Climate Action Secretariat 2015

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ESTIMATES NOTE (2013)

Confidential

ISSUE TITLE:

Ministry of Environment

Climate Action Secretariat 2015/16 Budget

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 Climate Action Secretariat (CAS) 2015/16 budget is \$19.307M. The net operating budget is estimated to be \$3.307M. CAS also receives \$1.305M funding from the Sustainable Environment Fund and a further \$2M from ministry offset payments, resulting in a total budget of \$6.612M.

Key message #2

 In 2015/16 the revised Greenhouse Gas Emissions Offsets Program in Ministry of Environment (MOE) will receive a \$7M budget for retiring offsets and a \$13M annual financing transaction to purchase offsets.

Key message #3

 Starting fiscal 2015/16, CAS will administer a five-year incentive Cement Sector Transitional Incentive Program. Program costs in 2015/16 will equate to \$9M.

CURRENT STATUS:

Key message #1

In 2014/15 the budget was \$3.273M and in 2015/16 the budget is \$19.307M, this increase is a result of:

- An increase of \$0.034M related to the Economic Stability Mandate.
- Greenhouse Gas Emissions Offsets Program cost of \$7M for retiring offsets.
 The \$7M increase for carbon offsets was announced in Budget 2014/15, but started impacting the budget in 2015.
- Cement Sector Transitional Incentive Program cost of \$9M.

- Greenhouse Gas Emissions Offsets Program:
 - Starting in 2015/16 MOE will have a \$7M budget increase to retire the offsets. Additional budget room will be managed through the contingency process.
 - o In 2015/16 the revised offsets program will also receive a \$13M annual

- financing transaction to purchase the offsets.
- Crown corporations, schools, universities, colleges and hospitals will continue to pay \$25/tonne for carbon offsets to MOE and flow to the consolidated revenue fund. The revised offsets program will have a \$2M recovery for ministry payments.

Key message #3

- Cement Sector Transitional Incentive Program:
 - Starting fiscal 2015/16, the Ministry of Environment will administer a fiveyear incentive program that will:
 - facilitate the B.C. cement industry to reduce their greenhouse gas emissions;
 - ameliorate the impact of the revenue neutral carbon tax on the cement sector; and
 - assist in the development of a B.C. low-carbon fuel industry that will provide clean fuel for cement, and generate new clean jobs and new export commodities.
 - The temporary incentive program is designed to be phased out over a five-year period at a cost of approximately \$27M. s.13 s.13

KEY FACTS/BACKGROUND

- Cement production is an energy intensive process that commonly uses greenhouse gas intensive fossil fuels like coal in large quantity.
- In 2013, the cement sector accounted for 3 percent of BC's greenhouse gas emissions.

s.13

- At the outset Ministry of Environment will conduct a global study on carbon intensities at leading cement production facilities to benchmark the B.C. cement industry.
- Ministry of Environment will also work with the cement sector to establish detailed production and carbon intensity data from the province's three cement production facilities.
- Based on the benchmarking and the B.C. cement industry's current carbon intensity, annual carbon intensity reduction targets will be set for the five-year program period.

Contact: Susanna Laaksonen-Craig, Head, Climate Action Secretariat (250-508-4132 cell)

Appendix 1: Consolidated Revenue Fund Summary (\$000)¹

	Total Operatin g Expense s 50-90	Total Salaries and Benefits 50-54	Total Operatin g Costs 55-75	Total Governm ent Transfers 77-80	Total Other Expens es 81-85	Total Internal Recoveri es 86-88	Total External Recoveri es 89-90	Total Capital Expenditur es
Budget 2007/08	4,000							
Budget 2008/09	15,45 8	2,204	11,82 4	1,433	-	(1)	(2)	_
Budget 2009/10 (February)	14,59 4	2,691	10,61 0	1,075	221	(1)	(2)	3
Budget 2009/10	7,132	3,439	3,456	_	1,545	(1,306	(2)	_
Budget 2010/11	6,487	3,583	3,070	931	211	(1,306	(2)	_
Budget 2011/12 (February)	5,123	3,406	2,814	ı	211	(1,306	(2)	_
Budget 2011/12 Updated	5,123	3,406	2,814	ı	211	(1,306	(2)	_
Budget 2012/13	4,123	3,506	1,714	-	211	(1,306	(2)	_
Budget 2013/14	3,271	3,506	904	_	169	(1,306	(2)	_
Budget 2014/15	3,273	4,106	2,306	_	168	(3,503	(2)	_
Budget 2015/16	19,30 7	4,133	9,474	9,000	7	(3,503	(2)	

Resource Summary: Operating Expenses (\$000)²

Core Business	2014/15	2015/16	2016/17	2017/18
Area	Restated	Plan	Plan	Plan
	Estimates			

 $^{^1}$ Source: Supplement to the Estimates. 2 Source: Ministry of Environment Service Plan 2015/16 $-\,2017/18$

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ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

Climate Action Legislation and Regulation

Date: February 19, 2015

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KEY MESSAGES:

Key message #1

 The Province has a comprehensive suite of climate legislation – amongst the strongest in Canada, with other provinces now taking more action.

Key message #2

 Legislation falls within the responsibility of several ministries, including Ministry of Environment, and is implemented across government and public sector organizations with support from the Climate Action Secretariat.

Key message #3

 The Ministry is now developing regulations to bring into force the new Greenhouse Gas Industrial Reporting and Control Act that sets an emissions intensity benchmark that provides for the cleanest LNG facilities in the world.

CURRENT STATUS:

Key message #1

See table below for full list of legislation and associated regulations.

- Climate action legislation in other ministries primarily addresses carbon pricing, clean energy, energy efficiency, and community climate action.
- The Ministry of Environment's Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) passed in fall 2014, and will be brought into force by regulation in 2015. (See key message #3 below).
- 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; and,
- Authority to set vehicle GHG emission standards and zero emission vehicle mandates.
- Most Ministry of Environment legislation is in effect; some pieces are on hold.
 Key elements are highlighted here:
 - BC has achieved Carbon Neutral Government status each year since 2010, in part via purchase of offsets. Offset procurement is now managed by the Climate Action Secretariat.
 - Progress to targets accounting is based on BC's greenhouse gas inventory. The Provincial Inventory Report is required every two years. BC's 2012 emissions inventory was released in 2014.
 - Reporting on progress to targets and plans to continue progress is required every two years. BC reached its interim greenhouse gas target of a 6% reduction below 2007 levels by 2012, as reported in the June, 2014 progress report.
 - Reporting Regulation obligations for GHG reporting and verification from BC facilities emitting over 10,000 tonnes are being met. Emission and verification reports are required annually. Emission report summaries for 2014 were published in 2014.
 - 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 install landfill gas capture facilities by 2016.
 - The Vehicle Emissions Standards Regulation under the Greenhouse Gas Reduction (Vehicle Emissions Standards) Act was drafted in 2008-2009. 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 were deemed unnecessary.

- GGIRCA sets a GHG emissions intensity benchmark for LNG facilities of 0.16 carbon dioxide equivalent (CO₂e) tonnes per tonne of LNG produced. The Act includes provisions for flexible compliance options (offset purchases; technology fund investments). This GHG intensity benchmark is lower than any other LNG facility in the world.
- Regulations under the Cap and Trade Act, offset provisions under the Greenhouse Gas Reduction Targets Act, s.12,s.13 s.12.s.13

KEY FACTS/BACKGROUND

- The Ministry of Environment is planning three regulations under the Act: s.12,s.13
- It is the Ministry's standard process to publish an Intentions Paper to our
 website for a public comment period typically between 30 and 60 days. Input
 is incorporated into drafting instructions and work is done with lawyers to turn
 that into a regulation. The provincial government approves a regulation by
 "Order in Council".
- There are also several items not in regulation that are under development and will also include consultation with stakeholders: offset protocols and using the registry. A tentative schedule is below for all aspects.

s.12,s.13	Consult with LNG Proponents	Public Comment Period Starts	OIC Regulation Package Approved
Registry User Testing	Q3	n/a	n/a
Offset Protocols	TBD	TBD	n/a

Contact: Susanna Laaksonen-Craig, Head, Climate Action Secretariat (250) 508-4132 cell

Legislation	Purpose	Status
MINISTRY OF ENVIRONMENT		
Greenhouse Gas Industrial Reporting and Control Act (GGIRCA)	sets a GHG emissions intensity benchmark for LNG facilities of 0.16 carbon dioxide equivalent (CO2e) tonnes per tonne of LNG produced; includes flexible compliance options (offset purchases; technology fund)	Passed 3 rd reading. Not in force; will be brought into force via regulation
Compliance regulation	addresses compliance provisions and registry S.13,S.17	Under development; expected 2015
Greenhouse Gas Reduction Targets Act	sets targets from 2007 baseline: 33% reduction by 2020; 80% by 2050 (Ministerial Order sets interim targets of 6% reduction by 2012 and 18% reduction by 2016) sets obligations for public reporting on BC's provincial greenhouse gas (GHG) emissions progress towards targets	Active
Carbon Neutral Government Regulation	defines the reporting and measurement obligations for government operations	Active
Emission Offsets Regulation	ensures the quality of GHG reductions achieved through offsets	Active; will be repealed and replaced with an updated version under GGIRCA
The Greenhouse Gas Reduction (Cap and Trade) Act	authorizes hard caps on greenhouse gas emissions from defined emitters	Partially active; will be repealed when GGIRCA in force
Reporting Regulation	establishes GHG reporting and verification obligations for BC facilities emitting over 10,000 tonnes	Active; will be repealed and replaced with an updated version under GGIRCA
Greenhouse Gas Reduction (Vehicle Emissions Standards) Act	enables implementation vehicle greenhouse gas emissions standards and enables a regulation to set zero emission vehicle mandates	On hold
Vehicle Emissions Standards Regulation	sets vehicle greenhouse gas emissions standards for vehicle manufacturers selling in BC (not in force as comparable federal government standards were subsequently adopted)	No longer necessary

Greenhouse Gas Reduction	amends the Environmental Management Act (EMA)	Partially active
(Emissions Standards) Statutes		
Amendment Act		
Landfill Gas Management	sets requirements for landfill gas methane collection systems by 2016 for large landfills	Active
Regulation		

s.13,s.17

Greenhouse Gas Reduction	enables regulation that sets renewable (5% for ethanol; 4% for diesel) and low carbon fuel	Active
(Renewable and Low Carbon Fuel	intensity requirements (10% reduction by 2020 relative to 2010) for BC fuel suppliers	
Requirements) Act		
2008 Utilities Commission	• enables Demand Side Measures Regulation which sets legislative context for utilities, facilitating	Active
Amendment Act	the reduction of GHG emissions, reduction of demand, introduction of more renewable	
	resources, provision of transmission infrastructure and introduction of more clean technology	
Clean Energy Act	sets provincial energy objectives and mechanisms, including those for electricity self-sufficiency,	
	clean or renewable energy, energy efficiency, greenhouse gas emission reductions and fuel	Partially
	switching to lower carbon intensity energy. Regulations in force under the Act include the	Active
	Greenhouse Gas Reduction (Clean Energy) and the Improvement Financing regulations	
Energy Efficiency Act	longstanding Act that sets energy efficiency standards for a range of equipment and devices	Active; ongoing updates
MINISTRY OF COMMUNITY, SPORT AN	D CULTURAL DEVELOPMENT	•
Local Government (Green	sets requirements for GHG targets in official community plans and regional growth strategies	Active
Communities) Statutes Amendment	and enables local government flexibility in instituting bylaws for parking and development cost	
Act	charges with lower environmental impacts	
ACC		
ACC		
MINISTRY OF FINANCE		

s.12,s.13	S.	12,s.13	Not in force		
MINISTRY OF NATURAL GAS DEVELOPMENT: OFFICE OF HOUSING AND CONSTRUCTION STANDARDS					
BC Building Code	•	regular updates to the Code include measures to reduce energy use; most recent updates took effect December 2014	Active; ongoing updates		
	•	Solar Hot Water Ready Requirement regulation (enabling for local governments)	Active		

ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

Environmental Incentive Programs

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 To address potential competitiveness impacts of the LNG greenhouse gas benchmark on the BC liquefied natural gas (LNG) industry, the BC Government is creating an LNG Environmental Incentive Program.

Key message #2

 By incenting investment in advanced technology and rewarding achievement of world-leading performance, the program will help ensure the development of the cleanest LNG facilities in the world.

Key message #3

 A clean electricity incentive for BC's utilities has also been approved by the BC Government to encourage the use of BC's grid electricity for liquefied natural gas ancillary services. This electricity incentive will also contribute to having the cleanest liquefied natural gas operations in the world.

CURRENT STATUS:

Key message #1

s.12,s.13

Key message #2 s.12,s.13

Key message #3

- The Clean Electricity Incentive Program will be a government expenditure program open to BC Hydro for the 0.0 tCO₂e/MWh GHG intensity electricity delivered to LNG facilities for ancillary needs in the prior calendar year.
- LNG facilities must report greenhouse gas emissions resulting from purchased electricity. Electricity purchased from BC Hydro for ancillary purposes (those uses not including operation of compression and refrigeration equipment) will be reported at 0.0 tCO₂e/MWh.
- BC Hydro has been instructed to purchase greenhouse gas offsets for all GHG emissions attributable to electricity supplied to liquefied natural gas facilities for ancillary purposes.
- To ensure BC ratepayers are not required to pay these offset costs and reduce liquefied natural gas operations' exposure to future grid electricity greenhouse gas emissions costs, an electricity incentive for BC Hydro has been approved.

KEY FACTS/BACKGROUND

s.12.s.13

s.13,s.17

s.13,s.17

Contact: Tim Lesiuk, Executive Director, Climate Action Secretariat (250) 216-5893 cell

ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential Ministry of Environment	BC's Status on Cap and Trade
Date: February 19, 2015	

RETURN TO TOP KEY MESSAGES:

Key message #1

- BC supports carbon pricing. BC's revenue neutral carbon tax remains the most comprehensive carbon price in North America.
- BC has also 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 climate action leader.

Key message #2

 Continued engagement with the Western Climate Initiative (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 began trading between jurisdictions in 2014. Ontario has recently announced plans to introduce a carbon pricing system, and in 2014 signed a Memorandum of Understanding with Quebec s.13,s.16
 s.13.s.16
- It is important to note that BC already has North America's most comprehensive carbon price because of the revenue neutral carbon tax. The existing carbon tax is a clean and clear system that is already achieving emissions reductions while the economy is continuing to grow.

Key message #2

 Through the WCI, 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

- One provincial representative currently sits 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.

KEY FACTS/BACKGROUND

- "Cap-and-trade" is a carbon pricing system which sets specific limits on greenhouse gas emissions and allows regulated sources to trade and bank allowances or credits to minimize the cost of compliance. Cap and trade systems and other emissions trading systems are used around the world to reduce the cost of meeting reduction targets.
- BC was a founding jurisdiction of the Western Climate Initiative; WCI worked on the design for a regional cap-and-trade program to serve as a model of what could work on a federal level as well as a regional tool to reduce emissions.
- Of the five original Canadian provinces to join the WCI, Quebec implemented a cap and trade system and linked its market with California in 2014.
- WCI Inc. is a non-profit organization that was set-up to provide the administrative services to run a cap-and-trade program, including a tracking system, auction platform and market monitoring. B.C. sits on the board of WCI Inc. to provide expertise and continue our support for the efforts of other jurisdictions to price carbon.
- BC's 2008 Cap-and-Trade Act was recently repealed in 2014 with the introduction of the Greenhouse Gas Industrial Reporting and Control Act.
- Very similar provisions are enabled under the new Act for reporting, offsets, tracking and compliance. Rather than a system-wide cap, emissions limits are proposed by sector. s.13,s.17
 s.13,s.17

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ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

Progress Toward BC's Greenhouse Gas Targets

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 British Columbia has reached its first greenhouse gas emissions reduction target of 6% below 2007 levels by 2012 as set out in the Province's Climate Action Plan.

Key message #2

 The BC Government recognizes it will have to do more to continue reducing emissions and remains committed to achieving the targets set in the *Greenhouse Gas Reductions Targets Act* – reductions of provincial greenhouse gas emissions by at least 33% by 2020 and 80% by 2050, from 2007 levels.

Key message #3

 The Climate Action Plan and subsequent policies are creating new economic opportunities for businesses and families in BC's low-carbon economy, while making communities healthier and safer.

CURRENT STATUS:

- British Columbia's total emissions in 2012 add up to 61.5 million tonnes CO₂e, and with offsets from forest management projects, the total is 60.5 million tonnes CO₂e, down from 66 million tonnes in 2007.
- BC has reached its interim greenhouse gas target of a 6% reduction below 2007 levels by 2012.
- This is a major milestone that marks the success of the 2008 Climate Action Plan and represents the first step in a longer journey toward achieving 2020 and 2050 targets.
- That BC's emissions have remained relatively stable during the economic recovery rather than resuming their prior growth path is a major success. It indicates that the recession alone was not the cause of BC's emissions reductions, and that policy, behaviour change and efficiency are having an impact.
- This result was achieved through:

- A range of leading policies and actions to both reduce and store greenhouse gases;
- Some emissions reductions resulting from events outside BC's control, such as the global economic downturn; and,
- Investment in forest management emissions reduction activities that improve our forests and create offsets that are counted toward targets.

- There are challenges to attainment of future targets, including new industrial development such as LNG, forest carbon fluctuations, and diesel transport.
 More actions are needed to meet the interim 2016 target of an 18% reduction of GHG emissions below 2007 levels, as well as the 2020 and 2050 targets.
- Government's Climate Action Plan (2008) sets out the path for achieving greenhouse gas reduction targets.
- A number of commitments in the 2008 Plan are either complete or substantially underway. Including:
 - Creating a revenue neutral carbon tax reduces emissions and stimulates investment.
 - Demonstrating leadership through Carbon Neutral Government.
 - Partnering with local governments to create the Climate Action Charter, which commits the 182 local government signatories to creating energy efficient, compact communities.
 - Establishing an adaptation strategy to prepare for the impacts of climate change.
 - Implementing various standards, including those for fuels, energy efficiency, landfill gas management, and green community development.
- Since the 2008 Climate Action Plan, new actions have been implemented, including:
 - The Clean Energy Act sets a 93% target for clean or renewable electricity generation (excluding electricity generated for LNG export facilities) 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 (December, 2011 March, 2014) provided incentives for clean energy vehicles and new vehicle charging infrastructure. Budget 2015 reintroduced the Clean Energy Vehicle Incentive Program, and a fuelling/charging infrastructure program, which will provide British Columbians incentives when considering the variety of clean and green choices for their transportation needs. BC currently has the highest clean energy vehicle sales per capita in Canada.
 - The Forest Carbon Offsets Protocol guides quantification and verification of BC forest carbon offsets from forest activities. Accounting for increased carbon storage in forests facilitates forest enhancement projects.

The Greenhouse Gas Industrial Reporting and Control Act includes a
greenhouse gas emissions intensity benchmark of 0.16 carbon dioxide
equivalent (CO₂e) tonnes per tonne of LNG produced, which is lower than
any other LNG facility in the world. Companies will have flexible options to
reach this world-leading benchmark, including purchasing offsets and
contributing to a technology fun

Key message #3:

- Climate action creates new opportunities for businesses and families in BC's low-carbon economy. Energy efficiency and alternative transport help families to save money. More efficient businesses are more competitive. A 2012 Globe Foundation report stated 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.
- 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.

KEY FACTS/BACKGROUND

- British Columbia's total emissions in 2012 add up to 61.5 million tonnes CO₂e, and with offsets from forest management projects, the total is 60.5 million tonnes CO₂e for a net reduction of 6.0% since 2007.
- Emissions in 2007 were 66 million tonnes CO₂e.
- To meet BC's next interim target, BC will need to reduce total emissions to 54 million tonnes by 2016. To achieve legislated targets, BC will need to reduce total emissions to 44 million tonnes by 2020, and 13 million tonnes by 2050.

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ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

Provincial Greenhouse Gas Inventory and Accounting

Date: February 19, 2015

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KEY MESSAGES:

Key message #1

In even-numbered years, BC publishes the Provincial Inventory Report.
Data is published 18 months in arrears; thus, the 2012 data was
published in June 2014. 2012 emissions (including net deforestation)
were 61.5 million tonnes. Summary interim tables for BC for the 2013
year are scheduled to be posted in June, 2015.

Key message #2

 For the purposes of accounting for progress to targets, BC provincial greenhouse gas emissions were estimated to be 60.5 million tonnes in 2012.

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 annually publishes the National Greenhouse Gas Inventory Report (NIR), which presents GHG emissions at national and provincial levels. It is released under Canada's commitment as a signatory to the UN Framework Convention on Climate Change. Their next release for the 2013 year is expected in April 2015.
- The British Columbia Greenhouse Gas Inventory Report (PIR) is based on the data in the NIR. The PIR provides the figure for total emissions for B.C. that is used as part of the assessment of B.C.'s progress towards meeting its GHG reduction targets.
- BC total emissions have been as follows:

o 2012: 61.5 million tonnes

2011: 61.7 million tonnes

2010: 61.2 million tonnes

2009: 51.3 million tonnes

2008: 64.3 million tonnes

2007: 64.3 million tonnes

1990: 55.6 million tonnes

 Emissions went down between 2007 and 2012 in the electricity, manufacturing, buildings, transport, industrial process, agriculture, and waste sectors, and went up in the fossil fuel and mining, and fugitives sectors.

 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.

Key message #2

- The figure for total emissions given in the NIR is not the figure B.C. uses in determining whether it has met its GHG targets. B.C.'s inventory practice is to include net deforestation and to adjust for identified discrepancies where there is agreement on the discrepancy. Environment Canada makes the correction in the following year.
- In accounting for progress to legislated targets, BC takes credit for actions not included in the inventory. For 2012, this totaled 1.0 million tonnes of forest carbon offsets
- Based on this methodology, the estimate for BC's 2012 greenhouse gas emissions is 61.5 million tonnes (Mt) while the estimate for accounting for progress to targets is 60.5 million tonnes (Mt). BC met its interim 2012 reduction target of 6% below 2007 levels by 2012.

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 have also changed 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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ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential	Largo Industrial Emissions
Ministry of Environment	Large Industrial Emissions
Date: February 19, 2015	

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KEY MESSAGES:

Key message #1

 In June, 2014, the Ministry of Environment published its annual greenhouse gas emissions reports for calendar year 2013 for industrial operations in the province.

Key message #2

 The reports provide a comprehensive and accurate picture of trends in 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.
- 2013 emission report summaries were released to the public in June 2014.
 2014 summaries will likely be released in summer 2015.
- Operations that emit 25,000 tonnes or more must have reports verified by an accredited verification body by May 31, to ensure accuracy and consistency in the data across industries and over time.

- There are 105 companies with 189 facilities over 10,000 tonnes reporting.
- The total 2013 GHG emissions from all industrial operations in BC over 10,000 tonnes are 19.4 megatonnes (Mt) of carbon dioxide equivalent, which is 31 percent of total provincial emissions.

- The total emissions in 2013 were 0.6 percent higher than in 2012. Oil and gas, and cement sector emissions increased while emissions from mining and smelting and from forest products decreased.
- Total electricity import emissions were 1.3 Mt, 16% more than in 2012, and are additional to the 19.4 Mt of industrial emissions occurring within BC
- Companies with the largest emissions in 2013:

Spectra Energy Transmission: 4.7 Mt

o Teck Coal: 1.5 Mt

Lafarge Canada: 0.9 Mt

- Individual facilities with the largest emissions in 2013:
 - o Fort Nelson Gas Plant Spectra Energy Transmission: 1.5 Mt
 - o Transmission Mainline Spectra Energy Transmission: 0.9 Mt
 - o Pine River Gas Plant Spectra Energy Transmission: 0.8 Mt
- Data on industry emissions is important because:
 - it provides valuable baseline and progress data for the Province and for industry;
 - o is used by BC companies to develop energy-savings plans; and,
 - the provincial government is using the information to help inform existing and potential climate and energy policies.
- BC companies report through the One Window BC-Canada website that allows them to provide data only once, meeting both governments' GHG reporting requirements.

KEY FACTS/BACKGROUND

- 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.
- Once consultation and drafting are complete, the intention is to port the Reporting Regulation over to the new *Greenhouse Gas Industrial Reporting* and Control Act. s.13

s.13

- The reported data would serve as a foundation for an LNG regulatory program or other regulatory programs.
- Consistent with international GHG accounting rules:
 - Electricity import emissions are not included in the provincial inventory as they occur outside of BC, however; they are reported to BC as BC 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 would have a significant impact on facility emissions totals. s.13,s.17
 s.13,s.17

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ESTIMATES NOTE (2015)
Confidential

Ministry of Environment

ISSUE TITLE:

BC's Revenue Neutral Carbon Tax

Date: February 19, 2015

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Key message #1

Tax policy decisions are the prerogative of the Minister of Finance. The
carbon tax was reviewed in Budget 2013. While economic analysis
conducted for the review indicates that the carbon tax has had, and will
continue to have, a small negative impact on gross domestic product
(GDP) in the province, GDP growth in BC was still above the national
average. Budget 2013 froze carbon tax rates at \$30/tonne and
government has committed to maintaining the freeze for five years.

Key message #2

 BC's broad-based, revenue neutral carbon tax is the foundational 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.

Key message #3

• The carbon tax covers combustion emissions from both individuals and industry and returns these revenues to both groups.

CURRENT STATUS:

- 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. 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.
 - Maintaining the current carbon tax rates and base will help to ensure BC is not diverging in a substantial way from policies in competing jurisdictions. s.13,s.17

- Relief for the agriculture sector includes the greenhouse growers' relief program that returns part of carbon taxes paid to greenhouse operators, and a 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.
- Budget 2013 froze the carbon tax rate at \$30/tonne of greenhouse gas emissions in order to give competing jurisdictions time to catch up with BC's carbon pricing leadership.
- There has been good progress on carbon pricing internationally, with France, Mexico, California, and Quebec implementing new programs.
- The governors of Washington and Oregon have announced new plans to introduce some form of carbon pricing in their jurisdictions. The Ontario government has also committed to implement carbon pricing s.13,s.16 s.13,s.16

Key Message #2

- BC continues to have a leadership position on climate action, and its carbon tax is a key component of this position.
- In a December 2014 speech, World Bank President Jim Yong Kim praised BC's carbon tax as "one of the most powerful" examples of carbon pricing.
- 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 efficiencies reduce costs for business and households.
- The carbon tax encourages growth in the clean technology, alternative energy, and other low-carbon sectors.

- 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, the sector, the region, the use etc. This increases the efficiency of the tax. (The exception is coverage of marked fuels, which also have different treatment from 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.

KEY FACTS/BACKGROUND

- The carbon tax applies to emissions from the combustion of fossil fuel in BC (including flaring), 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 generated \$1.22 billion in revenues in 2013/14. The same amount will be to British Columbians through tax cuts.
- The carbon tax is expected to generate \$1.24 billion in 2014/15.
- 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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ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	Clean Transportation Initiatives
Date: February 19, 2015	

RETURN TO TOP KEY MESSAGES:

Key message #1

 BC is taking a comprehensive approach to the reduction of greenhouse gas (GHG) emissions from the transportation sector, which accounts for 36% of provincial emissions.

Key message #2

 \$15.8 million has been spent over the past three and a quarter years on clean transportation initiatives, including the Clean Energy Vehicle (CEV) Program. Budget 2015 confirmed funding for renewed CEV incentive and charging infrastructure programs.

Key message #3

 Ministry of Transportation and Infrastructure is developing a 10 year transportation plan for the province that recognizes the role of investment in alternative transportation options in reducing greenhouse gas emissions.

CURRENT STATUS:

Key message #1

 BC's comprehensive approach addresses each of the contributing factors to transport emissions.

Vehicle fuel efficiency:

- Environment Canada has developed more stringent standards for light duty vehicles from 2017 through 2025. Environment Canada is also developing more stringent standards for new heavy duty vehicles post 2018.
- BC's Scrap-it program provides incentives for owners to scrap older, high emission vehicles.
- Other groups, such as Forest Products Innovations are actively working to reduce emissions from heavy duty transport by researching fuel saving devices, conversion of vehicles to LNG and compressed natural gas and by providing driver fuel efficiency training.

Vehicle fuel intensity:

BC's Renewable and Low Carbon Fuel Requirements regulation

- requires a 10% reduction in carbon intensity of transportation fuels by 2020, with an expected associated annual GHG reduction of 2.5 million tonnes by 2020.
- BC Ferries has taken significant steps to replace marine diesel with natural gas – two spirit class ferries will be retrofitted and three new ferries will be built to run solely on natural gas, with an estimated 25% GHG reduction.

Kilometers travelled:

- Ongoing investments in transit (such as the Evergreen Line) and cycling infrastructure reduce vehicle kilometers traveled.
- The Government has approved referendum wording on fiscal measures to support Metro Vancouver's transportation and transit plan. The referendum will be run via mail-in ballot from March 16 to May 29, 2015.
 - The question: Do you support a new 0.5% Metro Vancouver Congestion Improvement Tax, to be dedicated to the Mayors' Transportation and Transit Plan?

Key Message #2: Clean Energy Vehicle (CEV) Program

- BC's CEV program encourages the adoption of CEVs and charging station infrastructure. Budget 2015 announced new funding for CEV incentives and fuelling and charging infrastructure. Responsibility for the delivery of the new CEV program will be with the Ministry of Energy and Mines.
- Data show the importance of incentives in encouraging manufacturers to make vehicles available in a jurisdiction.
- The previous Clean Energy Vehicle Program (2011-2014) provided point-of-sale incentives of up to \$5,000 per vehicle. These incentives stimulated the purchase of 950 vehicles over the three year period that the program was active.
- In addition, the program funded over 1,000 charging stations (the largest charging network in Canada), one new hydrogen fuelling station, 10 research and training projects with colleges and universities throughout B.C., and an outreach and awareness program.
- The program placed B.C. as a leader in Canada, and in line with its Pacific Coast Collaborative partners, with the highest per capita electric vehicle sales and the largest infrastructure in Canada.

Key Message #3: BC's 10 Year Transportation Plan

- s.13
- Ministry of Transportation and Infrastructure's discussion guide on the 10 year transportation plan notes that transportation is a major contributor to

greenhouse gas emissions and that every step to improve efficiency helps to minimize the impact. The guide addresses pedestrian, cycling and transit infrastructure; efficiency improvements in BC's trucking sector; and, new approaches such as powering ferries with natural gas instead of diesel as opportunities to reduce emissions.

KEY FACTS/BACKGROUND

- Transportation emissions account for 23 million tonnes out of BC's total 61.5 million tonnes of emissions. 15 million tonnes are from industrial and commercial transport, and 8 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 a slightly upward trajectory.
- s.12,s.13
- Clean Transportation Initiatives-Expenditures and Results:

		Approved Funding (\$M)	Actual Expenditures (\$M)	Results
Clean Energy Vehicle Program	CEV for BC Incentive	7.46	4.90	950 vehicle incentives provided as of March 31st, 2014
	Electric Charging	6.28	6.28	By March 31, 2014 550 publicly or fleet-accessible Level 2 charging stations operational 142 Level 2 charging stations installed in
	Infrastructure Deployment	5.25	5.25	multi-unit residential or commercial buildings By March 31, 2015 Remaining 3 of 13 DC Fast Chargers will be operational; 10 already installed
	LiveSmart Residential Rebates	0.56	0.16	306 Residential Rebates for Charging stations provided as of March 31st, 2014
	SCRAP-IT	2.5	2.5	3119 vehicles scrapped between November, 2011 and March, 2013. Approximately 12,500 tonnes of emissions were reduced by retiring lower fuel efficiency vehicles.
	COAC (trucking sector)	2.0	2.0	Retrofits and driving training will achieve 10% reduction in fuel consumption. Goal to cut GHG emissions by 68,000 tonnes annually
	TOTAL	18.8	15.84	

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ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential Ministry of Environment	Built Environment Initiatives
Date: February 19, 2015	

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KEY MESSAGES:

Key message #1

 Reducing emissions in BC communities in new and existing buildings in particular, is a key strategy to achieving our greenhouse gas emission reduction targets.

Key message #2

 Some measures are in place, but further progress on reducing emissions in the built environment will require partnerships with energy utilities, local governments, builders, developers, realtors and community residents.

CURRENT STATUS:

Key message #1

- Over 80% of the buildings that will be standing in 2050 and a significant portion of the transportation infrastructure required for 2050 are already built today.
- Reducing emissions in existing homes and buildings is essential to achieving greenhouse gas emission reduction targets.
- Local governments across BC are making progress in reducing emissions from waste, notably via the ban on organics in landfills in major regions such as Metro Vancouver and the Capital Regional District.

- New BC Building Code standards have increased energy efficiency requirements for new commercial buildings (effective December, 2013) and new residential structures (effective December, 2014).
- While the successful LiveSmartBC home retrofit incentive program ended on March 31, 2014, BC Hydro and FortisBC have launched the Home Energy Rebate Offer program to provide modest grants for specified energy efficiency upgrades to eligible customers.
- The Carbon Neutral Capital Program provides \$14.5M/year to support public

- sector building energy efficiency retrofits in the health, K-12 and postsecondary education sectors.
- 182 local governments have signed the Climate Action Charter, which commits all signatories to measuring and reporting on their community's greenhouse gas emissions profile. Under the Charter, they will also work to create compact, more energy-efficient communities.

KEY FACTS/BACKGROUND

- Residential and commercial buildings and municipal waste emissions made up 17% of BC's total GHG emissions in 2012.
- Transportation, another key component of the built environment, makes up an additional 36% of provincial emissions.
- Major BC environmental organizations such as the Pembina Institute and Lighthouse are developing new proposals to move towards a lower-carbon built environment, including a shift to net-zero emission buildings over time.

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ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

BC's Future Climate Action

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 BC remains committed to achieving its aggressive legislated GHG reduction targets of 33% below 2007 levels by 2020, and 80% below by 2050.

Key message #2

 BC has begun work on revitalizing its Climate Action Plan to reflect the Province's climate leadership. We have more to do to bring our emissions down further, and we will do what it takes to reach our longterm goals.

CURRENT STATUS:

Key message #1

- British Columbia has reached its first interim greenhouse gas emissions reduction target of 6% below 2007 levels by 2012 as set out in the Province's Climate Action Plan.
- The next milestone towards meeting the 2020 target is the 2016 interim target of an 18% reduction in greenhouse gas emissions below 2007 levels.
- The 2018 Progress to Targets report will provide the final determination as to whether the 2016 target has been achieved.

- Climate Action Secretariat staff are developing options for possible new climate measures to move towards achieving legislated greenhouse gas reduction targets.
- Details on the scope of the new measures, and consultations with internal and external stakeholders on the new Climate Action Plan, are not confirmed at this time.
- A recent example is the Cement Sector Low-carbon Fuel Program announced in BC Budget 2015. Up to \$27 million incentive funding over five years will incentivize BC's cement sector to develop a clean fuel source and displace coal, realizing a reduction of up to 1% of the province's total emissions.
- BC continues to seek fresh ideas from other jurisdictions to help develop new policies that could succeed in helping BC meet its targets and create jobs across all sectors of our economy.

KEY FACTS/BACKGROUND

- British Columbia's total emissions in 2012 add up to 61.5 million tonnes CO₂e, and with offsets from forest management projects, the total is 60.5 million tonnes CO₂e for a net reduction of 6.0% since 2007.
- Emissions in 2007 were 66 million tonnes CO₂e.
- To meet BC's next interim target, BC will need to reduce total emissions to 54 million tonnes by 2016. To achieve legislated targets, BC will need to reduce total emissions to 44 million tonnes by 2020, and 13 million tonnes by 2050.

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ESTIMATES NOTE (2015)
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Ministry of Environment

Date: February 19, 2015

ISSUE TITLE:

Industrial and Land-based Initiatives

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KEY MESSAGES:

Key message #1

 BC is continuing to take action across the economy to address climate change. The revenue neutral carbon tax is the foundation of our climate action plan and covers all combustion emissions, including from industry.

Key message #2

Further actions are underway in each sector to accomplish:

- A forest sector with more trees that are growing faster and living longer.
- An innovative waste system with full recycling and composting, and complete landfill gas capture.
- Environmentally sensitive industries that are efficient, use clean energy, and capture their own emissions.

CURRENT STATUS:

Key message #1

- The Carbon Tax has not harmed BC's competitiveness.
- Independent analysis is telling us that our greenhouse gas emissions are down and our GDP is keeping pace with the rest of Canada.
- BC has reached its interim greenhouse gas target of a 6% reduction below 2007 levels by 2012.

- Sector by sector actions and results include:
 - The Forest Carbon Offset Protocol was completed to enable the quantification of emissions from improved forest management. This is one of the most substantial options available in this province to mitigate climate change, while improving the quality of our forests and providing economic opportunity to forest-dependent communities.
 - Waste diversion programs provide 64% of British Columbians a way to reduce waste sent to landfills.

- 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 install landfill gas capture systems that capture 75% of greenhouse gas emissions from landfills by 2016.
- Resource industries' use of clean technologies has largely contributed to BC having the highest per capita clean technology jobs in Canada.
- Energy efficiency and conservation programs have resulted 4,460 GWh of electricity saved from 2008 to 2013, which is equal to over 80 million incandescent lightbulbs switching to CFL.
- Routine flaring at oil and gas producing wells and production facilities will be eliminated by 2016.

KEY FACTS/BACKGROUND

Industrial emissions account for 19.4 million tonnes out of BC's total 61.5 million tonnes of emissions.

 The 2008 Climate Action Plan provided a roadmap to reduce emissions in every sector of the economy. Actions in every sector have helped people, communities and businesses reduce their emissions and their costs, while helping communities prepare for evolving climate conditions over the coming decades.

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ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential	Oliverate Biologo d Adoutetion
Ministry of Environment	Climate Risk and Adaptation
Date: February 19, 2015	

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KEY MESSAGES:

Key message #1

 The Province is taking action to manage the risks associated with climate change, including sea level rise, a changing water cycle and more frequent and intense weather extremes.

Key message #2

 The Climate Action Secretariat facilitates and supports initiatives across government to ensure that 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:

- Preparing for Climate Change: British Columbia's Adaptation Strategy (2010) outlines steps the provincial government is taking to moderate harm and take advantage of new opportunities associated with a changing climate.
- 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; and,
 - collaborating with other levels of government, the private sector and civil society to enhance BC's resilience to weather and climate.
- CAS has partnered with other ministries and organizations across BC to leverage federal funding for adaptation projects on issues relating to coastal management, economic instruments and the natural resource sector.
- Ministry efforts to modernize the water act will introduce more flexibility and efficiency in the water allocation system, and accommodate 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:

- The Ministry of Forests, Lands and Natural Resources Operations (FLNRO) is implementing the BC Forest Stewardship Action Plan for Climate Change Adaptation (released in 2012), and is working with regional offices on regional adaptation strategies.
- Through federal Growing Forward funding, the Ministry of Agriculture is supporting the efforts of industry to develop innovative products, tools and processes to adapt to climate change. The Ministry has also completed an assessment of how its policies and programs can further support adaptation.
- The Ministry of Transportation and Infrastructure has assessed climate change impacts to the province's transportation infrastructure, and is addressing and revising standards where appropriate.

KEY FACTS/BACKGROUND

- Recent reports by the Intergovernmental Panel on Climate Change (IPCC)³, U.S. Global Change Research Program⁴ and Natural Resources Canada⁵ emphasize that climate change is already impacting North America, Canada and British Columbia and additional impacts to our natural environment, economic prosperity and the health of British Columbians are anticipated. Further action on adaptation will be required to address these risks.
- Adaptation is a shared responsibility between all levels of government and the private sector. The province's investments in improving climate science support adaptation planning at multiple levels.
- Local governments have a significant role to play in ensuring that British Columbia is prepared for unavoidable climate change impacts. Many local governments in BC have developed and are starting to implement plans to reduce risk and vulnerability related to climate change and its impacts.
- The Government of Canada is spending s.16,s million over 5 years (2011-2016) to help Canada adapt to climate change. The funding covers nine 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 BC.
- The Government of Canada has announced a \$200 million investment over five years for the National Disaster Mitigation Program, beginning April 1, 2015. CAS will support Emergency Management BC (JAG) to implement this program and align disaster risk reduction and climate adaptation in BC.

³ Fifth Assessment Report (AR5)

⁴ 2014 National Climate Assessment

⁵ Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation

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ESTIMATES NOTE (2015) Confidential

ISSUE TITLE:

Ministry of Environment

Science on Climate Change

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 Warming of the climate system is unequivocal. According to the IPCC, it is "extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century".

Key message #2

 Continued emissions of greenhouse gases will cause further warming and changes in all components of the climate system. Most aspects of climate change will persist for many centuries even if emissions of CO₂ are stopped.

KEY FACTS/BACKGROUND

- Recent reports by the Intergovernmental Panel on Climate Change (IPCC)⁶, U.S. Global Change Research Program⁷ and Natural Resources Canada⁸ emphasize that climate change is already impacting North America, Canada, and British Columbia:
 - Canada's climate is changing, with observed changes in air temperature, precipitation, snow and ice cover and other indicators.
 - Changes in climate are increasingly affecting Canada's natural environment, economic sectors and the health of Canadians.
 - Extreme weather events are a key concern for Canada and there is growing confidence that some types of extreme events will increase in frequency and/or intensity as the climate continues to warm.
- The World Meteorological Organization (WMO) has ranked 2014 as the hottest year on record. 14 of the 15 hottest years on record have occurred this century.
- Observed and expected impacts for British Columbia include:

⁶ Fifth Assessment Report (AR5)

⁷ 2014 National Climate Assessment

⁸ Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation

- Increased risk of summer drought, particularly in snowmelt systems due to declining snowpack and glaciers as well as earlier peak runoff and warmer summer temperatures;
- Increased risk of flooding due to more extreme precipitation and shifts to more winter rain in snowmelt systems;
- Impacts to infrastructure, including an increasing risk of damage, shortened asset life, and reduced safety performance due to sea level rise and higher storm surge, increased river flooding, more extreme heat and precipitation events;
- Impacts to terrestrial, aquatic, and marine ecosystems and related ecosystem services, including commercially important activities such as timber production, fisheries, and tourism due to ocean acidification, changes in water quality and streamflow volumes, forest fires and increased competition from invasive and non-native species; and,
- Increased risk of illness and death associated with more extreme heat events and reduced air quality.

Key Message #2:

- Limiting climate change will require substantial and sustained reductions of greenhouse gas emissions. BC is taking action across the economy to reduce our emissions. Continued leadership in climate action along with our partners around the world will drive global emissions reductions. (See note 11, BC's Future Climate Action, and note 15, BC's Efforts to Promote Climate Action Internationally).
- Further changes in climate are inevitable, even if GHG emissions stop today.
 Adaptation is a necessary response to climate change, complementing global measures to reduce greenhouse gas emissions. BC can enhance the social and economic resilience of British Columbians to the negative impacts of climate change by adapting ahead of time (see note 13, Climate Risk and Adaptation).

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ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

BC's Efforts to Promote Climate Action Internationally

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

- BC is an international leader in the fight against climate change. BC encourages other jurisdictions to follow our carbon initiatives to ensure our industries are not placed at a competitive disadvantage for playing their part in addressing climate change.
- All the nations of the world will sign a new agreement on climate at the next UN climate negotiations in Paris in December, 2015. BC has the opportunity to promote BC's climate action initiatives internationally to contribute to a strong agreement in Paris.

Key message #2

 Climate change is a global issue. By exporting natural gas, BC will supply growing markets with the cleanest-burning fossil fuel.

CURRENT STATUS:

- BC is an international leader in the fight against climate change.
- 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.
- BC will work with partner jurisdictions and organizations in Canada, on the West Coast in the Pacific Coast Collaborative, and around the world to contribute to strong agreement in Paris in December, 2015.
- The 2015 UN Climate Change Conference, COP 21 in Paris, France, will see all nations of the world agree to the next stage in the global fight against climate change post-2020. BC will continue to push for strong international agreement and continue to show climate leadership as a model for national and subnational jurisdictions around the world.

Key message #2

- Climate change is a global issue. By exporting natural gas, BC will supply growing markets with the cleanest-burning fossil fuel.
- BC's climate leadership guides the development of our LNG industry. The GHG emissions cap we have placed on our LNG facilities will make BC's the cleanest in the world.

KEY FACTS/BACKGROUND

- BC is involved with several key strategic regional and international climate
 action organizations to continue BC's international leadership and encourage
 other jurisdictions to follow our carbon initiatives. 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. Examples include:
 - Carbon Tax: The Province is receiving interest on an international level from the World Bank, as well as at the state level, with both Washington and Oregon looking to adopt similar systems. Nova Scotia's government is assessing options provided in an independent tax review, which recommended a BC-style pollution tax;
 - Western Climate Initiative (WCI): Through the WCI, BC has been instrumental in regional collaboration to amplify climate actions and encourage other governments to adopt similar policies. WCI is now largely focused on the implementation of cap and trade in California and Quebec. s.13.s.16
 - Low Carbon Fuel Standards: BC was the first jurisdiction in North America to introduce a low-carbon fuel standard, with California following soon after, and Washington and Oregon are currently looking to implement their own transportation plans;
 - 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. The Environmental Protection
 Agency has adopted a similar system based on the same principles.
 - Compact of States and Regions: Leaders of more than a dozen states and regions which together represent 142 million people and almost 5% of global GDP signed on to the Compact on December 9, 2014 in Lima, Peru. As signatories to the Compact, they will commit to providing an annual account of their greenhouse gas emission targets and reporting progress towards these targets.
 - World Bank's Carbon Pricing Leadership Coalition: will advance carbon pricing solutions globally. Members will share experience, research, and

best practice to spur action across sectors, supply chains, and neighboring jurisdictions. BC invited as founding Leader.

• Natural gas from BC can be part of the global climate solution. China has recently revised its target for the use of natural gas in its energy supply upwards from 8.3% to 10% by 2020. China is a large and growing economy, and BC LNG could displace some of its growth in coal-fired electricity.

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ESTIMATES NOTE (2015)
Confidential

Ministry of Environment

Date: February 19, 2015

ISSUE TITLE:

Pacific Coast Collaborative – Action Plan on Climate and Energy

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KEY MESSAGES:

Key message #1

 BC is a signatory to the Pacific Coast Collaborative Action Plan on Climate and Energy, working alongside Washington, Oregon and California to integrate climate change and energy strategies for 53 million people on the West Coast.

Key message #2

 Since signing the Action Plan in October, 2013, the four governments have been actively demonstrating how subnational governments can work together to promote climate action.

CURRENT STATUS:

- Involvement in the Pacific Coast Collaborative (PCC) since 2008 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. In October 2013 British Columbia
 signed the Pacific Coast Action Plan on Climate and Energy with PCC
 partners.
- Through the PCC, 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.
- The comprehensive action plan and collaborative approach of the four jurisdictions can act as a model for regional action at the national and subnational levels for jurisdictions developing their new climate commitments toward the UN climate agreement on global action post-2020 set for Paris in December, 2015.

Key message #2

- Among the most significant commitments in the Action Plan was to develop and maintain carbon pricing and low carb fuels policies in each jurisdiction. California and BC have moved ahead with implementation and are actively supporting Oregon and Washington as they evaluate options and introduce their own carbon pricing mechanisms.
- Interest from Washington State and Oregon in adopting carbon pricing mechanisms such as BC's Revenue Neutral Carbon Tax is growing and opportunities to promote this policy will exist in the years ahead, helping to reduce perceived competitiveness issues for BC-based businesses.

KEY FACTS/BACKGROUND

- The Pacific Coast Collaborative (PCC) agreement was signed by the Premier
 of British Columbia and the Governors of Washington, Oregon and California
 and Alaska in June 2008. Clean energy, regional transportation, sustainable
 regional economy, innovation, and emergency management are the named
 priorities of the collaboration.
- Update on key actions:
 - Carbon Pricing: Oregon is building on existing programs to set a price on carbon emissions. Washington is actively developing a carbon market program and has released an initial plan for review of the legislature.
 - Low carbon fuels: Oregon has a bill before the senate to extend their current low-carbon fuel standard. In Washington, the Department of Ecology has outlined a draft cleaner fuels rule for comment by legislators. California continues implementing its program and will adopt amendments in 2015 to strengthen the program^{s.13} s.13
 - Alternative fuels for commercial trucks, buses, rail, ports and marine transport: BC is providing a time-limited, utility-based incentive for the acquisition of LNG and CNG vehicles for heavy duty fleets. BC Ferries has announced that three new ferries will be dual-fueled with LNG and diesel; the two largest ferries will also be converted to LNG by 2017. Washington has enacted tax equity legislation to support deployment of natural gas transportation fuels; in 2014, Oregon established incentive programs for fleet operators to convert to alternative fuel vehicles, and California is developing a Sustainable Freight Initiative that will tie together efforts in the state to cut emissions from the transportation of consumer goods.

 The Intergovernmental Relations Secretariat is responsible for crossgovernment coordination of British Columbia's participation in the Pacific Coast Collaborative given the leading role of the Premier.

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ESTIMATES NOTE (2015)
Confidential

ISSUE TITLE:

Ministry of Environment

BC Job's Plan and Climate Action (Green Economy)

Date: February 19, 2015

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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. Growing Green Jobs updated progress on the green economy in 2014.

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 LNG sector in BC will have the cleanest LNG facilities in the world to deliver the cleanest burning fossil fuel in the world.

CURRENT STATUS:

- 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, Premier 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 areas such as:
 - Accelerating the adoption of natural gas and electric vehicles;
 - Building with low-emission cement;
 - Adopting solar power, biomass, biomethane, and geoexchange technologies in BC communities; and,
 - Developing new opportunities to generate offsets in areas such as technology adoption by greenhouse growers and restoring marine ecosystems.
- In 2014, BC released the second update of the Green Economy strategy, highlighting how LNG will play a role in global greenhouse gas emission reductions and how natural gas will power greenhouse gas emission reductions in British Columbia.
- The report describes government's priorities and successes for climate action:
 - 1. Strengthening the government of British Columbia's leadership in reducing its own emissions;
 - 2. Promoting British Columbia's policies internationally to achieve greater action on climate change; and,
 - 3. Pursuing British Columbia's LNG operations as the cleanest in the world.

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.
- A Green Economy approach accelerates technology adoption, leading to emission reductions without impacting industry competitiveness.
- British Columbia is demonstrating this approach through accelerating the adoption of clean energy and technologies by the provincial public sector and local governments.
- Exploring opportunities to develop new technology investment funds that can support BC's strength in fossil fuel exports.

KEY FACTS/BACKGROUND

 In 2014, British Columbia established a regulatory benchmark for LNG greenhouse gas emissions of 0.16 t CO2e/tonne LNG that clearly makes these facilities the cleanest in the world

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ESTIMATES NOTE (2015)
Confidential

Ministry of Environment

Date: February 19, 2015

ISSUE TITLE:

LNG and BC's Climate Leadership

RETURN TO TOP

KEY MESSAGES:

Key message #1

 The BC government has committed to having the cleanest LNG facilities in the world, while maintaining its leadership in clean energy and climate change.

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, BC will supply growing markets with the cleanest burning fossil fuel.

