

MEETING NOTE

DATE: Nov 4, 2022

PREPARED FOR: Honourable Josie Osborne, Minister of Land, Water and Resource Stewardship

REGARDING: Meeting with Guide Outfitters Association of BC, regarding how outfitters can help with reconciliation

INTRODUCTIONS: Scott Ellis, Executive Director and Chief Executive Officer

SUMMARY:

- Guide Outfitters Association of British Columbia (GOABC) represents the guide outfitting industry and advocates for science-based wildlife management.
- As of 2019, the guide outfitting industry employed approximately 2,500 people in rural British Columbia (BC) and contributed \$191 million to the economy annually. Many guide outfitting businesses are long-term family operations.
- Guiding Territory Certificates allow the use of a specified area for the purposes of operating a guide outfitting business. They are not a tenure and therefore do not have the same rights as tenured commercial operations. Transfers of Guide Territory Certificates are often extremely valuable when sold on the market (millions of dollars).
- GOABC is seeking more stability and certainty to operate on the land base and have outlined a position regarding compensation for lost access and revenue when guiding territory is impacted due to lands transfers to Indigenous Nations through reconciliation agreements or by title declaration.
- GOABC supports land transfers under the treaty model, where guide outfitting interests are largely maintained.
- GOABC is concerned about impacts to outfitters in the areas of the Tŝilhqot'in Nation Government (TNG) title lands and BC interim measures for hunting related to the Yahey Decision.
- In March 2022, GOABC wrote to Premier John Horgan with concerns about BC's interim measure related to Treaty 8 (Yahey Decision): Regulatory changes were made to reduce moose hunting by 50 percent outside of remote areas and to close caribou hunting as a precautionary measure.
- In July 2022, GOABC sent letters to Minister Murray Rankin, Minister of Indigenous Relations and Reconciliation regarding their concerns and position on compensation. They also requested funding support for the First Nations Guide Mentorship Program. Over last four years Ministry of Forests (FOR) has funded at about \$100,000 per year from surplus.

STRATEGIC CONSIDERATION AND MESSAGES:

- Government is committed to engaging with potentially impacted stakeholders, including guide outfitters, on lands selection and transfers as part of the process for reaching agreement with Indigenous Nations. We always consider ways to minimize impacts to guide outfitting certificate.
- Transfer of lands to First Nations is a critical tool for the province in recognizing title and advancing reconciliation through negotiated agreements.
- In areas of First Nations title or fee simple lands, the First Nation must give consent for the Guide Outfitter Certificate holder to continue to operate. This is the same situation as for any fee simple owner.
- In the treaty context, guide outfitting interests are largely maintained, and access continues.
- Currently, the Province does not compensate guide outfitters for impacts to their territories. Guiding territories are very large and the opportunity remains available in other parts of the territory.

- Proactive and positive relationships between guide outfitters and First Nations can be helpful to arrive at mutually beneficial solutions via negotiation. This could include negotiated permitted access agreements. Alternatively, a guide outfitter certificate could be transferred in willing buyer/willing seller from the guide outfitter to the applicable First Nation.

Attachment(s): Attachment 1 - QA_Guide Outfitters Association of BC
Attachment 2 - Tsilhqot'in Nation – Declared Title Area Tenure Transition Update

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ADM	CW	Nov 14, 2022
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Attachment 1: Guide Outfitters Association of BC (GOABC) Q&A

- Access and consent - Guide outfitters (GOs) are concerned about loss of access to areas described by their Guide Territory Certificates (GTC) through transfer of lands to Indigenous Nations
 - Existing GO certificates continue over Treaty Settlement Lands but access is only guaranteed to First Nations Public land (e.g. not held by private or individual Member interests).
 - If an area of the Guide certificate is on First Nation private land the First Nation are not obliged to provide access. First Nation owned fee simple lands are treated the same as any other fee simple lands – owner permission is required for access to the lands.
 - First Nations can require that GO's receive consent for accessing Declared Title Lands to engage in guiding activities.
 - The GO and First Nation could enter into an agreement for permitted use on First Nation lands.
- Impact/Compensation – Guide Outfitters lobby government to provide compensation for areas no longer accessible under a Guide Territory Certificate.
 - Currently, the Province does not compensate GO's for impacts to their territories.
 - Frequently, these guiding territories are very large and the opportunity remains available in other parts of the area.
 - Proactive and positive relationships between guide outfitters and First Nations can be helpful in these circumstances; however, each situation is unique.
 - Opportunities to arrive at mutually beneficial solutions via negotiation should be explored. This could include a First Nation and GO entering into agreement for permitted access to First Nations private lands. Alternatively, a GO certificate could be transferred in willing buyer / willing seller from the guide outfitter to the applicable First Nation.
- Lands selection and engagement with Guide outfitters
 - During the land selection process, potential impacts on interest holders are assessed to inform requirement for engagement with stakeholders, including with GOs.
 - Government is committed to engaging with potentially impacted stakeholders, including Guide Outfitters, on lands selection and transfers as part of the process for reaching agreement with Indigenous Nations. We are open to hearing any feedback about the process and how to improve the timing of engagement and communication so that the process can be predictable for GOs.
- Tsilhqot'in Title Lands / Declared Title Area (DTA)
 - Similar to private property, Aboriginal title means Tsilhqot'in Nation owns the lands in the declared title area.
 - Tsilhqot'in Nation has the right to decide how those lands and its resources are accessed and used, and to benefit from economic activity on them.

- The Province is working closely with Xeni Gwet'in leadership to build a shared transition plan that recognizes the Tšilhqot'in right to use and control the land and enjoy its benefits while providing certainty to businesses who wish to continue to operate. This process is complex and takes time.
- We are committed to providing meaningful updates on the progress of the transition work as well as other initiatives under way related to guide outfitter interests within the DTA.
- The Province is working with the Guide Outfitter Association of BC (GOABC) to explore options to assist holders of Guide Territory Certificates that overlap the DTA (see appendix 2 for details).
- British Columbia (BC) encourages all GO to build relationships with Indigenous Nations whose territories their Guide territory overlap to explore potential opportunities.
- The Province remains a neutral party in any purchase negotiations between the operators and the First Nation.
- The Province has provided some funding to the Nation to support acquisition of properties on a willing buyer, willing seller basis.
- Treaty 8 and Yahey Decision – Hunting Regulations. In March 2022 GOABC wrote to the Premier with concerns about BC's interim measures related to Treaty 8 (Yahey Decision): Plan to reduce moose hunting by 50%, precautionary closure of caribou hunting.
 - Ungulates including moose and caribou are of critical importance to the Treaty 8 way of life.
 - Treaties are constitutionally protected, government-to-government agreements that identify, define and implement a range of rights and obligations, creating long-term, mutually binding commitments.
 - The courts have said the Province infringed on the treaty rights of Blueberry and must demonstrate substantive, concrete protections for wildlife and wildlife habitat (Yahey, para. 1713).
 - Interim hunting regulation changes proposed for the Northeast (Wildlife Act Region 7B) are aimed at restoring and protecting aspects of the Treaty 8 way of life, while still being inclusive of licensed hunters.
 - The proposed hunting regulation changes are an interim measure and part of a broader package of actions specific to improving wildlife stewardship and habitat conservation and to reducing other resource management decisions that negatively affect wildlife.
 - The regulations will be reviewed after two years as part of the next regular hunting regulation cycle.
 - The interim regulation changes, which will be reviewed in two years, are part of a broader package of actions including habitat protection, restoration, and reducing other negative impacts on wildlife- there is an opportunity to work together during this 2-year period on the shared objective of increasing hunting opportunities for everyone.

Attachment 2: Tsilhqot'in Nation – Declared Title Area Tenure Transition Update

Background

Since the Supreme Court of Canada (SCC) declaration of the Tsilhqot'in Nation's (TN) Aboriginal title in 2014, the TN, through Bridging Agreements entered into with the Province, had given guide outfitters permission to continue to access its title lands for guide outfitting, subject to the conditions of provincial licenses and certificates. Relevant Bridging Agreements expired on March 31, 2019.

The provincial *Wildlife Act* provides that ownership in all wildlife in British Columbia is vested in the government (Section 2(1)) and use must be done in accordance with a permit or licence (Section 2 (2)). The Province's view is that the *Wildlife Act* continues to apply over title lands. However, the 2014 SCC Tsilhqot'in Decision described important aspects about authority and decision-making over Aboriginal title lands that impact existing tenure holders where tenures overlap with title lands.

The 2014 SCC Tsilhqot'in Decision affirmed that Aboriginal title confers the right to the use, control and benefit of lands. On title lands, the Tsilhqot'in may proactively manage, enact laws, and decide the uses of the lands and resources. Based on the management goals of the Xeni Gwet'in, the Province is approaching the Tsilhqot'in title lands as though they are similar to privately owned lands, for the purposes of what non-Tsilhqot'in people may do on those lands. Some guide territory certificates, while valid, cover areas that are both on provincial Crown land and Tsilhqot'in title lands. In the title land portion of these guide territory certificate area, the declaration of Aboriginal title means that the Tsilhqot'in title lands will no longer be regulated in the same manner as other provincial Crown land.

Summary of Tenures: Guide Outfitters – Declared Title Area

- There are 10 tourism operators (e.g. hunting/fishing lodges) located within the title lands, two of which are now owned by Xeni Gwet'in (XG) - Elkin Creek Ranch and Yohetta Wilderness Adventures. These businesses often hold multiple tenures, some of which have a broad defined area – park use permits and commercial recreation, for example.
- There are five Guide Territory Certificates (GTC) that partially overlap the TN Aboriginal title lands including one recently acquired by the TN.
- Of the five, the smallest overlap is nine percent and the largest is 74 percent. Now that Xeni Gwet'in has purchased one, there are four remaining with overlaps.
- A GTC that overlaps the title area remains valid, subject to existing terms and conditions of provincial authorizations. Permission from the Tsilhqot'in Nation and the Xeni Gwet'in, in addition to provincial authorization is required for guiding activities to occur on title lands. That permission has not been provided by the TN/XG to date for any licenced guides.

Current Messaging

- The Province is working closely with Xeni Gwet'in leadership to build a shared transition plan that recognizes the Tsilhqot'in right to use and control the land and enjoy its

benefits while providing certainty to businesses who wish to continue to operate. This process is complex and takes time.

- We are committed to providing meaningful updates on the progress of the transition work as well as other initiatives under way related to guide outfitter interests within the Declared Title Area (DTA).
- The Province is working with the Guide Outfitter Association of BC (GOABC) to explore options to assist holders of Guide Territory Certificates (GTC) that overlap the DTA.
 - The Ministry of Forests (FOR) hired an appraiser to value businesses and Certificates that overlap the DTA. All four business valuations are complete.
 - BC is supporting conversations between Xení Gwet'in and GTC holders around the sale of the certificates where both parties are interested in moving to a GTC transfer business deal.
- In addition, FOR is working internally on an approach to manage the needs of the operators and the Xení Gwet'in on the Chilko River. Collaboration of the parties will be a step in this approach.

Appraisal Status

- Appraisal work has been completed, to inform government's decision on how to proceed in this unique situation with guide outfitters that overlap the Declared Title Area. On GOABC's recommendation, FOR hired Frances Potgieter of Ernst & Young.
- The appraisal work is scoping work, to inform a decision by government on how to address business impacts to guide outfitters from implementation of the DTA.
- Guide outfitters are hopeful that they will receive 'compensation' for lost opportunity over the last years, and some are hopeful to sell at fair market value.

Local Guide Outfitter Engagement in Cariboo Chilcotin

- Regional Ministry of Indigenous Relations and Reconciliation (IRR) and FOR managers are available to reach out to Cariboo Chilcotin Guide Outfitting Association (CCGOA) - as invited.
- In December 2019 and 2020, IRR and FOR regional managers met with the CCGOA.
- In June 2020 and 2021 FOR regional staff attended the CCGOA AGM
- Through 2021 and into 2022, FOR and reps from the CCGOA and the BCGOA attend regularly monthly meetings.

BRIEFING NOTE FOR INFORMATION

DATE: November 24, 2022

PREPARED FOR: Honourable Josie Osborne, Minister of Lands, Water and Resource Stewardship and Minister Responsible for Fisheries

ISSUE: The Business Council of British Columbia has requested to meet regarding the economic opportunities in provincial natural resource policies and strategies.

BACKGROUND:

- The Business Council of British Columbia (BCBC) has requested to meet with the Minister of Land, Water and Resource Stewardship (LWRS). BCBC is a non-partisan organization that advises decision makers, through policy and research, in support of a stronger economy. BCBC's membership includes natural resource sector stakeholders and government agencies.
- BCBC suggests British Columbia (B.C.) can become an attractive investment opportunity because of our renewable resources that allow for low carbon emissions; however, B.C. lacks a competitive edge due to the costs to produce in B.C. and our complex regulatory framework.
- From 2018 to 2020, BCBC and the Province engaged in a joint governance group to identify barriers to economic competitiveness. However, this collaboration ended due to other competing priorities. BCBC has continued to develop recommendations, through research and engagement, that they believe the Province should adopt. BCBC suggests that the Province has acted on BCBC's advice previously, including developing initiatives to support the economic advancement of Indigenous communities, as established in the Rural Economic Diversification and Infrastructure Program. The Province does not keep track of when or to what extent it adopts recommendations from lobbyists such as the BCBC, but alignment between the BCBC's platform and the Provincial mandates suggests there is evidence of this.
- As a key government lobbyist, the Province communicates and engages with the BCBC on shared issues. In November 2022, the Ministry of Indigenous Relations and Reconciliation executive presented to the BCBC's Indigenous Affairs and Reconciliation Council on the New Fiscal Framework (NFF).
- Permitting/Authorizations and Statutory Decision-Making Solutions (PASS) in LWRS, established out of the 2022 provincial re-structuring, is responsible for transforming the permitting system, which is challenged by a complex decision-making landscape that lacks alignment with Provincial commitments.
- PASS is collaborating cross-sector, including working with consideration of the CleanBC Roadmap initiative for a low carbon economy and the New Fiscal Relationship (NFR) team to support co-developing a new fiscal framework with First Nations that supports Indigenous governments to care for their citizens and manage their territories in ways that reflects their values. NFR has identified forestry revenue sharing models as a means to support this.

DISCUSSION:

BCBC has focused on developing recommendations to enhance B.C.'s economy, by ensuring that we remain an attractive opportunity for investors to support local jobs and economic growth, while not comprising B.C.'s environment. Likewise, the Province is committed to identifying opportunities to effectively manage the use of natural resources, while not comprising high regulatory standards.

BCBC suggests because B.C. produces commodities with lower carbon emissions compared to other jurisdictions, the Province can be a lead in addressing climate change, while still supporting investment, particularly from investors considerate of environmental, social and governance principles (also referred to as "ESG" or "sustainable investing"). The BCBC released a "Low Carbon Advantage Plan" in April 2020, which included a number of recommendations to realize the low carbon advantage. This includes a recommendation to transform the regulatory system.

Other recommendations focus on building an investment strategy and supporting business competitiveness. However, the BCBC argues that B.C. does not adequately protect industrial operators, particularly emissions intensive ones, from the impact of the Carbon Tax. Consequently, investors may prefer to invest elsewhere and, with lack of access to renewable resources, emit higher levels of carbon (this is referred to as "carbon leakage"). Budget 2022 included a commitment to increase the Carbon tax to up to \$170/tonne of CO₂ by 2030, in line with the federal government's commitment. The Ministry of Environment and the Ministry of Finance are reviewing current program and will prepare options that protect affordability and competitiveness for people and businesses. BCBC has been engaged in government's Carbon price review process.

BCBC has further suggested that investors are deterred away from B.C. due to the complexity of the regulatory framework. For example, intake and decision points are fragmented across the Province, and large projects may require over 30 authorizations, which may take anywhere from months to years to grant. To alleviate this constraint, it is suggested that reformation to policy and legislation must take place to ensure high standards of environmental protection and economic growth can co-exist. FOR and EMLI analysis suggests that the Province misses out on incremental revenue from tenure and potential multi-billion dollar investments such as mines.

BCBC is interested in working with the Province to meet our shared goals, and have identified opportunities to do so, including tax protections and regulatory reform that supports revenue sharing with First Nations.

The BCBC is also working closely with the Ministry of Job, Economic Recovery and Innovation on the development of a Centre of Excellence in First Nations Economic Development. The intent of the Centre is to support opportunities for economic development and investment for Indigenous peoples, and to guide the expansion of provincial initiatives to support First Nations communities in securing new economic opportunities. The focus of the Centre will be on five areas of activity including the following:

- First Nations business capacity;
- First Nations economic strategy development and coordination;
- Policy, research and data gathering;
- Indigenous trade development; and,
- The B.C. – First Nations Transformative Change Initiative (DRIPA implementation).

