements for the past five years.
- **Kettle River (KO):** \$490,000 funded the expansion of the campground including 28 new campsites, picnic tables, flush toilets and more trails linking existing campground loops.
- **Garibaldi (SC):** \$750,000 funded a new 30-site backcountry campground, toilets and picnic shelter around Elfin Lakes. Included are improvements to the access road and upgrading of ranger stations.
- **Herald (TC):** \$110,000 went towards new picnic tables in campground and day-

use areas.

- **Lakelse Lake (N):** \$225,000 project improved the day-use change house and the toilet and shower building as well as new picnic tables and sanitation facilities.
- **Martha Creek (KO):** \$643,000 funded the reconstruction of the campground including the addition of new lakeshore campsites and other infrastructure such as picnic tables.

Several other high use provincial parks have seen recent capital investments:

- **Goldstream (WC):** \$150,000 project saw the start of a multi-year project to refurbish the campgrounds.
- **Cultus Lake (SC):** \$420,000 to plan campground expansion, install new accessible picnic tables and complete renovations for toilet and shower buildings.
- **Golden Ears (SC):** \$200,000 project saw the renovation and restoration of the day use area.
- **Shuswap Lake (TC):** \$180,000 project addressed septic field problems and completed the refurbishment of toilet/shower buildings.
- **Kokanee Creek (KO):** \$775,000 project saw a campground expansion and a new toilet/shower building.

Other projects include those with high cultural value such as **Lucy Island (N)**, **Naikoon (WC)**, **Juniper Beach (TC)**, **Fintry (KO)**, **Mount Assiniboine (KO)** and **Nisga'a Lava Beds (N)**.

**Attachment:** 2013/14 Approved Capital Projects

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Recreation User Fees</b>
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### KEY MESSAGES:

- **Key message #1 – There will be no camping fee increases in 2013.**
- **Key message #2 – Discount rate fee adjustments approved by the Minister in 2013 for Moyie Lake and Norbury Lake reflect the offering of long-stay camping services in those parks.**
- **Key message #3 – Recreation user fees pay 80% of the costs of direct park operations (Park Facility Operator contracts).**

### CURRENT STATUS:

#### ***Key message #1:***

- No fee increases will take place in 2013.

#### ***Key message #2:***

- For Moyie Lake, a long-stay camping fee of \$100/week was approved (available off-season only)
- For Norbury Lake, long-stay camping fees of \$38/week (offseason rate) and \$55/week (peak season rate) were approved.

#### ***Key message #3:***

- The annual cost of providing contracted park services across the province was just over \$20 million in 2012/13. BC Parks is estimated to have earned \$16 million in recreation user fee revenues and \$15.9 million of this revenue was retained by PFOs to help fund visitor services in campgrounds and day use areas. The remainder was paid into the Consolidated Revenue Fund.
- BC Parks pays approximately \$4 million in additional contract costs out of their vote allocation (called deficiency payments). Deficiency payments are expected to increase each year due to Cost of Living Allowance (COLA) clauses in contracts.

### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Approved recreation user fee ranges include:
  - Front-country camping fees between \$5 – \$35 per party/night
  - Group camping fees between \$20 - \$120 per site/night, plus \$1 - \$5 per person/night
  - Backcountry camping fees between \$5 - \$10 per person/night, and
  - Backcountry cabin fees from \$4 - \$42 per person/night.
- With these new authorities BC Parks reviews the fee schedule on an annual basis to keep it up-to-date and to respond to requests submitted by Park Facility Operators.
- In 2011 long stay fees were added to the fee schedule. Under these fees, visitors can stay at select parks for a minimum four weeks at a discounted rate. The purpose of the long stay program is to increase camping in the off-season and in low occupancy parks.
- Business cases for changes in recreation user fees prepared by regional staff and park facility operators must be submitted to Victoria staff by October 31, 2013 for review.
- Decisions regarding any changes to fees for the 2014/15 park season need to be made by December 31, 2013 to provide enough time for the Discover Camping reservation system provider to adjust fees accordingly.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241



<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC Parks Service Delivery Costs</b></p>
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### KEY MESSAGES:

- **Key message #1 - BC Parks' visitor services are largely provided under contract by Park Facility Operators (PFOs).**
- **Key message #2 - The direct cost of providing contracted park services across the province is currently \$20 million per year.**
- **Key message #3 – There has been no reduction in service levels in the past five years.**

### CURRENT STATUS:

#### ***Key message #1:***

- Since the mid 1980s, BC Parks' front-country campgrounds have operated under contract. In 2003, to recognize efficiencies, BC Parks entered into 10 year agreements with 22 businesses to operate most front-country campgrounds and day use areas (28 bundles containing 201 parks). An additional 50 parks are managed under individual contracts.
- Park Facility Operators (PFOs) must meet the service standards set by BC Parks. They maintain campgrounds, day use areas and offer additional services to ensure a safe and satisfactory experience for park visitors.
- As required in the contracts, the financial aspects of 24 bundles were re-negotiated in 2008/09; one was renegotiated in 2009/10, and the remaining three were re-negotiated in 2010/11.
- The elimination of HST in April 2013 required a further round of financial negotiations to determine allocation for the tax surplus in all bundles.

#### ***Key message #2:***

- The annual cost of providing contracted park services across the province was just over \$20 million in 2012/13. BC Parks is estimated to have earned \$16 million in recreation user fees and \$15.9 million of this revenue was retained by PFOs to help fund visitor services in campgrounds and day use areas. The remainder was paid into the Consolidated Revenue Fund.
- BC Parks pays approximately \$4 million in additional contract costs out of their vote allocation (called deficiency payments). Deficiency payments are expected to

increase each year due to Cost of Living Allowance (COLA) clauses in contracts.

***Key message #3:***

- In 2009/10 BC Parks made service reductions to address budget pressures. These include reduced operating seasons, trail maintenance and site servicing in 43 parks. These service level reductions save an estimated \$700,000 dollars annually. There were no new service reductions in last 3 years and nothing for 2013/14.
- BC Parks staff worked with the PFO's to ensure there were no service reductions in the park due to the removal of the parking machines.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- BC Parks is committed to offering a range of recreation opportunities in all regions of the province at a reasonable price. In addition, fee exemptions or discounts are also offered to targeted user groups (e.g. disabled, seniors and youth). Some public subsidy of visitor services is necessary to meet these objectives.
- Most park operating contracts expire in 2013. The Parks Recreation Integrated Service Model (PRISM) transformation project is seeking ways to improve the delivery of recreation services and finding the most efficient and effective delivery mechanism for the next set of contracts.

**Attachment:** N/A

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks Attendance and Revenue</b>
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### KEY MESSAGES:

- **Key message #1 – BC Parks implemented a new attendance system in 2012, with the intent of improving reporting practices for attendance and revenue in provincial parks.**
- **Key message #2 – BC Parks 2012/13 attendance is estimated to be 20.6 million, approximately 1.2 million visits (6.3%) more than last year.**
- **Key message #3 – BC Parks 2012/13 recreation user fee revenues are estimated to be \$16 million, an increase of approximately 0.6 million (4.2%) over 2011/12.**

### CURRENT STATUS:

#### ***Key message #1:***

- A new attendance and revenue system was implemented by BC Parks in 2012 that aimed to improve the efficiency, accuracy and reliability of attendance and revenue reporting. The new reporting methodology associated with the system likely caused some variation in attendance and revenue numbers compared to historical data.
- Most Park Facility Operators now have direct access to the system, which allows them to enter their own attendance and revenue data and increases the quality and reliability of the statistics.

#### ***Key message #2:***

- Day use attendance is estimated to have been approximately 18,000,000 in 2012/13, an increase of 7% compared to 2011.
- Camping attendance is estimated to have been approximately 2.4 million in 2012/13, an increase of just under 3.7% from last year. Camping visits tend to be less variable than day use as most campers make plans in advance, often paying for a reservation. These committed users will generally complete their trips, although they may change dates. Camping visits increased in every month from April through August in 2012 compared to the same months in 2011.

<b>BC Parks Visits</b>	<b>2008/09</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>	<b>2012/13 (estimates)</b>	<b>% change</b>
<b>Day Use</b>	17,067,285	17,532,494	17,132,601	16,813,262	18,000,000	7.06%
<b>Camping</b>	2,365,520	2,519,665	2,358,896	2,315,411	2,400,000	3.65%
<b>Marine</b>	179,757	206,662	187,488	207,454	150,000	-27.69%
<b>Total Attendance</b>	<b>19,612,562</b>	<b>20,258,821</b>	<b>19,678,985</b>	<b>19,128,673</b>	<b>20,550,000</b>	<b>6.28%</b>

\*Estimates only. Final attendance and revenue data will be available in the fall of 2013.

### **Key message #3**

- BC Parks recreation user fee revenue is projected to be approximately \$16 million, an increase of 4.2% compared to 2011.

<b>Recreation user fee revenue</b>	<b>2011/12</b>	<b>2012/13 (estimates)</b>	<b>% change</b>
<b>Day Use</b>	\$104,422	\$96,000	-8.07%
<b>Camping</b>	\$14,967,786	\$15,600,000	4.22%
<b>Marine</b>	\$272,114	\$293,000	7.68%
<b>Total Revenue</b>	<b>\$15,344,322</b>	<b>\$15,989,000</b>	<b>4.20%</b>

\*Estimates only. Final attendance and revenue data will be available in the fall of 2013.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The new attendance and revenue system has aimed to improve reporting practices for attendance and revenue data associated with Recreation Services.
- BC Parks will continue to work with partners to improve recreational opportunities across the province.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Discover Camping Program (DC)</b>
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### KEY MESSAGES:

- **Key message #1 – The BC Parks Discover Camping reservation service features reservations for 95 BC Parks, in 106 frontcountry campgrounds.**
- **Key message #2 – The BC Parks Discover Camping registration system allows for permit registrations in 26 backcountry parks.**
- **Key message #3 – The Discover Camping Program is improved each year, using technological enhancements and stakeholder feedback and is not subsidized by taxpayers.**

### CURRENT STATUS:

#### ***Key message #1:***

- In 2012, for the first time, over 100,000 reservations were made.
- The majority of reservations are made online, while less than 10% are made through the call centre.
- A total of 106,926 reservations were made in 2012, a 10.4% increase from 2011 which had 96,878.
- The DC Program handled over half (\$8.1 M) of the User Fees collected by BC Parks (\$15.3 M) in 2012.
- There are over 5,000 individual sites available for reservations including: frontcountry campsites, groupsites, yurts and cabins.
- Transaction (reservation) charges have remained at 1996 pricing.
- 75% of the reservations made in 2012 originated in British Columbia.

#### ***Key message #2:***

- The DC Backcountry Registration System was introduced in 2011.
- Since 2011, over 3,100 (3,139) permits have been sold online through the DC Backcountry registration system, generating over \$150,000 in revenue (\$150,775).

#### ***Key message #3:***

- 5 new parks were added to DC in 2013 (Bowron Lake (frontcountry), Martha Creek, Kleanza Creek, Chilliwack Lake and Mable Lake)
- Up to 3 reservations in one transaction (shopping cart model).
- The DC program is based on a user-pay model and is not subsidized by taxpayers.

- Additional revenue from DC is reinvested into BC Parks through the Park Enhancement Fund.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The DC Program is overseen by BC Parks through a third party contractor (Camis Inc.) from Guelph Ontario.
- Camis Inc. is considered a park reservation leader and oversees reservation systems for many park systems including: Ontario Parks, Saskatchewan Parks Washington State Parks, Parks Canada, and Michigan Parks.
- The objectives of the reservation service are to:
  - provide consumers with equitable access to specific high demand products and peace of mind ;
  - ensure fairness and consistency in the opportunity to make reservations throughout the province; and,
  - improve BC Parks and Park Facility Operations business efficiencies, as well as customer service and inventory management.
- The objectives of the backcountry registration system are to:
  - provide an alternate way to pay for your backcountry permit online, prior to arriving in the park and does not guarantee a site (is not a reservation); and,
  - improve BC Parks and Park Facility Operations business efficiencies, as well as customer service.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC Parks Website and Marketing Program</b></p>
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### KEY MESSAGES:

- **Key message #1 – BC Parks website is one of the busiest BC Government websites and in 2012/13 had over 2.9 million unique visits.**
- **Key message #2 – BC Parks visitors have come to rely on the BC Parks website to provide a broad array of park information such as health and safety updates, recreation opportunities and other detailed park information.**
- **Key message #3 – BC Parks markets the opportunities available to park visitors through its own marketing program as well as through partnership arrangements.**
- **Key message #4 – BC Parks website unique visits increased 12% from 2011/12 to 2012/13.**

### CURRENT STATUS:

#### ***Key message #1:***

- The BC Parks website had over 2.9 million unique visits in 2012/13. A unique visit represents one person with a unique web address visiting the website.
- BC Parks also has a social media presence with its Facebook page. As of June 2013 there are over 4,300 people who like the page.

#### ***Key message #2:***

- The BC Parks website is the key communication tool for BC Parks and an information focal point for park users.
- Specific information on the website:
  - Health and safety information including: campfire bans, park closures, flood alerts, wildlife issues, avalanche alerts and park related health alerts
  - Park details including: park fees, location map, activities/facilities available
  - Information about using the Discover Camping reservation service.
  - Opportunities to review and comment on draft park management plans
  - BC Parks conservation information
  - Volunteer opportunities and initiatives
  - Opportunities to support BC Parks through partnership and sponsorship
  - Events calendar and links to public initiatives and promotional programs.

#### ***Key message #3:***

- Key marketing partnerships include: Camping and RVing Coalition, Power and Sail Cruise Sector, Destination BC and Society of Park Facility Operators.
- BC Parks marketing programs/products include: BC Parks Passport Program, regional map brochures, Jerry the Moose Mascot, promotional items such as moose antlers, stickers, temporary tattoos and collectable pins and BC Parks branded merchandise.
- Promotional events include: Parks Day (July 20, 2013), Learn to Fish Program (July and August) and special events in Mount Robson Provincial Park to celebrate the park's 100<sup>th</sup> birthday!!

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The BC Parks website is the main source of information for BC Parks visitors and is used extensively to market BC Parks and promote specific BC Parks initiatives.
- The “BC Parks” brand is not only important from an identification point of view but is also used to help leverage resources and sponsorship for the benefit of our provincial parks system.
- BC Parks website unique visits increased from 2.6 million in 2011/12 to 2.9 million in 2012/13.

**Contact:** Bob Austad, Executive Director, Visitor Services Branch (250) 356-9241



<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Parks Recreation Integrated Service Model (PRISM)</b></p>
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### KEY MESSAGES:

- **Key message #1** – BC Parks has been providing front country recreation services with private sector partners, since the mid 1980's.
- **Key message #2** – In 2013, a majority (75%) of existing contracts are up for renewal. A request for proposals (RFP) was initiated in March 2013.
- **Key message #3** – To respond effectively to stakeholder feedback, ensure we reduce administrative burden and provide good value for British Columbians, a final RFP/contract will be in the spring of 2014. Contract extensions will ensure there is no disruption of service.

### CURRENT STATUS:

#### ***Key message #1:***

- BC Parks has been providing front country recreation services with private sector partners, since the mid 1980's. Initially these services were provided by Park Facility Operators (PFO) under the PFO "Non-Bundle Model" before BC Parks moved to the PFO "Bundle Model" in 2003. This new model was implemented to increase the efficiency and effectiveness of recreation services delivery in front country parks.

#### ***Key message #2:***

- In 2013, the majority (75%) of existing contracts will expire. This provides BC Parks with an excellent opportunity to further improve the model for recreation service delivery in front country parks.
- A RFP was initiated in March 2013 (Draft) and final RFP was scheduled to be released in June 2013. Included in the process are individual and grouped parks for 42 separate opportunities. BC Parks will contract with successful proponents to deliver Recreation Services for each opportunity. Such services include collecting fees, maintaining facilities, ensuring visitor safety and security, and promoting use of the park.
- The final RFP will be released in Spring 2014. One year extensions of current contracts will be negotiated to ensure there is no disruption of service.

#### ***Key message #3:***

- The public consultation component of the procurement process included the release of a draft RFP and contract.
- BC Parks also held 10 open houses throughout the province to engage existing and

new proponents on the business opportunity and received feedback.

- Stakeholder feedback was critical of some components of the proposed contract.
- Agreement components to be revisited include:
  - Contract length of term
  - Compensation Model
  - Additional Services (extra services provided by the PFO)

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- BC Parks has been providing front country recreation services with private sector partners, since the mid 1980's. Initially these services were provided by Park Facility Operators (PFO) under the PFO "Non-Bundle Model" before BC Parks moved to the PFO "Bundle Model" in 2003. This new model was implemented to increase the efficiency and effectiveness of recreation services delivery in front country parks.
- The Bundle Model incorporated several changes to the delivery of recreation services, including longer term contracts (10 years) with re-negotiation periods every 3 years; a shift from prescriptive contract language to results-based language; and lastly, the grouping of most individual park operation contracts into bundles (27 total). Out of 255 parks, 46 have remained under the Non-Bundle Model due to geographic constraints limiting the efficiency gained by including them as part of a larger bundle.
- The objective of the new agreements is to implement a recreation service delivery model that:
  - encourages and creates an entrepreneurial climate;
  - improves efficiencies in the delivery of recreation services;
  - reduces administrative burden;
  - provides sustainable economic opportunities;
  - provides sustainable delivery of recreational services;
  - ensures effective monitoring of service agreements ;
  - maintains BC Parks' service standard and level of delivery;
  - is quantifiable for successful reporting;
  - protects the conservation and recreation values of Provincial Parks;
  - encourages sustainable and green environmental practices;
  - encourages the development of new recreation services to increase visitor satisfaction; and
  - cost effective.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks Interpretive Program</b>
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### KEY MESSAGES:

- **Key message #1 – BC Parks will be exploring partnership opportunities in 2013 and beyond to support interpretive programming and will continue to engage youth through programs such as the BC Parks Passport, the Get Outside BC youth initiative and the Learn to Fish program.**
- **Key message #2 – In 2013 some Park Facility Operators will continue to offer interpretation in BC Parks during the 2013 operating season.**

### CURRENT STATUS:

#### ***Key message #1:***

- BC Parks engages youth and families in 2013 with programs such as the BC Parks Passport, the Get Outside BC youth initiative and the Learn to Fish program
- BC Parks will also be seeking additional and new sponsorship opportunities.

#### ***Key message #2:***

- A limited number of Park Facility Operators have offered interpretive programs every year, and will continue to do so in 2013.

### KEY FACTS/BACKGROUNDER/OTHER AGENCIES:

- In 2001, the BC Parks Interpretive Program budget was over \$1.2M (including staff costs) and took place in 42 BC Parks.
- In 2002, the funding for this program was eliminated as part of the Core Review process.
- Starting in 2006, an interpretative program commenced that was administered by BC Nature and the BC Conservation Corps in partnership with BC Parks, Park Facility Operators and Service Canada.
- In 2008 this program operated in 24 parks at a cost of approximately \$500,000.
- In the fall of 2009 BC Conservation Corps funding was reduced and funding for interpretation was cancelled.
- In 2010 BC Nature ran a limited interpretation program in 15 parks at a cost of approximately \$275,000. BC Nature advised BC Parks that would not continue to operate an interpretative program without an ongoing funding commitment from the government.
- In September 2010, at the UBCM Convention the government committed to restoring and

enhancing interpretative programs in BC Parks. This commitment was reconfirmed in the Throne Speech in February 2011.

- In the Spring of 2011 the government indicated it did not have funding available to support an interpretation program in BC Parks. There has been no interpretation program in BC Parks since 2010.

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Office of the Auditor General Report:  Conservation of Ecological Integrity  in B.C. Parks and Protected Areas</b>
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### KEY MESSAGES:

- **Key message #1 – The Ministry is implementing the Ministry’s responses to the seven recommendations of the Office of the Auditor General’s (OAG) report *Conservation of Ecological Integrity in B.C. Parks and Protected Areas*.**
- **Key message #2 – The Ministry’s response to the OAG report has been achieved. Implementation of projects is ongoing.**
- **Key message #3 - The OAG followed up and reported out publically on the Ministry’s progress in October 2011 and in October 2012. In April 2013, the OAG released an examination of the Ministry’s self assessments. The OAG found that there was “supporting evidence for the ministries” description of their actions.**

### CURRENT STATUS:

#### ***Key message #1:***

- The Ministry is implementing its commitments (outlined in p. 8-12 of the report) related to the seven recommendations from the OAG.
- Implementation of the commitments demonstrates the commitment by BC Parks to conservation management.

#### ***Key message #2:***

- The Ministry provided a measured response to the OAG report that was largely achieved in the timeframe requested and within allocated budget.

#### ***Key message #3:***

- The OAG presented its report and recommendations and the Ministry presented its response to the Parliamentary Select Standing Committee on Public Accounts in December 2010. The Committee had no concerns with the approach the Ministry was taking.
- In October 2011 and October 2012, the OAG published the Ministry’s self assessments on progress in their follow-up reports on implementation of recommendations from recent OAG reports.
- During the third and fourth quarter of 2012/13, the OAG conducted an evaluation of the Ministry’s self assessments. This was the first time the OAG assessed the implementation of their recommendations.
- The evaluation was positive regarding the Ministry addressing its commitments. However,

the OAG also identified that the Ministry did not fully agree with the OAG original recommendations. The Ministry continued to state that some of the OAG recommendations were beyond the mandate of the Ministry or far beyond fiscal abilities to implement.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Ministry made commitments to each of the seven recommendations (see attachment). However, some recommendations by the OAG were beyond government's ability to undertake. Two examples include:
  - Completing representation gaps in the system is dependent on changes in provincial land use planning objectives. This is beyond the Ministry mandate and Government is not prepared to re-open land use plans.
  - Fulfilling information gaps of all conservation values, processes and risks within the system is dependent on unrealistic resourcing. Government must weigh these against competing priorities such as health care and education.
- Instead, the Province committed to increasing representation as a more significant criterion in land acquisition and to use alternate approaches to monitoring and inventory activities to increase the knowledge of protected area values.
- Implementing the OAG recommendations comprehensively was estimated to cost as much as \$355 million in the next decade. The Ministry committed to a set of actions that will be delivered within the allocated budget.