CURRENT STATUS:

- New legislation (Greenhouse Gas Industrial and Reporting Act) for industrial GHG emissions was passed in the fall of 2014 and requires LNG facilities to achieve a GHG emissions intensity benchmark of 0.16 tonnes of CO₂e per tonne of LNG produced (tCO₂e/tLNG).
- Facilities not meeting this world- leading benchmark directly, by the
 incorporation of lower emissions technologies or the use clean energy, would
 be able to achieve compliance with the benchmark through flexible options
 including purchasing BC-based offsets for each tCO2e emitted over the
 benchmark, or through payments of \$25 per tCO₂e to the Ministry of
 Environment for technology investment.
- GHG Emissions from LNG facilities will also be covered by the carbon tax, and so will all of the fuel used in processing and pipelines upstream.
- The carbon price for combustion emissions of LNG facilities in BC could be up-to \$55 per tonne of CO₂e.

Key message #2

- Extraction, processing, transmission and liquefaction GHG emissions cumulatively could add up to 27.7 MT of incremental GHG emissions in BC if the export market opportunity of 80 MTPA of LNG becomes a reality.
 - Currently, BC produces 44 BCM of natural gas per year and this leads to an average of 10 million tonnes (MT CO₂e) of GHG emissions annually.
 - Producing 80MTPA of LNG requires doubling the production of natural gas in the Province, which could double upstream GHG emissions from 10 to 20 MT CO₂e per year.
 - Transporting the natural gas to the BC coast is expected to create up to 4.9 MT CO₂e per year. Transmission emissions estimates are based on information submitted by pipeline proponents in the environmental assessment process.
 - The liquefaction process at LNG facilities could create 12.8 MT CO₂e per year. This is based on the GHG intensity benchmark of 0.16 tCO₂e/tLNG produced.
- The Province is investigating aggressive upstream electrification, fugitive emissions management, and carbon capture storage policies to reduce GHG emissions from natural gas extraction, processing and transmission.
- The GHG emission benchmark's flexible mechanisms (i.e., offsets and the technology fund) can be also used as an incentive to fund upstream GHG emission reduction projects.

- The Chinese government anticipates boosting the share of natural gas as part
 of total energy consumption to around 8% by the end of 2015 and 10% by
 2020 to alleviate high pollution resulting from the country's heavy coal use
- In 2013, the Province commissioned a study in collaboration with Globe Advisors to assess the global carbon impact of BC's natural gas value chain, from the wellhead to various potential consumer markets overseas.
- Globe Advisors determined that LNG could be a climate solution when it replaces the use of coal.
- A recent study by the University of Calgary reached similar conclusions to the Globe report, indicating that there is potential for a net benefit to global GHG emissions from LNG exports displacing coal or oil in the production of electricity.
- Specifically, the University of Calgary report concluded that countries such as China, India, Japan, and Taiwan would lower their GHG emissions associated with power generation by importing BC's LNG and displacing coal.

KEY FACTS/BACKGROUND

- By studying the greenhouse gas emissions of leading global LNG facilities, along with independent research, BC has established that no other LNG facility in the world will have GHG emissions intensity as low as 0.16 tonne CO₂e per tonne of LNG produced (tCO₂e/tLNG).
- BC LNG facilities achieving the 0.16 regulatory benchmark will have a clear claim to be the "world's cleanest LNG facilities".

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ESTIMATES NOTE (2015)
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ISSUE TITLE:

Ministry of Environment

Creation of Climate Investment Branch

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 The Climate Investment Branch (CIB) was established in 2014 to develop and manage government's greenhouse gas (GHG) offsets portfolio in support of BC's annual carbon neutral government commitment.

Key message #2

 The Climate Investment Branch operates in a more efficient model while maintaining a portfolio of high-quality, credible offsets.

Key message #3

 Developing a strategically diverse offsets portfolio enables BC's leadership on climate action while supporting continued growth of BC's green economy.

CURRENT STATUS:

Key message #1

- To become carbon neutral, each BC public sector organization must first measure, then reduce, report, and offset their emissions. CIB facilitates this final step through investments in high quality BC-based offsets that reduce GHG emissions or sequester carbon.
- The Climate Investment Branch was established in 2014 following the 2013
 Core Review decision to transition the Pacific Carbon Trust into government
 under a more efficient model while maintaining government's commitment to
 climate leadership and a carbon-neutral public sector.
- In 2014, CIB posted a new procurement call for BC-based offsets projects and is on schedule to deliver up to 750,000 high quality offsets by June 2015 to help BC reach its carbon neutral commitment for the 5th year in a row.

Key message #2

 The CIB secures offsets for carbon neutral government in a more efficient model, for example:

- The annual portfolio cost is lowered to \$13M;
- At least 50% of the portfolio is reserved for lowest cost offsets, regardless of project types; and,
- The program has shifted to increased role of the private sector, capitalizing on the BC carbon market established with the Pacific Carbon Trust.
- The program is managed by significantly fewer staff (from 18 at Pacific Carbon Trust to 5 at CIB).
- By managing portfolio risk and exercising due diligence, CIB is ensuring an annual portfolio of credible, high-quality offsets for Carbon Neutral Government.

Key message #3

- By investing in an offsets portfolio, the Province is driving innovation, new jobs, economic opportunities and making clean technology projects a reality.
- Offsets investments are bridging BC's resource industries to a competitive future with timely investment focused on overcoming key barriers to reducing emissions and growing our green economy.
- The Ministry has set 5-year portfolio objectives in support of government's strategic goals:
 - at least 50% of the portfolio will be populated with lower cost offsets;
 - 5 to 40% will address key challenges for emission reductions, including natural gas, new industrial projects, off-road vehicles and forestry;
 - 5 to 40% will support projects that help to achieve one or more goals of the Climate Action Plan, the BC Technology Strategy or the BC Jobs Plan; and,
 - 5 to 40% will be generated from GHG reduction projects that support community-based organizations or benefit the local population.
- The program is also working to improve policies and programs related to offsets and collaborate with stakeholders to ensure they are effective.
- A Pricewaterhouse Coopers study showed that 31 BC offsets projects garnered investments of \$300 million in addition to revenue from offset purchases. This means new job opportunities and other economic benefits and support for cleaner technologies are taking root in BC.

KEY FACTS/BACKGROUND

 In November 2013, it was determined that Pacific Carbon Trust had fulfilled its mandate to establish a carbon offset business sector in BC, and a Core Review decision was made to close the Crown corporation. This led to

- establishment of the Climate Investment Branch in MOE's Climate Action Secretariat in April, 2014.
- Pacific Carbon Trust acquired offsets meeting Carbon Neutral Government obligations 2008 – 2013, and is now dissolved. The Climate Investment Branch is procuring offsets starting with the 2014 calendar year.
- Public sector organizations will continue to purchase offsets at \$25/tonne of CO₂e. At the same time, an expanded carbon neutral capital program provides \$14 million annually for public sector emission reduction projects.
- In 2015/16 the revised offsets program in MOE will receive a \$13M annual financing transaction to purchase the offsets. Crown corporations, schools, universities, colleges and hospitals will continue to pay \$25/tonne for carbon offsets to MOE and flow to the consolidated revenue fund. The revised offsets program will have a \$2M recovery for ministry payments. Starting in 2015/16 MOE will have a \$7M budget increase to retire the offsets. Additional budget room will be managed through the contingency process.

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ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential	Carbon Offset Portfolio
Ministry of Environment	
Date: February 19, 2015	

RETURN TO TOP KEY MESSAGES:

Key message #1

 The new Climate Investment Branch is on schedule to deliver a portfolio of high quality offsets by June, 2015 to ensure BC reaches its carbon neutral commitment for the fifth year in a row.

Key message #2

 The Province's revised offset portfolio program is guided by the principles of credibility, transparency and accountability while optimizing carbon market efficiencies and an increased role of the private sector.

Key message #3

The Climate Investment Branch is building a strategically diversified portfolio
of carbon offset projects to drive BC's green economy, enable BC's leadership
on climate action, and uphold our commitment to a carbon neutral public
sector.

CURRENT STATUS:

- To become carbon neutral, each BC public sector organization must first measure, then reduce, report, and offset their emissions. The Climate Investment Branch facilitates this final step through investments in high quality BC-based offsets that reduce GHG emissions or sequester carbon.
- BC's portfolio of offset projects is significantly cutting emissions in the province every year, responding to demand of approximately 700,000 offsets annually for carbon neutral government.
- The Ministry has set five-year portfolio objectives in support of government's strategic goals:
 - 1. at least 50% of the portfolio will be populated with lower cost offsets;
 - 2. 5 to 40% will address key challenges for emission reductions, including natural gas, new industrial projects, off-road vehicles and forestry;

- 3. 5 to 40% will support projects that help to achieve one or more goals of the Climate Action Plan, the BC Technology Strategy or the BC Jobs Plan; and,
- 4. 5 to 40% will be generated from GHG reduction projects that support community-based organizations or benefit the local population.
- The Ministry's objective of a diversified portfolio balances the need to be fiscally responsible with making targeted investments to overcome barriers in key sectors.

Key message #2

- The Climate Investment Branch is required by law to rely upon the expert opinion of accredited auditors to determine if GHG reductions projects qualify as carbon offsets. Every offset project considered for the government's portfolio is audited by third-party accredited professionals to ensure they meet the requirements of BC's Emissions Offsets Regulation. This approach is consistent with offset systems now being developed and implemented in Quebec, California, Australia, China, South Korea and elsewhere.
- Details about individual carbon offset projects in the portfolio are publicly available on a third-party environmental registry (Markit). This ensures offsets are not doublecounted and allows the public to learn more about specific projects.
- BC now boasts a more mature carbon market, providing opportunity for the Climate Investment Branch to optimize efficiencies by shifting to an increased role of private sector carbon professionals in developing the offsets portfolio, while meeting government's high standards.

- Like the carbon tax which puts a price on carbon, offsets are another price-driven
 mechanism to encourage behavior change that leads to reductions in greenhouse
 gas emissions. Climate action mechanisms like carbon offsets provide incentives for
 companies, municipalities and cooperatives to take meaningful action to reduce their
 emissions, and their actions reverberate throughout BC, supporting jobs and
 generating revenue. As with the carbon tax, putting a price on carbon has proven to
 change behavior for the benefit of the environment.
- By investing in an offsets portfolio, the Province is driving innovation, new jobs, economic opportunities and making clean technology projects a reality. Offsets investments are bridging BC's resource industries to a competitive future with timely investment focused on overcoming key barriers to reducing emissions and growing our green economy.
- Projects in the offset portfolio support green technology and jobs further advance BC's Green Economy. Examples include:
 - Innovative natural gas transmission efficiency improvements that reduce the amount of methane that is released into the atmosphere;
 - Particulate scrubbers in biomass combustion projects;
 - Landfill methane capturing systems that reintroduce into the commercial

- system; and,
- Forest Carbon Projects that represent the culmination of significant effort and collaboration by the local First Nation communities and the BC Government.
 Established conservation and heritage sites, improved forest management, and jobs are some of the opportunities derived from these projects.
- BC is now well-situated to attract additional investors who are purchasing offsets for voluntary and regulatory markets. This means jobs and other economic benefits, and support for cleaner technologies to take root in BC

KEY FACTS/BACKGROUND

- 13 proposals have been received to date in response to the September, 2014 procurement call for offsets projects.
- Up to 20 BC-based emissions reductions projects are forecasted to contribute to the Carbon Neutral Government 2014 commitment.
- Ministry of Environment is forecasted to meet financial targets of \$10 million offset purchases and to meet offset demand for Carbon Neutral Government 2014.
- Where financial approvals allow, additional volume will be purchased and inventoried to help risk manage potential competition for offsets from the Liquid Natural Gas industry.

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Appendix A: Portfolio Project Examples

Forestry

The Great Bear Rainforest & Haida Gwaii Carbon Project (Coastal First Nations)

This project converts forests in BC's Great Bear rainforest and on Haida Gwaii that were previously available for logging to protected forests. This not only protects existing carbon stocks, but also reduces emissions caused by harvesting, road building and other operations and increases carbon sequestration as the forest grows. Protecting regional ecosystems and important cultural heritage values are additional project objectives. Revenues from this project will contribute directly to the development of a conservation economy within the area, co-managed by the Province and local First Nations.

• Kruger Products, New Westminister: Clean Tech Biomass Gasification

Paper producers rely on steam to power their mills. Usually, this steam is created by natural gas, which produces carbon dioxide emissions, or by hog fuel, which emits particulate matter. Kruger Products has utilized groundbreaking, made-in-BC technology to replace two of its standard boilers with a clean biomass gasification system. Kruger now meets about half of the plant's steam requirements by converting local wood waste into clean-burning syngas.

Natural Gas

Natural Gas Processing Electrification

Natural gas is transported along a pipeline to homes and businesses in BC and the Pacific Northwest. Under standard practice, fossil fuel would be used to drive the compressors that move natural gas along the pipeline. New compression systems are connected to the BC Hydro electricity grid, eliminating the need for fossil fuels and significantly reducing greenhouse gas emissions.

Agriculture

Sun Select Farms, Delta: Greenhouse Fuel Switch

 Sun Select Farms greenhouse operator reduced greenhouse gas emissions by installing insulating curtains to increase energy efficiency and a biomass boiler to help heat the greenhouse and reduce reliance on natural gas as a heat source. Taking their efforts one step further, Sun Select uses a BC-developed technology that filters the carbon dioxide from the boiler and delivers it directly to the vegetables in the greenhouse.

Community

Foothills Boulevard Regional Landfill, Prince George: Methane Capture

 The landfill near Prince George is capped to prevent methane – a greenhouse gas 25 times more potent than carbon dioxide – from escaping into the

atmosphere. The trapped gas is burned under controlled conditions, and in the process is released as CO_2 , resulting in reduced levels of methane emitted at the landfill site.

Transportation

- TransLink, Lower Mainland: Bus Fuel Switch Project
 - TransLink is reducing its greenhouse gas emissions by operating a fleet of diesel-electric hybrid buses and articulated trolleys in the Lower Mainland.
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ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential	
Ministry of Environment	Forest Carbon Offsets
Date: February 19, 2015	

RETURN TO TOP 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 was built upon the international best practices of leading forestry protocols and involved broad public input from stakeholders.

Key message #4

 Reforesting land and restoring forests ravaged by the mountain pine beetle epidemic 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 tonne 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 by encouraging emission reductions.

- The Forest Carbon Offsets Protocol is designed to encourage carbon sequestration in BC's forests and helps to ensure the projects are of high quality. The protocol covers a wide range of forest-based activities on private and public lands.
- The protocol provides detailed instructions on how land-based forest 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 seeking validation under the Regulation must use the Forest Carbon Offsets 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 validation by two auditors is nearing completion. The final stage will be for VCS to consider the recommendations of the validation bodies.

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.
- Recognition under this standard would enable B.C. developers to sell land-based forestry offsets into an international market.
- 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 and 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.

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Confidential

Ministry of Environment

ISSUE TITLE:

Carbon Neutral Government

RETURN TO TOP KEY MESSAGES:

Key message #1

Date: February 19, 2015

 As a leader in climate action, BC became the first major jurisdiction to achieve carbon neutrality across the provincial public sector. Now in its fifth year, BC's public sector has taken strides to save energy, reduce costs and greenhouse gas (GHG) emissions, and create clean, healthy communities in BC.

Key message #2

 Total emissions have decreased slightly across the public sector since 2010 and there has been an overall improvement in energy efficiency. Moving forward, the focus of the Carbon Neutral Government program will be on assisting the public sector in substantially reducing greenhouse gas emissions.

Key message #3

Since the initiation of the Carbon Neutral Government program, the Province
has leveraged funding to support the public sector in improving energy
efficiency, implementing green technologies and decreasing emissions. In
2014, the Province announced the extension of the successful Carbon Neutral
Capital Program for school districts to the health authorities and postsecondary institutions.

CURRENT STATUS:

- Carbon Neutral Government incents greenhouse gas (GHG) emissions reductions, energy and asset management, and leadership in creating a green economy and clean, healthy communities.
- Every day, nearly two million British Columbians work in, learn in, or visit public sector buildings that are carbon neutral.
- Public sector organizations (PSOs) follow a four-step process to achieve carbon neutrality: (1) measure their GHG emissions; (2) minimize their emissions as much as practicable; (3) offset any remaining emissions by purchasing high-quality, madein-BC carbon offsets; and, (4) report publicly on progress.

- Carbon Neutral Government demonstrates a commitment to taking action on climate change in Government's own operations. It allows the public sector to:
 - Be a part of creating clean, healthy communities, and 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.

Key message #2

 The following table summarizes the total carbon dioxide equivalent emissions and climate normalized emissions for PSOs for the first four years of the carbon neutral government program:

Year	Emissions (TCO ₂ e)	Climate Normalized Emissions (TCO ₂ e)
2010	812,065	860,170
2011	873,938	849,679
2012	845,211	848,707
2013	796,080	796,388

- For 2013, the public sector paid \$17.3 million to purchase offsets for the 692,599 tonnes of GHG emissions that require offsetting under the legislation, while spending \$414 million on energy and fuel costs. For every 1% improvement in energy efficiency, \$4 million in fuel costs are saved annually.
- Climate normalized emissions for 2013 are the lowest level of emissions for the public sector since the CNG program began, representing a 7% drop since 2010.
- Moving forward, the Carbon Neutral Government program will focus on supporting PSOs in achieving even greater GHG emissions reductions, and realizing reduced energy and operating costs. A key part of this work will be to identify the specific type of projects and initiatives the public sector needs to make to achieve the legislative target of a 33% reduction in GHG emissions by 2020, and illustrate the business case for funding these initiatives.

Key message #3

 The Carbon Neutral Capital Program (CNCP) for the K-12 Education Sector has been expanded to the health and post-secondary sectors. Total CNCP funding was increased in April 2014 to \$14.5 million for all three sectors. These funds are equal to the amount each sector pays in carbon offsets and used for capital projects that reduce GHG emissions and result in energy conservation.

CNCP Funding 2014/15				
Sector	Number of Amount of CNCP Projects Funded Funding (\$)		Estimated Annual GHG Reductions (tonnes CO ₂ e)	
K-12	28	5,000,000	1,293	
Health	23	5,700,000	3,603	
Advanced Education	19	3,800,000	1,284	
Total	70	14,500,000	6,180	

- CNCP Projects funded for 2014/15 have included:
 - Boiler upgrades to high efficiency boilers
 - Upgrades to HVAC systems
 - Lighting upgrades to more efficient lighting (LEDs)
 - Upgrading digital controls and sensors for heating/cooling systems
 - Installation of a geothermal system (UVic)
 - Installation of a biomass boiler (BCIT)
- These projects are reducing GHG emissions, operating costs, and the amount of
 offsets each sector requires to achieve carbon neutrality. They also contribute to the
 overall reduction in GHG emissions the public sector is mandated to achieve.

KEY FACTS/BACKGROUND

Appendix A: Background on Funding Emissions Reductions in the Public Sector

Public Sector Energy Conservation Agreement

- The Public Sector Energy Conservation Agreement (PSECA) started in 2007 and ended in 2010. A total of \$75 million was committed to support energy efficiency and GHG emission reduction projects for PSOs. Some projects did not advance and, to date, \$60 million worth of projects announced under PSECA have been realized. These projects are estimated to yield annual energy savings of \$12.6 million and GHG reductions of 35,600 tonnes.
- The Public Sector Energy Conservation program resulted in projects that showcase innovative BC based clean technologies.
- Examples of successful PSECA Projects:
 - 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.
- As a continuation of the PSECA Agreement, CAS has worked 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.
- The following table outlines funding leveraged via PSECA

<u>Carbon</u>
Neutral
Capital
Program
for
School
Districts

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
TOTAL	\$60,558,039	\$10,117,234	\$6,525,162	\$32,970,762	\$110,171,197

- 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, comprised 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.
- The 25 successful projects for 2013-14 were announced on March 6, 2013. As well, as part of the \$5 million provincial funding, 43 districts received about \$10,000 each to identify possible energy efficiency projects in the future.
- Examples of Projects Supported by the CNCP:
 - The new heat pumps at Palmer Secondary school in the Richmond school district will lower the school's greenhouse gas emissions by approximately 76 per cent. This new system will allow SD 38 to save more than \$19,000 on annual energy costs and \$5,000 on annual carbon offsets.
 - By replacing its old boilers with a more-efficient model powered by wood waste, the Cowichan Valley school district will be able to cut the school's greenhouse gas emissions by 168 tonnes and its annual energy costs by more than \$54,000, in addition to saving more than \$4,000 each year in carbon offsets.

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ESTIMATES NOTE (2015)
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ISSUE TITLE:

Ministry of Environment

Local Governments and the BC Climate Action Charter

Date: February 19, 2014

RETURN TO TOP KEY MESSAGES:

Key message #1

• 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 Province in taking steps to reduce energy use, save money and create clean, healthy, sustainable communities.

Key message #2

 The Province and the Union of BC Municipalities have established a joint Green Communities Committee under the Climate Action Charter to support local governments in taking action on climate change 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 or making progress on their carbon neutral status.

CURRENT STATUS:

- The BC Climate Action Charter voluntarily commits local governments to:
 - o be carbon neutral in respect of their corporate operations for 2012;
 - measure and report on their community's GHG emissions profile; and,
 - o create complete, compact, more energy efficient communities.
- As of 2013, 172 local governments reported on their corporate and community-wide climate actions. 158 local governments measured their corporate emissions, and 36 local governments achieved carbon neutrality in 2013.
- In 2013, local governments offset or balanced their corporate greenhouse gas emissions by over 127,000 tonnes: about 50% of BC local governments' total reported corporate footprint.
- Local governments report on their action through the Climate Action Revenue

- Incentive Program (CARIP). Since 2008, the Province has paid local governments approximately \$19.4 million under CARIP.
- Communities have a large influence over community-wide emissions and BC's ability to reach our GHG reduction targets.
- Reflecting on the past four years, it is clear that local governments are making advances toward reaching their climate action goals in the corporate and community spheres as the total number of actions reported through have almost doubled since 2010.

- Established in 2007 after BC local governments, UBCM and the Province signed the BC Climate Action Charter, the Green Communities Committee plays an important role in building local government capacity to plan and implement climate change initiatives.
- The Climate Action Secretariat has worked in partnership the Green Communities
 Committee to develop the following to support local governments in taking action to
 make their own operations carbon neutral:
 - The "BC Climate Action Toolkit" website provides BC communities with guidance, resources, practical advice and best practices to help them reduce their GHG emissions and implement their Climate Action Charter commitments;
 - The *Community Energy and Emissions Inventory* (CEEI) is the first of its kind in North America. It helps local governments meet the Climate Action Charter commitment to measure and report on community GHG emissions profiles. CEEI helps local governments establish GHG reduction targets, policies and actions in official community plans or regional growth strategies;
 - o The *Becoming Carbon Neutral Guidebook* provides guidance for local governments on how to become carbon neutral, including step-by-step guidance on how to balance corporate emissions to zero by investing in GHG reduction projects and/or through purchased offsets.; 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.

Key message #3:

- The **Becoming Carbon Neutral** guidance document provides local governments three options to achieve credible carbon neutrality:
 - undertake a GCC framework supported local GHG reduction project;
 - o develop an alternative project that meets GCC framework criteria; and,
 - o purchase offsets that meet high standards.

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) Statues 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.

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ESTIMATES NOTE (2015) Confidential

ISSUE TITLE:

Ministry of Environment

Climate Action Outreach and Engagement

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

Key message #1

 The Government is fostering awareness and understanding regarding the issue of climate change to encourage organizations, institutions and local governments to prepare for and prevent further climate change impacts.

Key message #2

 The Government facilitates and showcases the advancement of climate action leadership across the province, while social media provides opportunities to reach new audiences and motivate positive behaviour change.

Key message #3

 The Government has established the rationale and business case for taking action to conserve energy and to create more sustainable communities and supports and identifies continued momentum and collaboration.

CURRENT STATUS:

- In 2011 Climate Action Secretariat (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. In January, 2014, a new course module was added regarding climate change mitigation options.
- CAS supports a variety of sustainability related conferences and events around the
 province and internationally. CAS advises and sets agendas as well as provides
 speakers, content and facilitation. Events for 2014 included a UBCM session on
 healthy communities and climate action, hosting the UBCM BC Mayors Climate
 Leadership Council annual breakfast, presenting the Climate Action Charter at an
 international conference on climate leadership in Germany and working with
 partners in Northern BC to present their perspective on cumulative effects and
 climate.
- CAS is actively hosting and participating in a wide selection of webinars and networks related to climate action and sustainability. CAS works with organizations like the Federation of Canadian Municipalities Partners in Climate Protection Program, academic partnerships (SFU, UBC and Royal Roads University) on local government climate action engagement and supports with work of other government

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of BC Ministries who work with local governments on sustainability and climate issues.

Key message #2

- CAS has relationships with a variety of organizations working on carbon and sustainability such as ClimateSmart Solutions. CAS connects small- and mediumsize enterprises and professional associations that have the potential to reduce emissions with these organizations to support the green economy.
- CAS has worked with partners including the academic community to support the BC Mayors' Climate Leadership Council by helping facilitate peer-to-peer leadership for newly elected officials in 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.
- CAS works nationally with organizations such as Quality Urban Energy Systems of Tomorrow and co-hosted their national conference in Vancouver in December, 2014.
 Senior representative from utilities, developers and local governments were in attendance.

Key message #3

- With the achievement of Carbon Neutrality since 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. CAS held their annual CNG symposium in December of 2014.
- CAS celebrates success in climate action and provides support for the Community Energy Association's local government awards presented at UBCM. For 2014 Richmond won in the Community Planning & Development category, Nanaimo won the Corporate Operations award and Telkwa and School District 54 received the Public Collaboration award
- CAS also supports the work of the Green Communities Committee and the annual UBCM award on climate action. Columbia Shuswap Regional District received the 2014 for climate leadership and innovation.

Contact: Suzanne Spence, Executive Director, Climate Action Secretariat (250) 588-9346 cell /

Ben Finkelstein, Manager, Green Communities, CAS

(250) 588-0053

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Budget Overview

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Ministry of Environment

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KEY MESSAGES

- Key message #1 The estimated Conservation Officer Service (COS) budget is \$16,714,000 for Fiscal Year 2015/16.
- Key message #2 Overall, the anticipated COS budget remains the same from fiscal year 2014/15.

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 partners continues in order to ensure the effective deployment of resources on the landbase.
- Lag times inherent in staffing vacancies will be used to offset significant salary pressures.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 567-8929

ESTIMATES NOTE (2015) Confidential

Ministry of Environment

ISSUE TITLE:

Conservation Officer Service Overview

Date: February 2015

RETURN TO TOP KEY MESSAGES

Key message #1 – There are 155.3 positions in the Conservation Officer Service (COS), of which 148 are sworn Conservation Officer (CO) positions and 7.3 are civilian positions

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 unrestricted appointments to enforce all Acts and Statutes, and protect the public and
 preserve the peace.
- COs are located in 45 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.
- 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.

Conservation Officer Service Positions (FTEs)

Type of position	2015/ 2016	2014/ 2015 ¹	2013/ 2014	2012/ 2013	2011/ 2012	2010/ 2011
Uniform/patrol Conservation Officer and Sergeant	107	107	106	105	105	105
Plainclothes Investigation Sergeant and Detective Sergeant	21	22	22	22	24	25
Seasonal Conservation Officer	0	0	0	0	0	0
Total – front line CO staff	128	129	128	127	129	130
Inspector and	16	16	16	17	17	17
Executive Officer						
Training Sergeant	2	2	2	2	2	1
Predator Conflict Reduction and	1	1	1	1	1	1
Response Coordinator						
Staff Sergeant, Quality Assurance	1	1	1	1	1	1
Total – non front line CO staff	20					
Total – Sworn Officers	148	149	148	148	150	150
Civilian	7.3	7.5	8.5	8.5	9.5	11.5
Total Conservation Officer Service positions (sworn officer and civilian)	155.3	156.5	156.5	156.5	159.5	161.5

^{*}Notes: Positions are reported as of the end of each fiscal year. In October of 2010, seventeen positions (FTEs) were transferred to the COS from the former Ministry of Forests and Range.

- 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.
- 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	Guilty plea. Fine \$400k plus
	Pollution	reparations.
Lillooet	Fatal attack by Black Bear	Bear responsible for fatal attack
		destroyed.
Kinder Morgan Canada	Burnaby Oil Spill	Each party fined \$1,000 and ordered to
Inc., Cusano		each pay \$149, 000 to the Habitat
Contracting Inc, R.F.		Conservation Trust Fund.

¹ Positions are reported as of the end of each fiscal year, except for 15/16

Binnie and Associates	
Ltd.	

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 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 by delivering livestock protection services (education and predator mitigation) in partnership with livestock producers, The number of case files, tickets and warnings has seen a gradual increase over the past nine years

Year	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15
Total Case Files	7,139	6,743	8,207	8,937	8706	8171	9745	9996	8939
RTCC	44	49	47	48	42	37	59	41	23
Tickets	2,436	1,989	2,096	2,190	1961	2220	2563	2631	2343
% change over previous FY	18%	-18%	5%	4%	-10%	13%	15%	3%	-11%
Warnings	3,067	2,466	2,441	2,598	2452	2623	3439	3612	2815
% change over previous FY	34%	-20%	-1%	6%	-6%	7%	31%	5%	-22%

 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 COS is using Community Environmental Justice Forums (Regional Premiers Award) to address non-compliance as an alternative to issuing tickets or taking an offender to court and 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 of Justice and Attorney General.
- The COS utilizes the Report All Poachers and Polluters 24/7 toll-free hotline that allows the public to report known suspected poachers and polluters. 1-877-952-RAPP (7277) or Cellular #7277.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 567-8929

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COS Capacity

ISSUE TITLE:

Ministry of Environment

Date: February 2015

RETURN TO TOP KEY MESSAGES

Key message #1 – The COS provides public safety and environmental enforcement services to the citizens of our province, these services are delivered out of 44 field offices located throughout our province; 10 locations are staffed with one Conservation Officer. During peak call demand periods officers in single officer locations do not have adequate relief or assistance resulting in officer safety, operational and wellness concerns that result in elevated risk to officer and public safety.

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.

Key message #3 – 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 #4 – 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.

CURRENT STATUS:

Key message #1:

- Conservation Officers have identified that one-officer locations have operational limitations due to
 their location and access to qualified back up. In the past, due to staff limitations, the COS has been
 forced to introduce more single officer postings to provide adequate geographical coverage in BC.
 However, the only qualified back up for the either the Revelstoke Conservation Officer or the Golden
 Conservation Officers is the local RCMP in each of the communities, and these too have certain
 operational limitations given the primary focus of their law enforcement mandate.
- The PLT has reviewed calls for service and investigation case loads in the Kootenay Region to
 determine the current operational workload pressures and supervisory capacities. Moving the point
 of assembly for the Sgt position from Revelstoke to Golden will ensure continued service delivery for
 the Revelstoke area and increase the supervisory/mentoring and operational oversight of the other
 officers in the Columbia Kootenay Zone (The Invermere field office has two conservation officers that

are supervised by this same Sgt). Moving the Sgt position to the Golden field office will consolidate staff to eliminate two of the COS' one-officer locations and ensure that qualified backup was available for response for human/ wildlife conflicts and high risk enforcement tasks by potentially allowing two officers to be deployed at the same time. The Sergeant in charge of the zone will ensure that staff resources are utilized as efficiently as possible to ensure a high standard of service is maintained throughout the zone. The Sergeant can also draw on Provincial Quick Response Teams, the Provincial Investigations Branch and Conservation Officer regional resources as required to address major incidents and concerns.

• The Revelstoke community has raised concerns about the transfer of the Revelstoke FTE to Golden. Continued communications with local community representatives is ongoing to explain the reasons for the transfer of the position and outline the strategies the COS will use to ensure their concerns are addressed and that the community receive the same level of service from the COS. These strategies include ensuring human /wildlife conflict concerns are responded to in a timely manner and that public outreach, education, and compliance and enforcement from the COS that remains effective.

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:

 In 2013-14 (to date) the COS responded to 334 of the 854 calls received regarding livestock damage by large predators. There have been 114 confirmed verifications of cattle losses and several more for other livestock types. Ranchers have submitted 38 of these verifications. In response to verified attacks, officers have removed 28 wolves, 34 Black bears, 4 Grizzly bears, 67 cougar, and 5 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 #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 Emergency Management BC, the COS operates a 24 hour RAPP line (Report all Poachers and Polluters) 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 10 locations that are staffed with one Conservation Officer. During peak call demand periods 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 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 WildSafeBC (formerly 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 will direct the public to
 education and information sources 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.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 567-8929

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Ministry of Environment

Date: February 2015

ISSUE TITLE:

Major Investigations

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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 of a 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 1766 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 plain clothes detectives in the Major Investigations Unit, undercover detectives of the Special Investigations Unit and detectives in the Intelligence Unit usually in a lead role or as a support to uniformed Conservation Officers. Cases can be referred to the Major Investigations Unit via the Investigation Referral Process (IRP).

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. (See CEJF Estimates Note).

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.

Contact: Doug Forsdick, Acting Chief Conservation Officer, Conservation Officer Service (250) 356-9100

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Ministry of Environment

Date: February 2015

ISSUE TITLE:

COS Role in C&E in the Natural Resource Sector

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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.
- 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 full and part time officers, including 148 COS sworn officers. Other enforcement staff include, BC Parks and, FLNRO C&E). Additional support is provided by Ministry of Energy and Mines investigators, and the Oil and Gas Commission 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 led 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.

- The Conservation Officer Service and FLNRO C and E have developed a Strategic Alliance Document and accompanying action plan to guide collaboration between the two agencies.
- 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 provided 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.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 567-8929

ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Community Environmental Justice Forums (CEJFs)
Date: February 2015	

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- Key message #1 The Ministry has developed an innovative approach to respond to environmental contraventions by regulated companies.
- Key message #2 CEJFs are proving to be an enforcement option that delivers considerable benefits to all participants.
- Key message #3 CEJFs offer effective enforcement at a fraction of the cost and time required for court prosecution.

CURRENT STATUS:

Key message #1

- Community Environmental Justice Forums apply the principles of restorative justice in a facilitated forum that brings together the non-compliant company and the affected community to collectively determine how to repair harm to the environment and to community values and relationships.
- The Ministry is a pioneer in the application of restorative justice to environmental contraventions committed by companies. The Conservation Officer Service was awarded a Premier's Award in 2012 for its innovative application of this approach to a mercury spill in Trail BC.
- CEJFs are an enforcement option that is considered only when specific criteria are met: the non-compliance was not intentional, the company admits fault and is remorseful, a community has been harmed, and all parties voluntarily agree to participate.
- The Ministry has policies and procedures in place to ensure that CEJFs are conducted in a fair, consistent and transparent manner. The Ministry reports all CEJFs in the Environmental Violations Database and the Quarterly Environmental Enforcement Summaries.

Key message #2

- Companies, communities and law enforcement all report very high satisfaction with the CEJF process and the outcomes.
- CEJFs empower communities to be a partner in the administration of justice. CEJFs

provide the community with an opportunity to speak to the harm caused by the offence and to reinforce community values and expectations. The community plays a key role in determining the restitution required by the company to repair the harm, all of which stays in the community.

- CEJFs can result in real behavior change in companies. The company is required to face
 those directly affected by the offence, to explain their actions, to apologize and to make
 restitution that will repair the harm. CEJFs offer the company an opportunity to
 demonstrate accountability and to restore its social licence. Restorative justice statistics
 show very high compliance with the agreements and low recidivism by offenders.
- Ministry enforcement staff appreciate the timely and cost-effective resolution of cases, and the positive environmental outcomes that result. CEJFs offer the opportunity for learning and building relationships with communities and the regulated parties who operate within them.

Key message #3

 The financial restitution that results from the forum is commensurate with fines that would be awarded in court however the process is concluded at a fraction of the cost and time. A typical forum can be held within 30-45 days of the incident compared with a 1-2 year timeframe to resolve the matter through the courts.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Restorative justice is a growing dispute resolution mechanism, based on the principle of repairing harm and mending relationships rather than strictly on punishment.
- The Ministry has conducted 8 major CEJFs to date, resulting in over \$657,000 in restitution paid to communities affected by environmental offences. All agreements have been complied with.
- Non-compliance occurs when regulatory requirements are not met. Not all contraventions
 are similar in nature and the circumstances under which they occur vary widely;
 accordingly the Ministry continues to explore new tools and approaches to ensure it has a
 range of appropriate enforcement responses. Including the newly enacted

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

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Ministry of Environment

Date: February 2015

ISSUE TITLE:

Mt. Polley Investigation

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KEY MESSAGES:

Key Message #1 – An independent investigation into the cause of the August 4, 2014, Mount Polley tailings pond breach is underway, being led by British Columbia's Conservation Officer Service (COS), and assisted by Environment Canada, Department of Fisheries and Oceans and the RCMP.

Key Message #2 – MIU officers, trained in specialized investigative techniques, focus on cases that are complex, involve corporations, are international or are multi-jurisdictional in scope. As law enforcement officers, conservation officers in the MIU are highly trained in complex investigations including person interview practices and evidence gathering techniques that can secure criminal prosecution.

Key Message #3 The Conservation Officer Service is an independent law enforcement body, and forwards recommendations for charges when warranted directly to provincial Crown Counsel.

CURRENT STATUS:

Key message #1:

 The COS is the primary natural resource law enforcement agency in B.C. that specializes in commercial environmental and industrial investigations. The Conservation Officer Service enforces over 33 pieces of provincial and federal legislation, including the *Environmental Management Act* and the *Fisheries Act*. They are also Special Provincial Constables under the *Police Act* with a wide suite of powers associated with that designation.

Key message #2:

The Conservation Officer Service uses the highest level of major case file
management techniques, as well as internationally recognized systems such as the
incident command system. Major Case Management supports major investigations
by efficiently processing, organizing, indexing, and ultimately disclosing the large
quantities of information derived from these investigations.

Key message #3:

 At the conclusion of the investigation, a determination is made by COS to issue a Report to Crown Counsel (RTCC) recommending charges. This RTCC is not made public. It is sent directly to Crown Counsel. A determination is then made by Crown Counsel to pursue charges. At the time the charges are laid in court, the public would be made aware of the charges themselves. Information regarding the evidence that supports any charges would not be made available until the court case is heard.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The Mt. Polley investigation is currently ongoing.
- Investigators are collecting evidence through a variety of means including interviews and judicial applications.
- The investigation is expected to continue for several months.
- Comments on the specifics of the investigation cannot be made as the investigation is ongoing.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 356-9100

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Ministry of Environment

Date: February 2015

ISSUE TITLE:

Lemon Creek

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KEY MESSAGES:

Key Message #1 – The Conservation Officer Service conducted a detailed investigation into the July 26, 2013, Lemon Creek fuel spill near Slocan BC. After careful consideration of all of the facts and circumstances which lead to the incident, no report to Crown Counsel was forwarded and the investigation was closed.

Key Message #2 – Often these types of investigations are multi-jurisdictional due to the nature of the incident and the applicable legislation involved (*Environmental Management Act, Fisheries Act*). In this particular investigation, the Conservation Officer Service is the lead agency and Environment Canada is assisting.

Key Message #3 – On September 29, 2014, a private information was sworn in Nelson against Executive Flight Centre and the Government of British Columbia, Ministry of Transportation and Infrastructure pursuant to section 36(3) of the *Federal Fisheries Act*. (deposit deleterious substance)

CURRENT STATUS:

Key message #1: The Conservation Officer Service has reopened the investigation and are consulting with Public Prosecution Service of Canada (Federal Crown). A report to Crown Counsel maybe submitted if sufficient evidence is gathered to support an offence.

Key message #2: Environment Canada investigators continue to assist the COS in this matter.

Key message #3: The private information is now before the courts.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The COS/Environment Canada have reopened the investigation.
- If sufficient evidence is gathered to support a charge pursuant to the *Federal Fisheries Act or Environmental Management Act*, a report to crown counsel will be submitted.
- We cannot comment on the specifics as this matter is currently before the courts.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 356-9100

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Ministry of Environment

Date: February 2015

ISSUE TITLE:

WildSafeBC (Bear Aware) Funding

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KEY MESSAGES

- Key message #1 We were pleased to provide \$275,000 in funding in 2014/15 that supported 25 WildSafeBC coordinators and WildsafeBC programs in over 100 communities in B.C.
- Key message #2 WildSafeBC is an educational program, coordinated by the BC Conservation Foundation (BCCF). It is designed to prevent and reduce conflicts between people and wildlife in our communities.
- Key message #3 WildSafeBC is an expansion of the highly successful Bear Aware program
 expanding the focus from reducing human-bear conflicts to reducing human-wildlife conflicts.

CURRENT STATUS:

Key message #1:

- For fiscal year 2014/15 COS/MOE contracted \$275,000 to the BC Conservation Foundation to fund the 2014 WildSafeBC program. In partnership with municipalities, regional districts, the Habitat Conservation Trust Fund, Gaming private trust funds and volunteer support from private individuals, 25 WildSafeBC coordinators, in addition to a network of volunteers, delivered programs in over 100 communities throughout the province. Using the provincial funds, BCCF was able to deliver a program valued at over \$620,000 for the 2014/15 season.
- 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 2014/15 funding are: Bella Coola, Capital Regional District, Castlegar, Elk Valley, Fernie, Fraser Valley Regional District, Golden, Grand Forks, Invermere/Radium, Kamloops, Kaslo, Kimberley/Cranbrook, Maple Ridge, Nelson, New Denver, Pacific Rim, Quesnel, Regional District of Okanagan-Similkameen, Revelstoke, Rossland-Trail, Selkirk/Purcells (Creston and area) Squamish, Sunshine Coast Regional District, Thompson Nicola Regional District, .
- For fiscal year 2013/14 COS/MoE contracted \$225,000 to the BC Conservation Foundation to fund Bear Aware and BCCF was able to deliver a program valued at over \$520,000

Key message #2:

 In May 2013, MoE, in partnership with the BC Conservation Foundation, launched WildSafe BC an expansion of highly successful Bear Aware program. This allowed for the utilization of existing infrastructure and delivery models to help communities address their growing problems with deer, coyotes, cougars and other wildlife.

Key Message #3:

 The mission of the WildSafeBC program is to reduce the number of human-wildlife 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.

- Due to the success of Bear Aware and increased scope of WildSafeBC the program has requested funding of \$500,000 for 2015/16 to support all of the BC communities35 to date that wish to participate.
- s.13.s.17

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The WildSafeBC 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. WildSafeBC (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 "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 human-bear 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.
- WildSafeBC (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 sevencommunities, Kamloops, Squamish, Lions Bay, Whistler, Port Alberni, Naramata, and the Village of New Denver have successfully attained official "Bear Smart" status. We anticipate additional Bear Smart designations in the next years.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 387-9100.

Confidential

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Urban Deer (Ungulates) Review and Report

RETURN TO TOP

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 MoE and MFLNRO staff will continue to support and encourage communities to prepare and implement community-based deer conflict management plans.
- Key message #4 Several communities have developed deer conflict management plans and 5 communities (Cranbrook, Kimberley, Invermere, Elkford and Oak Bay) 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 Urban Deer Management, Fertility Control, Translocation, Hazing with Dogs, Culling, and Utilization of Meat to assist deer conflict committees in developing effective management strategies.
- The Province is currently working with local governments to understand the demand for the use of hazing by dogs - as an additional tool that could be used to address urban deer conflicts. It is also working with communities in the Kootenay Region to develop an experimental trial to understand if translocation could be an effective tool in managing urban deer.

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.
- In January 2015, MoE participated in a two day workshop with UBCM involving 12 local governments, MFLNRO and MOTI, the SPCA and WildSafeBC. This workshop provided information, laid the foundation for the creation of a Provincial Urban Deer Advisory Committee and encouraged the UBCM and local governments to prepare recommendations for government's consideration.

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. They have a permit approved to remove 50 deer before April 2015. Kimberley, Invermere and Elkford also had permits approved to remove deer. Kimberley killed 99 deer in January 2012 and 11 in Winter 2014. Invermere removed 19 deer in Winter 2012 and have a permit to remove deer in 2014/15. Elkford killed 39 deer in January 2014. A permit has been approved for Oak Bay to cull a maximum of 25 deer in Winter 2015 but no cull has yet taken place.
- In Invermere, a lawsuit from the Invermere Deer Protection Society to quash the option to cull deer was dismissed in its entirety in October 2013. The BC Supreme Court judge upheld the process Invermere and other communities have used around consultation on options to deal with urban deer.
- Communities in the Kootenays experienced aggressive protesting from animal advocacy groups, trap vandalism, trespassing and contractor harassment. The COS increased patrols to mitigate potential vandalism of lawfully set traps in Kootenay communities.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 356-9100

ESTIMATES NOTE (2015) Confidential

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Human-Wildlife Conflict Information

RETURN TO TOP 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 2014/15 (to date) the COS has received approximately 27,798 calls regarding human-wildlife conflicts compared to 28,065 in 2013/14, 29,615 in 2012/13 and 30,750 in 2011/12. Of those calls in 2014/15, 17,541 involved human-bear conflict, compared to 16, 180 in 2013/14, 18,975 in 2012/13 and 21,250 in 2011/2012. Human-bear conflicts in 2014/15 have been relatively low to average compared to previous years, likely due to abundant natural food availability throughout most of the province and increased bear conflict awareness and reduction initiatives by communities.

Key message #2:

Amendments to the Wildlife Act in 2011 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 complement
existing tools and are expected to reduce the number of bears that come into
conflict with people.

Kev 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. Total number of PAT responses for the 2014 calendar year were 13 resulting in human injury and 0 fatalities compared to 17 injury and 0 fatalities in 2013 and 15 injury and 0 fatalities in 2012.

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 3 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 (2011) 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 humanwildlife conflicts. When wildlife is relocated, it most often returns to conflict situations or does not survive, as it has to compete with established populations.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 387-9100.

Appendix: List of Wildlife Incidents

			GRIZZLY BEARS	-		
Year	# of Calls	Attended	Killed by CO	Relocated	Haze d	Cubs to Rehab
2009-10	301	92	13	7	-	0
2010-11	615	197	30	10	-	6
2011-12	455	158	12	9	7	0
2012-13	514	198	35	12	3	0
2013-14	428	126	12	2	10	0
2014-15	487	129	12	3	9	11
Average	462	154	20	8		1.2

			BLACK BEARS	-		
Year	# of Calls	Attended	Killed by CO	Relocated	Hazed	Cubs to Rehab
2009-10	11986	1280	254	68	-	16
2010-11	22625	2630	645	110	-	24
2011-12	20794	2514	506	30	78	34
2012-13	18421	2469	509	59	115	34
2013-14	15752	1691	397	22	119	24
2014-15	17054	2291	553	18	180	52
Average	17881	2111	461	58		26

			COUGARS			
Year	# of Calls	Attended	Killed by CO	Relocated	Hazed	

Average	2597	454	69	1.4	
2014-15	2692	454	92	0	4
2013-14	3224	564	118	0	2
2012-13	2930	568	90	2	2
2011-12	3069	610	57	4	0
2010-11	1854	214	38	1	-
2009-10	2242	386	57	0	-

Appendix: List of Wildlife Incidents continued

			WOLVES		
Year	# of Calls	Attended	Killed by CO	Relocated	Hazed
2009-10	316	29	4	0	-
2010-11	327	26	2	1	-
2011-12	480	130	79	0	0
2012-13	568	161	70	1	12
2013-14	482	95	145	0	0
2014-15	363	74	28	0	0
Average	418	85	37	0.4	

			COYOTES		
Year	# of Calls	Attended	Killed by CO	Relocated	Hazed
2009-10	741	119	15	1	-
2010-11	1016	62	17	0	-
2011-12	1390	179	66	0	1
2012-13	1150	194	64	0	8
2013-14	1716	152	52	0	9
2014-15	1537	115	43	0	0
			_		
Average	1162	137	39	0.2	

Confidential

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Livestock Protection Program

RETURN TO TOP

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.

CURRENT STATUS:

Key message #1:

- The COS has provided a dedicated coordinator position to oversee responses to livestock depredation. This position has achieved the goal of educating, training and equipping all agencies and individuals involved in livestock predator interactions. To date 577 cattle producers have received this training and there has been increased involvement with the BC Trappers Association who also play an important role.
- 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, 119 COs have received Level 1 Predator Response training and 71 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), Lillooet (including Ashcroft and Clinton), Vernon, Kamloops, Clearwater, Williams Lake, Prince George, Smithers and Fort St John regions. The COS has also delivered 30 verification training courses to 370 producers throughout the province with 40 more scheduled to take the training this February.

- In 2014-15 (to date) the COS responded to 281 of the 685 calls received regarding livestock damage by large predators. There have been 114 confirmed verifications of cattle losses and several more for other livestock types. Ranchers have submitted 38 of these verifications. In response to verified attacks, officers have removed 29 wolves, 57 Black bears, 3 Grizzly bears, 38 cougar, and 16 coyotes.
- In 2013-14 the COS responded to 334 of the 854 calls received regarding livestock damage by large predators. There were 114 confirmed verifications of cattle losses and several more for other livestock types. Ranchers have submitted 38 of these verifications. In response to verified attacks, officers have removed 28 wolves, 34 Black bears, 4 Grizzly bears, 67 cougar, and 5 coyotes.
- 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 submitted 15 of those verifications. In response to verified attacks, officers removed 57 wolves, 56 black bears, 21 grizzly bears, 52 cougar, and 20 covotes.
- The COS has not received any additional resources to assist in delivering on livestock-predator conflicts. As a result, the COS does not have available resources to respond to every incident and it is anticipated this will continue to be the case in 2014/15.

Key message #2:

- The COS coordinates an across-ministry working group bringing scientific management and expertise dealing with conflict resolution associated with 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.

Contact: Doug Forsdick, Chief Conservation Officer, Conservation Officer Service (250) 356-9100

Confidential

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Controlled Alien Species (CAS)

RETURN TO TOP

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.
- The time and resources necessary for compliance and enforcement of the Act must also be balanced against other public safety concerns such as human wildlife conflicts.
- As of January 2014, 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. Conservation Officers are further supported by approved veterinarians who specialize in handling exotic species.

 As of February 4, 2014; MFLNRO had approved 75 permit applications covering approx. 340 CAS animals (includes multiple animals of the same species).

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. 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 spent annually per generating stations to mitigate mussel impacts on facilities and has spent \$20 million 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 to increase the ability to intercept and inspect for the new invasive aquatic species.
- 4 CAS inspection stations will be set as 3-year program focused in the South East part of BC along the US border and Alberta border to intercept vessels being transported into BC. COS will provide support to the inspection stations when noncompliance is detected.

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 non-invasive 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 a management plan) to acquire, breed and possess CAS. The film industry requires a permit to temporarily bring CAS into B.C.
- In 2014 there were 10 CAS responses conducted by the COS.
- Currently, there are four facilities in British Columbia that are permitted to house CAS species.