MINISTRY RESPONSE:

- The Province is committed to making B.C. an environmentally sustainable investment opportunity, promoting economic growth and jobs, reconciliation with Indigenous peoples through stronger fiscal relationships, and modernizing land use planning through co-developed approaches with First Nations.
- The Province has stood up initiatives to achieve these goals; this includes PASS, to enhance the regulatory framework to support a predictable process, fair and transparent durable decisions. PASS will collaborate cross-sector, including with CleanBC and the New Fiscal Framework.
- We agree with you that B.C.'s renewable resources allow industries to produce goods with lower carbon emissions and believe that our work on permitting and statutory decision-making will improve timelines associated with approving projects, facilitating economic and environmental sustainability.
- Further, the Province is committed to co-developing a new fiscal framework with Indigenous Peoples that will help ensure Indigenous partnership in sustainable forestry management and support Indigenous governments in fulfilling their responsibilities and accountabilities. As a first step, in 2019, the Province implemented long-term gaming revenue sharing and in April we committed to co-developing a new forestry revenue sharing model, which included immediately doubling the amount of forestry revenue currently shared with First Nations.
- The CleanBC initiative demonstrates that B.C. is well positioned to meet the interests of ESG investing. CleanBC is advancing key climate action commitments towards their 2030 target of 40-percent reduction in climate-changing emissions, including meeting or exceeding federal requirements for carbon pricing, to ensure all citizens live, work and play in a cleaner and more prosperous B.C.
- B.C has an opportunity to be a lead in addressing climate change while fostering economic growth and jobs, and BCBC has demonstrated consistent interest in supporting this. We appreciate the role of the BCBC and the work it has done on behalf of the business community.

Attachment

BCs Low Carbon Advantage Plan

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	Initials	Date
DM	LH	Nov 25, 2022
ADM	CW	Nov 21, 2022
Program Dir/Mgr.		



Low Carbon B.C.'s Advantage

A PILLAR OF

Stronger Tomorrow,  Starting Today.

AUGUST 11, 2020





MAXIMIZING B.C.'S LOW CARBON ADVANTAGE

We are pleased to present this **Low Carbon Advantage** plan as part of the British Columbia business community's overarching **Stronger Tomorrow: Starting Today, An Economic Plan for B.C. Families and Businesses**.

It is based on almost two years of unprecedented effort between industry—led by a team of senior policy and business leaders—and specialists in the Province of British Columbia to build on B.C.'s reputation as a reliable and responsible provider of low carbon commodities and energy. This plan recognizes the industrial sector as the backbone of B.C.'s export economy; and that this sector has a unique opportunity to grow local investment and jobs, as well as contribute to global climate change solutions while there is a rising demand for commodities, domestically and globally.

B.C.'s highest value-added sector, by far, is natural resource production. The mining, oil and gas production sectors generates *five times* as much value-added (real GDP at basic prices) per unit of labour input as the business sector overall. The sector's openness to international competition and trade engenders its intensive use of capital, skills, advanced technologies and economies of scale.

To better understand the opportunity as well as barriers to this low carbon advantage, dozens of subject matter experts from industry and the Provincial Government, worked intensely to assess the critical components of a strategy, verifying the data and expert findings.

This **Low Carbon Advantage** plan reports out on those verified results which demonstrate that, on average, our energy and commodity exports have half the climate change-causing greenhouse gas (GHG) intensity of our competition. But we also verified that our industries face a significant competitive disadvantage compared to global competitors.

Just before the pandemic hit, work on solutions had stalled and then necessary attention was directed to public health and new economic stresses. However, it is our firm belief that this work is more important than ever as governments seek to "build back better" by reinvigorating investment and putting more people back to work, while also deploying climate solutions.

Indeed, that is why the **Stronger Tomorrow: Starting Today** economic recovery plan from the Business Council of B.C. placed an emphasis on competitiveness *and* a cleaner world. The Climate Solution Council stated to the Government of B.C. in May 2020 that the work on a low carbon industrial strategy "needs to proceed with urgency to improve the competitiveness of B.C.'s industries". We respectfully state that B.C.'s low carbon advantage is that plan.

While B.C. has received international accolades for its leadership in carbon pricing and climate change planning—efforts that our industries have supported over the years—B.C. is the only jurisdiction in the world that has a price on carbon without comprehensive protections for its trade-exposed industries: the European Union, California and other Canadian provinces all have this protection. A key element of what we need to optimize our low carbon advantage is for the B.C. Government to announce the next stage of actions for Emissions-Intensive Trade-Exposed (EITEs) producers.

At the risk of carbon leakage and missing the opportunity B.C. has with the transition to a lower carbon global economy, we cannot continue to be the global outlier on EITE policies. B.C. businesses and resource communities need the Provincial Government to move forward and take action.



As Premier John Horgan said, “B.C. is uniquely positioned as a destination and supplier of choice for industry looking to drive low-carbon economic growth and opportunities. Working together we can meet increasing global demand for products, services and solutions that reduce air pollution and protect our environment.”

We propose bold recommended actions in these key areas to realize our low carbon advantage:

1. **Transform the regulatory system** to create efficient and effective regulatory processes that provide global leadership in sustainability performance, cutting complexity not corners
2. **Develop a clear business investment strategy** that demonstrates B.C. is open for investment and markets the low carbon advantage we have from the commodities we produce
3. **Embrace carbon offsets and market mechanisms** as compliance tools in the B.C. climate framework with investment in nature-based solutions
4. **Endorse protection for emissions-intensive trade-exposed** production from the full carbon tax consistent with federal policy in order to prevent carbon leakage
5. Refocus current infrastructure/capital plans to **support Canada’s export economy and trade patterns and further the build out of clean infrastructure**
6. **Support the further adoption and diffusion of technology and innovation** across industries

This is a significant opportunity to advance B.C.’s economy and corresponding high wage jobs in rural and urban B.C. while furthering objectives on global climate change and Indigenous reconciliation.

Time is of the essence and our lack of competitiveness is resulting in carbon and capital leakage in B.C. today—leakage that we believe, if not addressed, will have larger impacts on jobs, investment and Provincial Government revenues in the years to come.

Regards,

Industry’s Leadership Advisory Group to the Low Carbon Advantage Plan

Greg D’Avignon, Business Council of B.C.



Susannah Pierce, LNG Canada

Susan Yurkovich, Council of Forest Industries

Tom Syer, Teck Resources

Brad Herald, Canadian Association of Petroleum Producers

August 11, 2020



REPORT
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THE OPPORTUNITY

We are collectively living through the worst economic shock of our lifetimes—indeed, the worst in 100 years in B.C.—triggered by the worst health crisis in multiple generations, the COVID-19 pandemic. Society will come out of this looking different—the questions are: what damage will be done; and how do we rebound and shape this future to enable faster and sustainable recovery and seize opportunity?

Figure 1 — Competitiveness Findings

ECONOMIC CONTRIBUTION OF THE LOW CARBON SECTOR TO B.C. *

	2019	2017 – 2019 Average As % of all industries
GDP - \$Millions	253,048	9.6%
Merchandise Exports - \$Millions **	43,494	44.43%
Total Employment - 000s	2506.5	2.9%

*Defined as inclusive of mining, oil and gas extraction, wood product and paper manufacturing, non-metallic mineral and primary metal manufacturing.

** Share of total merchandise exports

Data from Business Council of B.C.

The industrial sector, which produces the goods we and the global marketplace need, is the backbone of B.C.'s export economy and is essential to recovery, hiring and creating new jobs. To restore and maintain our standard of living, and to enable these high paying jobs and rising incomes, the province must sustain a strong and vibrant export sector, anchored by globally-competitive firms operating in industries where B.C. enjoys competitive advantages. Responsible resource development is at the heart of the Canadian economy and we are exceptional at how we do this sustainably using some of the best technology and practices anywhere. B.C. is a small, open trading economy. So much of the provincial economy and jobs are integrated with global economies through trade in products and services—this is central to our collective provincial prosperity and the quality of life for British Columbians.

Stronger Tomorrow, Starting Today set out ideas for the collective government policy and business actions necessary to extract ourselves from the deep hole in the provincial economy due to the COVID-19 pandemic. The plan focuses on recouping lost jobs and creating new ones; replenishing eroded government finances; and enabling a better more inclusive future that provides for the wellbeing of future generations and the many households and businesses that comprise B.C. It specifically identifies the vital role our natural resource and energy sectors must play in driving our recovery efforts and fostering collective prosperity in order to get people back to work, from Vancouver to Vanderhoof—growing high-paying jobs and economic opportunity.

This plan highlights the unique opportunity, starting now, for B.C. and Canada to pivot over the medium and long term to build out the economy in innovative and impactful ways with solutions that support a low carbon future.



This **Low Carbon Advantage** plan lays out the potential of our low carbon advantage—one that the rest of the world aspires to achieve yet we have in our grasp, provided we get the right pieces in place together now. Pieces that we need industry—but also the Government of B.C.— to help put in place right away.

LEVELING THE PLAYING FIELD FOR B.C. TO CREATE JOBS AND PROVIDE SOLUTIONS TO THE CHALLENGE OF GLOBAL CLIMATE CHANGE

A key element of what we need to optimize our low carbon advantage is for the B.C. Government to announce protections for Emissions-Intensive Trade-Exposed producers (EITEs). Climate leaders like Norway, California and all other provinces in Canada provide these protections. As a result, B.C. is at a disadvantage for investment and risk of job loss as the only jurisdiction in the world that doesn't protect these producers and their export products.

We cannot continue to be the global outlier. B.C. export jobs and producers need the Provincial Government to stand beside it and ensure fairness and enable our competitiveness.

Prior to the COVID-19 pandemic, the business news in Canada was dominated by discussions about how Canada could show leadership on the balance of natural resource development and climate in the wake of investment being pulled from several major resource development projects. And there continues to be a trend globally on sustainable investing and looking at environmental criteria as a way for investors to evaluate companies. British Columbians expect that respect for climate will be part of future-oriented economy recovery efforts. For two years now, the Business Council of B.C. has been building a solid, technical foundation for a plan to enable the export of B.C.'s low carbon content commodities. It is now more urgent than ever. We've shown before in B.C. that we can have both economic growth and respect for climate imperatives. This **Low Carbon Advantage** plan proposes further evolving this position as global GHGs rise—to think beyond our borders.

The opportunity is for B.C. to become **a verified, competitive low carbon supplier of the energy, commodities and innovations the world will consume in the years ahead. And if B.C.'s low carbon exporters can become more competitive, this benefit can only grow.** Through selling the goods the world needs, B.C.'s exporters can be a real solution to the climate challenge by reducing global emissions while growing B.C. jobs, B.C. companies, and revenues that the B.C. Government uses pay for the services we all rely on.



We Need to Even the Playing Field to Be Competitive

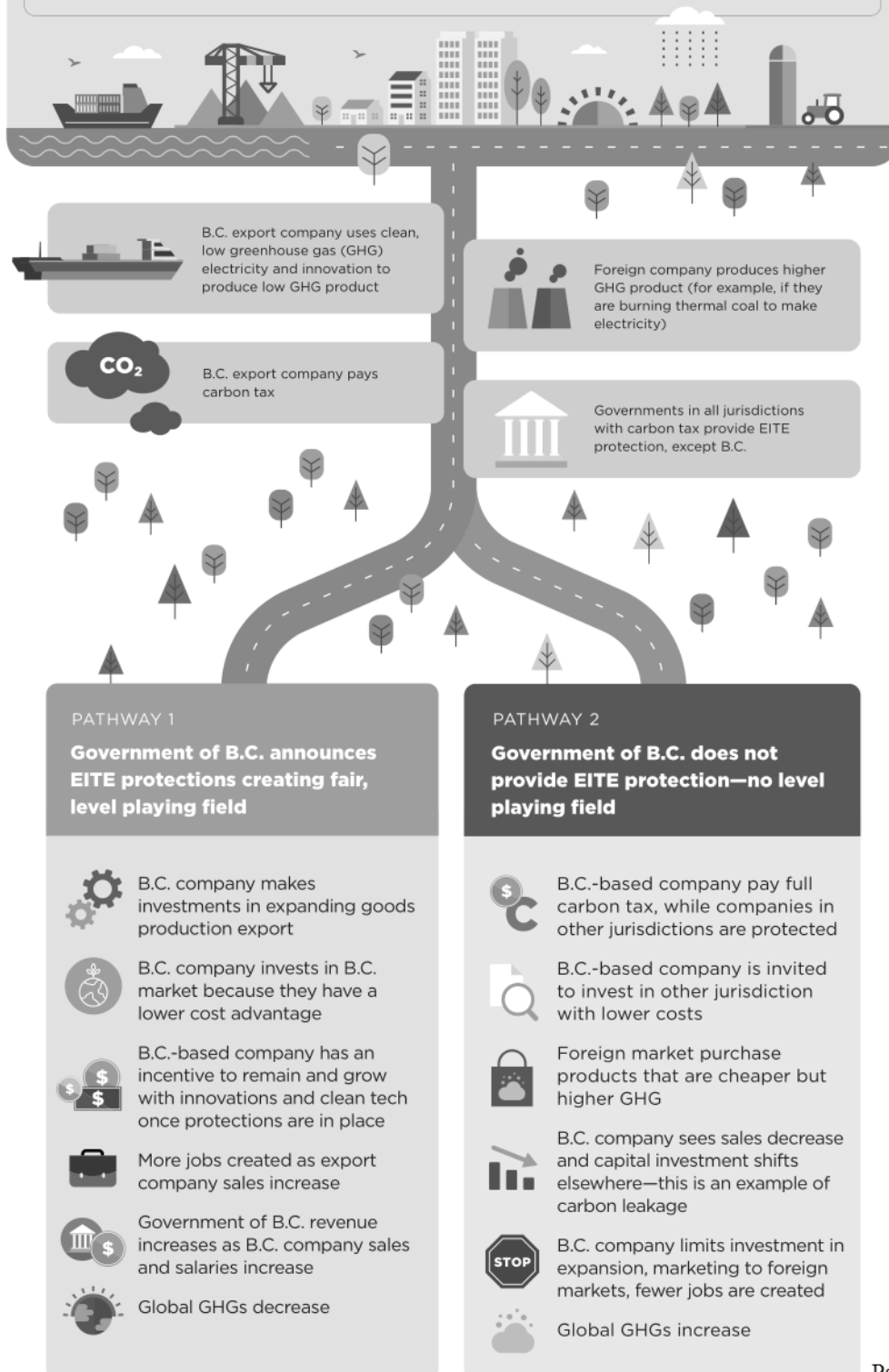


Low Carbon
B.C.'s Advantage

What is an EITE industry?

Emissions-Intensive Trade-Exposed producers are those that grow, mine or manufacture goods that are for export and are commodities that can be bought from any place in the world.

Examples are: mining, forestry, natural gas, and others—all industries that are foundational to B.C.'s economy.





Through collaborative work with the B.C. Government, it has been proven and verified by external experts that commodities produced in B.C. have an 18 million tonnes of GHGs (Mt CO₂e) advantage over products produced by competing jurisdictions. That's equivalent to a third of B.C.'s annual GHGs emissions each and every year. For a full list of experts, see Appendix 1.

Why not promote this advantage by enabling the success of B.C. exporters and communities to have an outsized impact on GHGs while at the same time growing B.C. jobs? The challenge is to adopt solutions that ensure B.C. businesses are competitive in a world marketplace so that the global marketplace buys what we export.

The Canadian energy, transportation and commodity export sectors were already in a cost reduction and efficiency mode pre-pandemic. As certain sectors mobilized to cut costs quickly as they faced uncertain demand and lower commodity prices, B.C. was the first place to reduce shifts because of its high cost of operations. To be a low carbon solution provider, we need to prioritize the competitiveness of B.C. industries in the post-COVID-19 race to rebuild our economy. At risk is not just the opportunity to grow our global GHG advantage, but the viability of these businesses that support direct and indirect jobs and communities around the province. We also bear the risk that more carbon-intensive jurisdictions expand, thereby leading to a concept called "carbon leakage". If B.C. products aren't competitive in the marketplace, the products will come from elsewhere, at a proven higher carbon content.