**Attachment:** Summary of deliverables as a result of performance audit

**Contact:** Brian Bawtinheimer, Executive Director, Park Planning and Management Branch  
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**Attachment: Conservation of Ecological Integrity  
in BC's Parks and Protected Areas**

<b><i>Recommendation</i></b>	<b><i>Response</i></b>	<b><i>Outcome</i></b>
<b><u>Recommendation 1:</u></b> The ministry update its BC Parks Program Plan so that it includes clarification of ecological integrity (EI) and performance targets that adequately address the ministry's goal of proactive stewardship of ecological integrity.	<ul style="list-style-type: none"> <li>• Definition of EI and context for management to be added to the Program Plan.</li> <li>• Program Plan clarifies where EI drives management decisions.</li> <li>• Review performance measures and refine to a final state.</li> </ul>	EI has been defined along with performance indicators. They were communicated by the ADM to all staff as the Program Plan has not been updated.
<b><u>Recommendation 2:</u></b> The ministry to complete the strategic direction and procedural guidelines for its Conservation Management Program (policy framework) and ensure that the Conservation Program policies are consistently upheld.	<ul style="list-style-type: none"> <li>• Policy to be updated by the end of 2011/12.</li> <li>• Develop strategic direction.</li> <li>• Develop/update procedural guidelines.</li> </ul>	Conservation policy has been revised. Strategic direction in form of a Conservation Action Plan drafted. Procedural guidelines ongoing.
<b><u>Recommendation 3:</u></b> Government to develop a plan to address current gaps in the parks and protected areas system*.	<ul style="list-style-type: none"> <li>• Land Acquisition: Ensure criteria for land acquisitions related to ecological representation are maintained or enhanced.</li> </ul>	Revised criteria for prioritizing land acquisition projects.
<b><u>Recommendation 4:</u></b> The ministry to obtain the information it needs in order to determine management actions for the conservation of ecological integrity and ensure that its policy of developing a five-year conservation management activities plan (research, inventory and monitoring) is met**.	<ul style="list-style-type: none"> <li>• Staff training for use of the Conservation Risk Assessment (CRA) tool.</li> <li>• Update CRA and related policy.</li> <li>• Citizen Science Monitoring (approaches for staff, stakeholders and volunteers).</li> </ul>	CRA training developed and implemented. CRA updated – ongoing. Citizen Science Monitoring (Long Term Ecological Monitoring program) underway. Protocols tested, 1/3 of sites identified and/or monitored in 2012.

<b><i>Recommendation</i></b>	<b><i>Response</i></b>	<b><i>Timeline</i></b>
<b><u>Recommendation 5:</u> The ministry review and update its Master Plan Policy to clarify what type of management plan is required for each park and protected area, how ecological integrity in each area will be conserved and when each plan should be reviewed and updated***.</b>	<ul style="list-style-type: none"> <li>Management Planning policy updates, including shift from prescriptive to outcome based plans.</li> </ul>	Management planning policy revised.
<b><u>Recommendation 6:</u> The ministry conduct annual planning for each park and protected area to determine what actions are needed to address conservation objectives, threats and stressors, determine priorities from this plan, and monitor and evaluate action items against conservation objectives.</b>	<ul style="list-style-type: none"> <li>Revisions to Annual Management Planning process and consistent implementation across the Province.</li> </ul>	Process refined and implemented.
<b><u>Recommendation 7:</u> The ministry report periodically to the Legislative Assembly and public on how it is conserving ecological integrity in the province's parks and protected areas system.</b>	<ul style="list-style-type: none"> <li>Comprehensive reporting will be done across program areas – includes the annual report and comprehensive information on measurable program outcomes.</li> </ul>	Two annual reports complete. Published in October 2011 and December 2012.

The following footnotes are cost estimates made by the Ministry in response to implementing the Auditor's recommendations.

\* RE #3: Continued acquisitions of privately-owned land for inclusion in the protected area network could be \$200M.

\*\* RE #4: Cost estimates for creating a baseline inventory for the existing protected areas system at 1:20,000 scale for terrestrial and aquatic ecosystems is estimated at \$103M. Ongoing systematic monitoring is estimated at \$3.5M per year.

\*\*\* RE #5: Comprehensive plan development and review for 1000 protected areas is estimated to cost \$1.6M per year based on 100 plans delivered per year for 10 years before repeating the cycle.

The total cost estimate is \$355M over the next ten years.



<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Southern Strait of Georgia National Marine Conservation Area Reserve Feasibility Assessment</b></p>
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### KEY MESSAGES:

- **Key message #1** – Since 2003, the Province has engaged collaboratively with Parks Canada in assessing the feasibility of establishing a National Marine Conservation Area Reserve in the Southern Strait of Georgia.
- **Key message #2** – A draft boundary concept for consultation was announced by the two governments in October, 2011. B.C. and Canada have been working together to complete the feasibility study in the near future, focussing efforts on consultations with the First Nations affected by the proposal, local governments and key stakeholders.
- **Key Message #3** – Upon completion of the feasibility study, a decision will be made whether B.C. agrees that a National Marine Conservation Area Reserve is feasible and desirable.

### CURRENT STATUS:

#### **Key message #1:**

- The feasibility study for the Southern Strait of Georgia National Marine Conservation Area Reserve (NMCAR) proposal has included four rounds of public consultations between 2004 and 2008.
- A number of technical studies for the feasibility study have been completed, including a conservation analysis, a socio-economic baseline study, a mineral potential analysis and a hydrocarbon resource study.

#### **Key message #2:**

- There are 19 First Nations potentially affected by the proposal. There has been ongoing dialogue between Parks Canada and these nations. Parks Canada is now reviewing progress to date on First Nation consultation and considering future consultation efforts.
- Since the boundary announcement in 2011, Parks Canada and BC government staff have met with all the affected local governments. Feedback from local governments has been largely supportive of the NMCAR proposal.
- Consultation with key stakeholders, particularly marine industries and tenure holders, is ongoing.

- Costs associated with the feasibility study are mainly borne by Canada. The Province contributes staff time and expertise.
- The boundary proposed for consultation includes approximately 1,400 sq. km. in the Southern Strait of Georgia stretching from Cordova Bay in Saanich to the south, and Gabriola Passage and southern Gabriola Island to the north, including Saanich Inlet.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

There are 3 steps to creating a National Marine Conservation Area Reserve:

- 1) **Feasibility Study** – Examines issues such as local support, First Nations perspectives and land use conflicts.
- 2) **Establishment Agreement** – Explains the details for the transfer of provincial lands to Canada, sharing of costs between the parties, regional economic benefits and compensation for affected resource tenure holders as required.

s.12

- National Marine Conservation Area Reserves are areas managed for sustainable use by Parks Canada in cooperation with the Department of Fisheries and Oceans and Transport Canada.
- The Canada *National Marine Conservation Areas Act* requires that each National Marine Conservation Area Reserve contain at least one area zoned for multiple uses and one zoned for full protection.
- The only activities that are entirely prohibited in a National Marine Conservation Area Reserve are ocean dumping and non-renewable resource exploration and development.
- Other activities, such as commercial shipping and marine transportation, commercial fishing, utility corridors, tourism and recreation can continue in a NMCAR, as long as they do not impair the structure and function of the ecosystem.
- If B.C. agrees to the establishment of the National Marine Conservation Area Reserve, the seabed in the Southern Strait of Georgia that is currently owned by B.C. would be transferred to the ownership of Canada. On December 3, 2010, the Province of B.C. approved, subject to the positive outcome of the feasibility study, the transfer of provincially-owned seabed to Canada to enable the establishment of a National Marine Conservation Area Reserve.

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<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>South Okanagan – Lower Similkameen National Park Reserve Feasibility Assessment</b></p>
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### KEY MESSAGES:

- **Key message #1 – Between 2003 and 2011, the Province engaged collaboratively with Parks Canada to assess the feasibility of establishing a national park reserve in the South Okanagan–Lower Similkameen.**
- **Key message #2 – B.C. is not considering a national park reserve at this time, as we recognize that there is a large contingent of people opposed to it.**
- **Key message #3 – 9,300 hectares of the area proposed for the national park is already protected in the South Okanagan Grasslands Protected Area. Overall, just over 20% of the land base in the South Okanagan is set aside under some kind of provincial protection.**

### CURRENT STATUS:

#### ***Key message #1:***

- In 2003, B.C. and Parks Canada signed a Memorandum of Understanding agreeing to assess the feasibility of a national park reserve in the South Okanagan–Lower Similkameen to represent the Dry Interior Plateau natural region.
- The feasibility assessment included public and stakeholder consultations, a socio-economic impact assessment, and the analysis of potential land use conflicts, in order to determine whether a national park reserve is feasible and desirable.
- Parks Canada bore most of the costs of the feasibility assessment. B.C. contributed staff time and expertise.

#### ***Key message #2:***

- The feasibility study, with the exception of First Nations perspectives, was completed in 2011. The feasibility study determined a national park reserve was feasible and there was support for the proposal. However, it recognized there was also continued opposition.
- In December 2011, the Government of B.C. publically announced that it was not prepared to consider a national park reserve in the South Okanagan-Lower Similkameen at this time.
- On February 6, 2012, the Okanagan Nation Alliance issued a press release urging the governments of Canada and British Columbia to “revisit their premature and hasty decision to abandon the South Okanagan Park proposal until full consultations have taken place with the First Nations”.
- In February 2013, the Okanagan Nation Alliance released their feasibility study respecting

a potential national park reserve, which recommended that the Okanagan Nation Alliance support a continued process towards a national park reserve and that they seek the provincial government's re-engagement in further discussions with the federal government on the proposed national park reserve.

**Key message #3:**

- The proposed national park reserve boundary encompassed approximately 285 km<sup>2</sup> near the towns of Oliver, Osoyoos and Keremeos, including the existing provincial South Okanagan Grasslands Protected Area and existing federal protected lands at Vaseux Lake.
- In terms of rarity, diversity and species richness, the area contained within the national park reserve proposal is one of the province's most ecologically valuable, encompassing 41 federally-listed species-at-risk.
- Provincial conservation designations, that together total approximately 20% of the land base in the South Okanagan, include Class A parks, protected areas, wildlife management areas, Section 16 *Land Act* Reserves for habitat conservation and private land acquisitions and donations.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Interior Dry Plateau natural region is not currently represented in the national parks system.
- There are 3 steps to creating a national park reserve:
  - 4) **Feasibility Study** – Examines issues such as local support, First Nations perspectives and land use conflicts.
  - 5) **Establishment Agreement** – Explains the details for the transfer of provincial lands to Canada, sharing of costs between the parties, regional economic benefits and compensation for affected resource tenure holders as required.

s.12

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ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 19, 2013</b>	<b>ISSUE TITLE:</b>  <b>Land Acquisition Projects 2013/14</b>
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### KEY MESSAGES

- **Key message #1 – In 2012/13, s.17 was acquired by the Ministry for protected area purposes.**
- **Key message #2 - The Ministry does not have the funding available in the 2013/14 budget to pursue all land acquisition initiatives it has interest in.**
- **Key message #3 – The priority for 2013/14 will be on completing projects where there are legal obligations in place or where donation lands with significant values are being offered to the Ministry.**

### CURRENT STATUS

#### ***Key message #1:***

- The following lands were acquired for protected area purposes in 2012/13:

<b>Acquired</b>	<b>Value \$</b>	<b>Ministry contribution \$</b>	<b>Area ha</b>
Larson/Waterman (Tweedsmuir Park)	\$17,000	\$8,000	242 ha.

s.17

#### ***Key message #2:***

- There is no set annual budget for land acquisition. However, there are a number of pre-existing legal obligations related to ongoing files that require a small amount of funding which is requested from the BC Parks land improvement capital budget.
- The Ministry acquires private lands for protected areas to fill key gaps in the protected area system:
  - To protect important conservation values;
  - To provide or enhance recreation opportunities;
  - To resolve operational issues and enhance conservation and recreation opportunities within or adjacent to established protected areas.
- Not all lands that are identified as opportunities can be acquired based on capacity and budget. The Ministry ranks and seeks out only the priority lands where there is a willing vendor and when resources are available.

- The Ministry seeks opportunities to partner with others and develops creative solutions to finance land acquisition projects. The Ministry has been able to leverage contributions in a variety of ways including: land exchanges, partnering with land trusts, providing tax receipts for donations of land, transferring development rights, and financing using forest carbon offsets. These tools allow the Ministry to purchase more lands than by using cash only. Valuable community partnerships are also developed by partnering with non-government organizations.
- The Ministry's response in the Report of the Office of the Auditor General committed that "the Ministry will maintain the land acquisition program..." The Ministry will continue to consider key environmentally sensitive lands through the BC Parks land acquisition program as funding permits.

***Key message #3:***

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s.17, s.13

s.17, s.13

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Lands are selected based on priorities for conservation, recreation or operational purposes.
- All land acquisition projects require support funding to conclude the acquisitions. Costs include but are not limited to land surveys, appraisals and First Nations accommodation on land exchanges.

**Attachments:** *Land Acquisition Projects 2013/14*

**Contact:** Brian Bawtinheimer, Parks Planning & Management (250) 387-4355

Page 49 redacted for the following reason:

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<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Quadra Island Land Acquisition Project</b></p>
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### KEY MESSAGES:

- **Key message #1** – BC Parks has been working to acquire three parcels of private property on Quadra Island that would connect Small Inlet and Octopus Islands Marine Parks.
- **Key message #2** – While BC Parks has garnered partnerships and a possible land exchange to complete this project, a significant funding gap remains.
- **Key message #3** – Not all lands that are identified as opportunities can be acquired based on capacity and budget.

### CURRENT STATUS:

#### ***Key message #1:***

- Approximately 405 hectares of privately owned land are located between Small Inlet and Octopus Islands marine parks on Quadra Island (see attachment). The three parcels of land are owned by Washington State Forest Company, Merrill and Ring.
- BC Parks has had a long standing interest in acquiring these lands which increase connection between the two parks and protect ecological, cultural and recreation features. These lands were identified in the 1995 Vancouver Island Land Use Plan for protection.
- Based on government direction in 2011, staff re-initiated work on the file which resulted in a conditional purchase and sale agreement with Merrill and Ring. The agreement expired on March 31, 2013 as the land owners were not willing to extend the agreement. Staff had worked to meet the conditions of the agreement; however, the condition to secure funding was unable to be met.

#### ***Key message #2:***

- The lands are valued at \$6.15M. A significant gap of about \$2.4M (which includes property transfer tax) remains which the Ministry has been unable to secure to date.
- Funding secured to date includes:
  - \$822,000 from the government's Pacific Marine Heritage Legacy Fund (to secure lands in the Gulf Islands north of Active Pass);
  - \$758,000 from a bequest for the establishment of marine parks;
  - \$200,000 raised by the Quadra Island Conservancy (most through individual donations under \$1,000).
  - \$100,000 from the Marine Parks Forever Society;
  - \$100,000 from the Strathcona Regional District;
  - A land exchange for \$2,020,000.

for a total of 4,000,000, including \$400,000 in third party contributions.

- On April 30, 2013, the owner put the lands up for public sale. Staff have been told that Merrill and Ring would honour the conditions of the expired agreement if government could make a firm offer before August 1, 2013, when bids would be opened.

***Key message #3:***

- There is strong interest from the local community. The Quadra Island Conservancy raised over \$200,000 in just five months (with most individual donations being \$1000 and under).
- The local MLA, Claire Trevena, has raised this project numerous times in the legislature and through meetings with previous ministers of the environment.
- The Sierra Club of BC recently began a public campaign to request government contribute funding to the partnership to complete the purchase transaction.
- Without the remaining funds, the lands will be sold privately and a long standing opportunity for recreation and conservation will be lost.
- While staff have made every effort to source the remaining funds required to complete the project, government is currently not in a financial position to complete this acquisition.
- Public outcry from the local community who have raised a portion of the funds is anticipated.

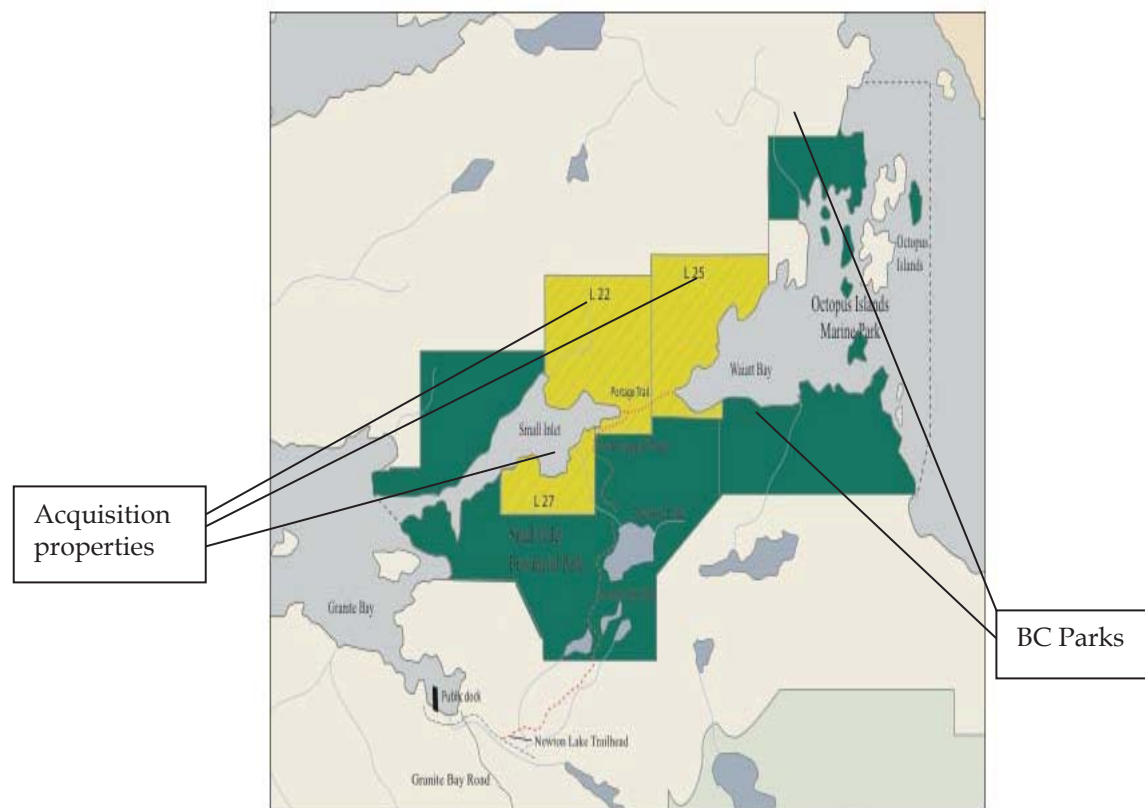
**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Ministry of Forests, Lands and Natural Resource Operations is assisting in this project through a proposed land exchange. The exchange would see \$2,020,000 of Crown lands on neighboring East Thurlow Island exchanged for the equitable portion of the Merrill and Ring lands.

**Attachment:** Map of the area.

**Contact:** Brian Bawtinheimer, Executive Director, Park Planning and Management Branch (250) 387-4355

Attachment: Location of private lands for acquisition



ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks Intergovernmental Initiatives</b>
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### KEY MESSAGES:

- **Key message #1 – BC Parks is involved with other provincial and territorial governments as well as the federal government on matters respecting protected areas.**
- **Key message #2 – Key areas include working with Canada on proposed federal protected area reserves, including in the marine environment; working with other protected area jurisdictions on park management practices; and participating in the national heritage rivers protection program.**
- **Key message #3 – Further, BC Parks works with international jurisdictions with respect to park management practices.**

### CURRENT STATUS:

#### ***Key message #2:***

- In October 2003, Canada and BC signed a Memorandum of Understanding (MOU) respecting the establishment of national park reserves and national marine conservation area reserves in BC. Commitments in the MOU include:
  - Explore the feasibility of establishing a new national park reserve in the South Okanagan to represent the Parks Canada's Dry Interior Plateau natural region.
  - Explore the feasibility of establishing a new national marine conservation area reserve for the waters of the Southern Strait of Georgia surrounding the Gulf Islands National Park Reserve.
  - Canada preparing an interim management plan in order to help determine the conditions under which the Gwaii Haanas marine area in Haida Gwaii that was agreed to in 1988 could be established as a national marine conservation area reserve.

s.12

- In 2010 and 2011, BC Parks assisted in facilitating a feasibility study for a new national park reserve on Bowen Island. While not part of the original MOU with Canada, the province agreed to assist the Municipality of Bowen Island and Parks

Canada in exploring opportunities for a near-urban national park reserve. The proposal was fully within the municipal boundaries and was subject to a municipal referendum. The vote under the referendum was 45% for and 55% opposed to the concept and project subsequently ceased.

- B.C. is also involved with Environment Canada and Fisheries and Oceans Canada on the establishment of marine protected areas under Canada's *Oceans Act* and *Canada Wildlife Act*. These areas include the Scott Islands off the northern tip of Vancouver Island and an area between Haida Gwaii and the mainland to protect glass sponge reefs.
- BC Parks is directly involved in the Canadian Parks Council which is a coalition of federal, provincial and territorial park agencies working together to better park management across Canada. The Council has developed a number of initiatives such as best practices for working with aboriginal people, managing for climate change, and determining the economic value of parks. Currently, in preparation for a fall meeting of Ministers responsible for parks, the Canadian Parks Council is developing a national approach to better connect Canadians to nature through parks to help improve human health and well being.
- BC Parks actively participates in the Canadian Heritage Rivers System and represents the province on the Canadian Heritage Rivers Board. The Canadian Heritage Rivers System is Canada's national river conservation program. It promotes, protects and enhances Canada's river heritage, and ensures that Canada's leading rivers are sustainably managed.
- BC Parks participates in and contributes to the activities of the Canadian Council on Ecological Areas (CCEA), a non-profit organization which has representatives from all federal/provincial/territorial protected area agencies across Canada. CCEA, with the assistance of Natural Resources Canada and Environment Canada, maintains the Conservation Areas Reporting and Tracking System (CARTS), which is the authoritative source for protected area data for national and international reporting purposes.

**Key message #3:**

- BC Parks also engages with a variety of regional, national, and international park agencies and organizations. These include:
  - Regional districts who have park management programs
  - The National Association of State Park Directors
  - Previous information exchange and staff exchanges with park organizations in Australia
  - Healthy Parks, Healthy People initiatives and partners in Australia, the U.S. and Africa.

**Contact:** Brian Bawtinheimer, Executive Director, Park Planning and Management Branch (250) 387-4355

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC Parks Annual Report and Annual Statistics Report</b></p>
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### KEY MESSAGES:

- **Key message #1** – In 2011, BC Parks modernized public reporting through the development of an annual report and an annual statistics report.
- **Key message #2** – The BC Parks Annual Report contains information on the full breadth of BC Parks' programs and activities.
- **Key message #3** – The BC Parks Statistics Report contains detailed attendance and revenue tables and graphs, satisfaction survey information and the financial tables.

### CURRENT STATUS:

#### ***Key message #1:***

- BC Parks annually releases statistical reports on park revenue, attendance, and satisfaction ratings from park users. This report is a key document particularly as it relates to performance measures of attendance and satisfaction.
- In 2009/10 the report was expanded to include information on land designations, management planning and the stewardship of natural and cultural heritage. In 2010, the Office of the Auditor General recommended further expanding annual reporting to be more fulsome on the management of the protected areas system.
- The first revised reporting model that included both the Annual Report and the Statistics Report was released in September 2011.