Contact: Doug Forsdick, Acting Chief Conservation Officer, Conservation Officer Service (250) 356-9100

Environmental Protection Division – 2015 A List

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ESTIMATES NOTE (2015) Confidential

Ministry of Environment

ISSUE TITLE:

Status of 2015/16 Budget Environmental Protection Division

Date: February 20, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 –The Environmental Protection Division is experiencing budget pressures in some of its programs. Division resources include \$25.986M budget (\$8.356M Base budget and \$17.630M SEF), which includes \$20.909M salaries, \$4.404M operating and approximately 254 full time staff positions. EPD has access to \$1.0M in contingency funds to ensure environmental standards are in place for all new mining developments.
- 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 four branches: the Environmental Emergency and
 Land Remediation Branch; Environmental Standards Branch; Business
 Services Branch and Regional Operations Branch.
- Key message #3 Business planning is ensuring the highest priorities are identified and resourced in 2015/16 in order to support the BC Jobs Plan, LNG and Major Mining projects, 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.
- Ongoing recovery efforts related to the Mount Polley tailings impoundment breach and the broader mining sector reviews, necessary following the Independent panel report findings, have placed additional staffing and resource pressures on the division. EPD is working to hire key staff in both of these areas to ensure that the ministry mandates are achieved in these areas.
- Treasury Board recently approved MOE (Environmental Protection) access to the Contingencies and New Programs Vote for up to \$1.0 million 2015/16 to address the backlog of applications and expected new applications for EA review and Environmental Management Act (EMA) waste discharge permit authorizations

- focusing on mining activities in the SE Coal block. Nine FTEs will be hired beginning in 2015/16 with this funding.
- EPD estimates for 2015/16 is down \$0.429M from last fiscal due to vehicles moving into overhead last fiscal

Environmental Protection Core Business Analysis (\$000s)

	Restated	Estimates	Restated	Restated	Restated	Estimates
	2011/12	2012/13	2012/13	2013/14	2014/15	2015/16
Environmental	\$6,954	\$6,954	\$6,954	\$8,324	8.785M	8.356M
Protection						
SEF	\$19,000	\$19,000	\$19,000	\$17,630	\$17,630	\$17,630
Total	\$25,954	\$25,954	\$25,954	\$25,954	\$26,415	\$25.986
Operating:						

Key message #2:

- Effective April 1, 2014, Environmental Protection Regional Operations revised their delivery model to create a dedicated mining and LNG/Oil and Gas Teams. This was done to ensure timely response to client needs, manage staff workload and align with other Natural Resource Sector processes.
- Environmental Protection Division plays a key role in verifying compliance with the Environmental Management Act (EMA) and Integrated Pest Management Act (IPMA). Regional Monitoring, Compliance and Stewardship staff as well as staff in the Integrated Pest Management and Waste Prevention team work to ensure that the environment and human health are protected through compliance verification with EMA and IPMA.

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 is limited to critical program delivery
 - Work is underway to potentially change the regulatory model to support a reduction in the need for resources in the area of municipal waste management.
 - In addition to added capacity through contingency funds, we are also looking at how we do the work e.g. having lower risk work done by qualified professionals.

Contact: Lori Halls, Assistant Deputy Minister, Environmental Protection Division, (250) 387-9997.

Ministry of Environment

Date: February 4, 2015

ISSUE TITLE:

Administrative Penalties for Environmental Protection

RETURN TO TOP KEY MESSAGES

- Key message #1 -The ministry's new Administrative Penalty program
 is now in effect. Introduced under the Environmental Management Act
 and the Integrated Pest Management Act, Administrative (Monetary)
 Penalties (AMPS) regulations were passed on June 23, 2014. To date,
 no AMPs have been issued. Efforts have been focused on developing
 an implementation program and the training of staff.
- Key message #2 The use of administrative penalties will fill a gap in the ministry's enforcement tools and bring greater consistency to the treatment of non-compliance within the natural resource sector.
- Key message #3 An Information Paper was released to stakeholders and the public. Follow-up conference calls or meetings have been held at the request of a number of industry associations including the Council of Forest Industries, the Mining Association of B.C., the Diary Association, the Retail Council of Canada and the Pulp and Paper sector. Ministry staff continues to engage with various industry associations on implementation.

CURRENT STATUS:

Key message #1

- To bring the AMP program into force, a fee issue paper was approved by the
 Treasury Board in February 2014 and two new regulations (one per act) were
 created on June 23, 2014. The regulations provide program details including which
 contraventions AMPs can be applied to (all mandatory requirements in both acts and
 31 regulations), what the maximum penalties can be and the administrative process
 that must be followed.
- Although the regulations are in force, the ministry intends to implement slowly. Each
 program is in the process of identifying who its statutory decision maker(s) will be
 and working with Strategic Policy Branch to develop program-specific guidance and
 an implementation approach.

Key message #2

 AMPs will fill a gap between warnings and violation tickets issued for minor offences, and criminal prosecutions reserved for more serious ones. AMPs will provide the

- ministry with an appropriate response to a wide range of contraventions for which suitable remedies are not currently available.
- To develop this new program the ministry researched numerous administrative penalty regimes across Canada and consulted with B.C. agencies that rely on this tool. Increasingly regulatory agencies are turning to administrative penalties as a fair, timely and cost-effective way to address non-compliance.
- The use of administrative penalties will bring the ministry in line with its regulatory partners including the Ministry of Forests, Lands and Natural Resource Operations and the B.C. Oil and Gas Commission.

Key message #3

- An Information Paper outlining the details of the penalty program was posted to the ministry website in February 2014, and direct notification given to all key EPD stakeholders. Comments and concerns have been address and are being incorporated into program specific guidance for compliance staff (including the Conservation Officer Service) and statutory decision makers.
- The ministry is adopting a slow, phased approach to implementation. Where staff
 have determined that a penalty is an appropriate response, parties who are in
 contravention of a regulatory requirement will be given ample notice and opportunity
 to come into compliance before a penalty is imposed.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- AMPs are financial penalties that can be imposed on individuals or companies who
 fail to comply with a provision of a statute or regulation, with an order issued by a
 ministry official, or with the terms and conditions of an authorization.
- As an administrative rather than criminal type of sanction, AMPs are imposed by designated ministry officials instead of the courts.
- AMPs are intended to encourage compliance. They are designed to remove the financial benefit, advantage or gain achieved by breaking the law. As such, they help to ensure a level playing field among regulated parties.
- The ministry's Compliance & Enforcement Policy and Procedure guides ministry staff in selecting appropriate tools to respond to instances of non-compliance. AMPs are a new tool that compliments the other remedies currently available to staff including advisories, warnings, licensing sanctions, restorative justice and prosecution. It is important that the ministry have a range of responses to effectively enforce its acts and regulations.

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

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Ministry of Environment

Date: February 6, 2015

ISSUE TITLE:

Use of Qualified Professionals/Approved Professionals

RETURN TO TOP KEY MESSAGES

- Key message #1 Qualified Professional (QP) models have been in place for a number of years and have been purposely designed by government to achieve desired outcomes based on costs and risks, benefits and efficiency.
- Key message #2 QPs represent qualified individuals certified by specialized organizations.
- Key message #3 The Ministry of Environment has had a professional reliance model for Contaminated Sites dating back to the early 1990's when the ministry established the Roster of Approved Professionals.

CURRENT STATUS:

Key message #1

- The use of QPs typically allows the ministry to focus staff resources on high risk and high priority issues, regulatory oversight, assurance and compliance, and policy development.
- A Cross-Ministry Working Group was formed in 2011 to examine and support effective use of Qualified Persons (QP) in the Natural Resource Sector (NRS). In the NRS there are over 40, 000 QPs registered among 6 QP governing associations in the Province.
- The working group was tasked with developing a framework that would recognize
 and leverage QPs skills and certification. The framework design focuses on QP
 competency, accountability and guidance within a managed continuous
 improvement cycle. The framework can be viewed as an effectiveness system with
 which to evaluate and improve the use of QPs.

- QP certification is designed to ensure competency and accountability for activities that carry sufficient cost and risk.
- QPs support government in managing public's interest.
- B.C. has numerous professional associations that provide accountability and require ongoing professional education to ensure that BC's professionals are well qualified and up to date in their respective fields as required by their accreditation bodies.
 (These include: the College of Applied Biology, British Columbia Institute of

Agrologists, Association of Professional Engineers and Geoscientists of BC, Association of BC Forest Professionals, Association of the Chemical Profession of British Columbia (ACPBC) and the Contaminated Sites Approved Professional Society (CSAP), among others).

Key message #3

- CSAP Approved Professionals (APs) are hired by property owners to review technical information on contaminated sites investigation and remediation for all low and moderate risk sites in the province. The AP's scope of work is governed by protocols established by the Ministry with strict rules governing the requirement for both self-review and arm's length reviews of projects.
- In its present form members of the Roster are appointed from the Contaminated Sites Approved Professional Society (CSAP) which was established in 2007 under the Societies Act. CSAP currently has 105 members.
- CSAP member's work now accounts for about 80 90% of the contaminated site
 work in the province, most of which was previously done by government employees.
 Nearly 800 sites have been assessed and remediated by members of CSAP since
 2008.
- The Contaminated Sites Approved Professional (CSAP) model has been an
 effective mechanism for the Ministry to ensure work is performed to a high standard
 while allowing government resources to be focused on high risk site and regulatory
 obligations.
- The CSAP model has resulted in overall efficiencies in the approval and certification
 of remediation at low and moderate risk sites in the province provides an enhanced
 performance management tool used by the Province to assist in decision making.
- CSAP actively contributes to the knowledge and guidance for remediating contaminated sites and the Ministry has been successful in leveraging this additional expertise in the development of new policies and guidance.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In 2014 the University of Victoria' Environmental Law Centre published a review of "Professional Reliance in British Columbia's Environmental Regulations". Their study reviewed 27 regulatory regimes in BC that incorporate some form of professional reliance. Based on their finding it would not be credible to make a blanket statement that "professional reliance is a success" or "professional reliance is a failure."
- The study concluded that the contaminated sites regulatory regime has a wellstructured approach to the role of independent professionals through detailed regulations and agreements between the BC government and professional oversight bodies and employs many of the best practices they recommend.

Contact: Mike Macfarlane, Director, Land Remediation, EPD, 250-356-0557

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ISSUE TITLE:

Ministry of Environment

Structured Application Process

Date: February 13, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 Establishing a consistent process for application
 processing is of strategic importance to the Ministry and to stakeholders to
 address timely response to client needs, manage staff workload and align
 with other NRS sector authorization processes.
- Key message #2 The Structured Application Process (SAP) will be of
 great benefit to stakeholders as we are seeking to reduce application
 processing wait times and provide clients with the certainty that they need to
 conduct environmentally compliant operations.

CURRENT STATUS:

Key message #1

- Effective September 22, 2014, the Environmental Protection Regional Operations
 Branch implemented a structured application process that focuses on maintaining a
 fair and equitable process that addresses the volume of authorizations received by
 Environmental Protection Division and addresses the client need for timeliness for a
 decision.
- We have mandated responsibilities which need to be managed to address our accountabilities for protecting human health and the environment across the province.
- SAP supports the shift of responding to application requests on a sector or area basis which will enable the equitable service to clients across the province regardless of the location of the client's operation.
- SAP will benefit EP staff by enabling them to focus on applications in the order in which they are received by the ministry, and eventually provide predictable processing times for various standard types of applications.

s.13.s.17

- Client Service and timely response/handling of applications for authorizations is a key measurable we need to deliver consistently across the province.
- If the application is complete and satisfies all of the information needs as stated on the EPD Waste Authorizations internet, the application processing should be straight

- forward. Our application volume is high. Clients can look at the Waste Discharge Authorizations webpage to find out exactly where their application sits in the queue.
- Application processing has historically taken greater than 24 months for many applications. With the SAP, Environmental Protection is striving for processing the majority of applications within 6 months - this timeframe and an outline of the authorization process can be found on the EPD internet.
- The discharge of waste without an authorization is a contravention of the Environmental Management Act. Clients are advised not to contravene the Environmental Management Act.
- The application information requirements and process can be found on the EPD Waste Authorizations website.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Implementation of the First In First Out approach was soft launched in September 2014 - in that application lists for the five Regional Operations Branch teams was posted on the ministry website. At this time, the application lists are updated monthly. The lists identify which clients are in the queue for authorizations and include application information such as name of client, application date, and facility type.
- As of September 20, 2013, the application list for EMA authorizations was over 290; as of January 31, 2015, the application list is 334, broken down as follows:
 - Oil and Gas 36
 - Mining 45
 - o Coast 132
 - o North 57
 - o South 64
- The average growth rate in authorizations since 2004 is 14% per year. EP staff have been focusing on processing backlog applications. Some of the applications were received in 1995 and were only recently processed.
- Proponents may be sitting in the queue due to incomplete applications, proponent delays in provision of additional information, reduced efficiency in process, systems errors, and EP capacity.
- There was a need to establish a process to manage staff workload and address a timely response to client needs. When an application is complete, the processing time for a new authorization may be 4 to 6 months or less depending upon the complexity of the application. When there are extraordinary circumstances (i.e. use of emerging technology, significant public and First Nations interest, cumulative effects, absence of adequate environmental baseline data, etc.), processing time for complex applications may take up to 18 months or longer.
- There were situations where clients knowingly submit EMA applications which demand unrealistic review periods (i.e. submission of an application for a mining effluent discharge with a request to discharge within 14 days). This queue jumping penalizes clients who have planned and submitted applications in accordance with

¹ http://www2.gov.bc.ca/gov/topic.page?id=0876E90DA4744A449423D35EB4E09785

- the guidance provided, reduces the productivity of staff by operating in a very reactive mode, inappropriately rewards clients who fail to follow the guidance materials, and adds cost to clients who are waiting for authorizations and costs to government for staff Compensatory Time Off and urgent contracts to support the application reviews.
- By committing to processing applications based upon the date the application was received, the Environmental Protection Division (EPD) will seek to reduce processing wait times and provide clients with the authorization certainty that they need to conduct environmentally compliant operations. This approach is in keeping with the approach administered by Front Counter BC and many other government departments.

Contact: Jennifer McGuire, Executive Director, Regional Operations Branch, 250-361-5944

Ministry of Environment

ISSUE TITLE:

Amendments to the Environmental Management Act (EMA)

Date: February 17, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 The proposed amendments are designed to provide greater certainty for waste discharge authorizations issued under the Environmental Management Act and also greater flexibility for making authorization decisions.
- Key message #2 The proposed amendments will expressly set out environmental factors that statutory decision makers may consider in exercising their discretion in making permitting decisions.
- Key message #3 The amendments are being brought forward at this time to align the permitting authorities in the *Environmental* Management Act with the recently developed Environmental Mitigation Policy and Procedures.
- Key message #4 The amendments will add new authorities concerning area based management plans under the Act.

CURRENT STATUS:

Key message #1

- The proposed amendments to the EMA are designed to provide greater certainty for project development and flexibility to optimize environmental management.
- There are three components to the proposed changes:
 - The amendments will expressly set out environmental factors that statutory decision makers may consider in exercising their discretion in making permitting decisions.
 - The amendments will enable a more flexible approach to permitting by adding authority to include environmental offset requirements in permits.
 - 3. The amendments add new authorities concerning area based management plans under the *Act*.
- The proposed amendments to the Environmental Management Act reflect the government's goal of updating and improving legislative authorities for balanced and effective natural resource management.

- Currently, statutory decision makers (SDMs) can and do consider a range of factors as a matter of their discretionary authority to make environmental management decisions. Such factors include the assimilative capacity of the environment, emissions "trade-offs", and cumulative effects.
- Express authority to consider these key factors is being added to the permitting authority in the EMA to provide a more certain basis for decisions that take these factors into account. These amendments will give SDMs better tools to seek better net environmental outcomes.
- The list of key factors is not meant to be exhaustive; the statutory decision maker can consider any other factor that the decision maker thinks is relevant to the protection of the environment.

Key message #3

- The amendments will enable a more flexible approach to permitting by adding authority to include environmental offset requirements in permits. The new authority for offsets is based on concepts in the recently developed Environmental Mitigation Policy and Procedures.
- "Offsets" will involve taking measures to counteract, or make up for, an
 environmental impact that cannot be adequately addressed through other
 reasonable mitigation measures. Offsets are examined after all options to avoid
 impacts, minimize impacts or a restore impacts on-site have been exhausted. This
 hierarchy of avoiding, minimizing, restoring on-site, and then offsetting is known as
 the 'environmental mitigation hierarchy'.
- The new permitting authorities in *EMA* concerning the use of environmental offsets would only be used when a statutory decision maker receives an application for their use from a proponent and is satisfied that the use of offsets is appropriate.

Key message #4

- New Minister's powers are being added to establish a mechanism for providing
 certainty concerning the issuance of permits in the context of approved area based
 management plans under EMA, and for amending area based management plans
 after their initial approval to allow for greater flexibility in how plans are designed and
 implemented over time.
- Proposed changes include adding publication requirements to new Minister's ordermaking powers to align with other provisions in *EMA* and ensure transparency.

BACKGROUND:

The Environmental Management Act

• The *EMA* was brought into force on July 8, 2004. The Act replaces the old *Waste Management Act* and the *Environment Management Act* and brings provisions from both of those acts into one statute.

EMA provides a more flexible authorization framework, increases enforcement
options and uses modern environmental management tools to protect human health
and the quality of water, land and air in British Columbia. EMA also enables the use
of administrative penalties, informational orders and economic instruments to assist
in achieving compliance.

The Environmental Mitigation Policy

- The Policy for Mitigating Impacts on Environmental Values (the Environmental Mitigation Policy) was recently developed by the Ministry of Environment and the Ministry of Forests, Lands and Natural Resource Operations in consultation with stakeholders.
- The EMP is intended to support the environmental portion of informed, integrated, transparent decision-making in the Province's natural resource sector. It includes provision for the use of environmental offsetting as part of a hierarchy of environmental mitigation measures.
- The policy and related procedures are available on the Ministry of Environment website at http://www.env.gov.bc.ca/emop/.

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

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ISSUE TITLE:

Ministry of Environment

Land Based Spill Response Policy Work

Date: February 12, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 –The Environmental Emergency Program has and will continue to work with stakeholders on the development of an industry-funded model for enhanced land-based spill prevention and response.
- Key message #2 Our goal is to develop a world-leading industry-funded spill regime with the right mix of prevention, planning, response and recovery.
- Key message #3 To be clear, pipelines are just one aspect of any land-based spill preparedness and response regime – the goal is to develop policy for all spills affecting the land base and fresh-water bodies in the province, including: oil tank leaks, overturned tanker trucks/railcars, and chemical spills.
- Key message #4 –We completed public consultation on a second intentions paper that outlines a series of policy changes to establish a world leading spill response regime in B.C.

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 British Columbia (B.C.) These are:
 - Establishing a world-class and industry funded regime for land based spill preparedness and response.
 - Developing clear rules and ensuring capability and capacity for spill preparedness and effective spill response and recovery.
 - Ensuring effective government oversight and coordination of industry spill response actions.

Key Message #3:

The safe transportation and use of hazardous materials – including petrochemicals, such as oil and condensates – is critical to B.C.'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 high profile risks related to pipelines and tankers, other sources of spills can have equally devastating impacts on public safety and the environment, where the province has significant management responsibilities.

 Major resource developments in the province's northeast, proposals to open new and expanded transportation corridors for petrochemicals and other hazardous materials, and the visibility and consequences of recent significant spills around North America, is resulting in increased attention and expectations for preparedness and response to spills in B.C.

Key Message #4:

- Increasing preparedness through regulation commensurate with risk is not "development vs the environment" but rather something all levels of government and industry agree upon.
- The Ministry continues to work with other provincial and federal agency's to ensure B.C.'s requirements are harmonized with other jurisdictions and avoid unnecessary duplication.

KEY FACTS/BACKGROUND:

• s.13,s.17

- A land-based spill preparedness and response policy intentions paper was released in November 2012, following the release, the Ministry has conducted lengthy rounds of meetings with three working groups and an advisory committee as well as hosted a symposium in March 2013 to obtain stakeholder input into the elements of a world leading land-based spill response regime.
- As a result of this work with industry, First Nations, local governments and other stakeholders throughout 2013, the Ministry released a second intentions paper in 2014 that clearly articulated the policy it intends to advance as the foundation of B.C.'s world leading land-based spill response regime, encompassing:
 - More than a dozen new preparedness, response and recovery requirements (response times, geographic response plans, communication and planning requirements, exercises, training, equipment, environmental restoration, loss of public use);
 - A new mandatory requirement that companies posing a significant risk join a spill preparedness and response organization to ensure that a verified response capability and capacity is always available for any spill;
 - Requirements that certain companies contribute to a contingency fund and / or demonstrate insurance coverage for clean-up through to environmental restoration; and,
 - An increased Environmental Emergency Program to ensure it has the staff and funds to meet its legislated mandate and fully administer the new regime.
- A report summarizing the range of responses received through the consultation has been prepared and is posted on the Ministry website.

 After review and consideration of these comments and comments received over the whole consultation process, Ministry staff has made recommendations to senior decision makers on how to advance the implementation of a world leading landbased spill regime.

Contact: Graham Knox, Director, Environmental Emergency Program

(250) 356-8383

ISSUE TITLE:

Ministry of Environment

Tanker Traffic and Oil Spill Response

Date: February 10, 2015,

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Ministry of Environment 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 The Ministry response to a marine spill 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 #3 The Ministry is working diligently with our federal partners to advocate for a world class spill preparedness and response regime in B.C.

CURRENT STATUS:

Key message #1:

- During a marine spill, the Ministry of Environment would, in concert with the Canadian Coast Guard:
 - o Ensure the availability of equipment, expertise and trained personnel;
 - o Provide the public with accurate and timely information, and
 - o Ensure the safety of the public and response personnel.
- The Ministry currently has 10 full-time Environmental Emergency Response Officers (EEROs) and 3 Senior EEROs located in 8 offices around the province. EEROs are highly trained in hazardous materials assessment and response.
- At any given time, 2 EEROs are on call to provide swift response to environmental emergencies.
- The Ministry may also deploy our Incident Management Team comprised of Technical Specialists to provide additional support.

- In all major spill incidents the Ministry establishes an integrated response with the responsible party, lead federal agencies, local governments, First Nations and other key stakeholders to ensure a coordinated, effective and efficient response.
- The province monitors all actual and potential spills to the marine environment and would appoint a Provincial Incident Commander in the event of a major marine spill to represent provincial interests and ensure protection of provincial resources in the marine environment and along the coast.

- In particular, the Province will take an active role in coastal resource identification and the establishment of protection priorities, in the event of an oil spill, the protection, cleanup, and restoration of the intertidal shoreline and seabed, which are under the jurisdiction of the Province.
- Most potential large spillers (e.g., tankers and vessels exceeding 400 tonnes) are required to join the federally certified Western Canada Marine Response Corporation – an industry funded response organization that provides equipment, responders, and expertise to the Responsible Party.

Key message #3:

 The proposed Northern Gateway and Kinder Morgan heavy oil pipelines, if approved, would result in an increase in tanker visits to B.C. ports. The province will continue to identify gaps in the marine regime and work with federal partners to prioritize areas for improvement, so that all current and future shipping occurs as safely as possible.

KEY FACTS/BACKGROUND:

- In light of proposed and advancing resource projects and increased tanker traffic,
 B.C. is working diligently to ensure it has a world class spill response regimes for both terrestrial and marine environments.
- The driver for much of the world class work was the July 2012 *Technical Analysis:* Requirements for British Columbia to Consider Support for Heavy Oil Pipelines.
- Setting requirements for marine spill preparedness and response is largely a federal responsibility, however, the Ministry maintains capability and capacity for preparedness, response and recovery from marine spills to protect provincial resources and mitigate impacts to the province.
- Major developments with marine spill response components occurring around the province in 2013 and moving into 2014 include:

Enbridge Northern Gateway Project

- Enbridge is seeking approval for its Northern Gateway pipeline project to meet growing demands for Alberta oil sands oil in Asian and U.S. markets.
- Environmental impacts associated with the construction and operation of the pipelines were the subject of review by a National Energy Board (NEB) Panel.
- The Province had official intervener status in the hearing process and presented a
 written submission to the NEB's review process indicating that it could not support
 the project as it has been presented. In particular, the Province was uncertain
 whether Northern Gateway could effectively respond to a land or marine spill.
- In December 2013, the NEB Panel recommended that the federal government approve the project, subject to 209 required conditions. The decision on whether or not this project should proceed still rests with the federal Cabinet.
- The NEB's positive recommendation meets the first of the five conditions for B.C. to consider support for heavy oil pipelines.

Kinder Morgan Trans Mountain Pipeline Expansion Project

- The Trans Mountain Pipeline Expansion project is a proposal to expand the existing Trans Mountain pipeline system between Edmonton, AB and Burnaby, B.C. and will increase tanker traffic at Vancouver from 5 per month to 34 per month.
- Trans Mountain filed an application with the NEB in December 2013 which will initiate a regulatory review of the proposed expansion including a public hearing.
- The Province has official intervener status in the hearing process.
- As with the Northern Gateway Project, this proposal is also subject to the Province's five conditions.

Nuka Report

- The Province contracted Nuka Research in 2013 to conduct a major analysis looking into the current spill regime in Canada, existing vessel traffic, and what can be done to strengthen Canada's regime in order to achieve world class.
- The resulting West Coast Spill Response Study, consisting of three volumes, provides key elements for a world class system that includes spill prevention, preparedness, response and recovery.
- This study will assist the Province as it engages with the federal government on advocating for world class, as well as assessing the changes ultimately made at the federal level.

Tanker Safety Expert Panel

- The federal government formed a Tanker Safety Expert Panel to provide recommendations on the current regime, which led to 45 recommendations in its November 2013 A review of Canada's Ship-Source Oil Spill Preparedness and Response Regime.
- During the Panel's review the Province contributed its views through a letter outlining 12 areas that recommendations should address as well as through an oral presentation.
- The Ministry response to the report was generally supportive of the recommendations.

Contact: Graham Knox, Director, Environmental Emergency Program (250) 356-8383

ISSUE TITLE:

Ministry of Environment

Enbridge Northern Gateway Pipeline

Date: February 5, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Our government understands the economic benefits that the Northern Gateway Pipeline may bring, but it will not be at the cost of our environment.9-9
- Key message #2 All heavy oil pipeline proposals are subject to B.C.'s five requirements, including the proposed Northern Gateway Pipeline (NGP). That has not changed.

CURRENT STATUS:

Key message #1:

- On June 17, 2014, the federal government approved Enbridge's Northern Gateway Pipeline project subject to 209 conditions. This followed the Joint Review Panel (JRP) recommendation of the project, in December 2013, if these 209 conditions were met.
- Ultimately, it is up to the NGP Pipeline to meet the 209 conditions and for the National Energy Board to ensure they are being met.
- Many of the conditions require consultation with the Province, and specifically the Ministry of Environment. As the Province engages with NGP on meeting its 209 conditions we will continue to ensure our five requirements for accepting Heavy Oil Pipelines are being met.
- The timelines for conditions vary: some must be complete before construction, others prior to operations, and some are ongoing during the lifetime of the project.

Key message #2:

- Since 2012, the Province has made it clear that B.C. will only consider support for heavy oil pipelines if five conditions are satisfied.
- The proposed Northern Gateway pipelines, if approved, would result in an increase in tanker visits to B.C. ports. The province will continue to identify gaps in the marine regime and work with federal partners to prioritize areas for improvement, so that all current and future shipping occurs as safely as possible.

KEY FACTS/BACKGROUND:

Enbridge Northern Gateway Project

- Enbridge has approval for its Northern Gateway pipeline project to meet growing demands for Alberta oil sands oil in Asian and U.S. markets.
- Environmental impacts associated with the construction and operation of the pipelines were the subject of review by a National Energy Board (NEB) Panel.
- The Province had official intervener status in the hearing process and presented a
 written submission to the NEB's review process indicating that it could not support
 the project as it has been presented. In particular, the Province was uncertain
 whether Northern Gateway could effectively respond to a land or marine spill.
- In December 2013, the NEB Panel recommended that the federal government approve the project, subject to 209 required conditions. The federal Cabinet approved the project in June 2014.
- The NEB's positive recommendation meets the first of the five conditions for B.C. to consider support for heavy oil pipelines.

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- The Ministry response to the report was generally supportive of the recommendations.

Contact: Graham Knox, Director, Environmental Emergency Program (250) 356-8383

ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	Kinder Morgan/Trans Mountain pipeline
Date: February 5, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Ministry is currently reviewing Trans Mountain's submission to the National Energy Board and, as with the recent Enbridge Northern Gateway process, will use the NEB review process to advocate for the province's interests.
- Key message #2 The Ministry's review focuses on risks posed along the pipeline route, as well as the risk of spills at terminals or from an associated increase in tanker traffic along the West Coast.
- Key message #3 The Province has been clear that the five conditions for heavy oil pipelines must be met before B.C. will consider support for any proposed pipeline project.

CURRENT STATUS:

Key message #1:

- B.C. has been granted intervenor status in the National Energy Board review process.
- A team of experts in parks, air quality, and spill preparedness and response is currently reviewing the company's application to identify specific risk areas and will be seeking information on how Trans Mountain plans to reduce those risks.

Key Message #2:

- On the land side, the proposed Kinder Morgan pipeline, if approved, would present an increased risk of spills from the pipeline along the proposed route. Any spill has the potential to directly impact provincial interests including land, inland waterways, provincially protected species, parklands, etc.
- It would also result in an increase in tanker visits to B.C. ports and an increased risk of spills from storage and loading facilities as well as spills in the marine environment from tankers.
- These risks are being analyzed and will be the subject of information requests and possibly cross examination during the NEB hearing process.
- The Ministry currently has 10 full-time and 3 Senior Environmental Emergency Response Officers (EEROs) located in 8 offices around the province. EEROs are highly trained in hazardous materials assessment and response.

 A response to a spill from the proposed pipeline or oil tanker traffic would follow our established spill response protocols. Government could also request international support based on agreements with neighboring jurisdictions such as the Pacific States-British Columbia Oil Spill Task Force which includes Washington, Oregon, California, Alaska, and Hawaii.

Key Message #3:

- In light of proposed and advancing resource projects, B.C. is working diligently to ensure it has world class spill response.
- On the land side, after over a year of work with industry, First Nations, local governments and other stakeholders, we released a second intentions paper (in 2014) outlining proposed policies to advance a world leading spill response regime. We are currently considering all comments received throughout the process.
- On the marine side, the province 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. Together the three volumes of the West Coast Spill Response Study provide us with:
 - o An assessment of the current regime (Volume I)
 - A detailed vessel traffic study (Volume II)
 - o An understanding of what it would take to be world class (Volume III)
- The province is also advocating with the federal government for stronger spill response requirements in the marine environment, which falls under federal jurisdiction
- The province is participating (or is set to pending their kick-off) in a number of
 initiatives with First Nations and the federal government to discuss and develop a
 world leading marine regime for the West Coast. (examples: Coastal First
 Nations /BC/Federal government Tri-partite discussions, Area Based Planning
 Initiative for the South Coast of BC, federal Major Project Office West meetings)

KEY FACTS/BACKGROUND:

- Trans Mountain is proposing an expansion of its current 1,150-kilometre pipeline between Strathcona County (near Edmonton), Alberta and Burnaby, B.C. The proposed expansion, if approved, would create a twinned pipeline that would increase the capacity of the system from 300,000 barrels per day, to 890,000 barrels per day.
- The twinning has a projected capital cost of about \$5.4 billion and would include an estimated 994 km of new pipeline and reactivation of 193 km of pipeline.
- New tanks would be added to existing storage terminals in Burnaby (14 new tanks), Sumas (1), and Edmonton (5). The Westridge Marine Terminal in Burnaby would be expanded with 3 new berths.
- The proposed new line would carry heavier oils with capability for transporting light crude oils while the existing line would carry refined products, synthetic crude oils, and light crude oils with capability for heavy crude oils.

- At present, the Westridge Marine Terminal handles approximately five tankers per month. With a twinned pipeline, the number of tankers loaded at the Westridge Marine Terminal could increase to approximately 34 per month.
- s.13,s.17
- The existing line experienced a backhoe strike and rupture July 24, 2007 in Burnaby releasing 234 cubic meters of crude oil. And the Sumas tank farm had a release of 90 cubic meters January 24, 2012. Both spills were responded to by KM and BC Environment. Federal regulators (NEB and Transportation Safety Board) found flaws in KM's response and made recommendations for improvement.

Contact: Jim Hofweber, Executive Director, Environmental Emergencies and Land Remediation (250) 387-9971

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Ministry of Environment

ISSUE TITLE:

Mount Polley Tailings Storage Facility Breach

Date: February 13, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 On August 5, 2014, Ministry of Environment (MoE) issued a Pollution Abatement Order to the Mount Polley Mining Corporation (MPMC).
- Key message #2 In November 2014, the MoE accepted MPMC's Mitigation and Remediation plan after an extensive review process.
- Key message #3 Three investigations into the cause of the breach are underway. The results from the first investigation were made public Jan 30th, 2015.
- Key Message #4 Jan 13 2015 MPMC submitted applications to the Ministry of Energy and Mines (MEM) and the MoE to re-start the mine.

CURRENT STATUS:

Key message #1

- MoE issued a Pollution Abatement Order (PAO) to the MPMC on August 5, 2014 which requires the company to undertake short and long term environmental impact assessments and implement a monitoring and remediation plan to address environmental impacts and report on progress against actions.
- The ministry continues to oversee all work undertaken by the company to ensure a long-term environmental monitoring program is implemented in compliance with the PAO and the Environmental Management Act.
- Failure to comply with the PAO could lead to a maximum fine of \$300,000 per day and up to 6 months in jail under the Environmental Management Act.
- An amendment to the existing PAO is being considered to define further reporting requirements for the Environmental Impact Assessment, the Remediation Plan and define expectation of water quality standards in Quesnel Lake and the related management and monitoring plans.

- To meet the requirements outlined in the PAO, MPMC will execute the long-term mitigation and remediation plan in two phases:
 - Phase one (October 2014 to June 2015) focuses on human health and environmental safety while ensuring no additional damage to the environment

- occurs as a result of the spring freshet 2015.
- Phase two (July 2015 to July 2016) focuses on remediating the impacts of the breach.
- A progress report on MPMC's remediation plan, focusing on Phase One of a longer term plan, was released in Likely, B.C. on November 23, 2014.
- The company has already completed or initiated many components of Phase One, towards achieving three key outcomes, which will ensure:
 - No further unauthorized discharges into Hazeltine Creek.
 - The impact zone will be stabilized to manage seasonal events; and,
 - Water quality entering Quesnel Lake and at the outer edge of the impact zone will meet provincial water quality guidelines.
- Actions taken to achieve these outcomes include:
 - Reconstruction of the Tailings Berm Breach,
 - Control of outflows from Polley Lake, re-establishment of the Hazeltine Creek channel and the mouth of Edney Creek including erosion protection to mitigate sediment loss to the creeks,
 - Establishment of sediment ponds to treat flows for sediment loads prior to entry to Quesnel Lake and related monitoring to measure the effectiveness of these works.
- A letter was sent to the company on November 21 outlining what actions have been completed to the ministry's satisfaction, and what actions still need to be taken over the short-term.
- All plans continue to be reviewed by MoE staff, along with an environmental working group and an independent science panel.

- The independent panel determined that the strength and location of a layer of clay, silt and sand under the dam was miscalculated during its original design and construction. This layer became overstressed, causing a section of the dam to collapse.
- At the time of the failure, the height of the water in the tailings storage facility was within permitted levels.
- The panel also determined that:
 - This was a sudden failure with no warning signs;
 - No amount of inspections would have detected the foundation issue;
 - The Ministry's geotechnical inspectors are well qualified and did their job as regulators.
- Government will act immediately on key recommendations which include:
 - The Chief Inspector of Mines has asked all operating mines with tailings storage facility dams to provide a letter by June 30, 2015 to confirm whether foundation materials similar to those at Mount Polley exist below their dams.
 - The Province will move towards a new requirement that all operating mines with tailings storage facilities in B.C. establish Independent Tailings Dam Review Boards.
 - Government will initiate a code review to determine how to best implement the panel's remaining recommendations, including the adoption of best

available practices and technologies.

- The Panel raised concerns regarding the planning and management of mine impacted water. These concerns will be considered in any future applications for the storage treatment and discharge of mine effluent.
- There are still ongoing investigations underway by the Conservation Officer Service and the Chief Inspector of Mines. Findings from these investigations will inform discussions around industry standards and determine if any wrong-doing occurred. If so, appropriate charges and fines will be applied under the law.

Key message #4

- Applications have been submitted to the MEM and the MoE for the restart of operations. Both MEM and MoE have requested more information from the company in order to consider these applications
- Government will consult and work with First Nations and others on the review of these applications.
- The applications will also be reviewed by the Cariboo Regional Mine Development Review Committee and there will be a 30-day public consultation period.
- Findings or recommendations made by the panel may help to inform the review process

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- On August 4, 2014, a breach occurred at the Mount Polley Mine tailings storage facility, discharging estimated 17 million cubic meters of water and 8 million cubic meters of tailings/materials into Polley Lake. Hazletine Creek flows out of Polley Lake and the flow of contaminated water continued into Quesnel Lake.
- MoE staff have been on the ground since the breach occurred, conducting monitoring, holding information meetings and providing support to the impacted community, First Nations, and local government.
- Under the Province's polluter-pay model, MPMC will be responsible for the clean-up and remediation costs.
- The Province is working in partnership with the Williams Lake and Soda Creek Indian Bands to address the breach, as signed in a letter of understanding.
- The two chiefs and ministers of Environment, Energy and Mines and Aboriginal Relations and Reconciliation comprise a principals table to oversee a government-to government response. The First Nations chiefs and their delegates are also a part of a seniors officials committee which is overseeing activities such as assessing impacts, clean up and remediation planning decisions related to the mine's future.
- s.13,s.16

Contact: Hubert Bunce, Director, Mount Polley, Regional Operations Branch, Environmental Protection Division, (250) 751-3254

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Ministry of Environment

Date: February 6, 2015

ISSUE TITLE:

Copper Mountain Mine Tailings Spill

RETURN TO TOP KEY MESSAGES

- Key message #1 In December of 2014 a spill of tailings slurry from a
 pipeline occurred at the Copper Mountain Mine. The tailings slurry spill
 while of concern to the ministry was not large and measured impacts
 were limited.
- Key Message #2 –Ministry of Environment (MoE) staff monitored the response and cleanup activities, and provided input and technical advice to the mine company.
- Key message #3 –MEM is leading a review of the TSF management system and will provide appropriate direction to the company regarding engineering and safety measures for the TSF.

CURRENT STATUS:

Key message #1

- Some of the slurry escaped the secondary containment berms and flowed into Wolfe Creek and surrounding vegetated area.
- The tailings slurry spill, while of concern to the MoE, was not large and measured impacts were limited. Daily monitoring of turbidity indicates clear water flow since the end of December.
- The MoE will monitor effects occurring during spring freshet due to concern that some contaminants may be temporarily bound in snow in the forested area surrounding Wolfe Creek.

- The Ministry continues to work closely with Ministry of Energy and Mines(MEM) and other agencies in following up on the spill.
- A summary report on monitoring to date is under preparation by MOE staff
- The company has submitted a mitigation plan which is under review by MOE staff.
- The ministry issued specific direction to the mine regarding mitigation measures and further cleanup of residual materials near Wolfe Creek. A Pollution Prevention Order was issued February 13, 2015.

Key message #3

- The December Tailings Slurry spill was from a pipeline that delivers tailings from the mill to the TSF, not from the Tailings Storage Facility itself. However, the MEM is reviewing the TSF management system at Copper Mountain Mine and will provide further information about ensuring that the TSF is safe.
- The mine is located above settled areas including the town of Princeton and is above the Similkameen River. The consequences of failure of the impoundment are high, as identified in the dam safety review of this facility.
- Extra caution must be observed in all matters pertaining to the conveyance of tailings slurry to the impoundment and to the management of the impoundment itself.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Between 5 and 6:30 pm on December 10, 2014, Mine staff noticed a stoppage in the main Tailings line.
- At 9:43 pm, Emergency Management BC received the initial report from the company.
- MoE staff were in contact with Mine's staff, and other relevant agencies in the first 12 hours after the incident.
- MoE compliance staff arrived on scene at December 11, 2014
- Throughout the incident, Ministry staff worked with First Nations, Interior Health, First Nations Health Authority, and the local regional district to share information.
- The company commenced water quality sampling of Wolfe Creek on Dec 10th, 2014 at about 11:30 pm, and monitoring efforts are ongoing.
- Additionally, the seepage return system, a typical feature of tailings impoundments, is currently suspended due to a leak in the seepage return pipeline that occurred in October 2014.
- This leak caused damage to a portion of the face of the East Tailings Dam and compromised the safety of the seepage return lines. The seepage return system is expected to be re-commissioned in the spring once repairs are implemented.
- As a precautionary measure Interior Health issued a 'Do Not Use' order for water from Wolfe Creek immediately downstream from Copper Mountain Mine to the mouth of the Similkameen River.
 - The Do Not Use order for Wolfe Creek and Lorne Lake downstream was rescinded December 16th, 2014.
 - The Do Not Use Order for the Ridge Canyon Water System was rescinded December 19th, 2014.

Contact: Doug Hill, Director of Mining, Regional Operations, Division, Phone RETURN TO TOP

ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:		
Ministry of Environment	AirCare		
Date: February 6, 2015			

RETURN TO TOP KEY MESSAGES:

- Key message #1 The AirCare light duty vehicle inspection program wrapped up on Dec 31, 2014.
- Key message #2 We are taking action to reduce 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.
- Phasing the program out at the end of 2014 gave 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.
- AirCare was entirely funded through the collection of test fees and was required by legislation to collect no more than the revenue sufficient to cover the full costs of the program.

Key Message #2:

- As part of the AirCare phase out government committed to explore options to reduce emissions from 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 were 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.
- In 2013 Metro Vancouver 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 developing options to reduce emissions from on-road heavy duty diesel vehicles.
- 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: Glen Okrainetz, Manager Clean Air Section

Environmental Standard Branch

(250)953-3417

ISSUE TITLE:

Rio Tinto Alcan Environmental Appeal

Date: February 6, 2015

Ministry of Environment

RETURN TO TOP KEY MESSAGES

- Key message #1 Ministry staff are the statutory decision makers for Environmental Management Act authorizations and, as such, the decision is at arm's length from the political process.
- Key message #2 The Environmental Appeal Board (EAB) granted appellant status to two applicants to appeal the April 23, 2013 permit amendment, allowing an increase in SO2 emissions from 27 to 42 tonnes per day.
- Key message #3 The appeal process is continuing. The Ministry respects the appeal process and the decision on this permit is now in the hands of the Environmental Appeal Board (EAB).

CURRENT STATUS:

Key message #1

- The ministry had a legal obligation to consider the application from Rio Tinto Alcan to amend the waste discharge permit in anticipation of the smelter modernization project.
- The permit amendment decision on April 23, 2013 was based on the merits of the required effects assessment (SO2 Technical Assessment Report), and was made independent of the political process.

- Both appellants have made 10 allegations, 7 of which question the validity of the science used in the technical assessment, and 3 are non-technical (inadequate public consultation, fettering of the decision maker and apprehension of bias).
- The remedy sought by the appellants is to have the EAB panel reach a new decision requiring SO2 scrubbing technology added to the project.

Key message #3

- There have been two postponements of the appeal hearing due to the volume and complexity of the disclosures requested by the appellants. The hearing is now scheduled for 4 weeks between April 27 and June 12, 2015.
- Construction of the smelter modernization project continues. Should the EAB find in favor of the appellants, SO2 scrubbing technology could be retrofitted to the smelter.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- 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 aluminum smelter in Kitimat.
- The KMP was included in the 2013/14 Kitimat Airshed study, which found that with proper management, Kitimat's airshed can safely accommodate new industrial growth, while still protecting human health and the environment.
- The project was first announced in 2007 and given the formal notice to proceed in 2011 by RTA's Board of Directors.
- The Rio Tinto Alcan (RTA) smelter modernization project will reduce certain emissions in the airshed by nearly 50 per cent, including significant reductions in particulate matter, greenhouse gasses, and fluoride.
- In April 2013, RTA was granted a permit amendment by the ministry allowing for increased sulphur dioxide emissions as part of the upgrades. As part of the amendment, RTA submitted an Environmental Effects Monitoring (EEM) program plan to the ministry for review (in December 2013) which includes how they will monitor human health, vegetation, and terrestrial and aquatic environments as well as criteria that would trigger emission reduction and/or other mitigation. The plan was approved by the Director on October 7, 2014, and is currently being implemented.

Contact: Ian Sharpe, Regional Director, Regional Operations Branch, Environmental Protection Division, 250-847-7251

ISSUE TITLE:

Ministry of Environment

Air Quality and Proposed LNG Facilities

Date: February 5, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Ministry wants to ensure emissions from any industrial development, including LNG, can be safely accommodated in BC's airsheds.
- Key message #2 In 2013, the Province funded a \$650,000 scientific study to help inform regulatory and policy development for future industrial activity in the Kitimat area. The study looked at cumulative effects of industrial air emissions, primarily sulphur and nitrogen oxides.
- Key message #3 In December 2014, the Province funded an independent science-based study to better understand the potential cumulative impacts from industrial air emissions in the Prince Rupert, building on information from the Kitimat Airshed Study
- Key message #4 The Ministry is working closely with the Ministry of Natural Gas
 Development, the Environmental Assessment Office and the Oil and Gas
 Commission to assess the potential environmental effects from air emissions at LNG
 facilities.

CURRENT STATUS:

- The following LNG projects are currently being proposed:
 - Four facilities proposed in the Kitimat area
 - LNG Canada, Kitimat LNG, Douglas Channel, Cedar
 - Seven proposed facilities in the Prince Rupert area
 - PNW, Prince Rupert, Aurora, Orca, WCC, Grassy/Woodside, Watson Island
 - Three proposed facilities for the south coast/Vancouver Island area
 - Woodfibre, Discovery, Steelhead
 - Five proposed pipelines to service LNG facilities
 - West Coast, Coastal Gaslink, PRGT, PTP, Eagle Mountain,
- Of the facility proposals, one has received their EA Certificate, four are active in the EA process, four are in the pre-stages of EA, one has an existing EA certificate (needs amendment) and three are sub-EA projects. The Prince Rupert projects are anticipated to enter a joint EA/CEA review process in early 2014.

- Of the pipeline proposals, three have received their EA Certificates, one is active in the EA process, and one has an existing EA Certificate that is in the amendment process.
- The Ministry has conducted discussions with most 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 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 Ministry has established world-leading interim ambient air quality objectives (NOx and SOx) which include the LNG industry. Emissions from natural gas turbine power generation are potentially the largest source of emissions from LNG facilities.

Key Message #2:

- The study was released on July 18, 2014. The results of the study show, that with proper management, Kitimat's airshed can safely accommodate new industrial growth, while still protecting human health and the environment.
- The study focusses on sulphur dioxide and nitrogen dioxide emissions from: four proposed LNG facilities, Rio Tinto Alcan's existing aluminium smelter and planned modernization, a proposed oil refinery, BC Hydro gas turbine powered electrical generation facilities and the predicted increase to shipping in Douglas Channel.
- Twelve scenarios were evaluated, based on a range of existing and proposed facilities with various levels of emissions treatments. Each scenario considered the potential effects of sulphur and nitrogen oxides on vegetation, water, soil and human health.
- The draft report was received by the ministry at the end of March and was subsequently reviewed by other agencies, including local First Nations, Northern Health and the Ministry of Health.
- This report is helping to shape management strategies to protect air quality, human health and our overall environment.

- On December 2, 2014, the Province issued an RFP to conduct a study of the Prince Rupert airshed. The Province is funding this \$500,000 study to help inform future decisions on industrial development within the airshed while examining any potential environmental and health impacts.
- The successful proposal was put forward by ESSA Technologies of Vancouver, BC.
- The study will include a thorough review and analysis of the cumulative effects of existing and proposed industrial air emissions from:

- Six proposed LNG terminals (Pacific Northwest, Prince Rupert, WCC, Woodside, Aurora, Watson Island. Initially Aurora had two options now they are focusing on Digby Island.),
- Existing and proposed Prince Rupert Port Authority development,
- o Gas turbine powered electrical generation facilities, and
- Related rail and marine transportation.
- The study will assess the impact of emissions (Nitrogen Dioxide, Sulphur Dioxide and Particulate Matter 2.5) through seven scenarios or case studies, including their potential effects on surface water, soils, vegetation, and human health.
- Conclusions from the study will be used to inform environmental assessment work as well as future permitting and regulatory decisions for LNG and other industrial proponents in the Prince Rupert airshed
- The final report is due to government by the end of May and will undergo a series of reviews, including reviews by technical experts and First Nations (among others to be determined), prior to being publically released.

Key Message #4:

- As part of the Environmental Assessment process, LNG proponents will be required
 to conduct an impact assessment on air quality as well as a cumulative effects
 assessment. 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 a majority of the proponents as
 well as the BC LNG Alliance.
- The Ministry has met with proponents regarding the type of baseline data collection needed (air, soil, and water samples) for environmental assessment.
- Ministry staff have also been dedicated to collaboration and support of
 Environmental Management Act permitting, which in this case is the responsibility of
 the Oil and Gas Commission, as well as contributing information and expertise to the
 Ministry of Natural Gas Development.
- The Ministry has formed a dedicated team of expert staff to review all environmental aspects of LNG projects, including the setting of relevant emissions standards, supporting environmental assessment, and issuing the necessary construction permits. The Oil and Gas Commission is responsible for permitting LNG plant operations under the Environmental Management Act.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The Kitimat Valley continues to receive attention regarding current and proposed industrial developments. In addition to proposed LNG facilities, industrial developments include:
 - o The Rio Tinto Alcan (RTA) aluminium smelter modernization project
 - o 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 (SO₂) emissions. Accordingly, the air permit was amended in 2013 to allow a maximum limit of 42 tonnes per day of SO₂ (from 27 tonnes per day).
- The key air emissions from LNG facilities are SO₂, NOx, and fine particulate. The key emission sources are natural gas turbines and acid gas incinerators.
- First Nations and public groups throughout BC are well informed and concerned about potential impacts from SO₂ and NOx. 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 NOx 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 airshed.
- 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 airshed impacts.

Contact: Ed Hoffman, Director-LNG & Oil and Gas, Regional Operations Branch, Environmental Protection Division, 250-565-6443

Ministry of Environment

ISSUE TITLE:

Lavington Pellet Plant

Date: February 4, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 On December 17th, 2014, after careful consideration, the ministry conditionally approved an application for an air discharge by Pinnacle Renewable Energy for a pellet plant in Lavington.
- Key message #2 The proposed pellet plant is to be constructed directly adjacent to the existing Tolko sawmill, and adjacent to an elementary school. The location of the plant has created significant concern and local opposition to the project.
- Key message #3 The permit requires the lowest concentration discharge rate of any pellet plant currently operating in British Columbia. This plant will be using technology which will set a new higher standard for all pellet plants across the province
- Key message #4 An appeal has been filed with the Environmental Appeal Board regarding the issuance of this conditional permit. An appeal date has yet to be scheduled.

CURRENT STATUS:

Key message #1

- The Environmental Management Act requires an air discharge permit for the type of facility proposed by Pinnacle Renewable Energy in Lavington.
- There were two components to the Environmental Management Act application a technical assessment and a consultation report.
 - The technical assessment report requires the proponent to assess potential impacts of discharges from the pellet plant on the environment and all nearby receptors including the elementary school.
 - The consultation report summarizes all consultation conducted and what actions were taken to address concerns.
- After careful review and consideration of the application and treatment technology, this permit was granted with conditions.