British Columbia's official target to slash emissions by 40% by 2030 (from 2007 levels) is equal to cutting 4 million tonnes (Mt) per year for 10 years, inclusive of growth. If the estimated 8% drop in world GHG emissions in 2020 was replicated in B.C., it would see emissions drop by 5.4 Mt this year. Even in a year when the economy was largely shuttered for three months, with a high of 400,000 British Columbians out of work, the province will record approximately half of the annualized decline in GHG emissions needed to align with the Provincial Government's legislated target.

Jock Finlayson & Denise Mullen

Opinion: Is the Low Carbon Future Upon Us Now?

Business Council of British Columbia, 2020

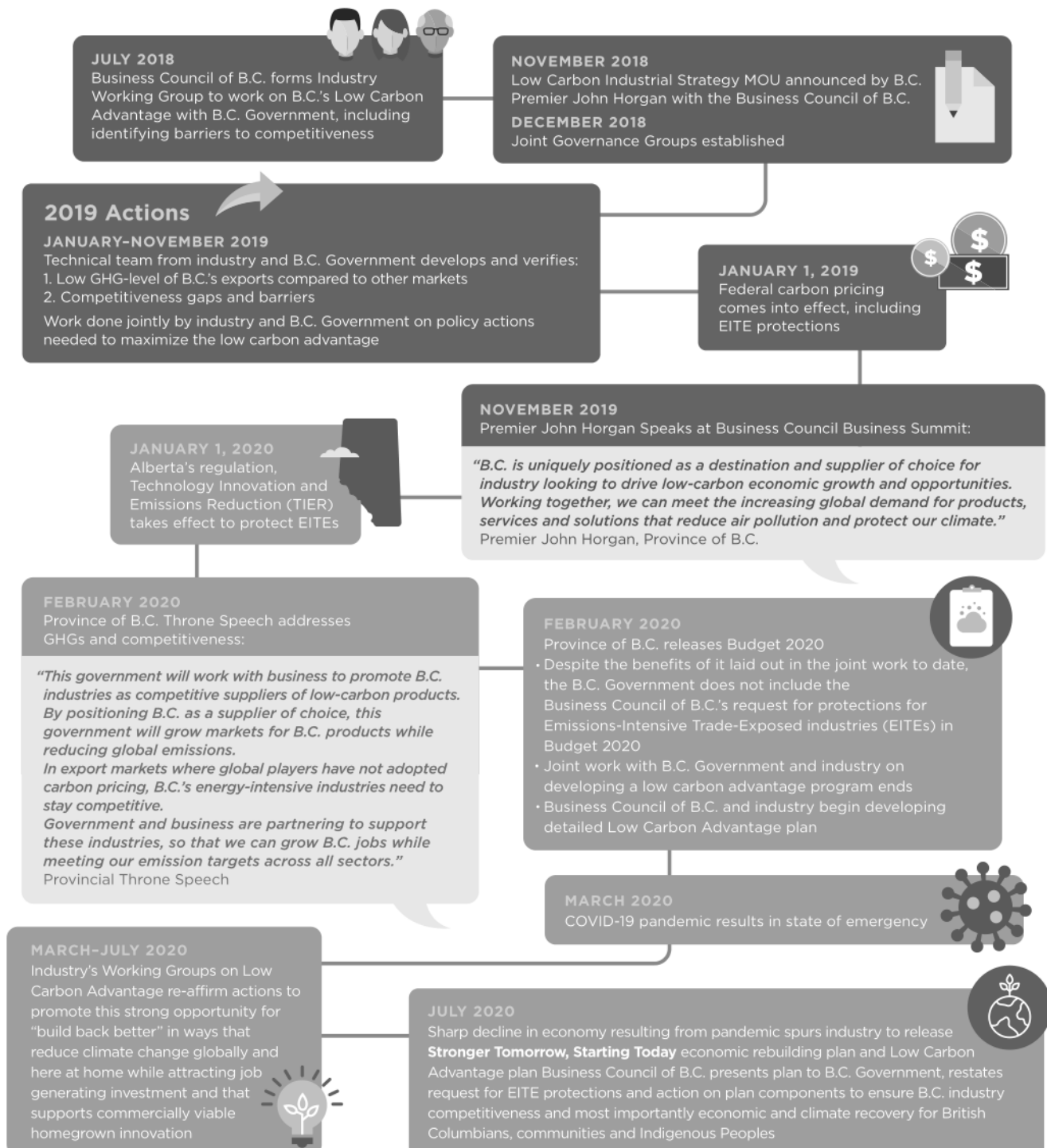


Two Years of Research Confirms We Can Leverage Our Low Carbon Advantage...With Support



Low Carbon
B.C.'s Advantage

The Business Council of B.C. has been working with the B.C. Government toward B.C.'s Low Carbon Advantage since 2019. Here is a brief glimpse at the journey to-date.





Climate change is real, and for years B.C. industries have supported domestic reduction targets by being at the forefront of innovation for emissions reductions. If the rest of the world made some of the important innovations and policy shifts when B.C. did, the world would be further ahead. B.C. has the real chance to help beyond our own borders, a point made by the First Nations Climate Initiative, which supports the design of a low carbon economy in B.C. Indeed, the **Low Carbon Advantage** plan is aligned with First Nations' efforts on nature-based solutions as part of developing economic opportunities on the land-base and new partnerships where B.C. has a comparative advantage.

As advocates position themselves for the discussion on Canada's economic future, it needs to be made clear that Canada's, and B.C.'s, highest value-added sector is natural resource production. It pays the bills and generates the highest paying jobs for Canadians.

"The quickest, surest path for Canada's post-pandemic recovery is to fire up its big economic engines. The double-word-score is that B.C.'s natural resource exports can also make an outsized impact on climate goals for the world. The pace of our ambition is tied to smart policy that enables economic strength."

David Williams

Which Industries Pay Canada's Bills?

Business Council of British Columbia, 2020

B.C.'S OUTSIZED IMPACT

The international marketplace is increasingly competitive and may be more so as the world's economies try to emerge from the crisis caused by the pandemic. It will be a steep climb back. While the US was on a roll prior to the pandemic, the same was not true for Canada. A Bank of Canada poll of Canadian businesses in early 2020 showed conditions were deteriorating even before the pandemic hit. Its business outlook survey dipped into negative territory showing that business sentiment had softened before the concerns around the pandemic intensified in Canada.

Along with a return to social normalcy, job creation and growth, there are also discussions about how to "build back better" through a green recovery. At the same time, the world's need and demand for natural resources will continue to increase. So where can B.C.'s export sector stand out?

We need not see these as competing camps in a narrative of B.C.'s global position as a low carbon producer of high-quality natural resource products. A low carbon industrial advantage will support both job growth and climate change objectives.

Within the international community, B.C. has long been recognized as a North American leader on climate policy and results. Given this, it is not surprising that industries that do business in B.C. are leaders on climate, and export this expertise as they invest in opportunities outside our borders. Fueled by interests of their investors and employees; the need to reduce costs and improve efficiency; and pride in the natural environment in which they operate, B.C. companies are leading some of the most innovative work in the world on emissions reductions, and have global recognition for sustainability and progressive low carbon commitments and actions. For some time, the industrial



sector has seen the opportunity for B.C. to affect a reduction in the world's GHGs by promoting B.C. exporters as low carbon suppliers of the natural resources and innovations the world will consume in the years ahead.

This global advantage presents a significant opportunity for B.C., and Canada. As we emerge from the pandemic with a ravaged economy, we can show long-term leadership on how to balance natural resource development with climate goals, in particular if Canada determines that the investments it wants to make in the economic future of the country will be greener.

But this will require intensive effort to ensure our industries are nimble in the new environment, competitive and have regulatory certainty at home. We have an opportunity to do more, we must:

- Recognize the rising demand for natural resources inputs domestically and globally
- Build on Canada's global reputation as a reliable and responsible provider of low carbon commodities
- Value B.C. as the choice for global and domestic capital in search of low carbon, competitively priced energy and commodities which drives innovation and impact

The risk is that more carbon-intensive jurisdictions gain additional market share at the expense of a lower carbon-intensive exporter like B.C., leading to a loss of B.C. jobs in the export sector just as economies around the world rebound.

B.C.'s GHG Targets

The Climate Change Accountability Act includes legislated targets for reducing GHGs, a climate change accountability framework and requirements for the provincial public sector. B.C.'s GHG emissions are to be reduced by at least 40% below 2007 levels by 2030, 60% by 2040 and 80% by 2050. In 2019, the Provincial Government introduced requirements to set sectoral emissions targets and an interim emissions target on the path to our 2030 goal.

By its own forecasts the Province is at least 20% off its 2030 target and there is no clear plan to achieve new sectoral targets that recognize the high marginal costs of abatement in B.C.

Globally, carbon leakage is a serious concern. Indeed, since beginning this work to prove the low carbon content of B.C.'s commodities, the world has largely failed to act on commitments from the Paris Accord (signed in 2015 at COP21, the United Nations Framework Convention on Climate Change)—the U.S. has withdrawn and China's emissions grew last year by four times B.C.'s total emissions.

B.C. is committed to climate targets and Canada's support for the Paris Accord. B.C. faces a high incremental cost relative to the marginal reductions in GHGs gained, which means that reducing emissions will come at a far greater cost in B.C. because our almost entirely carbon-free electricity system is from renewable sources—95% of our energy is already clean, but this makes it harder to achieve larger gains.



B.C. is also the only jurisdiction with carbon pricing without a comprehensive approach to protection for its trade-exposed industries. This is a disadvantage for a small, open economy where integration with global economies through trade is central to B.C.'s prosperity. In the past, B.C. has managed to drive a strong climate agenda balanced with economic growth. Post-pandemic, if the rest of the world does not demonstrate the leadership that B.C. has, in time, B.C.'s economic prosperity will suffer.

Pride in B.C. Innovation — Carbon Engineering

Unlike capturing emissions from industrial flue stacks, Squamish, B.C.-based Carbon Engineering's technology captures carbon dioxide (CO₂)—the primary GHG responsible for climate change—directly out of the air around us. This can help counteract today's CO₂ emissions, and remove the large quantities of already-emitted CO₂ that remains trapped in our atmosphere.

They have fully demonstrated this with their Direct Air Capture technology and are now commercializing and receiving world-wide attention. The team and partners are working to build industrial-scale Direct Air Capture facilities that will each capture one million tons of CO₂ per year—which is equivalent to the work of 40 million trees.

The results could be devastating for our society. If B.C.'s products cannot be priced competitively in the global market, growth and economic prosperity cannot come to either businesses or government. Without prosperity, government revenues will drop, making it hard to pay for the social programs British Columbians rely on. This is not a place we can afford to be post-pandemic.

As the jurisdiction leading in North America on climate issues, B.C. has continued to push for a strong domestic emissions reduction agenda; the Province's carbon tax is among the broadest (and therefore highest) in the world and is still scheduled to rise. But, because we represent just a tiny fraction of the world's population, reducing emissions here at home has only a limited impact and comes at a far greater cost compared to others that have yet to move to clean electricity or taken steps to innovate to reduce industrial emissions. For perspective, B.C.'s total annual GHG emissions are roughly equal to two days' emissions in China. Hence the opportunity to demonstrate real leadership and impact by exporting more of our clean products, solutions and technologies for global impact while at the same time promoting jobs and capital investment in B.C.

To do that, we must be competitive. Displacing competitors that have higher emissions to meet growing energy and commodity input demands is a tall order. And right now, the cost of doing business

is making that a challenge. The U.S., one of our strongest competitors, is withdrawing from the Paris Accord. Australia, another key competing jurisdiction, repealed its carbon tax in 2014 and continues with industrial policies that provide strong incentives and direct funding for switching to renewable energy (solar and wind) that have increasingly lower costs. And the latest report pre-pandemic from the United Nations shows emissions from China continuing to rise.

At some point, if the rest of the world does not catch up with B.C. in terms of commitment to lower GHGs, we will have to ask when the balance tips from lack of competitiveness to an actual economic atrophy, or worse. What is the impact of us continuing to pursue targets that the world's largest emitters don't take seriously while our businesses suffer because we can't be competitive due to this commitment? As The New York Times observed in 2016:



"While the introduction of the carbon tax set B.C. apart as a leader on the cutting edge, it is also part of the problem. For the policy to work best, it needs the rest of the world to catch up."

Eduardo Porter

Does a Carbon Tax Work? Ask British Columbia

New York Times, 2016

The rest of the world has not caught up.

The opportunity presented by B.C.'s low carbon advantage is to leverage B.C.'s commitment and leadership to amplify our brand by:

- Promoting B.C. as a world-leader on emissions reductions
- Building a strong global reputation for B.C.'s industrial sector as a supplier of choice of low carbon commodities
- Growing our competitive edge as other jurisdictions (many without a price on carbon) move forward aggressively with more direct, subsidy-based approaches to achieve climate objectives

B.C.'S EXPORT INDUSTRY—THE ENGINE OF THE ECONOMY AND JOBS

B.C.'s small, open economy is integrated with the Canadian and global economy through trade in products and services, capital flows, the transmission of data and the movement of people. And this doesn't just benefit rural B.C. In a study for Resource Works, Philip Cross found that if the resource sector were to grow by 10%, more than half (55%) of the jobs created would be located in the Lower Mainland. This is largely because of the business flowing to non-resource industries such as finance, insurance, professional services (such as law and accounting), real estate and trade.¹

This integration is central to B.C.'s prosperity, presenting challenges as well as opportunities. It underscores the need to pay careful attention to B.C.'s comparative position as a location for producing *traded goods and services* to ensure that the province remains attractive to business and investment.²

B.C. sells roughly half of its international merchandise exports to the U.S.; China and Japan are our next largest customers. In the past this diversity has provided some lift to B.C.'s export sector and supported economic growth broadly which translates into jobs in both urban and rural communities.

Exporting products is linked to higher productivity and higher wages. Having to compete in the international marketplace encourages local firms to invest in productivity-enhancing equipment and processes, spurring growth. To compete globally, companies must provide quality products and services at competitive prices.

¹ The 7 Myths of the B.C.'s Resource Economy, Philip Cross, December 2016.

² These are goods and services produced in B.C. that are mainly sold outside of the province.



Like other advanced economies, B.C. has become more dependent on international trade to sustain its economy and bolster living standards. If we include trade with the rest of Canada as well as with other countries, exports of goods and services in total are now equivalent to about 45% of B.C.'s gross domestic product (GDP), while the value of imports is equivalent to more than half our GDP.

Most of B.C.'s exporting firms are price takers—they sell their products at prices largely or wholly set by external markets. If taxes, regulations or other factors beyond their control increase their production costs, exporters must absorb the difference, decreasing their profits. This erodes their ability to invest, expand operations and generate new opportunities.

When this happens, profit-seeking firms may choose to scale back future investments in their B.C. operations and facilities and invest elsewhere, taking jobs and capital with them, and increasing carbon leakage. In the end, this does not serve us well in B.C.

COMPETITIVENESS—WHY IT MATTERS

Competitive circumstances vary widely across industries and over time. However, in the long term, if companies producing traded goods and services cannot make a reasonable profit in B.C., they will shift capital and attention to other places. As demonstrated in ***Stronger Tomorrow, Starting Today*** export-capable sectors have the potential to grow more rapidly because of access to larger markets and many of B.C.'s fastest growing industries are export-oriented. Growth equals prosperity and jobs.

Canada continues to trail the U.S. and other leading economies in several key areas that affect competitiveness, including burden of taxation, state of innovation, regulatory environment for business, speed at which new technologies are adopted across the economy and aggregate market size (relative to the U.S.).

We also lag in business investment, which boosts the economy in two ways: first, when businesses undertake the investment; and second, as companies and their employees become more productive with more and better equipment, machinery, advanced technologies, factories and buildings, engineering infrastructure and intellectual property.

B.C. imposes the highest tax costs on new capital investment projects in Canada, and the overall business tax regime is making it increasingly unattractive to deploy much needed new capital across a wide array of sectors. B.C.'s average marginal effective tax rate (METR) on new capital projects is 24.3%, compared to 10.8% for Quebec, 12% for Alberta, 14% for Ontario and 14.9% for Canada (on average).

Looking at the data for Canada and other industrial countries, the C.D. Howe Institute estimates that Canada has lost ground compared to most other advanced economies since 2015.³ For example, for every dollar U.S. companies allocate to expand and improve the private sector's stock of productive capital, Canadian businesses spend just 57 cents.

³ Tooling Up: Canada Needs More Robust Capital Investment William B.P. Robson, Jeremy Kronick and Jacob Kim September 2018, Commentary NO. 520



“Sagging business investment does not just dampen activity now, it limits future improvements in wages and living standards. Canada should reduce and restructure taxes that raise costs and squeeze returns on investment, avoid policies that raise the prices of key inputs, ensure that competition and opportunities abroad keep Canadian businesses sharp, reduce disincentives to business growth, and improve measures to ensure competitive, well-functioning markets for different types of financing.”