#### ***Key message #2:***

- The **BC Parks Annual Report** contains information on the full breadth of BC Parks activities. It informs readers through text, indicators, maps and photos. This document tells BC Parks' success stories, recognizes the work done by staff and our many partners, showcases key projects and facility investments, and discusses challenges and lessons learned.
- The current reports cover the 2011/12 fiscal year and were released in the fall of 2012. The 2012/13 fiscal year reports will be released in the fall of 2013.

#### ***Key message #3:***

- The BC Parks Statistics Report contains detailed park attendance and revenue tables and graphs, satisfaction survey information and the financial tables.

**Contact:** Lori Halls, Assistant Deputy Minister, BC Parks and Conservation Officer Service Division, (250) 387-9997

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Strathcona Park Horse Use Permit</b></p>
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### KEY MESSAGES:

- **Key message #1 - Ministry announced on August 19, 2009 that the Strathcona Park management plan would be amended to clarify the appropriateness of horse use in the park outside previously identified areas.**
- **Key message #2 – This management plan amendment is consistent with the overall objective for horse use in the 1993 Master Plan and the 2001 Master Plan Amendment – which is to provide opportunities for horse use which have minimal impact on the environment or conflict with other users.**
- **Key message #3 – In 2008 the Ministry undertook a focused public process to clarify the appropriateness of horse use in the park outside previously identified areas. The process included public and stakeholder involvement and an impact assessment. BC Parks have determined that horse use will only be considered for a very small area of the park (less than 0.004% of the park) and only on existing old road beds and their associated corridors.**
- **Key message #4 – Following the amendment, the Friends of Strathcona Park filed a complaint with the BC Office of the Ombudsperson alleging that the procedure used by the Ministry to make the amendment was unfair and designed to manufacture a reason to grant the horse use permit. In February 2011, the Ombudsperson ruled that the group's allegations were not substantiated.**
- **Key message #5 – Taking into consideration the 2009 Amended Master Plan and the completed Impact Assessment, a Park Use Permit for horse use in the Bedwell Valley was issued to Clayoquot Wilderness Resort in January 2012. The Park Use Permit includes conditions regarding the upgrade and maintenance of the existing trail subject to BC Parks standards and further approvals.**
- **Key message #6 – In May, 2012, Friends of Strathcona Park filed a petition in the Supreme Court of BC in regards to the Park Use Permit. The court case occurred in February, 2013. The judge made a decision June 24<sup>th</sup>, 2013 indicating the petition is to be dismissed and the Minister's decision is to remain.**



## CURRENT STATUS:

### ***Key Messages #2:***

- The use of the terms Master Plan and management plan are interchangeable – more recent direction from government is that management plan will be used for new plans and for amendments to older plans.
- The use of horses was a contentious issue in the original Strathcona Park Master Plan process. However, the original and amended Master Plans reference two specific areas within Strathcona Park as being acceptable for horse use and indicated that proposed uses in other areas would be reviewed.
- In 2008, staff determined that the management plan was ambiguous regarding the potential for horse use in the Bedwell Valley and other areas of the park. The Minister directed a management plan amendment process be undertaken to clarify plan direction.
- The Strathcona Park Public Advisory Committee (SPPAC) advised the Ministry a park use permit for horse use should not be considered without an amendment to the Strathcona Park Master Plan. Members of SPPAC and others involved with drafting the original plan generally perceive its intent was to limit horse use to two specific areas of the park.
- Opinions from public meetings and consultation with stakeholder groups were sharply divided on whether horse use is appropriate. All responses and input received as part of the consultation process were taken into account.
- The decision to amend the plan to allow for the consideration of using horses in a small portion of the park was made following consultations with: First Nations, environmental groups, local governments, stakeholder organizations, and the general public.
- Friends of Strathcona Park (FOSP) are opposed to the park use permit and are concerned about potential impacts as well as possible future expansion of Clayoquot Wilderness Resort further into the park. FOSP have informed staff that they have retained legal services and have sought a judicial review of the permit.

### ***Key Message #5:***

- Clayoquot Wilderness Resort (CWR), a resort at the mouth of the Bedwell drainage outside the park, submitted a park use permit application in July 2006 for guided horse-back trips in the Bedwell Valley. A park use permit was issued to CWR in January 2012 for that use.
- CWR will need to undertake extensive upgrading to the existing trail, including the replacement of stream crossing structures, in order to take horses on the trail. The engineering, upgrading and annual maintenance form part of the park use permit conditions and will be the responsibility of CWR.
- Park staff worked with CWR on developing specific criteria that are included in the park use permit.



- The permit is supported by the Ahousaht First Nation, Strathcona Park Lodge (located outside the park on Upper Campbell Lake), and the Wilderness Tourism Association.
- The work to upgrade the existing Bedwell trail is scheduled to begin in the summer of 2013 with guided horse trips expected in 2014.

***Key Message #6:***

- s.14

s.14 Mr. Justice Sigurdson confirmed that the Minister must be accorded deference in his decision to issue a PUP. As the court notes, “If the Minister reasonably holds the view that the permit is necessary for the preservation or maintenance of the recreational values, or is consistent with or complementary to the recreational values of the park involved, he or she may issue the permit”. The Court accepted that it is the Minister’s job, not the Courts, to determine the recreational values of a provincial park and whether issuing the PUP is necessary to for the preservation or maintenance of those recreational values.
- On the legal side, the court accepted that the standard of review of the Minister’s decision is the deferential standard of reasonableness.
- CWR will need to undertake extensive upgrading to the existing trail, including the replacement of stream crossing structures, in order to take horses on the trail. The engineering, upgrading and annual maintenance form part of the park use permit conditions and will be the responsibility of CWR.

**Contact:** Tom Bell, A/Executive Director, Regional Operations (250) 354-6345

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Halkett Bay Artificial Reef</b>
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### KEY MESSAGES:

- **Key message #1 – Artificial Reef Society of BC (ARSBC) is currently awaiting final direction from Environment Canada on testing results for pcbs and lead from paint and insulation samples. Prior to sinking the ship as an artificial reef the ARSBC must obtain formal authorization from Transport Canada, Environment Canada and Department of Fisheries, prior to BC Parks granting formal approval to establish an artificial reef at Halkett Bay in 2013.**
- **Key message #2 – Federal court has granted Wesley Roots of W.R. Marine Services a maritime lien on the ship that grants him ownership, until a debt of approximately \$95,240.00 dollars is paid for a breach of an agreement for moorages fees and operational services.**
- **Key message #3 – Stakeholder consultation was completed by the ARSBC and BC Parks. Squamish First Nations and the diving community strongly support the proposal while some Halkett Bay property owners are opposed to the artificial reef.**
- **Key message #4 – Previous Ministers Terry Lake and Murray Coell and other key stakeholders were committed to the project to sink the ship in Halkett Bay Park as an artificial reef.**

s.14

s.14

### CURRENT STATUS:

#### ***Key message #1:***

- The ARSBC have finished cleaning the ship and are ready for final inspection, however, they must first wait to get the final test results from Environment Canada on levels of PCBs and lead in ship insulation and paint. Based on the results, the ARSBC may be faced with new mitigation measures for cleanup, which may be beyond their financial capacity.
- Transport Canada is the lead agency for vessel navigation and safety, and have granted clearance for the ARSBC to sink the vessel for disposal at sea, pending final authorizations from Environment Canada and Department of Fisheries (DFO).
- DFO is the lead agency responsible to address the loss of fish habitat resulting from the ship's hull placement on the bottom of the sea bed. The

ARSBC have a formal mitigation agreement jointly with DFO and BC Parks, which addresses the loss of fish habitat through eel grass restoration at Portal Cove Provincial Marine Park. The DFO agreement is not approved until clearance and authorizations have been received from Transport Canada and Environment Canada.

***Key Message #2:***

- The ARSBC has indicated they will take Wesley Roots of W.R. Marine Services to court to resolve the maritime lien.
- The long delays in obtaining government approval to sink the ship as an artificial reef and the maritime lien have just about exhausted the ARSBC financial capacity to pay for monthly liability insurance.
- Should Environment Canada indicate from the testing results, that new mitigation measures are required to remove PCBs and lead, the resulting costs may be beyond the financial capacity of the ARSBC and the project will cease to be viable.

***Key message #3:***

- Halkett Bay property owners continue to oppose the artificial reef citing a variety of concerns. Halkett Bay property owners are not satisfied with the consultation process and cite concerns about increased boat traffic, environmental contamination, wave action and ship breakup.
- The United Church was initially concerned about where the ship would be placed as an artificial reef. They can exercise a foreshore removal clause, but have reserved their decision upon the ARSBC having changed the location of the artificial reef.
- Squamish First Nations is a strong and very vocal supporter of the ARSBC Halkett Bay artificial reef proposal. Strong support also comes from the diving industry.

***Key message #4:***

- The previous Minister, Terry Lake has been to Gambier Island and viewed the ship from the water and visited Halkett Bay and the proposed sinking location for the ship with Halkett Bay Provincial Park with BC Parks staff.
- The previous Minister, Terry Lake met with the ARSBC, Halkett Bay property owners, and representatives from the United Church and camp Fircom.
- The current Minister of Environment, the Honorable Mary Polak, will only approve the ARSBC artificial reef project pending completion of the ARSBC obtaining full clearance and authorization from Transport Canada, Environment Canada and Department of Fisheries and Oceans.

- Minister Coell, on March 8, 2011 accepted the donation of the HMCS *Annapolis* (the “Ship”) and the services from the Artificial Reef Society of British Columbia (ARSBC) to sink the ship in Halkett Bay Marine Park (the “Park”) to create an artificial reef.

s.14

- The park use permit will ensure the Province is protected from liability and that the ARSBC will undertake the sinking of the ship and the related expenses. The agreement will also ensure the ARSBC conducts ongoing maintenance and research on the artificial reef.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

s.14

- Parks’ management plan identifies diving as a current low use activity, and is silent on the creation of an artificial reef.
- Consultation meetings with key stakeholder have been completed by both ARSBC and BC Parks.
- Artificial reef has the ability to enhance rock fish species which are rare. This is a very important goal of Squamish First Nations.

**Contact:** Bob Austad, Executive Director of Visitor Services Branch (250) 356-9241

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Juan de Fuca Park Trail Trespass</b>
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### KEY MESSAGES:

- **Key message #1** – In June 2008, Marine Trail Holdings Limited acquired private lands adjacent to Juan de Fuca Park.
- **Key message #2** – In 2010, Marine Trail Holdings Ltd. applied to the Capital Regional District to rezone their seven parcels and for a phased development agreement to permit a tourist resort adjacent to Juan de Fuca Park. In September 2011, the Capital Regional District denied Marine Trail Holdings Ltd.'s rezoning application.
- **Key message #3** – In May 2013, forestry activities commenced on one (DL 569) of the seven district lots acquired by Marine Trail Holdings Ltd. that are fronted by Juan de Fuca Park.
- **Key message #4** – Given its current budget, the Ministry of Environment is not able to pursue acquisition of this property at this time.
- **Key message #5** – The province will re-engage in discussions with Marine Trail Holdings Limited regarding the 2 points of trespass of the park trails onto private land.

### CURRENT STATUS:

#### ***Key Message #1:***

- In 1994, the Province completed a land exchange with Western Forests Products and TimberWest, in which the Province received approximately 700 hectares of land including a 100 metre strip fronting seven district lots owned by Western Forest Products. In 1996, the acquired lands, along with additional Crown lands, were established as Juan de Fuca Park.
- In 2007, the Minister responsible for the *Forest Act* released private lands adjacent to Juan de Fuca Park owned by Western Forest Products from tree farm licence status. In June 2008, Marine Trail Holdings Limited acquired seven district lots from Western Forest Products for approximately \$3.2 million.

**Key Message #3:**

- The logging is being done by Pacheedaht Andersen Timber Holdings Ltd., a partnership between the Pacheedaht First Nation and Anderson Pacific Forest Products.

**Key Message #4:**

- The commencement of forestry activities has generated local media interest and renewed requests that the Province consider purchasing the lands.
- Since Marine Trail Holdings Ltd. was not able to proceed with resort development, they decided to log one of their private lots in order to recoup some of their investment.
- While Marine Trail Holdings Ltd. has not indicated that any additional lots are to be logged at this time, they previously indicated that they may close the trail where it trespasses onto their lands due to liability concerns if logging activity is to proceed.

**Key message #5**

- The Juan de Fuca Park Trail trespasses onto Marine Trail Holdings Ltd.'s lands in two places (DL 565 and DL 566). In addition, two emergency access routes/public access trails cross lands owned by Marine Trail Holdings Ltd. (DL 567; DL 565 and DL 566). There is also an issue of a survey error respecting DL 567 which remains unresolved.
- During the rezoning process, BC Parks entered into discussions with Marine Trail Holdings Ltd. to address the trespass issues and to secure BC Parks' continued use of access roads over Marine Trail Holdings Ltd.'s lands. Marine Trail Holdings Ltd. was prepared to transfer 98 hectares to BC Parks which would have resolved the trespass issues. When the rezoning application was denied, the offer to transfer land to BC Parks was withdrawn.
- BC Parks has not re-initiated discussions with Marine Trail Holdings Ltd. to resolve the ongoing trespass and access issues. Those discussions will be scheduled soon.

**Contact:** Tom Bell, A/Executive Director, Regional Operations (250) 354-6345

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Indian Arm Park Recreational Properties</b>
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### KEY MESSAGES:

- **Key Message #1** – When Indian Arm Park was established in 1995, 29 recreational lots that were leased under the *Land Act* were included in the park in error. As the recreational properties were incorporated in the park boundary, the *Land Act* leases were converted into park use permits. BC Parks wants to remove these recreational lots from the park.
- **Key Message #2** – Of the 29 original permits there are 26 remaining. The status of these permits range from some being in full compliance with permit conditions, to three that are in arrears of payment of park use permit fees. There are 15 properties located within zones with high geotechnical hazards.
- **Key Message #3** – Indian Arm Park is managed collaboratively with the Tsleil-Waututh Nation under a management agreement which is administered through a Park Management Board structure. BC Parks have worked closely with the Tsleil-Waututh Nation to gain support for a boundary adjustment to remove the recreational properties from the park. The Park Board has endorsed a recommendation to remove the properties from the park, subject to several conditions, which include no future conversion of the lots to private land.

### CURRENT STATUS:

#### ***Key message #1:***

- At least 2 of the 26 permit holders wish to have their recreational lots removed from the park in order to pursue the option to purchase.
- The Ministry is considering transferring the administration and management of the recreational lots to the Ministry of Forests, Lands and Natural Resource Operations (FLNRO).
- FLNRO has expressed willingness to administer these properties. The lands will need to be removed from the park to enable this transfer.

#### ***Key message #2:***

- Permit holders have the opportunity to transfer their park use permits (including the sale of any improvements on the properties) to other parties. BC Parks staff have been processing permit transfers and renewals.
- A geotechnical assessment determined the level of risk associated with the

following hazards: flood, avulsion, debris flow, rockfall, and landslide. Of the 28 lots assessed, 15 have a high to very high hazard rating for one or more of these hazards.

- Two permittees have recently had their permits cancelled due to unpaid fees. A third permit was cancelled as a result of a debris flow in 2006 which destroyed the cabin.
- The Ministry of Forests, Lands and Natural Resource Operations is willing to administer all recreational properties, including those situated within geotechnical high hazard zones, but may place future restrictions on the tenures.

***Key message #3:***

- Removal of the land from the park requires consultation with all First Nations potentially affected (Tsleil-Waututh Nation, Squamish Nation, Musqueam Nation).
- Through the activities of the Park Management Board established under the Collaborative Management Agreement, the Province has committed not to modify the park boundary without consulting with the Tsleil-Waututh Nation.
- By way of their representation at the park management board, the Tsleil-Waututh Nation has provided support for the removal of the recreational properties from the park, subject to three conditions, including: that the Province consider no future fee-simple sales of the lots, that the lands revert back to the park if the Crown land tenure is cancelled, and that Tsleil-Waututh, BC Parks and the District of North Vancouver explore land exchange options with the goal of adding lands to the park.
- On July 17, 2012, the Minister of Environment and the Minister of FLNRO gave direction to proceed to undertake the remaining steps in the process with the intent to remove the recreational lots from the park and to transfer the lands to FLNRO to administer the recreational lots under the Land Act.
- This summer, open houses will be held for the park use permit holders to provide information regarding the boundary amendment and transfer process.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- s.14, s.16

s.14, s.16

 A management plan for Indian Arm Park was jointly prepared with Tsleil-Waututh Nation and was signed off in February 2010. The management plan does not address the issue of the recreational properties based on a decision by the Park Management Board to keep the issue separate from the planning process.
- **Contact:** Tom Bell, Executive Director, Regional Operations, (250) 354-6345



<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Stawamus Chief Park Gondola Project</b></p>
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### KEY MESSAGES:

- **Key Message #1 – The Sea to Sky Gondola Corporation is constructing an aerial gondola that originates from a staging area situated on private land off Highway 99 adjacent to Shannon Falls Park and passes through Stawamus Chief Protected Area to a ridge top viewing area on Crown land above the park.**
- **Key Message #2 - The Sea to Sky Gondola Corporation applied for an amendment to the boundary of Stawamus Chief Park for the 20 metre right of way through the park required for placement of the gondola towers and cable span. In spring 2012 the park boundary was amended to remove the gondola right-of-way from Stawamus Chief Park and designate the lands as protected area under the *Environment and Land Use Act*.**
- **Key Message #3 – BC Parks has issued a park use permit for the construction and operation of the gondola. The gondola construction is underway and the proponent is working with staff to implement trail improvements and other mitigation measures to provide long-term benefits to the park.**

### CURRENT STATUS:

#### ***Key message #1:***

- The project will offer tourists and the general public new recreational opportunities in close proximity to Squamish, including the gondola ride and the associated views of Stawamus Chief and the Howe Sound.
- It includes many new facilities that compliment the amenities in the adjacent provincial parks, including trails, viewpoints, an interpretive centre and theatre, restrooms, concessions, and possibly rental and guiding services.
- The gondola proposal involves a 20-metre right of way through Stawamus Chief Park associated with the operation of the gondola cable span, including the installation of seven towers in the park and associated tree cutting.

#### ***Key message #2:***

- Sea to Sky Gondola Corporation made an application to adjust the boundary of Stawamus Chief Park to remove 2.36 hectares from the park.

This boundary adjustment required an act of the legislature. In May 2012, Bill 49 received Royal Assent, removing the subject lands from Stawamus Chief Park.

- The right of way for the gondola was then designated as protected area under the *Environment and Land Use Act*. This designation enabled BC Parks to consider an application for a park use permit to authorize the proposed use of the land and manage the land in a manner consistent with the adjacent parks.
- The proponent undertook significant First Nation, public, local government and stakeholder consultation, including numerous meetings and community open houses. The proposal has general support from the Squamish First Nation, local governments, and the Squamish community.

### ***Key message #3***

- The proponent has received all regulatory approvals and has now commenced site work with a plan to be open for public use in 2014.
- BC Parks is monitoring the construction phase and has been working with the proponent to ensure implementation of mitigation actions including trail development and ecosystem restoration.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- Stawamus Chief Park is a Class A park located one kilometre south of Squamish. It is a popular destination for rock climbing and hiking with approximately 294,000 visitors annually.
- The 526 hectare park was established in 1996 primarily due to its international significance as a rock climbing area.
- The Stawamus Chief Park Master Plan, approved in 1997, states that the main role of the park will focus on recreation.

**Contact:** Tom Bell, Executive Director, Regional Operations (250) 354-6345

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC Parks Volunteer Strategy</b></p>
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### **KEY MESSAGES:**

- **Key message #1 – Volunteers play an important role in BC Parks. Much of the protected area system known today has been built by volunteers.**
- **Key message #2 – In 2012/13, BC Parks engaged stakeholders, volunteers and staff to inform the development of a volunteer strategy to improve the volunteer experience in BC Parks. It was released in September 2012 and is currently being implemented.**
- **Key message #3 – In April 2013 BC Parks launched a group insurance program called the Stewardship Partners Insurance Program to enable volunteer groups to undertake work on behalf of BC Parks.**
- **Key message #4 – In 2013/14 BC Parks is funding volunteer projects in parks with \$240,000 from the Park Enhancement Fund.**

### CURRENT STATUS:

#### ***Key message #1:***

- BC Parks success has always relied on volunteers. There are many activities in which volunteers are actively engaged in the BC Parks system including: campground hosts, ecological reserve wardens, facility construction, inventories, and site restoration to name a few.

#### ***Key message #2:***

- The strategy was built on feedback provided during a series of public and staff workshops held throughout the Province in February and March 2012 in 11 communities across the province (Victoria, Prince George, Smithers, Vancouver, Penticton, Kamloops, Williams Lake, Miracle Beach, Haida Gwaii, Nelson and Cranbrook).
- The strategy has been implemented in three phases:
  - Build the Core Program (March – September 2012)
  - Enhance the Core Program (September 2012– April 2012)
  - Expand the Core Program (ongoing)
- To date, BC Parks has launched several significant improvements to the BC Parks Volunteer Program as a result of the strategy:

- Establishment of a Provincial Community Engagement Specialist FTE position to provide oversight of the Volunteer Program and maintain consistency.
- Launching an online volunteer community to supporting current volunteers and connect with future ones ([www.bcparksvolunteers.ca](http://www.bcparksvolunteers.ca)).
- Releasing an updated, online staff toolkit to build capacity for staff to manage volunteers efficiently.
- Stewardship Partners Insurance Program launched.

### ***Key message #3***

- One of the most significant improvements to the BC Parks volunteer program has been the development of the Stewardship Partners Insurance Program with Risk Management Branch (Ministry of Finance). The program enables legally registered societies and corporations to enter into 5-10 year agreements to undertake work on behalf of BC Parks. In return, all group members are provided General Liability Insurance and Accidental Death and Dismemberment Insurance.
- Recreation Sites and Trails (MFLNRO) also operates this program.

### ***Key message #4***

- Funding helps volunteers participate in regional conservation and recreation projects, including facility restoration, trail construction and invasive plant control.
- Each region distributes \$40,000 to community groups in support of volunteer projects; there is an additional \$40,000 to support projects with a provincial or multi-region scope.

### **KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- BC Parks has a list of over 200 stakeholder groups who volunteer with BC Parks.
- This project complements the goals and objectives in other key BC Park initiatives, such as the response to the Auditor General's report and the Parks Recreation Integrated Service Delivery Model (PRISM).