Key message #2

 The pellet plant will produce wood pellets from sawdust and shavings from the neighbouring Tolko sawmill. The permit for the pellet plant links these two facilities together in that the pollution control equipment must be upgraded at the sawmill before the pellet plant can operate.

Key message #3

- Pinnacle's proposal included an air dispersion modelling report and also outlined additional emission control devices and offsets to reduce emissions.
- With the conditional permit, it is expected that the overall impact to the airshed from both facilities will result in a net reduction of particulate discharges, and subsequent improvement, to local air quality.
- The permit requires the lowest concentration discharge rate of any pellet plant currently operating in British Columbia. The new technology this plant will be using will set a new higher standard for all pellet plants across the province; however, each application and its process will be considered on a case-by-case basis as the new standard may not be applicable in every instance.

Key message #4

 The permit decision has been appealed by three members of Lavington LIFE, a local group who opposes the facility. At this time, no stay has been requested as the pellet plant has not yet been constructed.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The proposed plant is also adjacent to an elementary school which has led to concerns from the Vernon School Board, local politicians and the public around increased traffic and air quality.
- The Vernon School Board has stated they cannot endorse its construction due to
 potential health effects on students and teachers. In a letter to the ministry, the
 Board urged Ministry of Environment to review the proposal to ensure safety and
 well-being of staff and students.
- A local group called Lavington LIFE is also opposed to the proposed pellet plant and started a petition. Other concerns they have with the proposal include: noise, light, traffic, and fugitive dust.
- Under the Reviewable Projects Regulation of the Environmental Assessment Act, pellet plants do not meet the threshold for a formal review; however, Lavington LIFE requested the Minister order an Environmental Assessment. It was determined this is not a reviewable project under the Environmental Assessment Act and the application followed the normal ministry decision-making process for issuing authorizations.

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Ministry of Environment

ISSUE TITLE:

Industry Product Stewardship (Recycling)

Date: February 5, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Extended Producer Responsibility (EPR) programs (aka Industry Product Stewardship) 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 2013, B.C. was awarded the highest ranking (B+) alongside the province of Quebec, for EPR programs on EPR Canada's national report card.
- Key message #3 Industry Product Stewardship policy offers substantial economic benefits, such as job creation. A 2013 study demonstrated that B.C.'s EPR policy generates over 2,400 jobs in B.C
- Key message #4 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.
- BC's EPR programs divert over 335,000 metric tonnes of material from landfills annually, which includes the collection and recycling of an estimated 185,000 tonnes of packaging and printed paper

Key message #2 and #3:

- The producers of designated products support the flexibility afforded in BC's resultsbased Recycling Regulation. Industry support for BC's approach has helped us become the North American leader in EPR programs.
- B.C. currently has EPR programs for 23 different product categories covering the vast majority of consumer products, including beverage containers, tires, used oil, oil

filters and containers, antifreeze, pharmaceuticals, solvents, flammable liquids, gasoline, pesticides, paint, electronics, cell phones, IT and telecommunications, audio/visual, household batteries, thermostats, residential fluorescent lamps, car batteries, smoke detectors and small appliances.

- Reduced waste collection and landfilling costs due to EPR programs are substantial, with estimated savings of over \$85 million annually.
- A 2013 study demonstrated that B.C.'s EPR policy generates over 2,400 jobs in B.C. and this is anticipated to climb to over 7,500 by 2022.

Key message #4:

- The governance structure, management of program costs, and operational systems
 of a stewardship agency are determined by the producers as members of the
 agency.
- Producers determine how to fund their stewardship program, and the majority have chosen to charge a separate fee (termed an eco fee or environmental handling fee) to the consumer at the point of sale.
- If a fee is charged, then independently audited annual financial statements are required to be submitted to government. While fees are not mandated or approved by government, consumers often incorrectly assume that an eco fee is a tax.

KEY FACTS/BACKGROUND:

- Government's primary concern is performance, environmental outcomes and transparency. Industry is required to provide annual reports and third party verification of performance to government and the public.
- The 2014/15 2016/17 Ministry of Environment Service Plan commits to capturing more products under EPR following the schedule in the Canadian Council of Ministers of Environment Extended Producer Responsibility Action Plan. However, the Ministry is currently focused on solidifying the recent e-waste and PPP program expansions before tackling any new product categories.
- The ministry provides financial support of approximately \$75,000/year for the Recycling Council of BC's Recycling Hotline (1-800-667-4321) and the Recyclopedia website: www.rcbc.bc.ca

Contact: Meegan Armstrong, A/ Manager, Waste Prevention

250 387-9944

ISSUE TITLE:

Ministry of Environment

Multi-Material BC (MMBC)

Date: February 10, 2015

RETURN TO TOP

KEY MESSAGES:

- Key message #1 Multi-Material BC (MMBC) is a not-for-profit service provider developed by industry, for industry, to assist businesses in complying with the packaging and printed paper requirements of the Recycling Regulation. The program will ultimately result in an estimated \$80 to \$100 million in savings to local governments and B.C. taxpayers.
- Key message #2 Industry stewardship of Packaging and Printed Paper is by far
 the largest and most complex Extended Producer Responsibility program in the
 history of B.C., and it is still very much in its infancy after being launched last spring.
- **Key message #3 -** MMBC is already providing recycling services to over 1.24 million households (73% of B.C. households).
- **Key message #4 -** Overall, 87 communities in B.C. are receiving industry–funded curbside or multi-family collection service through the MMBC program.
- Key message #5 In addition to curbside and Multi-family services, 198 drop-off depots are now in place across the province, including 6 recent locations.
- Key message #6 The province has ensured the industry run program for
 packaging and printed paper collection does not negatively impact B.C. small
 businesses. By regulating an exemption for low volume producers we will ensure
 these regulations impact less than one per cent or just 3,000 of the province's
 385,000 businesses.

CURRENT STATUS:

Key message #1:

General:

- The idea behind EPR is sensible: businesses should be responsible for recovering and recycling the products they supply into the B.C. marketplace. As industry takes on the management of end-of-life paper and packaging, municipalities are relieved of a significant cost and administrative burden. The success of other EPR programs has proven that this industry responsibility model is not only cost effective, but also encourages better product design/ less wastage, and helps increase overall recycling performance.
- Aside from shifting recycling costs away from taxpayers, this will mean an increase in the types of packaging British Columbians can put in their blue box (e.g., milk

- cartons, aerosol containers, plant pots, etc.).
- As a result, more packaging and printed paper in B.C. will be collected and recycled, helping to reduce the volume of this material in landfills and its impact in the environment.

Gulf Islands:

- As much as Extended Product Stewardship programs have been asked for and well received by local governments across the province, it does not mean industry will assume any and all local government costs for whatever collection services have been established.
- s.13,s.17
- The CRD now receives more than \$5 million annually from MMBC to fund its various curbside and depot programs including Gulf Island depots. Costs for these depots have always been in excess of revenues received (from other stewardship programs (e.g. paint), commodity sales, refundable beverage container donations). The CRD has long-recognized the additional costs involved and chose to establish and maintain these recycling services. However, as MMBC funding does not cover all such costs, the CRD is currently reviewing the remaining funding shortfall.
- To date, operators of 198 public and private depots across the province have accepted the various incentives offered by MMBC to manage PPP, with MMBC assuming all transportation costs in order to negate geographical cost differences facing such operators.
- Although the Ministry does not get involved in business-to-business relationships, staff have been working with all parties to clarify if any funding shortfall(s) being experienced are more related to the chosen nature of services being provided i.e. limited volumes/economies of scale, or if there are unique challenges to be addressed on the Gulf Islands.

Key Messages #2 through #5:

- Overall, 87 communities (such as regional districts, cities, etc.) in B.C. are receiving industry–funded curbside or multi-family collection service through the MMBC program, including:
 - twenty communities (including First Nations) that are now receiving curbside recycling for the first time; and
 - recently funded curbside programs launched in Prince George, Quesnel, University Endowment Lands, Langley and Revelstoke) as part of MMBC's planned implementation.
- Although the program only launched last May, the vast majority of B.C. communities have MMBC funded curbside, multi-family and/or depot services in place. However, a number of communities declined the incentives offered by MMBC prior to the November 30th, 2013 deadline. Many such communities later reversed their position and were put on MMBC's waitlist pending further producer funding.

- The Ministry continues to aggressively pursue producer compliance through issuance of advisory and warning letters, as part of escalating enforcement measures. This has successfully resulted in over 160 producers coming into compliance over the past few months.
- Our government will continue to work with MMBC, as well as local municipalities and regional districts in an effort to ready them for implementation as further producer funding becomes available.

Key Message #6:

- Government amended the Recycling Regulation to exempt small businesses from any reporting or recycling costs if they meet any one of the following:
 - Under one million dollars in annual revenues;
 - Under one tonne of packaging and printed paper supplied to B.C. residents; or
 - Operate as a single point of retail sale and are not supplied by or operated as part of a franchise, a chain or under a banner.
- With respect to most franchises with locations in B.C. the reporting and financial responsibilities target the parent corporation and not individual franchisee owners.

KEY FACTS/BACKGROUND:

- In addition to already directly servicing the vast majority of B.C. communities, the MMBC program allows new materials to be recycled such as milk cartons, aerosol cans, Styrofoam, plant pots and drink cups. As the service continues to grow, so will the volume of materials collected.
- Better product design/less waste is an integral part of shifting the costs and responsibilities to the producers responsible. Although it often takes time to research and develop new approaches, some are easily implemented in the short-term e.g. switching to better existing packaging or using other media than printed flyers/junk mail.
- The CRD sub-contracts the depot services contract it has with MMBC to the Gulf Island depot operators. The CRD recently asked MMBC to extend this existing depot contract through December 2015. A meeting to confirm is set for Feb 18th.
- The main issue the Gulf Island depot operators have is that the CRD paid them to recycle PPP on a per household rate, similar to a curbside rate. As MMBC pays all depots on a per tonne rate, and there are limited tonnes available on the Gulf Islands, a funding shortfall exists especially compared to local expectations.

Contact: Bob McDonald, Manager, Packaging and Printed Paper Implementation, Environmental Standards Branch 250 356-9082

ESTIMATES NOTE 2015

Confidential

Ministry of Environment

Date: February 5, 2015

ISSUE TITLE:

Metro Vancouver's SWMP: Waste Flow Bylaw & Waste-to-Energy Procurement

RETURN TO TOP KEY MESSAGES:

- Key message # 1 The ministry conditionally approved Metro Vancouver's Solid Waste Management Plan (SWMP) in July 2011.
- Key Message # 2 On October 11, 2013, Metro Vancouver approved a proposed bylaw (Bylaw 280) to ensure garbage generated by businesses, institutions, and multi-family residential buildings is processed at regional facilities and not transported to other areas with lower tipping fees.
- Key message #3 On October 17, 2014, Minister Polak announced Bylaw 280
 was not approved by the province and that MLA Marvin Hunt would review
 Metro Vancouver's Solid Waste Management Plan to make recommendations
 on the most effective way to maximize waste diversion in the region.
- Key message #4 Based on the approved solid waste management plan (SWMP), Metro Vancouver requires additional municipal solid waste disposal capacity and has developed an eight phase Waste-to-Energy (WTE) procurement process.

CURRENT STATUS:

Key message #1:

- The ministry conditionally approved Metro Vancouver's Solid Waste Management Plan (SWMP) in July 2011.
- The SWMP includes goals for diverting 70 per cent of regional waste through recycling, composting and other programs by 2015 (increasing to 80 per cent by 2020) and calls for construction of a waste-to-energy facility either inside or outside of the region.
- Minister's conditions of the SWMP approval include:
 - A competitive process for any new or upgraded WTE facilities or landfills.
 - Recognizing the FVRD and Metro Vancouver share a common and critically important airshed and Metro Vancouver will consult with the FVRD to address air quality concerns prior to beginning construction of a new or expanded facility.
 - o s.13,s.16

 Ensure methane gas collected from solid waste management facilities can be used as an alternative fuel and for generating clean electricity or heat.

Key message #2:

- On October 11, 2013, Metro Vancouver (MV) approved a proposed bylaw (Bylaw 280) to ensure garbage generated by businesses, institutions, and multi-family residential buildings is processed at regional facilities and not transported to other areas with lower tipping fees.
- A number of companies, predominantly in the recycling industry, supported the bylaw and the tipping fees, advocating this drives higher levels of recycling and supports business expansion.
- Other regional districts have indicated support for MV's bylaw which limits flow out of the region.
- The proposed bylaw received criticism from the waste hauling and management industry citing it as an attempt to create a monopoly on regional garbage and justify the need for a new incineration facility.
- Many of the other opponents (e.g. Fraser Valley Regional District) believe that Bylaw 280 will ensure that garbage flows to MV's proposed WTE facility.

Key Message #3:

- On October 17, 2014, Minister Polak announced Bylaw 280 was not approved by the province.
- A number of public-interest concerns factored into the decision not to approve Bylaw 280, including:
 - o the potential to create a monopoly on waste management,
 - o the potential for increased illegal dumping; and
 - o the destabilization effect it may have on private-sector collection and hauling.
- Instead, MLA Marvin Hunt is reviewing Metro Vancouver's Solid Waste Management Plan on behalf of the province to determine the most effective way to achieve waste diversion. This review is ongoing.

Key Message #4

- Metro Vancouver's approved solid waste management plan states that the regional district will require additional disposal capacity of 370,000 tonnes (likely less depending on the success of the recycling and diversion programs e.g. organics ban starting in 2015) once the Cache Creek Landfill (CCLF) reaches capacity in 2016. s.13,s.16
- As per the Minister's July 2011 conditional approval of MV's SWMP, MV must ensure that any new WTE consider the full range of options both in and out of region

- in an equal and fair manner, and consult with the Fraser Valley Regional District in the event that an in-region site is chosen.
- MV has developed an 8 phase WTE procurement process which includes working
 with the FVRD on a consultation plan. They are currently in Phase 2 Potential Site
 Identification Process. Four potential locations (six individual parcels in four
 locations Duke Point, Nanaimo; Port Mellon, Delta and Vancouver) were made
 public by MV on November 21, 2013. s.13,s.16
 s.13,s.16

Summary:

- The Ministry supports the 5Rs hierarchy to achieve solid waste goals. MV's SWMP
 has ambitious recycling targets and contemplates working closely with private
 companies to achieve those goals.
- Ministry staff are engaged in each stage of the WTE procurement process and the related public consultation including the ministerial required consultation with the FVRD.

Contact: Avtar S. Sundher, Authorization Section Head, Regional Operations Branch, Environmental Protection Division 604-582-5272

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ESTIMATES NOTE (2015)

Confidential

Ministry of Environment

Date: February 2, 2015

ISSUE TITLE:

Air Emissions Guideline for Waste to Energy Operations

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Ministry of Environment has up-to-date air emissions guidelines for Municipal Solid Waste combustion. The standards reflect current international best practices.
- Key message #2 Some 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.

CURRENT STATUS:

Key message #1/2:

- The Ministry of Environment has 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 message #3

- WTE is allowed under the Environmental Management Act; however, approval for WTE should not be considered a license to burn garbage and communities are required to target 70 per cent waste diversion through reducing, reusing and recycling before pursuing WTE.
- Proposed WTE facilities must also have a high degree of energy recovery, consistent with European standards, and meet B.C.'s emission standards, which are

- among the most stringent in the world. Prior to a facility starting operation, a discharge authorization, which includes specific operational and monitoring requirements, is required from the ministry.
- The Ministry will use its air emissions guideline as a basis for evaluating any proposed WTE facilities in Metro Vancouver or elsewhere.
- New waste-to-energy-facilities built in B.C., with a capacity greater than 225 tonnes per day, must go through an Environmental Assessment (EA). Additionally, all new facilities proposed in Metro Vancouver or the Fraser Valley Regional District, regardless of capacity, are subject to an EA.

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.
- Some 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*.
- Many stakeholders including businesses, some local governments, nongovernmental organizations and members of the public strongly oppose the use of MSW as a feedstock for fuel or energy."
- A report commissioned by MoE and conducted by SSG consulting that reviews government policies and various management options for municipal solid (including WTE) is in the public realm as a result of an FOI request.
- At present, Metro Vancouver's Burnaby incinerator is the only large scale WTE facility in BC that processes municipal solid waste.
- Metro Vancouver's new solid waste management plan allows them to pursue wasteto-energy as an option for disposing of solid waste and the regional district has developed an 8 phase procurement process. Currently Metro Vancouver is progressing with the Site Identification Process and 4 sites (Duke Point, Nanaimo; Port Mellon, Delta and Vancouver) have been publically identified.

• s.13,s.16

Contact: Lori Halls, Assistant Deputy Minister

Ministry of Environment

ISSUE TITLE:

Biosolids in Merritt

Date: February 6, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 Biosolids are the solid portion of treated wastewater that are beneficially and safely used as a fertilizer and soil amendment. Their application to the land base and management are governed by the Organic Matter Recycling Regulation (OMRR).
- Key message #2 Recently, there have been two notifications received by the ministry to apply biosolids in the Merritt area.
- Key message #3 The OMRR sets standards for metals and pathogens in biosolids and if the requirements of the OMRR are met, environmental risk is considered negligible.

CURRENT STATUS:

Key message #1

- In BC, biosolids production, management and application to the land base are governed by the Organic Matter Recycling Regulation (OMRR), which falls under both the *Environmental Management Act* and the *Public Health Act*. This regulation is designed to protect human health and the environment.
- To comply with the regulation, notification must be provided to the ministry at least 30 days prior to biosolids application to the land base. It must include a land application plan completed by a qualified professional.
- Public consultation or notification is not required under OMRR; however, some companies provide public notification and information voluntarily.

Key message #2

- The ministry has received two recent notifications to apply biosolids in the Merritt area. The ministry and the Interior Health Authority have reviewed the land application plan for the Woodward Road (Dry Lake) proposal (the site being primarily discussed in the media).
- Due to the public concerns with this site, the ministry has directed the proponent to provide additional information about their application plan regarding setbacks from surface water and slopes, as well as an evaluation of groundwater depth, drinking water and habitat protection, among other detailed considerations.
- s.13

- the ministry have again reviewed the information. It is anticipated the revised plan will be submitted this spring.
- The land application for the second notification has not been completed and will be reviewed following its submission.

Key message #3

- Residents and First Nations in the Nicola Valley are raising concerns about biosolids application in the area – primarily about the effect of biosolids on human health and the environment.
- Where the requirements of the OMRR are met, environmental risk is considered negligible. Compliance inspections may occur when the ministry is made aware of a potential harm or in response to a complaint.
- Biosolids are land applied across Canada and the U.S. They are successfully used in various areas of the province such as the Sechelt Sand and Gravel Mine on the Sunshine Coast, the Highland Valley Copper Mine near Logan Lake, Vancouver Island University forest land and the Okanagan Ranch near Clinton.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In B.C., the land application of biosolids has not yet been used for food crops for human consumption. However, New York City wastewater treatment biosolids have been used to fertilize wheat farms in Colorado for two decades.
- The Canadian Council of the Ministers of the Environment (CCME) approved the Canada-wide Approach for the Management of Wastewater Biosolids on October 11, 2012. B.C.'s Organic Matter Recycling Regulation is in alignment with the approach.
- On January 11, 2015, the group Friends of the Nicola Valley issued a press release claiming the Nicola Valley "is scheduled to become a dumping ground for Okanagan and Lower Mainland human waste." The release further states "sludge application is shrouded in secrecy" with "no public consultation or notification, and no on-site inspection."
- A petition has been started by the Friends of Nicola Valley and has over 1500 signatures.
- On January 12, 2015, the Chiefs of the Nicola Valley sent a letter to the Regional Director, Southern Interior Region, Environmental Protection Division, cc'ing Ministers Polak, Rustad, and Thompson, among others, demanding all current biowaste operations stop and no new notifications proceed "until the Crown and ministry regulators establish a meaningful dialogue" resulting in First Nations support.

Contact: Cassandra Caunce, Regional Director, Regional Operations Branch, Environmental Protection Division, 250-371-6225

RETURN TO TOP

Ministry of Environment

ISSUE TITLE:

Capital Regional District Sewage Treatment

Date: February 6, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Capital Regional District must deliver on its requirements for sewage treatment.
- Key message #2 The Province has no plans to intervene around the rezoning of McLoughlin Point for wastewater treatment.
- Key Message #3 Regardless of the 2018 provincial deadline, the CRD has to be in compliance with federal regulations by 2020.
- Key Message #4 Failure to comply with the timelines currently defined in the approved Core Area Liquid Waste Management Plan could result in the loss of federal and/or provincial funding.

CURRENT STATUS:

Key message #1:

- The Capital Regional District's current discharge of raw screened sewage into the Juan de Fuca Strait does not meet provincial or federal regulatory standards and environmental impacts are occurring.
- The CRD's Liquid Waste Management Plan (LWMP) was approved by the Minister
 of Environment in August 2010 and states treatment is to be in place by December
 31, 2018. The approved LWMP included rezoning McLoughlin Point for construction
 of a wastewater treatment plant.
- The CRD is solely responsible for all aspects of the treatment upgrades and must meet all deadlines.
- The ministry has provided guidance on steps the CRD or its member municipalities need to take if they want to pursue any treatment option(s) other than what is currently in the CRD's approved Core Area LWMP.
- For any new proposal to be given proper consideration. The CRD must provide written notification of its intentions to pursue an amendment to the approved LWMP.

Key Message #2:

- On April 7, 2014, Esquimalt council unanimously voted against rezoning and voted to amend the zoning bylaw so a sewage treatment facility would not be allowed at McLoughlin Point; the council previously voted against the rezoning in July 2013.
- The CRD previously asked the Minister to use the Environmental Management Act

(EMA) to override Esquimalt council's July 2013 decision.

• s.13.s.16

Key message #3:

- Any requests for an extension or amendment(s) to the LWMP cannot impact the Federal deadline of 2020.
- The Federal deadline is a firm regulatory requirement under the Wastewater Systems Effluent Regulations whereby all high risk facilities must meet National Performance Standards by 2020.

Key message #4:

- The current funding agreements and funding agreements in principle with senior government are based on the approved CRD Core Area LWMP.
- Failure to comply with these obligations would result in the possible loss of federal and/or provincial funding.
- Moving forward with treatment is supported by the Province, the Government of Canada, and the Capital Regional District Board.
- In 2012, the total capital cost of the project was estimated to be \$782.7 million. The
 federal contribution would be up to \$253.4 million, the provincial contribution a
 maximum of \$248 million, and CRD would provide the balance at close to \$281.3
 million. The Biosolids Energy Centre portion of the program would be delivered
 through a P3 with support from the P3 Canada Fund. However, the funding
 agreements note that the system must be in operation by March 2018.

KEY FACTS/BACKGROUND:

- Capital Regional District, including the Cities of Victoria, Langford and Colwood, the
 Districts of Oak Bay and Saanich, the Township of Esquimalt and the Town of View
 Royal discharge up to 40 billion litres per year of raw screened sewage into the Juan
 de Fuca Strait.
- The current sewage discharge does not meet provincial or federal regulatory standards for discharge and impacts to the environment are occurring.
- In July 2006, Minister Penner directed the Capital Regional District to amend its LWMP and to detail a schedule for the provision of wastewater treatment. The plan amendment was to include options related to the type, number and location of facilities as well as preliminary costs of treatment.
- In October 2006, Premier Campbell announced a provincial commitment to fund one-third of the capital cost for the best, lowest cost solution for wastewater treatment in the Capital Regional District, with the condition that Partnerships BC take a hard look at whether or not the project can be completed as a public-private partnership.
- In June 2010, the Capital Regional District Board approved a plan amendment and schedule committing to treatment facilities and locations, including the McLoughlin

- Point Wastewater Treatment Plant in 2016, biosolids treatment at Hartland landfill in 2016, and a West Shore treatment plant in 2030.
- The system configuration takes advantage of staging opportunities to establish the best, lowest cost configuration to meet treatment objectives, and provides a practical, cost-effective system that incorporates currently viable resource recovery opportunities. The plan amendment was approved by Minister Penner in August 2010.
- As part of the plan amendment, the Capital Regional District submitted a business case to the Minister of Community, Sports and Cultural Development to address provincial requirements and assess public-private partnerships.
- In July 2012, the provincial and federal governments announced the commitment to provide shared funding. The total capital cost of the program was estimated to be \$782.7 million in 2012. The federal contribution would be up to \$253.4 million, the provincial contribution a maximum of \$248 million, and the CRD would provide the balance, at close to \$281.3 million. The funding agreements indicate that the system must be in operation by March 2018.
- In February 2014, the Capital Regional District submitted request for a minor amendment (Amendment Number 9) to the plan in order to address the scheduled project completion date of 2018 and other minor plan updates.
- On June 13, 2014, Minister Polak met with the Mayor of Victoria and Westshore mayors to discuss possible options going forward.
- On June 13, 2014, six members of Washington State Congress along with two Senators sent the Premier (with a cc to the Prime Minister) a letter calling on Victoria to stop dumping sewage into the Strait of Juan de Fuca. This followed a June 10 letter from the Governor of Washington State who raised the same concerns. A letter from the Premier's Office was sent to both Congress and the Governor in mid-July.
- On July 3, 2014, Minister Polak approved Amendment No. 9 subject to conditions including provisions for a wet weather flow management progress report, an updated First Nations consultation summary report and a consolidated version of the Core Area LWMP.
- Also on July 3, 2014, Minister Polak sent a letter to the CRD stating the Province would not extend its funding deadline for sewage treatment and that the CRD is solely responsible for all aspects of the project and must meet all deadlines.
- To date the CRD has not provided any notice to amend the approved LWMP; however, in December 2014, the CRD acknowledged formation of the Westside Wastewater Treatment and Resource Recovery Select Committee which includes representatives from Colwood, Esquimalt, Landford, View Royal, and Songhees First Nation. Subsequently in January 2015, the CRD acknowledged formation of the Eastside Wastewater Treatment and Resource Recovery Select Committee which includes representatives from Victoria, Saanich and Oak Bay. Each of these committees are to evaluate options and develop a wastewater treatment and resource recovery plan specific to each sub-region.

McLoughlin Point Wastewater Treatment Plant

• The McLoughlin Point Wastewater Treatment Plant is the keystone facility for the Seaterra Program and a key component of the approved LWMP

- On July 22, 2013, the Township of Esquimalt and Capital Regional District each met separately with the Minister of Environment, the Deputy Minister of Environment, and the Minister of Community, Sport and Cultural Development. The Ministers indicated that they expected both local governments to negotiate in good faith and achieve agreement on zoning the site so that the plan may advance.
- Staff from the Capital Regional District and Township of Esquimalt have worked together to develop a revised zoning bylaw. In addition, staff from both local governments have negotiated two additional amenity and mitigation agreements to address concerns expressed by the Township of Esquimalt Council, and by the public at a public hearing in July 2013, in relation to the previous zoning application.
- On April 7, 2014, Esquimalt council unanimously voted against rezoning and voted to amend the zoning bylaw so a sewage treatment facility would not be allowed at McLoughlin Point; the council previously voted against the rezoning in July 2013 On April 10, 2014, in a letter to the Minister of Environment, CRD requested Provincial Cabinet issue an order under Section 37(6) of EMA to suspend the operation of provisions of a rezoning bylaw of the Township of Esquimalt in order that the approved plan may proceed.
- The CRD previously asked the Minister to use the Environmental Management Act
 to override Esquimalt council's July 2013 decision. After a thorough review of this
 specific situation, there is some question as to whether EMA provides the Province
 with the authority necessary, to step in and order the rezoning of McLoughlin Point.
- On May 27, 2014, Minister Polak issued a press release confirming that the Province would not intervene in matters of zoning between CRD and Township of Esquimalt.

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Alternate Contact: Kirsten White, Senior Environmental Protection Officer, 250-751-3193

ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Microbeads
Date: February 6, 2015	

RETURN TO TOP KEY MESSAGES

- Key message #1 We are concerned about waste plastics in our environment.
- Key message #2 We support raising awareness on this potential issue and letting consumers make an informed decision.
- Key message #3 The Province looks to the Federal government to establish consistent national rules for product standards and trade.

CURRENT STATUS:

Key message #1

- Plastics, including large debris and microplastics, can make their way into the
 environment through a variety of pathways, such as through the sewage system,
 litter or even through the normal wear and tear of fishing nets. In addition to direct
 sources such as the microbeads used in personal care products, microplastics also
 have indirect sources such as the breakdown of larger pieces of debris or the
 laundering of polyester and fleece clothing.
- Because plastics enter the environment through a number of pathways and sources, the cooperation of multiple levels of government is necessary to successfully deal with the broader issue of plastic waste.
- B.C. has aggressively expanded its EPR programs to cover more plastics products.
 The recent expansion of our e-waste programs to include all electronics (including
 toys and small appliances) as well as the inclusion of plastic shopping bags in the
 new packaging and printed paper program, means that there are more recycling
 options for British Columbians and fewer plastics in the environment.

Key message #2

- Several manufacturers such as Johnson and Johnson have already made voluntary commitments to phase out microbeads. The timing and nature of these phase-outs varies from company to company. Such market driven actions have the potential to be faster and more effective than regulation.
- The Province commends the forward-thinking companies that are voluntarily phasing out the use of microbeads in their personal care products. Solving the problem of plastic pollution in the environment will require the cooperation of all levels of government, citizens and industry alike.

Key message #3

- In Canada, addressing microbeads in consumer products, whether through product bans or other means, will require the participation of the federal government as it is the role of the federal government to establish consistent national rules for product standards and trade.
- The ministry has connected with the federal government to discuss this proposal.
 The federal government is studying the issue and considering whether national action is warranted.
- s.13,s.14,s.16
- s.13,s.16

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Microbeads are polyethylene microspheres that are widely used in cosmetics, skin care and personal care industries, as well as biomedical and health science research.
- Wastewater treatment plants are not designed to filter out microbeads, and they accumulate in the marine environment.
- The risks of microplastics, including microbeads, in the aquatic environment are not well understood. In addition to physical toxicity (digestive tract obstruction) in aquatic invertebrates and fish, microplastics can absorb toxins that are already present in the environment. Because many of the toxics are bioaccumulative, there is increasing public concern that microplastics, including microbeads, may introduce or increase toxins in the food chain.
- Microbeads associated with personal care products are gaining attention as a source of aquatic pollution globally and global advocacy groups, including the B.C. chapter of the Surfrider Foundation are calling for jurisdictions to ban their use.
- In June 2014, Illinois banned the sale of cosmetics containing plastic microbeads over concerns for the presence of microbeads in the Great Lakes.
- In June 2014, the Canadian Plastics Industry Association (CPIS) wrote a letter supporting the decision by the State of Illinois to ban the sale of products containing microbeads.
- On July 22, the Surfrider Foundation held a press conference with NDP MLA Spencer Chandra Herbert calling for the ban on the use of microbeads in B.C.

Contact: Heather English, A/Issues Manager, 250.580.1532
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Ministry of Environment

ISSUE TITLE:

Water Quality in the Elk Valley (Area-Based Management Plan & Valley permit)

Date: February 15, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Elk Valley Area Based Management Plan (ABMP) was approved November 18, 2014. This is a significant step towards taking action to invoke immediate change in the region's water quality trends so we can ensure the environment, wildlife, and health are protected.
- Key message #2 Statutory decisions within the Elk Valley are now guided by the ABMP. The Environmental Management Act (AMA) permit issued in November 2014 considered the ABMP and set substantial legal requirements for immediate monitoring, management and prescribed a treatment schedule for ensuring improving water quality in the Elk Valley.
- Key message #3 Substantial public and stakeholder consultation was undertaken during the ABMP development. Most importantly was the extensive consultation and technical discussions with the Ktunaxa Nation. The Ktunaxa support for the ABMP is a reflection of the commitment of the province, the Ktunaxa and the proponent (Teck) to see water quality levels stabilize and improve.

CURRENT STATUS:

Key message #1:

- The regional economy of the Elk Valley and surrounding areas is heavily dependent on mining and related activities.
- The plan was developed by Teck Coal Limited over 12 months involving substantive public, stakeholder and government technical staff review. A Technical Advisory Committee (TAC) comprised of technical specialists from MOE, MEM, EAO, Env Canada, Ktunana Nation, Montana Dept of Env Quality, US EPA, and an independent third party scientist from UBC.
- The ABMP was submitted to government July 22, 2014. A thorough technical review of the plan was conducted by government technical & specialist staff and contractors.
- The plan includes substantive baseline information regarding the water quality and impacts to the aquatic environment in the Elk Valley, strategies and commitments to immediately begin to stabilize and reverse the concentrations of selenium, cadmium, sulphate, nitrate and the formation of calcite.
- This is the first ABMP issued under the EMA. This approved plan sets policy for EMA statutory decision makers to consider when making decisions within the area

designated under the plan.

Key Message #2:

- The EMA effluent discharge permit was issued November 19, 2014 to set legal requirements for Teck Coal Limited to meet water quality levels at various points within the Elk Valley.
- The permit requires comprehensive monitoring of water quality, sediment, fish and benthics. The permit also requires the establishment of an Environmental Monitoring Committee (EMC) which is responsible for reviewing data and many reports prior to submission to the ministry. The EMC is responsible for holding a minimum of one public open house(s) to share annually the data and progress made in improvements to the water quality in the Elk Valley.
- Teck is <u>addressing management of waste rock and water</u>, and deploying new and emerging water treatment technologies.
- The permit also sets requirements for the installation and operation of treatment plants.
- The B.C. 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.
- Failure to follow conditions in the EMA permit may be considered a violation of EMA and subject to enforcement action.
- The Ministry is monitoring the compliance of this permit very carefully.

Key message #3:

- The Ktunaxa Nation Council (KNC) have been constructive and collaborative throughout the development of the ABMP.
- The B.C. government appreciates the leadership of the KNC and the technical contributions made to the ABMP and valley permit during the consultation phases.
- The KNC are members on the EMC as well as participants in a Lake Koocanusa monitoring and research working group.

KEY FACTS/BACKGROUND:

- Teck Coal Ltd. owns and operates five coal mines in the Elk River Valley and the Elk River has seen selenium levels rise as a result of the historical mining activity.
- 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 boundary Lake Koocanusa. Selenium is a
 naturally occurring and essential element that bio-accumulates; high levels of
 selenium are harmful to birds, fish and other aquatic life and may be harmful to
 human health.
- On November 18th, 2014, the Minister of Environment approved Teck's area-based management plan for the Elk Valley watershed (the Elk Valley Water Quality Plan.)
- The plan was developed in response to a ministerial order issued to Teck on April

- 15, 2013, instructing the company to take steps to stabilize and reverse water quality concentrations for selenium, cadmium, nitrate and sulphate.
- The order defined specific environmental objectives and outcomes such as protection of aquatic ecosystems, protection of human health and protection of groundwater. The order also required Teck to identify short, medium and long-term water quality targets.
- The plan lays out a schedule for the installation of 9 active water treatment plants over the next 18 years.
- The long-term targets 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.
- This approved plan covers the entire Elk Valley watershed, including Fording River and Lake Koocanusa, and will ensure any future decisions affecting water quality are made within the context of the entire watershed and not just individual sites.
- As part of the order, a technical advisory committee (TAC) was established to guide development of the plan. The TAC met seven times between September 27, 2013 and July 10, 2014.
- The committee included representatives from each of the following: Teck, the Province (MoE, MEM and EAO), Government of Canada (Environment Canada), U.S. Government, Montana State Government, The Ktunaxa Nation Council, and an independent third- scientist from UBC.
- The TAC provided over 700 science-based technical recommendations for Teck to consider in the development of their plan. The vast majority of this advice was incorporated into the plan and an explanation of how the advice was used is included in the plan.
- The Province is aware of Environment Canada's (EC) September 22, 2014 enforcement letter notifying Teck of alleged violations of the Fisheries Act related to selenium and westslope cutthroat trout.
- The Province reviewed the EC reports and this information was considered before a final decision on the plan was made.
- The approved ABMP is now policy which EMA statutory decision makers must consider when making any EMA decision within the Elk Valley.
- An EMA permit was issued November 19, 2014 to authorize the discharge of effluent

 specifically the constituents included in the ABMP from all 5 of the Teck mines in
 the Elk Valley.
- This permit is the legal instrument which requires Teck to install treatment, monitor, and meet specific water quality levels in the Elk Valley. The permitted Water Quality levels hold Teck to specified limits of Selenium, Nitrate and Sulphate, and set water quality levels which reduce over time.
- A compliance plan is in effect to monitor Teck's compliance with the permit.

Contact: Jennifer McGuire, Executive Director, Environmental Protection, Regional Operations (250) 361-5944

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Ministry of Environment

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ISSUE TITLE:

Fraser-Surrey Docks

RETURN TO TOP KEY MESSAGES:

- Key message #1 Standards for the safe operation of railways and rail equipment fall under the jurisdiction of Transport Canada. The federal government does not regulate for coal dust emissions resulting from the transportation of coal by rail.
- Key message #2 The Fraser-Surrey Docks coal terminal expansion proposal
 is located on federal land, overseen by Port Metro Vancouver. As such, it is
 the federal government which has jurisdiction to regulate air emissions from
 the property itself. Stormwater runoff from the site is treated and discharged
 into sewer systems so there is no effluent discharge to the environment and
 thus no need for a permit from the Ministry.
- Key Message #3 s.13,s.16

s.13,s.16	s.1	13.	s.	1	6
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CURRENT STATUS:

Key Message # 1

- It is standard practice for many rail companies, such as Canadian National and Canadian Pacific, to spray their coal cars at the mine site with substances that prevent fugitive emissions.
- Standards for the safe operation of railways and rail equipment fall under the jurisdiction of Transport Canada.
- The federal government does not regulate for coal dust emissions resulting from the transportation of coal by rail. The federal government does regulate the transportation of some commodities, under the *Transportation of Dangerous Goods Act*; however, coal has not been classified as a dangerous good under this Act.
- The Ministry has an air quality monitoring program that takes air quality readings at stations throughout the province outside Metro Vancouver. Under the *Environmental* Management Act, Metro Vancouver has authority for air quality management and air pollution control within its region. Metro Vancouver has an extensive air quality

- monitoring program. The Ministry and Metro Vancouver stations do not monitor for coal dust, but do monitor for fine particulates considered to cause respiratory problems, such as smoke from fires and diesel exhaust.
- The Corporation of Delta and Metro Vancouver have been monitoring coal dustfall in selected locations since July 2013. Delta led the establishment of an independent interagency review committee to review the health environmental impacts associated with the transportation of coal. A Ministry representative sits as an observer on this committee.

Key Message # 2

- The Fraser-Surrey Docks coal terminal expansion proposal is located on federal land, overseen by Port Metro Vancouver. The federal government has jurisdiction to regulate air emissions on Port lands.
 - Metro Vancouver's delegated responsibility under the Environmental Management Act allows it to regulate air emissions from non-federal land in the region.
 - Metro Vancouver is of the opinion that if it can be proven that pollution from federal lands is impacting air quality within Metro Vancouver's boundaries, Metro Vancouver could take action under the *Environmental Management Act* to address such a situation.
- The Ministry's evaluation of the project was limited to examining potential discharges to the environment proximate to the docks.
- Stormwater from the site is treated and discharged into Surrey / Metro Vancouver sewer systems. The Ministry was satisfied there are no discharges associated with stormwater to the Fraser River from this project.
- On August 21, 2014 Port Metro Vancouver issued a permit for the Fraser Surrey Docks marine terminal, following a two year project review process.
- The Ministry continues to monitor this file but has no regulatory authority over the project.

Key Message # 3												
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• Metro Vancouver has also worked with Neptune Terminals, which operates on federal port lands, on an air quality permit to ensure emissions are at safe levels.

KEY FACTS/BACKGROUND:

- On August 21, 2014 Port Metro Vancouver issued a permit for the Fraser Surrey Docks marine terminal. The permit allows the marine terminal to handle up to 4 million metric tonnes of coal per year.
- This permit was issued after a 2 year project review process. Due to public concern additional studies were conducted by third party QPs including an Environmental Impact Assessment, Air Quality Assessment and a Human Health Risk Assessment. These studies indicated no significant adverse environmental effects (including health effects).
- FSD intends to have the project up and running by fall 2015. Once running, the
 project will tow two barges daily from the FSD site to Texada Island (for transfer
 to deep sea vessels).
- Texada Quarrying Ltd. received a permit from Ministry of Energy and Mines to handle additional coal on Texada Island. MOE has not required Texada Quarrying Ltd. to have a permit.

Contact: AJ Downie, Regional Director – Coast, Regional Operations Branch, Environmental Protection Division (250) 751-3176

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Ministry of Environment

ISSUE TITLE:

Tervita Corporation Landfill in the District of Highlands

Date: February 13, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Tervita must comply with the Environmental Management Act and is required to submit plans and reports, including annual monitoring reports, to the ministry and the District of Highlands. The ministry will continue to work with Tervita to ensure compliance with the Environmental Management Act.
- Key message #2 Ministry of Environment staff are reviewing Tervita's latest monitoring program results, plans and reports and continue to ensure that the compliance action plan is being followed.

CURRENT STATUS:

Key Message #1:

- In July 2013, ministry staff issued a notice of non-compliance and warning to Tervita due to exceedances of some water quality guidelines and mild landfill leachate influences at groundwater and surface water compliance locations.
- Tervita is implementing a compliance action plan to address non-compliances and they are submitting information as required.
- Tervita has acted upon recommendations by an independent consultant to conduct additional groundwater studies at the Highwest landfill, and are communicating directly with the District of Highlands on an ongoing basis. The studies commenced in early summer 2014, and the results have now been received by the ministry and will be reviewed in the coming months.
- The latest submission from December 2014 includes a summary of the groundwater investigations and monitoring done to date.
- Tervita has taken operational steps in the past 2 years to reduce the volumes of leachate generated at the landfill and have installed new monitoring points.
 Concentrations of contaminants of concern have dropped very significantly as these measures have been phased in.
- The ministry will continue to work with Tervita to ensure compliance with the Environmental Management Act.

Key Message #2:

 Ministry staff are currently reviewing information submitted by Tervita in response to non-compliances and will likely meet with Tervita once the review is completed. Ministry staff will continue to monitor compliance to ensure protection of human health and the environment.

KEY FACTS/BACKGROUND:

- Open burning and landfilling commenced at this site in the 1960s. In 1979, the
 Ministry of Environment issued a permit for open burning and landfilling of
 demolition, land clearing and construction waste. In 1995, the permit was amended
 to require a refractory pit burner.
- In 2008, the Capital Regional District Solid Waste Management Plan (SWMP) was amended to include this facility. In 2009, Operational Certificate 100193 was issued for this facility and the out-dated permit was cancelled. The SWMP and operational certificate required significant facility improvements including shut-down of the refractory pit burner, completion of plans and reports by qualified professionals, installation of new engineered-lined landfill cells, leachate collection and management, achievement of water quality standards at the property boundary, submission of annual monitoring reports, and posting of security.
- In March 2013, the federal Public Works and Government Services Canada announced awarding of a \$38.6 million dollar contract to Tervita Corporation to relocate and deposit approximately 150,000 cubic metres of contaminated soil from the Esquimalt Graving Dock Water Lot Sediment Remediation Project to the landfill, from June 2013 to March 2014.
- In July 2013, ministry staff issued a notice of non-compliance and warning to Tervita Corporation, due to exceedances of water quality guidelines at groundwater and surface water compliance locations, and requested submission of an updated compliance action plan by September 30, 2013. On September 30, 2013, Tervita Corporation submitted an updated compliance action plan.
- In late November 2013, a ministry hydrogeologist completed a review of the landfill environmental monitoring program. The review and findings were forwarded to Tervita Corporation for follow-up.
- In late December 2013, Tervita Corp. submitted an updated compliance action plan
- In January 2014, ministry staff confirmed Tervita will continue to implement the updated plans submitted and encouraged Tervita to engage with the District of Highlands to outline plans and actions at the facility.
- The District of Highlands has requested the ministry commission and fund an independent, professional third-party assessment of the engineered landfill design and monitoring systems at the site.
- Tervita is implementing the compliance action plan and they are submitting information as required. The latest submission (December 2014) includes a summary of the groundwater investigations and monitoring done to date.
- The authorization and additional documents are publicly viewable on the ministry waste discharge authorizations public document search website: https://j200.gov.bc.ca/pub/ams/Default.aspx?PossePresentation=DocumentSearch (search Authorization Number 100193). Additional information and reports will be made publicly available after they are received and reviewed.

Contact: AJ Downie, Coast Regional Director, Environmental Protection Division. (250) 751-3176 **RETURN TO TOP**

ISSUE TITLE:

Ministry of Environment

South Island Aggregates (SIA)

Date: February 5, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Ministry staff are the statutory decision makers for Environmental Management Act authorizations and, as such, the decision is at arm's length from the political process. In this instance, the statutory decision maker concluded the final permit will provide the necessary level of treatment and human health and environmental protection.
- Key message #2 –Upon Receipt of the Appeal Application in August 2013 the Environmental Appeal Board (EAB) issued a stay on the discharge of waste to the site. The appeal hearing began in March 2014 and concluded on July 25, 2014 (not continuous).
- Key Message #3 –The Ministry respects the appeal process and is awaiting a decision from the EAB.

CURRENT STATUS:

Key message #1:

- The ministry had a legal obligation to consider the application from South Island Aggregates (SIA) to treat and discharge contaminated soil.
- The final decision was based on the technical merits of the proposal and was made independent of the political process.
- The Environmental Management Act, which governs decisions made by statutory decision makers, does not require the Minister to sign off and the Minister does not have the ability to overturn decisions made on sound technical merits.
- These types of statutory decisions are common and ensure decisions are made by technical staff experts who have the best knowledge of the subject.
- The decision includes treating the discharge water to B.C. drinking water standards, and full transparency by public posting of monitoring information and reports.
- Qualified professionals from both inside and outside the ministry were involved in the review of this application.

Key Message #2:

- A total of five (5) parties filed a Notice of Appeal to the Environmental Appeal Board (EAB).
- The EAB ruled there were valid concerns around the risk contaminants pose to groundwater, surface water, and human health, and issued a stay. The initial stay was partial in that it allowed the proponent to continue construction of its facility, but no materials could be received at the site.

• In a subsequent decision in December 2013, the EAB allowed for receipt and treatment of a limited amount of lesser contaminated soil (marine sediments) at the facility, but did not allow the receipt of contaminated soil exceeding industrial land use soil quality criteria, as prescribed by the Contaminated Sites Regulation. However subsequent non-compliance with the EMA permit forced the Director to require SIA to stop receiving more soil until permit compliance was achieved. Currently, SIA would need to submit evidence that the compliance issues were dealt with, at which point the Director could allow them to receive the limited material the EAB had allowed.

Key Messages #3:

- The ministry shared relevant documents with the EAB and the appellants in December 2013 and January 2014.
- The EAB began the hearing in Victoria in March and final oral arguments were heard on July 24 & 25th, 2014.
- The ministry is currently awaiting a decision from the EAB; indication from the EAB is that the final decision will be released imminently.

KEY FACTS/BACKGROUND:

- In the fall of 2011 South Island Aggregates (SIA) applied for a permit under the Environmental Management Act (EMA) to treat and discharge contaminated soil.
- 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 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 SIA to "receive, treat, utilize and landfill contaminated soil and ash to the cavity created by an advancing hard rock quarry."
- There was extensive public consultation, including formal notifications and public information sessions on the application. A public meeting to hear the details of the discharge application and the related process was attended by an estimated 250 concerned citizens.
- Ministry staff coordinated an assessment of the potential environmental impacts of the proposal, including impact on surface water, groundwater, air quality and wildlife.
- Those potential impacts and protective measures were compared against the
 ministry's standards for protecting human health and the environment; a draft permit
 was developed which ensured that there would be an adequate level of treatment
 and environmental protection.
- The statutory decision maker made the final decision to issue the permit on August 21, 2013. The permit required submission of various documents.

- On December 11, 2013, the ministry issued a letter to SIA acknowledging receipt and acceptance of the documents required under the Permit. Outstanding items included the submission of Financial Security and the submission of as-built drawing(s) for the landfill cells prior to the landfilling of soil.
- The water treatment system was commissioned in the first half of 2014 and showed that the system had limitations to treat influent with high salt content, typical to marine sediment runoff.
- The location of the settling pond and the discharge spillway was also found to have been constructed in part on adjacent CVRD property. The settling pond was modified to correct the situation but the CVRD remained concerned with the spillway final location. This issue was left to CVRD and SIA to resolve.
- The CVRD initiated legal proceedings against SIA regarding the proposed use of the property stating that it violates the CVRD's zoning bylaw. No current information is available on this action.
- An inspection by MOE in February 2014 found that the works had not been completed as required (soil cell liner did not meet specifications). In March 2014 a letter from the Director was issued indicating that soil in the Soil Management Area (SMA) could not be landfilled but could be stored under cover in the SMA and that no additional contaminated soil was to be received at the site until non-compliances associated with the works are addressed. To date, the Ministry has not received the materials necessary to demonstrate compliance.
- Another inspection was conducted in April 2014. The inspection highlighted 3 other non-compliances with the permit requirements related to uncontrolled runoff leaving the site via an unauthorized swale, uninstalled flow monitoring equipment and unfulfilled reporting requirements. An advisory was issued to SIA following the inspection.

VIHA/MoH involvement

- VIHA received a request for an investigation under the *Drinking Water Protection Act* in connection with the SIA application under consideration by EPD.
- VIHA's Medical Health Officer (MHO) wrote a letter to MOE 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 that was being provided 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.
- VIHA has said they will only consider the protection of water under the Drinking Water Protection Act once the EAB has ruled.

Contact: A.J. Downie, Regional Director, Regional Operations Branch, Environmental Protection Division, 250-751-3176

ISSUE TITLE:

Ministry of Environment

Cosmetic Use of Pesticides

Date: Feb 6, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Following extensive consultation, we know people are concerned about overuse of pesticides. 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.
- Key message #2 –Government is currently designing the necessary regulations to reduce unnecessary pesticide use and ensure pesticides are being used safely and responsibly on private landscaped areas. s.12,s.13 s.12,s.13

CURRENT STATUS:

Key message #1:

- Currently, no licence is required for land owners to use pesticides on private land (except for certain industrial applications).
- 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.
- Consultation on proposed regulations for the cosmetic use of pesticides occurred between October and December of 2013, and with specific groups in 2014.
- Over 200 submissions and over 500 letters (as part of a campaign) were received.
- A summary of the comments received in 2013 is available on the ministry's website.

Key message # 2:

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

- The objectives of the proposed amendments are to ensure that:
 - pesticides will be used by people with knowledge and training;
 - pesticides will be used as part of an Integrated Pest Management (IPM) process;
 and
 - public interaction with pesticide vendors will be increased at the point of sale.

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 – Manitoba, 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: Christine Woodhouse, A/Manager, Integrated Pest Management Section 250 356-5274

Ministry of Environment

ISSUE TITLE:

Mining in British Columbia/ Coordinated Authorizations

Date: February 16, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Despite recent declines in metal prices, the mining sector growth in BC over the last decade has also resulted in an increase in applications for Environmental Assessment Certificates and for waste discharge permits required under the *Environmental Management Act*.
- Key message #2 Access to EAO and s.12,s.13 supported the Environmental Protection Division effort to ensure environmental standards are in place for all new mining developments.
- Key message #3 Mining activities continue to be a key focus of the Environmental Protection Division and this sector will continue to require services for permitting and compliance assessment after the EA process.