William B.P. Robson, Jeremy Kronick and Jacob Kim

Tooling Up: Canada Needs More Robust Capital Investment

C.D. Howe Institute, 2015

In 2019, the Business Council, together with subject matter experts from industry and the Province of B.C., set out to assess the competitiveness of the largest segments of the commodity export sectors in B.C.: pulp and paper, lumber manufacturing, mining, natural gas and aluminum.

Meyers Norris Penny (MNP), a leading chartered accountancy and business consulting firm in Canada, was engaged to facilitate and validate the results. The competitiveness assessment and GHG benchmarking aimed to address the following questions:

- To what extent do B.C.'s EITE producers face a competitiveness gap in relation to its key competing jurisdictions?
- If competitiveness issues resulted in lost investment or lower production levels in B.C., would the competing jurisdictions produce commodities with higher or lower emissions than the B.C.-based commodities they displaced?
- What policy levers could be implemented that would make B.C.'s EITE sectors more competitive?

The reason for the investment of time and effort was that industry deemed it essential for credibility and veracity in validating B.C.'s low carbon advantage.

On competitiveness, the profit margins of representative facilities or operations in B.C. were compared to those in key competing jurisdictions. A base case was developed for 2017 that showed B.C. generally had competitiveness challenges as a result of a number of factors that varied by sector but included: resource quality/availability, transportation distances, markets access constraints and tax policy. The base case was then used to create a current (pre-COVID-19 pandemic) scenario. This base case did not include U.S. tax changes of 2018 which would further that competitiveness gap.



B.C.'s Low Carbon Advantage Plan

The results were dramatic and clear. The profit margins of our industrial sector are significantly lower, -11% to -87% when compared to our competitors. And this work was done in 2019—these were the disadvantages our industry faced before the economic shock of the COVID-19 pandemic.

There has been validation of this in reports that the current provincial government has asked for, or had commissioned, in the last three years. The 2018 Provincial Mining Jobs Task Force, supported by an independent review, found several key gaps on competitiveness that need to be addressed.

“Overall, B.C. has been at risk for several years to eroding market share and competitiveness challenges from both regulatory and cost perspectives. While these challenges are not unique in a global context, there is evidence that B.C. is falling behind. Over the past decade B.C.’s share of investment in the mining sector, both nationally and globally, has declined.”

**Provincial Mining Jobs Task Force,
2018**

Figure 2 — Competitiveness Findings

PROFIT MARGIN RELATIVE TO COMPETING JURISDICTION

Coal	B.C. vs Australia	-11%
Copper	B.C. vs Chile	-35%
	B.C. vs Arizona	+4%
Natural Gas	B.C. vs Texas	-34%
Lumber	B.C. Interior vs Prairies (Alberta)	-37%
	B.C. Interior vs Southern US (Georgia)	-87%
	B.C. Coast vs US West Coast (Oregon)	-85%
Pulp	B.C. Interior vs Sweden	-24%
	B.C. Interior vs Finland	-36%
	B.C. Interior vs Chile	-62%

MNP BC Low Carbon Industrial Strategy: Phase One Findings, August 2019.

Pride in B.C. Innovation—Natural Gas

The natural gas industry has created its own research and development “ecosystem” to seek out emerging technologies through the Natural Gas Innovation Fund. The Fund was created by the Canadian Gas Association to support the funding of cleantech innovation. Funded by industry, it seeks cleantech projects led by start-ups and organizations with the right innovation for market uptake and commercial viability.

A Price Waterhouse Coopers [report](#) commissioned by the Council of Forest Industries in 2019 at the behest of the Provincial Government came to similar conclusions as MNP’s work above.

The B.C. government is staring at a \$12.5 billion deficit for 2020-21, in part due to lost tax and royalty revenues from the industrial sector. This is why ***Stronger Tomorrow, Starting Today*** emphasizes the need for stimulus measures and other policy reforms aimed at achieving business growth and hiring.



Key Themes from Competitiveness Assessment from MNP

In the opinion of MNP from their review of the policy environment of competing jurisdictions, key themes arising from the competitiveness analysis include:

Higher capital costs, smaller scale and/or competing with new facilities. *Relative to competing jurisdictions, some sectors identified that B.C. has higher capital costs for new investment. Industry also noted that existing operations (e.g., copper and pulp) often competed against newer and/or larger facilities that provide a competitive advantage through economies of scale.*

Competition for investment. *In comparison to B.C., some of B.C.'s key competing jurisdictions have become more aggressive in competing for investment. Examples include the US and Alberta which have recently reduced their corporate income tax rates to attract investment.*

Differences in climate policy across jurisdictions. *Each jurisdiction was identified to have a varying degree of climate policy or carbon pricing in place. In most cases, B.C.'s competing jurisdictions either lacked carbon pricing or recently repealed the carbon tax (e.g., US and Australia). In other cases, carbon pricing was viewed as less stringent than B.C. with certain allowances or exemptions offered to industry (e.g., Alberta, Scandinavia).*

Regulatory uncertainty. *Engagement with industry stakeholders identified that outside of a strict cost comparison, there is a growing level of uncertainty with respect to regulatory issues at both the provincial and federal level. This was a common concern of both existing operations and new investment with examples that varied by sector.*

Transportation/infrastructure challenges. *The ability to get product to market was also determined to be a key consideration for competitiveness. Relative to competing jurisdictions, some B.C. sectors are disadvantaged by farther distances to port (e.g., metallurgical coal) or market access constraints (e.g., natural gas).*

Resource quality/access. *Resource quality and resource access was identified as a key factor affecting competitiveness. Some sectors identified limitations with respect to having a lower quality resource (e.g., copper ore grades) or a lack of supply (e.g., fibre supply constraints) that affect B.C.'s ability to attract investment.*



VALIDATING THE LOW CARBON ADVANTAGE

The other part of the equation—to prove the value proposition of investing in the competitiveness of B.C.'s industrial sector—definitively showed the low carbon advantage of B.C.'s commodities. Again, MNP provided facilitation and validation support to subject matter experts from industry and the Provincial Government. They were supported by le-ef.com Consulting⁴. A copy of the MNP report titled **BC Low Carbon Industrial Strategy: Phase 1 Findings** is available at lowcarbonadvantagebc.ca.

The GHG benchmarking analysis was based on a comparison of emissions intensities with competing jurisdictions at a given point in time. It's important to understand the difference of a "product-on-product" advantage over a "product displacement" advantage. Product-on-product is, for example, the metallurgical coal produced in B.C. compared to metallurgical coal produced in Australia. Product displacement refers to the advantage when a lower carbon content commodity (e.g., liquified natural gas produced by a company like LNG Canada—which will have the lowest carbon intensity of any large facility in operation today) displaces the purchase/use of a higher carbon content commodity (e.g., thermal coal). The savings from product displacement are significantly higher than a product-on-product advantage. When used to replace coal for power generation in Asia, the estimated savings from the LNG Canada project is 60 Mt (at the low end) which equates to 20% of Canada's 2030 GHG reduction targets. This is also equivalent to the removal of 50% of Canada's cars.

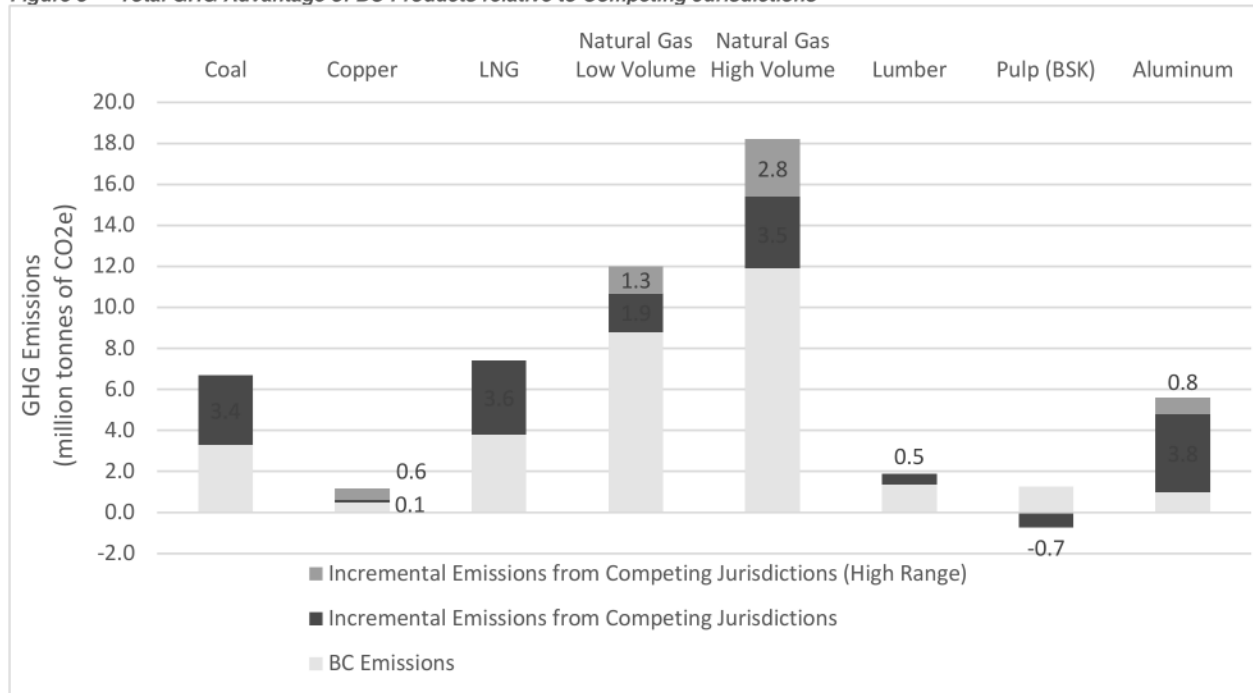
A product-on-product advantage was measured to best answer the following question: if competitiveness issues resulted in lost investment or lower production levels in B.C., would the competing jurisdictions produce commodities with higher or lower emissions than the B.C.-based commodities?

Based on a product-on-product GHG emissions comparison, B.C. industries showed an advantage of 12 to 18 million tonnes in GHG emissions relative to competing jurisdictions (Figure 3). This range is based on a sum of the incremental emissions that would arise from competing jurisdictions at B.C. production volumes (note that this range includes a "low volume" and "high volume" scenario for natural gas, with both scenarios presented in Figure 3).

⁴ Dr. Christine Schuh, President of le-ef.com Consulting Corp., is a leading expert on greenhouse gas verification. Prior to her current role, Christine led the Canadian climate change practice for PricewaterhouseCoopers (PwC) for a decade. Her expertise lies in the quantification of emissions reductions and verification of results. Christine has worked with several governments (including Alberta, Quebec and British Columbia) in establishing greenhouse gas quantification methodologies that are consistent with science and general accounting principles, while informing the design of policy elements.



Figure 3 — Total GHG Advantage of BC Products relative to Competing Jurisdictions



The resulting conclusions, drawn from almost a year of technical work and the involvement of dozens of experts, are that:

- There is a product-on-product GHG advantage in B.C. compared to competing jurisdictions
- B.C. companies operate at a significant cost and complexity disadvantage over competitors
- Other jurisdictions are more aggressive in attracting investment
- Other factors, importantly regulatory uncertainty, further erode B.C.'s competitiveness
- Carbon leakage is happening in B.C.



Pride in B.C. Innovation—LNG

The GHG intensity of LNG produced by Shell's LNG Canada at its Kitimat facility will be about 35% better than the top performing global facilities currently operating and 60% better than the weighted average for the global LNG facilities benchmarked.

Exporting B.C.'s abundant natural gas to countries that need a cleaner alternative to produce power—in particular coal—positions B.C. play a much larger role in the global climate solution. A facility the size of LNG Canada can displace the equivalent of 60 to 90 million tonnes a year (mtpa) of carbon—which is a similar amount to what the entire province of B.C. produces in a year.

CARBON LEAKAGE EXPLAINED—OUR LOSS INCREASES CLIMATE CHANGE IMPACTS

If costs related to climate policies get too high, businesses will move production to places with less stringent environmental rules and lower costs. That's known as carbon leakage and it has the potential to impact trade and jobs.

For example, if environmental policies in one country add a cost to the production of certain commodities, the result will be fewer commodities exported and eventually a shift in production of the commodity to a competing jurisdiction with lower costs. Essentially, our lower carbon intensive commodities are replaced in the marketplace by higher carbon intensive commodities produced by our competitor. This equals lost jobs and higher global GHG emissions. An excellent illustration of carbon leakage is domestic cement manufacturing in B.C. With the introduction of the carbon tax, imports to B.C. of foreign produced cement rose by as much as 40%. These competitors do not pay the carbon tax despite elevated emissions from longer supply chains.

The Conference Board of Canada released the first data-driven analysis of carbon leakage in Canada in November 2019, titled *Tipping the Scales: Assessing Carbon Competitiveness and Leakage Potential for Canada's EITEs*. This report brings attention to carbon leakage as an unintended consequence of a carbon pricing policy. It describes the magnitude of potential leakages as large; indicates that Canada's industries face higher compliance costs than peers; and estimates



a loss of \$10 billion in economic activity and 50,000 jobs. The report concludes that policy protection is important in mitigating the potential fallout from carbon pricing. As the report states: “**Carbon pricing needs to be implemented in a way that minimizes the impact on the competitiveness of industries and maximizes emissions reductions—both locally and globally.**”

An unaddressed concern for industry from the inception of B.C.'s carbon pricing plan is the lack of targeted protection for emissions-intensive trade-exposed (EITE) production.

Jurisdictions with a price on carbon and <u>with</u> EITE industry protection:	Jurisdictions with a price on carbon and <u>without</u> EITE industry protection:
<ul style="list-style-type: none"> • Canada • Alberta • Ontario • Quebec • Nova Scotia • California • Connecticut • Delaware • Maine • Maryland • Massachusetts • New Hampshire • New Jersey • New York • Rhode Island • Vermont • All 28 countries of the EU • Switzerland • South Korea • China • Mexico • New Zealand • Chile 	<ul style="list-style-type: none"> • British Columbia

Without exception, all of the jurisdictions with emissions trading systems have developed regulations to support “at-risk industries” and taken steps to provide free or low-cost allowances to these industries to keep them competitive. Canada’s recently-implemented federal backstop carbon price, which will apply in provinces lacking credible carbon pricing policies, recognizes carbon leakage and diminished industrial competitiveness as significant risks.



The Business Council and MNP have been unable to identify any another jurisdiction with a carbon pricing regime **that does not provide robust protection** from the effects of carbon pricing for trade-exposed industries.

Canada's Output Based Pricing System has avoidance of carbon leakage as a core principle, and the system applies protections for EITE industries that are not applicable in B.C. because the Provincial Government has a unique system. This has the effect that B.C. EITE industries are worse off than those in any other province and more at risk of carbon leakage.

A VISION FOR THE FUTURE—B.C. COMMODITIES IN OUR DAILY PRODUCTS

The value proposition is that a more competitive industry can attract investment to B.C.; support innovation in further GHG reductions; and sustain and grow high wage jobs and new companies through technology and innovations.

B.C. companies producing low carbon content commodities are not competitive on a global scale. Current Provincial policies aren't supportive enough. And the costs of production are just too high. Industry needs more support from the B.C. Government to bring the opportunity to life.

The impact of this is counter to what we all want to see. We are knowingly pushing investment to other jurisdictions with higher carbon content commodities, which does nothing to help manage climate change.



Pride in B.C. Innovation—Cement

Lafarge has recently invested \$28m in a new low carbon fuel system at its Richmond cement plant to allow for increased transition from fossil fuels. This circular economy driver will divert over 100,000 tonnes of landfill material every year and will eliminate the creation of landfill methane.



ACTIONS TO OPTIMIZE THE B.C. LOW CARBON ADVANTAGE AND GLOBAL CLIMATE CHANGE SOLUTION POTENTIAL

Below are a number of recommended actions, grouped according to six themes, that are a result of extensive collaboration with subject matter experts from across the industrial sector and were confirmed by MNP's examination of the differences between competing jurisdictions in 2019:

1. Regulation
2. Business Investment, Marketing and Branding
3. Tax Policy
4. Climate Policy
5. Infrastructure
6. Innovation

Industry leaders reinforced the urgency of this action in the spring of 2020 as they assessed, together with Business Council, the devastation to our economy by the COVID-19 pandemic.

These actions can help ensure we are agile and flexible on investing in the growth of current operations and new projects in B.C. that will contribute to a net reduction in global GHGs. For a full list of actions see Appendix 2.