**Contact:** Tom Bell, Executive Director of Regional Operations, (250) 354-6345

<p>ESTIMATES NOTE (2013)</p> <p><b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>BC Parks Community Engagement</b></p>
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### KEY MESSAGES:

- **Key message #1 – In September 2012, BC Parks formalized a Community Engagement program as part of BC Parks’ Regional Operations. Along with the Volunteer Program, the program includes public outreach and collaboration, youth engagement, social media and partnerships with the health sector.**
- **Key message #2 – BC Parks and protected areas are an important part of healthy, vibrant communities. BC Parks acknowledges that connecting British Columbians to our parks is a critical component of our work.**

### CURRENT STATUS:

#### **Key message #1:**

- **Volunteers**
  - In 2012, BC Parks revitalized and improved the volunteer program by consulting with past and present volunteers in developing a Volunteer Strategy, which was released in September 2012 and is currently being implemented.
  - Since 2011, BC Parks has invested \$200,000 per year (\$240,000 in 2013) from the Park Enhancement Fund (PEF) to directly support park projects that are run by volunteers and community partners.
- **Social Media**
  - In 2011, BC Parks launched a Facebook page, which currently has over 4000 fans.
  - BC Parks is currently looking at ways to strengthen online engagement with the public through social media.
- **Youth Engagement**
  - For three years, BC Parks has co-hosted the Get Outside BC Youth Leadership project with the Canadian Parks and Wilderness Society – BC Chapter, Mountain Equipment Co-op, Parks Canada and the Child and Nature Alliance of Canada. Each year, 40 youth from across BC come together to share their love for the outdoors and to gain skills that empower them to connect others in their communities to parks. The youth participate in a leadership summit

for 5 days and then return to their communities to carry out projects or events in local parks.

- BC Parks is currently piloting a regional youth engagement project called Youth in Parks with the Capital Regional District and the Boys and Girls Club of Greater Victoria. A team of 15 youth work collaboratively to host community events in parks with funding and support from the partner organizations.
- Working with the Canadian Parks Council, BC Parks is supporting the development of the Get Out to Parks website aimed at providing young people with easy access to information about parks programs, locations and opportunities – [www.gotparks.ca](http://www.gotparks.ca).

**Key message #2:**

- BC Parks engages diverse audiences through innovative collaborations and diverse projects that aim to keep parks relevant in the context of rapidly changing demographics.
- BC Parks co-chairs the Healthy by Nature Cross Government Working Group with the Ministry of Health. This working group builds on the momentum of the 2011 Healthy by Nature Forum ([www.healthybynature.ca](http://www.healthybynature.ca)) and creates a place where the ministries of environment, health, transportation, education, children and family development, etc. and the Public Service Agency collaborate to strengthen the connection between British Columbians and parks/nature.
- BC Parks contributes to the Canadian Parks Council's *Connecting Canadians to Nature* initiative which will be the focus of the FPT Parks Ministers' meeting in Fall 2013.

**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- BC Parks Community Engagement relies on collaborations with FPT Park Agencies, non-profit partners, municipal park agencies, and numerous other Ministries including Health, Education, Children and Family Development, etc.

**Contact:** Tom Bell, Executive Director of Regional Operations, (250) 354-6345

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>BC Parks Staffing Levels: Park Rangers (FTEs)</b>
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### KEY MESSAGES:

- **Key message #1** – In 2013/14 there will be approximately 164 people working who have the formal training and been granted the authority of a Park Ranger. 77 positions are regular and 87 are seasonal. This is the same number of Park Ranger positions as 2011/12 and 2012/13.
- **Key message #2** – In total, approximately 164 staff comprised of 77 regular FTEs and 37 seasonal FTEs (equivalent to 87 seasonal positions) have park ranger status. FTE = Full Time Equivalent, one 12 month position.

### CURRENT STATUS:

#### **Key message #1:**

- The following table includes the number of BC Parks positions with Park Ranger authority,(seasonal and regular staff) from 1999/00 to 2013/14.

**Number of BC Parks Positions with Park Ranger Authority – 1999/00 to 2013/14**

Year	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08
Seasonal	168	156	172	117	99	99	124	121	121
Regular	103	103	104	97	94	77	77	77	77
Total Rangers	271	259	276	214	193	176	201	198	198

Year	08/09	09/10	10/11	11/12	12/13	13/14
Seasonal	144	87	87	87	87	*87
Regular	77	78	77	77	77	77
Total Rangers	221	165	164	164	164	164

*\*Estimated number of seasonal rangers for 2013/14*

- The Ministry hires seasonal rangers for the summer operating season. Because much of our park staffing is seasonal, the number of Park Rangers employed at any given time changes. All summer seasonal rangers will be hired by the first week of June.
- The seasonal Park Rangers have employment work terms which vary from 3 months to 10 months, to delivery core field oriented programs and services within the 1,030 parks and protected areas.

#### **Key message #2:**

- The following table includes the number of BC Parks positions with Park Ranger authority (regular and seasonal positions) estimated for 2013/14.

**Number of BC Parks Positions with Park Ranger Authority – 2013/14**

<b>Staffing Position</b>	<b>Regular Positions</b>	<b>Seasonal Positions</b>	<b>Total Positions</b>
<b>PPA Section Head</b>	10	0	10
<b>Area Supervisor</b>	49	0	49
<b>Senior Park Ranger</b>	10	29 Est.	39
<b>Park Ranger</b>	0	58 Est.	58
<b>Other Positions</b>	8	0	8
<b>Final Total</b>	<b>77 Positions</b>	<b>87 Positions</b>	<b>164 Positions</b>

\*Note: No reduction in Park Rangers positions for 2013/14.

\*Est. = Estimated number of seasonal Park Rangers for 2013/14.

- Park Ranger authority is performed by a variety of positions in BC Parks, all these staff have the skills, knowledge and experience to fully perform the duties and responsibilities to enforce the *Park Act* and related legislation.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In addition to BC Parks staff, Park Facility Operators employ approximately 700 staff. Some of these staff have compliance responsibilities within their park operating areas.
- Park rangers continue to work with Park Facility Operators, local Royal Canadian Mounted Police, Conservation Office Service and enforcement staff in other ministries to deliver on priority compliance and enforcement projects.
- Cross ministry compliance projects initiated in regions through resource management coordination provide further compliance support within parks and protected areas.

#### **Contact:**

Bob Austad, Executive Director, Visitor Services Branch, (250) 356-9241



ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Mount Robson Provincial Park  100<sup>th</sup> Anniversary</b>
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### KEY MESSAGES:

- **Key message #1 – Celebrations are underway for Mount Robson Provincial Park 100<sup>th</sup> Anniversary.**
- **Key message #2 – BC Parks in working with community partners and NGOs to deliver Centennial events.**

### CURRENT STATUS:

#### ***Key message #1:***

- Festivities have started with a pancake breakfast May 20<sup>th</sup> and over the course of the summer months a number of guest speakers will make presentations, including one of North Americas top alpinists, Barry Blanchard and the Canadian Chair of the United Nations International Decade “Water for Life” Robert Sanford.

#### ***Key message #2:***

- BC Parks is working in collaboration with the Mount Robson Park Facility Operator, Alpine Club of Canada, Village of Valemount, local area museums and a number of local businesses will be supporting a wide variety of events and activities to commemorate this milestone over the course of the 2013 summer season.

### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- March 1<sup>st</sup>, 1913 Mount Robson Provincial Park was created by the BC Government, the first ascent of Mount Robson happened on July 31<sup>st</sup> of the same year.
- Mount Robson Provincial Park is a part of the Canadian Rocky Mountain Parks UNESCO World Heritage Site.
- The Park protects a diversity of wildlife and habitat for wide-ranging species at risk, such as bighorn sheep and grizzly bears, as well as other species, including mountain goat, woodland caribou, wolf, and wolverine. The park is also home to some of the oldest white bark pine in Canada (800 years).
- The valley through Mount Robson is rich in cultural history. The use of the area between Tete Jaune and Jasper house by the Simpcw First Nation is well

documented. The Lheidli T'enneh First Nation hunting grounds extend as far east as the Rockies.

- Robert Sandford, Canadian Chair of the United Nations International Decade “Water for Life” will give a presentation at the Mount Robson Amphitheater July 20<sup>th</sup>, 2013. Celebrations continue until the 3<sup>rd</sup> Annual Mount Robson Marathon in early September.
- A complete list with important links can be viewed in the event calendar on the BC Parks website: [http://www.env.gov.bc.ca/bcparks/explore/parkpgs/mt\\_robson/](http://www.env.gov.bc.ca/bcparks/explore/parkpgs/mt_robson/)

**Attachment:** BC Newsroom Media Release

**Contact:** Tom Bell, A/Executive Director, Regional Operations 250 354-6345

## **Mount Robson Provincial Park turns 100 today**

Friday, March 1, 2013 7:45 AM

VICTORIA - Mount Robson Provincial Park, which was designated a UNESCO world heritage site in 1990, turns 100 today, announced Environment Minister Terry Lake.

Events are being planned for the upcoming summer season to mark Mount Robson Provincial Park's centennial and honour its great history as one of B.C.'s best known and frequented parks.

Established by the British Columbia legislature in 1913, Mount Robson Provincial Park is B.C.'s second oldest provincial park, after Strathcona Provincial Park.

Mount Robson Provincial Park offers scenic year-round activities for British Columbians to enjoy. Hikers, horseback riders, snowshoers and skiers can explore over 200 kilometres of trails. Climbing, spelunking, canoeing, boating and swimming are a few of the other activities available in the park. Those looking to stay overnight can set up camp in one of the park's campgrounds from May to October.

Spanning 224,866 hectares, Mount Robson Provincial Park is known for its various wildlife viewing opportunities. Over 182 species of birds, 42 species of mammals and four species of amphibians have been documented in the park throughout the years. Whitetail deer, moose, elk and black bear can be found in the lower elevations of the park, while mountain goat and sheep inhabit the higher elevations.

### **Quotes:**

Terry Lake, Minister of Environment -

"From the rugged snow-capped mountains to the sub-alpine forests, it is easy to see the natural beauty of Mount Robson Provincial Park. Whether you're on a family trip through the Rockies or a road trip to see more of British Columbia, join BC Parks as we celebrate the Mount Robson Provincial Park's 100th birthday."

Shirley Bond, MLA for Prince George-Valemount -

"Mount Robson Provincial Park is a spectacular park. Known locally for its hiking, wildlife viewing and family friendly camping, it attracts visitors from across North America and around the world. I invite all British Columbians to come and discover this wonderful BC Park for themselves, and help us celebrate the park's 100th birthday."

### **Quick Facts:**

- At almost 4,000 metres, Mount Robson is the highest peak in the Canadian Rockies, lending to its nickname as the Monarch of the Canadian Rockies.
- The park includes a portion of one of the world's largest world heritage sites.
- Mount Robson Provincial Park also protects the headwaters of the Fraser River.
- A national highway, railway, fiber-optics system and pipeline all help keep people and goods moving through the park.
- Parking fees were eliminated at provincial parks in 2011, making them more accessible to B.C. families.

**Learn More:**

A list of events celebrating Mount Robson Provincial Park's centennial will be posted on the park's website as the summer season approaches:

[www.env.gov.bc.ca/bcparks/explore/parkpgs/mt\\_robson](http://www.env.gov.bc.ca/bcparks/explore/parkpgs/mt_robson)

For more information about BC Parks, visit: [www.BCParks.ca](http://www.BCParks.ca)

**Media Contact:**

Media Relations  
Ministry of Environment  
250 953-3834

<p>ESTIMATES NOTE (2013)  <b>Confidential</b></p> <p>Ministry of Environment</p> <p><b>Date: June 24, 2013</b></p>	<p><b>ISSUE TITLE:</b></p> <p><b>Exclusive Use of Campsites – Juniper Beach</b></p>
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### KEY MESSAGES:

- **Key message #1 – BC Parks does not permit exclusive use of an entire campground to individuals. BC Parks does work with First Nations and non First Nations governments and organizations to support cultural and community events within parks.**
- **Key message #2 – BC Parks recognizes and supports First Nations cultural values and events.**

### CURRENT STATUS:

#### ***Key message #1:***

- On February 26, 2013 s.22 a member of the Bonaparte Indian Band met with BC Parks staff and stated he wants to hold an exclusive First Nations cultural event at Juniper Beach Provincial Park, on August 23-25, 2013.
- BC Parks stated that they cannot accommodate his request to close the Park for exclusive use. BC Parks proposed alternative arrangements and dates. s.22 is not willing to consider alternate dates (during the off season) or arrangements.
- s.22 has not responded. BC Parks continues to try and make contact.

#### ***Key message #2:***

- Ultimately BC Parks would like to work collaboratively with Bands on cultural events that will strengthen relationships with First Nations, BC Parks and the public.
- BC Parks has proposed and supported non-exclusive First Nations cultural events in parks.

### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In 2011 following an archaeological assessment, First Nations ancestral remains were found onsite in Juniper Beach Provincial Park. Building on its strong relationship with local FNs (including Bonaparte Indian Band and Skeetchesn) bones were reinterred in the park and the Band led a repatriation ceremony in the Park in late July, early August 2011.
- In the Spring of 2012, s.22 from the Bonaparte Indian Band notified BC Parks staff of his intent to hold an exclusive First Nations three day gathering at Juniper

Beach Provincial Park in the Fall of 2012. BC Parks staff advised s.22 that the campground would not be closed for his exclusive use, but would instead, work with him to look at suitable alternatives.

s.16, s.13

- Campers were encouraged to find other accommodations at nearby parks; however, the park was not closed to the public. There was BC Parks presence on the ground during the entire event. BC Parks staff regularly communicated with campers and event organizers throughout weekend, secured grounds by staffing the park gate and undertaking regular walk-about through park.
- There were no significant incidents during the event. Approximately 50 FN attended the ceremony vs the 300 that s.22 indicated would attend. Only about 6 campsites out of 30 were occupied for the weekend.
- Park operations were turned back over to the Park Facility Operator successfully on Sunday, September 23rd, 2012.
- On February 26, 2013 s.22 met with BC Parks staff and stated he wants to hold a First Nations exclusive cultural event again this year, on August 23-25. He was not willing to consider any alternate dates or arrangements. He indicated that he is giving BC parks lots of time and unlike last year he wants the park closed to the public.
- BC Parks stated that they could not accommodate his request but would be willing to work with Bonaparte Indian Band on a cultural event ensuring the park remained open to the public. No response has been received by s.22 BC Parks staff continue to try and make contact with s.22
- BC Parks met with the new Chief and Council of the Bonaparte Indian Band. s.16

s.16 BC Parks encouraged Bonaparte Indian Band to work together in organizing a cultural awareness/appreciation event in Juniper Beach Park during the summer or fall of this year.

- Bonaparte Indian Band appeared to be open to this idea but is going to check with their Elders. BC Parks made a follow up call to Bonaparte's Band Administrator to see if BC Parks could meet with Elders. The Band Administrator will be following up.

**Contact:** Tom Bell, Executive Director, Regional operations (250) 354-6345

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>EC Manning Park, the Forest Fuel and Fire Risk</b>
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### KEY MESSAGES:

- **Key message #1** – BC Parks works with the Wildfire Management Branch (WMB) of the Ministry of Forests, Lands and Natural Resource Operations to manage wildfire in Parks and Protected Areas as WMB is directly responsible for all wildfire activities on Crown Land in British Columbia.
- **Key message #2** – The forest fuel load situation has resulted from successful fire suppression for over the last 75 years and the recent mountain pine beetle epidemic that killed 18.3 million hectares of forest in British Columbia over the last decade.
- **Key message #3** – BC Parks has been aware of and working on the fuel loading issue within EC Manning Park and other parks around the province for approximately 10 years.

### CURRENT STATUS:

#### ***Key message #1:***

- BC Parks is working with WMB to plan for wildfire on a landscape scale including in areas of unusually high fuel loading. BC Parks staff work on local and provincial teams in creating seamless planning documents to guide wildfire and prescribed activities that will facilitate crown land fuel issues adjacent to communities.

#### ***Key message #2:***

- Climate change, insects and disease, fire suppression, windthrow and aging are natural processes causing trees to die. In EC Manning Park, we have those and other disturbances to the forest that will continue over time. It is BC Parks policy to maintain ecological processes and diversity in nature through thoughtful planning and management of natural values while ensuring health and safety of the visiting public.

#### ***Key message #3:***

- While more fuel reduction work could be carried out in EC Manning Park, the highest risk areas adjacent to facilities and infrastructure have been managed sufficiently. Addressing fuel loading and wildfire risks within EC Manning Provincial Park has been a priority for BC Parks and surrounding neighbours since 2000.

- BC Parks is working with other agencies and communities to continue to address fuel loading issues in the wildland urban interface as resources come available. Fuel reduction is an ongoing issue because vegetation grows and creates forest fuel even after the abatement has taken place.
- BC Parks working in partnership with the Wildfire Management Branch (WMB) and other agencies including BC Hydro, Ministry of Transportation and Infrastructure, and owners of Manning Park Resort have completed fuel reduction and fuel breaks within the park over the last decade as funds and resources permitted. WMB offers fire crews to work in parks during the times when they are between fire activities.
- Starting in 2002 and continuing until present, dead trees have been removed from areas adjacent to Manning Park Resort facilities, park campgrounds, day use areas, roads, hydro lines, and many trails throughout the park. Fuel reduction and fuel break objectives were incorporated in all projects where possible.
- In 2007 and 2008 a major fuel break was developed within the park adjacent the Community of Eastgate.
- The latest fuel reduction project undertaken in EC Manning Park was in 2012 involving removal of dead trees and fuel loading along the Gibson Pass Road to the ski hill.
- It is estimated that in addition to costs recovered through sale of dead trees removed from the park a further \$1.7 million has been spent to support work to date.
- Much of the fuel reduction and fuel break development in the park has been in response to recommendations from a Fire Risk Assessment conducted in 2005.

#### KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Tree removal activities in parks associated with fuel reduction and fuel break development is costly as a result of a greater standard of care of natural values. Additionally, after a tree dies and ages, the timber value decreases which reduces the viability to offset project costs significantly.
- Wildfire Management Branch (WMB) has recently initiated a Landscape Fire Management Planning program to proactively reduce wildfire risks to communities, critical infrastructure and natural resource values;
- BC Parks is a member of the Landscape Fire Management Planning working group and is supporting the development of landscape fire management plans currently being piloted in 3 regions.



**Attachment:**

- Estimated funds needed to develop plans and implement fuel reduction in high priority parks in the wildland urban interface in BC.

**Contact:**

Tom Bell, Executive Director, BC Parks Regional Operations

**Attachment: Estimated Funds Needed to Develop and Implement Fuel Reduction in  
Priority Parks**

**Appendix 1: Estimated funds needed to develop plans and implement fuel reduction in high priority parks in the wildland urban interface in BC.**

The social, economic, and biological consequences of Firestorm 2003 were felt throughout British Columbia. The Firestorm Review 2003 made several specific recommendations applicable to BC Parks, the most important being the reduction of hazardous fuel buildups. This task required a strategic direction if resources and funding are to be allocated appropriately.

If BC Parks is to significantly reduce fire risk within parks and protected areas, careful allocation of resources and funds will be required over a number of decades to reduce the build-up of fuels that has occurred over the past 60 years.

In 2004 and in 2005 BC Parks commissioned B.A. Blackwell to develop criteria to prioritize park interface planning and treatments. Initial criteria included wildland urban interface coverage among other fire and fuel characteristics that could be used to determine the risk of several parks within BC. The criteria resulted in a prioritized list of parks where fuel management activities should be considered.

The results of these two studies showed that planning, funding, and treatment priority should go to those parks that are listed as moderate, high, or extreme risk of impact. A long-term strategy was recommended in order to mitigate beetle caused fuel hazard in parks over 15 years. Further recommendations made by B.A. Blackwell included construction of fuel breaks and alternative fuel management strategies, particularly around campsites and park structures, that will reduce the risk of fire ignition and spread.

Out of 710 parks within the wildland urban interface (data acquired from WMB, June 2013), 51 were ranked as high risk parks (consequence and probability) recommended for fuel treatment or modification.

s.13, s.17

s.13, s.16

Page 84 redacted for the following reason:

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s.17

ESTIMATES NOTE (2013) <b>Confidential</b>  Ministry of Environment  <b>Date: June 24, 2013</b>	<b>ISSUE TITLE:</b>  <b>Quadra Island Land Acquisition Project</b>
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### KEY MESSAGES:

- **Key message #1** – BC Parks has been working to acquire three parcels of private property on Quadra Island that would connect Small Inlet and Octopus Islands Marine Parks.
- **Key message #2** – While BC Parks has garnered partnerships and a possible land exchange to complete this project, a significant funding gap remains.
- **Key message #3** – Not all lands that are identified as opportunities can be acquired based on capacity and budget.

### CURRENT STATUS:

#### ***Key message #1:***

- Approximately 405 hectares of privately owned land are located between Small Inlet and Octopus Islands marine parks on Quadra Island (see attachment). The three parcels of land are owned by Washington State Forest Company, Merrill and Ring.
- BC Parks has had a long standing interest in acquiring these lands which increase connection between the two parks and protect ecological, cultural and recreation features. These lands were identified in the 1995 Vancouver Island Land Use Plan for protection.
- Based on government direction in 2011, staff re-initiated work on the file which resulted in a conditional purchase and sale agreement with Merrill and Ring. The agreement expired on March 31, 2013 as the land owners were not willing to extend the agreement. Staff had worked to meet the conditions of the agreement; however, the condition to secure funding was unable to be met.

#### ***Key message #2:***

- The lands are valued at \$6.15M. A significant gap of about \$2.4M (which includes property transfer tax) remains which the Ministry has been unable to secure to date.
- Funding secured to date includes:
  - \$822,000 from the government's Pacific Marine Heritage Legacy Fund (to secure lands in the Gulf Islands north of Active Pass);
  - \$758,000 from a bequest for the establishment of marine parks;
  - \$200,000 raised by the Quadra Island Conservancy (most through individual donations under \$1,000).
  - \$100,000 from the Marine Parks Forever Society;
  - \$100,000 from the Strathcona Regional District;
  - A land exchange for \$2,020,000.

for a total of 4,000,000, including \$400,000 in third party contributions.

- On April 30, 2013, the owner put the lands up for public sale. Staff have been told that Merrill and Ring would honour the conditions of the expired agreement if government could make a firm offer before August 1, 2013, when bids would be opened.

***Key message #3:***

- There is strong interest from the local community. The Quadra Island Conservancy raised over \$200,000 in just five months (with most individual donations being \$1000 and under).
- The local MLA, Claire Trevena, has raised this project numerous times in the legislature and through meetings with previous ministers of the environment.
- The Sierra Club of BC recently began a public campaign to request government contribute funding to the partnership to complete the purchase transaction.
- Without the remaining funds, the lands will be sold privately and a long standing opportunity for recreation and conservation will be lost.
- While staff have made every effort to source the remaining funds required to complete the project, government is currently not in a financial position to complete this acquisition.
- Public outcry from the local community who have raised a portion of the funds is anticipated.