CURRENT STATUS:

Key message #1:

- All mines typically require an effluent discharge permit, a refuse permit, and an air emissions permit under the Environmental Management Act (EMA).
- As of Q4 of fiscal 2015/16, there are 28 mining related applications in the Environmental Assessment review process plus an additional 20 non-SE Coal projects undergoing permitting and permit amendments, and 35 permitting projects coordinated by the SE Coal Permitting Project (SECPP) that require EMA authorizations. All of these projects require direct involvement of EPD staff to assess environmental impacts of the proposed projects and to ensure compliance.

Key Message #2:

- s.12,s.13
- As well there is an additional backlog workload brought on with the SECPP which commenced in Q3 of 2014, six months before the additional resources became available. This includes 6 key deliverables on the major project list, and 16 nonmajor permitting deliverables.

Key Message #3:

- Over the past three quarters with the formation of a provincial Environmental Protection (EP) mining team, the ministry has been able to process 20 applications per quarter on average.
- The EP mining team was significantly challenged to improve output due to involvement in the Mount Polley spill, other smaller spills such as the one that occurred at Copper Mountain, and the dedicated effort of 6 FTE's for the review of the Elk Valley Area Based Management Plan and the subsequent Valley Permit.
- New guidance documents and streamlined procedures are predicted to assist in improving application quality and reducing the amount of time required to process applications.
- The application intake from mining proponents remains steady. There are five mining project actively under review that will likely result in 15 new permit applications if EA certificates are issued this year.
- As the BC economy grows, there is need to ensure there is a balance between sustainable development and a healthy environment. Mining permits are controversial to process, and require substantial consultation with First Nations.
- Coordination among NRS agencies is required in order to provide timely decisions, and ensure that resources are utilised efficiently.
- EP continues participation in the Mining Association of BC Communications
 Forum. This forum provides direct discussions with the mining sector regarding
 regulatory changes and improvements as well as understanding the pressures
 facing the sector.

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

Date: February 5, 2015

Ministry of Environment

ISSUE TITLE:

Lemon Creek Fuel Spill clean-up

RETURN TO TOP KEY MESSAGES:

- Key message #1 The ministry outlined clear endpoints for the cleanup of different shoreline environments along Lemon Creek and the Slocan River.
- Key message #2 The ministry will continue to review data received, make any needed recommendations for changes to the long-term monitoring and remediation program and post information publicly.
- Key message #3 As the matter is before the Court and we cannot provide any further details.

CURRENT STATUS:

Key message #1:

- Regional ministry staff monitored the response and cleanup and provided input and technical advice.
- The cleanup phase was completed in September 2013 and transitioned to long-term monitoring and remediation.
- Executive Flight Centre was required to develop and implement a monitoring program to assess potential impacts and monitor ecosystem recovery associated with the Jet A1 fuel spill.
- The initial spill cleanup endpoints of no continuous sheen or odour in Lemon Creek and the Slocan River were met in late August 2013. The longer term endpoints of no detectable hydrocarbons in the environment have largely been met, and monitoring efforts will continue in Lemon Creek and the Slocan River.

Key message #2:

- SNC Lavalin provided the ministry with an Environmental Impact Assessment report in December 2013, which is posted publicly online.
- Monitoring by SNC Lavalin was completed following Environmental Monitoring Plans (EMPs), which were reviewed and approved by the ministry.
- Following the EMPs, water and sediment quality monitoring was done at numerous sites within Lemon Creek and the Slocan River for contaminants related to jet fuel.
- The environmental monitoring program evaluated aquatic life impacted by the spill in the summer and fall of 2014. A final report on the environmental monitoring program is expected on April 17, 2015 with a draft report available February 15, 2015.
- All Environmental Monitoring Plans and Impact Assessment Reports are available

- on MoE's Lemon Creek website
- The ministry will continue to oversee implementation of monitoring activities to
 ensure the information generated meets the ministry's needs for assessing potential
 environmental impacts and monitoring ecosystem recovery. The ministry will
 continue to review the data it receives and make any needed adjustments to the
 long-term monitoring.

Key message #3:

- A lawsuit has been commenced concerning the Lemon Creek fuel spill and response involving various parties, including Executive Flight Centre and the Province.
- On December 20, 2014, a Provincial Court Judge ruled that a private citizen could bring charges under the Federal Fisheries Act against the BC Government and Executive Flight Centre in relation to the spill.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- On July 26, 2013, a tanker truck carrying approximately 35,000 litres of Jet A1 fuel rolled into Lemon Creek in the Slocan Valley. The tanker was en route to fuel helicopters fighting a forest fire in the area.
- Lemon Creek is a tributary of the Slocan River, which drains into the Kootenay River.
- The spill was reported to Emergency Management BC. Ministry staff arrived at the scene at 5 AM on July 27 to monitor the response and cleanup.
- The Ministry, Executive Flight Centre and Interior Health Authority organized response and issues management under a unified command structure.
- Executive Flight Centre hired Quantum Murray to help with the clean-up and SNC Lavalin to undertake environmental and wildlife assessments and monitoring.

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 Executive Flight Centre has also appealed the Director's decision to the Environmental Appeal Board (EAB) to recover costs incurred by the province in response to the spill. This appeal is before the EAB.

Contact: Robyn Roome, Regional Director, Regional Operations Branch, Environmental Protection Division (250) 354-6362

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ESTIMATES NOTE 2015 Confidential

Ministry of Environment

Date: February 5, 2015

ISSUE TITLE:

Chilliwack Hazardous Waste Recycling Facility

RETURN TO TOP KEY MESSAGES

- Key message #1 Aevitas Inc. submitted a registration application under the Hazardous Waste Regulation for the proposed hazardous waste recycling facility in Chilliwack on November 13, 2014.
- Key message #2 Opponents to the project have expressed concerns about the potential health and environmental impacts. The project will not proceed unless the ministry deems it safe for human health and the environment.
- Key message #3 The type of facility being proposed requires registration under the Hazardous Waste Regulation and may possibly be subject to other provincial legislation.

CURRENT STATUS:

Key message #1

- Aevitas Inc. submitted a registration application for the facility in Chilliwack on November 13, 2014, under the Hazardous Waste Regulation.
- The application was accompanied by the required technical elements including plans and specifications for the works, an operational plan, contingency plan and closure plan.
- Chilliwack council has approved the rezoning proposal (November 2014) as well as a development permit (January 6, 2014) for a hazardous waste recycling facility approximately 150 metres from the Fraser River.
- The proposed facility will manage hazardous wastes such as transformer oils, PCB oil, flammable liquids and solids, oxidizing substances, corrosives, toxic and infectious substances and mercury from light bulbs.
- The application will undergo the necessary reviews and assessments by ministry staff before a final decision is made.

Key message #2

 The proposed location is opposed by First Nations, sports fishery groups, and environmental organizations that worry an accidental spill would impact the Fraser River. These groups took the city to court arguing there were flaws in the public consultation process that led to the rezoning but on Dec.1st, 2014, the BC Supreme

- Court ruled in favour of the city.
- The ministry has heard the concerns expressed by stakeholders with respect to health and safety.
- Due to stakeholder interests and concerns, Aevitas has proposed a consultation strategy for the project. The Ministry is reviewing the strategy and will provide feedback to Aevitas regarding its adequacy.
- The project will not proceed unless the ministry deems it safe for human health and the environment.

Key message #3

- The decision to approve the registration application rests with a Statutory Decision Maker from the ministry.
- Some larger waste management and handling facilities are also subject to review under the Environmental Assessment Act's Reviewable Projects Regulation (RPR).
- Ministry staff have directed Aevitas to work with the Environmental Assessment Office to determine if an EA is required. Where an EA is required, that process includes more extensive public consultation.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The MLA for Maple Ridge-Pitt Meadows has sent a letter to the Chilliwack mayor stating the proposed location is "fraught with hazard."
- The Opposition environment critic has visited the proposed site and commented in local media that he believes the work proposed needs to happen but questioned the proposed location.
- Ministry staff have also received letters from First Nations and the Opposition Critic opposing the proposed location. The Opposition Critic and MLA have also requested to the Minister in writing that the project undergo an EA Review.
- BC Wildlife Federation has raised concerns regarding the proposed facility and have specifically asked "what if any bond requirements would be required of the company or Chilliwack given the proximity to the Fraser River and risk to the environment."
- s.13,s.16

Contact: AJ Downie, Regional Director - Coast, Regional Operations Branch, Environmental Protection Division, 250-751-3176

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ESTIMATES NOTE 2015 Confidential

Ministry of Environment

Date: February 6, 2015

ISSUE TITLE:

Upland hydrocarbon contaminated soil treatment facility proposal

RETURN TO TOP KEY MESSAGES

- Key message #1 Upland Excavating Ltd. (Upland) is following the waste discharge authorization process under the Environmental Management Act.
- Key message #2 Under the waste discharge authorization process, the applicant/agent is expected to respond to anyone who expresses questions, comments or concerns regarding the application, and to prepare and submit a consultation report.
- Key message #3 After Upland submits a final application, it will be reviewed and processed in accordance with environmental protection policy and procedures.

CURRENT STATUS:

Key message #1

- Upland proposes to accept hydrocarbon contaminated soil, treat the contaminated soil in a covered structure on-site, and deposit the treated soil on-site.
- In September 2013, Upland submitted a pre-application for a permit under the Environmental Management Act.
- Under the waste discharge authorization process, the applicant/agent retains a
 qualified professional to prepare and submit a technical assessment report, and the
 applicant/agent carries out posting, publication, notification and consultation of the
 public, agencies and First Nations.

Key message #2

- Upland is still in the application process so any questions, comments or concerns regarding the application should be sent to Upland and their agent.
- In response to Upland's consultation activities to date, several agencies, groups and persons, including Campbell River Environmental Committee (CREC), have expressed questions, comments and concerns regarding the application.
- Concerns include possible effects on groundwater and surface water including domestic water supplies and the federal Quinsam River hatchery.
- Upland's agent has contacted CREC and indicated that it intends to provide a full

and complete response to CREC.

Key message #3

- Upland is preparing a final application including a consultation report and a technical assessment report by a qualified professional.
- At this time, Ministry staff have requested additional technical information from Upland, including a hydrogeologic study/report.
- After Upland submits a final application, ministry staff will review it according to environmental protection policy and procedures.
- The application will hold its current placement in the application queue.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In September 2013, Upland submitted a pre-application for a permit under the *Environmental Management Act* for a proposed hydrocarbon contaminated soil treatment facility to be located in the City of Campbell River (Vancouver Island), beside the Gold River highway.
- Upland proposes to accept hydrocarbon contaminated soil, treat the contaminated soil in a covered structure on-site, and deposit the treated soil (possibly up to 50,000 cubic metres per year) on-site.
- On January 7, 2015 MLA Trevena met with ADM Lori Halls to discuss concerns raised by the CREC. At that time MOE communicated that a final application had not been received by the Ministry and consultation activities were ongoing. CREC was encouraged to work directly with Upland to try and have their concerns addressed.
- On approx. January 14, Upland submitted additional application materials. MOE staff reviewed the submitted materials and determined that the application is still not complete because it is lacking in technical information (some of which is relevant to the stakeholder concerns). MOE staff responded to Upland requesting additional information including a hydrogeologic study/report.
- The Upland file is sitting at #47 in the EPD Coast Region application queue as of December 31st, 2014. Ministry staff have not begun their review of the final application because a complete final application has not yet been submitted.

Contact: AJ Downie, Regional Director – Coast, Regional Operations Branch, Environmental Protection Division, 250-751-3176

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 5, 2015 ISSUE TITLE: Brownfields

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Ministry of Environment was an integral partner in the brownfield renewal strategy, which aims to reduce barriers and provide incentives to the investigation, remediation and redevelopment of brownfields.
- Key message #2 the Ministry of Environment has recently become the provincial lead for *B.C. Brownfield Renewal*, and is currently carrying out a review of options for ongoing provincial leadership regarding brownfields
- Key message #3 The Ministry's contaminated sites regulatory framework provides a flexible, polluter-pay-based regime that ensures 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

- In 2007, Cabinet directed the development of a provincial brownfield redevelopment strategy which was publically announced the following year and was led by the Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO) until 2014.
- The Ministry of Environment has worked closely with MFLNRO to both develop and implement the four-pillar strategy which targeted (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 workshops delivered across B.C.

Key Message #2:

- During this transitional time for B.C. Brownfield Renewal, the Ministry of Environment has provided brownfield-related support to the Ministry of Jobs, Tourism and Skills Training (JTST) in their delivery of a series of small-community marketing and investment-readiness workshops. In addition, support is also being provided to the Ministry of Community, Sport and Cultural Development (MCSCD).
- The ministry review of options for ongoing provincial leadership regarding brownfields includes the identification of strategic internal partnerships (e.g., JTST, MCSCD), funding sources, and ongoing educational and capacity-building initiatives.

Overall, the Strategy has made a difference for many communities in the Province.
 Approximately \$7 million has been spent to help defray costs to private land owners
 of early investigations under the Strategy pillar of strategic financial incentives. The
 original funding program approved by Cabinet has been completely disbursed and
 any additional provincial funding would require a new request to government.

Key Message #3:

- The ministry recognizes the importance of balancing economic and environmental factors in delivering its environmental protection mandate.
- Key learnings from the delivery of *B.C. Brownfield Renewal* to date include (i) the positive value and effect of even modest financial support to brownfield redevelopment projects, (ii) the critical role of partnerships and collaboration amongst all stakeholders (property owners, developers and other investors, professional service providers, local government and the Province); and (iii) the key role local government can play as champion of community revitalization through brownfield redevelopment. Three "Brownie Award" winners from B.C. in 2014 attest to these important success factors.
- The Province's contaminated sites regulatory framework provides a flexible, polluterpay-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 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.
- As part of B.C. Brownfield Renewal the ministry is committed to the ongoing review and streamlining of the provincial contaminated sites (brownfields) regulatory framework. The goal of these efforts has been to continue increasing certainty in (i) business processes, and (ii) environmental protection outcomes.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- British Columbia has adopted the national definition for brownfields as follows: abandoned, vacant, derelict or underutilized commercial and industrial properties where past actions have resulted in actual or perceived contamination and where there is an active potential for redevelopment.
- 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.

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

ESTIMATES NOTE 2015 Confidential Ministry of Environment Date: February 16, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 Namu is a historical First Nations village site located on the Central Coast which was used as a cannery/fish processing plant until the 1980s. Staff from the Ministry of Environment and from Forests, Lands and Natural Resource Operations (FLNRO) conducted an inspection in September and identified a number of public safety and environmental concerns.
- Key message #2 In its capacity as the regulator, Ministry of Environment is monitoring progress at the site. If the ministry feels the clean-up and mitigation measures taken are inadequate, a Pollution Prevention Order may be issued to the parties to address any environmental concerns.
- Key message #3 The Coast Guard recently conducted an inspection
 of the Chilcotin Princess on February 11 to evaluate its risks. The
 desire is to have the vessel removed in a timely manner. If the vessel is
 in danger of sinking the Coast Guard has indicated that they will
 remove all potential contaminates from the boat and pump the vessel
 out.
- Key message #4 Recognizing the significance of the Namu site to the Heiltsuk First Nations, the province is committed to resolving this issue with them.

CURRENT STATUS:

Key message #1/2

- The Ministry and FLNRO staff visited and inspected the site on September 30, 2014 and found several public safety and environmental issues, including potential chemical spillage/release.
- FLNRO issued a letter to the site owner, Namu Properties Ltd., on October 31 giving
 the company 60 days to submit a plan and schedule to bring the site either into
 compliance with the uses specified in the existing tenure agreements or to remove
 and dispose of any hazards on the site so it could be considered safe, clean and
 sanitary. s.13,s.17

s.13,s.17

- In January, BC Government staff met twice with David Milne, a representative of Namu Properties Ltd which holds the land tenures in the area of Namu, including the tenure over the wharf against which the Chilcotin Princess is moored.
- Staff discussed Mr. Milne's obligations with regards to taking appropriate action at the site to manage risks to public and environmental safety.
- Mr. Milne was given until February 10, 2015 to remove the barrels present on the wharf structure and to provide details of his company's plan to bring the tenures back into compliance s.13 s.13

Key message #3

- On January 13, 2015, FLNRO staff met with David Milne (Namu Properties Ltd.) and discussed preliminary plans for the site including removing Mr. Milne's derelict vessel (Chilcotin Princess) in late January and clean-up and decommissioning plans for the herring reduction plant and ice plant scheduled to begin in May 2015. These are the two structures in the most advanced state of decay on the Crown lease (much of these structures already collapsed).
- FLNRO denied Mr. Milne's request of January 27, 2015, for a 60 day extension for removing the Chilcotin Princess. Mr. Milne was instructed by FLNRO to have the vessel pumped out and removed from the site.
- FLNRO determined the vessel does not fall under their lease agreements and are limited in their ability to deal with it but have contacted the Canadian Coast Guard.
- s.13,s.14
- The Coast Guard has confirmed the vessel is currently not seaworthy. They've identified several petroleum products in the vessel that pose a risk if the vessel was to sink. Coast Guard estimates that there is 25,000 L of fuel on the boat.
- The Coast Guard spent 6 hours pumping water out of the vessel to refloat it. They propose issuing a directive to Mr. Milne to deal with the vessel and will re mobilize to the site on March 2nd to remove any hydrocarbons and dispose of them if Mr. Milne has not done it by that date.
- The Coast guard has identified concerns that large portions of the warehouse building on the dock might collapse if the pilings are damaged by the boat during storm events.

Key message #4

- Namu is a historical First Nations village site located on the Central Coast.
- In August 2011, the Heiltsuk first nations returned the ancient remains of 142 people
 to Namu for burial in the vicinity of their original resting place. The remains were
 originally removed by SFU archaeologists for study with the permission of the
 Heiltsuk.
- In a meeting on February 18, 2015 Minister Polak met with Heiltsuk Chief Councilor

Marilyn Slett, Chief Harvey Humchitt, and Hereditary Chief Ken Campbell, MLAs Jennifer Rice and Scott Fraser and committed to working with the First Nation to resolve this issue

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Namu is a historical First Nations village site located on the Central Coast which was purchased by BC Packers in 1932 and used as a cannery/fish processing plant until the 1980s.
- Namu Properties Ltd. entered into the lease agreements with the Province for Namu in the early 1990s for a commercial sport fishing resort, oil buying station and fish buying station.
- Several media outlets are focussing on environmental concerns at Namu highlighted by the group Pacific Wild who produced a video showing the poor conditions and waste found at the site. A form letter encouraging the federal and provincial governments to take action has also been produced that can be sent to Minister Polak and the Premier among others.
- Media previously focussed on this site back in June/July 2014 when the Heiltsuk First Nation raised concerns about the environmental hazards at the site and associated cleanup costs standing in the way of their purchasing and developing the site. The previous ADM for Environmental Protection met with the Chief Harvey prior to a site visit in September but there have been no other formal meetings between First Nations and MoE.
- On October 21st, 2014, the MLA for the North Coast read a statement in the Legislature calling Namu a "derelict, decrepit environmental ticking time bomb collapsing into the Pacific Ocean" and stating "the government claims there is no pollution problem..."

Contact: Mike Macfarlane, Director of Land Remediation, EPD,

250 356-0557

ESTIMATES NOTE 2015 Confidential

Ministry of Environment

Date: February 5, 2015

ISSUE TITLE:

Neucel Pulp Mill in Port Alice - production curtailment

RETURN TO TOP KEY MESSAGES

- Key message #1 Neucel Specialty Cellulose (Neucel) is a pulp mill and the primary employer in Port Alice, Vancouver Island. The mill has been facing financial challenges and on Feb 5 2015 the company announced a 6 month production curtailment (shutdown).
- Key message #2 The Ministry has issued a draft Information Order to Neucel seeking information to ensure an appropriate shutdown plan and contingency plans are in place. Discussions between the Ministry and Neucel are ongoing and it is premature to publicly comment further on the issue.

CURRENT STATUS:

Key message #1

- Despite some investment by Fulida (mill owner), the Port Alice pulp mill is inefficient due to deferred upgrades by previous mill owners, resulting in higher than average production costs. This, combined with the lower price of cellulose, has led to financial challenges.
- Due to budget pressures, Neucel closed operations on November 7, 2014 for a two month period. Ministry of Jobs, Tourism and Skills Training (JTST) has been providing assistance and support before and during this time, and continues to do so
- The mill was restarted on Jan 18, 2015. Neucel will operate the mill until Feb 21 to
 use up their supply of logs on site. They are not sourcing additional fiber at this time,
 and only have enough chemicals on hand to operate for the 1 month.
- On Feb 5, 2015 Neucel announced that "in order to ensure the long term viability of the mill, Neucel will take a 6-month production curtailment starting approximately Feb 21. During the curtailment, the company will investigate alternative operating strategies for the future of Neucel".

Key message #2

- Ministry staff are actively engaged in discussions with the company about the planned curtailment.
- There are often hazardous materials on site at pulp mills, and there are pollution control systems in place that need to be managed in accordance with the Environmental Management Act during mill closures.
- To ensure that environmental issues are managed appropriately. Ministry staff have

shared a draft Information Order with the company, asking them to provide details including: plans/schedule for an orderly shutdown; updated contact information (they have begun to lay off staff); inventory of chemicals and products on site; Operational Plans for the shut-down period (treatment works, landfill management. etc.); a Risk Assessment; and an updated Emergency Response Plan.

• The decision regarding formal issuance of the Order will depend on the outcome of future discussions between the company and the Ministry.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Neucel Specialty Cellulose (Neucel) is a pulp mill located in Port Alice, a remote community on the northwest coast of Vancouver Island. Neucel is the main employer in the community (approximately 400 employees).
- Since operations began in 1918, the pulp mill has undergone a number of changes in ownership, particularly in the last decade. In 2004, owner Doman Industries declared bankruptcy s.13,s.17 s.13.s.17
- In April 2006, the Province provided an environmental indemnity to the purchaser (Neucel) and successors s.13,s.17 s.13,s.17
- Since 2011 Neucel has been owned by Fulida Group Holdings Ltd of China. Fulida
 is one of the leading producers of rayon in the world and is a financially secure
 company.
- Despite a \$100 million investment by Fulida, the mill is inefficient due to deferred upgrades by previous mill owners resulting in higher than average production costs.
- The mill has had some permit non-compliances in recent years; contributing factors appear to include things such as aging infrastructure, employee turnover and training, and a relatively vulnerable power supply. s.13,s.15,s.16
 s.13,s.15,s.16
- s.13.s.17
- Ministry staff are actively involved in discussions with the mill regarding an orderly shutdown and appropriate management of environmental issues during the curtailment (shutdown) period.

Contact: AJ Downie, Regional Director - Coast, Regional Operations Branch, Environmental Protection Division, 250-751-3176

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ESTIMATES NOTE (2015) Confidential

Ministry of Environment

ISSUE TITLE:

Watson Island Contamination and Chemical Storage

Date: February 6, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Responsibility for the site and the maintenance of the tanks rests with the City of Prince Rupert as the site owner. The Ministry of 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 the Environmental Management Act (EMA).
- Key message #2 The Ministry has responded to 3 spills at the site in the last 2 years as a result of the ongoing degradation of the chemical storage tanks and infrastructure on the site. Our goal is to manage the environmental risks of the site while minimizing any impact on taxpayers.
- Key message #3 The remaining inventories of chemicals on the site remains a concern. The disposal of the content of these tanks is an ongoing effort involving the City of Prince Rupert, local First Nations, Ministries of Environment, Jobs, Tourism and Skills Training, and Forests Lands and Natural Resource Operations.

CURRENT STATUS:

Key message #1:

- The mill has not operated since 2001. On September 29, 2009, the City of Prince Rupert became owners as a result of a tax forfeiture.
- In October 2011, the Watson Island Development Corporation (WatCo) attempted to purchase the site. The City ended the agreement in February 2014, resulting in court action. This is still before the court and needs to be resolved before title can be transferred to any potential new owner.
- The ministry and the Minister have the discretion under the Environmental Management Act (EMA) to take necessary action to address any threats or events at the site that pose an imminent risk to health or the environment.

Key Message #2:

- In response to a request by the City of Prince Rupert, the Province agreed to take action to remove higher risk chemicals that pose health, safety and environmental concerns.
- As a result, the ministry has responded to three spills at the site over the last three
 years. The total cost of these actions is approximately \$s.17 and they were
 drawn against the \$s.1 fund held by FLNRO for the Site.

- s.13,s.16,s.17
- The last reported leak was from a sodium chlorate tank on November 26, 2013. The
 tank was in an advanced state of deterioration with no secondary containment if the
 tank were to rupture. For these reasons, MoE used powers under EMA to take
 immediate action to mitigate an imminent environmental threat.

Key Message #3:

- The City of Prince Rupert and Lax Kwa'Laams and Metlakatla First Nations officials requested assistance from the Province to remove priority chemicals at the site.
- s.13,s.16,s.17
- An agreement with the City was reached in the summer of 2013 to remove the higher risk chemicals.
- On July 16, 2014, the City announced it had entered into an exclusivity agreement with Watson Island LNG. Watson Island LNG was working with the city on the development of a decommissioning plan for the site as well as the development of a remediation plan.

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.
- Six tanks and associated piping were identified as being of the highest priority for spill prevention action. They included: sodium chlorate tank, one strong black liquor tank, one 48% black liquor tank and three weak black liquor tanks.

 The recommendations from the June 2013 report were tabled with the Ministries of Finance, FLNRO and JTST for further discussions with the City. The proposal was that any removal or disposal actions would be in partnership with the City and funded from a portion of the existing funding envelope held by FLNRO from previous remediation at the site.

Contact: Mike Macfarlane, Manager of Land Remediation

250 356-0557

ESTIMATES NOTE 2015 Confidential

Ministry of Environment

ISSUE TITLE:

Leaking Underground Storage Tanks

Date: February 6, 2015

RETURN TO TOP KEY MESSAGES

- Key message #1 The B.C. government's role is to establish standards for hazardous materials cleanup and provide oversight of the response to spill incidents.
- Key message #2 While the construction, care and maintenance of home heating oil tanks are not regulated by the B.C. government, all property owners are prohibited under the Environmental Management Act from "causing pollution" and are responsible for clean-up costs from spills.

CURRENT STATUS:

Key message #1

- The ministry continues to work with local government and the fuel suppliers to minimize the occurrences of leaks through awareness programs, bylaws and best practices.
- If a spill occurs, the ministry provides oversight to ensure action is taken such as appropriate clean-up. The Environmental Emergencies Program responded to several of these high-profile heating oil tank leaks. However, the ministry does not typically locate or remove underground storage tanks, unless they pose an imminent threat to the environment.

Key message #2

- Although MoE does not specifically regulate residential heating oil tanks, all property owners in B.C. are legally responsible for complying with the Environmental Management Act, the Spill Reporting Regulation, Contaminated Sites Regulation and Hazardous Waste Regulation.
- Homeowners are responsible for ensuring their home heating oil tanks and any associated pipes are in good condition.
- It is important that British Columbians be reminded to regularly check their home heating oil tank for leaks and are advised to replace it approximately every 15 years in order to minimize the chance of a leak.
- Under EMA, the following may be responsible for cleaning up a contaminated site: current owner or operator; previous owner or operator; producer or transporter of a substance that caused contamination. Any of these individuals may also be

- responsible for cleanup if an adjacent site becomes contaminated by a substance migrating from the original site.
- Homeowners are responsible for their tanks even if underground and they are unaware of their existence. Owners are contractually obliged to disclose a tank's location in a property disclosure statement if aware of their existence, but there is no legislative requirement.
- The Office of the Fire Commissioner and local governments have a regulatory role and some local governments have bylaws that include provisions for the removal or decommissioning of abandoned or unused residential heating oil storage tanks.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In November 2012, an Environmental Law Centre report suggested B.C. have mandatory tank inspections with a tag system to confirm tanks and pipes are in good shape and ensure companies don't deliver to a tank without a valid tag. According to the report, a max lifespan for tanks should be set, and decommissioned tanks should be identified and inspected.
- Opposition MLAs (Rob Fleming and Lana Popham) held a community forum in Saanich on February 5th, 2015 to discuss the risks of home heating oil spills with an expert panel that included industry and the University of Victoria's Environmental Law Centre.
- On January 19, 2015, Fleming indicated (on CFAX) some maritime provinces have insurance pools for liability and B.C. should do the same. Other suggestions he made was for an inventory of all tanks and professional certification for those dealing with underground tanks.
- On January 16, 2015, a home heating oil spill leaked approximately 750-1000 litres
 of fuel into the Gorge Waterway. This is the latest in a series of home heating oil
 spills into Greater Victoria waterways such as the Gorge, Blenkinsop Creek, and
 Colquitz River. While media keyed in on the Saanich spills, there are many
 abandoned or unused tanks across B.C.
- Every year there are several reports of this type of spill occurring in the fall/winter.
 The primary cause of spills appears to be aging oil tanks and lines a typical oil tank needs to be replaced approximately every 15 years. However, the January 16th spill and some other past spills in the area are a result of a major supply lines to tanks being severed.
- In 2004, government created the Land Remediation Fund through an amendment to EMA to provide funding for government programs related to brownfield development, orphan site remediation and remediation of domestic and commercial underground storage tanks. The amendment creating the fund was passed but not brought into force and, as such, no funding assistance is currently available from the province for these circumstances.

Contact: Mike Macfarlane, Director, Land Remediation, EPD, 250-356-0556
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Environmental Sustainability and Strategic Policy - 2015

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ESTIMATES NOTE (2015)

Confidential

Ministry of Environment

Date: February 20, 2015

ISSUE TITLE:

Status of 2014/15 Budget Environmental Sustainability and Strategic Policy Division

RETURN TO TOP 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 \$22.302M base budget (Environmental
 Sustainability Working Budget \$20.143M; Strategic Policy Working Budget
 \$2.159M) and 167 full time staff positions (ES 144; SP 23).
- 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 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 2015/16, with lower priorities being deferred or scaled back due to resource constraints.

CURRENT STATUS:

Key message #1:

Environmental Sustainability estimates for 2015/16 is up \$1.096M from last fiscal. The
primary reason for this variance is the amount of \$0.996M needed for the
implementation of the new Water Sustainability Act which requires increased
operating budgets and new FTEs to perform the work.

Vulnerabilities

s.13,s.17

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.

ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Resources for Environmental Management
Date: February 19, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 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 decisionmaking, 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.
 - <u>Mitigation and Offsetting Policy</u>: supports a consistent approach to mitigating environmental impacts from development projects or activities.
 - One Window, One Process: better aligns NRS processes and decisionmaking, allowing better use of limited resources.

- The Ministry leads <u>shared environmental stewardship</u> to leverage resources, capacity and encourage public and stakeholder engagement. Examples include:
 - Our nationally recognized industry-led and funded Product Stewardship Program.
 - 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 for several years been making strides in its <u>enforcement</u> reporting:
 - In 2011, the ministry launched a new online environmental violations database. The public can search by violators' names, dates or types of infractions.
 - In 2013, the ministry launched Closing the Gap a concerted environmental court fines collection strategy.
- The ministry is also working to ensure C&E staff have a range of <u>enforcement</u> tools at their disposal:
 - The Conservation Officer Service has been using 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.
 - The ministry also intends to implement Administrative Penalties this year. These are financial penalties that can be imposed on individuals or companies who fail to comply with a provision of a statute or regulation.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Government's NR 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

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ESTIMATES NOTE 2015 Confidential

Ministry of Environment

Date: February 19, 2015

ISSUE TITLE:

Division of Responsibilities between the Ministry of Environment /
Ministry of Forests, Lands and Natural Resource Operations (MFLNRO)

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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 sanctions are still provided by the parent ministry who holds the legislative accountability. An example being administrative sanctions 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.
- With respect to 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
Fish and Wildlife Act and	Management	
Guide outfitting/trapping	Establish legislation, policy and standards related to the sustainability, conservation and recovery of species and ecosystems.	Apply and administer the Wildlife Act including all statutory decisions pertaining to licensing and administration of Guide Outfitting, recreational hunting trapping and angling.
Species assessment and utilization	Conduct status assessments on all provincial species and ecological communities	Establish and administer policy for the utilization and allocation of wildlife.
	e.g. making determinations if a species population is	Make determinations on the annual allowable harvest.
	healthy, of special concern, or threatened.	Manage licensing programs for angling and hunting. Work with other levels of
	Grizzly bear populations	government and
	have been listed as a	stakeholders in the
	species of concern;	development of hunting and
	Mountain, boreal and northern caribou population have been listed as a	angling regulations and allocation.
	threatened species. MoE	Gather data on game
	develops objectives,	species and statistics on

ADVICE TO WIINISTER		
	strategies and management frameworks for the recovery of these species and the protection of habitat.	recreational use/success. MFLNRO implements strategies for the management of species and habitats.
International Trade in Animals	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.
Decision Making/Enforcement	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 licence suspensions and or cancellations.
Park Management hunting and fishing	Apply and administer the Park Act, Ecological Reserve Act, Environment and Land Use Act 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.	
Wildlife and Fisheries Health	Monitor Species Health trends.	Provincial Veterinarian Policy and decision making on fish and wildlife trans- regional/provincial transplants.
Invasive Species	Provide policy and scientific expertise on Invasive plants and animals. Represent	Implement policy; deliver invasive species management program.

ADVICE TO MINISTER			
	the province in national and international forums.		
Riparian Area Regulation	Update regulation as required; policy development; and effectiveness monitoring.	Implement and monitor regulation; work with qualified professionals; and authorize exceptions.	
Species At Risk	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.	
Fish and Wildlife Management Monitoring Forest and Range Practices	Establish monitoring networks; synthesize data provided by MFLNRO; and produce trend data. Act (MELNRO) /Oil and Ga	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.	
Forest and Range Practices Act (MFLNRO) /Oil and Gas Activity Act (MEM)			

ADVICE TO MINISTER			
Forest, Range, Oil and Gas Environmental Management	Developing environmental component of Forest, Oil and Gas legislation and policy.	Contributing to environmental legislation and policy. Implementing legislation and policy.	
Natural Values Management	Identifying and legislating identified species. Developing management standards for species to apply spatially on the landscape. Support MFLNRO operational policy development for implementing strategic policy and legislation. Conduct effectiveness monitoring.	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.	
Water Act and Management			
Policy and Legislation	Establish legislation, policy and standards related to the sustainable use, protection and governance framework for water.	Provide input on strategic policy direction and legislative development. Develop operational policy for implementation.	
Dams and Dikes	Draft legislation; and assist in legislative updates.	Dam and dike safety, flood management, drought management policy development, implementation, and management.	
Water Authorizations Surface and Ground water	Draft legislation; and assist in legislative updates. Set strategic policy framework for water governance and use.	Apply and administer the Water Act with respect to 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. Establish and administer policy for the utilization and allocation of water.
Water Science	Provide water science expertise on ground and surface water.	Issues identification, data gathering and monitoring.
Drought Management	Set strategic policy framework for water conservation.	Work with other levels of government and stakeholders in the development of water use, and drought management plans.
Flood Management	Provide snow pack information.	Develop policy management framework; lead/coordinate flood management.
Enforcement	Support the enforcement of the Water Act and Fish Protection Act through the Conservation Officer Service.	Issue order under the Fish Protection Act.
Water/Snow Monitoring	Establish monitoring networks; synthesize data provided by MFLNRO; and produce trend data.	Gather data and submit; and develop management strategies based on data synthesis and trends.

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

ESTIMATES NOTE (2015) Confidential Ministry of Environment Development of the BC Environmental Mitigation Policy (EMP)

RETURN TO TOP KEY MESSAGES:

- Key message #1- MoE, in partnership with other natural resource sector agencies, has developed 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 vision is to use the Policy and Procedures as a targeted decision-support 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- In April 2014, following two phases of broad public engagement, expert input and trial application, the Natural Resource Board endorsed the Environmental Mitigation Policy and associated Procedures for implementation across the Natural Resource Sector. Extension and development of further supporting policy are underway to support implementation.

CURRENT STATUS:

Key message #1:

- MoE, in partnership with other natural resource management agencies, developed 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 a decision support tool 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, minimize and restore environmental damage, and to offset remaining adverse impacts on environmental values.
- The EMP and Procedures will help ensure (a) appropriate consideration and identification of environmental values and mitigation actions for the potential impacts from proposed development; and (b) the overall organization of this information in mitigation plans.

Key message #2:

- Specific criteria to inform the targeted application of the Policy and Procedures were 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, The Natural Resources Permitting Process, and regulatory harmonization will support the longterm vision of integration of the EMP into natural resource sector business areas as appropriate.

Key Message #3:

- The EMP and associated Procedures were revised based on comments received during internal and external
 engagement (workshops and web-based), a trial application period, and from qualified professionals in the
 fields of environmental impact assessment and economics.
- To ensure consistent implementation of the EMP, internal (MOE-FLNRO) extension workshops were held around the province in February-April 2014; a second series of internal extension workshops are underway (January-March 2015) to provide further awareness and in-depth training to a broader FLNRO audience. Policy overview presentations are available to manager-level and director-level leadership teams.
- Awareness and training sessions will expand in 2015 to target other NR sector agencies and the qualified professionals who work for development proponents.
- The Policy and associated Procedures will evolve and improve as particular implementation issues arise and are resolved.

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 implementation of the EMP across the NR sector in April 2014.
- During development, an Inter-Agency Policy Advisory Committee, with representation from all natural resource sector business areas, ensured linkages with relevant government initiatives and business areas.
- Concepts and principles of the EMP are compatible with those of the Values Foundation and support the Cumulative Effects Assessment framework.
- On-going legislative and policy initiatives integrate the concepts and principles of the EMP.

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.
- Feedback received during external engagement and during trial application was positive. The policy was seen
 to be a valuable tool for resolving decision barriers and First Nations accommodation. 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.

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ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	BC's Five-Year Plan for Species at Risk
Date: February 12, 2015	αι Νίσκ

RETURN TO TOP KEY MESSAGES:

- Key message #1 "Protecting Vulnerable Species: A Five-Year Plan for Species at Risk in British Columbia" was released in 2014 as a response to the 2011 report of the BC Task Force on Species at Risk.
- Key Message #2 BC's Five-Year Plan for Species at Risk brings together the numerous activities that the Province undertakes for species at risk into a coherent program that establishes provincial leadership on this high profile issue, and helps respond to the February 2013 BC Auditor General's report on biodiversity conservation.
- Key message #3 Implementation of the Five-Year Plan for Species at Risk is underway, and we plan to report on progress on an annual basis.

CURRENT STATUS:

Key message #1:

- The report of the BC Task Force on Species at Risk was released in 2011.
- s.12.s.13
- In March 2013 "Protecting Vulnerable Species: A Draft Five-Year Plan for Species at Risk in British Columbia" was posted to the internet for a 6-week public review period. Summaries of the top comments received, including "frequently asked questions" related to these comments, were posted weekly on the website.
- A final version of the Five-Year Plan for Species at Risk was posted to the internet in July 2014. The Plan is well aligned with the Task Force recommendations. It addresses, in whole or in some cases in part, 22 of the 27 actions put forward by the Task Force.
- The process of finalizing the plan included engagement with staff who will be involved in carrying out the actions it contains to ensure that they are clear, appropriate, realistic, and achievable within existing Ministry budgets.

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;
- o apply protection for species at risk consistently across all sectors; and
- o measure and report on government's investments in species at risk.
- The Plan also celebrates some of our key successes over the past 30 years in protection and management of species at risk. These include our provincial Conservation Data Center, our application of ecosystem-based management on the north and central coast, and our leadership in producing recovery or management plans for some 172 species at risk.

Key message #3:

- Responsibilities for delivering on actions in the Five-Year Plan rest primarily with the Ministries of Environment and Forests, Lands and Natural Resources Operations, but will also require the engagement of other ministries, particularly within the natural resource sector.
- Any actions that will require further resources or government support will be brought back to government for a decision. Examples of some of these key projects include:
 - Analyze opportunities for and make recommendations regarding changes to existing or new policy and legislation to address gaps in protection for species at risk, ensuring input from stakeholders and the public is considered prior to making any changes (started in 2013).
 - Explore and recommend new ways (including incentives and possible project funding) to promote voluntary protection of species at risk (by 2015).
- A process is being developed to track and report on progress toward implementing the plan. The intent is to report out publicly on implementation of actions within the Five-Year Plan, similar to the approach used to report on implementation of "Living Water Smart", British Columbia's Water 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.
- The Wildlife Amendment Act (2004) was intended to broaden provincial powers
 under the BC Wildlife Act and make them consistent with species listing powers in
 the federal Species at Risk Act. However, the Wildlife Amendment Act (2004) has
 never been brought into force. Currently only vertebrate species (e.g., mammals,
 birds, fish) can be legally listed as Threatened or Endangered under BC's Wildlife
 Act; not plants or invertebrates (e.g., insects) as under SARA.
- BC has limited regulatory tools that protect species at risk on private lands and largely relies on voluntary stewardship of landowners.

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ESTIMATES NOTE (2015)

Confidential

Ministry of Environment

ISSUE TITLE:

Species at Risk Act /
Federal-Provincial Relations

Date: February 12, 2015

RETURN TO TOP 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. s.13,s.16 s.13,s.16
- 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 that is informed by the best available science and includes consideration of socio-economic implications as appropriate.

CURRENT STATUS:

Key message #1:

- As a signatory to the Accord for the Protection of Species at Risk in Canada (1996),
 British Columbia committed to a number of actions to protect and recover species at risk
- The Canada-BC Agreement on Species at Risk (2005) provides a mechanism for coordination and cooperation between Canada and British Columbia on delivery of species at risk protection and recovery.
- The Canada-BC Agreement on Species at Risk (2005) will expire in 2015, and discussions are currently underway regarding renewing the agreement.
- 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 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.

s.13,s.16

- Once identified Critical Habitat must be 'Effectively Protected' on provincial crown lands. s.13
- Critical habitat has been identified in a final recovery strategy for approximately 43 species in BC.

Key message #3:

- The Ministry of Environment leads the development of recovery plans for species at risk that can be adopted by the federal government under SARA.
- The Minister of FLNR is responsible for the implementation of recovery or management plans for species at risk. Species at risk recovery is achieved by using measures to protect species, protect habitat and augment populations.
- 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. This consideration helps
 to identify the best suite of protection measures to address recovery objectives while
 managing social and economic impacts associated with that protection.
- 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.
- The main tools that BC has for implementing the habitat component of species recovery are under the Forest Range Practices Act and the Oil and Gas Activities Act. These acts provide habitat protection on Crown Land from forestry, oil and gas activities, and any other activity that requires a licence to cut.
- 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:

 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.

- BC has limited regulatory tools that protect species at risk on private lands and largely relies on voluntary stewardship of landowners.
- The Wildlife Amendment Act (2004) was intended to broaden provincial powers
 under the BC Wildlife Act and make them consistent with species listing powers in
 the federal Species at Risk Act. However, the Wildlife Amendment Act (2004) has
 never been brought into force. Currently only vertebrate species (e.g., mammals,
 birds, fish) can be legally listed as Threatened or Endangered under BC's Wildlife
 Act; not plants or invertebrates (e.g., insects) as under SARA.
- Several of the actions in the Five-Year Plan for Species at Risk in BC are aimed at developing recommendations for government consideration regarding filling these gaps.

Table 1: Statistics on SARA listed species in BC (as of Feb. 2015)

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	142
responsibility	

Table 2: Statistics on recovery planning in BC (as of Feb. 2015)

SPECIES AT RISK RECOVERY PLANNING ACTIVITY	NUMBER
Species with completed plans (Final & First postings) developed by	172
a BC-led or co-led planning process [= 142 documents]	(168 Final)
Species with completed plans (Final & First postings) developed by	94
a Federally-led planning process [= 66 documents]	(90 Final)
Species with completed plans developed by a BC-led planning	78
process posted to MoE website [= 77 documents]	
Species with completed BC-led plans that have been federally	36
adopted and posted to the SARA public registry (Final & First	(25 Final)
postings)	
Species with completed plans where critical habitat has been	51
identified by federal agencies and posted to the SARA public	(43 Final)
registry (Final & First postings only)	

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

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ESTIMATES NOTE (2014) Confidential	ISSUE TITLE:
Ministry of Environment	Mountain Caribou Management
Date: February 12, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 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 with support from Ministry of Environment.
- Key message #2 Following its plan, government has collaborated with forestry and recreational sectors to protect areas for mountain caribou across 2.2 million hectares of habitat, since 2007. Most recently, the province is undertaking wolf culling in the South Selkirk herd.
- Key message #3 The federal recovery strategy that includes BC's mountain caribou was posted January 2014. The federal strategy is based on science alone, whereas BC developed its MCRIP around this same science but with consideration of social and economic implications of caribou conservation.

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 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.
- s.13
- To address population declines of mountain caribou, government in 2007 endorsed
 a provincial implementation plan for mountain caribou, known as the Mountain
 Caribou Recovery Implementation Plan (MCRIP). The MCRIP outlines BC's
 response to the need to manage a species at risk for which 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.
- MFLNRO is responsible for the plans operational delivery. 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.
- 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. This has constrained implementation activities like caribou transplants.

Key message #2:

- Following the MCRIP, government has protected:
 - 2.2 million hectares of habitat in collaboration with the forest sector;
 - 1.0 million hectares of habitat in collaboration with BC snowmobilers;
 - 2.0 million hectares of habitat in collaboration with heliskiing tenure holders;
- Predator management is a controversial requirement of all caribou recovery strategies. The South Selkirk herd is of international significance, crossing the Canada-US border, and has been the subject of numerous caribou transplants in past.
- Aerial shooting is the most effective and humane method to reduce wolf numbers to permit caribou to recover.

Key message #3:

- In January 2014, the federal government posted for public review a recovery strategy for caribou within the federal designated Southern Mountains National Ecological Area, which includes mountain caribou.
- SARA requires that a federal recovery strategy be based on science, with no
 consideration of socio-economic implications. BC's MCRIP was developed around
 the same science as the federal strategy, but BC's path forward also considered
 socio-economic implications.
- BC is working with Canada to achieve outcomes that serve both federal and provincial strategies.

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,s.13
- 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 mainly due to road building and timber harvesting associated with industrial forest practices.

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ESTIMATES NOTE (2014) Confidential	ISSUE TITLE:
Ministry of Environment	Boreal Caribou Management
Date: February 16, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 In 2011, our government published the Implementation Plan for the Ongoing Management of Boreal Caribou in British Columbia (BCIP), which allows for a population reduction in four of six boreal caribou herds in B.C. and accepts a high probability of two herds being extirpated within 50 years.
- Key message #2 The Ministry and other Natural Resource Sector agencies are collaborating with the Canadian Association of Petroleum Producers (CAPP) under a Memorandum of Understanding that secures 10 million dollars over five years to support management, monitoring, and research activities associated with the BCIP.
- Key message #3 The BCIP requires updating to accommodate new science and to better align with the federal government's national recovery strategy for boreal caribou.

CURRENT STATUS:

Key message #1:

- Boreal caribou are believed to be in decline in British Columbia (B.C.) and are listed as threatened under the federal Species at Risk Act (SARA) and red-listed (Threatened) in B.C. The Ministry is committed to meeting government's objectives and goals for recovering this species.
- Industry (e.g., forestry, oil and gas) development in northeast B.C. is implicated in
 the declines of B.C.'s six boreal caribou herds. In order to ensure B.C.'s forestry,
 and 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 (BCIP). The BCIP outlines the response of the provincial
 government to the need to manage species at risk for which management and/or
 recovery in B.C. may have significant socioeconomic implications.

Key message # 2:

- 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

- B.C. 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.
- Current research and monitoring of boreal caribou indicates the up to 30% of boreal caribou habitat use is occurring outside current habitat designations established under the Forest and Range Practices Act (FPRA) and Oil and Gas Activities Act (OGAA). These habitat designations are intended to manage habitat for boreal caribou to support their survival and recovery.
- For 2015-16, 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 message # 3:

- The goals of BCIP 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 s.13
- The federal government's national recovery strategy states (as part of the Critical Habitat definition) that each of B.C.'s six boreal caribou ranges (also called herds) must maintain at least 65% of the habitat in an undisturbed condition. Currently, the percentage of undisturbed habitat in B.C. boreal caribou ranges varies between 13% to 42%.
- The national recovery strategy applies to the province under terms of the federal Species at Risk Act (SARA) and identifies the need to effectively protect critical habitat and recover all six BC boreal caribou populations to self-sustaining population of more than 100 animals within each herd range.
- The Ministry, in conjunction with other Natural Resource Sector agencies, is leading a process to revise the BCIP to accommodate new science and determine the feasibility of aligning the BCIP with the national recovery strategy.
- For 2015-16, MFLNRO and MOE will lead the process to revise the BCIP, while working with other Natural Resource Sector agencies, governments, industry, First Nations, and stakeholders.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- All caribou in B.C. are woodland caribou (Rangifer tarandus caribou).
- B.C. caribou are classified into three ecotypes of Mountain, Northern, and Boreal. s.12.s.13
- Approximately 1200 boreal caribou are distributed within 6 ranges in the northeast corner of B.C. Without management, B.C.'s population will likely be extirpated from all but one of 6 range areas within 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 and alteration that leads to increased mortality from predators such as wolves. The habitat fragmentation and alteration occurs as a result of forest harvesting, road building and seismic lines associated with industrial development of B.C.'s natural resources.

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ESTIMATES NOTE (2014) Confidential Ministry of Environment Date: February 12, 2015 ISSUE TITLE: Northern Caribou Management in the South Peace

RETURN TO TOP KEY MESSAGES:

- Key message #1 In March 2013, the Province released the Implementation
 Plan for the Ongoing management of South Peace Northern Caribou in British
 Columbia. The Ministry of Forests, Lands and Natural Resource Operations
 (MFLNRO) is responsible for the Plan's operational delivery. Funding of the
 plan is to be delivered through mitigation offset funding from industry.
- Key message #2 The Province will work with First Nations, other provincial agencies and levels of government, and industry to increase this caribou population through management actions, including habitat protection, wolf control, and maternal penning of calves.
- Key message #3 A federal recovery strategy that includes the caribou in the south Peace was posted January 2014. The federal strategy is based on science alone, whereas BC developed its implementation plan around this same science but with consideration of social and economic implications of caribou conservation, including First Nations' treaty right to hunt caribou.

CURRENT STATUS:

Key message #1:

- The seven northern caribou herds in the south Peace have declined over the last decade and that decline is continuing. This decline can be attributed to extensive industrial development (e.g., forestry, oil and gas and coal mining) in caribou habitat that facilitates increased predation and caribou mortality.
- These caribou 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.
- s.13
- To address the conflict between resource development and caribou conservation in the south Peace, government endorsed a provincial implementation plan in 2012 and released it in 2013. The plan outlines BC's response to the need to manage this species at risk for which management and/or recovery in BC may have significant socioeconomic implications.

Key message #2:

The goal of the implementation plan is to increase caribou in the south Peace from

1,000 to over 1,200 animals in 21 years and to accommodate FNs treaty right to hunt caribou.