1. REGULATION

Without question, in surveys with the Business Council's members and the detailed work with subject matter experts, the ever more complex, slow and uncertain regulatory framework in B.C. has a significant impact to competitiveness and investment.

Cumulatively, the increasingly cumbersome regulatory and permitting processes and a more complex and uncertain legal environment add to the economic burden on businesses. In general, companies and exporters in the natural resource, manufacturing, transportation and infrastructure sectors are most affected by regulatory costs associated with provincial and local government environmental policies and processes. It is not a simple task to quantify these costs, or to determine how they compare with those in other jurisdictions. What we do know from international studies that track regulatory performance is that Canada has seen an alarming erosion over time. This trend is consistent with reviews done nationally (Resources of the Future Economic Strategy Table report) and here in B.C. (Mining Jobs Task Force).



While the regulatory systems have elements of excellence—data and science leadership, social integration—the metrics around timelines and complexity are poor. Overall, it is fair to say that the regulatory environment for traded industries in B.C. currently serves as a source of competitive disadvantage. Like Canada as a whole, the province has gradually acquired a reputation as a very difficult place to undertake both greenfield and brownfield industrial projects in sectors such as forestry, mining, energy, manufacturing and infrastructure.

“...energy infrastructure bottlenecks, an outdated tax system, an increasingly complex legal and regulatory environment for business, and Canada’s fragmented internal market are among the factors inhibiting investment and slowing capital formation.”

*Global Competitiveness Report
World Economic Forum, 2017-18*

Most B.C. business leaders believe the province’s regulatory burden puts them at a disadvantage relative to many other provinces and U.S. states as well as jurisdictions like Australia. Environmental review processes and permitting rules are becoming more complicated, costly and protracted. Permitting a mine can take several years, even after a project has been approved under the Environmental Assessment process. Absent, or unfinished treaties with Indigenous Peoples, unresolved title claims and the need for Reconciliation often add further complexity and time for developers, notably in the natural resource, transportation and infrastructure sectors.

Governments regulate to protect the public interest. The balance that needs to be struck is what degree of regulation is necessary and at what cost to doing business. Business leaders highlighted regulation in Canada as one of the most significant cost and competitiveness factors to operating in B.C. It is not about being against regulation—the key is that it be efficient in delivering intended public interest outcomes. Increasingly cumbersome regulatory and permitting processes and a more complex and uncertain legal environment add to the economic burden on businesses in B.C.

The Canadian Energy Research Institute completed a study in March 2020 that found that Canadian projects face a 13 to 19-month delay compared to projects in the U.S. This adds to project costs in



Pride in B.C. Innovation— Forestry

The Brock Commons Tallwood House is an 18-storey mass timber hybrid student residence at the University of British Columbia. It was the world's tallest contemporary wood building at the time of completion in 2017. The use of mass timber in place of more carbon-intense building realized a carbon benefit equivalent to removing 511 cars from the road for a year. The prefabrication of the mass timber also reduced on-site waste by about two-thirds and reduced traffic and transportation to and from the site.



Canada of approximately 15%.⁵ That is on new projects. B.C. has a very complex environment for existing operations with daily consequences adding time and cost. This is due in large part to the nature of agreements with Indigenous Nations, which tend to address a specific issue, rather than comprehensive pathways to support the resolution of relationships between Indigenous Nations and the Crown.

Australia's Environmental Assessment Review

Australia, one of the key competitors for many of B.C.'s exports sectors, is expected to formalize changes to its regulatory processes in the fall of 2020 to a streamlined "single touch" system for state and federal assessments using specialized teams of officials.

The goal is to fast-track 15 large infrastructure projects worth \$72 billion and 66,000 jobs. The target is to have approvals in place in 21 months instead of the usual 3.5 years.

Statement from the Prime Minister of Australia, June 2020:

"...these approvals alone cost industry over \$300 million just in 2019. That's not good enough.

At the end of 2019, approval decisions took 90 days on average. Today they take 40. That is what we've achieved this year in 2020.

Our goal is to cut these times by a further 25% by the end of this year – to 30 days for major projects. Ultimately, our objective is the streamlining of Commonwealth and state processes to a point of 'single touch approvals'.

These commitments are what B.C. is competing against for investment.

The Business Council has called on the Provincial Government to halt the development of new regulations as we work collaboratively to get the economy going again. This is not the time to be adding to the operational burden of companies.

Ultimately, B.C.'s goal should be to organize its people, processes, technology and culture around what happens on the land, in communities and within a broader economic framework.

⁵ Competitiveness of Canada's Regulatory Framework for the Oil and Gas Sector, Study No.185 March 2020, Canadian Energy Research Institute.



A Natural Resources Corridor as a Partnership with Indigenous Nations

Developing a modern, multi-purpose, natural resource trade corridor is a real opportunity to accelerate exporting B.C.'s and Western Canadian resources to meet growing demand in Asia. The corridor can provide a true nation-to-nation building opportunity where coastal and interior Indigenous communities are equity partners with the Government of B.C. throughout its development and ownership. It could provide an opportunity Indigenous equity participation in projects.

Investor uncertainty in B.C. and Canada could be significantly reduced when land for industrial use is permitted and developed through a government-Indigenous partnership. This would in turn attract and enable development across the natural resource supply chain.

REGULATORY ACTIONS

- 1) Transform the **regulatory system** to create efficient and effective regulatory processes that provide global leadership in sustainability performance, cutting complexity not corners.
 - Increase efficacy and timeliness of regulatory programs and oversight
 - Improve inter-agency coordination with clear, dedicated sectoral leadership and accountability (and resource this accordingly)
 - Simplify service delivery for proponents, the public and Indigenous communities by decreasing duplication and interaction points
 - Address the cumulative effects of resource development in the permitting process
 - Improve industry confidence in the regulatory process including increased predictability and therefore decreased risk for industry seeking to invest in the Province
 - Improve availability and utility of data and information sharing to support effective and efficient processes
 - Decrease financial risks with respect to:
 - Cost for industry to engage in regulatory processes
 - Internal cost for authorization processes and compliance activities
 - Create a unique stream for known performers with strong records of compliance
- 2) Introduce a competitiveness lens to current and future regulations and compliance measures to assess and weigh the impact on communities and economic prosperity so it is well understood.
- 3) Develop a modern, low carbon natural resource trade corridor—where Indigenous communities are equity partners and projects deemed to be in the national interest have a different gate through processes.
- 4) Leverage technology as a compliance and decision making and consultation tool.
- 5) Resolve the pathways to reconciliation and Crown revenue sharing arrangements with Indigenous communities to create greater certainty in decision-making.

A sectoral working group is already working diligently on many of these goals for the mining sector; this needs to be expanded immediately to other natural resource and energy sectors and should include a clear lead for coordination of ideas and effort



2. BUSINESS INVESTMENT, BRANDING AND MARKETING

The way companies behaved and invested pre-pandemic will be different from the way forward. Many within the industrial sector have international parent companies, or companies with operations in multiple provinces and jurisdictions. Capital will look for the most favourable place to invest. We need to send a strong signal to investors that there is an advantage to investing in B.C.

While the province points to LNG Canada as its example of new natural resource development, the broader market signal the Province sends is one of increasing complexity and cost. A public- and market-facing marketing strategy is needed to grow investment (and jobs) here in the Province and abroad. Business leaders are consistently saying in this new era that in a globally competitive market for capital there is little chance of investment in B.C. at this time.

Yet the potential for B.C. industries described in this Low Carbon Advantage plan could be a once-in-a-lifetime opportunity to brand and market B.C. products to jurisdictions, like Japan, that have an interest in purchasing cost competitive, lower GHG content goods. As well, Environmental, Social and Governance (ESG) metrics to measure the sustainability and societal impact of an investment in a company or business is increasingly important in the investment world.

The proven GHG advantage of B.C.'s low carbon content commodities should be a huge advantage and a product that can be differentiated in the market.

Environmental, Social and Governance

Responsible investing is widely understood as the integration of environmental, social and governance (ESG) factors into investment processes and decision-making. ESG factors cover a wide spectrum of issues that traditionally are not a part of financial analysis yet may have financial relevance. This might include how corporations respond to climate change, how good they are with water management, how effective their health and safety policies are in the protection against accidents, how they manage their supply chains, how they treat their workers and whether they have a corporate culture that builds trust and fosters innovation.

Even in a post COVID-19 world, these factors will continue to grow in significance. The Dow Jones Sustainability Index (DJSI) is the world standard on measuring ESG performance.

Responsible Steel, of which Teck Resources is a member, is a new global standard and certification program on ESG for the steel industry.



BUSINESS INVESTMENT, MARKETING AND BRANDING ACTIONS

- 6) Develop a clear investment attraction strategy that includes a compelling value proposition (aligned with this paper) and welcome door for investment.
 - Market the actions within this plan, specifically on regulatory reform demonstrating B.C.'s commitment to new investment and the growth of current operations; and market B.C.'s reliable political and government environment, sound public health system and First Nations support for businesses generating low carbon content commodities and offsets
 - Develop investor-centric offerings to navigate B.C.'s investment and regulatory structures
 - Resource and give clear leadership to regulatory efforts for new investments with demonstrable and significant economic benefits for B.C.
- 7) Develop an in-market marketing plan and branding for B.C. commodities based on this plan, as well as ESG initiatives, that highlights B.C.'s low carbon content commodities.
 - Put on offer our low carbon advantage on exports, energy intensity (B.C. clean energy) clean supply chains, technology and sequestration
- 8) Create a formal process to assess the individual and cumulative impacts of government policy changes on key competitive measures and to monitor policies that improve competitiveness in our competing export market jurisdictions.

3. TAX POLICY

Cost, in terms of taxes paid, is undoubtedly a significant factor in investment decisions, both for existing operations and new investment. Cost competitiveness was key in LNG Canada's final investment decision and the Province acknowledged this through various fiscal measures that evened the playing field with other sectors and jurisdictions. There have been several reports written about the lack of tax competitiveness in B.C. in the last number of years. Exporting generates widespread economic benefits and is at the heart of B.C.'s prosperity—B.C. presently has one of the highest average marginal effective tax rates (which excludes carbon tax) of all advanced economic jurisdictions.

The ***Stronger Tomorrow, Starting Today*** plan has comprehensive recommendations on tax competitiveness.

Our focus in this ***Low Carbon Advantage*** plan is on EITE and the carbon tax. It was the finding of MNP, confirmed by the Business Council's research, that all other global jurisdictions have recognized that if other competing jurisdictions have much lower carbon prices, or no carbon price at all, local industries will be at a competitive disadvantage, which impacts communities, the economy and jobs. This is particularly true for those industries which are emissions-intensive and trade-exposed. The Federal Government has recognized this and has put in place protections from the federal carbon price of 80-90% on an industry's average emissions. The aim of the federal Output Based Pricing System is to minimize competitiveness risks for emissions-intensive trade-exposed production while retaining the carbon price signal and incentive to reduce GHG emissions. **B.C. is the only jurisdiction in the world that has a price on carbon without protections for its trade-exposed industries.**



Several environmental advocacy groups weighed in on the development of the federal system which has EITE protections as part of its key principle to minimize carbon leakage and competitiveness risks.

"We . . . support the hybrid design of the backstop instrument which applies a carbon levy and an output-based pricing system to ensure EITE industries reduce emissions while limiting the risks of carbon leakage."

**David Suzuki Foundation and
Pembina Institute, April 9, 2018**

"We applaud the federal government on finalizing the design of the carbon pollution pricing system for large emitters in a way that incentivizes Canada's heavy industry to innovate and reduce emissions while protecting competitiveness in international markets"

Pembina Institute, June 28, 2019

EITE Industry Protections

*Jurisdictions that have implemented Emissions Trading Systems have considered protections for **emissions-intensive trade-exposed industries** (EITE). These systems recognize that without special provisions or offsets to address increased energy-related costs stemming from domestic climate policy, business may shut down or shift production to other jurisdictions which have fewer or no constraints on emissions. This may lead to carbon leakage.*

Canada has an output-based pricing system that recognizes that large industrial facilities face competition from peers in jurisdictions that do not yet have a price on pollution. The system is designed to maintain a competitive position relative to international peers. The federal carbon pollution pricing system, also known as the federal backstop, does not apply in B.C. The European Union has identified 147 industrial activities that are EITE and thus receive special treatment.

TAX POLICY ACTIONS

- 9) Recognize the need to avoid carbon leakage as a core principle of policy, which is currently missing from CleanBC.
- 10) Provide emissions-intensive trade-exposed producers with protection from the full carbon tax consistent with the approach in the Federal Government in order to prevent carbon leakage.
- 11) Address the Capital Cost Allowance which continues to be a factor in cost competitiveness with U.S. producers.



CLIMATE POLICY

Emission offsets have been part of B.C.'s climate action toolkit since 2008. The Province uses them to achieve a carbon-neutral public sector—an initiative that's won international praise and awards. However, offsets and market mechanisms such as carbon trading are not included as compliance tools in the climate policy framework for industry. That is resulting in tremendous lost opportunities. Preliminary third-party analysis indicates that B.C. industry offset projects could have a material impact on both GHG reductions and the economy.

B.C. needs to include carbon offsets and market mechanisms as compliance tools in their climate framework with investment in nature-based solutions and the Federal Government needs to play a coordinating role in a national offset market and own the space from intellectual property development to application and adoption credits allowing industry to choose technology.

Carbon Offsets

Carbon offsets, or certified carbon emission reductions, can contribute to real reductions in the near and medium term, with the advantage of (1) buying time for longer term technological and infrastructure solutions to evolve, (2) creating room for economic growth and (3) mitigate the potential for investment leakage and carbon leakage.

A preliminary estimate of the potential for carbon reductions from B.C. offset projects prepared by BlueSource Canada ranges from 5.5 MT/yr by 2025 to 20 MT/yr by 2030. These numbers are material, as 6 MT/yr of offsets would be roughly equivalent to the remaining 25% reduction that is needed by the CleanBC program to achieve the 2030 reduction goal.

Market mechanisms, including carbon trading and offsets are being included by an increasing number of jurisdictions as a key part of a robust climate

Indigenous Participation

Sustainable resource development with Indigenous participation is part of the Canadian identity and there is significant interest and opportunity from Indigenous leaders in B.C. in offsets and nature-based opportunities that can support economic opportunities.



CLIMATE POLICY ACTIONS

- 12) B.C. must include carbon offsets and market mechanisms as compliance tools in their climate framework that should include:
 - Investment in nature-based solutions
 - Time for longer term technological and infrastructure solutions
 - Support for technology sector to provide validation of quality and veracity of offsets
 - Creation of room for economic growth
 - Mitigation of potential investment leakage and carbon leakage
- 13) The Federal Government must play a leading/coordinating role on a national offset market with Canada offering high-quality nature-based solutions.
 - Include Indigenous communities as partners in nature-based solutions
 - Explore Internationally Transferred Mitigation Outcomes (ITMOs) as an opportunity to monetize the low GHG-intensity of B.C. commodities—collaborate with the Federal Government on critical international negotiations around the implementation of Article 6 of the Paris Accord
 - Lead the creation of a national trading market for Canadian business and excess for international purchase
- 14) Support the exploration, with Alberta and Saskatchewan, of regional emissions trading and a global centre for technology and innovation in methane and carbon sequestration and use.
- 15) Canada needs to own the space from Intellectual Property development to application and adoption credits allowing industry to choose technology.
 - Consolidating and leveraging federal funds in support of this
 - Consider further tax credits for companies that invest in R&D and capital expenditures focused on emissions reductions, and that allow for collaborative sectoral investment where like businesses share in the investment and risk
- 16) Maintain and improve B.C.'s GHG product-on-product and displacement advantage with competing jurisdictions as a key component underpinning the credibility of an ongoing low carbon industrial strategy. As in competitiveness, it is important to understand the impacts of key policies on lowering GHG product intensities.
 - Explore the value of an accreditation-style model for verification and branding of low carbon content commodities
- 17) Government of Canada to pursue bi-lateral agreements to create markets for low carbon product and confirm Article 6 agreement templates for demonstration (e.g., Japan, Korea).

4. INFRASTRUCTURE

B.C. exporters and importers use trade networks that rely on multiple modes of transportation to move their cargo. The trade networks connect B.C. businesses to global markets, facilitate trade and underpin both provincial and national economic growth. As such efficiency and reliability is key.

Approximately \$1 of every \$3 of Canada's trade in goods beyond North America moves through a port, with a significant portion of these goods moving in containers. The Canadian economy will take the hit when the ports, and Vancouver International Airport, cannot accommodate growing trade. These kinds of plans are essential to export industries.