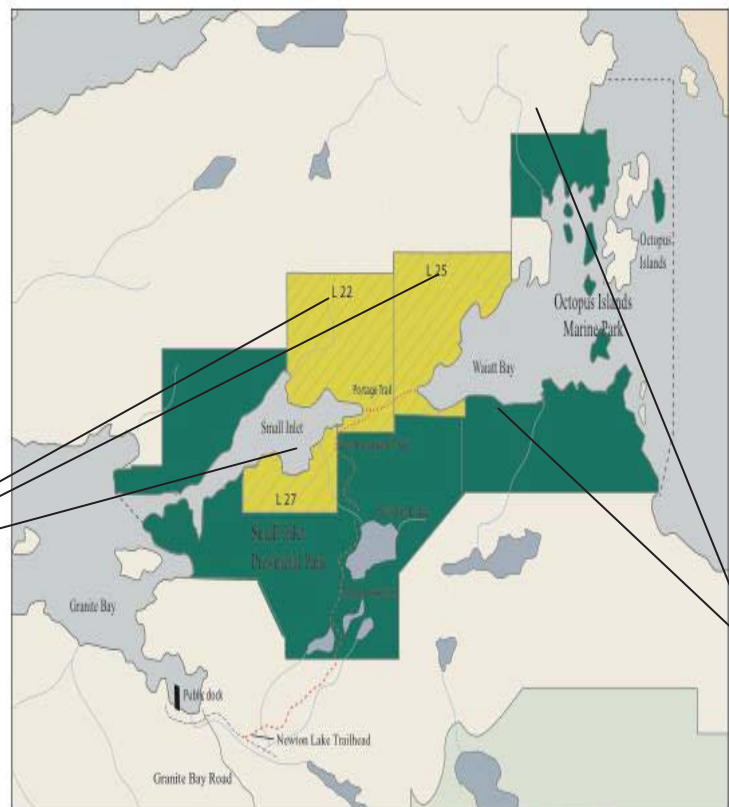
**KEY FACTS/BACKGROUND/OTHER AGENCIES:**

- The Ministry of Forests, Lands and Natural Resource Operations is assisting in this project through a proposed land exchange. The exchange would see \$2,020,000 of Crown lands on neighboring East Thurlow Island exchanged for the equitable portion of the Merrill and Ring lands.

**Attachment:** Map of the area.

**Contact:** Brian Bawtinheimer, Executive Director, Park Planning and Management Branch (250) 387-4355

Attachment: Location of private lands for acquisition



Acquisition properties

BC Parks

**Ministry of Environment  
and the  
Environmental Assessment Office**

**REVISED 2013/14 – 2015/16  
SERVICE PLAN**



For more information on the British Columbia  
Ministry of Environment,  
see Ministry Contact Information on Page 37 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](http://www.gov.bc.ca/env)

Published by the Ministry of Environment



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## Message from the Minister and Accountability Statement



I am pleased to present the *Revised 2013/14 – 2015/16 Service Plan* for the Ministry of Environment and the Environmental Assessment Office.

I'm proud of the support my ministry provides to government's key initiative – the *BC Jobs Plan* for B.C. While a traditional view of environmental protection might pit our ministry's mandate against job growth and more family supporting jobs, I – along with Premier Clark - couldn't disagree more. And I believe the work we've undertaken on climate change, waste management, species at risk plans like the boreal caribou management plan, strategic park boundary amendments and increased rigour on environmental

assessments, including a new environmental mitigation policy and work on assessing cumulative effects, speak to our guiding principal; environmental protection and stewardship is the bedrock on which to build a growing economy. In a province blessed with rainforests, world-class recreation opportunities, Canada's only desert and greatest biodiversity, our balanced approach isn't optional – it's imperative.

It's the reason why we stood up for British Columbia's interests on the Northern Gateway Pipeline proposal at the National Energy Board's Joint Review Panel hearings as an intervenor and why we will continue ensuring B.C.'s environmental interests are protected with respect to all other proposals. We continue to be guided by five clear principles that all heavy oil pipeline proposals must meet. A completed environmental assessment review, world leading marine and land oil spill prevention and response, First Nations participation and a fair share of project benefits are non-negotiable tenets of our approach. Considerable ministry resources were invested in coordinating B.C.'s participation in the review of the proposed Northern Gateway Project.

My ministry has backed up these conditions through the development of world-leading practices for land-based spill prevention and response by releasing a policy development discussion paper which has led to comprehensive stakeholder engagement with industry, spill prevention and response experts, First Nations, the federal government, and local governments. This includes a three day symposium on world class spill response with approximately 200 participants and an ongoing working group who will develop recommendations to the ministry. The ministry will also continue to work with experts in spill preparedness and response on the development a world-leading marine spill plan. Central to these discussions is the polluter pay principle.

This same principle holds true for our nationally renowned product stewardship and recycling program. By putting the onus on the producers of products including electronics, plastics and – beginning in 2014 - all packaging materials, we are reducing the pressure and costs on local governments and taxpayers while reducing the amount of waste going to landfills.

An added benefit of diverting waste from our landfills is that it helps reduce greenhouse gas emissions. That policy, coupled with others like B.C.'s revenue neutral carbon tax (which was

frozen for five years in *Budget 2013*), the clean energy vehicle program, offset protocols, and the northwest transmission line that supports the electrification of B.C.'s mines, is helping to keep the province on track to meet its interim 2012 target of a 6 per cent reduction below 2007 levels. And we continue to work towards establishing the world's first Liquefied Natural Gas plants powered by clean energy with natural gas support as necessary.

It was another banner year for BC Parks. We invested \$13.98 million dollars (a 27 per cent increase) in capital upgrades alone to help improve accessibility and the overall park experience knowing that it's money well spent. For each dollar invested in our provincial parks, \$8.42 is generated in local economic spending as British Columbians share the natural splendor of our great outdoors with their families and visitors from abroad. Customer satisfaction is up at 80 per cent and camping reservations hit an all time high at 107,000 for the 2012 camping season. As more and more British Columbian families continue to enjoy BC Parks, we continue to ensure our incredible natural legacy is protected for future generations.

Through the Conservation Officer Service, we are continuing to help communities reduce human wildlife conflicts through education programs such as Bear Smart. Conservation officers also provide critical public safety services, and are on the front lines of the enforcement of our environmental laws and regulations.

As part of government's commitment to sound fiscal practices within the public service, the ministry is also undertaking a number of initiatives in order to reduce costs and streamline ministry service delivery. The Conservation Officer Service and the Environmental Assessment Office both have specific initiatives underway to dramatically improve the efficiency of key services without compromising our world-leading environmental standards.

A key focus continues to be the implementation of a comprehensive response to the Auditor General's 2011 report on the oversight of certified projects, with a number of inspections being planned for the coming year. The Environmental Assessment Office continues to lead B.C.'s analysis and response to the new *Canadian Environmental Assessment Act*, and B.C. is working to achieve the goal of "one project, one environmental assessment" through coordination with the federal government.

We would not be where we are today without the hard work and dedication of ministry staff, and I want to extend to them my deepest and sincerest thanks for their efforts.

The *Ministry of Environment and the Environmental Assessment Office Revised 2013/14 – 2015/16 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.



Honourable Mary Polak  
Minister of Environment

June 17, 2013

# Purpose of the Ministry



*Cathedral Provincial Park and Protected Area*

British Columbia's water, land, air, and plant and animal life are among the most abundant and diverse in all of Canada, and provide British Columbians with a plethora 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.

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 on those 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 the 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: Growing Green Jobs* and the *Climate Action Plan* depend heavily on the knowledge and hands-on planning expertise of Ministry staff.

# Strategic Context

## Climate Change

In 2007, the Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> 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. It further concluded that 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 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 neighbouring jurisdictions are implementing actions, including Alberta, California, Australia, 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.

## 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.

## Resource Management Coordination

When Government's structure to manage Crown land and natural resources was reconfigured in the spring of 2011, it created an improved arena for coordination and integration. Under the direction of the Natural Resource Board, natural resource ministries are making bold changes to service delivery in the natural resource sector. This sector approach promotes streamlined authorization processes and enhanced access to public services across the province. 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. The ministries are working together to make these improvements and meet the commitments of the *BC Jobs Plan*.

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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.



## **Economic Forecast**

The Economic Forecast Council expects British Columbia's real GDP will grow by 1.6 per cent in 2013 and 2.5 per cent in 2014. Risks to British Columbia's economic outlook include the following: further slowing of domestic economic activity; renewed weakness in the US economy; the ongoing European sovereign debt crisis threatening the stability of global financial markets; exchange rate volatility; and slower than anticipated economic growth in Asia dampening demand for BC's exports.



*Elk Lakes Provincial Park*

# 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

### Objective 1.1: Reduced provincial greenhouse emissions

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 better 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	2007/08 Baseline	2012/13 Target <sup>2</sup>	2013/14 Target	2014/15 Target	2015/16 Target
Annual level of greenhouse gas emissions in British Columbia relative to 2007 levels <sup>1</sup>	64.9 megatonnes	6% reduction by 2012 <sup>3</sup> (61.0 megatonnes)	18% reduction by 2016 (53.2 megatonnes)	18% reduction by 2016 (53.2 megatonnes)	18% reduction by 2016 (53.2 megatonnes)

Data Source: Ministry of Environment

<sup>1</sup> Emissions levels for 2007, 2008, 2009 and 2010 were 64.9, 65.4, 61.5 and 62.0 megatonnes, respectively. Greenhouse gases are measured in units of tonnes of carbon dioxide equivalent. See the *British Columbia Greenhouse Gas Inventory Report 2010*, page 15, for details at [env.gov.bc.ca/cas/mitigation/ghg\\_inventory/index.html](http://env.gov.bc.ca/cas/mitigation/ghg_inventory/index.html). Emissions estimates for 2007 can be expected to differ slightly with the release of each inventory report due to refined calculation methods. There will be an interim update of 2011 emissions in 2013 but a full report will not be released. The next *British Columbia Greenhouse Gas Inventory Report* will be released in 2014 and will report on 2012 emissions.

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

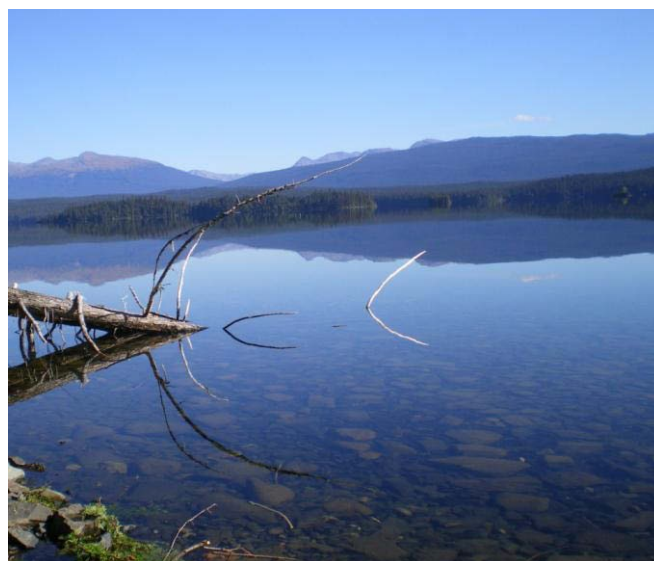
<sup>3</sup> The data required for assessing the 2012 greenhouse gas emission target is expected to be available in 2014.

## 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. Emissions included within the scope of the inventory include 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*. This report in turn is based on Environment Canada's *National Inventory Report: Greenhouse Gases and Sinks in Canada*,<sup>2</sup> which is prepared every year to meet Canada's obligations under the *United Nations Framework Convention on*



Swan Lake / Kispiox River Provincial Park

<sup>2</sup> [ec.gc.ca/Publications/default.asp?lang=En&xml=A91164E0-7CEB-4D61-841C-BEA8BAA223F9](http://ec.gc.ca/Publications/default.asp?lang=En&xml=A91164E0-7CEB-4D61-841C-BEA8BAA223F9).



**Climate Change.**<sup>3</sup> Baseline data also may be revised due to methodological improvements. The ministry fulfils its legal requirement to report on progress towards legislated targets by publishing *[Making Progress on B.C.'s Climate Action Plan](#)*.<sup>4</sup>

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

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.

### **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;
- fostering superior management of natural resources and infrastructure in the face of climate change by 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	2014/15 Target	2015/16 Target
Completion of sector based policy, strategy or operational reviews for climate sensitive business areas. <sup>1</sup>	2	2 <sup>2</sup>	4	5	6

Data Source: Ministry of Environment

<sup>1</sup> See the B.C. Forest Stewardship Action Plan for Climate Change Adaptation at [www.for.gov.bc.ca/het/climate/actionplan/index.htm](http://www.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.

<sup>3</sup> [unfccc.int](http://unfccc.int).

<sup>4</sup> [env.gov.bc.ca/cas/pdfs/2012-Progress-to-Targets.pdf](http://env.gov.bc.ca/cas/pdfs/2012-Progress-to-Targets.pdf)

## 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 new 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.

The previous performance measure, introduced in the *2010/11 – 2012/13 Service Plan*, tracked the number of provincial ministries considering climate adaptation in business planning and delivery, as determined from Ministry Service Plans. In 2011/12, eight ministries that are key to making progress on adaption in sectors such as transportation, agriculture, the environment and natural resources described specific initiatives in their service plans, substantially achieving the target for the performance measure.

Work has already begun. Government supported an industry led effort to complete a climate change risk and opportunity assessment for the agriculture sector. The Ministry of Forest, Lands and Natural Resource Operations (FLNRO) has developed an action plan for climate adaptation. Both were completed in 2012. Looking ahead, the Ministry of Environment, working with the Ministry of Energy, Mines and Natural Gas, has initiated an assessment of the mining sector, and, working with FLNRO, Emergency Management BC and the Ministry of Community, Sport and Cultural Development, is assessing coastal flood protection policy. These initiatives will be completed in early 2014. Thereafter it is anticipated that one assessment will be completed each year. Sectors under consideration include Transportation Infrastructure, Tourism and Health Care.

Information about *Preparing for Climate Change: British Columbia's Adaptation Strategy*, is available at [livesmartbc.ca/government/adaptation.html](http://livesmartbc.ca/government/adaptation.html).

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

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

BC's leadership on climate change has sparked innovation across BC's economy to develop business solutions to address environmental problems. By accelerating how we develop and demonstrate new clean energies and technologies here in BC, 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 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;



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

- 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](#).<sup>5</sup>

## 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>6</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;
- 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.

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

Performance Measure	2012/13 Forecast	2013/14 Target	2014/15 Target	2015/16 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, 28 provincially significant rivers and streams, including the Fraser, Columbia and Peace, are monitored in B.C. This performance measure relies on data collected from 37 monitoring stations to determine whether water quality is stable or improving in each of these key water bodies.

<sup>5</sup> [councilofthefederation.ca/pdfs/Water\\_Charter\\_Aug\\_4\\_2010.pdf](http://councilofthefederation.ca/pdfs/Water_Charter_Aug_4_2010.pdf).

<sup>6</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))

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.

One new trend station was established in September 2012 in the Petitot River in northeastern B.C. The Petitot River monitoring station was established to monitor for Natural Gas resource developments in the Horn River Basin. An additional monitoring station is planned for the Murray River near Tumbler Ridge, B.C., to monitor for cumulative impacts from upstream coal mining. Another station has been proposed for the Quesnel River to monitor for aquatic impacts from heavy metal mines.

The Federal-Provincial Surface Water Quality Monitoring Program continues to continuously monitor Osoyoos Lake and the Fraser River Estuary using water quality monitoring buoys. This data is posted in near-real-time on the internet. Furthermore, data collected from the Federal-Provincial Surface Water Quality 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](#)<sup>7</sup> developed by the Canadian Council of Ministers of the Environment.

### **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;

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<sup>7</sup> [ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=68DE8F72-1](http://ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=68DE8F72-1).

- 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, Mines, and Natural Gas 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	2012/13 Forecast	2013/14 Target	2014/15 Target	2015/16 Target
Number of air emission standards incorporating current Best Achievable Technology practices	7	8	9	9

Data Source: Ministry of Environment

Note: Targets are cumulative.

#### **Discussion**

The Best Achievable Technology (BAT) 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.<sup>8</sup>

To ensure that continual progress is made to better regulate industrial waste discharges, the Ministry of Environment is committed to developing until 2015, at least one new air standard that incorporates BAT. The development of such standards is complex as it may involve modification of the industrial process and/or application of control technology to minimize releases to the environment, while ensuring that economic viability is maintained.

#### **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.

#### **Strategies**

Key strategies for this objective include:

<sup>8</sup> More information on industrial regulations and codes of practice is available at [env.gov.bc.ca/epd/industrial/regs/](http://env.gov.bc.ca/epd/industrial/regs/).





*Emergency response to an oil spill*

- ensuring the prevention, preparation, mitigation and response 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;
- 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 that information in support of science, policy development and shared stewardship;
- employing the [B.C. Species and Ecosystems Explorer](#)<sup>9</sup> 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 ecosystem;



- providing leadership in overall program coordination for species at risk, including preparing and implementing recovery plans, legal listing, and intergovernmental relations;
- collaborating with partners on strategies to address invasive species;
- 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;

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

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<sup>9</sup> [a100.gov.bc.ca/pub/eswp/](http://a100.gov.bc.ca/pub/eswp/)



- 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.

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

Performance Measure	2012/13 Projected	2013/14 Target	2014/15 Target	2015/16 Target
Changes in the conservation status of species	No change	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

BC has one of the most diverse assemblages of species of any Canadian province. 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 status rank assessments for a different subset of species and ecosystems annually and reports these at the end of each fiscal year. As such, assessments for the 2012/13 fiscal year will be complete and reported in the final quarterly reporting period.

Species status changes slowly and this measure may require time respond to environmental change or management actions. 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.

### 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](http://env.gov.bc.ca/cos/info/wildlife_human_interaction/UrbanUngulates.html)<sup>10</sup> 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

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<sup>10</sup> [env.gov.bc.ca/cos/info/wildlife\\_human\\_interaction/UrbanUngulates.html](http://env.gov.bc.ca/cos/info/wildlife_human_interaction/UrbanUngulates.html)

- providing open access to scientific data and information about the state of environment through websites such as [Environmental Reporting BC](#)<sup>11</sup> 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.

## **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>12</sup>

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<sup>11</sup> [env.gov.bc.ca/soe/](http://env.gov.bc.ca/soe/)

<sup>12</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)).

- 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](#);<sup>13</sup>
- expanding the role of Qualified and Approved Professional delivery and reliance, such as the [Contaminated Sites Approved Professional Society](#);<sup>14</sup>
- 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	2012/13 Actual	2013/14 Target	2014/15 Target	2015/16 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	68%	68%	79%	84%

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

In October 2009, the Canadian Council of Ministers of Environment endorsed the [Canada-wide Action Plan for Extended Producer Responsibility](#)<sup>15</sup>. 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](http://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.

<sup>13</sup> [env.gov.bc.ca/main/compliance-reporting/](http://env.gov.bc.ca/main/compliance-reporting/)

<sup>14</sup> [csapsociety.bc.ca](http://csapsociety.bc.ca)

<sup>15</sup> [ccme.ca/assets/pdf/epr\\_cap.pdf](http://ccme.ca/assets/pdf/epr_cap.pdf).

## **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:

- operating the hydrometric and air monitoring networks<sup>16</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,



*Atna River Falls, Morice Lake Provincial Park*

native species, ecosystems and the environment as a whole, while supporting economic opportunities.

#### **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 that will engage British Columbians in conservation and recreation activities

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<sup>16</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.

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;
- ensuring effective park management performance and value for money through the implementation of the Parks Recreation Integrated Service Model; 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	2012/13 Forecast	2013/14 Target	2014/15 Target	2015/16 Target
Number of recorded park visits	20.0 million	20.9 million	21.3 million	21.7 million
Park visitor satisfaction level	80%	Maintain or improve (from 80%) <sup>1</sup>	Maintain or improve (from 80%)	Maintain or improve (from 80%)

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. A number of respondents for summer 2012 will be available by the end of October, 2012 – the survey's closing date.

<sup>1</sup> Based 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. In 2009, The Canadian Parks Council published an economic impact report stating that every dollar invested in British Columbia's protected areas system generates \$8.42 in spin off economic activity.

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 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 maintenance and to help determine how capital funding should be allocated.

The Ministry has targeted an approximate 1.7 million 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 5 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.



*Shannon Falls Provincial Park*

# Ministry of Environment Resource Summary

Ministry of Environment	2012/13 Restated Estimates <sup>1</sup>	2013/14 Estimates <sup>2</sup>	2014/15 Plan	2015/16 Plan
<b>Operating Expenses (\$000)</b>				
Environmental Protection <sup>(3)</sup> .....	6,954	8,324	8,324	8,324
Environmental Sustainability .....	19,083	19,083	19,083	19,083
BC Parks .....	31,422	31,422	31,422	31,422
Conservation Officer Services .....	16,714	16,714	16,714	16,714
Climate Action <sup>(4)</sup> .....	3,523	3,271	3,271	3,271
Executive and Support Services <sup>(4)</sup> .....	21,790	21,132	21,136	21,138
Sub-Total .....	99,486	99,946	99,950	99,952
Environmental Assessment Office .....	8,754	8,754	8,754	8,754
Park Enhancement Fund <sup>(5)</sup> .....	500	1,500	1,500	1,500
Sustainable Environment Fund <sup>(3)</sup> .....	20,305	18,935	18,935	18,935
<b>Total .....</b>	<b>129,045</b>	<b>129,135</b>	<b>129,139</b>	<b>129,141</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>				
Executive and Support Services <sup>(6)</sup> .....	17,415	18,227	20,913	20,913
Park Enhancement Fund .....	400	400	400	400
<b>Total .....</b>	<b>17,815</b>	<b>18,627</b>	<b>21,313</b>	<b>21,313</b>

<sup>1</sup> For comparative purposes, amounts shown for the 2012/13 have been restated to be consistent with the presentation of the 2013/14 *Estimates*.

<sup>2</sup> Further information on program funding and vote recoveries is available in the [Estimates and Supplement to the Estimates](#).



<sup>3</sup> The \$1.37M increase in Environmental Protection is offset by an equivalent decrease in the Sustainable Environment Fund.

<sup>4</sup> Climate Action, and Executive and Support Services (\$0.993M) expenditure management savings target.

<sup>5</sup> The \$1M increase in the Park Enhancement Fund is more than offset by increased revenues.

<sup>6</sup> The \$0.472M 2013/14 increase in capital is comprised of a \$3.245M increase in vehicle budget, offset by decreases of (\$2.083M) in land and (\$0.35M) in specialized equipment.

# Environmental Assessment Office

## Purpose of the Office

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 Office's vision is to support vibrant communities, a healthy environment, and a prosperous economy. The Environmental Assessment Office ensures that proposed major projects meet provincial environmental, economic and social goals, and that the interests and concerns of B.C.'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 \$30 billion in potential capital investment.