- The Plan includes recommendations to conserve and protect habitat, manage predators and reduce the impacts from industrial activity.
 - This includes protecting 90% (approximately 400,000 hectares) of identified high-elevation winter caribou habitat across the South Peace through a combination of existing and new habitat protections.
- Controlling wolf predation on caribou is a critical and controversial element in each of the approved caribou plans.
- The implementation plan is to be funded from the application of the Ministry's Environmental Mitigation Policy for those industrial activities that have been identified to move forward within the south Peace region.
- The implementation plan is expected to cost > \$1 million annually. Currently
 offsetting funds are insufficient to implement recovery actions because the level of
 industrial activity on caribou ranges has been limited to date.
- Wolf control is a key part of this plan and a small program was implemented by West Moberly First Nation in 2013 at arm's length to government.
- A maternal penning project was implemented by WMFN in 2014.
- The Ministry will work with the MFLNRO to provide policy support and oversight on the application of the Ministry's Environmental Mitigation Policy to fund the implementation plan.

Key message #3:

- In January 2014, the federal government posted for public comment a recovery strategy for caribou within the federal designated Southern Mountains National Ecological Area, which includes animals in the south Peace.
- The federal plan would prohibit all destruction of core high elevation habitat, limit the level of industrial activity in low elevation habitat, and promote predation management over the entire herd range of declining herds.
- Staff are examining the "gap" between the PNCP and the federal strategy and will recommend appropriate modification to the PNCP.
- BC's plan was also intended to reflect First Nations interest in continued harvest of moose and future harvest of caribou.

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.s.13
- Approximately 1,000 northern caribou distributed within seven herds occur in the south Peace. 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.

First Nations:

- 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 south Peace 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 the six adjacent herds in the south Peace
- In June 2014, the West Moberly First Nation (WMFN) released an independent caribou recovery strategy for the Moberly caribou herd which is included in the PNCP.

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 13, 2015 ISSUE TITLE: Predator Control for Protection of Species at Risk

RETURN TO TOP 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:

- The Provincial Grey Wolf Management Plan outlines a comprehensive strategy for managing wolves in BC and supports active reduction of localized wolf populations to reduce unsustainable predation on wildlife in peril, e.g., caribou.
- Control of wolves and cougars is a key component of the Mountain Caribou Recovery Implementation Plan and the Peace Northern Caribou Plan. The intent is not to remove all wolves or cougars from the landscape, but rather to reduce their densities to reduce predation pressure on critically endangered caribou herds.
- Since 2007, wolf control has been conducted to support mountain caribou recovery by increasing harvest rates, and sterilizing breeding pairs. Increased harvest rates and targeted removal of cougars has also been conducted to support mountain caribou recovery. These programs have not been effective at reducing caribou predation.

- Consistent with the Wolf Plan and caribou implementation plans, proactive wolf control by aerial shooting has been initiated this winter for two critical caribou herds (South Peace, South Selkirk). These herds have the most pressing conservation need, have stakeholder support, are technically sound and include operationally feasible control projects.
- 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:

 The Provincial Grey Wolf Management Plan outlines a comprehensive strategy for managing wolves in BC and supports active reduction of localized wolf populations to reduce unsustainable predation on wildlife in peril, e.g., caribou.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The primary threat to threatened caribou herds in BC is habitat fragmentation that leads to increased mortality from predators such as wolves and cougars. Habitat fragmentation occurs due to road building and industrial activities including forest harvesting, oil and gas developments and mining
 - Independent science advice has recommended that wolf densities should be reduced by 80% for up to 5-10 years to effectively recover endangered herds and aerial shooting of wolves is the only available alternative that would be effective.
 - The Provincial Grey Wolf Management Plan indicates that wolves are common throughout much of BC, are expanding their distribution and are at a low conservation risk and wolf removal may be necessary to promote recovery of species at risk.
- MFLNRO has initiated additional wolf control to support the recovery of caribou herds. Wolf densities are being reduced in two critical caribou herds (South Peace, South Selkirk) this winter by aerial shooting. These initiatives are expected to last 5 years, at which time a decision will be made to determine if these efforts will continue.
- 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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ESTIMATES NOTE (2015)

Confidential

ISSUE TITLE:

Ministry of Environment

Managing for Cumulative Effects

Date: February 17, 2015

RETURN TO TOP KEY MESSAGE:

- Key message #1 The Province recognizes the increasing demands on the land base and that understanding the cumulative effects of resource development and use is important for effectively managing the environmental, social and economic values of importance to British Columbians.
- Key message #2 The Ministries of Environment (MOE) and Forests, Lands and Natural Resource Operations (MFLNRO) are co-leading a project to develop and implement a Cumulative Effects Framework (CEF) to support more durable and integrated decision-making for the Natural Resource Sector.
- Key message #3 The Cumulative Effects Framework will provide policy, procedures and decision-support tools to enable a consistent and effective approach to assessing and managing cumulative effects across the natural resource sector.

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 is currently undertaking an audit of government's management of cumulative effects of resource development.

Key message # 2:

- MOE and MFLNRO are co-leading a multi-year project to develop and implement a Cumulative Effects t 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.
- Experience from early implementation, continues to provide important lessons for developing the policy and standards for the CE framework and will inform

recommendations for broader provincial implementation.

- Early results show that the CE framework is supporting a wide range of natural resource sector decisions and management of key values through:
 - streamlined natural resource decision-making and reduced uncertainty and costs for project proponents by providing consistent, upfront guidance and easily accessible information to support project applications and reviews, and First Nations consultation;
 - improving outcomes for environmental, social, and economic values, by monitoring, assessing and managing a consistent set of values for all sectors;
- The CEF will provide the policy, procedures and tools necessary to support periodic assessment of cumulative effects to key environmental, social and economic values over broad, sub-regional areas. It will also provide the procedures for ensuring assessment results are effectively considered and addressed in natural resource decision-making.
- s.12,s.13

Key message # 3:

- The expected benefits of the Cumulative Effects 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 FLNR as an integrated resource management ministry to better manage the cumulative effects of expanding resource development on the land base;
 - Developing an integrated model for the natural resource sector to increase the consistency, efficiency and effectiveness of decision-making as a part of natural resource sector transformation.
 - Implementing a CEF as part of the integrated model, to support a more effective approach to assessing and managing cumulative effects across the natural resource sector.
- The CEF is being implemented in a phased approach, with an initial focus on implementation in former pilot areas, while building a consistent foundation of information, policy and procedures and analytical tools to support longer-term implementation across the province.
- Benefits are being realized including more timely, well-informed decisions and improved consultation and engagement with First Nations.
- Input and guidance from First Nations and key stakeholders is being solicited both provincially and in regions. Engagement will continue to be a key component of CEF implementation.

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ESTIMATES NOTE (2015) Confidential Ministry of Environment ISSUE TITLE: Status of Research at the

Date: February 12, 2015

RETURN TO TOP KEY MESSAGES:

Ministry of Environment

- 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.
- The Technical Services Section in MOE's Knowledge Management Branch provides knowledge management services in support of NR Sector research activities including: The Natural Resources Library, the Analytical Chemistry Laboratory, Production Resources for scientific and technical publishing, and forest Research Information Systems.

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. Success of the Framework requires cross-Sector agreement regarding resourcing for the supporting technical services.
- The two Ministries have developed 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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ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	Invasive Species
Date: February 16, 2015	

RETURN TO TOP 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.
- In 2013, the ministry 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 \$28M to infrastructure and recreational boating; impacts to fisheries would also be substantial but can't yet be quantified. European fire ants could impose annual damages of \$100M to public and private property.
- Successful management of invasive species depends on cross-jurisdictional collaboration and partnerships with all levels of government, academia, and nongovernment organisations.

Key message #2:

- BC has a well established program for invasive plants, and is working toward a similar program for invasive animals.
- 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.
- The IMISWG is developing options for improving our invasive species program and regulatory framework to more effectively address all invasive species and pathways of introduction.
- Invasive species do not respect borders, hence cross border / jurisdictional collaboration is a key to success. The province continues to work with neighbouring jurisdictions in the Pacific North-West to prevent the introduction and spread of zebra and quagga mussels as well as other invasive species.
- The province is working toward establishing a perimeter defence program in spring 2015 to prevent the introduction of invasive mussels into BC. This program is a key initiative for implementing the 2012 amendments to the Controlled Alien Species

- Regulation (Wildlife Act).
- Public education and media attention are potent tools for raising awareness of the impact and management of invasive species, as evidenced by the success and broad media coverage of the 10th anniversary Invasive Species Forum (Richmond, January 2015), held by the Invasive Species Council of BC and sponsored in part by the Provincial Government.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The IMISWG has provided policy direction, coordination and collaborative delivery of
 provincial invasive plant programs for the province since 2004. More recently it has
 expanded its mandate to include invasive animal species (vertebrates and
 invertebrates) in response to this growing threat.
- Since 2009, the MoE has taken an increasingly active role in addressing invasive species impacts, in particular for animal species.
- 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 managed under a non-native fish policy through research in combination with control, 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 minimise bullfrog impacts and allow their coexistence with native amphibians.
- The province is working with the Invasive Species Council of BC to prevent invasive species introductions by raising awareness through behaviour change programs such as "Clean, Drain, and Dry" (for recreational boaters) and "Grow Me Instead" (for gardeners and horticulture trades)
- MoE and FLNRO are working with Fisheries and Oceans Canada to monitor for zebra and quagga mussels across BC.
- Partnerships with academia fill knowledge gaps about invasive species distribution, impacts, and removals (e.g. snakehead fish, 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. Chemical treatments were completed in 2013 and 2014 and will also be conducted in 2015.

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ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	Invasive Mussels
Date: Feb. 13, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 BC recognises invasive mussels as a significant economic and ecological risk.
- Key message #2 The Ministry of Environment is involved in a number of initiatives to prevent the introduction of invasive mussels into BC waters.

CURRENT STATUS:

Key message #1:

- In 2013, the Ministry 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 \$28M to hydroelectric facilities, municipal waterworks and recreational boating while a recent analysis estimated that damages to agricultural irrigation could approach \$15M annually. Impacts to fisheries would also be substantial but can't yet be quantified.
- An Ecological Risk Assessment has found most of BC to be suitable environment for invasive Zebra and Quagga mussels.
- A recent summary of the Idaho boat inspection program indicates that 10% of mussel-infested boats and trailers moving through Idaho were destined for BC.
- The discovery of Zebra mussels in Lake Winnipeg in November 2013 and the subsequent failed eradication attempt increases the risk for an introduction of invasive mussels to BC significantly.
- BC is working toward initiating a mandatory roadside inspection program to be in place for this boating season.

Key message #2:

New legislation - federal / provincial

- Amendments to the Controlled Alien Species Regulation (under the BC Wildlife Act)
 which prohibit the possession, transportation and sale of a number of aquatic
 invasive species including live or dead Zebra and Quagga mussels were brought
 into force the Dec. 2012. MoE is leading on the implementation of this regulation.
- The federal government published the federal Aquatic Invasive Species legislation under the federal Fisheries Act in Gazette 1 in December 2014. This proposed legislation would ban the importation of Zebra and Quagga mussels into SK, AB, and BC, which would allow BC to work with Canadian Border Services to detect, inspect and decontaminate infested boats crossing the international border.

Collaboration national / international

 The Ministry is reducing the risk of invasive species introductions through crossjurisdictional collaboration and partnerships with all levels of government, academia,

- and non-government organisations.
- Invasive species do not respect borders, hence cross border / jurisdictional collaboration is a key to success. 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.
- Through this collaboration BC has been notified, on average, of 10 trailered boats infested with Zebra or Quagga mussels destined for BC waters per year, allowing for their decontamination prior to them entering our lakes and rivers.
- BC is coordinating its invasive mussel prevention program with Alberta,
 Saskatchewan and Manitoba to maximize its effectiveness.

BC Invasive mussel prevention

- The provincial government has established an Inter-Ministry Invasive Species Working Group (IMISWG) - with representation from all resource and land management ministries to coordinate on invasive species management in BC.
- MOE, and FLNR, have completed the provincial Zebra and Quagga mussel Early Detection and Rapid Response (EDRR) Plan, to allow a focused and effective response to a potential mussel introduction in the future. The plan is closely linked to the Provincial and Columbia River Basin EDRR plans.
- MOE and FLNR are working with Fisheries and Oceans Canada to monitor for Zebra and Quagga mussels across BC. To date there have been no invasive mussel populations detected in BC waters.
- MOE is working closely with the Invasive Species Council of BC on a major outreach project to reduce the risk of invasive mussel movement or introduction by promoting 'Clean, Drain, and Dry' with recreational boaters.
- Consistent with the Pacific North-West Economic Region (PNWER)
 recommendation, MOE and FLNR are working closely with neighbouring provinces
 and states to develop a regional perimeter defence to prevent invasive mussel
 introduction to the Pacific Northwest and western Canada.
- MOE and FLNR are working to establish a BC Mussel Defence program which would include roadside inspection crews operating throughout the boating season, in conjunction with a comprehensive education and outreach effort.

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 17, 2015 ISSUE TITLE: OAG Audit of Biodiversity Conservation

RETURN TO TOP KEY MESSAGES:

- Key message #1 The B.C. government has recognized that effective conservation of biodiversity in the 21st century required a fundamental shift to how we manage natural resources in BC.
- Key message #2 Government continues to implement a shift from a ministryby-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 BC that help conserve biodiversity.
- Key message #4 –The audit and its six recommendations which the Province responded to 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 BC: Assessing the Effectiveness of Key Tools"
- On November 18, 2013, MOE & MFLNRO Sr. staff appeared as witnesses to the Select Standing Committee on Public Accounts and answered questions relating to the Auditor General's Report. Details are available via Hansard.
- The Ministries of Environment and Forests Lands & Natural Resource Operations submitted a self-assessment (as required) to the OAG in February (2014).

Key message #2:

- The consolidation of much of the decision making for natural resource development and use within FLNRO was an important step towards coordinated and consistent approaches to managing for government's strategic outcomes- including biodiversity.
- Key policy initiatives including 'Integrated Decision Making', Environmental
 Mitigation Policy and the Cumulative Effects Assessment Framework are all linked to
 the effort to create a more coordinated and robust decision making process.

Key message #3:

- 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 Decision 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 had significant achievements for the February 2014 review. Others have progressed since that time or 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 BC 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 #3

- 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:
 - 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;
 - Review its legislative framework to ensure that any significant gaps, inconsistencies or barriers to achieving conservation of biodiversity are identified and addressed;
 - 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) Confidential	ISSUE TITLE:
Ministry of Environment	Northern Goshawk Management
Date: February 12, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 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 #2 The Province is in the process of setting provincial objectives for implementing northern goshawk recovery on the coast. These will balance habitat protection and population recovery with development opportunities for BC's coastal forestry industry.
- Key message #3 The Province currently protects a significant amount of Northern Goshawk habitat in coastal BC through Parks and Protected Areas, Land Use Orders, and Wildlife Habitat Areas.

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.
- 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 provincial objectives for NoGo for population recovery can be achieved. (These objectives have not yet been set – see Key Message #2).
- The MFLNRO is responsible for delivering this plan. The Ministry will work with MFLNRO to provide species at risk policy support and oversight on NoGo management, and to coordinate with the federal government on the management

status, population outcomes, and habitat protections for NoGo.

Key message #2:

- For 2015, the Ministry is working with MFLNRO to structure a decision for senior government to set provincial objectives for NoGo. These will form the basis for an implementation plan that balances NoGo conservation against socio-economic considerations.
- In 2014, the federal government released a draft recovery strategy for NoGo under SARA, which identified approximately 22,000 hectares of critical breeding habitat to be protected.
- When final, the federal recovery strategy will identify the amount of critical habitat to be protected, without consideration of the socio-economic implications to BC's coastal forestry industry.
- We anticipate a significant gap between federal expectation for critical habitat protection and BC's approach. Once the federal plan is finalized, the Province will be expected to demonstrate progress toward protecting identified critical habitat for NoGo.

Key message #3:

- 33 Wildlife Habitat Areas (WHAs) have been legally designated for northern goshawk in BC to date. Field inventory is ongoing to identify and designate additional WHAs.
- Retention of Northern Goshawk habitat is planned under the South Central Coast and Central and North Coast Land Use Orders through the Strategic Landscape Reserve Design process.
- Based on habitat modelling, the province currently protects enough habitat for almost 500 goshawk territories in its Parks and Protected Areas, constrained areas and areas not suitable or available for forest harvesting.

s.13

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

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ESTIMATES NOTE (2014) Confidential

Ministry of Environment

ISSUE TITLE:

Marbled Murrelet Management

Date: February 12, 2015

RETURN TO TOP KEY MESSAGES:

- 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. Environment Canada posted a draft proposed federal Recovery Strategy in January 2014. The province has been participating in the planning effort and is reviewing the proposed strategy.
- 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 Over 600,000 hectares, or approximately 34% 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 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 filed a lawsuit outlining 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 posted a draft MAMU recovery strategy, on January 7th, 2014. Proposed critical habitat is defined as at least 70% of suitable nesting habitat present in 2002.
- For 2014-15, 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 approximatley 150 WHA proposals for MAMU in progress in the 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 34% of suitable habitat for MAMU is legally protected in six conservation regions in BC. Haida Gwaii has the highest at 54%, while the East Coast of Vancouver Island Conservation Region has the lowest at 28% protected (See table 1 below).
- 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.
- Any additional habitat protection will need to undergo a socio-economic analysis to determine the impacts to the forest industry and government revenues. MOE will continue to provide policy support and work with MFLNRO to determine if additional habitat protections 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.

Table 1. Predicted suitable MAMU habitat based on the BC model habitat algorithm, and current habitat protection (Federal, Provincial, Regional and Municipal parks, Wildlands, Conservancies, Wildlife Management Areas, Forest Recreation Sites, Clayoquot Reserves, Haida Gwaii Land Use Order, Coastal Douglas Fir Land Use Order, Biodiversity, Mining and Tourism Areas, Wildlife Habitat Areas and Class 1 Grizzly Bear areas).

Conservation Region	Modelled 2002 suitable habitat (ha)	Protected habitat (ha)	% Protected
Northern Mainland Coast	425,490	126,905	30
Haida Gwaii	223,231	120,946	54
Central Mainland Coast	536,840	169,556	32
Southern Mainland Coast	198,432	54,654 ¹	28

West and North Vancouver Island	410,377	140,103	34
East Vancouver Island	86,393 ²	23,907	28
Total	1,880,763	636,070	34

¹ Amount does not include protection of Vancouver watersheds that are not parks but do not have harvest permits

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permits
² Amount has not been corrected to reflect harvest rates on private lands which are higher than on Crown Land

ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential	
Ministry of Environment	Fish and Wildlife Compensation Program (BC Hydro) –
Date: February 13, 2015	Governance and Delivery

RETURN TO TOP 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 basinlevel 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.

Key message #2

- Participation by provincial staff (MOE and FLNRO) 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.
- 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.
- All Regions have now developed strategic plans to guide investment decisions for the available compensation funds. Proposal intakes have continued throughout the transition and Regional Boards are in the process of allocating resources for 2015-16 under the new governance model.
- In the Peace region a new collaborative working relationship has been established with First Nations with 8 First Nation Bands and the Treaty 8 Tribal Association signing onto an MOU with MOE and BC Hydro.
- In the Columbia, a 2013 partnership agreement with the Columbia Basin Trust saw an additional \$3M in funding administered by the FWCP and directed specifically to restoration and enhancement activities in the upper Kootenay area of the basin guided by a recently completed strategic plan.

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ESTIMATES NOTE (2015)

Confidential

Ministry of Environment

Date: February 16, 2015

ISSUE TITLE:

Grizzly Bear Recovery in Threatened GBPUs

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KEY MESSAGE:

- Key message #1 Grizzly bears are an iconic species in BC and while they are
 not an endangered species, some populations are 'threatened' and in need of
 recovery. Threatened populations are not subject to hunting but face
 pressures from a variety of land uses. The "Coast to Cascades" Grizzly Bear
 Initiative proposed to partner with the province on recovery planning for
 Grizzly bears in SW BC.
- Key message #2 MOE and FLNRO are partnered on several Grizzly bear conservation initiatives including: 1) Inventory and Monitoring programs; 2) Habitat Protection; and 3) Impact assessment and mitigation related to potential impacts from resource development.
- Key message #3 The province has identified Grizzly bears as a provinciallevel "value" for inclusion as part of the Cumulative Effects Framework. This work will clarify provincial objectives for Grizzly bears and the effectiveness of current habitat management practices for bears. Results will inform future land-use decisions and will support the long-term conservation of Grizzly bears in BC.

CURRENT STATUS:

Key message #1:

- Concern over Grizzly bear conservation has been expressed by First Nations, stakeholder groups and the public not only with respect to hunting policy but also regarding the conservation and restoration of "threatened" populations which are not subject to hunting. Nine of the 56 Grizzly Bear Population Units (GBPUs) in BC are currently classed as "Threatened".
- The Coast-to-Cascades Initiative requested government to implement the
 recommendation in the 2008 Sea-to-Sky LRMP to "complete a [Grizzly Bear]
 Recovery Plan for each of the four GBPUs that overlap the plan area" and further
 recommends that recovery planning also be undertaken for the south-adjacent
 'North Cascades' GBPU.
- U.S. agencies have initiated the development of an Environmental Impact Statement that will examine alternatives for how to recover the North Cascades Grizzly bear population (which is a trans-boundary population shared between Washington and BC) BC is considering how to participate in the EIS, at the invitation of the US Fish and Wildlife Service.

Key message # 2:

 Inventory and Monitoring: Projects are proposed or funded for the Kettle Granby, Squamish-Lillooet, South Chilcotin and Stein-Nahatlatch GBPUs in support of

- population recovery. The results of a 10-year Grizzly bear inventory and monitoring project for SW BC are available.
- Cumulative Effects Analysis (CEA) for Grizzly Bears has been a major component of major project decision-making under the Environmental Assessment Act since 1993 and remains a large part of government's input to major projects including the LNG Pipelines.
- A Grizzly bear monitoring program is currently being designed for the 3 Certified LNG Pipelines. If built, the proponents will contribute a total of \$1.2 million to Grizzly bear monitoring over 5 years.
- A Contribution Agreement for Grizzly bear monitoring of the Upper Lillooet IPP
 was signed with Innergex \$300,000 has been provided by the company to help
 deliver the Regional Grizzly Bear Monitoring and Inventory Plan as
 recommended by the Sea to Sky LRMP.
- Habitat conservation and planning initiatives include: 1) further delivery of
 conservation designations (Wildlife Habitat and Specified Areas) under FRPA
 (including a new 8000 ha proposal in the Lillooet Timber Supply Area); 2) Parks
 and Protected Area management (including revised input to Big Creek, South
 Chilcotin and Babine River Corridor Parks) and; 3) revision of the Central and
 North Coast Grizzly habitat protection to include new information from Coastal
 First Nations.
- Approximately 1.7 million hectares have already been designated as Specified Areas or Wildlife Habitat Areas under the Forest and Range Practices Act. An additional 300,000 hectares of important seasonal habitats have been removed from the Timber Harvesting Land-base in the Central and North Coasts (part of the Great Bear Rainforest) in watersheds outside the many coastal Parks, Conservancies and Protected Areas.

Key message # 3:

- The province has declined to initiate Grizzly bear recovery planning to date, but has linked the Coast-to-Cascades recommendation with the Natural Resource Permitting Project's cumulative effects initiative and values framework.
- Work is underway to define current habitat effectiveness and mortality risk for the BC, building on 2014 work in several Cumulative Effects pilot areas. These assessments are expected by May 31st, 2015.
- This work will establish clear objectives/outcomes for the threatened Grizzly bear population units, with guidance on monitoring and mitigation. This will be an asset to decision makers when dealing with resource development decisions and can be used to provide developers with clear expectations and potentially greater social license for their proposed activities.

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ESTIMATES NOTE (2015)

Confidential

Ministry of Environment

ISSUE TITLE:

Air Quality Monitoring in Northeast B.C.

Date: February 16, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 With continued oil and gas development in the northeast, local
 public demand for air quality information continues to grow. The Ministry of
 Environment (MoE) is collaborating with the Canadian Association of Petroleum
 Producers (CAPP), Spectra Energy, the Oil and Gas Commission (OGC), Ministry of
 Natural Gas Development and other local partners to conduct an air quality
 assessment and establish an ongoing air monitoring program in the northeast.
- Key message #2 To date, in addition to existing monitoring, three new ambient air
 monitoring stations measuring compounds related to oil and gas activity have been
 deployed at rural locations. So far monitoring is showing that, notwithstanding a
 couple of localized hotspots, air quality in the northeast is generally well below air
 quality objectives.
- Key message #3 Continued expansion of industrial development in the northeast will increase the demands for representative air quality monitoring across the region. Work is underway to assess ongoing monitoring needs. This includes scientific analysis by staff, and guidance from a technical advisory group.

CURRENT STATUS:

Key Message #1:

- As oil and gas development in the Northeast continues to grow, the Ministry and its partners are evaluating air quality monitoring to ensure that there is adequate science-based information for public health and air quality management.
- Funding for this multi-phased project is provided by CAPP members, Spectra Energy, OGC, and MOE.

Key message #2:

- As part of this project, three new relocatable monitoring stations have been installed to better understand the emissions impacts of oil and gas activity on human health and the environment. The stations are located near rural population nodes at **Doig River**, **Farmington and Tomslake** which are in close proximity to oil and gas development activities.
- Air quality measurements from these stations, now in place for over a year, as well as those collected through industry monitoring have recently been analyzed. That analysis has concluded:
 - Sulfur dioxide (SO₂) and hydrogen sulfide (H₂S) concentrations are generally very low throughout the Peace region.

- Near major emission sources, such as at Taylor townsite or the Pine River gas plant, brief increases in SO₂ and H₂S concentrations were measured, generally for less than a few hours.
- The SO₂ hourly air quality objective was met at all monitoring sites.
- In contrast, the <u>H₂S hourly</u> air quality objective was frequently exceeded at Taylor townsite and at the Pine River Gas Plant. It was also occasionally exceeded at Pine River Hasler. s.13

Key message #3

- A Technical Advisory Group of air quality experts from across Canada, and a Public Outreach Group made up of local stakeholders, are providing advice on designing an ongoing air monitoring network and public messaging on air quality in northeast BC.
- This program is complementary to the Ministry of Health's Northeast Human Health Risk Assessment.
- Next steps include designing where monitoring stations will be placed, what
 pollutants they will measure, and exploring governance options to maintain and
 fund air quality monitoring in the northeast.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Since 1993, MoE has operated (under industry permits) five (5) permanent air quality monitoring stations in the Northeast region, including Fort St. John, Taylor (2) and Pine River/Hasler (2). Data from current air quality sites are available at http://www.bcairguality.ca/readings/northeast/.
- MoE and OGC partnered in 2010/2011 to conduct very short-term monitoring studies with MoE's mobile air monitoring laboratory. These studies are available at: http://www.bcairquality.ca/reports/region Peace.html. OGC continues to deploy its mobile unit to explore possible air quality hotspots in the northeast.
- The Peace Environment & Safety Trustees Society (PESTS) has recently installed a number of electrochemical monitoring devices in northeast BC. Results from these monitors can be found at: http://elm.perkinelmer.com/map/. MoE is working with PESTS to evaluate the efficacy of these devices in the north compared with the traditional gas monitoring technology employed by MoE.

Contact: David Tesch, Executive Director, Knowledge Management Branch, Environmental Sustainability and Strategic Policy Division, 250-387-5831.

ESTIMATES NOTE (2015)	ISSUE TITLE:
Confidential	
Ministry of Environment	Hydrometric Network
Date: January 27, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Province recognizes the importance of the hydrometric network to economic development, water sustainability, public safety, and providing information for understanding the impacts of climate-change.
- Key message #2 The Province remains committed to working with our partners and stakeholders to optimize the hydrometric network in B.C.
- Key message #3 Additional annual funding (\$0.6M) is needed to maintain the existing network, and to respond to growing demands and increasing costs for water quantity monitoring.

CURRENT STATUS:

Key message #1:

- Information regarding water resources is integral to water management and natural resource decision making, including natural gas development. Water quantity (hydrometric) data is critical for: flood forecasting, determining and regulating water supply conditions and drought response, protecting environmental flows, and for supporting economic development and community well-being.
- In order to address increased risks to public safety, support implementation of the Water Sustainability Act, and inform decisions regarding water use and supply, a well-coordinated approach to supply high quality water information is critical for Natural Resource Sector interests and sustainable economic development in BC.

Key message #2:

- The provincial hydrometric network is part of the National Hydrometric Program and has been co-managed with Environment Canada under a *Memorandum of Agreement* since 1975. The agreement was renewed in August 2013.
- The renewed agreement ensures continuation of the 40 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 sustainable water management and natural resource decision making.
- Given existing funding constraints, expansion or augmentation of the hydrometric network will require financial commitments from external partners (e.g., Canadian Association of Petroleum Producers' members; local governments) who have an interest in establishing and maintaining additional monitoring sites.

Key message #3:

- The budget allocated to BC's hydrometric network has been unchanged since 2008. As of FY 14/15, the hydrometric program budget is insufficient to sustain the existing hydrometric network, given inflation, infrastructure upgrading and equipment replacement, decommissioning costs and uncertain funding from third parties. s.13,s.17
 s.13,s.17
- s.13,s.17
- 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 FACTS/ BACKGROUNDER/ OTHER AGENCIES:

- BC's network of approximately 450 hydrometric stations provides long-term stream flow and water level data that inform water management and natural resource decision-making. The stations are operated and maintained by the Water Survey of Canada, Environment Canada, under a federal-provincial agreement. Under the agreement, 12-months-notice is required in advance of any network reductions. A provincial corporate policy for network optimization and prioritization is conceived.
- 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 about 70% of the annual costs of approximately \$7M, almost half of which is recovered from third parties (e.g., BC Hydro, local governments, industry). In recent years, much of this funding has been subject to budget pressures and competing priorities. There are fewer stations now and station operating costs have increased.
- The 2003 report Water Quantity Monitoring in British Columbia: A Business Review
 of the BC Hydrometric Program determined that for every dollar spent on
 hydrometric monitoring, approximately \$19 was returned to the economy. With
 increasing frequency of extreme weather events, the network importance in terms of
 avoided costs increases.

Contact: David Tesch, Executive Director, Knowledge Management Branch, Environmental Sustainability and Strategic Policy Division, (250) 387-5831.

ESTIMATES NOTE (2015) Confidential

Ministry of Environment

ISSUE TITLE:

Water Sustainability Act – Current status

Date: February 16, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Water Sustainability Act (Bill 18) received Royal Assent on May 29, 2014 and will be implemented in 2016.
- Key message #2 The current *Water Act* will remain in effect until the *Water Sustainability Act* is brought into force.
- Key message #3 Government will implement the new Act s.12,s.13 s.12,s.13

CURRENT STATUS:

Key message #1:

- The Water Sustainability Act will improve government's ability to manage water in light of changing supply and growing demand to ensure the environment is protected, water users have fair and secure access to water, and water management is sustainable, efficient and adaptive.
- The Water Sustainability Act will benefit all British Columbians our communities and families, our environment and our economy.

Key message #2:

- The Water Sustainability Act will repeal most of the Water Act, which has served as our primary water law since 1909.
- Rights granted under the Water Act will continue under the WSA. The intent of the WSA is to continue to authorize the use of water and associated activities predominantly in the same way as under the Water Act.
- When the act comes into force in 2016, the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) will be the lead agency responsible for implementing the Act. The Ministry of Environment (MoE) will continue its lead role in setting standards, developing policy and regulations, and providing science expertise in support of implementation of the Act.

Key message #3:

- Groundwater and surface water are interconnected, they are one resource and they need to be managed as such. s.12,s.13
 - s.12.s.13
 - s.12,s.13

To facilitate the transition there

- will be a one-year period where application fees for existing non-domestic groundwater users will be waived.
- Regulation of groundwater corrects the inequality in our current water management system. Until now, use of groundwater has not required an authorization or payment of fees and rentals, whereas surface water used for the same purpose has.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Since 2009, the B.C. government has engaged widely and received substantial input from individual British Columbians, First Nations organizations and stakeholder groups. Government will continue to provide engagement opportunities during the development of regulations.
- Government is developing a strategy to engage First Nations during the
 development of regulations as well as meet government's legal obligations to consult
 on water licence applications including approximately 20,000 existing non-domestic
 groundwater wells.
- The Water Sustainability Act will replace the existing Water Act and establish a
 provincial framework for water, improving government's ability to manage risk,
 competing demands and water 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.
- Government will implement the new Act using a phased approach, starting with priority regulations required to maintain business continuity (water fees and rentals, and groundwater).
- The Act may increase some costs and obligations to businesses and individuals including: s.13,s.17

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

ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	Water Sustainability Act & First Nations
Date: February 17, 2015	Nations

RETURN TO TOP KEY MESSAGES:

- Key message #1 First Nations in B.C. bring a unique perspective to the Water Sustainability Act (WSA) process 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 Government acknowledges that First Nations have a strong interest in water and is committed to continue to engage with First Nations during the development and implementation phases of the Act and associated regulations..

CURRENT STATUS:

Key message #1:

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

Key message #2:

- Ministry of Environment (MoE) and Ministry of Forests, Lands and Natural Resource Operations (FLNRO) staff, with advice from Ministry of Aboriginal Relations and Reconciliation (MARR), are preparing a strategy to engage First Nations on the development of regulations.
- Resources will be focused at the strategic level by working with First Nations that have entered into treaties or strategic agreements; about 40 percent of First Nations organizations in BC will be engaged in this fashion beginning in early 2015.
- Those First Nations without formal agreements (about 60 percent) will be informed of the progress of regulation development primarily through government's WSA website and blog as well as through correspondence and other communication materials.
- Government will also continue to meet periodically with the First Nations Leadership Council (FNLC) to share information on policy and regualtory topics.
- The strategy will also outline a consultation process for future groundwater licence applications—including those associated with the approximately 20,000 existing nondomestic wells-s.13

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- During development of the WSA, MoE distributed formal invitations and copies of all documents to all 203 First Nations organizations at regular intervals.
- Opportunities specifically for First Nations to participate in the development of the WSA 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.
 - An FNLC Technical Table consisting of representatives of the Union of BC Indian Chiefs, First Nations Summit and BC Assembly of First Nations was briefed several times in the early stages of the development of the WSA.
 - A number of First Nations participated as Technical Advisors to the policy development process.
 - Notification of treaty First Nations pursuant to Final Agreements.
- The FNLC and/or its staff have met with MOE representatives multiple times over the past 3 years to discuss a proposed Memorandum of Understanding (MOU) with the Province.
- The MOU is intended to establish a more formal working relationship to address environmental stewardship-related issues including water. An agreement has yet to be achieved.

Contact: Lynn Kriwoken, Executive Director, Water Protection and Sustainability Branch, ESSPD, (250) 387-9481.

ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 16, 2014 ISSUE TITLE: Bilateral Water Management Agreements

RETURN TO TOP KEY MESSAGES:

- Key message #1 British Columbia is completing bilateral water management agreements with Alberta (focusing on the Peace River) and with each of the Yukon and Northwest Territories (involving primarily the Liard River).
- Key message #2 The agreements are among the seven that are being developed under the Mackenzie River Basin Transboundary Waters Master Agreement.
- Key message #3 British Columbia looks forward to the completion of BWMAs with all of its neighbors to co-operatively manage the water resources of the Mackenzie River Basin.

CURRENT STATUS:

Key message #1:

- Ministry of Environment (MOE), Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) and BC Hydro are currently negotiating the BC/Alberta BWMA with Alberta. Ministry of Energy and Mines (MEM) also participates. These discussions are part of a larger multilateral process of developing three BWMAs associated with the Peace, Athabasca, and Slave sub-basins of the Mackenzie River Basin.
- Representatives from MOE and MFLNRO also form the BC Negotiating Team for the BC/Yukon and BC/NWT BWMAs associated with the Liard sub-basin of the Mackenzie Basin.

Key message #2:

- Development of the BC/Alberta BWMA was initiated in October 2011 and has been conducted concurrently with the now completed regulatory review phase and environmental assessment for the Site C Clean Energy Project (Site C).
- Discussions leading to the development of BC/Yukon and BC/NWT BWMAs were initiated in January 2014.

Key message #3:

- Negotiations on the BC Yukon and BC NWT bilateral water management agreements for the Liard basin are nearing completion.
- BC's engagement with First Nations is still in progress.
- The Agreements are expected to be ready for Ministerial signatures by spring 2015.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Bilateral water management agreements (BWMA) are water quality and quantity commitments at key trans-boundary river crossing points in the Mackenzie River Basin. More specifically, the water management agreements are intended to address principles, water quality, groundwater, water allocation, consumption and aquatic ecosystem health of the Liard and Peace River sub-basins.
- Once bilateral agreements are signed and in place, the agreements will not affect
 the right of any party to propose a new development (e.g., mine or natural gas
 development) or to participate in a regulatory proceeding (e.g., environmental
 assessment). However, any impacts of such developments must not cause a
 jurisdiction to default on a commitment made in a bilateral agreement.
- These agreements will respect existing laws, regulations, policies and plans as they
 pertain to water stewardship and aquatic ecosystem health. Some of the topics that
 each agreement is intended to address include:
 - Classifying each transboundary water body according to the uses and pressures on each water body;
 - Protecting the quality of water supplies for people and the environment;
 - Information sharing, notification and consultation between provinces/territories;
 - Exploring opportunities to conduct joint research and in collaboration with others;
 - Establishing and implementing monitoring networks for surface water quality and quantity, groundwater as well as ecological health;
 - Preventing the movement of invasive species into and within each basin; and
 - Sharing available water supplies while ensuring that the needs of aquatic ecosystems are met.
- Engagement of First Nations was initiated in July 2014 and is currently ongoing notably with the Fort Nelson and Kaska Dena First Nations.
- Local governments within the Peace and Liard basins were also formally advised in December 2014 of the agreements; limited response has been received.

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

ESTIMATES NOTE (2015) Confidential

Ministry of Environment

Date: February 16, 2015

Living Water Smart: BC's Water Plan -Accomplishments

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KEY MESSAGES:

- Key message #1 Passage of the Water Sustainability Act on May 29, 2014 represents a major milestone in implementing the Living Water Smart plan. The Act will deliver on 19 of the 45 Living Water Smart actions.
- Key message #2 Living Water Smart continues to help change how British Columbians do business around water, and will help communities adapt to emerging challenges, 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.

Key message # 1: Passage of the Water Sustainability Act

- The Water Sustainability Act received Royal Assent on May 29, 2014 and will improve government's ability to manage water, protect stream health, and develop area-based regulations and plans.
- Implementation is planned to start in early 2016 to allow time to develop necessary regulations and to plan a smooth transition to the new Act.
 Regulations will be developed and implemented over a number of years.

Key message #2: Living Water Smart continues to help change how British Columbians do business around water

- Living Water Smart provides a clear vision for water in BC.
- Supported by the Water Sustainability Act and Living Water Smart, a water ethic
 continues to grow in BC that guides how British Columbians value water in their
 communities and businesses.
- Flood Hazard Area Land Use Management Guidelines to include design considerations for sea level rise are being developed by the Province in consultation with local governments. Consultation work initiated in 2014 is planned to continue in 2015.

Key message #3: Living Water Smart is improving water-demand management to help reduce water use and get the science and information we need to make good water decisions.

- Planning provisions of the Water Sustainability Act will empower the Province, local government and other stakeholders to develop and implement comprehensive water sustainability plans that carry the force of law where they are most needed.
- To help encourage efficient water use and to cover costs to implement the Water Sustainability Act, changes to water fees and rentals will come into effect in 2016. The new rates were introduced on February 5, following an extensive review and engagement process.
- Science remains integral to fulfilling the Living Water Smart commitments. Work on a Water Science Strategy framework from 2014 is being carried forward in 2015.

Key Facts/ Background/ Other Agencies:

- Living Water Smart: BC's Water Plan outlines government's vision and commitment to ensuring our water remains 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 science and 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 can continue to visit the Living Water Smart website at <u>www.livingwatersmart.ca</u> and post comments or ideas on the Living Water Smart Blog, at http://blog.gov.bc.ca/livingwatersmart/.

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

Living Water Smart Implementation Update (to January 31, 2015)

Status:

Complete - Commitment has been achieved

WSA - Completion of commitment is contingent upon roll-out 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

Co	mmitment	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 user's factor in new approaches to securing stream health and the full range of stream benefits.	 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. 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 coordination activities are also assisting with the delivery of this action. When it comes into force in 2016 the Water Sustainability Act will allow Provincial Water Objectives to be established that would be considered by statutory decision makers in decisions affecting land and water. 	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.	 The Water Sustainability Act, which focuses on meeting this commitment, is expected to come into force in early 2016 following further consultation and engagement to inform development of regulations. The Province conducted broad public and stakeholder engagement in 2014 on the structure and rates of a new water fee and rental structure. 	WSA
3.	Legislation will recognize water flow requirements for ecosystems and species.	 Requirements for consideration of environmental flow needs are a key component of the new Water Sustainability Act. Development of environmental flow needs policy is entering its final stages. The policy will ensure that consistent scientific and technical methods are used to determine flow needs across agencies 	WSA

Co	mmitment	Progress delivered	Status
		and regions.	
4.	Government will require all users to cut back their water use in times of drought or where stream health is threatened.	 The Water Sustainability Act will allow the minister to issue temporary protection orders to protect fish populations or critical environmental flows. Section 9 of the Fish Protection Act will 	WSA
		 remain in force and be incorporated into the Water Sustainability Act. Section 9 of the Fish Protection Act was brought into force to enable temporary reductions of water use to protect flows for fish. Through the use of Section 9 of the Fish Protection Act 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. Most new water licenses are being issued with "Fish Clauses" that provide the ability to regulate water licenses for the benefit of aquatic values. 	
5.	Government will limit all new licenses to 40-year terms in areas where there is high demand and pressure on water.	 All water power licenses are issued since 2003 are limited to 40 years. 30 year review of water license terms and conditions (except for water power) will be enabled by the Water Sustainability Act. 	WSA
6.	The Ground Water Protection Regulation will protect the quality and quantity of our groundwater	The Water Sustainability Act will regulate groundwater use and the Ground Water Protection Regulation is being updated.	WSA
7.	By 2012, government will regulate groundwater use in priority areas and large groundwater withdrawals	 The Water Sustainability Act will bring groundwater into the water licensing system, to be managed in the same manner as surface water. Except for domestic use, all existing and new groundwater users will require a license or authorization. 	WSA
8.	By 2012, government will require all large water users to measure and report their water use	The Water Sustainability Act includes regulation making authority for measuring, calculating and reporting on the quantity and quality of water diverted and used.	WSA
9.	Government will secure access to water for agricultural lands	 The Water Sustainability Act allows water to be dedicated for agricultural use on qualifying agricultural lands as part of a Water Sustainability Plan. The Ministry of Environment is working with the BC Agriculture Council Water Committee to develop approaches for water use under a stock watering 	WSA

Commitment Progress delivered Status		
Communicati	regulation as provided for in the Water	Status
	Sustainability Act. The Agricultural Water Demand Model is now operational for the Okanagan Basin, the Bonaparte and Nicola basins and the Similkameen Valley. A report on water use in these basins has been completed.	
10. Government will continue to work toward preserving First Nations' social and cultural practices associated with water	Government continues to consult First Nations on decisions that could affect their social and cultural practices associated with water, including on the proposed Water Sustainability Act.	Continuous/ WSA
11. Government and First Nations' treaty water negotiations and other related agreements support providing a clean and safe domestic, agricultural and industrial water supply for First Nation communities.	The Province (Ministry of Aboriginal Relations and Reconciliation) is working with some First Nations organizations to develop Shared Decision-Making Agreements. These agreements will include decisions related to water. Water is an important component of treaty negotiations. \$\s.13,\s.16\$	Continuous
	Completed final agreement with Water chapter: (the Maa-nulth treaty – negotiated with Nuu-chah-nulth First Nations) and the Tsawwassen First Nations.	
12. By 2020, water use in B.C. will be 33 percent more efficient.	 The Water Sustainability Act will introduce new tools to promote water use efficiency. These include an expanded definition of "beneficial use", water conservation audits, requirements for measurement and reporting and 30-year license reviews. 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. Water Demand Management Planning guidance and a Water Conservation Calculator http://waterconservationcalculator.ca/) have been developed through the Ministry of Community, Sport and Cultural Development. 	In Progress

Commitment Progress delivered Status		
Communent	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.	Janus
13. Fifty percent of new municipal water needs will be acquired through conservation by 2020.	 Progress towards this target is being made through the conservation actions noted above and changes to infrastructure grant criteria. 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. 	In Progress
14. Government will look at new ways to help promising water conservation technology succeed.	 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. The B.C. Real Estate Association has volunteered to be a partner to create incentives to make homes water efficient. The BC Building Code was updated (2012) to enable non-potable water use. Points based Infrastructure Grant Assessment criteria provide applicants with more points if they can show that they are approaching infrastructure problems in an integrated manner (e.g., about energy, climate change adaptation, water conservation, new approaches to "waste as a resource"). 	Continuous
15. Government will fund household evaluations of water, energy and transportation use.	 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 delivered water information and home water assessments as a part of the Low Carbon 	Complete

Commitment	Progress delivered	Status
	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.	 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. Additional work 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. 	Complete
17. By 2010, government will mandate purple pipes in new construction for water collection and reuse.	The upcoming 2012 BC Codes will include new provisions to enable nonpotable water use for certain plumbing fixtures and underground irrigation systems. Pipes carrying water for reuse are colored purple to identify their contents as non-potable. Note that the code does not require the use of purple water re-use pipes, but rather enables and regulates re-use of water.	Complete
18. In partnership with industry, government will develop a water efficiency labelling system for water consuming products.	 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. In October 2011, the BC Ministry of Environment became a Promotional Partner of the US EPA WaterSense Program. The primary responsibility of promotional partners is to help educate consumers on water efficiency and the WaterSense brand. In a signed agreement with WaterSense, BC has committed to promote water efficiency and WaterSense labeled products and programs, encourage participation by constituents, and provide 	Continuous

Commitment	Progress delivered	Status
	an annual report.	
19. Government will require more efficient water use in the agriculture sector.	 An 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. Government support has ensured that the delivery of irrigation Industry Association of BC Certified Irrigation Designer and Certified Irrigation Technician Programs continues to serve the needs of the agricultural sector. Water use efficiency will be promoted through new tools that will be introduced in the Water Sustainability Act (described above). 	Continuous/ WSA
20. Government will award a youth water-science prize or scholarship for excellence in water stewardship.	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.	Completed
21. Government will celebrate examples of successful water stewardship by awarding annual water awards to individuals or groups.	 The Province supports and promotes the Council of the Federation's Excellence in Water Stewardship Award. 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). 	Continuous
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.	 Government has worked with VANOC to influence water smart action at and during the Olympics. 2010 Educational material and websites prepared by government include actions for sustainability. 	Complete
23. By 2010, a strategy to set the direction for water science for B.C. will be implemented.	The development of the water science strategy is underway. The BC Water Symposium, held in three simultaneous locations (Victoria, Kelowna and Prince-George) in 2010 marked the beginning of an ongoing dialogue to create a Water Science Strategy that enables organizations across the province to exchange water related knowledge between those that create and hold knowledge and those that use it to make decisions, support policy development	In Progress

Commitment	Progress delivered	Status
	and create operational procedures.	
24. Government is expanding British Columbia's hydrometric and other climate-related networks.	 In 2008 the governance structure supporting the hydrometric network, and its agreements including funding support, was renewed. A Review of the Hydrometric Network in BC was completed (2012). The Province is continuing to co-deliver the Hydrometric Agreement with Environment Canada. The partners continue to explore opportunities to improve the functionality and cost-effectiveness of the network. The Province is also examining opportunities to expand the water monitoring network (hydrometric; ground and surface quality) particularly in areas experiencing high development demand. 	In Progress
25. Government will publish a report on the state of our water by 2012 and every five years after that.	The Ministry of Environment launched a new Environmental Reporting website in 2013. The site features water as an indicator topic. Information available includes trends in water use, water quality and quantity. The site also provides access to water-related data from a variety of sources.	Continuous
26. Government will work with other provinces to share ideas and resources to improve water conservation and collectively help communities adapt to climate change.	 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. Canadian premiers endorsed the Council of the Federation Water Charter in 2010. The Charter commits the provinces to promote water conservation and work together on water related issues. The Council of the Federation established the Water Stewardship Council in 2011, guided by the Water Charter. This initiative replaces the Western Water Stewardship Council. 	Continuous
27. Tools to incorporate traditional ecological knowledge into information and decision making will be	Natural resource agencies across government have met to discuss traditional ecological knowledge as a factor in decision making. There is	In Progress

Commitment	Progress delivered	Status
developed by 2015.	enthusiasm to work together and link this work with the First Nation Regional Coordination teams. • An 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 continue the development of effective tools that incorporate Traditional Ecological Knowledge in decision making.	
28. By 2012, all students in B.C. will have completed at least one stream-health assessment.	 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. This project is now deferred. 	Deferred
29. Government will support communities to do watershed management planning in all priority areas.	 Government continues to support watershed planning processes in the province with information and resources. 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. Government has supported the Township of Langley Water Management Plan which is the first plan being developed under Part 4 of the Water Act. This Plan will likely be among the first to be considered for implementation once the new Water Sustainability Act comes into force. 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. The Water Sustainability Act will enable creation of Water Sustainability Plans for specific regions. 	WSA
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.	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. Drought response management workshops were held between Jan-May 2010. Input from workshops incorporated	Continuous/ WSA

Commitment	Progress delivered	Status
	 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. The BC Drought Response Plan was implemented in summer 2010 and will be periodically reviewed and updated based on experiences and input from stakeholders. In 2012, MoE, FLNRO, Agriculture and Agri-Food Canada and the Okanagan Basin Water Board collaborated with partners to hold a "drought tournament". Stakeholders participated in a gaming exercise to explore the implications of a range of management decisions during a drought. The Water Sustainability Act includes measures to help manage water resources in times of scarcity and will enable more effective implementation of the Drought Response Plan. 	
31. Government will improve the quality and protection of drinking water sources.	 Work is underway to encourage the development of drinking water protection plans. Planning guidance documents are being developed to better support those interested in developing source water protection plans. Current DW Protection Plans (for DW capture zones) have been digitized and added to the government's EcoCat. A layer of DW capture zones has been added to iMAP and the Water Resources Atlas. DW capture zones in the Northeast are in the process of being delineated Provincial Drinking Water Officers continue to work with water suppliers to complete a Drinking Water Source to Tap Assessment as required and/or requested. The Water Sustainability Act will promote protection of drinking water by expanding prohibitions on dumping of debris into streams and aquifers. 	Continuous / WSA
32. The government will cooperate with Canada to	Deferred.	Deferred

Commitment	Progress delivered	Status
ensure the quality of drinking water in all Aboriginal communities will meet the same provincial standards applied across British Columbia by 2015.	5	
33. Government will provide summer jobs for youth between the ages of 16 to 22, to undertake 20 stream restoration projects across the province.	 The BC Conservation Corps and Living Rivers Trust have supported this commitment in past. The Living Rivers Trust continues its work. 	Complete
34. Government will work with the private sector and support communities to conserve and restore stream function.	 Government supports ongoing efforts to protect and restore stream function through the Living Rivers Trust Fund. Government and several nongovernmental organizations have formed the Wetland Stewardship Partnership (WSP) to collaborate on wetland protection. MOE has completed 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. MOE has developed a Cumulative Effects policy to address environmental effects resulting from numerous small impacts and activities. Phased implementation of the Cumulative Effects Framework began in 2014. 	Continuous
35. Wetland and waterway function will be protected and rehabilitated	 The Wetland Stewardship Partnership released Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in British Columbia. The draft guidelines and best practices promote best management practices for wetlands. The guidelines continue to be field tested and will be updated based on experiences and feedback from user groups. 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. MOE, the Wetland Stewardship Partnership and the UVic Environmental Law Clinic have developed a draft 	Continuous/ WSA

Commitment Progress delivered Status						
Commitment		Status				
	discussion paper to support a "no net loss of wetlands" policy. • MOE has completed 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.					
36. Government and partners will restore ecological health to 30 km of stream between Vaseux Lake and Osoyoos Lake.	 The Okanagan River Restoration Initiative is underway. Phase 1 and 2 are complete; Phase 3 is underway (2015) Phase 2 provides fish passage at the drop structure. Phase 3 will reconnect a historic oxbow side channel 	In Progress				
37. Government will fund the Mount Washington mine remediation project with \$4.5 million, restoring the health of the Tsolum River.	The Tsolum River Restoration project is underway.	Complete				
38. To enhance some watersheds, government will examine the potential of decommissioning dams.	 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. List of abandoned dams compiled. The Province has accelerated some its 	Complete				
	work on dams. Further dams will be reviewed as they are identified.					
39. Community development strategies will be developed to recognize the important role riparian areas play in adapting to climate change.	 Working with partners, including the Real Estate Association and BCWWA to extend message and develop new standards. Wetland partnership, Riparian Areas Regulation, and green bylaws toolkit are also facilitating delivery of this goal. 	Continuous				
40. Adapting to climate change and reducing our impact on the environment will be a condition for receiving provincial infrastructure funding.	 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. Points based Infrastructure Grant Assessment criteria provide applicants with more points if they can show that they are approaching infrastructure 	Complete				

Commitment Progress delivered Status					
	problems in an integrated manner (e.g., about energy, climate change adaptation, water conservation, new approaches to "waste as a resource").				
41. Where new development on flood plains is unavoidable, it will be flood-proofed to high provincial standards.	 Flood Hazard Area Land Use Management Guidelines that include design considerations for sea level rise are being developed by the Province in consultation with local governments. Consultation work initiated in 2014 is planned to continue in 2015. 	In Progress			
42. Government will provide \$100M for flood protection over the next 10 years to help communities minimize flood losses.	 A component of the province-wide 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. 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. 	In Progress			
43. Government will provide incentives for the restoration of streams or wetlands.	MOE has developed an Environmental Mitigation Policy for wetlands and other ecosystems.	In Progress			
44. Green developments waiting for provincial environmental approvals will be fast-tracked and given priority.	 Criteria for green development will be developed (Community Service) BC Building Code was updated in 2012 to enable the use of "purple pipes" for non-potable water sources Note: for clarification approvals will not be "fast-tracked", but clarity on expectations for green developments will be provided to expedite approval processes. 	Continuous			
45. Government will develop new protocols for capital planning that will look at the lifecycle costs and benefits of buildings, goods and services.	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.	Complete			

ESTIMATES NOTE (2015) Confidential

Ministry of Environment

Date: February 16, 2015

ISSUE TITLE:

Shale Gas Hydraulic Fracturing (Fracking)

RETURN TO TOP **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 new Water Sustainability 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.
- . 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.