Clean energy is Canada's—and B.C.'s—comparative advantage on climate. We have a history of designing cutting-edge industrial processes that run on renewable power. A full 97% of B.C. Hydro's electrical power is from clean or renewable sources. Phase 2 of the Comprehensive Review of BC Hydro plan is to expand the electrification of the economy and attract new, clean businesses to B.C. This needs diligent effort where it can be done in an economic manner and may be the only way some sectors can achieve targets.

Pride in B.C.—Nature-Based Solutions

Shell recently announced an agreement with Tokyo Gas and GS Energy to receive the world's first carbon-neutral LNG cargo with all parties committed to assisting the transition towards a lower-carbon future.

"Carbon neutral LNG cargoes are another choice we are offering our customers, as they seek to address their CO₂ emissions today. In turn, they are then able to offer the same to their customers who increasingly want to reduce the net carbon footprint of their energy use," said Slavko Preočanin, Vice President, Shell LNG Marketing and Trading.

Nature-based projects protect, transform or restore land and enable nature to add oxygen and absorb more CO₂ emissions from the atmosphere. Each carbon credit is subject to a third-party verification process and represents the avoidance or removal of 1 tonne of CO₂. Credits used for this deal are bought from Shell's global portfolio of nature-based projects. These projects also have extra benefits such as offering alternative sources of income to local communities, cleaning air and water, improving soil productivity and maintaining biodiversity.

As outlined in ***Stronger Tomorrow, Starting Today***, recent policies announced by the federal government create a strong incentive for the use of alternative fuels to lower GHG emissions, such as marine LNG fuel use and bunkering, and hydrogen. B.C. is going in a similar direction. But greater uptake of such fuels requires infrastructure to support existing operations and policy to encourage new investment and certainty for ongoing operations.

INFRASTRUCTURE ACTIONS

- 18) Refocus current infrastructure/capital plans to support Canada's export economy and trade patterns and further the build out of clean infrastructure:
 - Continue with electrification, including fuel switching, transmission and distribution
 - Provide incentives for fuel switching
 - Build efficiency into trade routes for inter-provincial and international exports
 - Address rail barriers and expand capacity in the west
- 19) Support efforts on the "port of the future" including use of alternative fuels, spatial planning, digitization, LNG bunkering and use of electric vehicles and equipment.



5. ENABLING COMMERCIALLY VIABLE INNOVATION WITH IMPACT

The Province of B.C. has very few low-cost abatement options at its disposal, for two main reasons. First, B.C. differs from almost every other nation and subnational jurisdiction that has been able to meaningfully reduce GHG emissions in one telling way—our existing 95% clean electricity system. Most of the jurisdictions that have substantially reduced emissions have done so in large measure via “fuel switching”. We cannot take advantage of the commonly used carbon abatement option to further reduce GHGs since it is already in place. Second, a decade of experience with the carbon tax indicates that most of the inexpensive emission reduction options have already been implemented in B.C. as households and businesses have incrementally responded to the escalating carbon levy.

“The world needs technology and strong policy to move in a new direction. Throughout history, humanity’s energy use has moved toward more concentrated, convenient and flexible forms of energy. With greater understanding of the climate challenge, we are making huge strides in developing the technology we need to move toward a low carbon future.”

Samantha Gross,

Why are Fossil Fuels So Hard to Quit?,

Brookings Institution, 2020

Support for technology and focused innovation are critical components of reducing domestic GHGs and driving economic growth. In fact, breakthrough technologies may be the only solution to achieve domestic targets. For industry, the relatively high risk of early adoption (high cost, regulatory burden, uncertain return on investment) discourages the adoption of new products and processes. Governments must prioritize the role technology can play in emissions reductions—in particular breakthrough technologies which can de-risk technology adoption by industry —and assess the possibility of technological innovation as a way to provide room for growth.

Breakthrough technologies will be essential to meeting 2050 GHG reduction targets for Canada. We must adopt a technology solution in B.C.—we cannot spend our way to the targets. This is not featured enough in CleanBC, the Province’s current climate action plan. Without innovation, the path to 2030 targets is in question, even if all the actions within the current CleanBC plan were to be taken. The CleanBC plan could be one that leads in the world, but there is a real lack of transparency for consumers and businesses on the true cost of the plan.

The intersection of industry innovation and clean technology already supports productivity, efficiency and GHG reductions across multiple sectors, with projects in areas from water and wastewater to energy management.

But the potential is far greater.

B.C. now has the opportunity to support the further adoption and diffusion of technology and innovation across industries, while providing reference customers and growth pathways for local innovation firms. Together with Indigenous partners, we can also be the leader in nature-based solutions. B.C. is home to Canada’s Digital Technology Supercluster, a cross-industry collaboration which includes some of Canada’s biggest names in healthcare, communications, natural resources, technology and transportation. With all this talent and passion, we have an opportunity—and responsibility—to help the world by demonstrating our innovation.



Pride in B.C. Mining — Teck Resources

The SunMine solar farm, owned by Teck Resources, is built on a fully reclaimed mine site in the City of Kimberley, B.C. When opened in 2015, it was Western Canada's largest solar power facility; the first grid-connected solar facility in B.C.; and the first built on a reclaimed mine site. SunMine uses 4,032 solar-cell modules mounted on 96 solar trackers that follow the movement of the sun to maximize solar exposure.

INNOVATION ACTIONS

- 20) Explore, as a convener, of the science and research communities, the possibility of technological innovation as a way to provide room for growth (targets) that includes some of the innovations described in this paper, such as electrification.
- 21) Support efforts, through direct investment and tax credits, for the role technology can play in emissions reductions, in particular, breakthrough technologies to de-risk technological adoption by industry.
 - Provide seed funding for start-ups in the idea space as a technology fund with the right procurement rules that do not stifle small companies
 - Use existing vehicles such as the supercluster as a consolidator of activity

BEYOND OUR BORDERS

As has already been stated, B.C. can have an outsized impact on global GHG with its low carbon content commodities. There should be a strong desire to market this advantage, and the province's robust track record on climate to a global marketplace. Here at home we need to promote greater collaboration for Western Canada, and nationally on innovation, offsets and market mechanisms—all elements missing from the CleanBC plan.

Internationally Transferred Mitigation Outcomes (ITMOs) are referenced. These provide an opportunity to monetize the low GHG intensity of B.C. commodities.

An example would be LNG produced in B.C. displacing thermal coal in a host jurisdiction. In a hypothetical ITMO, these reductions would be applied against B.C.'s targets rather than the targets of the host country, so the host country "loses" these reductions in their adjusted emission inventory. The amount shared is negotiable, but these shared reductions will represent a cost to the host



jurisdiction which may then look for the best bids or find more reductions to meet their own targets. In essence an ITMO assumes host countries would give up their reductions against their own targets. In the Paris Accord context, these are a commodity and not free.

This is important because under the way targets are calculated under the Paris Agreement the buyer (not the supplier—e.g., B.C.) gets the credit for the actual displacement of higher emission intensity coal with LNG, while B.C. does not get “credit” for improving global emissions through the supply of its superior low carbon content emissions products.

The rules are not final, and B.C. can only participate in ITMOs with Canada. Canada has stated that the priority is to first focus on emissions reductions within Canada, but part of Canada's approach to climate change could also involve acquiring allowances for emissions reductions in other parts of the world, as a complement to domestic emissions reduction efforts.

CONCLUSION—THE TIME IS NOW FOR CLIMATE, JOBS AND OUR FUTURE

As we grapple with the significant economic shock of the COVID-19 pandemic while still focused on how best to limit carbon production and reduce GHGs emissions, the world is looking for solutions. B.C.'s Low Carbon Advantage can position our province and companies as leaders—and provide an opportunity for jobs, growth and prosperity to recover from this shock—as the world continues to move through the global energy transition.

It can also be a source of pride within B.C. for the local communities, companies and employees who support these efforts to be low carbon.

B.C. can show leadership and have an outsized impact in the world's GHG emissions by becoming a cost-competitive, low carbon supplier of energy and commodities. This benefit can grow if the Provincial Government uses its levers to ensure B.C.'s low carbon exporters can become more cost-competitive as world demand for commodities returns with our global economic recovery. Over time this can have greater positive global impact than a focus only on domestic reductions within B.C. We need to stop defining what we can do to within the confines of a provincial border and generate more prosperity for the people of our province.

The technical work of this report was prepared collaboratively with the Provincial Government. Despite positive signals including a commitment in the 2020 Throne Speech to chart a path to a low carbon economy, no firm commitments from Government have been made. In the meantime, our competitive position has only deteriorated and is now made worse by the economic fallout of the COVID-19 pandemic.

B.C.'s export sector needs a signal from the Province to know that Government takes this leadership opportunity seriously. That it sees the opportunity to promote this workhorse of the provincial economy in this unprecedented time. And that the Province commits to working collaboratively with business on building out this brand.

That signal is for the Government of B.C. to announce protections for EITEs. We cannot continue to be the global outlier. B.C. business needs the Provincial Government to stand beside it and ensure our competitiveness.

There is a significant opportunity to advance B.C.'s economy and corresponding high wage jobs in rural and urban B.C. while reducing the cause and impacts of global climate change. This includes



clear opportunities to accelerate meaningful reconciliation with Indigenous peoples and drive commercially viable innovation that can lead materially to further reductions in domestic emissions.

But time is of the essence and our lack of competitiveness is resulting in carbon and capital leakage in B.C. today—leakage that we believe, if not addressed, will have larger impacts on high wage jobs, investment and Provincial Government revenues in the years to come. Action is required. Promotion of our Low Carbon Advantage will be just the spark we need.



APPENDIX 1: EXPERTS CONTRIBUTING TO THE LOW CARBON ADVANTAGE TECHNICAL WORK

Industry's Leadership Advisory Group:

Greg D'Avignon, Business Council of BC
Susannah Pierce, LNG Canada, Shell Canada
Susan Yurkovich, Council of Forest Industries
Tom Syer, Teck Resources
Brad Herald, Canadian Association of Petroleum Producers

Industry's Technical Leadership Team:

Richard Dunn, Ovintiv
Chris Adachi, Teck Resources
Graham Kissack, Paper Excellence
Danielle Melchior, B.C. Council of Forest Industries
Rob Seeley, LNG Canada
Dave Schick, Parkland Corporation
Frederic Picard, Rio Tinto

Industry and Energy Working Groups:

Bryan Cox, Canadian LNG Alliance
Vicki Balance, Explorers and producers
David Keane, Woodfibre LNG
Darcy McLaughlin, Saguaro Resources
Jonathan Moser, Lafarge Canada
Tyler Tarnoczi, Cenovus
Julia Balabanowicz, Innergex Renewable Energy
Skye McConnell, Shell Canada
Richard Prokopanko, Rio Tinto
Robin Silvester, Vancouver Fraser Port Authority
Geoff Morrison, Canadian Association of Petroleum Producers
Carolyn Chisholm, Rio Tinto
Rhona DelFrari, Cenovus
Bob Espey, Parkland Petroleum
Brendan Galloway, Petronas Canada



Colleen Giroux-Schmidt, Innergex Renewable Energy

Laurence Lemay, Shell Canada

Dave Lye, Ovintiv

Duncan Wilson, Port of Vancouver

Melissa Winks, Rio Tinto

Jeff Zweig, Mosaic Forest

Jock Finlayson, Business Council of B.C.

Ken Peacock, Business Council of B.C.

Denise Mullen, Business Council of B.C.

Cheryl Muir, Business Council of B.C.

Steve Carr, Consultant to Business Council of B.C.

Kim Henderson, Consultant to Business Council of B.C.

Technical Consultants:

MNP

le-ef Consulting

Government of B.C.:

Premier's Office

Ministry of Finance

Ministry of Jobs, Economic Development and Technology

Ministry of Environment and Climate Change Strategy

Climate Change Secretariat

Ministry of Forests, Lands and Natural Resources

Ministry of Energy, Mines and Petroleum Resources



APPENDIX 2: RECOMMENDED ACTIONS FOR A PATH TO LEADERSHIP BALANCING NATURAL RESOURCE DEVELOPMENT AND CLIMATE

Medium term assumes 12–18 months, long term assumes a post-COVID-19-vaccine world.

Recommended Action	Medium/ Long Term	Provincial/ Federal
1.REGULATION		
<p>1. Transform the regulatory system to create efficient and effective regulatory processes that provide global leadership in sustainability performance, cutting complexity not corners.</p> <ul style="list-style-type: none"> • Increase efficacy and timeliness of regulatory programs and oversight • Improve inter-agency coordination with clear, dedicated sectoral leadership and accountability (and resource this accordingly) • Simplify service delivery for proponents, the public and Indigenous communities by decreasing duplication and interaction points • Address the cumulative effects of resource development in the permitting process • Improve industry confidence in the regulatory process including increased predictability and therefore decreased risk for industry seeking to invest in the Province • Improve availability and utility of data and information sharing to support effective and efficient processes • Decrease financial risks with respect to: <ul style="list-style-type: none"> ○ Cost for industry to engage in regulatory processes ○ Internal cost for authorization processes and compliance activities • Create a unique stream for known performers with strong records of compliance 	Medium	Provincial
2. Introduce a competitiveness lens to current and future regulations and compliance measures to assess and weigh the impact on communities and economic prosperity so it is well understood.	Medium	Provincial/Federal
3. Develop a modern, low carbon natural resource trade corridor—where Indigenous communities are equity partners and projects	Long	Federal
	Long	Provincial



<p>deemed to be in the national interest have a different gate through processes.</p> <p>4. Leverage technology as a compliance and decision making and consultation tool.</p> <p>5. Resolve the pathways to reconciliation and Crown revenue sharing arrangements with Indigenous communities to create greater certainty in decision-making.</p>	Long	Provincial
2. BUSINESS INVESTMENT, MARKETING AND BRANDING		
<p>6. Develop a clear investment attraction strategy that includes a compelling value proposition (aligned with this paper) and a welcome door for investment.</p> <ul style="list-style-type: none"> Market the actions within this plan, specifically on regulatory reform demonstrating B.C.'s commitment to new investment and the growth of current operations; and market B.C.'s reliable political and government environment, sound public health system and Indigenous support for businesses generating low carbon content commodities and offsets Develop investor-centric offerings to navigate B.C.'s investment and regulatory structures Resource and give clear leadership to regulatory efforts for new investments with demonstrable and significant economic benefits for B.C. 	Medium	Provincial
<p>7. Develop an in-market marketing plan and branding for B.C. commodities based on this plan, as well as ESG initiatives, that highlights B.C.'s low carbon content commodities.</p> <ul style="list-style-type: none"> Put on offer our low carbon advantage on exports, energy intensity (B.C. clean energy) clean supply chains, technology and sequestration 	Medium	Provincial
<p>8. Create a formal process to assess the individual and cumulative impacts of government policy changes on key competitive measures and to monitor policies that improve competitiveness in our competing export market jurisdictions.</p>	Medium	Provincial
3. TAX POLICY		
<p>9. Recognize the need to avoid carbon leakage as a core principle of policy, which is currently missing from CleanBC.</p>	Medium	Provincial



10. Provide emissions-intensive trade-exposed industries with protection from the full carbon tax consistent with the federal approach in order to prevent carbon leakage.	Medium	Provincial
11. Address the Capital Cost Allowance which continues to be a factor in cost competitiveness with U.S. producers.	Medium	Federal
4. CLIMATE		
12. B.C. must include carbon offsets and market mechanisms as compliance tools in their climate framework that should include: <ul style="list-style-type: none"> Investment in nature-based solutions Time for longer term technological and infrastructure solutions Support for the technology sector to provide validation of quality and veracity of offsets Creation of room for economic growth Mitigation of potential investment leakage and carbon leakage 	Medium	Provincial
13. The Federal Government must play a leading/coordinating role on a national offset market with Canada offering high-quality nature-based solutions. <ul style="list-style-type: none"> Include Indigenous communities as partners in nature-based solutions Explore Internationally Transferred Mitigation Outcomes (ITMOs) as an opportunity to monetize the low GHG-intensity of B.C. commodities—collaborate with the Federal Government on critical international negotiations around the implementation of Article 6 of the Paris Accord Lead the creation of a national trading market for Canadian business and excess for international purchase 	Long	Federal
14. Support the exploration, with Alberta and Saskatchewan, of regional emissions trading and a global centre for technology and innovation in methane and carbon sequestration and use.	Long	Provincial/Federal
15. Canada needs to own the space from Intellectual Property development to application and adoption credits allowing industry to choose technology. <ul style="list-style-type: none"> Consolidating and leveraging federal funds in support of this Consider further tax credits for companies that invest in R&D and capital expenditures focused on emissions reductions, and 	Medium	Federal