## 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<sup>17</sup>. This regulation identifies thresholds for industrial, mining, energy, water management, waste disposal, food processing, transportation and tourist destination resort projects. Reviewable proposed projects 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, the Minister believes the project may have a significant adverse effect, and 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.

The Environmental Assessment Office leads project reviews with input from technical government experts, local government representatives, First Nations, and the public to identify and assess the potential for significant effects of proposed projects and potential mitigation



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

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<sup>17</sup> For example, if a proposed coal mine is projected to produce  $\geq 250,000$  tonnes of coal per year, it would be automatically reviewable.

measures. Consequently, projects that complete an environmental assessment are often designed and implemented much differently from how they are proposed at the beginning of the environmental assessment process.

The Environmental Assessment Office fulfills the Province's legal duty to consult with First Nations throughout the environmental assessment process. The Environmental Assessment Office consults, and where appropriate, 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 an 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 conditions of the certificate to avoid or mitigate adverse effects. In this way, a proponent is granted a 'conditional' environmental assessment certificate.

After a project is certified, the Environmental Assessment Office works with other government agencies to ensure that proponents comply with certificate conditions.

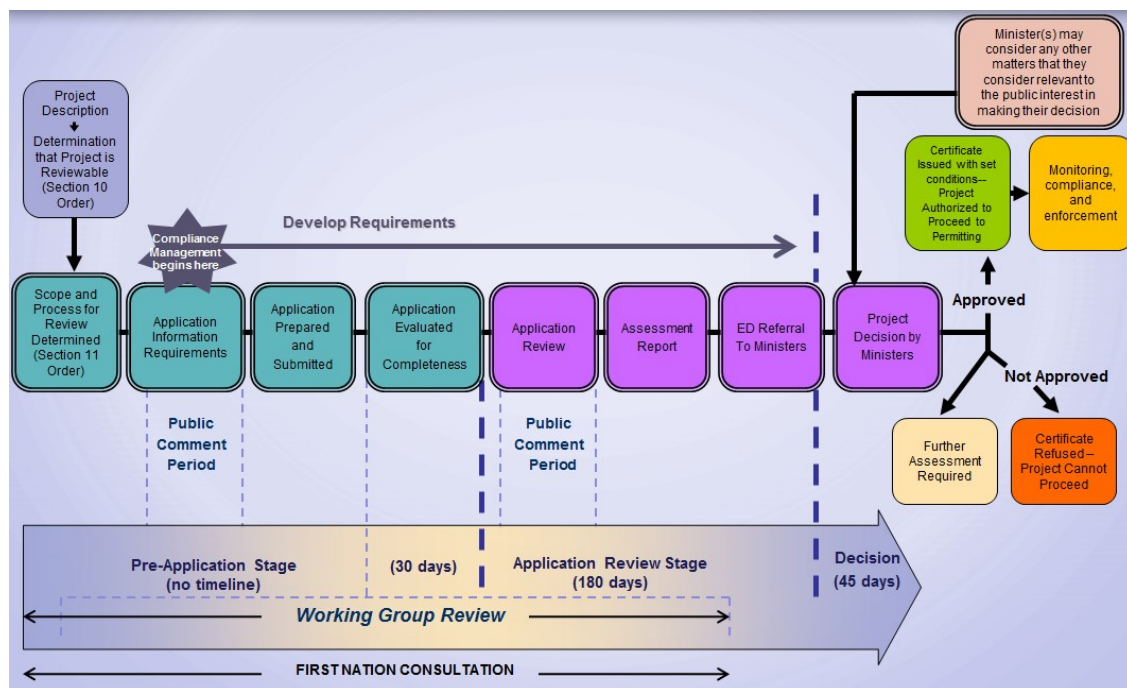


Figure 1: The environmental assessment process.

# 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 currently under review by the Environmental Assessment Office, approximately 51 percent are mining projects and 26 percent are power projects. The remainder of projects undergoing assessment are found in the oil and gas, destination resort, waste disposal, water and industrial sectors.

## Evolving Practice of Environmental Assessment

The practice of environmental assessment, including compliance and effectiveness management, is evolving as 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 such as federal and provincial Environment Assessment Administrators, International Association for Impact Assessment and other provinces to identify leading best practices used by other agencies.

The Environmental Assessment Office continually reviews its process to ensure effectiveness and efficiency improvements. A key focus at this time is to ensure clearer expectations of all participants in the environmental assessment process, and that B.C.'s environmental assessment process meets or exceeds federal substitution and equivalency requirements as described below.

## Federal-Provincial Coordination

Historically, approximately two-thirds of proposed projects in B.C. have required assessment under both provincial and federal legislation. The *Canadian Environmental Assessment Act* was amended by the federal government in July 2012 to include: new “start-to-finish” timelines; the introduction of new compliance functions; a requirement that the federal government issue a federal “decision statement” at the conclusion of each environmental assessment; and new tools for substitution and equivalency that support the goal of having one process for projects (one project, one environmental assessment) that require federal and provincial environmental assessments. The Environmental Assessment Office is working with the federal government on transition and implementation issues relating to the new Act.

## First Nations

The Environmental Assessment Office is committed to working constructively with First Nations to ensure that the Crown fulfills its duties of consultation and accommodation and is guided by the following principles which can be found in more detail in the [Fairness and Service Code](#):

- Respect
- Capacity

- Government to Government Dialogue
- Dealing with Differences

To improve and enhance efforts to engage effectively with First Nations, the Environmental Assessment Office has:

- refreshed First Nations consultation guidance to reflect the Provincial Interim Direction for Meeting Legal Obligations when Consulting First Nations;
- trained all staff on our consultation requirements and developing preliminary strength of claim assessments;
- committed to coordinating consultation with other agencies to ensure engagement with First Nations is as respectful as possible; and
- initiated the refresh of the Environmental Assessment Office's guidance to proponents for engaging effectively with First Nations.

The Environmental Assessment Office is changing the Service Plan measure respecting First Nations engagement from fiscal year 2012/13. The Environmental Assessment Office will no longer measure First Nations engagement in the process based on whether or not First Nations choose to engage in the environmental assessment process because the performance measure was not effective in measuring the Environmental Assessment Office's results in this area. Even though this measure is discontinuing, the Environmental Assessment Office will continue to provide qualitative information to describe the Environmental Assessment Office's activities to engage First Nations.



*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 potentially adverse effects of a proposed 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 environmental 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 conditional 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; 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 Forecast	2013/14 Target	2014/15 Target	2015/16 Target
Number of compliance inspections completed on certified projects	15 inspections*	17 inspections	19 inspections	21 inspections

\*Note: Increase to forecast for 2012/13 from target of 10 inspections for 2012/13 based on actual results achieved to date.

### Discussion

In July 2011, the Office of the Auditor General published a report<sup>18</sup> on the Environmental Assessment Office's oversight of certified projects and concluded that oversight was insufficient to ensure that potential adverse effects are avoided or mitigated. In the spring of 2011, the Environmental Assessment Office established a Policy and Quality Assurance Unit to lead the development of a comprehensive compliance management program. While the Auditor General's report focused on the post-certification oversight provided by the Environmental

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<sup>18</sup> <http://www.bcauditor.com/pubs/2011/report4/audit-bc-environmental-assessment-office-EAO>

Assessment Office, the addition of dedicated compliance and enforcement staff play an important role in supporting the development of certificate conditions during the application review process. Compliance staff within the Environmental Assessment Office work with other regulatory agencies to clarify inspection roles and responsibilities and ensure the project is constructed and operated according to the Environmental Assessment Certificate.

To that end, the Environmental Assessment Office conducts site inspections of certified projects to promote compliance and enforce legally binding environmental assessment certificate conditions. For 2013/14, the Environmental Assessment Office has increased the target number of site inspections to 17 from the baseline target of 10 (set in 2011/12) to reflect the growth and functionality of the compliance and enforcement program. Oversight of certified projects is provided through field based inspections completed by the Environmental Assessment Office compliance and enforcement staff and permitting agencies with the authority to enforce compliance under the *Environmental Assessment Act*. For example, the Environmental Assessment Office has established a partnership with the Compliance and Enforcement Branch of the Ministry of Forests, Lands and Natural Resource Operations to assist in conducting inspections of the environmental assessment certificate conditions placed on certified projects, and is ensuring effective coordination with other agencies who inspect on subsequent permit conditions. The results of inspections of environmental assessment certificate conditions undertaken by the Environmental Assessment Office and by partner agencies will continue to inform future targets as the program evolves.



*EA certificate inspection in May of 2012 of the Northwest Transmission Line project.*

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

Performance Measure	2012/13 Forecast	2013/14 Target	2014/15 Target	2015/16 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%	85%	90%

**Data Source:** Environmental Assessment Office

## Discussion

Upon successful completion of the environmental assessment process, projects are granted environmental assessment certificates. These certificates stipulate a number of conditions that projects must adhere to throughout the lifespan of the project (pre-construction, construction, operations, and decommissioning). Depending on the certificate, there may be a requirement for environmental assessment certificate holders to submit annual or periodic reports detailing compliance with each condition related to the current phase of their project.

Compliance reports are reviewed by staff from the Environmental Assessment Office to ensure the reports meet the requirements of the condition, and to determine whether a project inspection may be warranted. Reports also alert staff as to the current status of certified projects. The documents are then posted on the [electronic project information centre](#) on the Environmental Assessment Office's website to ensure transparency and accountability to the public.

This performance measure target is set at 80% to reflect that compliance reports may have issues requiring resolution prior to posting. In such cases, the review, investigation and resolution of non-compliance could exceed the six week time period. Self-monitoring and reporting by environmental assessment certificate holders is integral to the Environmental Assessment Office's compliance and enforcement strategy and supplements the proactive inspection and compliance promotion activities undertaken by the Environmental Assessment Office. This performance measure reflects the Environmental Assessment Office's commitments to review compliance reporting in a timely manner, while maintaining a high level of transparency by ensuring compliance reports are readily available to the public.

## 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 in 2001 to allow for more flexible and responsive procedures. One of the major strengths of B.C.'s environmental assessment legislation is its requirement that certain phases of project reviews be completed within specific timelines.

## Strategies

Key strategies for this objective include:

- ensuring that all relevant information is incorporated into the proponent's application for an environmental assessment certificate, thereby greatly reducing the need to suspend the review during the legislated 180-day application review period;
- identifying policy, practice and legislative options to enhance the effectiveness and efficiency of the environmental assessment review process; and
- working with other provincial agencies to improve service to clients and the public, including participating in the "Integrated Decision Making" initiative in the Natural Resource Sector.



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

Performance Measure	2012/13 Baseline	2012/13 Forecast <sup>2</sup>	2013/14 Target	2014/15 Target	2015/16 Target
Percentage of application reviews in the B.C. environmental process completed within 180-days:					
B.C. process only	100%	100%	100%	100%	100%
Joint B.C./Canada process	100%	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 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 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**

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 the 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.

# Environmental Assessment Office

## Resource Summary

Core Business Area	2012/13 Restated Estimates <sup>1</sup>	2013/14 Estimates <sup>2</sup>	2014/15 Plan	2015/16 Plan
Operating Expenses (\$000)				
Environmental Assessment Office .....	8,754	8,754	8,754	8,754
<b>Total .....</b>	<b>8,754</b>	<b>8,754</b>	<b>8,754</b>	<b>8,754</b>

<sup>1</sup> For comparative purposes, amounts shown for the 2012/13 have been restated to be consistent with the presentation of the 2013/14 *Estimates*.

<sup>2</sup> Further information on program funding and vote recoveries is available in the [Estimates and Supplement to the Estimates](#)

# Appendix

## 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: 250 847-7728

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

### **Water Management Projects and South West Coast Sector**

(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)

### **First Nations**

Trish Balcaen – a/Executive Project Director  
250 387-1624  
[Trish.Balcaen@gov.bc.ca](mailto:Trish.Balcaen@gov.bc.ca)

### **Coal Projects and Kootenays Sector**

(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 Management, Destination Resorts and Transportation Projects and Northwest Sector**

Chris Hamilton – Executive Project Director  
250 387-5606  
[Chris.Hamilton@gov.bc.ca](mailto:Chris.Hamilton@gov.bc.ca)

### **Power and Industrial Projects and Northeast Sector**

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 Sector**

Shelley Murphy – Executive Project Director

250 387-2563

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## **Oil and Gas Projects and Omineca Sector**

David “Archie” Riddell – Executive Project Director

250 387-1409

[David.Riddell@gov.bc.ca](mailto:David.Riddell@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, and Intergovernmental Relations**

Michelle Carr – Executive Director, Policy and Quality Assurance

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## **Environmental Assessment Operations**

John Mazure - Executive Lead, Environmental Assessments

250 387-9408

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## **Associate Deputy Minister’s Office**

Doug Caul – Associate Deputy Minister

250 356-7475

Ministry of  
Environment and the Environmental  
Assessment Office

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2011/12  
Annual Service Plan Report

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Ministry of Environment and the Environmental Assessment Office

For more information on how to contact the British Columbia  
Ministry of Environment,  
see Ministry Contact Information on page 51.

**Ministry of Environment**  
PO BOX 9339  
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or visit our website at  
***[www.gov.bc.ca/env/](http://www.gov.bc.ca/env/)***

Published by the Ministry of Environment

## Message from the Minister and Accountability Statement



I am pleased to present the many accomplishments of the Ministry of Environment and the Environmental Assessment Office over the past year in the *2011/12 Annual Service Plan Report*.

The Ministry of Environment is a leader in environmental management and a contributor to British Columbia's economic and social sustainability. We continue to support tourism and conservation through BC Parks and demonstrate leadership in water stewardship and action on climate change.

We are committed to air quality and the protection of species at risk, and we've shown that British Columbia can balance support for economic growth while protecting the environment.

The Green Economy is fundamental to our provincial well-being, both economically and environmentally. In March, we released "BC's Green Economy: Growing Green Jobs," which highlights the clean initiatives that are part of the [BC Jobs Plan](#)<sup>1</sup> and demonstrates the unique advantages that have made British Columbia a global leader in sustainable economic development. By investing in clean energy technologies such as liquefied natural gas and by launching innovative programs like the Clean Energy Vehicle Program, we're helping to grow British Columbia's clean tech sector and create jobs while preserving and enhancing our environment.

2011 marked the 100 year anniversary of BC Parks. Premier Clark and I officially launched the centennial celebrations at Mount Seymour Provincial Park by announcing free parking in BC Parks and the Community Legacy Program. Over 250 events took place during the centennial celebrations in every region of the province. We will continue to promote BC Parks by enhancing volunteer opportunities and experiences in our parks. Through these activities and conservation efforts, we plan to maximize visitation to our parks, as well as enhance the tourism and job creation spinoffs that are so vital to local communities across the province.

Last winter we invited public review and comment on our proposed new Water Sustainability Act. The proposed Act will respond to pressures from population growth as well as the effects of climate change on water resources. This will help to keep our environment, economy and communities strong.

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<sup>1</sup> [bcjobsplan.ca](http://bcjobsplan.ca)

## Ministry of Environment and the Environmental Assessment Office

British Columbia's public sector officially became carbon neutral last year, a first for any province or state in North America. The commitment to carbon neutrality applies to all schools, post-secondary institutions, hospitals, Crown corporations and government offices. The initiative focuses on occupant behaviour change, energy efficiency and sustainability in over 7500 buildings and also stimulates growth in the green technology sector. This is a key part of our commitment to reduce greenhouse gas emissions by 2020. We will also continue to mitigate and adapt to climate change by building on our commitment in our [Climate Action Plan](#).<sup>2</sup>

British Columbia's air quality remains a priority for the ministry. The Blue Sky Western Canada Forest System was expanded to include smoke forecasts from all Western provinces, Yukon, Northwest Territories, Ontario and the U.S. border states. Blue Sky is a valuable source of information for health authorities. We also continue to provide financial support to expand the successful woodstove exchange program. New high-efficiency woodstoves require less fuel and are proven to reduce emissions by up to 70 per cent compared to older woodstoves. Continued consumer adoption of this program will go a long way to protecting the overall health of British Columbia's airsheds.

Through the Conservation Officer Service, we are helping communities reduce human bear conflicts through education programs such as Bear Smart - a program developed in partnership with the BC Conservation Foundation, the Get Bear Smart Society and the Union of BC Municipalities. Communities can become officially designated „Bear Smart“ by properly managing wildlife attractants. Last year the Village of Lions Bay and the Resort Municipality of Whistler joined the City of Kamloops and the District of Squamish as Bear Smart communities.

B.C. is a leader in product stewardship, with more stewardship programs than any other jurisdiction in North America. In 2011, Packaging and Printed Paper was added to B.C.'s Recycling Regulation requiring producers to finance and manage the recycling of these products as of May 2014. These stewardship programs not only protect the environment by using resources and energy more efficiently, they also reduce overall costs.

The ministry demonstrated its commitment to an open government and its leadership in supporting environmental science by releasing datasets for public use. By March 31, 2012, the ministry had released over twenty new datasets through Data BC, on the state of environment, compliance and enforcement, and BC Parks. We also made environmental protection authorization datasets available, providing citizen access to data on the permitting of industrial and municipal facilities that discharge waste into the environment. This is the first time the government has made this type of data or information available to the public.

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<sup>2</sup> [livesmartbc.ca/attachments/climateaction\\_plan\\_web.pdf](http://livesmartbc.ca/attachments/climateaction_plan_web.pdf)

## Ministry of Environment and the Environmental Assessment Office

The Environmental Assessment Office leads a neutral environmental assessment process that is inclusive, transparent and contributes to British Columbia's economic, social, and environmental sustainability. Proposed projects are assessed for potential environmental, economic, social, heritage and health effects that may occur during the lifecycle of these projects. In 2011/12, we managed the environmental assessments of 74 proposed projects representing a total potential capital investment of \$35 billion. We also completed five Environmental Assessment Certificate amendments, two Environmental Assessment Certificate extensions, and three Environmental Assessment Certificate exemptions.

The Environmental Assessment Office also led provincial efforts to provide coordinated input into the statutory review of the *Canadian Environmental Assessment Act*, and explored enhanced methods of cooperation with the federal government on joint project assessments. Enhancements were made to our compliance management program, and we continued to consult with First Nations while adapting to evolving case law. We also actively supported and contributed to the „one process“ streamlining and integration initiatives across natural resource sector ministries.

More details of these and other accomplishments made over the past year are presented in this report. I would like to thank staff for their contributions and dedication to environmental protection.

The *Ministry of Environment and the Environmental Assessment Office 2011/12 Annual Service Plan Report* compares the actual results to the expected results identified in the Ministry's *Revised 2011/12 – 2013/14 Service Plan*. I am accountable for those results as reported.



Honourable Terry Lake  
Minister of Environment

June 30, 2012

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# Highlights of the Year

## **Extended Producer Responsibility Programs**

British Columbia has more product stewardship programs than any other jurisdiction in North America. In 2011, new stewardship programs were developed for small appliances, lead-acid batteries and smoke detectors. Additionally, Packaging and Printed Paper was added as a category to the B.C. Recycling Regulation which will require producers of these materials to finance and manage the recycling of packaging and printed paper as of May 2014. These new programs provide British Columbians with more options to recycle and more opportunities to share in the stewardship of British Columbia's air, land, water, and climate.

## **Climate Action Offset Cooperative**

In December 2011, the Ministry of Environment announced \$2 million in funding for a newly formed Carbon Offset Aggregation Cooperative (COAC). The Prince George-based cooperative is a first-of-its-kind program that pays heavy equipment operators and trucking companies to lower their carbon emissions. This essential seed money helps COAC provide a low-interest loan to members to retrofit heavy duty diesel trucks and equipment to increase fuel efficiency, save money and reduce carbon emissions. To date, 86 vehicles or pieces of equipment have undergone the necessary installations and a training program has provided owners and operators with techniques that will further increase vehicle efficiency. Greenhouse gas reduction attributed to the first 27 members is expected to be 16,200 tonnes (based on reducing fuel consumption by 10%), with this number increasing to 40,500 tonnes over the next year as the membership increases and more vehicles enter the program. COAC is expected to accelerate emission reductions and provide significant fuel savings for owners and operators.

## **Clean Energy Vehicles**

The Clean Energy Vehicle point-of-sale incentive program has already motivated purchases of new clean energy vehicles. Short-term incentives like those offered through the program foster the development of clean energy vehicle sector economies of scale, reducing prices and encouraging greater clean energy vehicle sales.

## **Large Facility Greenhouse Gas Emissions Reporting**

A One Window Reporting System is used for reporting greenhouse gas emissions from large facilities to meet both federal and provincial reporting requirements. This One Window System is operated jointly by Environment Canada and the ministry and allows all B.C. companies with obligations to report their emissions to both jurisdictions to report only once. Facilities in B.C. with greenhouse gas emissions over 10,000 tonnes reported for the second year on 2011 emissions using this approach. There are approximately 200 such facilities in B.C. For those facilities with joint reporting obligations, the One Window System allows them to report once, quickly, efficiently and accurately.

## **Bear Smart**

The Resort Municipality of Whistler and the Village of Lions Bay were awarded Bear Smart status in 2011 for reducing human bear conflicts in B.C. This is a significant achievement with only four B.C. communities achieving Bear Smart status. Through its partnership with a number of organizations including the BC Conservation Foundation and the Get Bear Smart Society, the Conservation Officer Service is committed to increasing the number of Bear Smart communities in B.C.

## **Wildlife Attractant Management**

In January 2012, the Ministry of Environment introduced the *Wildlife Attractant Amendment Act* to help address the management of wildlife attractants such as garbage and food. This amendment helps to preserve public safety by giving Conservation Officers the authority to take enforcement action, issue tickets, or pursue court prosecution to address individuals who repeatedly fail to adequately manage food attractants.

## **Species At Risk Task Force**

Due to the importance of addressing species at risk and the complexity of the issue, we invited comments on a report released last summer by the British Columbia's Species at Risk Task Force. Recommendations included addressing legislation, environmental management, and further engagement of the public and First Nations. We continue to work on the development of an implementation plan to address species at risk in British Columbia.

## **Community Environmental Justice Forums**

In 2010, the Conservation Officer Service developed and implemented Community Environmental Justice Forums as an alternative method to court prosecution. The Community Environmental Justice Forum addresses a company's non-compliance and is designed to promote restitution with the affected community. The Conservation Officer Service recently won a regional Premier's Award for Innovation and Excellence in the Partnership category for their work with the Trail Teck Metals case through the use of a Community Environmental Justice Forum. What could have taken years to resolve through the court system took only 33 days to complete. Trail Teck Metals took responsibility for their non-compliance and gained increased respect from the community.