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:
 - The OGC's FracFocus.ca, a mandatory public disclosure registry for hydraulic fracturing fluid composition to increase natural gas sector transparency.
 - The OGC's NorthEast Water Tool (NEWT), and Water Portal. NEWT provides
 guidance on water availability throughout northeast B.C. and supports decisionmaking for water-use approvals and licenses. The Water Portal is a map-based
 water information tool designed to provide public access to water-related data
 and information in northeast BC.
 - A Ministry of Health study that is assessing 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. It is anticipated that Phase 2 of the study will be complete soon;
- Completing a Northeast Water Strategy (expected to be released in 2015) that lays
 the framework to ensure healthy and sustainable water resources for communities,
 industry and the environment. Strategy objectives include:
 - Enhance information and decision-making tools, as well as reporting, compliance and enforcement to manage proposed increases in natural gas development sustainably.
 - Improved monitoring and regulation proposed in the strategy to provide a sound footing for resource management in the Northeast with respect to water usage.

Key message #3:

- MoE contributed to the development of the Oil and Gas Activities Act (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.
- Under the new Water Sustainability Act the oil and gas sector will be subject to new requirements for consideration of stream health and aquatic environments and water objectives; measuring and reporting; and licensing of groundwater use, among other provisions. The new Act is expected to come into effect in 2016.

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.

- OGC staff authorizes section 8 approvals for short-term water use. Specific staff in the OGC are also designated Regional Water Managers (RWMs) and Assistant RWMs and review and adjudicate water license applications. Oil and gas developers are required to report on their water use quarterly and this information is available on the OGC's website.
- In summer of 2010, 2012 and 2014 the Northeast experienced lower than normal streamflow conditions. Government responded by issuing water supply and stream flow advisories, while the OGC responded with Directives to limit water diversion for certain watersheds.
- Under the Province's Climate Action and Clean Energy (CACE) Fund, MOE: improved aquifer mapping; installed additional observation well monitoring sites in northeast BC; and developed guidelines around groundwater use.
- Funds from various sources, including the Climate Action and Clean Energy (CACE) fund allowed Government to address recommendations from the Auditor General of B.C.'s 2010 Report on Groundwater Management. Progress has included the installation of new observation wells, aquifer classification and data management and is described in an April 2012 progress report available through the OAG.

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ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	Water Pricing
Date: February 16, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 Government has concluded a comprehensive review of water pricing in BC and released a new water fee and rental schedule on February 5, 2015.
- Key message #2 Fees and rentals have been set to cover the cost of administering the new Water Sustainability Act including, for the first time ever, groundwater regulation.
- Key message #3 The new fees and rentals will come into effect in January 2016 when the new Water Sustainability Act is implemented.

CURRENT STATUS:

Key message #1:

- Initiated in March 2014, the review was guided by seven water pricing. principles and informed by extensive public comment on government's Pricing B.C.'s Water discussion paper.
- A consistent message in public feedback is that water is undervalued. Strong support
 was expressed for increasing water rates to better reflect the value of water to people,
 the environment and the economy.
- Government consulted with key user groups including agriculture, industry, local government and conservation organizations in Fall 2014. Revisions were made to the draft pricing proposal in response to these meetings.
- The new fee and rental rates took into consideration a review of water pricing in other jurisdictions.

Key message #2:

- Existing fees and rentals do not generate sufficient revenue to offset the cost of regulating groundwater or other new water management program costs.
- There was strong public support to sufficiently resource the new *Water Sustainability Act* to enable its full implementation.

Key message #3:

Beginning in 2016, all non-domestic users of groundwater will be required to pay an
application fee and an annual rental, in the same way that surface water users do
today. The application fee for existing groundwater users will be waived for the first
12 months following implementation of the Act.

This is the first update to the water fee and rental structure since 2006.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Under the Water Sustainability Act, surface water and groundwater will share the same pricing structure. The approach is based on the principle that surface and groundwater are interconnected and part of same hydrologic cycle.
- Domestic groundwater users will be exempt from licensing and paying fees and rentals.
- The new fees and rentals are designed to:
 - Generate sufficient revenue to recover the costs necessary to fully implement the Water Sustainability Act and associated programs;
 - Improve fairness and equity by charging fees and rentals for most groundwater uses and assigning the same rates for similar water uses;
 - Minimize increases to agriculture and aquaculture to help protect food security;
 - Accommodate lower increases for conservation and storage purposes in recognition of their positive ecological and recreational values;
 - Limit impacts to B.C.'s business competiveness.
 - Most British Columbians are connected to a municipal water system and pay a
 utility bill to their municipality, which holds the water licence. Households
 supplied by a municipal water system may see a s.13,s.1 increase in their annual
 water bill.
- Although some of the changes are significant for users of large volumes of water, about 88 percent of surface water users will see increases of \$100 or less and 77 percent of non-domestic groundwater users will pay \$250 or less.
- B.C. will continue to have among the lowest rates in Canada.

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ESTIMATES NOTE (2015) Confidential

Ministry of Environment

ISSUE TITLE:

Resources for WSA Implementation

Date: February 19, 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 New resources are required to implement the Water Sustainability Act (WSA) which is new work for government. \$25M over three years was identified in Budget 2015 for this purpose.
- Key message #2 After a comprehensive review, government announced new water fees and rentals on February 5, 2015 with a key goal of recovering the costs to implement the WSA.
- Key message #3 Implementation of the WSA will be undertaken by the Ministries of Environment and Forests Lands and Natural Resource Operations. Hiring new FTEs is planned in both ministries, with the majority in FLRNO.

CURRENT STATUS:

Key message #1:

- The WSA will result in new work for government requiring increased operating budgets and new FTEs to perform the work.
- Government has committed \$25M over three year for WSA implementation: \$5M in year 1, \$9M in year 2 and \$11M in year 3. Of this, MOE will receive \$1M annually and FLNRO will receive \$4M, \$8M and \$10M annually.
- The highest cost of implementation will be associated with the groundwater program (e.g. First Nations consultation, licensing existing groundwater users, knowledge management). Additional support will also be needed in developing operational policies and ongoing regulation development.
- As this is the first time government will formally manage groundwater, there is some catching up to do in bringing existing users under the licensing scheme and improving our knowledge base about groundwater. This large undertaking is expected to take at least 5 years.
- The comments during public and stakeholders engagement were that the WSA needs
 to be properly resourced if it is to be effective. This budget reflects that perspective
 and responds to what the financial needs are to begin the implementation of the this
 new Act.
- Effective implementation of the WSA is good for both the environment and the
 economy. The Act will help better manage water and the environment. This in turn will
 provide more certainty and security for the businesses and industries that rely on it.

Key message #2:

Initiated in March 2014, the pricing review was guided by seven water pricing

- principles and informed by extensive public comment on government's Pricing B.C.'s Water discussion paper.
- There was strong public support to sufficiently resource the new WSA to enable its full implementation.
- Existing fees and rentals do not generate sufficient revenue to offset the cost of regulating groundwater or other new water management program costs.

Key message #3:

- Responsibility for the provincial water program is shared between MOE and FLNRO.
 While the budgets are separate, staff across both ministries will be working closely together to transition British Columbia to the new Act.
- \$5M will be spent in 2015/16 to begin implementation of the WSA. Of this, operating costs are estimated at \$767,500 (see Table 1 below).
- New FTEs in both ministries will be hired primarily to support the new business associated with groundwater authorization and management. FTEs will be needed to process authorizations for 20,000 existing groundwater users and build knowledge about the groundwater resource.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Implementation of the WSA beginning in 2016 will include new work for government which will result in a need for new staff to process applications for new and existing non-domestic groundwater users and support this work.
- It is expected that at least 20,000 existing groundwater users will be transitioned into the licensing system once the new Act comes into force. A five-year transition period to license these users is expected.
- The phased approach to hire and deploy staff to implement the WSA is detailed in Table 2 below. MOE and FLNR anticipate hiring 86 staff by the end of fiscal year 2015/16 (6 in MOE and 80 in FLNRO).
- Hiring will be phased to manage deployment logistics and workload. New staff hired in MOE will support WSA implementation, in particular hydrogeologist support is needed for the groundwater program, policy analyst support is needed as regulation work and operational policies and procedures will continue throughout WSA implementation. As well, program operations require continuing support (e.g. Information Management, Information Technology).
- The majority of staff hired in FLNR will be processing authorizations for new and existing non-domestic groundwater users.
- The new fees and rentals are designed to generate sufficient revenue to recover the costs necessary to fully implement the WSA and associated programs as well as;
 - Improve fairness and equity by charging fees and rentals for most groundwater uses and assigning the same rates for similar water uses;
 - Minimize increases to agriculture and aquaculture to help protect food security;
 - Accommodate lower increases for conservation and storage purposes in recognition of their positive ecological and recreational values;
 - Limit impacts to B.C.'s business competiveness.

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



Table 1. Breakdown of WSA Operational Costs - 2015/16

Ministry of Forests Lands and Natural Resource	Operating	Description		
Operations	Costs			
Groundwater Licensing	\$301,000			
Vehicles	\$126,000	18 repurposed vehicles at \$7K each		
Office space & phones	\$45,000	To accommodate new allocation staff in Surrey; 12K for phone hook-up, 33K for office space.		
Human Resources	\$15,000 Training of allocation staff - FrontCounter BC and groundwater staff			
Data and Information Management	\$115,000	Amortization costs (\$65k) plus \$50k for system maintenance		
Stakeholder Consultation and Engagement	\$5,000	Engagement on regulation development - internal government workshops		
Total	\$306,000			
Ministry of Environment				
Groundwater Licensing	\$357,500			
Acquisition of Science Research	\$350,000	Contract funding for groundwater characterization and hydraulic connectivity studies		
Data Collection, Monitoring, and Reporting	\$7,500	Phase 2 GWPR implementation - train contractors to submit electronically		
Stakeholder Consultation and Engagement	\$89,000	Engagement on new groundwater licensing requirements and other new regulations		
Setting Environmental Requirements	\$15,000	Governance working group meetings		
Total	\$461,500			
Grand Total	\$767,500			

Table 2. Water Sustainability Act Implementation - FTE Count by Ministry/Program/Function - 2015/16

			PHASE (FTE Count)					DINO	
			I . II		III	IV		FUNDING	
Ministry/Program/Function	Position Title	Classification	Apr-June	July-Sept	Oct-Dec	Dec-Jan	Total	Transition	Permanent
ENV									
Groundwater Licensing									
Groundwater Information and Modelling	Hydrogeologist	LSO 3	1	2			3	0	3
Area based Management Tools									
Policy Analyst	Policy Analyst	STO 27	1	1			2	0	2
Water Program Operations									
IM/IT Systems	TBD	TBD	1				1	0	1
ENV Total FTE			3	3	0	0	6	0	6
FLNR									
Groundwater Licensing									
Groundwater Licensing and Modelling	Regional Hydrogeologist	LSO 3	1	1	0	4	6	0	6
Authorizing - transition existing groundwater use	Water Stewardship Technician*	STO 21	4	0	9	5	18	18	0
Authorizing - transition existing groundwater use	NR Specialist FCBC*	STO 21							
Authorizing - transition existing groundwater use	Client Service Assistant FCBC*	Clk 11							
Authorizing - new groundwater use	Water Stewardship Officer	STO 24	4	2	4.5	0	10.5	0	10.5
Billing and amendments	Revenue Clerk (CSNR)	Clk 11	0	0	2	3	5	3	2
FN consultation on water licensing decisions	FN Advisor	STO 24	4	2	9.5	11	26.5	23.5	3
Human Resources - Section Heads	Section Head	LSO 3	1	0	2	0	5	5	0
Environmental Flow Needs	Sr. Ecosystems Biologist	BIO 27	0	1	0	2	3	0	3
Area Based Management Tools									
Water Program Operations									
IM/IT Systems Class:	TBD	TBD	1	0	0	0	1	0	1
Groundwater observation well networks	Groundwater Protection Technician	STO 21	3	0	0	0	3	0	3
Verification and Enforcement	Compliance and Enforcement Officer	STO 24	0	0	2	0	2	0	2
FLNR Total FTE			18	6	29	25	80	49.5	30.5

* FTE split between authorizations and FCBC not determined



ESTIMATES NOTE 2015 Confidential

Ministry of Environment

Date: February 13, 2015

ISSUE TITLE:

Enforcement Reporting
Quarterly Environmental Enforcement
Summary (QEES) and the Environmental
Violations Database (EVD).

RETURN TO TOP

KEY MESSAGES

- Key message #1 B.C. is considered a national leader in its environmental enforcement reporting – in the breadth of what we report, the fact that we name names of violators, and the way it is available through a searchable database or PDF format reports.
- Key message #2 Our enforcement reporting demonstrates this government's commitment to transparency for achieving its environmental protection responsibilities.
- Key message #3 Ensuring compliance with environmental laws and regulations is one of the ministry's primary objectives, preventing damage before it occurs.
- Key message #4 The Ministry operates on the premise of compliance education, verification and enforcement – the goals are voluntary compliance, people knowing what the rules are, but when necessary enforcement is always an option.

CURRENT STATUS:

Key message #1

Quarterly Environmental Enforcement Summary (QEES)

- The Ministry of Environment (MoE) has been publishing the QEES since 2006. Its purpose is to improve transparency and to provide additional deterrence to those businesses and individuals subject to environmental laws.
- The QEES is published on the MoE website, and includes compliance and enforcement actions taken to prevent actual or potential impact to the environment, human health or safety.

Environmental Violations Database (EVD)

The EVD, which is also found on the MoE website, is an online searchable database
of all the data included in the QEES, dating back to 2006 (more than 19,000 entries).

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- Enforcement actions included in the QEES and EVD originate as follows: orders and administrative sanctions are provided by program staff in MoE and Ministry of Forests, Lands and Natural Resource Operations (MFLNRO); and tickets, court convictions and Community Environmental Justice Forums (CEJFs) are provided by Conservation Officers and Park Rangers in MoE.
- Since the realignment of responsibilities in the Natural Resource Sector in 2010,
 MoE leads the reporting of enforcement actions taken under authority of both MoE and portions of the MFLNRO legislation.
- The reporting covers violations ranging from hunting and fishing, open burning, mud bogging, dam safety, pesticide and pollution.

Stats and Trends -

- 2014 had the second highest number of tickets issued and the second highest ticket fines levied since 2007.
- 2014 also had the third highest number of administrative sanctions issued since 2007.

	2007	2008	2009	2010	2011	2012	2013	2014*
Orders	29	26	18	19	13	22	8	13
Administrative Sanctions	180	175	229	209	157	196	281	223
Tickets	2045	2099	1955	1721	1454	1955	2294	2203
Ticket Fines	\$357,343	\$402,621	\$346,192	\$336,485	\$301,594	\$403,052	\$473,138	\$452,030
Court Convictions	97	65	64	53	67	87	78	67
Court Penalties	\$314,434	\$297,268	\$803,822	\$166,191	\$684,814	\$497,785	\$411,008	\$397,714
Restorative Justice	0	0	0	2	2	1	0	2
RJ Penalties	\$0	\$0	\$0	\$44,500	\$335,000	\$250,000	\$0	\$28,000
Total Penalties	\$671,777	\$699,889	\$1,150,014	\$547,176	\$1,321,408	\$1,150,837	\$884,146	\$877,744

^{*} numbers for 2014 are preliminary and may increase when the 3rd and 4th quarter reports are published.

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

ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Overdue Fines Collection (Closing the Gap initiative)
Date: February 13, 2015	

RETURN TO TOP KEY MESSAGES

- Key message #1 B.C. is considered a national leader in its environmental enforcement reporting – both in the breadth of what we report, as well as the fact that we name names of violators.
- Key message #2 MoE expanded its public reporting in 2013 to include the Closing the Gap report which lists all individuals and business with overdue environmental court penalties.
 - a. This report is the first of its kind in North America.
- Key message #3 The purposes of publishing the Closing the Gap report are to:
 - > (1) improve transparency by providing information on overdue environmental court fines; and
 - > (2) provide, through the publication of the names of violators, an additional incentive for individuals and businesses to clear these debts.
- Key message #4 the Closing the Gap initiative has improved the rate of collection of court fines from 40% to 85% in one year. MoE has set a longer-term goal of 95% collection rate for all court fines.
- Efforts will continue to focus on strategies across the BC Government to improve the way fines are collected as a result of this project.

CURRENT STATUS:

Key message #1

- Closing the Gap on overdue environmental court fines is a multi-ministry project led by MoE, aimed at increasing the rate of environmental court fine payment to 95%.
 The project involved a two-pronged approach:
 - MoE publishes an updated report every 6 months: Closing the Gap: A Special Report on Overdue Environmental Court Penalties (2005-2013)

This report names all the businesses and individuals who have overdue environmental court penalties, the amount of the fine and the legislation under which the violation occurred.

Ministry of Finance launched a collections strategy focused on environmental court fines.

These focused collections activities included: Ministry of Finance's service provider, Revenue Services BC, increased attention to the files, leading to more success tracking down debtors, increased contact with the debtors, use of bank demand actions, property liens, and finally referral to the Canada Revenue Agency for seizure of tax returns and GST payments.

*Through the Ministry of Forests, Lands and Natural Resource Operations, individuals with valid licenses under the *Wildlife Act* who also possessed court penalties under the *Wildlife Act* were notified that their privileges were being immediately cancelled until payment was made.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The Closing the Gap report is available on MoE's public internet site.
- The report covers nine years: 2005 2013.
- The *Closing the Gap* report includes 4 business owing a total of \$54,525 and 135 individuals owing a total of \$346,223 in overdue environmental court penalties.
- All businesses and individuals who have overdue environmental court fines payable
 to the Province have been named. In the interest of complete transparency, even
 the names of dissolved companies were included in this report.
- Authority to publish the names is provided by the Ministry of Environment Act, section 6.1 to both the Minister of Environment and the Minister of Forest, Lands and Natural Resource Operations.

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

ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Roundtable on the Environment and the Economy
Date: February 3, 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 The Roundtable brings a variety of voices to the table to ensure we find the right balance between economic development and environmental protection.
- Key message #2 The Roundtable is a key forum for frank discussions on the economic and environmental priorities that are important to British Columbians.
- Key message #3 We are confident the Roundtable will help our government put in place the best policies to guide sustainable resource development in B.C.

CURRENT STATUS:

- The Roundtable is chaired by Peace River South MLA and Parliamentary Secretary of Energy, Literacy and the Environment, Mike Bernier.
- Sixteen stakeholders are participating.
- Meetings have been occurring every three to four months.
- 4 meetings have taken place so far on March 27, 2014, June 24, 2014, September 18, 2014, and January 27, 2015.
- Summaries of discussions are available on the Ministry of Environment website.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The Premier's June 10, 2013 mandate letter to Environment Minister Mary Polak asked her to "Create a new roundtable of representatives from communities, industry, labour, First Nations and the environmental sector to provide guidance on how to balance environmental protection with economic development."
- The Premier's June 10, 2014 mandate letter directed the Minister to continue the work of the Roundtable.

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

Appendix A: Members of the Roundtable on the Environment and the Economy

Chair: Mike Bernier, Peace River South MLA and Parliamentary Secretary of Energy, Literacy and the Environment

The following members represent agencies from five sectors:

Environment

Lisa Matthaus, Provincial Lead, Organizing for Change Al Martin, Director of Strategic Initiatives, BC Wildlife Federation Linda Hannah, Regional VP (BC Region), Nature Conservancy of Canada Matt Horne, Associate Regional Director for British Columbia, Pembina Institute

Industry

Greg D'Avignon, President and CEO, Business Council of BC
Brad Herald, Vice President, Western Canada Operations, Canadian Association of
Petroleum Producers
Karina Briño, President and CEO, Mining Association of BC
Stan Vander Waal, Vice Chair, BC Agriculture Council
James Gorman, President and CEO, Council of Forest Industries
Paul Kariya, Executive Director, Clean Energy BC

Communities

Gary MacIsaac, Executive Director, UBCM Luke Strimbold, Mayor of Burns Lake

First Nations

Shane Gottfriedson, Chief of the Tk'emlups te Secwépemc

Labour

Frank Everitt, President, United Steelworkers of BC
Philip Hochstein, President, Independent Contractors and Businesses Association
Irene Lanzinger, Secretary-Treasurer, BC Federation of Labour

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ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Parliamentary Secretary for Energy Literacy and the Environment for Minister Mary
Date: February 17, 2015	Polak

RETURN TO TOP KEY MESSAGES

Key message #1 –

- 1. The role of this position is to help promote the balance between energy development and use with protecting the environment so it remains front and center for government, opposition members, policy makers, industry and all British Columbians.
- 2. At times they can seem at odds, which is challenging since we value both in our pursuit of a rich quality of life.
- 3. We have to move beyond *one-or-the-other* positions and recognize that our management of the land base has to be designed such that both can thrive.
- Key message #2 Coming from Dawson Creek and now representing Peace River South, Mike Bernier is the right fit for this job. He has 20 years' experience in the energy industry and is a leader in one of the most critical regions in the province when it comes to energy development; he understands the importance of finding the right balance. His perspective and leadership in this role and his continued role as Chair of the Roundtable on Environment and Economy will be invaluable.
- Key message #3 An MLA who holds a ministerial or parliamentary office receives an additional salary for the additional work performed. This applies to MLAs regardless of their political party. Mike Bernier's additional salary is \$15,278.85 (on top of his base of \$101,859).

CURRENT STATUS:

Key Message #1

- There are numerous major energy projects proposed or already occurring in B.C.
- Energy projects strengthen our economy by (1) creating local high paying direct and indirect jobs, (2) bringing investment to B.C., and (3) providing revenue to government to continue to deliver health and education services, among others.
- Beyond the above economic benefits, the energy products B.C. produces are
 essential to the lives of British Columbians; they fuel our vehicles, heat our homes,
 and ensure the global supply chain for which we rely on for so much of our food and
 consumer products has the fuel it needs to continue operating.
- Projects that have the right balance where there are meaningful economic benefits and relatively small or meaningfully mitigated environmental impacts require the support of this Parliamentary Secretary to make the case why B.C. needs them.

 There is a huge amount of misinformation about both the potential benefits and negative impacts of major energy projects and the Government of British Columbia wants to use this Parliamentary Secretary position to serve as a referee – and try and separate the facts from the fiction.

Key message #3

- All MLAs receive a basic compensation of \$101,859. Parliamentary Secretaries receive an additional 15% of their basic compensation amounting to an additional \$15,278.85.
- Those that hold a ministerial or parliamentary office such as a Parliamentary Secretary – receive an additional salary that corresponds to a percentage of the basic compensation.
- This is true for MLAs from all political parties even if they are not in Government.
 Examples of additional salaries provided are: Premier (+90%), Minister (+50%),
 Leader Official Opposition (+50%), Government Whip (+20%), Official Opposition House Leader (+20%), and Chair of Select Standing or Special Committee (+15%).
- These rules are established under the Members' Remuneration and Pensions Act.

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

ESTIMATES NOTE 2015 Confidential	ISSUE TITLE:
Ministry of Environment	Mandate Letter
Date: February 17, 2015	

RETURN TO TOP KEY MESSAGES

Key message #1 – The Ministry of Environment is on track to meet all the commitments outlined in the Mandate letter.

CURRENT STATUS:

Key message #1

- The Ministry of Environment is on track to meet all the commitments outlined in the Mandate letter. Progress on each of the 10 commitments is outlined below.
- Balance your ministerial budget in order to control spending and ensure an overall balanced budget for the province of British Columbia.
 - Both ENV and EAO are on target for a balanced ministerial budget.
- Implement the Water Sustainability Act that was passed by the Legislature and complete final consultations on water rates.
 - The Water Sustainability Act will be brought into effect in spring 2015 following the development and completion of supporting regulations. To support B.C.'s modernized water legislation a new fees and rental schedule for users has been introduced.
 - Extensive public consultation, including with user groups, helped to determine
 the new rate structure. In March 2014, the Ministry of Environment released a
 discussion paper on water pricing which generated over 130 submissions and
 comments from the public and user groups.
 - This is the first update to the water fee and rental structure since 2006. B.C.'s new rental rates range from \$0.02 to \$2.25 per 1000 m3 and will be among the lowest in the country, taking effect in 2016.
- Work with the Ministry of Natural Gas Development to develop criteria and standards for emissions for Liquefied Natural Gas projects in British Columbia.
 - On October 20, 2014, B.C. introduced legislation (<u>Greenhouse Gas Industrial Reporting and Control Act</u>) for the management of greenhouse gas (GHG) emissions from the province's burgeoning liquefied natural gas (LNG) industry.
 - This legislation will ensure that B.C. has the cleanest LNG facilities in the world by establishing GHG emissions intensity benchmark of 0.16 carbon dioxide equivalent (CO2e) per tonne of LNG produced. This greenhouse gas emissions intensity benchmark is lower than any other LNG facility in the world.

 Companies have flexible options to reach this world-leading benchmark, including purchasing offsets and contributing to a technology fund. Investments from both offsets and the technology fund will be used to further reduce GHG emissions in the natural gas and other sectors in B.C.

Complete the land-based heavy oil spill response studies in order to assist with our five conditions for supporting heavy oil pipelines in British Columbia.

- In reviewing options to strengthen B.C.'s spill preparedness and response
 policies and capacity, the Province has undertaken extensive consultation with
 industry, First Nations, the federal government, local governments and
 environmental non-governmental organizations.
- To date, the Ministry has released two policy intentions papers as well as summary of comments received on the second intentions paper prepared by a third-party contractor.
- Based on these consultations, the Ministry continues to examine options for legislative and regulatory changes to improve land-based spill preparedness and response in B.C.

5. Participate in the Kinder Morgan Trans Mountain Pipeline Expansion environmental review.

- B.C. continues to participate as an intervener in the National Energy Board led review of the Trans Mountain Expansion Project (TMEP) to actively represent the interests of British Columbians.
- To date, the Province has submitted over 120 information requests dealing with marine and land-based spill response, prevention and recovery.
- As the review process for TMEP is constantly evolving, provincial staff continue
 to evaluate materials provided by the proponent to ensure this project meets the
 highest standards of environmental protection and protects British Columbians
 from financial and environmental risk, if it does proceed.
- Any heavy oil pipeline project must satisfy B.C.'s five conditions before the Province will support it.

Work with the Ministries of Energy and Mines and Aboriginal Relations and Reconciliation to potentially develop a provincially designated protected area in the Klappan.

- Government is working with the Tahltan Nation to consider what activities are appropriate in the Klappans.13,s.16 s.13,s.16
- In December 2014, the Province and the Tahltan Nation released the Klappan Strategic Initiative technical report. Public input was sought on the process outlined in the report until February 16, 2015.
- The Province has also issued a temporary order under Section 7 of the
 Environment and Land Use Act to extend the deferral of decisions on permits and
 permit amendments on existing coal tenures in an area of the Klappan until
 March 31, 2015, as well as on new coal tenures in the Klappan until December 1,
 2015.

- Work with the MLA for Peace River South and his provincial roundtable on improving environmental protection and economic development in British Columbia.
 - The Roundtable on the Environment and the Economy continues to provide an
 opportunity for stakeholder groups to work with B.C. to ensure environmental
 policy priorities strike a balance between economic development and
 environmental protection.
 - Sixteen stakeholders are participating on the roundtable, representing a diverse range of views and interests including communities, industry, labour, First Nations and the environmental sector.
 - The roundtable has met four times since March, 2014. The last roundtable meeting took place on January 27, 2015.
- Work with the Ministry of Forests, Lands and Natural Resource Operations to review and make recommendations on B.C.'s Caribou protection and recovery strategies.
 - The Ministry continues to work with FLNRO to review and make recommendations on B.C.'s Caribou protection and recovery strategies.
 - Recently, FLNRO announced it is taking immediate action to save caribou herds under threat from wolf predation in two separate and targeted wolf culls: one in the South Selkirk Mountains and the other in the South Peace.
 - The operational plans for both the Selkirks and South Peace have been independently peer-reviewed.
 - Habitat recovery continues to be an important part of caribou recovery, but cannot address the critical needs of these herds in the short term.
- Work with the Ministry of Jobs, Tourism and Skills Training to deliver on our Growing Green Jobs plan to ensure resource sector growth spurs green technology innovation.
 - In September 2014, the Province released the B.C. Jobs Plan 3-Year Progress
 Update which renewed the focus on strategic priorities to grow the economy and
 create long-term, well-paying jobs that strengthen families and communities.
 - The Jobs Plan strengthens B.C.'s unique competitive advantages and sets targets to help drive new investment and economic growth, which supports job creation across sectors including technology and the Green Economy.
- 10. Work with stakeholders to ensure a successful transition from a taxpayerfunded recycling system to an industry-funded recycling regime.
 - In 2014, B.C. transitioned from a taxpayer funded recycling system to an
 industry-funded recycling regime to ensure businesses supplying packaging and
 printed paper are responsible for collecting and recycling their products. This
 concept is known as Extended Producer Responsibility which provides a financial
 incentive for companies to reduce packaging and printed paper wherever
 possible.

- Under B.C.'s Recycling Regulation, producers must comply with an approved stewardship plan. To date, the only stewardship plan granted approval by the Province is from the stewardship agency Multi-Material British Columbia.
- In order to ensure this transition does not create a burden for small businesses, the Province has created criteria to exempt these businesses from the reporting or recycling costs.

BACKGROUND:

- The Minister received the mandate letter on June 10, 2014. The mandate letter outlines 10 initiatives to be accomplished by the Ministry in the following year.
- Further information on individual initiatives in the mandate letter can be found in information notes in this binder.

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

ESTIMATES NOTE 2015 Confidential Ministry of Environment Date: February 17, 2015 ISSUE TITLE: Implications of the Williams Case (Tsilhqot'in Nation v. BC)

RETURN TO TOP KEY MESSAGES

- Key message #1 The Williams decision provides greater clarity both on Aboriginal title and rights, and on the Province's rights and responsibilities.
- Key message #2 The Tsilhqot'in Nation is the only Aboriginal group to have a proven title claim in BC.
- Key message #3 The Crown may only authorize actions or decisions on the land when consent of the Aboriginal title holding group is granted, or when a justification analysis is met.¹
- Key Message #4 BC continues to take into account the new direction provided by the court on Aboriginal title.

CURRENT STATUS:

Key message #1

- BC continues to uphold the duty to consult on behalf of the Crown.
- The Tsilhqot'in decision re-enforces and validates BC's commitment to avoid confrontation through negotiated settlements with First Nations.
- We are confident that the strong relationships we've established with First Nations and with industry will allow us to work through the implications of the decision in a way that continues to benefit First Nations and all British Columbians.
- Since 2006, we have reached more than 200 agreements with First Nations, both through the treaty process and other agreements such as revenue-sharing agreements, which can serve as building blocks towards full reconciliation.

Key message #2

 At this time, the declaration of proven Aboriginal title only applies to the Tsilhqot'in Nation. No other Aboriginal group in British Columbia (or Canada) currently has a court declaration of Aboriginal title.

¹ There are three components of the justification analysis: 1) the duty to consult and accommodate was adequately fulfilled; 2) the action/decision on the land is backed by a compelling and substantial objective; and, 3) the action/decision is consistent with the Crown's fiduciary duty to the Aboriginal title holding group.

- Aboriginal title cannot be disposed of, except to the Crown, and cannot be used in a way that would prevent future generations from using or enjoying the land. However, land use is not confined to uses and customs of pre-sovereignty times; land can be used in modern ways.
- s.13,s.14,s.16

Key message #3

- The Crown retains an underlying title to the Aboriginal title land, which is all that is left after the Aboriginal title rights are subtracted from the land.
- The Crown may only authorize actions or decisions on the land when consent of the Aboriginal title holding group is granted, or when a justification analysis is met.

Key message #4

- BC continues to take into account the new direction provided by the court on Aboriginal title.
- In some Provincial legislation, the definition of "Crown Land" refers to land "vested in the government". This definition would not apply to Aboriginal title land which is vested in the Aboriginal group. As a result, some statutes do not currently apply (e.g. Forestry Act).
- The Williams decision did not address Aboriginal title on privately owned or submerged lands.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In 2007, a trial judge found the Tsilhqot'in Nation (TN) had rights to hunt, fish, and trap in the claim area. The trial judge found TN has proven title to ~40% of the area, but did not declare title as it could not be applied to the whole area. The trial judge also struck down Provincial forestry permits, ruling that BC's forestry management practices unjustifiably infringed the TN's Aboriginal rights in the claim area. The trial commenced in 2002 and spanned 339 days over 5 years.
- In 2012, the Provincial Court of Appeal upheld the trial judge's ruling that the forestry
 permits infringed Tsilhqot'in Nation's aboriginal rights. However, the appeal judge
 differed on the issue of title ruling that title cannot be applied to broad areas such as
 hunting or trapping grounds, but only to very specific sites that have been intensively
 used.

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

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10	Service Delivery Costs				
11	Attendance and Revenue				
12	Discover Camping Program				
13	Website and Marketing				
14	Parks Recreation Integrated Service Delivery Model (PRISM)				
15	Interpretive Program				
16	Partnership and Donation Strategy				
17	Park Act Amendment and Park Authorizations				
PARKS I	PLANNING AND MANAGEMENT				
18	Southern Strait of Georgia National Marine Conservation Area Reserve Feasibility Assessment				
19	South Okanagan – Lower Similkameen National Park Reserve Feasibility Assessment				
20	System Growth and Land Acquisition				
21	Boundary Amendments				
22	Energy Corridors				
REGION	NAL OPERATIONS				
23	Halkett Bay Artificial Reef				
24	Haynes Point				
25	Sechelt Longhouses				
26	Peace Arch Park – Semiahmoo				
27	Volunteer Strategy				
28	Ski Hill Policy Development				
29	<u>Klappan</u>				

ESTIMATES NOTE (2015) Confidential

ISSUE TITLE:

Ministry of Environment

BC Parks Budget Overview

Date: February 2015

RETURN TO TOP KEY MESSAGES:

Key message #1 - The 2015/16 BC Parks estimated operating budget is \$31.751M, which is the same as 2014/15.

Key Message #2 – BC Parks will continue to receive \$329K in 15/16 as in 14/15 to ensure capacity to undertake the necessary due diligence and impact assessment of any LNG proposals that may affect parks and protected areas.

Key message #3 – Capital investment in BC Parks facilities remain at \$13.98M for 2015/16, same amount as in 2014/15. A 27% increase over the 2011/2012 budget.

Key message #4 – The highest priority business needs have been identified and will be addressed.

CURRENT STATUS:

Key message #1 & #2:

- BC Parks estimated operating budget of \$31.751M includes an increase of \$329K over 2013/14.
- The \$329K increase in 2014/15 and 2015/16 ensures capacity to undertake the necessary due diligence and impact assessment of any LNG proposals that may affect parks and protected areas.
- 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. Encorp Pacific, Mountain Equipment Co-op, and individual donors).

Key message #3:

- The \$13.98M for capital infrastructure 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;
 - o Offer new recreation opportunities;
 - Increase revenue and attendance;
 - o Improve accessibility with new park furniture and easier to use facilities;
 - Modernize appearance;
 - Ensure investments are integral to natural and cultural values;
 - o Ensure investments highlight the uniqueness of the park; and to
 - Lower operating costs.

Key message #4:

- 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 five years, and there will be no service
 reductions in 2015/16.
- 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.
- The division is continuing to look at ways to improve service delivery mechanisms that will lower administrative costs and eliminate inefficiencies.
 - A LEAN initiative is being implemented 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
 - o 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: Jim Standen, Assistant Deputy Minister, BC Parks and Conservation Officer Division, (250) 387-1288.

ESTIMATES NOTE (2015) Confidential

ISSUE TITLE:

Ministry of Environment

Park Enhancement Fund

Date: February 2015

RETURN TO TOP 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.

CURRENT STATUS:

Key message #1:

- From April 1, 2014 to January 31, 2015, the PEF brought in almost \$1.8 million. The
 majority of this was from the Discover Camping Reservation Service (\$1.6 million). The
 remainder was received from partnerships, donations, interest payments and protected
 areas stumpage.
- From its establishment in 2008 to January 2015, the PEF has received almost \$10.8 million for parks and protected areas in BC. Table 1 shows the income and expenditures from 2008 to January 31, 2015 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).

Table 1: PEF Income and Expenditures

Category	Income	Expenditures
Directed partnerships & sponsorships	\$2,072,435	\$1,184,364
Seed money, interest, merchandising & other	\$246,511	\$1,138,861*
Discover Camping Reservation Service	\$7,925,700	\$4,801,357
Stumpage	\$543,998	\$188,986
TOTAL	\$10,788,644	\$7,313,567

*Includes Community Engagement projects.

- The following bullets are examples of some of the larger projects and financial contributions made possible because of PEF:
 - Approximately \$250,000 was received from an anonymous donor to fund a significant trail upgrade in Garibaldi Provincial Park.
 - 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.
 - Encorp Pacific Ltd. has partnered with BC Parks since 2009 to install approximately 60 bear-proof recycling bins every year in parks across the Province. To date, over 250 bins have been installed, worth an estimated \$320,000.
 - 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.
 - Donations totalling \$100,000 received by Nyrstar mine to be invested into Strathcona 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.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The majority of the expenditures in PEF are for the operating contract regarding the Discover Camping Reservation Service.
- Due to the increasing popularity of the Discover Camping Reservation Service, reservation numbers are increasing on an annual basis. The increase in reservations (transactions) is generating increased income from the Discover Camping Reservation Service but also results in increased expenses as the service provider is paid based on the number of transactions processed.

Service transaction	Charge (plus tax)
Reservation	1 night =\$6.00
	2 nights=\$12.00
	3 or more nights=\$18.00
Change or Cancellation	\$6.00
Call centre	\$5.00 surcharge

Table 2: PEF Income and Expenditures Estimates 2015/16

Category	Income	Expenditures
Directed partnerships & sponsorships	\$360,000	\$320,000
Seed money, interest, merchandising & other	\$30,000	\$370,000
Discover Camping Reservation Service	\$1,500,000	\$1,100,000
Stumpage	\$10,000	\$10,000
TOTAL	\$1,900,000	\$1,800,000

- 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.
 - As of December 2009, PEF was also responsible for revenue from the Discover Camping Reservation system, and related contract costs for operations and maintenance (previously managed by Tourism BC).

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

ESTIMATES NOTE (2015) Confidential

ISSUE TITLE:

Ministry of Environment

BC Parks Program Overview

Date: February 2015

RETURN TO TOP 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 – British Columbia has one of the largest protected areas systems in North America, and has continued to add to it over the past decade.

Key message #4 – BC Parks operating budget remains steady in 2015/16 at \$31.751 million and its capital budget increased since 2011/12 by 27% to \$13.98 million.

Key message #5 – For 2015/16 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

2009	2010	2011	2012	2013
9,447,413	9,541,366	9,595,051	9,193,538	8,595,154

Source: Ontario Parks Statistics.

Parks Canada – Attendance

2009-10	2010-11	2011-12	2012-13	2013-14
12,282,172	12,548,933	12,529,627	12,722,828	12,723,434

Source: Parks Canada Attendance 20009-10 to 2013-14.

- 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, leading to increased use of the reservation system.

Key message #3:

- Since 2001, more than 2.3 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, 6 ecological reserves and 3 protected areas.
- There are 1029 parks, conservancies, ecological reserves and protected areas across British Columbia managed by BC Parks, covering just over 14 million hectares or 14.4% of the provincial land base.
- British Columbia has one of the largest protected areas systems in North America.
- 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 operating budget remains stable at \$31.751 million. In addition there is a \$13.98 million allocation for land improvement (capital facilities).

Key message #5:

- Park Ranger numbers have remained the same for the past four 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: Jim Standen, Assistant Deputy Minister, BC Parks and COS, (250) 356-1288
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ESTIMATES NOTE (2015) Confidential Ministry of Environment BC Parks Quick Facts Date: February 2015

RETURN TO TOP 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 February 1, 2015, there are 1,029 parks, conservancies, ecological reserves, recreation areas and protected areas covering approximately 14.4% or about 14 million hectares or about 140,000 km², managed by BC Parks.

Key message #3 – BC Parks has initiated or completed conservation risk assessments in 985 parks and protected areas.

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 6 Reconciliation Protocol Agreements, bringing the number of strategic agreements to 49.

Key message #5 - Over 300 parks offer facilities for recreation.

Key message #6 – Frontcountry park operations are delivered under contract by Park Operators.

Key message #7 – BC Parks' Discover Camping™ system features reservations for 99 frontcountry parks and registration for 28 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 1,029 figure only includes areas managed by BC Parks.
- There are presently:
 - o 643 Provincial Parks, covering 10,493,980 ha or 104,939 km²

- o 156 Conservancies, covering 2,998,507 ha or 29,985 km²
- o 2 Recreation Areas covering 5,929 ha or 59 km²
- o 148 Ecological Reserves, encompassing 160,452 ha or 1,604 km²
- o 80 Protected Areas covering 383,828 ha or 3,838 km²

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.

Key message #4:

 The Ministry values strong relationships with First Nations regarding the management of protected areas. BC Parks is now directly involved with 49 strategic agreements: 37 collaborative management agreements and 12 broader strategic engagement agreements and/or reconciliation protocols.

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.
- 39 group campgrounds and picnic areas that can be reserved.
- 126 boat launch areas.
- Approximately 6,000 kilometers of hiking trails.

Key message #6:

- 32 Park Operators manage 46 "bundles" (which include 225 parks) under contract with BC Parks.
- Approximately 40 additional parks are operated under individual contracts.
- The direct cost of providing contracted park services across the province is currently \$24 million per year.

Key message #7:

- Over 133,000 reservations were made in the 2014 camping season in 95 provincial parks.
- 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 28 backcountry and marine parks prior to visiting these sites.
- 75% of reservations made through DC, originated from British Columbia.

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 one of the largest parks and protected areas systems in North America.
- BC Parks in 2012/13 had attendance of 20.8 million. The 2013/14 attendance is projected to be similar.
- Attendance trends in other jurisdictions are presented below:

Ontario Parks - Attendance

2009	2010	2011	2012	2013
9,447,413	9,541,366	9,595,051	9,193,538	8,595,154

Source: Ontario Parks Statistics

Parks Canada - Attendance

2009-10	2010-11	2011-12	2012-13	2013-14
12,282,172	12,548,933	12,529,627	12,722,828	12,723,434

Source: Parks Canada Attendance 2009-10 to 2013-14.

- 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: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential Ministry of Environment ISSUE TITLE: Economic Contribution of BC Parks

RETURN TO TOP KEY MESSAGES:

Date: February 2015

- 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 showed that \$47 million in 2009/10 operating and capital expenditures (excludes amortization) by BC Parks and Park 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 \$47 million 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.
- BC Parks manages one of the largest parks and protected areas systems in North America.
 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 (CPC) 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: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential

Ministry of Environment

ISSUE TITLE:

BC Parks Annual Report and Annual Statistics Report 2013/14

Date: February 2015

RETURN TO TOP 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 2013/14 fiscal year and were released in January 2015. The 2014/15 fiscal year reports will be released in the fall of 2015.

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: Jim Standen, Assistant Deputy Minister, BC Parks and Conservation Officer Service Division, (250) 387-1288

ESTIMATES NOTE (2015) Confidential

ISSUE TITLE:

Ministry of Environment

BC Parks Staffing Levels: Park Rangers (FTEs)

Date: February 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 In 2015/16 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 in the last four fiscal years.
- 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 2015/16.

Number of BC Parks Positions with Park Ranger Authority - 1999/00 to 2015/16

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	14/15
Seasonal	144	87	87	87	87	87	87
Keg ular	15/76	78	77	77	77	77	77
Setas Ornangers	227	165	164	164	164	164	164
Regular	77						
Total Rangers	164						

*Estimated number of seasonal rangers for 2015/16

- 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 deliver core field oriented programs and services within the 1,029 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 2015/16. Number of BC Parks Positions with Park Ranger Authority - 2015/16

Staffing Position	Regular Positions	Seasonal Positions	Total Positions
PPA Section Head	11	0	11
Area Supervisor	47	0	47
Senior Park Ranger	10	29 Est.	39
Park Ranger	0	58 Est.	58
Other Positions	9	0	9
Final Total	77 Positions	87 Positions	164
			Positions

^{*}Note: No reduction in Park Rangers positions for 2015/16.

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, Regional Operations Branch, (250) 356-9241

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^{*}Est. = Estimated number of seasonal Park Rangers for 2015/16.

ESTIMATES NOTE (2015) Confidential

Ministry of Environment

Date: February 2015

ISSUE TITLE:

BC Parks Capital Investment Strategy 2015/16

RETURN TO TOP 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 2015/16. Over the past five years, BC Parks has invested approximately \$60 million in facilities. 2015/16 will see approximately 108 projects in 83 parks.
- 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 asset 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 projects that 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 forecast % regional breakdown for funding is as follows:

Region	Capital Budget %	Capital Costs
		\$
Kootenay/Okanagan (KO)	35	\$4.86 M
Thompson/Cariboo (TC)	14	\$1.99 M
Northern (Skeena, Peace, Omenica) (N)	17	\$2.36 M
West Coast (Vancouver Island, Haida	16	\$2.27 M
Gwaii) (WC)		
South Coast (Lower Mainland, Sunshine	18	\$2.51 M
Coast) (SC)		

The following table provides further details for what is forecast for 2015/16. The table's four categories will see a total investment of \$13.98 million. However, given the nature of construction planning and schedules, and in particular visitor health and safety concerns arising from unforeseen natural events, the actual budget percentage invested in any one category may vary from forecast.

Projects' Investment Priority	% of Projects	Capital Budget %	Capital Costs \$
Renovating central facilities	31	25	\$3.44 M
Restoring/upgrading high revenue parks	31	46	\$6.44 M
Addressing risks to visitors and cultural values	23	19	\$2.72M
Drinking water requirements	15	10	\$1.38 M
Totals	100	100	\$13.98 M

Key message #2:

In progress or recently completed projects include:

- Miracle Beach (WC): A multi year \$1,200,000 project that will see a
 reconstructed campground and group site roads and water system upgrades and
 a new gatehouse.
- Mount Robson (NR): A forecast \$350,000 project will see investments to upgrade the interior of the visitor centre and refresh the exterior.
- **Tweedsmuir (TC):** \$528,000 replacement of campground shelter and water systems upgrade.
- McDonald Creek (KO): \$1,500,000 funded the expansion of the campground including 18 new electrified campsites, accessible picnic tables, a new toilet shower building and more trails linking existing campground loops.
- The park has seen substantial improvements for the past three years.
- Okanagan Lake Park (KO): \$1,500,000 multi year project investing in upgrading the campgrounds, replacing the toilet shower buildings and furniture for accessibility.
- Cultus Lake Park (SC): A \$1,600,000 forecast multi –year investment in a new 40 site accessible campground with cabins and a toilet shower building.
- Multiple Parks in the Skeena (N): \$300,000 multi-year project to invest in accessibility with furniture and path of travel improvements.
- Juniper Beach (TC): \$857,000 funded the reconstruction and upgrade of sanitary and electrical infrastructure and for the interpretive materials to honour First Nations traditional territory and burial site discovered.
- **Smelt Bay (WC):** \$715,000 funded the campground refurbishments, including toilets, park furniture, connecting trails and communal cooking shelter.
- Alice Lake Park (SC): \$760,000 funded to increase the toilet shower capacity

and provide accessibility to lakeshore and trails campsites including upgrade to park furniture such as accessible picnic tables.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 2015 ISSUE TITLE: Recreation User Fees

RETURN TO TOP KEY MESSAGES:

- Key message #1 In 2015, there will be a \$3 to \$5 per night increase in 50 select front-country campgrounds; in addition, there will be a general \$2 per night increase in an additional 140 front-country campgrounds.
- Key message #2 The "family" rate for Elfin Cabin at Garibaldi Provincial Park will be substituted by a discounted per child rate to better represent parks regulation while simultaneously maintaining affordability for families.
- Key message #3 Recreation user fees pay only about 76% of the costs of direct park operations (Park Operator contracts).