<p>that allow for collaborative sectoral investment where like businesses share in the investment and risk</p> <p>16. Maintain and improve B.C.'s GHG product-on-product and displacement advantage with competing jurisdictions as a key component underpinning the credibility of an ongoing low carbon industrial strategy. As in competitiveness, it is important to understand the impacts of key policies on lowering GHG product intensities.</p> <ul style="list-style-type: none"> Explore the value of an accreditation-style model for verification and branding of low carbon content commodities <p>17. Government of Canada to pursue bi-lateral agreements to create markets for low carbon product and confirm Article 6 agreement templates for demonstration (e.g., Japan, Korea).</p>	<p>Medium</p> <p>Long</p>	<p>Provincial</p> <p>Federal</p>
5. INFRASTRUCTURE		
<p>18. Refocus current infrastructure/capital plans to support Canada's export economy and trade patterns and further the build out of clean infrastructure:</p> <ul style="list-style-type: none"> Continue with electrification, including fuel switching, transmission and distribution Provide incentives for fuel switching Build efficiency into trade routes for inter-provincial and international exports Address rail barriers and expand capacity in the west <p>19. Support efforts on the "Port of The Future" including use of alternative fuels, spatial planning, digitization, LNG bunkering and use of electric vehicles and equipment.</p>	<p>Medium</p> <p>Medium</p>	<p>Provincial/Federal</p> <p>Provincial/Federal</p>
6. ENABLING COMMERCIALLY VIABLE INNOVATION WITH IMPACT		
<p>20. Explore, as a convenor of the science and research communities, the possibility of technological innovation as a way to provide room for growth (targets) that includes some of the innovations described in this paper, such as electrification.</p> <p>21. Support efforts, through direct investment and tax credits, for the role technology can play in emissions reductions, in particular, breakthrough technologies to de-risk technological adoption by industry.</p>	<p>Long</p> <p>Long</p>	<p>Provincial</p> <p>Provincial/Federal</p>



<ul style="list-style-type: none">• Provide seed funding for start-ups in the idea space as a technology fund with the right procurement rules that do not stifle small companies• Use existing vehicles such as the supercluster as a consolidator of activity		
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MEETING NOTE

DATE: November 7, 2022

PREPARED FOR: Honourable Josie Osborne, Minister of Land, Water and Resource Stewardship

REGARDING: Industry Roundtable Meeting with MOWI Canada West, Greig Seafoods, and Cermaq Canada representatives regarding the Federal 2025 Transition Plan and finfish aquaculture in BC.

INTRODUCTIONS: James Mack, Assistant Deputy Minister of Land, Water, and Resource Stewardship

Background:

Operators

- Cermaq and MOWI Canada West have indicated that they wish to meet and update the Minister on their respective plans and approach in the federal 2025 Transition Plan, Discovery Islands decision, and provincial support for their business' operations in a roundtable format (Appendix 1).
- MOWI Canada West, Greig Seafoods, and Cermaq Canada represent the three largest finfish aquaculture operators in the province. Their operations account for most of the licensed marine finfish production in British Columbia (BC). Together, they account for 96 percent of the 226,967 tonnes of production, holding over 75 licensed sites.
- All three are members of the BC Salmon Farmers Association (BCSFA) which coordinates and advocates for many businesses and organizations throughout the value chain of finfish salmon farming in BC. This group has expressed concern that the 2025 Transition Plan will create uncertainty and harm their operations and existing First Nations partnerships.

Federal Decisions

- In December 2020, then federal Minister Bernadette Jordan announced that Fisheries and Oceans Canada (DFO) would phase out salmon farming operations in the Discovery Islands by June 2022, affecting approximately 26 per cent of BC production. Operators subsequently filed a judicial review to the Federal Court of Canada, and the ruling was overturned on grounds of procedural fairness in spring 2022.
- In response to the courts ruling, current DFO Minister Joyce Murray announced in June 2022 that DFO would undertake consultation with key stakeholders and First Nations on whether to continue licensing farms in the Discovery Islands area. A decision is expected in early 2023.
- In 2019, and again in 2021, Canada's Minister of Fisheries, Oceans, and the Canadian Coast Guard was mandated to continue to work with the Province of BC and Indigenous communities on a responsible plan to transition from open-net pen salmon farming in coastal BC waters by 2025.
- DFO is currently undertaking a phased engagement and consultation approach that will inform the development of a plan by June 2023. A series of workshop and roundtable discussions with First Nations and key stakeholders are occurring now through December.
- DFO has stated that their vision for the transition plan is to: Advance innovation and growth in sustainable aquaculture in BC that progressively minimizes or eliminates interactions between salmon open-net pens and wild salmon while also considering social, cultural, and economic objectives.

FNFFC Workshop

- Ministry staff attended a November 3, 2022, workshop hosted by The Coalition of First Nations for Finfish Stewardship (FNFFS), which represents First Nations with an interest in the industry in their territory. The workshop included representatives of the three major operators as well as DFO staff. The meeting focused on the state of the industry, First Nations involvement, and the 2025 Transition Plan.
- During the meeting, operators and Nations expressed a vision for the 2025 Transition Plan with several key themes, including:

- Transition Plan must respect First Nations self determination and currently held partnership agreements; 'Reconciliation' means the ability for Nations for say 'no' to the industry, but also 'yes' and 'maybe'.
 - Transition Plan must be based on realistic timetables and tools for implementation; The current timetable working towards plan development by June 2023 and DFO response to date is not adequate.
 - Transition Plan must be target based and open to a range of solutions; Operators have already implemented a broad range of changes that are a transition in themselves.
 - Transition Plan must incentivise adoption of new technologies and practices while helping to reduce business risk to operators
 - FNFFC views the non-profit BC Center for Aquatic Health Sciences (BC CAHS) as a key resource in furthering First Nations interests in and addressing concerns of finfish aquaculture.
 - DFO has currently renewed licenses only until 2024, while a transition plan is developed. This short licensing period is creating uncertainty and hampering needed investment required for business security and exploration of innovative technologies.
 - The Province did not adequately intervene over the Federal Ministers December 2020 decision to cease licensing in the Discovery Islands. There's a desire to see the Province more actively involved before a final decision is announced in early 2023.
- In addition to this federally led process and licensing considerations, operators are subject to the Provincial Salmon Aquaculture Tenure Policy. This policy was implemented in June 2022 and states that no new tenures (or major amendments) will be approved unless operators:
 - Meet all existing and future federal aquaculture license conditions that assure protection of the health of wild salmon.
 - Demonstrate support from relevant First Nation(s) in whose territory they propose to operate via industry/First Nations agreements; and
 - Meet all provincial *Land Act* policies related to the siting of finfish aquaculture sites.

KEY CONSIDERATIONS:

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KEY MESSAGES:

- I thank you for your time to share information around your operations, the "Go Forward" approach and Discovery Islands, and your thoughts on Indigenous involvement and coastal planning.
- To date, BC has not had a role in the federal Discovery Islands consultations or decision process. However, we have heard from industry and from First Nations on the importance of this decision for continued operations of several sites. We will consider our approach to this ongoing discussion and will continue to play a key role in aquaculture discussions.

- Our government has been exceedingly clear about the need for a comprehensive federal support plan for First Nations and communities that rely on salmon aquaculture for their livelihoods, as well as for exploring innovative technology and economic opportunities for the industry in these regions.
- We will continue to collaborate with you, and the Federal and First Nations governments to ensure the future of aquaculture benefits all. The province believes that Indigenous-led institutions such as BC CAHS are important institutions in building transparency and trust with industry and the public.
- To this end, we welcome your ideas around a pilot project for marine economic development and innovation capacity for First Nations in aquaculture and will consider the approach.

PREPARED BY:

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REVIEWED BY:

	Initials	Date
DM	LH	Nov 10, 2022
ADM	JM	Nov 9, 2022
Program Dir/Mgr.	MT/DT	Nov 9, 2022

APPENDIX 1: Proposed Agenda Topic Items

A Focus on the area formerly known as the Discovery Islands.

- *How will the province work with us on our 'go forward' D.I. approach based on FN self-determination and reconciliation?*
- *The new "vision" for the area formerly known as the D.I – not all farms back – will be based on what the Wei Wai Kai, Wei Wai Kum, Klahoose First Nations desire.*
- *Suggest that we rebrand the involved Nations areas under the BC coastal planning and encompass CR area under coastal planning as well.*
- *Engage CAHS for the assessment work and feasibility for rebuilding the salmon farming industry in the area under the broader transition framework.*
- *We wish to see Tyson Carswell, David Travia and Charlie Short to work with us on this as a pilot for Marine eco dev and innovation capacity for FN in aquaculture.*

BRIEFING NOTE FOR INFORMATION

DATE: November 7, 2022

PREPARED FOR: Honourable Josie Osborne, Minister of Land, Water and Resource Stewardship

ISSUE: Progress report on government's response to the Office of the Auditor General's 2019 audit *The Protection of Drinking Water*

BACKGROUND:

- The 2019 Office of the Auditor General's (OAG's) audit report, *The Protection of Drinking Water*, made eight recommendations: five directed to the Ministry of Health (HLTH) and three to the Office of the Provincial Health Officer (OPHO). OAG used the 2002 *Action Plan for Safe Drinking Water* (2002 Plan) as the benchmark. The 2002 Plan identifies HLTH as the lead ministry for coordination and implementation and thus HLTH was the focus of audit and lead ministry to respond.
- The Select Standing Committee on Public Accounts (PAC) accepted HLTH/OPHO's Action Plan response to OAG's 2019 recommendations. HLTH and OPHO are required to report annually to PAC on Action Plan implementation progress through an Action Plan and Progress Assessment (APPA) report.
- In the Budget 2022 Government announced the creation of a new Ministry of Land, Water and Resources Stewardship (LWRS), mandated to provide provincial leadership on water policy and strategies including the development and coordination of government's overarching *Source to Tap* strategy (S2TS) to protect drinking water.
- On September 29, 2022, HLTH received a request from OAG to submit a progress report on the recommendations made in the 2019 OAG's audit report *The Protection of Drinking Water* by December 1, 2022.
- The Assistant Deputy Ministers (ADMs) of HLTH, LWRS, and the Deputy Provincial Health Officer agreed that LWRS will submit the progress update to OAG and the APPA update to PAC on behalf of the agencies.

DISCUSSION:

As requested by OAG, HLTH, OPHO and LWRS have prepared the 2022 progress report (Attachment 1) current up to November 30, 2022. OAG is requiring the progress report be submitted in a specific format where actions are reported as either "Completed" or "Not Completed" and if "Not Completed" further described as "Intend to complete" or "Do not intend to complete". This differs slightly from the previous reporting to the PAC which categorized actions as "Fully or substantially implemented", "Partially implemented" or "No action taken". Consequently, staff have translated the APPA categories reported in a previous briefing (Cliff # 28332) to the new OAG categories.

Five of the eight OAG 2019 audit recommendations to HLTH and OPHO have been completed. Three of the recommendations have not been completed, but substantial work has been done and LWRS, HLTH and OPHO will work closely together to fulfill government's commitments. Attachment 1 provides details on commitments both completed and in-progress. The three OAG recommendations with outstanding government commitments are:

- Recommendation 2 – Obtaining a formal cross-ministry commitment to coordinate strategies to address risks to drinking water.
- Recommendation 3 – Developing the S2TS strategy to protect drinking water that includes prioritized activities based on risks identified in an integrated (interoperable) province-wide data system.

- Recommendation 6 - Reviewing the legislative provisions regarding drinking water protection plans and report out on impediments to their implementation.

Recommendations 2 and 3 have been partially addressed by mandating LWRS to lead and coordinate government's actions to protect drinking water. Formally clarifying accountabilities across government agencies will be addressed through the development in 2023 (timeline subject to Government's approval) of a S2TS, which will include agreements that define functions, roles, responsibilities, and accountabilities of partners agencies involved in drinking water. In response to recommendation 6, OPHO has concluded a preliminary review of Drinking Water Protection Plans (DWPPs), including the impediments to recommending, developing, and implementing DWPPs and collaborated with HLTH on preliminary recommendations. HLTH, OPHO and now LWRS will collaborate to continue this work.

Both the Progress Report (Attachment 1) and cover letter (Attachment 2) will be uploaded to the Auditor General's web site portal the week of November 28 in time to meet the December 1 submission deadline.

INDIGENOUS PEOPLES:

Access to safe drinking water remains a top priority of Indigenous communities. Engagement with Indigenous peoples, and recognition of the *BC Tripartite Framework Agreement on First Nation Health Governance* will be necessary for the development of a Provincial S2TS for drinking water.

NEXT STEPS:

- LWRS will submit progress report to OAG on behalf of agencies.
- LWRS will continue to advance outstanding items in collaboration with HLTH and OPHO.

Attachment(s):

1. 2022 HLTH LWRS Progress Report to OAG
2. DM_Ltr_LWRS response to OAG, Progress Report Request_HLTH_7Nov22

PREPARED BY:

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Water Protection & Sustainability Branch
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REVIEWED BY:

	Initials	Date
DM	LH	Nov 21, 2022
ADM	JM	Nov 8, 2022
Program Dir/Mgr.	JB, TZ	Nov 7, 2022



Progress Report: *The Protection of Drinking Water, 2019*

Name of Organization: Ministry of Land, Water and Resource Stewardship / Ministry of Health

Name of DM/CEO: Lori Halls (LWRS) / Stephen Brown (HLTH) / Dr. Bonnie Henry (OPHO)

Key contact name and email: ADM James Mack, James.Mack@gov.bc.ca

Summary of Recommendations:

We recommend that the Ministry of Health:

1) In conjunction with partner ministries lead a review of legislation and regulations that affect drinking water to ensure that legislators are informed of risks and legislative gaps that may affect government's commitments are addressed. These commitments include: a) clear lines of responsibility; b) safety of drinking water as the first priority in decision making; c) preventative rather than reactive approaches in addressing health hazards; d) tools that mitigate risks; and e) controls to ensure that small water systems provide safe drinking water and that the creation of unsustainable small water systems is limited.

2) Provide the leadership necessary to develop a cross-ministry commitment to coordinate strategies to address risks to drinking water. This includes establishing clear roles, responsibilities and accountabilities for all government agencies that are responsible for ensuring safe drinking water.

3) Lead the development of a provincial strategic plan for the protection of drinking water that includes prioritized activities based on the risks identified in an integrated (interoperable) province-wide data system.

4) Undertake the following actions: a) identify where and what type of risks exist in relation to source protection, drinking water treatment, distribution and small water systems; b) coordinate with ministries and agencies to develop actions to mitigate identified risks; and c) develop a process for the evaluation and adjustment of Health's guidelines to ensure they are effective.

We recommend that the Provincial Health Officer:

5) Take action to improve the oversight of drinking water, including the development of: a) policy and procedures for reporting significant impediments to the Minister of Health; b) guidance for drinking water officers on how and when to report situations to the Provincial Health Officer that significantly impact drinking water; c) a process for evaluating and tracking significant impediments; d) a process for monitoring drinking water officers' compliance with guidelines and directives.

6) In collaboration with the Ministry of Health, review the legislative provisions regarding drinking water protection plans and report out to the Minister of Health on impediments to the protection plan's implementation.

We recommend that the Ministry of Health:

7) Report out to the public on the progress it is making in improving the protection of drinking water for all British Columbians.

We recommend that the Provincial Health Officer:

8) Monitor progress and trends in the protection of drinking water and report on a timely basis to the Minister of Health and the legislative assembly on whether activities are mitigating risk.