## **Community Legacy Program**

As part of BC Parks' centenary celebrations, 27 registered not-for-profit societies, charities, First Nations Governments, Bands or Tribal Councils, local governments, schools, School Districts and post secondary institutions were awarded up to \$20,000 each to enhance British Columbia's parks in 2011. Approved projects included educational facilities and signs, trail enhancements, infrastructure to support recreational activities, conservation and restoration projects, and upgrades that make parks more accessible. BC Parks is looking forward to seeing the completion of a variety of exciting community projects taking place in parks and protected areas

across the province. A list of the projects that were selected as successful recipients of the Community Legacy Program funds can be seen [here](#).<sup>3</sup>

### ***Environmental Management Act* amendments**

Recent amendments to the *Environmental Management Act* give the Minister of Environment and the Lieutenant Governor in Council the authority to cancel permits in order to make way for new regulations. Since 2004, the ministry has been shifting from a permit-based regulatory model to regulations for selected industry sectors. This approach standardizes requirements and provides greater certainty to industry, and these amendments provide added authority to improve environmental protection services.

### **Natural Resource Decision Making**

The ministry received 1.75 million dollars from the Province's Climate Action and Clean Energy Fund to reduce backlogs and turnaround times for resource decision making. This funding enabled the ministry to complete 16 projects that will help determine how to proactively avoid or mitigate adverse impacts associated with land and resource activities. As part of this work and in conjunction with the BC Oil and Gas Commission, GeoScience BC and industry, the ministry continued to enhance and improve aquifer mapping, install and monitor observation wells and develop guidelines for groundwater use. These projects ensure stakeholders have access to timely and high quality information about their groundwater resources.

### **BC's Green Economy: Growing Green Jobs**

In March, Premier Christy Clark released "B.C.'s Green Economy: Growing Green Jobs," a report prepared by the ministry highlighting the clean initiatives that are part of the BC Jobs Plan and demonstrating the unique advantages that have made British Columbia a global leader in sustainable economic development. B.C.'s clean technology industry represents world-leading innovations and solutions for industries around the globe and for British Columbia that means long-term, high-paying jobs in a sector that continues to grow year over year. The report was prepared in collaboration with most of the province's largest corporations and significant input from the technology sector. Crossing all major economic sectors, industries and geography, the report demonstrates the province's success at delivering environmental outcomes and economic development through clean innovations and green practices in British Columbia.

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<sup>3</sup> [bccf.com/sites/default/files/CLP Project List.pdf](http://bccf.com/sites/default/files/CLP%20Project%20List.pdf)

# Purpose of Ministry

## **The Ministry supports government goals and initiatives by:**

- supporting government's Families First and Jobs and the Economy priorities by providing leadership in ensuring our natural legacy for future generations while supporting positive economic outcomes for B.C.;
- being a leader 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 and supporting the green economy 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.<sup>4</sup> 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 of BC, BC Conservation Foundation, Bear Aware, the BC Lung Association, BC Hydro, FORREX, Ducks Unlimited, Stewardship Centre for BC, as well as 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.

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<sup>4</sup> 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, including the ongoing management of 18 pieces of legislation;
- 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 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.



*A rainbow arcs skyward at Garibaldi Provincial Park*

# Strategic Context

## Economy

British Columbia's real GDP increased by 2.9 per cent in 2011 (according to preliminary GDP by industry data from Statistics Canada), following growth of 3.0 per cent in 2010. Overall in 2011, most indicators of British Columbia's economic performance showed improvement compared to the previous year. Gains in the domestic economy were observed in employment and consumer spending, while external gains were made in exports and shipments of manufactured goods. However, several risks to British Columbia's economy remain, including the European sovereign debt crisis, ongoing weakness in the US economy, exchange rate volatility, and slower than anticipated Asian demand for B.C. products.

## Population Growth

British Columbia's population 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)<sup>5</sup> 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 B.C. and globally. British Columbia 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.

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<sup>5</sup> A scientific intergovernmental panel that assesses scientific, technical and socio-economic information relevant to the understanding of climate change.

# Report on Performance

## Performance Results Summary Table

Goal 1: Effective action on climate change For greater detail see pages 16 to 21		2011/12 Target	2011/12 Actual
1.1 Reduced provincial greenhouse gas emissions Annual level of greenhouse gas emissions in British Columbia relative to 2007 levels	6% reduction by 2012		2011 DATA NOT AVAILABLE 4.5% REDUCTION THROUGH 2010
1.2 Preparing for unavoidable climate change and its impacts Number of provincial ministries that include a strategy on climate change adaptation in their Service Plans	8		8 ACHIEVED
Goal 2: Clean and safe water, land and air For greater detail see pages 21 to 26		2011/12 Target	2011/12 Actual
2.1 Enhanced protection and stewardship of our water resources Percentage of water bodies monitored under the Canada – B.C. Water Quality Monitoring Agreement with stable or improving water quality trends	96% or greater		96% ACHIEVED
2.3 Enhanced protection and stewardship of our air Number of air emission standards incorporating current Best Achievable Technology practices	6		6 ACHIEVED
Goal 3: Healthy and diverse native species and ecosystems For greater detail see pages 26 to 29		2011/12 Target (vascular plants)	2011/12 Actual (vascular plants)
3.2 Conserved, maintained and enhanced native species and ecosystems Changes in the status of five groups of species over five years	No Decline		Improved: 0 Declined: 0 Unchanged: 125 Awaiting Assignment: 3100 ACHIEVED
Goal 4: British Columbians share responsibility for the environment For greater detail see pages 30 to 33		2011/12 Target	2011/12 Actual
4.3 Industry and client groups implement best environmental management practices Number of product categories with industry-led product stewardship programs	11		11 ACHIEVED



## Ministry of Environment and the Environmental Assessment Office

Goal 5: Sustainable use of British Columbia's environmental resources For greater detail see pages 33 to 35		2011/12 Target	2011/12 Actual
<b>5.2 Optimize outdoor and economic opportunities from British Columbia's parks, fish and wildlife</b>			
Number of recorded park visits		20.1 million	DATA NOT AVAILABLE <sup>6</sup>
Visitor satisfaction survey		Maintain or improve (from 80%)	82% <b>ACHIEVED</b>

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<sup>6</sup> 2011/12 park visitor records will be made available once we have completed the data transfer to the new attendance system.

# Goals, Objectives, Strategies and Performance Results

The following sections present the Ministry's goals and provide an overview of their supporting objectives, strategies and performance measures. The performance reporting is based on the Ministry's [Revised 2011/12-2013/14 Service Plan](#).<sup>7</sup> Each performance measure has a discussion of the results, and the Ministry's response if there is significant variation between the target and the actual result.

## 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.

### 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

Key strategies for this objective include:

- 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;

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<sup>7</sup> [www.bcbudget.gov.bc.ca/2011/sp/pdf/ministry/env.pdf](http://www.bcbudget.gov.bc.ca/2011/sp/pdf/ministry/env.pdf)

## Ministry of Environment and the Environmental Assessment Office

- working with partners to support the implementation of the BC Jobs Plan, including initiatives such as 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;
- supporting the public sector to measure and reduce energy use, costs and emissions under the carbon neutral commitment through capital programs and behaviour change;
- 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.

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

Performance Measure	2007 <sup>2</sup> Baseline	2009 Actual	2010 Actual	2011 Target	2011 Actual
Annual level of greenhouse gas emissions <sup>1</sup> in British Columbia relative to 2007 levels	64.9 megatonnes	61.5 megatonnes	62.0 megatonnes	6% reduction by 2012 (61.0 megatonnes)	DATA NOT AVAILABLE <sup>3</sup>

**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> Actual data for 2011 will be available in April 2013.

### Discussion of Results

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

The data for the performance measure are taken from Environment Canada's *National Inventory Report*, which is prepared to meet Canada's obligations under the United Nations Framework Convention on Climate Change. The report is published annually with an approximate 16-month lag relative to the reported year. British Columbia publishes a Provincial Inventory Report with B.C. data only. The report has B.C. data from the Environment Canada inventory, as well as provincial greenhouse gas emissions from afforestation and deforestation, and by-product greenhouse gas emissions from certain gases from the industrial and electricity sectors. These additional emissions are reported by Environment Canada in national totals only.

Greenhouse gas emissions increased from 61.5 megatonnes in 2009 to 62.0 megatonnes in 2010, a change of 0.8 per cent. From 2009 to 2010, emissions increased due to increased fossil fuel production and refining energy use (related to increased natural gas production), increased coal mine fugitive emissions, and increased emissions from heavy duty diesel and off-road diesel vehicles. Decreased emissions were seen in residential, commercial and institutional buildings, light duty gasoline vehicles and trucks, and aluminum production. The severe economic recession that occurred in 2009 strongly affected economic activity across most sectors in B.C. and reduced some industrial emissions. Climate change policies are expected to have a strengthening role in reducing energy use and greenhouse gas emissions going forward.

British Columbia's 2010 greenhouse gas emissions were 5.7 per cent lower compared to 2000, and 11.7 per cent higher compared to 1990. The increase in greenhouse gas emissions since 1990 is largely due to population growth, but some of it can also be attributed to increased activity in mining, oil and gas extraction and transportation. The *British Columbia Greenhouse Gas Inventory Report 2008* shows that most of this increase occurred between 1990 and 2001. The greenhouse gas per capita (tonnes/person) has decreased from 14.9 in 2007 to 13.4 in 2010.



*Shannon Falls Provincial Park*

Both the *British Columbia Greenhouse Gas Inventory Report 2010* 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 2012.

### **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.

### **Strategies**

Key strategies for this objective include:

- leading the implementation of government’s Climate Change Adaptation Strategy<sup>8</sup> 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;
  - 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;
  - 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.

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<sup>8</sup> For more information on the Climate Change Adaptation Strategy, please go to [livesmartbc.ca/attachments/Adaptation\\_Strategy.pdf](http://livesmartbc.ca/attachments/Adaptation_Strategy.pdf).

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

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Number of provincial ministries that include a strategy on climate change adaptation in their Service Plans	4	6	8	8 <sup>1</sup> ACHIEVED

Data Source: Ministry of Environment

<sup>1</sup> 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 of Results**

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

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

A core deliverable under the second theme above is that ministries will consider the impacts of a variable and changing climate by incorporating adaptation strategies into their service plans and business planning, where relevant. This performance measure was introduced in the *2010/11 – 2012/13 Service Plan*. It is intended to support the government's increased focus on identifying and addressing key vulnerabilities related to climate variability and extreme weather. In 2011/12 eight ministries described initiatives in their service plans that would contribute to this goal: Agriculture; Community, Sport and Cultural Development; Education; Energy and Mines and Minister Responsible for Housing; Environment; Forests, Lands and Natural Resource Operations; Public Safety and Solicitor General; and Transportation and Infrastructure. The remaining ministries are committed to considering the impacts of climate variability and change in their planning and operations, without outlining any specific measures.

In January 2012, the Climate Action Secretariat commissioned a web survey from BC Stats of nearly 3,000 B.C. Public Service employees from all 19 ministries to establish a baseline of organizational awareness and preparedness in relation to climate variability and extreme weather events. The results of this survey are being used as a benchmark to help evaluate progress on climate adaptation within the provincial government as well as to inform future programming. The survey showed that the majority of employees felt that climate change impacts are a threat to B.C. and the work of the B.C. Public Service and that preparing for those impacts is important. Awareness of the relevance of climate change to specific business areas and integration of



climate change into government work remains uneven; however many natural resource ministries demonstrated a higher awareness of the relevance of climate change to their business area and have begun assessing or integrating climate change considerations into their work.

For more information on the Climate Change Adaptation Strategy please go to [www.livesmartbc.ca/attachments/Adaptation\\_Strategy.pdf](http://www.livesmartbc.ca/attachments/Adaptation_Strategy.pdf).

## 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](http://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 withdrawals;
- 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,



*Atna River Falls, Morice Lake Provincial Park*

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- 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 assess 53 sites and provide new on-line 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;<sup>9</sup>
- 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;<sup>10</sup> and
- 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	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Percentage of water bodies monitored under the Canada – B.C. Water Quality Monitoring Agreement with stable or improving water quality trends	96%	96%	96% or greater	96% ACHIEVED

Data Source: Ministry of Environment

**Discussion of Results**

Under the Canada – B.C. Water Quality Monitoring Agreement, 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 37 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

<sup>9</sup> 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.

<sup>10</sup> For more information on the Water Charter, see [councilofthefederation.ca/pdfs/Water\\_Charter\\_Aug\\_4\\_2010.pdf](http://councilofthefederation.ca/pdfs/Water_Charter_Aug_4_2010.pdf).



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dissolved oxygen, the Ministry is able to identify trends in overall water quality. The target was once again achieved in 2011/12.

The Federal-Provincial Surface Water Monitoring Group assessed 11 stations in the Fraser River Basin for status and trends reporting. These results are being compiled in a report on the Fraser River Basin as an update to a report released in 2000. This report is expected to be drafted and finalised by the end of fiscal year 2012/2013. Additionally, the Federal-Provincial Surface Water Monitoring Group will be assessing stations in the Columbia River. The results from these assessments will be included in a report to be drafted in 2013.

The Federal-Provincial Surface Water Monitoring Group is working with regional offices to establish new trend stations in the Murray and Pettitot rivers for monitoring coal mining and gas extraction (hydraulic fracturing) activities, respectively. As these new stations are located in northeast B.C., they increase the geographic coverage of the network and allow the Province to monitor for cumulative impacts from these activities.

Data collected from sites under the Canada – B.C. Water Quality Monitoring Agreement are used for a variety of reports, including the annual Canadian Environmental Sustainability Indicators Water Quality Index at [ec.gc.ca/indicateurs-indicators](http://ec.gc.ca/indicateurs-indicators).

### **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>11</sup>
- 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

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<sup>11</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)). See also Objective 4.3.

- 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**

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;
- maintaining coverage of the air quality monitoring network to ensure that it meets or exceeds National Air Pollution Surveillance standards;<sup>12</sup>
- 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.

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<sup>12</sup> The standards are available at [ec.gc.ca/rmspa-naps/](http://ec.gc.ca/rmspa-naps/).

#### Performance Measure 4: Clean air standards for industry

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Number of air emission standards incorporating current Best Achievable Technology practices	4	5	6	6 ACHIEVED

Data Source: Ministry of Environment

Note: Target figures are cumulative.

#### Discussion of Results

The government works with industry to ensure that business practices support British Columbians' environmental and health priorities, while ensuring economic sustainability. The Best Achievable Technology<sup>13</sup> 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 5 standards developed in past years have been for the slaughter and poultry processing industries;<sup>14</sup> biomass-fired electrical power generation;<sup>15</sup> wood-burning boilers used in agricultural operations;<sup>16</sup> pellet plant manufacturing operations;<sup>17</sup> and waste to energy facilities<sup>18</sup>.

In 2011, the Wood Residue Burner and Incinerator Regulation underwent a substantive review. By December 31, 2016 all remaining beehive burners within the Province of British Columbia will be required to shut down, representing the 6<sup>th</sup> and most recent Best Achievable Technology practice. The closing of beehive burners is anticipated to lead to improved air quality for various communities and to provide opportunities for value added end uses of wood fibre.

<sup>13</sup> The Factsheet Air Emissions for Best Achievable Technology can be found at [env.gov.bc.ca/epd/industrial/factsheets/pdf/bat.pdf](http://env.gov.bc.ca/epd/industrial/factsheets/pdf/bat.pdf).

<sup>14</sup> The code of practice for the slaughter and poultry processing industries is available at [env.gov.bc.ca/epd/industrial/regs/codes/slaughter/index.htm](http://env.gov.bc.ca/epd/industrial/regs/codes/slaughter/index.htm).

<sup>15</sup> The Factsheet Air Emissions for Biomass-Fired Electrical Power Generation can be found at [env.gov.bc.ca/epd/industrial/factsheets/pdf/biomass-fired-generation.pdf](http://env.gov.bc.ca/epd/industrial/factsheets/pdf/biomass-fired-generation.pdf).

<sup>16</sup> More information on the Agricultural Waste Control Regulation (Part 6–Agricultural Emissions) is available at [bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/10\\_131\\_92](http://bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_131_92).

<sup>17</sup> The Factsheet Air Emissions for Wood Pellet Manufacturing Facilities can be found at [env.gov.bc.ca/epd/industrial/factsheets/pdf/wood-pellet.pdf](http://env.gov.bc.ca/epd/industrial/factsheets/pdf/wood-pellet.pdf).

<sup>18</sup> The Factsheet Air Emissions for Combustion of Municipal Solid Waste can be found at [env.gov.bc.ca/epd/industrial/factsheets/pdf/combustion-msw.pdf](http://env.gov.bc.ca/epd/industrial/factsheets/pdf/combustion-msw.pdf).

#### **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**

Key strategies for this objective include:

- 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.

### **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 that information in support of science, policy development and shared stewardship;
- employing the B.C. Species and Ecosystems Explorer ([al00.gov.bc.ca/pub/eswp/](http://al00.gov.bc.ca/pub/eswp/)) and the Conservation Framework ([env.gov.bc.ca/conservationframework/](http://env.gov.bc.ca/conservationframework/)) 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

Key strategies for this objective include:

- setting priorities for species and ecosystem recovery and management action through B.C.'s Conservation Framework ([env.gov.bc.ca/conservationframework/](http://env.gov.bc.ca/conservationframework/));
- continuing to work with and expand partnerships, including those with First Nations, to identify, protect and



*A red fox (Vulpes vulpes) looks on*

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	2009/10 Actual (breeding birds)	2010/11 Actual (mammals)	2011/12 Target (vascular plants)	2011/12 Actual (vascular plants)
Changes in the status of five groups of species over five years	Improved: 8 Declined: 32 Unchanged: 182	Improved: 4 Declined: 2 Unchanged: 57	No Decline	Improved: 0 Declined: 0 Unchanged: 125 <b>ACHIEVED</b>

Data Source: Ministry of Environment

#### **Discussion of Results**

Changes in the status of native species of plants and animals in British Columbia is an important indicator of the Ministry's efforts to 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.<sup>19</sup> Every species or subspecies in the province is given a conservation status rank, which is a measure of its risk of becoming extinct in British Columbia, using science-based criteria and factors such as rarity, trends in populations or habitat, and threats.

<sup>19</sup> B.C. Conservation Data Centre Home is at [env.gov.bc.ca/cdc/index.html](http://env.gov.bc.ca/cdc/index.html).

Status ranks for all B.C. species are available on B.C. Species and Ecosystems Explorer.<sup>20</sup> This performance measure has previously reported on breeding birds and mammals: for 2010/11, and for 2011/12, the status of vascular plants is reported. Vascular plants are essentially trees, shrubs, herbs, grasses, other monocots (grasslike plants, lilies, orchids etc.), ferns and fern-like plants.

In 2011/12, the status of 125 vascular plants was reviewed, and none of these experienced a genuine change in status. This is only a sample of the 3000+ vascular plants that occur in B.C., but the review focused on those species where new information had become available or status changes were expected. In a group of species this large, a certain amount of change is expected to go undetected, especially because ecosystem modification continues to be a major pressure on vascular plant diversity in B.C.

Although there were no genuine changes in status, a number of plants (not shown) were assessed at different statuses due to progress in acquiring new information about where they occur, in what numbers, and the risk at those locations. Although these types of changes represent progress, they are not genuine changes in populations and thus are not reflected in this indicator.

### **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;
- 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 National Marine Conservation Area;
- 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.

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<sup>20</sup> BC Species and Ecosystems Explorer is at [env.gov.bc.ca/atrisk/toolintro.html](http://env.gov.bc.ca/atrisk/toolintro.html).



## **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 the responsibility for protecting the environment, human health, and public safety through initiatives such as the [Parks 100 Celebration](#),<sup>21</sup> Community Stewardship Initiatives, and the Bear Smart and [Urban Ungulate](#)<sup>22</sup> 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.<sup>23</sup>

### **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.

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<sup>21</sup> [env.gov.bc.ca/bcparks/BCParks100/](http://env.gov.bc.ca/bcparks/BCParks100/)

<sup>22</sup> [env.gov.bc.ca/cos/info/wildlife\\_human\\_interaction/UrbanUngulates.html](http://env.gov.bc.ca/cos/info/wildlife_human_interaction/UrbanUngulates.html)

<sup>23</sup> 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.



## 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 [LiveSmartBC.ca](http://LiveSmartBC.ca) Twitter feed ([@LiveSmartBCca](https://twitter.com/LiveSmartBCca)), to engage British Columbians on current environmental issues;
- using online resources to foster collaboration on climate action among stakeholders; and
- promoting shared water stewardship through the *Living Water Smart* blog ([LivingWaterSmart.ca](http://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

Key strategies for this objective include:

- continuing to work with industry to develop, implement and continuously improve industry-led product stewardship programs;<sup>24</sup>
- 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;<sup>25</sup>

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<sup>24</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)).

<sup>25</sup> See [env.gov.bc.ca/main/compliance-reporting/](http://env.gov.bc.ca/main/compliance-reporting/) for the *Quarterly Environmental Compliance and Enforcement Summaries*.

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- continuing to explore opportunities to reduce regulatory burden<sup>26</sup> 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: Industry-led stewardship programs

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target <sup>2</sup>	2011/12 Actual
Number of product categories <sup>1</sup> with industry-led product stewardship programs	10	11	11	11 ACHIEVED

Data Source: Ministry of Environment

<sup>1</sup> Product categories can include a large number of different products. For example, the electronic and electrical product category includes computers, small appliances, power tools and cell phones.

<sup>2</sup> Target figures are cumulative. The target is two new categories every three years.

### Discussion of Results

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

Product categories can include a large number of products. For example, the electronic and electrical product category includes an array of products from cell phones to power tools. New programs within the electronic and electrical product category were introduced by industry for small appliances and smoke detectors. New industry-led programs for lead acid batteries were also introduced. The public now has more options to recycle these products with no charge for drop off.

In 2011/2012 the Packaging and Printed Paper Product category was also added to the Recycling Regulation. This regulatory amendment requires a stewardship plan to be submitted to the Ministry by November 2012 and a program to be implemented by May 2014.

This performance measure was updated in the Ministry's 2012/13-2014/15 to better reflect the ministry's performance on meeting its goals for the Canada-Wide Action Plan for Extended Producer Responsibility.<sup>27</sup>

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<sup>26</sup> 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.

<sup>27</sup> The plan is available at [ccme.ca/assets/pdf/epr\\_cap.pdf](http://ccme.ca/assets/pdf/epr_cap.pdf).

For more information about Industry Product Stewardship programs in B.C., please visit our website at [env.gov.bc.ca/epd/recycling/](http://env.gov.bc.ca/epd/recycling/).

## **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 network<sup>28</sup> 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**

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;

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<sup>28</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.

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- 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;
- working with partners both inside and outside government to implement strategies and programs, including the Community Legacy Program, 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 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.