CURRENT STATUS:

Key message #1:

- Fifty of the most popular front-country camping opportunities were approved for a \$3 to \$5
 per night increase. The additional revenue from these increases will be used to maintain
 high levels of visitor services and to contribute to the consolidated revenue fund.
- The majority of other front-country camping opportunities were approved for a \$2 per night increase across all regions in the province.
- In accordance with BC Park's agreements with Park Operators, fees are retained by the
 operators as compensation for their services. Where fees are not sufficient to cover the
 agreed costs, a deficiency payment is payable to the operator. These fee increases will
 result in a reduction in those deficiency payments, thereby providing a direct benefit to the
 BC Parks operating budget.
- The additional fee revenue resulting from these fee increases is projected to be \$1.9 million per year.
 - \$1.9 mill is total additional earned revenue from fee changes.
 - \$1.3 mill is estimated total reduction in deficiency payments (this is the number used in the January 2015 news release.)

Key message #2:

- Because "family" is not currently defined in BC Parks' Recreation User Fee Regulation, the family rate at Garibaldi – Elfin Cabin will be substituted with a per child fee of \$10/child/night (adult rate remains unchanged at \$15/adult/night).
- This change in the "family" rate initiates a larger review of BC Parks' backcountry fee structure.

Key message #3:

 The annual cost of providing contracted park services across the province is estimated to be about \$24 million in 2014/15. BC Parks is estimated to have earned \$18.4 million in recreation user fee revenues, the majority of which was retained by Park Operators to help fund visitor services in campgrounds and day use areas. The remainder was paid into the Consolidated Revenue Fund.

• In 2014/15, approximately \$5.7 million of BC Parks' vote allocation is assigned towards additional maintenance costs and contract costs (called deficiency payments).

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- In 2007 Treasury Board approved new flexible fee authorities for BC Parks. These fee
 flexibilities allow the Minister of Environment to set recreation user fees within ranges
 approved by Treasury Board and to set new prices for merchandise sales (e.g. maps, logo
 wear, etc.) as required based on costs and market values.
- 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 and community groups who operate and manage the parks.
- Fee change requests are reported by business cases which are due at the end of October every year and which consider service levels, public response, projected attendance and revenue changes, as well as private sector comparables.
- 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.
- 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.
- Decisions regarding any fee changes are made by the Minister in December of the preceding year to ensure the public is aware of any fee increases in advance of reservations being made in the next camping season.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 2015 ISSUE TITLE: BC Parks Service Delivery Costs

RETURN TO TOP KEY MESSAGES:

Key message #1 – BC Parks' visitor services are largely provided under contract by Park Operators (POs).

Key message #2 – The direct cost of providing contracted park services across the province is currently \$24 million per year.

Key message #3 – There has been no reduction in service levels in the past four years.

CURRENT STATUS:

Key message #1:

- Since the mid-1980s, BC Parks' front-country campgrounds have operated under contract.
 To recognize efficiencies, BC Parks has entered into long-term agreements (10-year or 3-year) with 32 businesses to operate most front-country campgrounds and day use areas (46 bundles containing 225 parks). An additional approximately 40 parks are managed under individual contracts.
- Park Operators (POs) 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.
- The approved Fee Increase in January 2015 requires financial negotiations to allocate the increased revenues in 177 Parks.

Key message #2:

- The annual cost of providing contracted park services across the province was approximately \$24 million in 2014/15. BC Parks is estimated to have earned \$18.4 million in recreation user fees and \$18.3 million of this revenue was retained by POs to help fund visitor services in campgrounds and day use areas. The remainder was paid into the Consolidated Revenue Fund.
- BC Parks pays approximately \$5.7 million in additional contract costs (called deficiency payments) out of their vote allocation.

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 4 years and nothing for 2014/15.

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.
- 75% of the park operating contracts expired in 2014. The Parks Recreation Integrated Service Model (PRISM) transformation project publically tendered and awarded a new set of contracts, drafted using a more efficient and effective recreation service delivery model.

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ISSUE TITLE:

Ministry of Environment

BC Parks Attendance and Revenue

Date: February 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 BC Parks' 2014/15 overall attendance is projected to be over 21 million visits approximately the same number of visits as last year.
- Key message #2 BC Parks 2014/15 net Recreation User Fee revenues are projected to be \$18.4 million, an increase of approximately 8% over 2013/14.

CURRENT STATUS:

Key message #1:

- Day use attendance is estimated to be approximately 18.3 million visits, a slight decline from 2013/14.
- Camping attendance is estimated to be approximately 2.6 million visits, a 5 percent increase from 2013/14.

BC Parks Visits	2013/14	2014/15* (estimates)	% change
Day Use	18,692,209	18,312,764	-2%
Camping	2,448,344	2,571,699	5%
Marine	166,513	192,225	15%
Total Attendance	21,307,066	21,076,688	-1%

^{*} Estimates only. Final attendance and revenue data will be available in the fall of 2015.

Key message #2:

 BC Parks net recreation user fee revenue is projected to be approximately \$18.4 million, an increase of 8% compared to 2013/14.

^{*} Day use is not down relative to long-term levels/trends. It is just down relative to 2013/14, For comparison – 2011/12 day use was about 16.8 million visits; 2012/13 was 18.2 million visits. Even though 2014/15 is not as high as 2013/14, it is still estimated to be higher than 2012/13 and 2011/12.

^{*} Day use is expected to fluctuate a bit year to year. A 2% drop from last year can be explained merely by regular annual fluctuations.

 The increase can be attributed to higher camping attendance and fee increases in some high attendance campgrounds.

Net Recreation User Fee revenue	2013/14	2014/15 (estimates)	% change
Day Use	\$133,712	\$152,000	14%
Camping	\$16,736,838	\$17,988,000	7%
Marine	\$257,626	\$297,000	15%
Total Net Revenue	\$17,128,176	\$18,437,000	8%

^{*}Estimates only. Final attendance and revenue data will be available in the fall of 2015.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The new attendance and revenue system (implemented in 2012) has improved 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: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 2015 ISSUE TITLE: Discover Camping Program ™ (DC)

RETURN TO TOP KEY MESSAGES:

Key message #1 – The BC Parks Discover Camping™ reservation service features reservations for 99 BC Parks, in 115 front-country campgrounds.

Key message #2 – The BC Parks Discover Camping registration system allows for permit registrations in 28 backcountry parks.

Key message #3 – The Discover Camping Program is set up as user-pay system and is not subsidized by taxpayers.

Key message #4 – 75% of reservations made in 2014, originated from British Columbia

CURRENT STATUS:

Key message #1:

- In 2014, over 133,000 reservations were made, which represents a 9.6% increase from 2013, a year which saw over 119,000 reservations.
- The majority of reservations are made online (94%), while 6% are made through the call centre.
- The DC Program handled over half (\$9.9 M) or over 56% of the total User (camping) Fees collected by BC Parks (\$18 M in 2014).
- There are over 5,200 individual sites available for reservations including: frontcountry campsites, groupsites, and cabins.
- Transaction (reservation) charges have remained at 1996 pricing.
- New additions to DC for 2015: Summit Lake, Juniper Lake, Whiskers Point, Kootenay Lake (Davis Lake) Provincial Parks and Robson River and Kentucky Alleyne frontcountry campgrounds.

Key message #2:

- The DC Backcountry Registration System was introduced in 2011.
- Since 2011, over 10,000 permits have been sold online through the DC Backcountry registration system, generating over \$454,000 in revenue.
- There were no new additions for 2015. New additions to the Backcountry Registration system for 2014 included: Desolation Sound (which includes Copeland Island, Malaspina and Roscoe Bay provincial parks) and Joffre Lakes Provincial Park.

Key message #3:

- Discover Camping transaction service charges pay for maintenance and enhancements to the program, and the program is not subsidized by taxpayers.
- Discover Camping offers customers peace of mind that a campsite that will meet their needs, is waiting for them when they arrive in the park.

- Up to 3 reservations can be made in one transaction (shopping cart model).
- Additional revenue from DC is reinvested into BC Parks through the Park Enhancement Fund.
- Approximately 50% of BC Parks campsites are still First-come, First-served (drop in)
- Discover Camping reservation charges remain at 1996 pricing.

Key message #4:

- 75% of the reservations made, originated from B.C.
- The second highest DC customer originates from Alberta (13.6%)
- The remaining reservations are made from: the USA (3.2 %), the rest of Canada (2.7%) and the remaining 5% are from overseas (top 5: Germany, Switzerland, Netherlands, UK and France)

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The DC Program is overseen by BC Parks through a third party contractor (Camis Inc.) from Guelph Ontario which is considered a leader in providing reservation services. Camis oversees reservation systems for many park systems including: Ontario Parks, Saskatchewan Parks Washington State Parks, Parks Canada, and Michigan State Parks.
- The objectives of the reservation service are to:
 - provide park visitors with equitable access to specific high demand recreational opportunities and peace of mind;
 - ensure fairness and consistency in the opportunity to make reservations throughout the province; and,
 - Improve BC Parks' and Park Operators' business efficiencies, as well as provide customer service and inventory management.
- The objectives of the backcountry registration system are to:
 - o provide an convenient way to pay for backcountry permits online, prior to arriving in the park and does not guarantee a site (is not a reservation); and,
 - o improve BC Park' and Park Operators' business efficiencies, and customer service.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	BC Parks Website and Marketing Program
Date: February 2015	

RETURN TO TOP KEY MESSAGES:

Key message #1 – BC Parks website is one of the busiest BC Government websites and in 2013/14 had over 3.47 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 19.6% from 2012/13 to 2013/14.

CURRENT STATUS:

Key message #1:

- The BC Parks website had over 3.4 million unique visits in 2013/14. 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 February 2015 there were over 6,600 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;
 - o Park details including: park fees, location map, activities/facilities available;
 - Information about using the Discover Camping reservation service.
 - o Opportunities to review and comment on draft park management plans;
 - o Information on the Boundary Amendment process and current projects
 - BC Parks conservation information:
 - Volunteer opportunities and initiatives;
 - o 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, BC Ocean Boating Tourism Association, 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 18, 2015), Learn to Fish Program (July and August). Special events that occurred in 2014 including the Salute to the Sockeye event at Roderick Haig Brown Provincial Park and Wells Gray 75th Anniversary. A new suspension bridge, which will be a major tourism attraction for the region, will open In the Spring of 2015 in Elk Falls Provincial Park during the Park's 75th anniversary.

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 2.9 million in 2012/13 to 3.4 million in 2013/14.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793
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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 2015 ISSUE TITLE: Parks Recreation Integrated Service Model (PRISM)

RETURN TO TOP 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 were up for renewal. One year contract extensions were put in place for 2014, to ensure there was no service disruption, while the final request for proposals (RFP) were completed for release in Spring 2014. After a competitive tender process, 38 new Agreements (coordinating service delivery in 171 parks) were signed with Park Operators in November 2014
- Key message #3 To respond effectively to stakeholder feedback, ensure we reduce administrative burden and provide good value for British Columbians, public consultation with open houses was initiated in 2013 throughout the province.

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, which sees multiple parks tendered together as a package, 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 park operator contracts were scheduled to expire. This
 provided BC Parks with an excellent opportunity to further improve the model for
 recreation service delivery in front country parks. Such services include collecting fees,
 maintaining facilities, ensuring visitor safety and security, and promoting use of the
 park.
- A Draft RFP was initiated in March 2013. A one year extension of existing contracts were negotiated during August 2013 to ensure there was no disruption of service in 2014
- The final RFP was released in June 2014. Included in the process were individual and grouped parks for 41 separate opportunities. After the competitive tender, 38 new Agreements were signed with Park Operators.

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 included:
 - 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.
- In 2003, 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:
 - o encourages and creates an entrepreneurial climate;
 - reduces administrative burden;
 - o provides sustainable economic opportunities;
 - o provides sustainable delivery of recreational services;
 - o ensures effective monitoring of service agreements :
 - o maintains BC Parks' service standard and level of delivery;
 - is quantifiable for successful reporting;
 - o protects the conservation and recreation values of Provincial Parks:
 - o encourages sustainable and green environmental practices:
 - encourages the development of new recreation services to increase visitor satisfaction; and
 - o cost effective.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

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ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 2015 ISSUE TITLE: BC Parks Interpretive Program

RETURN TO TOP KEY MESSAGES:

Key message #1 – BC Parks will be exploring partnership opportunities and technology based options in 2015 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 – Some Park Facility Operators will continue to offer interpretation in BC Parks during the 2015 operating season.

CURRENT STATUS:

Key message #1:

- BC Parks engages youth and families in 2015 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.
- BC Parks will be looking at self-guided interpretive options building on newer smartphone technologies.

Key message #2:

 A limited number of Park Facility Operators have offered interpretive programs every year, and will continue to do so in 2015.

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 it 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 formal interpretation program in BC Parks since 2010.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793 <a href="https://example.com/rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-rector-new-re

ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	BC Parks' Partnership & Donation Strategy
Date: February 2015	

RETURN TO TOP KEY MESSAGES:

- Key message #1 BC Parks' Partnership & Donation Program has resulted in notable financial and in-kind contributions that have supported BC Parks' mandate, enhanced the ministry's conservation values and improved park visitors' experiences. BC Parks plans to build upon the success to date by continuing to expand the opportunities available to potential partners, sponsors and donors.
- Key message #2 A Partnership & Donation Strategy has been drafted to provide a two year vision for the program. In addition, as part of the draft strategy, a Corporate Partnership Policy and Partnership Recognition Matrix have been drafted to provide guidance and consistency for staff establishing new partnerships.
- Key Message #3 BC Parks is currently developing a new Credit Card Portal for donations which will allow donors and sponsors to use credit cards to make donations to the Park Enhancement Fund.

CURRENT STATUS:

Key message #1:

- The BC Parks' Partnership & Donation Program (renamed in 2012 from the "sponsorship program") provides opportunities for individual citizens, community groups, non-government agencies and private corporations to work with BC Parks on mutually beneficial projects.
- The Partnership & Donation Program has resulted in notable financial and in-kind contributions that have supported BC Parks mandate, enhanced the ministry's conservation values and improved park visitors' experiences.
- BC Parks plans to build upon the success to date by continuing to expand the opportunities available to potential partners, sponsors and donors.

Key message #2:

- BC Parks developed a sponsorship framework in 2008 following the establishment
 of the Park Enhancement Fund (PEF) as a special account under the Special
 Accounts Appropriation and Control Act. (Refer to Park Enhancement Fund
 Estimates Note for more information).
- While the PEF legislation provides a good framework, the Partnership & Donation Program also needs supporting policies and a multi-year strategy to help develop and expand the program.
- A Partnership & Donation Strategy has been drafted to provide a two year vision for the program. In addition, as part of the draft Strategy, a Corporate Partnership Policy

- and Partnership Recognition Matrix have been drafted to provide guidance and consistency for staff establishing new partnerships.
- Once these draft documents are approved, they will accompany the Commemorative Plaque Policy (which guides the use of recognition plaques in parks) and the Gift Acceptance Policy (which supports the newly launched Planned Giving Program) to complete the suite of documents needed to support and guide BC Parks' Partnership & Donation Program.

Key message #3:

- One of the constraints to increasing donations to BC Parks is the inability of donors to use credit cards to make donations to the Park Enhancement Fund. The Credit Card Portal will make it more convenient for donors to make donations to BC Parks.
- This project will also create an online database to better manage the Park Enhancement Fund.
- Estimated time of completion of this project is Spring 2015.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- BC Parks' has one position dedicated to the Partnership & Donation Program who
 works closely with parks staff across the province to develop, implement and track
 sponsorship and partnership activities. Contributions can be monetary or in-kind.
- Examples of sponsorship, partnership and donations received by BC Parks in the last few years include:
 - o sponsorship of 100 park benches to celebrate BC Parks' centennial in 2011;
 - sponsorship of more than 250 bear-proof recycling bins by Encorp Pacific;
 - donation of \$254,000 in financial securities (stocks/bonds) by an individual wishing to upgrade the Mamquam Trail in Garibaldi Provincial Park;
 - sponsorship of 1000 trees in Edge Hills Provincial Park by Prestige Guitars;
 - receipt of a bequest for over \$750,000 for the acquisition and development of marine parks; and,
 - o sponsorship of a playground in Gwillim Provincial Park.

Contact: Eva Riccius, Acting Executive Director, Visitor Services Branch (250) 387-8793

Ministry of Environment

Date: February 2015

ISSUE TITLE: Park Act Amendments (Bill 4) 2014

RETURN TO TOP KEY MESSAGES

- Key message #1 In Spring 2014, Bill 4, the Park Amendment Act 2014, was passed, amending the Park Act to clarify authorities for issuing park use permits.
- Key message #2- Bill 4 eliminated a reference to park size (parks under 2023 ha.) as a consideration for issuing park use permits that would impact natural resources.
- Key message #3 It included an amendment that identified under what circumstances a
 park use permit may be issued to allow film production, including commercial filming, in
 Class A parks.
- Key message #4 It also introduced a new provision identifying under what circumstances a park use permit may be issued to allow research activities in parks or conservancies.
- Key message #5 The introduction of Bill 4 brought increased attention to the BC Parks Provincial Boundary Adjustment Policy, Process and Guidelines.

CURRENT STATUS

Key message #1:

Bill 4 was brought into force by Royal Assent on March 24th, 2014. None of the amendments to the *Park Act* changed the manner by which parks, protected areas and conservancies are managed. The provisions brought into force under this bill provide increased clarity and certainty respecting authorizing activities and uses in parks and conservancies, thereby reducing risks associated with being challenged on decisions in these areas.

Key message #2:

Bill 4 eliminated the reference in section 9(5) of the *Park Act* to "a park of any class having an area of 2,023 hectares or less". This reference to 2,023 ha (5000 acres) dates back to the first *Park Act* in 1965 as a method of ensuring timber licences, mineral claims and other land alienations could not be granted in more vulnerable smaller parks. At that time, timber and mining activities were much more common in parks than today. Under modern park management practices today, this concern is no longer relevant.

Previously, section 9(5) of the *Park Act* prohibited most activities that may "remove, destroy, damage, disturb or exploit" a natural resource in parks that were 2 023 hectares or less. The reference to park size was removed as it had the potential to restrict BC Parks' ability to issue park use permits for appropriate outdoor recreation and tourism opportunities, and activities that benefit local and regional economies. This is a significant risk given approximately 70% of BC's 627 Class A parks are 2 023 hectares or less.

Parks of a similar class will all be managed to the same standards regardless of their size.

Key message #3:

The purpose of this amendment was to ensure that the Minister had the appropriate statutory authority to issue park use permits for film production in Class A parks. BC Parks has been issuing commercial film permits for decades; this amendment ensures that the Ministry has the statutory authority to permit commercial filming in class A parks and requires filming not be conducted in a manner detrimental to the recreational values of the park.

Key message #4:

The new provision introduced under Bill 4 provides the minister with the authority to issue park use permits for research in a Class A park or conservancy if, in the minister's opinion, issuing the permit has value to park managers or if the research relates to a specified purpose such as an improvement for public health or safety, an environmental assessment or feasibility study, or to inform a decision on a boundary modification proposal.

This provision in the *Park Act* is not subject to a "test", but the appropriateness of granting research permits will be outlined in public policy related to research. BC Parks conducted a public review and comment process on a draft research policy during the Spring of 2014. A final draft of the policy is being brought forward for decision in Spring 2015, and once approved will be posted online along with a summary of the public comments that were received.

The final draft of the policy creates a separation between general research (including academic research) and research for investigative use, which includes research for environmental assessments, feasibility studies, or boundary adjustment proposals. Regardless of the purpose of a research activity, the policy sets a threshold of 'no adverse impacts' in order for a research proposal to be considered appropriate.

Key message #5:

The Cabinet-approved Provincial Protected Areas Boundary Adjustment Policy, Process and Guidelines has been in place since 2000, and was updated in 2010. The Policy, available on the BC Parks website, outlines how a proponent may request government to consider a proposed boundary adjustment to a park or protected area. A key component of the rationale for the proposed change includes First Nation, other government and public interest.

Bill 4 generated increased attention to this policy. The BC Parks website has the policy and all boundary adjustments since 2004. While boundary adjustments have occurred in the past and will be considered in the future, it is important to note that just 0.027% of lands (3,824 hectares) have been removed from individual parks, conservancies, ecological reserves and protected areas since 2004. Most of these lands have been retained in the provincial protected areas system under another designation (for example, ecological reserve to Class A park or Class A park to protected area).

Contact: Jim Standen, ADM, BC Parks and Conservation Officer Service

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Southern Strait of Georgia National Marine Conservation Area Reserve Feasibility Assessment

RETURN TO TOP

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. A draft boundary concept for consultation was announced by the two governments in October, 2011.
- Key message #2 BC and Canada have been working together to complete the feasibility study, focussing efforts on consultations with the First Nations affected by the proposal, the public, 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:

- Since 2003, the Ministry has worked with Parks Canada to determine the feasibility
 of establishing a National Marine Conservation Area Reserve (NMCAR) in the
 Southern Strait of Georgia. The key steps to date have been to determine an
 appropriate study area boundary and initiate consultation.
- 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:

- Public consultations between 2004 and 2008 indicate general support for the proposal. Consultation since 2008 has focused on First Nations, local government and key stakeholders.
- There are 19 First Nations potentially affected by the proposal and there has been ongoing dialogue between Parks Canada and these First 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 B.C. 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 central Saanich in the south, to Gabriola Passage and southern Gabriola Island in the north, including Saanich Inlet.

Key Message #3:

- Due to the complexity of issues in this area, the ongoing consultations with First Nations and local governments, and the number of stakeholders involved, the feasibility study has taken longer than originally intended.
- While it was hoped that the feasibility study could be completed by the Fall of 2013, it became clear from ongoing consultation that additional time would be required to resolve issues raised by First Nations and stakeholders during the consultation process.
- B.C. and Canada will take the time necessary to respectfully engage with First
 Nations and meaningfully consult with stakeholders in this process. The project team
 is hoping that the feasibility study can be concluded in 2016.

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.
- 3) **Establishment of National Marine Conservation Area Reserve** Includes the actual transfer of lands to Canada and the establishment of the marine conservation area in federal legislation. Before this occurs, the final proposal is brought back to the B.C. Cabinet for approval.
- 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 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 BC 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.

Contact: Brian Bawtinheimer, Executive Director, Planning and Management

(250) 387-4355

Ministry of Environment

Date: February 2015

ISSUE TITLE:

South Okanagan – Lower Similkameen National Park Reserve Feasibility Assessment

RETURN TO TOP 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 remains a significant number of people opposed to the proposal.

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.

Key Message #4 – In the Fall of 2014, the Ministry began a dialogue with First Nations and area stakeholders to identify common objectives for enhanced environmental protection, tourism and outdoor recreation in the South Okanagan.

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 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.
- A number of regional and municipal governments, chambers of commerce and tourism organizations passed resolutions or have written to the Minister of Environment in 2012 – 2013 requesting that the Government of BC re-engage in discussions on the national park reserve.

Key message #3:

- The proposed national park reserve boundary encompassed approximately 285 km² 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, and wildlife management areas, Section 16 Land Act Reserves for habitat conservation and private land acquisitions and donations. This includes:
 - 79,353 ha of parks and protected areas (45,985 ha established since 2001);
 - 2100 ha of land owned privately for conservation purposes;
 - 1500 ha of land leased for conservation purposes;
 - 100 ha of Land Act map reserves;
 - 365 ha of Wildlife Management Area additions; and
 - 1074 ha of federal lands owned by the Canadian Wildlife Service
- The Okanagan Shuswap Land and Resource Management Plan (OSLRMP) recommended the establishment of 22 Goal 1 protected areas or parks and 27 Goal 2 protected areas or parks.
 - All Goal 1 areas were established either as parks or as protected areas under the Environment and Land Use Act in 2001, totalling 45,986 ha.
 - To date, 13 Goal 2 areas recommended from the OSLRMP have not been established and therefore have no protection afforded to them. 10 of these, amounting to 1,749 hectares, are located in the South Okanagan.

Key message #4:

- In November of 2014, the Minister of Environment met with potentially affected First Nations, and groups of stakeholders, both those who are opposed to the national park reserve proposal, and those who are in favour.
- The purpose of these meetings was to begin work to identify common interests and objectives for environmental protection, tourism development, and enhancement of the existing outdoor recreation experiences in the area.
- These discussions will continue in the coming year.

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.
- 6) **Establishment of national park reserve** Includes the actual transfer of lands to Canada and the establishment of the national park reserve through federal legislation. Before this occurs, the final proposal is brought back to the B.C. Cabinet for approval.

Contact: Brian Bawtinheimer, Executive Director, Planning and Management

(250) 387-4355

ESTIMATES NOTE (2015) Confidential	ISSUE TITLE:
Ministry of Environment	System Growth and Land Acquisition
Date: February, 2015	

RETURN TO TOP KEY MESSAGES

- Key message #1-British Columbia has one of the largest protected areas systems in North America and has continued to add to it over the past decade.
- Key message #2 The Ministry does not have the funding available in the 2015/16 budget to pursue all private land acquisition initiatives of interest.
- Key message #3 The priority for 2015/16 will be on completing projects where there are legal obligations in place, where operational efficiencies are made, or where donation lands with significant values are being offered to the Ministry.

CURRENT STATUS

Key message #1:

- Since 2001, more than 2.3 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 77 parks, 6 ecological
 reserves and 3 protected areas.
- There are 1029 parks, conservancies, ecological reserves and protected areas across British Columbia managed by BC Parks, covering just over 14 million hectares or 14.4% of the provincial land base.

Key message #2:

- There is no set annual budget for land acquisition. However, there are a number of preexisting legal obligations related to ongoing files that require a small amount of funding which is allocated from the BC Parks land improvement (facilities) capital budget.
- The Ministry acquires private lands for protected areas, most commonly on a willing seller/willing buyer basis, 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.

Key message #3:

- 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
- o partnering with land trusts
- o providing tax receipts for donations of land
- o transferring development rights, and
- o 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.
- Nine projects for 2015/16 have been identified and may close (Table 1). An additional five high profile projects are currently on hold (see Table 2).

s.13,s.17

KEY FACTS/BACKGROUND/OTHER AGENCIES:

 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.

Contact: Brian Bawtinheimer, Parks Planning & Management (250) 387-4355 RETURN TO TOP

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Protected Area Boundary Adjustments

RETURN TO TOP

KEY MESSAGES:

Key message #1 – There are currently five boundary adjustment proposals under consideration by the Ministry of Environment, affecting eight parks and protected areas.

Key message #2 – These proposals are reviewed pursuant to the Cabinet-approved *Provincial Protected Area Boundary Adjustment Policy, Process and Guidelines.*

Key message #3 – Government takes requests for boundary adjustments very seriously, and supports boundary adjustment requests only where there is public benefit and alternative locations are not feasible.

CURRENT STATUS:

Key message #1:

- BC Parks is aware of the following projects which, if approved, could affect parks and protected areas:
 - Kinder Morgan's Trans Mountain Pipeline Expansion may affect 4 parks and protected areas, including Finn Creek Park, North Thompson River Park, Lac Du Bois Grasslands Protected Area, and Bridal Veil Falls Park.
 - The Trans Mountain Expansion Project also is proposed to go through Coquihalla Summit Recreation Area. A boundary adjustment is not required to authorize construction of a pipeline in a recreation area as the activity could be authorized through a resource use permit.
 - The Ministry of Transportation and Infrastructure has proposed a project to remove a 30-metre right-of-way in Kalamalka Lake Park to enable widening and upgrade of an existing road. The right of way would be of sufficient size to accommodate potential future utilities.
 - The Ministry of Transportation and Infrastructure has proposed to remove 1.2 hectares from Nahatlatch Park, which would be transferred to Boston Bar First Nation as part of a negotiated agreement with the Boston Bar First Nation.
 - The Seabird Island Band has proposed a project to remove existing and deactivated roads from Sasquatch Park, to enable the use of those roads for hauling timber.
 - The owner of a private lot adjacent to Kleanza Creek Park has proposed a boundary amendment to provide legal access to the lot to enable it to be subdivided.

Key message #2:

- Information on all these projects, as well as *Protected Area Boundary Adjustment Policy, Procedures and Guidelines* are available on the BC Parks website.
- The process for boundary adjustments includes two key components:

- A stage 1 proposal that requests government to consider the concept of a boundary adjustment for the intended alternative land use, and if that is supported,
- A stage 2 application outlining in detail the business case and public benefits that would result if the boundary adjustment and alternate land use was approved.

Key message #3:

- The Protected Areas Boundary Adjustment Policy, Procedures and Guidelines sets out a rigorous process that all proponents must follow.
- Key components of the policy include:
 - 1. Alternatives to avoid the protected area have been considered.
 - 2. Overall economic benefits to the Province have been documented.
 - 3. Social and environmental impacts have been documented.
 - 4. Mitigation and restoration measures have been identified.
 - 5. First Nations have been adequately consulted.
 - 6. Local communities (including local governments) have been consulted.
 - 7. Provincial and Federal Agencies have been consulted.
- There is an increased risk of a proposal being rejected at any time under one or more of the following circumstances:
 - Viable alternatives exist:
 - There is significant First Nations opposition;
 - There is significant public or local government opposition;
 - Significant adverse effects on environmental or social values cannot be avoided, mitigated or compensated for; or
 - There is insufficient overall benefit to the Province.
- Since 2004, just 0.027% of the 14 million hectares in the provincial protected area system
 has been affected by boundary adjustments. During the same period, over 3.3 million
 hectares were added. Information on these adjustments is available on the BC Parks
 website.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

In the Fall, 2014 session of the Legislature, an amendment to the boundary of Nisga'a Memorial Lava Bed Park was approved to enable the construction of the Prince Rupert Gas Transmission Line. This amendment was supported by the Nisga'a Lisims Government. The amendment has not yet been brought into force pending approval in the Legislature of a resolution to amend the Nisga'a Final Agreement.

Contact: Brian Bawtinheimer, Executive Director, Parks Planning and Management Branch (250) 387-4355

ESTIMATES NOTE (2015) Confidential Ministry of Environment Date: February 2015 ISSUE TITLE: LNG and Oil Energy Corridors in Parks and Protected Areas

RETURN TO TOP KEY MESSAGES:

- Key message #1 Occasionally, energy companies identify routes for new energy corridors through parks and protected areas.
- Key message #2 In most cases, energy corridors would not be permitted under the Park Act. Any proponent interested in having a park amended to allow for an alternate use is subject to the Cabinet-approved Protected Areas Boundary Adjustment Policy, Procedures and Guidelines.
- Key message #3 Government takes requests for boundary adjustments very seriously, and supports boundary adjustment requests only where there is public benefit and alternative locations are not feasible.

CURRENT STATUS:

Key message #1:

- Liquid natural gas companies and oil companies are involved in planning new pipeline routes to the west coast of BC and to the Lower Mainland as part of the provincial Energy Plan.
- BC Parks is aware of the following companies whose projects, if approved, could affect parks and protected areas:
 - Spectra Energy's Westcoast Connector Gas Transmission Project may impact Nisga'a Memorial Lava Bed Park.
 - Kinder Morgan Trans Mountain Pipeline Expansion may affect 5 parks and protected areas, including Finn Creek Park, North Thompson River Park, Lac Du Bois Grasslands Protected Area, Coquihalla Summit Recreation Area and Bridal Veil Falls Park.
 - The Pacific Trails Pipeline and the Northern Gateway Pipeline are planned to go through Burnie River Protected Area. The Order in Council establishing Burnie River Protected Area allows for pipeline construction within its boundaries. In the Fall, 2014 session of the Legislature, an amendment to the boundary of Nisga'a Memorial Lava Bed Park was approved to enable the construction of the Prince Rupert Gas Transmission Line. This amendment was supported by the Nisga'a Lisims Government. The amendment has not yet been brought into force pending approval in the Legislature of a resolution to amend the Nisga'a Final Agreement.
 - Both Prince Rupert Gas Transmission and Spectra Energy had identified potential routes in the Khytzeymateen protected areas, but neither company is interested in pursuing those early proposed alignments.

Key message #2:

- Energy corridor projects are not permitted in provincial parks of any class, or in ecological reserves. They <u>may</u> be permitted in conservancies, but only if deemed an appropriate use by a conservancy management plan.
- If an energy corridor is not permitted, a proponent may seek an amendment to the park boundaries to exclude the lands identified for the project.
- The Cabinet-approved *Protected Area Boundary Adjustment Policy, Procedures and Guidelines*, available on the BC Parks website, guide a proponent through the process to develop a business case. The process includes two key components:
 - A stage 1 proposal that requests government to consider the concept of a boundary adjustment for the intended alternative land use, and if that is supported,
 - A stage 2 application outlining in detail the business case and public benefits that would result if the boundary adjustment and alternate land use was approved.

Key message #3:

- The Protected Areas Boundary Adjustment Policy, Procedures and Guidelines sets out a rigorous process that all proponents must follow
- Key components of the policy include:
 - 8. Alternatives to avoid the protected area have been considered.
 - 9. Overall economic benefits to the Province have been documented.
 - 10. Social and environmental impacts have been documented.
 - 11. Mitigation and restoration measures have been identified.
 - 12. First Nations have been adequately consulted.
 - 13. Local communities (including local governments) have been consulted.
 - 14. Provincial and Federal Agencies have been consulted.
- There is an increased risk of a proposal being rejected at any time under one or more of the following circumstances:
 - Viable alternatives exist;
 - There is significant First Nations opposition;
 - There is significant public or local government opposition;
 - Significant adverse effects on environmental or social values cannot be avoided, mitigated or compensated for; or
 - There is insufficient overall benefit to the Province.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- The Minister has received a Stage 2 boundary adjustment proposal for the Kinder Morgan Trans Mountain Pipeline Expansion project. No decision has been made on amending any boundaries with respect to this project.
- There are a few other potential pipeline projects that proponents have identified with potential implications for protected areas, but BC Parks has not received any enquiries from

these proponents about those projects. Where pipelines or other transmission corridors exist prior to protected area designation, or where permits were issued prior to 1995, the *Park Act* allows for that use to continue. As such, there are instances in the park system where pipelines and energy corridors exist.

- In parks and protected areas where energy corridors exist, BC Parks works with the company to ensure any maintenance and management of the corridor is conducted with as little impact to park values as possible.
- Examples where existing oil and gas corridors occur in park and protected areas include: Crowsnest Park; Arbutus Grove Park; Elk Falls Park; John Dean Park; Mount Robson Park; White Lake Grasslands Protected Area; Finn Creek Park.

Contact: Brian Bawtinheimer, Executive Director, Parks Planning and Management Branch (250) 387-4355

ISSUE TITLE:

Ministry of Environment

Halkett Bay Artificial Reef

Date: February 2015

RETURN TO TOP KEY MESSAGES:

Key message #1 - Environment Canada's disposal at sea permit will undergo a judicial review in late February 2015. The Artificial Reef Society of BC (ARSBC) can't move or sink the vessel until the judicial review is completed.

Key message #2 – The ARSBC has obtained formal authorization from Transport Canada, Environment Canada and Department of Fisheries (DFO) to sink the vessel in Halkett Bay Marine Park. Delays as a result of legal challenges presented by the "Save e Halkett Bay Marine Park Society", means the ARSBC will need to request amendments to their federal permits.

Key message #3 – Stakeholder consultation was completed by the ARSBC and BC Parks. Squamish and Tsleil-Waututh 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 vessel in Halkett Bay Park as an artificial reef. s.13,s.14

s.13.s.14

CURRENT STATUS:

Key message #1:

- The Federal Court granted an injunction on January 12, 2015, until a judicial review is complete in late February 2015, in regards to Environment Canada's disposal at sea permit. The "Save Halkett Bay Marine Park Society" claim that Environment Canada has no authority to issue the permit given the anti-fouling bottom paint on the vessel contains tributyltin chloride and dichloride (TBTs). The society claims the TBTs are toxic and beyond acceptable limits pertaining to existing Federal regulations.
- Environment Canada presented a written response to the "Save Halkett Bay Marine Park Society" formal petition in regards to the authorization (permit) issued on January 7, 2015. Environment Canada upon reviewing all the evidence, found no rational to rescind the original authorization. It was upon receiving this decision the "Save Halkett Bay Marine Park Society" petitioned the Federal Court for an injunction to stop the relocation and sinking of the vessel.
- The ARSBC did not have the financial capacity to remove the polychlorinated biphenyls (PCBs) found on the vessel. Environment Canada agreed to removes the

PCBs from the ship and this work, which involved the removal of insulation and paint, was completed on July 2, 2014 at a cost of \$.16,s.1 The Province of BC contributed s.16,s through a cost sharing agreement with the Federal Government.

Key Message #2:

- Transport Canada is the lead agency for vessel navigation and safety, and has granted clearance for the ARSBC to sink the vessel for disposal at sea. The permit is valid until August 2015.
- Environment Canada issued their authorization (permit) which is valid from October 14, 2014 to October 13, 2015. The permit will need to be re-issued if the Federal Court rules the permit is not valid at the end of February.
- DFO is the lead agency responsible for addressing the loss of fish habitat resulting from the vessel's hull placement on the bottom of the sea bed. The ARSBC received formal authorization to sink the vessel, but during a limited window of opportunity from August 15, 2014 to January 31, 2015. ARSBC will require DFO to amend the valid date of authorization prior to sinking the vessel.
- BC Parks issued a park use permit to the ARSBC on November 3, 2014 to sink the
 vessel in Halkett Bay Provincial Marine Park. A formal gifting agreement was also
 signed which allows the Province to become the owner of the vessel once it rests
 on the substrate of Halkett Bay Park.

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, inadequate sinking location, environmental contamination, and ship breakup from wave action.
- The United Church, a property owner in Halkett Bay, was also initially concerned about where the vessel would be placed as an artificial reef. They can exercise a foreshore removal clause, but have reserved their decision when the ARSBC changed the sinking location for the vessel. The sinking location is now beyond the boundary of the United Church's property interest, as defined in a purchase and sale agreement with the Province.
- Squamish and Tsleil-Waututh First Nations are strong and very vocal supporters 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 to view the vessel from the water and visited Halkett Bay and the proposed sinking location for the vessel in the park.
- 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, approved the ARSBC artificial reef project upon 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 gift of the HMCS Annapolis and the services from the Artificial Reef Society of British Columbia (ARSBC) to sink the vessel in Halkett Bay Marine Park to create an artificial reef.
- The ARSBC's park use permit application was denied on August 25, 2010 s.13,s.14 s.13,s.14
 reviewing all options, gifting the vessel to the Minister was identified as the preferred option.s.13,s.14 s.13,s.14
- The park use permit will ensure the Province is fully compliant with the Park Act and
 is protected from liability when the ARSBC will undertake the sinking of the vessel
 and the related expenses. The permit will also ensure the ARSBC conducts
 ongoing maintenance and research on the artificial reef.

KEY FACTS/BACKGROUND/OTHER AGENCIES:

- s.13,s.14
- Parks' management plan identifies scuba diving as an existing low use activity, and is silent on the creation of an artificial reef. However, the plan supports the development of new marine based recreational opportunities.
- 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 and Tsleil-Waututh First Nations.
- The sinking and scuba diving activity on the artificial reef will not impact the glass sponge reef south east of Halkett Bay. The distance from the planned artificial reef to the glass sponge reef is 1.3 kilometers.

Contact: Bob Austad, Executive Director of Regional Operations Branch (250) 356-9241

Ministry of Environment

ISSUE TITLE:

Haynes Point Park – Osoyoos Indian Band

Date: February 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 MoE/BC Parks is currently negotiating a new management agreement with Osoyoos Indian Band (OIB) s.13,s.16,s.17 s.13,s.16,s.17
- Key message #2 OIB has asserted their aboriginal rights and title at Haynes Point and Okanagan Falls parks s.13,s.16,s.17 s.13,s.16,s.17

 Key message #3 - s.13,s.16,s.18 s.13,s.16,s.18

CURRENT STATUS:

Key message #1:

 BC Parks has been given the mandate to direct award of operational park management for Haynes Point and Okanagan Falls parks through an new park operator agreement. s.12,s.13 s.12,s.13

s.13,s.16,s.17,s.18

Key message #2:

- In December 2014, OIB asserted their interest in rights and title over Haynes Point Park and noted the recent Tsilhqot'in decision as guidance for how the Province should approach aboriginal rights and title.
- The Osoyoos Indian Band is a part of the Okanagan Nation (Syilx) and is one of eight member communities of the Okanagan Nation Alliance.

	Okanagan Falls Park is of high cultural importance to OIB and the Okanagan Nation as a cultural fishing site and originally part of Indian Reserve #2 that was later deleted in 1913.	,
	ey message #3:	
s.1	,s.16,s.18	
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	ontact: Bob Austad, Executive Director, Regional Operations Branch, BC Parks and onservation Officer Division, (250) 356-9241. RETURN TO TOP	

Communitian

Ministry of Environment

Date: February 2015

ISSUE TITLE:

Sechelt First Nation - Construction of Longhouses in Provincial Parks

RETURN TO TOP KEY MESSAGES:

Key message #1 – Sechelt First Nation recently constructed a longhouse in Garden Bay Marine Park and began construction of a longhouse in Francis Point Park.

Key message #2 – The Province acknowledges that the Sechelt First Nation has a long-standing title claim in the Garden Bay area. The Sechelt First Nation intends to use the longhouses as places to practice their traditional culture.

Key message #3 – BC Parks is working with Sechelt First Nation to authorise and collaboratively manage the longhouse at Garden Bay Marine Park.

Key message #4 – The lands that form Francis Point Park are privately owned and set aside for conservation purposes. BC Parks is working with Sechelt First Nation to address their interest in having a longhouse in the area that does not impact the private lands or conservation values of the park.

CURRENT STATUS:

Key Message #1:

- In September 2014, Sechelt First Nation undertook the construction of a longhouse in the day use area of Garden Bay Marine Park in the Pender Harbour area of the Sunshine Coast. s.13,s.16
 s.13.s.16
- In October 2014, Sechelt First Nation initiated construction of a longhouse in Francis Point Park. The First Nation halted the construction when they were informed by the Francis Point Park Society that the lands forming the park are privately owned.

Key Message #2:

- Sechelt First Nation has a long-standing claim to title in the Pender Harbour area.
 The Province recognizes the importance of the Tsilhqot'in decision, and its implications for the recognition of Aboriginal rights and title.
- The Province is working with the Sechelt First Nation on a number of issues to resolve their interest in the area, s.13,s.16

Kev Message #3:

 BC Parks staff have met with Sechelt First Nation to understand their interests, and explore options to authorize the existing longhouse in Garden Bay Marine Park. The management plan for Garden Bay Marine Provincial Park underscores the cultural values of the park and the importance of the area to Sechelt First Nation. BC Parks is working with Sechelt First Nation to establish agreement on the future management of the longhouse site.

Key message #4:

s.13,s.16,s.17

Contact: Bob Austad, Executive Director, Regional Operations, BC Parks

(250) 356-9241

Ministry of Environment

ISSUE TITLE:
Peace Arch Park
Parking Lot Semiahmoo First Nation

Date: February 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 Peace Arch Park was established in 1931 to celebrate the peaceful relationship between Canada and the United States.
- Key message #2 The Peace Arch Park parking lot is situated on Semiahmoo First Nation Indian Reserve lands.
- Key message #3 Since February 2013, BC Parks has been in negotiations with Semiahmoo First Nation to compensate for past use of the parking lot, and secure an agreement for the long-term public use of the parking lot.

CURRENT STATUS:

Key Message #1:

- Peace Arch Park, with its Peace Arch monument, formal gardens, and large gatherings, is unique in the protected area system.
- The park and the Peace Arch are managed in a manner consistent with the adjacent State Park under an international agreement between the Province of BC and Washington State.

Key Message #2:

- The Peace Arch Park parking lot is located on 1.6 acres of land which forms part of the Semiahmoo Indian Reserve adjacent to the park.
- The parking lot is the only parking available for Peace Arch Park on the Canadian side of the border. On average 20,000 vehicles and 820 tour buses use the parking lot each year.
- In 1951, the parking lot was developed on former reserve lands that had been surrendered by Semiahmoo First Nation to the federal government.
- In 1997, the Federal Court of Appeal ordered that the surrendered lands be restored as part of the Semiahmoo reserve. The federal government returned the surrendered lands to the Semiahmoo First Nation as an addition to the reserve. As a result, the parking lot was in trespass on Semiahmoo reserve land.

Key Message #3:

• In 2013, BC Parks entered into a Memorandum of Agreement with Semiahmoo First Nation to work to resolve past trespass and secure future public use of the parking lot. The parties are still in negotiations towards a resolution to the issue.

Contact: Bob Austad, Executive Director, Regional Operations, BC Parks, (250) 356-9241

ISSUE TITLE:

Ministry of Environment

BC Parks Volunteer Strategy

Date: February 2015

RETURN TO TOP 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 implemented in 2013 and 2014.

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 2015/16 BC Parks will fund volunteer projects in parks with, funding (approximately \$100k) available 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.
 - BC Parks has estimated approximately 1,650 volunteers worked on projects in BC Parks in 2014/15.
 - Over 200 stakeholder groups volunteer with BC Parks.

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).
- 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 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).
 - Releasing an updated, online staff toolkit to build capacity for staff to manage volunteers efficiently.

Launching a Stewardship Partners Insurance Program.

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. The Province provides the groups with General Liability Insurance and Accidental Death and Dismemberment Insurance for all of their members at no cost. Previously, BC Parks could only provide insurance to individual volunteers, limiting the ability of groups to contribute to park stewardship.
- Recreation Sites and Trails (MFLNRO) also operates this program.
- As of February 2015 BC Parks has enrolled 50 registered non-profit societies and many individuals in the program.
- In last two years, volunteer groups enrolled in the program, contributed over 4,000 hours of time to BC Parks projects.
- In early 2014, the Outdoor Recreation Council (ORC) provided feedback from their legal counsel requesting a change to the indemnity language in the Agreement. Risk Management Branch and legal services have agreed to limit the indemnity and staff are currently working on rolling out the changes and ensuring that ORC members are supportive of the 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 minor funding to community groups in support of volunteer projects; there is an additional funding to support projects with a provincial or multiregion scope.
- This funding (approximately \$100k) will also be available for 2015/16.

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: Bob Austad, Executive Director of Regional Operations Branch, (250) 356-9241

ISSUE TITLE:

Ministry of Environment

Ski Hill Policy Development

Date: February 2015

RETURN TO TOP KEY MESSAGES:

- Key message #1 BC Parks is engaged in ongoing discussions with the Cypress, Mount Seymour and Manning Park ski hill operators to develop a ski hill policy for the three provincial parks.
- Key message #2 BC Parks has committed to interested parties that this
 policy development will be an open and transparent process. Following public
 input on a policy intentions paper in Spring 2014, BC Parks will be seeking
 public review and comment on a draft policy in Spring 2015.
- Key message #3 The policy will focus on permit administration, the review and approval of proposed new activities within and outside of the controlled recreation areas, and long term resort planning. In the past, BC Parks and the ski hill operators have struggled with these issues in the absence of an approved policy. Consistency with other government land managers is also a goal.

CURRENT STATUS:

Key message #1:

- In 2012, BC Parks and the ski resort operators agreed to work together to develop a commercial ski area policy supported with advice from the Canada West Ski Area Association and the Mountain Resort Branch (FLNRO). An MOU was signed in February of 2013 to formalize the agreement. The operator's request for a two year timeline for an approved policy has been pushed back to allow for more public involvement in policy development. The policy will ensure:
 - Continued public use, enjoyment and access to the park and the Permit Areas in a manner that considers public safety, is consistent with designated recreation objectives, and respects and meets the permit rights of the three ski hills;
 - Land use that is consistent with the intent of park designations and park management objectives, recognizing recreational and environmental values;
 - 3. A cooperative long term relationship between BC Parks and the Permittees, based on long-term commitment to effective communication and clearly defined roles and responsibilities;
 - 4. Enhanced business certainty and security for Permittees by establishing a well defined process that enables BC Parks to make timely operational and development decisions; and
 - 5. The administration of permits for the ski resorts is consistent with governing policies of other provincial agencies for similar resorts.

Key message #2:

 BC Parks and the operators agreed to a public consultation process that included consideration of First Nations interests. This commitment for public involvement has been implemented through meetings with stakeholder groups and interested First Nations, and by providing opportunity for public input through posting of a policy intentions paper in Spring 2014. February/March 2015 will see BC Parks requesting public review and comment on a draft policy.

Key message #3:

- The policy will provide:
 - Consistency in permit administration between the three ski hill permits, including clear direction on processes for permit renewals, transfers, assignments, amendments, and required insurance types and amounts;
 - Guidance on long term resort planning, ensuring any proposed process matches the effectiveness and public involvement of those followed by resorts on Crown land. The policy will recognize and allow all parties to address changing recreation opportunities, environmental conditions and changing visitor needs; and
 - Development of an open and transparent process to guide BC Parks in the review and approval of proposed new activities, both within and outside the controlled recreation area.
- In February/March 2015, a public review and comment process on the draft policy will be undertaken.

Contact: Jim Standen, Assistant Deputy Minister, BC Parks and Conservation Officer Division, (250) 387-1288.

RETURN TO TOP FUTURE OF THE KLAPPAN

- The Province has been actively engaged with the Tahltan First Nation around the possibility of establishing a protected area within the Klappan.
- The Province and the Tahltan jointly produced the draft Klappan Strategic Initiative Technical Report to assist in discussions around potential land use solutions in the Klappan.
- The draft technical report summarizes the cultural, ecological and economical values of the area.
- This informational report is available for public comment until February 16, 2015.
- Feedback from the public review will help shape the final report, which will be used in developing recommendations on land use in the Klappan.
- Permit deferrals specific to the Arctos tenures are in place until March 31, 2015, and for the broader Klappan area, deferrals on new coal licences are in place until December, 2015.

Background:

- s.13,s.16
- In September 2013, the Klappan Strategic Initiative (KSI) was announced as a shared approach between the Province and the Tahltan on future decisions about conservation and protection in the Klappan.

- While discussions are underway with the Tahltan, Arctos remains interested in moving forward in developing their application for an Environmental Assessment Certificate.
- The parties are currently undertaking work to facilitate Red Chris mine opening and to re-align their G2G relationship as committed to under the September 4th, 2014 Memorandum of Understanding signed by President Chad Day and Minister John Rustad.

s.13,s.16

- In December 2013, government deferred approximately 255,000 hectares within the Klappan, a temporary one-year measure issued under the Environment and Land Use Act. There are 62 coal licence applications that will be affected by this deferral.
- In September 2014, the Province deferred issuance of permits and permit amendments in the Arctos tenure area to support discussions with the Tahltan.
- Deferrals on permits specific to the Arctos tenures have since been extended until March 31, 2015. Deferrals on new coal licences have been extended until December 2015.

Communications Contact: Kim Franklin
Program Area Contact: Kevin Kriese (FLNRO ADM)

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250 953-3698

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