### Performance Measure 7: Park visitation and visitor satisfaction

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Number of recorded park visits	20.2 million	19.8 million	20.1 million	DATA NOT AVAILABLE <sup>1</sup>
Park visitor satisfaction level	78%	80%	Maintain or improve (from 80%)	82%

Data Source: Ministry of Environment

<sup>1</sup>2011/12 park visitor records will be made available once we have completed the data transfer to the new attendance system.

### Discussion of Results

British Columbia's parks system is the single largest recreation enterprise in the province and one of the best in the world. The number of visitors to provincial parks is used to measure the contribution of parks to the government's priorities of families and jobs. This data is intended to provide a reasonable indication of the trend in the level of use of public outdoor and commercial facilities and services available in B.C.'s parks.

Number of park visits: The preliminary estimate shows that the target for the number of park visits will not reach 20.1 million, a figure chosen as a target in 2008/09. Interim targets were set at a 100,000 visitor increase per year, between April 2010 and March 2012. BC Parks is currently migrating to a new attendance system, for a more reliable attendance source. Park visitor information will be available, when this transition is complete.

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Park visitor satisfaction survey: The Visitor Satisfaction Index is calculated as an average provincial rating of five services considered by park visitors to be important to their stay in a campground: cleanliness of restrooms; cleanliness of grounds; condition of facilities; a sense of security; and control of noise. The rating is based on the number of “excellent” and “above average” responses. The actual visitor satisfaction level in 2011/12 was 82% exceeding the target by 2%.



*BC Parks celebrated its 100 year anniversary in 2011/12*

# Report on Resources

Core Business Area	Estimated <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
<b>Operating Expenses (\$000)</b>					
Environmental Protection	7,054	0	7,054	6,639	415
Environmental Sustainability	19,367	1,701	21,068	22,173	(1,105)
Parks and Protected Areas	29,979	2,320	32,299	33,495	(1,196)
Conservation Officer Services	16,736	0	16,736	17,208	(472)
Climate Action	5,123	8,842	13,965	13,012	953
Executive and Support Services <sup>3</sup>	22,224	0	22,224	20,725	1,499
<b>Sub Total</b>	<b>100,483</b>	<b>12,863</b>	<b>113,346</b>	<b>113,252</b>	<b>94</b>
Park Enhancement Fund	500	899	1,399	1,399	0
Sustainable Environment Fund	20,305	0	20,305	20,305	0
Adjustment of Prior Year Accrual	0	0	0	(754)	754
<b>Total</b>	<b>121,288</b>	<b>13,762</b>	<b>135,050</b>	<b>134,202</b>	<b>848</b>
<b>Ministry Capital Expenditures (Consolidated Revenue Fund) (\$000)</b>					
Executive and Support Services	11,939	0	11,939	11,771	168
<b>Sub Total</b>	<b>11,939</b>	<b>0</b>	<b>11,939</b>	<b>11,771</b>	<b>168</b>
Park Enhancement Fund	400	0	400	35	365
<b>Total</b>	<b>12,339</b>	<b>0</b>	<b>12,339</b>	<b>11,806</b>	<b>533</b>

<sup>1</sup> The “Estimated” amount corresponds to the Estimates as presented to the Legislative Assembly in March 2011.

<sup>2</sup> Other Authorizations include access to contingencies, and an approved increase to spending in the Parks Enhancement Fund.

<sup>3</sup> Capital Expenditures in fiscal 2010/11 included \$0.035 million in the Park Enhancement Fund, \$10.763 million for park and recreational areas, \$0.086 million for land acquisition, \$0.002 million for office equipment, and \$0.795 million in specialized equipment including \$0.387 million in air and water monitoring equipment, and \$0.125 million for vehicles.

# Environmental Assessment Office

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

## Highlights of the Year

### Project Updates

The Environmental Assessment Office effectively managed 74 reviewable projects representing over \$35 billion in potential capital investment to B.C.'s economy. Five were referred to Ministers for decision, with four projects – representing \$1.3 billion in potential investment – receiving an Environmental Assessment Certificate and approval to proceed to the permitting and authorizations process.

One project, Ashcroft Ranch Landfill, was not granted an Environmental Assessment Certificate. Metro Vancouver's Integrated Solid Waste Resource Management Plan does not identify the need for a large new landfill in the B.C. interior, and in 2008, the Metro Vancouver board resolved to move away from interior landfills and focus attention on waste reduction.

**Table 1: Assessments completed in the fiscal year 2011/12**

Project Name	Sector	Potential Capital Investment (\$M)	Certification Date
Bevan Avenue Wells Project	Water Management	\$4	May 10, 2011
Ashcroft Ranch Landfill Project	Waste Management	\$75	Certificate refused, September 9, 2011
Kokish River Hydroelectric	Energy	\$200	November 24, 2011
Nahwitti Wind Farm Project	Energy	\$900	December 22, 2011
Tumbler Ridge Wind Energy	Energy	\$105	March 27, 2012

Data Source: Environmental Assessment Office



## Ministry of Environment and the Environmental Assessment Office

The Environmental Assessment Office also reviewed and approved requests from proponents for eight amendments to five Environmental Assessment Certificates for previously approved developments. Five of these amendments occurred in the energy sector, one in the mining sector, and one in the transportation sector.

Since 1995, 21 projects have been terminated, withdrawn or refused certification. In addition, projects often become inactive when proponents are required to conduct additional studies or consultation efforts, or when significant issues are identified.

### **Coordination with the Federal Government**

Approximately two-thirds of all proposed projects under review by the Environmental Assessment Office were confirmed by the federal government as subject to, or likely subject to, review under the *Canadian Environmental Assessment Act (CEA Act)*.

In October 2011, the federal Standing Committee on Environment and Sustainable Development initiated a statutory review of the *CEA Act*. British Columbia made a submission to the Standing Committee recommending that the *CEA Act* be amended to recognize another jurisdiction's environmental assessment process and decision as equivalent to its own, eliminating the need for a federal assessment where a provincial assessment is being conducted. B.C. also recommended that the federal government focus its resources on projects of national significance. B.C.'s submission to the Standing Committee was made available to the public on the Environmental Assessment Office's website on March 28, 2012.<sup>29</sup>

### **Compliance Management**

Compliance management was a key priority for the Environmental Assessment Office last year. In July 2011, the Office of the Auditor General published a report concluding that the oversight of certified projects was not sufficient to ensure that adverse effects of projects were being avoided or mitigated. In response, the Environmental Assessment Office worked with the natural resource sector ministries to address the Office of the Auditor General recommendations.

### **Engagement**

Engagement with key industry, environmental non-governmental organizations, and the public during the environmental assessment process is a priority. The Environmental Assessment Office has a strong partnership with the Western and Northern Affiliate of the International Association for Impact Assessment (IAIA), which provides opportunities to learn from leading practitioners in the field. In 2011/12, the Environmental Assessment Office met with a number of organizations to discuss the importance of environmental assessment regulation and share thoughts on best practices.

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<sup>29</sup> The submission is available at [www.eao.gov.bc.ca/pdf/BC Submission to 5 Year Review November 28 2011 FINAL.pdf](http://www.eao.gov.bc.ca/pdf/BC_Submission_to_5_Year_Review_November_28_2011_FINAL.pdf)



## Purpose of the Office

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

Environmental assessment is an iterative process that ensures that poorly designed projects are identified as early as possible, and that those projects are either redesigned or do not proceed.



*Gathering information for environmental baseline studies for the Quality Wind Project, located northeast of Tumbler Ridge, B.C.*

## Strategic Context

The Environmental Assessment Office's workload remained high as the global economic recession continued its recovery in 2011/12. The potential capital investment value for active and inactive projects undergoing environmental assessment during 2011/12 totalled over \$35 billion. Development proposals in the energy and mining sectors continued to comprise the majority of projects undergoing environmental assessment. Other sectors represented included tourism, transportation and waste management.

External factors that affected the business of the Environmental Assessment Office include:

### Federal Review

The statutory review of the *Canadian Environmental Assessment Act* was a major element in the strategic context of provincial environmental assessment. The Environmental Assessment Office has been actively engaged in this review, and has coordinated input from across the provincial government. It is B.C.'s position that elimination of duplication with a continued focus on environmental standards will provide a clear and robust framework leading to more timely decisions.

### Provincial Integrated Decision Making

As projects are assessed on environmental, economic, social, health and heritage impacts of proposed development, it has been increasingly important to strengthen relationships with ministries with mandates related to communities, health, economic development and natural resources. We continue to work towards the "one process" objective through various outreach and partnership initiatives.

### First Nations Consultation

Assessments will continue to be guided by the evolving case law and government policy related to the obligations of the Crown to consult with First Nations.

### Auditor General Report

Partly in response to the Office of the Auditor General report on the Environmental Assessment Office's oversight of certified projects,<sup>30</sup> enhancement of compliance and enforcement activities has been a major focus of the Environmental Assessment Office.

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<sup>30</sup> The report can be viewed at [www.bcauditor.com/pubs/2011/report4/audit-bc-environmental-assessment-office-EAO](http://www.bcauditor.com/pubs/2011/report4/audit-bc-environmental-assessment-office-EAO).

# Report on Performance

## Performance Results Summary Table

Goal 1: The environmental assessment process is effective and efficient For greater detail see pages 42 to 45		2010/11 Target	2010/11 Actual
<b>1.1 Ensure the process is easy to understand and complexity is minimized</b> Percentage of application reviews in the B.C. environmental process completed within 180 days:			
B.C. process only		100%	100% ACHIEVED
Joint B.C./Canada process		80%	100% EXCEEDED
<b>1.2 Ensure the Crown's duties to First Nations are discharged and that First Nations are engaged in environmental assessments</b> Percentage of potentially affected First Nations:			
Given the opportunity to engage in environmental assessments		100%	100% ACHIEVED
Engaged in environmental assessments		80%	81% EXCEEDED
Goal 2: The environmental assessment process is valued For greater detail see pages 45 to 49		2010/11 Target	2010/11 Actual
<b>2.2 Ensure that the benefits of environmental assessment are recognized</b> Number of requests to opt in to the environmental assessment process		2 or more	0 NOT ACHIEVED

# Goals, Objectives, Strategies and Performance Results

As part of its focus on continuous improvement, the Environmental Assessment Office updated its goals, objectives, and performance measures in the ministry's *2012/13-2014/15 Service Plan* to align with its recently developed strategic plan. As the Annual Service Plan Report is a review of the previous year's outcomes, it reports on the goals, objectives, and performance measures identified in the ministry's *Revised 2011/12-2013/14 Service Plan*. In future years, some of the goals, objectives and performance measures will be replaced with updated information that more clearly reflects the Environmental Assessment Office's business direction and vision.

## Goal 1: The environmental assessment process is effective and efficient

Given its comprehensive nature, environmental assessment requires a significant investment of time and resources by all participants. As a result, it is essential to ensure that the process is effective and efficient. The Environmental Assessment Office has a strong, national reputation for conducting effective and efficient assessments, and it is important to preserve and build upon that success.

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

#### Strategies

Key strategies for this objective include:

- working with the federal government to minimize duplication and to continue enhancing coordination;
- engaging First Nations early in the process, providing capacity funding, and making procedural decisions that are timely and principled;
- ensuring that project information is made widely available through the electronic Project Information Centre (e-PIC) on the Environmental Assessment Office's website ([www.eao.gov.bc.ca/](http://www.eao.gov.bc.ca/)) and through consultation activities such as open houses;
- reviewing and streamlining policy documents, practices and procedures;



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

## Ministry of Environment and the Environmental Assessment Office

- establishing clear service standards and commitments to proponents, First Nations and the general public, through the Environmental Assessment Office's Fairness and Service Code; and
- pursuing innovative partnerships and initiatives as part of supporting continuous improvement.

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

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Percentage of application reviews in the B.C. environmental process completed within 180 days:				
B.C. process only	100%	100%	100%	100% ACHIEVED
Joint B.C./Canada process	80%	80%	80%	100% EXCEEDED

Data Source: Environmental Assessment Office

### **Discussion of Results**

The legislated time limits in the *Environmental Assessment Act*, including a 180-day limit for review of applications for Environmental Assessment Certificates, offer process certainty 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 within the 180-day time limit. Five proposed projects were assessed and referred to Ministers for decision. Of the five reviews, four were solely provincial. The Environmental Assessment Office completed all four provincial reviews within the 180-day time limit.

One review was subject to both federal and provincial assessments (the Kokish River Hydroelectric Project). The provincial assessment was completed in November 2011, within the 180 day timeline, and the federal environmental assessment concluded on April 24, 2012.

### **Ministry Response**

The Environmental Assessment Office is pleased that the target number of joint B.C. Canada environmental assessments that completed their review within 180 days was exceeded by 20 per cent in 2011/12. While this result is significantly higher than the target, the targets in this performance measure will remain the same for the coming year, in light of the current federal statutory review of the *Canadian Environmental Assessment Act*, which may lead to adjustments in the way that Canada and B.C. coordinate on environmental assessment.

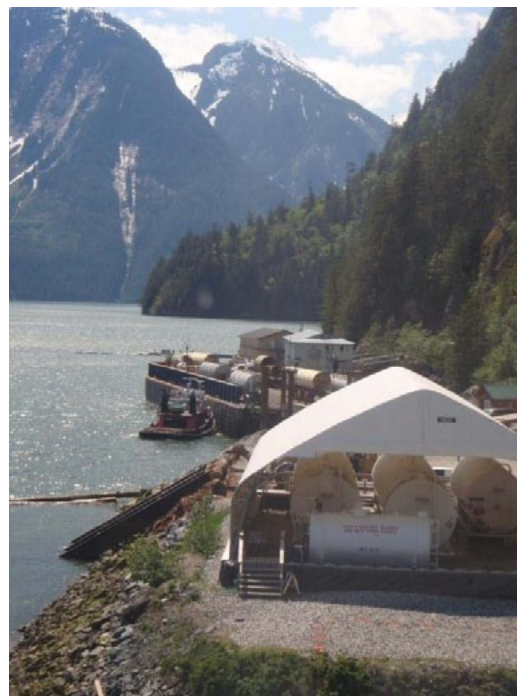


**Objective 1.2: Ensure the Crown's duties to First Nations are discharged and that First Nations are engaged in environmental assessments**

**Strategies**

Key strategies for this objective include:

- ensuring early communication and consultation with all First Nations potentially affected by a proposed project;
- acknowledging that First Nations have rights regarding consultation and accommodation that are different from other participants in environmental assessment;
- providing First Nations with capacity funding;
- inviting First Nations to participate with other experts on the technical working group for each proposed project; and
- enhancing coordination with the federal government on First Nations consultation through joint initiatives, including staff training workshops, information sharing, and tools and procedures improvement.



*Barge landing at the East Toba River, Montrose*

**Performance Measure 2: Percentage of potentially affected First Nations engaged in environmental assessments<sup>1</sup>**

Performance Measure <sup>2</sup>	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Percentage of potentially affected First Nations:				
Given the opportunity to engaged in environmental assessments	100%	100%	100%	100% ACHIEVED
Engaged in environmental assessments	80%	80%	80%	81% EXCEEDED

**Data Source:** Environmental Assessment Office

<sup>1</sup> The Environmental Assessment Office strives to engage all potentially affected First Nations in environmental assessments, but it is the decision of the First Nations whether or not to participate. The target for First Nations engagement is based, in part, on historical engagement levels. <sup>2</sup> Note: this percentage is calculated by considering how many First Nations listed on a proposed project's section 11 Order or otherwise invited to participate are involved in each environmental assessment. This percentage considers only active projects (those that the Environmental Assessment Office has been working on in the previous 26 weeks) and referred projects (those that have completed application review and have been sent to ministers for a decision).

## Discussion of Results

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

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

Two measures are taken: (1) the percentage of potentially affected First Nations given the opportunity to engage in environmental assessment; and (2) the percentage of First Nations engaged in the assessment. This recognizes that all First Nations potentially affected by a proposed project have the right to be consulted as part of the environmental assessment even though they may choose not to participate in the process.

In 2011/12, the target of 80% of First Nations being engaged on environmental assessments was exceeded by a margin of 1%.



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

## Goal 2: The environmental assessment process is valued

In addition to being effective and efficient, environmental assessments must be valued. Value is achieved by ensuring the full range of issues and interests have been considered, and that ministers are duly informed when deciding about both the benefits and potential adverse effects of a project when deciding whether to issue an environmental certificate. The value of environmental assessment is also considerably affected by the diligence of the Environmental Assessment Office in overseeing the construction, operation, and decommissioning of projects that are certified to proceed.

**Objective 2.1: Demonstrate that all interests and perspectives are considered**

Public comment periods are typically held two times during the review of each proposed project. These public comment periods include the opportunity for members of the public to attend an open house or project information session where they can learn about the proposed project and its environmental assessment from project proponents and Environmental Assessment Office staff.

The Environmental Assessment Office's approach to public consultation on the proposed Ajax Mine Project, near Kamloops, B.C., is an example of an innovative approach to public involvement in environmental assessment. In response to community concern regarding the proposed project, the Environmental Assessment Office approached local community groups with a proposal to develop a "community advisory group" with the goal of ensuring the environmental assessment is informed and influenced by the best possible information and detailed input from community groups. The community advisory group has provided a forum for two-way dialogue, resulting in a greater understanding of the environmental assessment process, enhanced approaches to public consultation, and clearer representation of community interests in the environmental assessment process.



*Information panels describing the environmental assessment process at a public information session on a proposed project*

**Strategies**

Key strategies for this objective include:

- engaging federal, provincial, and local government experts, along with First Nations, on technical working groups to consider potential impacts from a range of perspectives;
- providing opportunities for public input into the environmental assessment for each proposed project;
- ensuring that all assessment reports consider the potential environmental, economic, social, heritage and health effects of a project, as required by the *Environmental Assessment Act*; and
- collaborating with academic and practitioner organizations to build relationships and improve environmental assessment theory and practice.



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

**Strategies**

Key strategies for this objective include:

- demonstrating transparency in decision making and clarity of process;
- ensuring effective oversight and compliance management for certified projects; and
- engaging in outreach with First Nations, industry, academia, and the general public regarding the benefits of environmental assessment.

**Performance Measure 3: Requests to opt in to environmental assessment**

Performance Measure	2009/10 Actual	2010/11 Actual	2011/12 Target	2011/12 Actual
Number of requests to opt in to the environmental assessment process	N/A	3	2 or more	0 NOT ACHIEVED

Data Source: Environmental Assessment Office

**Discussion of Results**

Requests to opt in to environmental assessment are not within the control of the Environmental Assessment Office. While this measure may provide an indication of the perceived value of environmental assessment, it is also influenced by a number of external factors, including B.C.'s economy, the global economy, market trends and demand, and business competition. In future years, this performance measure will be replaced with a measure related to compliance management to more clearly reflect the work and accountabilities of the Environmental Assessment Office.

**Ministry Response**

As noted above, the Environmental Assessment Office will no longer be reporting on requests to opt in to environmental assessment, but will instead begin reporting on compliance management activities. The Environmental Assessment Office aims to be independently and objectively confident that conditions in Environmental Assessment Certificates are being complied with. The goals of the compliance management program are to ensure that:

1. Projects comply with environmental assessment requirements and appropriate enforcement measures address non-compliance;
2. Government agencies are working together to manage compliance and monitor the effectiveness of mitigation measures; and
3. Compliance management and effectiveness monitoring results are available to the public.

## Ministry of Environment and the Environmental Assessment Office

In July 2011, the Office of the Auditor General published a report concluding that the oversight of certified projects was not sufficient to ensure that adverse effects of projects were being avoided or mitigated. In response, the Environmental Assessment Office worked with in with the natural resource sector ministries to address five of the six recommendations made by the Office of the Auditor General.

The diagram below illustrates progress made on the Auditor General's six specific recommendations.

### Progress on Office of the Auditor General Recommendations

- 
- |                         |   |
|-------------------------|---|
| substantially completed | 1. Measureable and enforceable certificate conditions.  |
| complete and ongoing    | 2. Work with MOE on environmental mitigation policy.  |
| in progress             | 3. Clarify monitoring and compliance responsibilities.  |
| in progress             | 4. Develop and implement a comprehensive compliance and enforcement program.                          |
| early stages            | 5. Evaluate whether environmental assessments are avoiding or mitigating significant adverse effects. |
| in progress             | 6. Report out on EA certified projects.   |

*Figure 2: Progress on Office of the Auditor General recommendations*

One of the great strengths of environmental assessment is that proposed projects are often significantly improved during the course of environmental assessment through the participation of the working group, the public and stakeholder groups. Typical improvements to proposed projects include adjustments to project design or layout and additional or enhanced mitigation measures to avoid, prevent or minimize effects.

For example, during the environmental assessment of the Kokish River Hydroelectric project, the Environmental Assessment Office facilitated many discussions among members of the technical working group and the proponent to evaluate the potential effects on highly valued salmon and summer run steelhead trout from reduced flows in the river. Based on science and agency advice, the minimum in-stream flows for the project were increased to keep significantly more water in the river than was originally proposed by the proponent. These minimum flows are specified for six time periods during the year, with very high summer minimum flows required to ensure that fish migration will not be impeded.

## Ministry of Environment and the Environmental Assessment Office

A second example of the value of environmental assessment can be found in the recently approved Tumbler Ridge Wind Energy Project. The proponent was required to create a Monitoring and Adaptive Management Plan (MAMP) to respond to potential impacts on birds and bats. As part of the MAMP, the proponent is required to assemble a Technical Advisory Committee to advise the proponent about protocols for bird and bat monitoring, review the results of the monitoring and provide advice on adaptive management strategies. The Technical Advisory Committee will work with the proponent to assess the results of the monitoring to determine if a predictive model can be developed over time that would trigger real-time, automated changes in project operations if certain conditions occur. For example, the speed of the rotating turbines could be limited during certain weather conditions to minimize impacts to birds and bats. The MAMP requires the proponent to deposit monitoring data in both provincial and federal databases so that the effects of wind projects on birds and bats in northeastern B.C. is better understood by industry and regulators.

# Report on Resources

**Environmental Assessment Office Resource Summary Table**

Core Business Area	Estimated <sup>1</sup>	Other Authorizations <sup>2</sup>	Total Estimated	Actual	Variance
Operating Expenses (\$000)					
Environmental Assessment Office	8,754	0	8,754	8,651	103
<b>Total</b>	<b>8,754</b>	<b>0</b>	<b>8,754</b>	<b>8,651</b>	<b>103</b>

<sup>1</sup> The "Estimated" amount corresponds to the Estimates as presented to the Legislative Assembly in March 2011.

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

# Appendix

## 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

Ministry of Environment and the Environmental Assessment Office

**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: 250 847-7728

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

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

Ministry of Environment and the Environmental Assessment Office

**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: [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>

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Victoria BC V8W 9V1

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Email: [eaoinfo@gov.bc.ca](mailto:eaoinfo@gov.bc.ca)

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