Rec # 1	<p>Auditor General Recommendation: We recommend that the Ministry of Health: In conjunction with partner ministries lead a review of legislation and regulations that affect drinking water to ensure that legislators are informed of risks and legislative gaps that may affect government's commitments are addressed. These commitments include: a) clear lines of responsibility; b) safety of drinking water as the first priority in decision making; c) preventative rather than reactive approaches in addressing health hazards; d) tools that mitigate risks; and e) controls to ensure that small water systems provide safe drinking water, and that the creation of unsustainable small water systems is limited.</p>
Response for publication	
Status	<p>Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below.</p> <p>X Completed – the recommendation has been followed and all actions to address the findings have been taken.</p> <p>Not completed</p> <p>Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed</p> <p>Do not intend to complete – do not intend to fully complete the recommendation</p>
Summary	<p>In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 1.</p> <p>HLTH undertook a comprehensive legislative review of all statutes and regulations that impact water protection in the province, a literature review, as well as stakeholder consultation. HLTH also worked with the BC Water and Waste Association (BCWWA) to develop capacity, knowledge base and tools to support small water systems.</p> <p>HLTH established a cross-government Executive Directors Steering Committee on Drinking Water (EDSC-DW) to review findings of the review and develop a proposed governance model for source water protection.</p> <p>The results of the review and work of the EDSC-DW informed the organizational effectiveness review that led to the creation of the new Ministry of Land, Water and Resource Stewardship (LWRS) in April 2022. LWRS now has the mandate to provide provincial leadership on water policy and strategies including the coordination of government's Source to Tap Strategy (S2TS) to protect drinking water and more effective implementation of cross-government coordination on drinking water. LWRS will continue to work in close collaboration with HLTH and the OPHO on ensuring progress on fulfilling government's commitments continues.</p>
Detailed information for OAG use	

<p>Support for actions taken to date</p>	<p>In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions.</p> <ul style="list-style-type: none"> • Feb 2020: HLTH undertook a consultation with Deputy Ministers (DM) from partner ministries with responsibilities in protecting source water to engage and seek direction. • Jan 2021: HLTH established a cross-government Executive Directors Steering Committee on Drinking Water (EDSC-DW) (from Jan – Nov 2021) to review findings of the policy review and develop a proposed governance model for source water protection. • HLTH disbanded the EDSC-DW once the BC Water Committee and the ADM Water Forum were created as these are more appropriate forums to meet this goal. HLTH continues to participate at both committees. • Mar 2021: The review of B.C. legislation to identify gaps, overlaps, risks and hazards that focused primarily on source water protection mandate in line with DM recommendations was completed. The final report on a comprehensive legislative review on all statutes and regulations that impact water protection in the province, a literature review, as well as stakeholder consultation focused on source water protection was delivered in March 2021 by the contractor, Econics, that was engaged by HLTH for the review. • 2021: A cross government ADM Water Forum was established to facilitate collaboration on provincial strategic water policies. <p><u>Small Water Systems</u></p> <ul style="list-style-type: none"> • Sep 2019: HLTH led a multi-year contract with BC Water and Waste Association (BCWWA) to expand the project <i>Building Sustainable Small Water Systems in BC</i> to develop capacity, knowledge base and tools to support small water system. • Sep 2020: BCWWA established an advisory committee with representation from health authorities, Indigenous Service Canada, Office of the Provincial Health Officer (OPHO) and HLTH to oversee the deliverables of this project. • Mar 2022: BCWWA offered a number of free training programs for small water system owners. This included the development of a novel 1.5 hour long self-paced introductory course to water system operations and management. • Mar 2022: BCWWA developed, launched and maintains an online small water platform for system owners. This free, interactive online platform provides information, access to training and to networking opportunities to small water system owners and their supporters. • Fall 2022: BCWWA developed a guide to point-of-entry and point-of-use technologies for treating drinking water, and establishing the operating agreements required to ensure these technologies are properly maintained. The guide will be made available on the BCWWA online platform in Fall 2022. • 2022: Monitoring of project progress is ongoing and is being conducted by BCWWA. A final report for HLTH was delivered in March 2022.
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Support for Planned actions	<p>This action is now complete.</p> <p>Government has confirmed the governance model and clarified key accountabilities related to drinking water in the establishment of the LWRS. LWRS now has the mandate to provide provincial leadership on water policy and strategies including the coordination of government's S2TS to further protect drinking water.</p> <p>LWRS has established inter-agency committees including the ADM Water Forum and BC Water Committee to function, at least partially to address issues of gaps and accountabilities and maintain alignment of Acts, codes, and regulations and policies across agencies to further protect drinking water.</p>
Additional comments	None

Rec # 2	Auditor General Recommendation: We recommend that the Ministry of Health: Provide the leadership necessary to develop a cross-ministry commitment to coordinate strategies to address risks to drinking water. This includes establishing clear roles, responsibilities and accountabilities for all government agencies that are responsible for ensuring safe drinking water.
Response for publication	
Status	Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below. Completed – the recommendation has been followed and all actions to address the findings have been taken. X Not completed X Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed Do not intend to complete – do not intend to fully complete the recommendation
Summary	In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 2. HLTH worked with other agencies to ensure that health is considered in regulatory decisions that could impact source water. Through actions described in Recommendation 1 summary, HLTH has collaborated with partner agencies on defining clear roles, responsibilities, and accountabilities for ensuring safe drinking water. HLTH also engaged the Engineers and Geoscientists of BC (EGBC) to develop a professional oversight model for drinking water systems based on water system risk management plans (WSRMPs). LWRS will provide provincial leadership on water policy and strategies and lead the development of a new Watershed Security Strategy and Fund (WSS+F) which will establish clear roles, responsibilities, and accountabilities for all government agencies responsible for ensuring watershed security, and establish the foundation for cross-agency commitment to participating in the development of the Source-to-Tap Strategy (S2TS) to protect drinking water. HLTH will also work with LWRS to ensure that the Water System Risk Management Plans (WSRMP) findings are considered in development of the strategy.
Detailed information for OAG use	
Support for actions taken to date	In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions. <u>Coordinate strategies to address risks to drinking water</u>

	<p>Ensure that health is considered in regulatory decisions that could impact source water:</p> <p>Consultation with HLTH is now required to finalize benchmarks for Ministry of Environment and Climate Change Strategy (ENV) policy for the development for all <i>Source Drinking Water Quality Guidelines</i>.</p> <p>HLTH's commitments to the Hullcar Aquifer Response Plan are complete, specifically, the draft Public Health and Safety Report which was provided to the Steering Committee in November 2019.</p> <p>Apr 2021: HLTH's Human Health Risk Assessment Guidance to support assessment of human health risks from proposed industrial projects including chemical risks through the drinking water pathway was posted online at www2.gov.bc.ca/assets/gov/health/keeping-bc-healthy-safe/healthy-communities/bc-hhra-guidance.pdf</p> <p>The Ministry of Children and Family Development has established a lead filter fund to support long term lead mitigation strategies for childcare facilities.</p> <p>Development of a professional oversight model for drinking water systems based on water system risk management plans (WSRMPs).</p> <ul style="list-style-type: none"> • The Engineers and Geoscientists of BC (EGBC) developed a draft <i>Professional Practice Guidelines for the Preparation of One Water System Risk Management Plans in BC</i> (WRSMP Guidelines). These draft guidelines provide a risk-based tool to assist water system professionals in identifying, assessing, and mitigating risks. • Pilot plans for the City of Fort St. John and the City of Vancouver have been completed based on the draft WRSMP Guidelines. • The Regional District of Nanaimo has withdrawn from this project and further participation from the City of North Vancouver is not expected. <p>Clear roles, responsibilities, and accountabilities</p> <p>Mar 2020: HLTH undertook consultation with the Deputy Ministers from key ministries to inform the work regarding roles and responsibilities.</p>
<p>Support for Planned actions</p>	<ul style="list-style-type: none"> • Apr 2022: Government has confirmed the governance model and clarified key accountabilities related to drinking water in the establishment of the LWRS. LWRS has the mandate to provide provincial leadership on water policy and strategies including the coordination of government's S2TS to protect drinking water. • In addition, LWRS is completing a Water Accountabilities Matrix with partner ministries and agencies. • The transition of responsibilities for the S2TS may require legislative amendments. HLTH and LWRS will continue to monitor legislative needs to fully implement new accountabilities. • LWRS will help identify opportunities for improved collaboration and integration for source water protection. HLTH has started engagement with LWRS. • HLTH continues to participate on both the interagency Clcahl/Hullcar Steering Committee and the Technical Sub-committee to implement the Hullcar Aquifer Response Plan (HARP) to implement recommendations in HLTH's Public Health and Safety report. • LWRS will coordinate the update of the 2006 <i>Inter-agency Accountability and Coordination on Drinking Water Protection</i> (projected: March 2023)

	that will be informed by the S2TS to protect drinking water and will provide clear roles, responsibilities, and accountabilities.
Additional comments	None

Rec # 3	Auditor General Recommendation: We recommend that the Ministry of Health: Lead the development of a provincial strategic plan for the protection of drinking water that includes prioritized activities based on the risks identified in an integrated (interoperable) province-wide data system.
Response for publication	
Status	Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below. Completed – the recommendation has been followed and all actions to address the findings have been taken. X Not completed X Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed Do not intend to complete – do not intend to fully complete the recommendation
Summary	<p>In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 3.</p> <p>HLTH retained MNP Consultants to engage with key partners to develop a project charter that provides the scope, a recommended process, oversight, and engagement approach to modernize the 2002 Action Plan for Safe Drinking Water. This charter will inform the S2TS (a.k.a. provincial strategic plan) which will now be led and coordinated by LWRS. The Drinking Water Information System (DWIS) project has been identified as a priority for HLTH. HLTH retained consultants CGI to conduct extensive engagement with key partners to understand the business needs for DWIS.</p>
Detailed information for OAG use	
Support for actions taken to date	<p>In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions.</p> <p><u>Development of a provincial strategic plan</u></p> <p>Through a contract let to MNP Consultants, HLTH collaborated with partners and key ministries to develop a project charter that provides the scope and process for the oversight and engagement approach to modernize the 2002 Action Plan for Safe Drinking Water. This charter will inform the S2TS to protect drinking water (provincial strategic plan) which will now be led and coordinated by LWRS.</p> <p>HLTH completed a proposal for development of an interoperable management system (DWIS) in December 2021.</p> <p><u>An integrated (interoperable) province-wide data system</u></p>

- **Feb 2021:** the Office of the Chief Information Officer's (OCIO) Digital Investment Board approved the concept case put forward by health for Drinking Water Information System (DWIS) as a priority project.
- **Summer 2021:** Based on preliminary feedback from key partners, the DWIS Project was modified to include a more comprehensive engagement phase to better understand business needs, requirements, impediments, and limitations of the regional data systems.
- **Nov 2021:** HLTH retained CGI to conduct extensive engagement with key stakeholders to understand the data needs, existing data systems and associated resource implications. CGI delivered its *Report of Findings and Prioritized Requirements* including proposed pathways in July 2022.
- **Dec 2021:** HLTH completed its commitment to develop a proposal for development of an interoperable data management system (Drinking Water Information System (DWIS)) and this action is now complete.

Furthermore, the HLTH has engaged with the HAs on future steps to identify and assess a solution (application) for an interoperable data management system and develop a pilot.

Data and Indicators for DWIS

- HLTH has developed *Guidelines on Ultraviolet Disinfection of Drinking Water* and *Guidelines for Pathogen Log Reduction Credit Assignment* that are now posted to HLTH's website as part of the *Drinking Water Officers Guide*. These guidelines support the implementation of the *Drinking Water Protection Act* and Regulation (DWPA/R) and the provincial treatment objectives for safe drinking water and for managing risks to public health.
- A Standard Operating Permit draft has been developed based on the guidelines and with support of the Environmental Health Policy Advisory Committee (EHPAC). This provides key elements for operating water systems and for evaluation of risk through inspections.
- Indicators and performance measures have been identified. Once the DWIS is in place, these indicators will be utilized to measure and assess performance of the drinking water program.
- Program performance indicators have been identified and are now included in the Ministry's *Annual Service Plan for Safe Drinking Water*.
- The PHO indicators, data categories and metrics will be part of DWIS to support the PHO reporting on activities and trends and issues in drinking water.
- A cross-ministry Risk Assessment Working Group (RAWG) chaired by HLTH representative was established in May 2021. This working group meets as necessary to support HLTH's work on this action.
- With support from RAWG, an inventory of potential data sources suitable for evaluating risks to source water protection was created. This included a review of existing provincial data sources, data inventories, monitoring programs, and similar programs or methodologies used by other ministries across B.C. for planning or strategic assessment.
- The data inventory was reviewed by HLTH, with support from the RAWG, to determine which data was most relevant to meet HLTH's needs.

	<ul style="list-style-type: none"> • The selected data set consists only of publicly available data owned by the province of B.C., and there are no ownership or privacy concerns. • The data sets used for source water risk assessment are shared across ministries through existing electronic data warehouses. • HLTH confirmed that a modified version of the <i>Cumulative Effects Framework - Aquatic Ecosystems Protocol</i> is an appropriate indicator of performance. • The Ministry of Municipal Affairs (MA) provides grants to local governments for drinking water system infrastructure upgrades. HLTH has established a relationship with MA and meets regularly to discuss priorities for grant programs. Once the proposed DWIS is in place, it will incorporate MA key data requirements and provide a quantitative means for prioritization. • Common business processes and logic models for the drinking water program were developed through engagement with all agencies involved in the delivery of drinking water. The HPB consultant report, <i>Common Business Processes for Delivering Safe Drinking Water in BC</i>, was delivered in Feb 2022.
Support for Planned actions	LWRS now has the mandate to provide provincial leadership on water policy and strategies including the coordination of government's S2TS (provincial strategic plan) to protect drinking water. LWRS is the lead on the strategy and HLTH will provide support as required.
Additional comments	None

Rec # 4	<p>Auditor General Recommendation: We recommend that the Ministry of Health: Undertake the following actions: a) identify where and what type of risks exist in relation to source protection, drinking water treatment, distribution and small water systems; b) coordinate with ministries and agencies to develop actions to mitigate identified risks; and c) develop a process for the evaluation and adjustment of Health's guidelines to ensure they are effective.</p>
Response for publication	
Status	<p>Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below.</p> <p>X Completed – the recommendation has been followed and all actions to address the findings have been taken.</p> <p>Not completed</p> <p>Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed</p> <p>Do not intend to complete – do not intend to fully complete the recommendation</p>
Summary	<p>In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 4.</p> <p>HLTH and LWRS have developed several risk identification and mitigation strategies for source water protection and the treatment and delivery of safe drinking water. While the actions government committed to in response to this recommendation are complete, by no means is the work completed. It is recognized that improving government's identifying, evaluating, managing, and mitigating risks to drinking water is an ongoing continuous improvement commitment. More work is to come.</p> <p>To date, HLTH has delivered on its APPA commitment for interoperable data system (DWIS). The full implementation of an interoperable and integrated data system will support further assessment and management of risk as outlined in HLTH's Action Plan (APPA).</p> <p>HLTH has also worked with the natural resource sector to integrate risks to drinking water sources into existing risk assessments (Cumulative Effects Framework for Aquatic Ecosystems Protocol, British Columbia Guidance for Prospective Human Health Risk Assessment; HLTH approval for all source water quality guidelines; and HLTH's active participation on the BC Water Committee (Executive level) and the ADM Water Forum that provides continued advice for strategic policy to ensure health protection is integrated in natural resource policy. HLTH has also developed a process for the evaluation and adjustment of Health's guidelines to ensure they are effective.</p> <p>LWRS is now the lead agency to coordinate overall water policy and will provide a corporate approach to source water management.</p>

Detailed information for OAG use	
Support for actions taken to date	<p>In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions.</p> <p>a) Identify where and what type of risks exist and b) coordinate with ministries and agencies to develop actions to mitigate identified risks.</p> <p>HLTH has developed the following risk identification and mitigation strategies for source water protection and the treatment and delivery of safe drinking water.</p> <ul style="list-style-type: none"> • HLTH worked with the natural resource sector to integrate risks to drinking water sources into existing risk assessments. For example, the <i>Cumulative Effects Framework for Aquatic Ecosystems Protocol</i> has been modified for use on drinking water sources. • HLTH and OPHO are active members of the BC Water Committee (Executive level) and the ADM Water Forum; this provides continued advice for strategic policy to ensure health protection is integrated in natural resource policy. LWRS has established inter-agency committees including the ADM Water Forum and BC Water Committee to function, at least partially as a forum to address issues of gaps and accountabilities and maintain alignment of Acts, codes and regulations and policies across agencies to further protect drinking water. • HLTH retained Econics to conduct a comprehensive legislative review, assess gaps in roles, responsibilities, accountabilities and identify and assess any overlaps and risks in the existing framework. Recommendations from this report will continue to be reviewed and prioritized by BC Water Committee. • A key recommendation in the Econics and the OAG report was to establish clear roles, responsibilities and accountabilities for source and drinking water protection. The province has now identified LWRS as the lead agency to lead strategic water policy and drinking water protection. • ENV policy requires that HLTH provides approval for all Source Water Quality Guidelines. • HLTH's document <i>British Columbia Guidance for Prospective Human Health Risk Assessment</i> provides guidance to avoid and reduce risks to human health stemming from development projects. • HLTH is collaborating with its partners on the development of a DWIS at the provincial level as it is critical for the identification of risks of treatment, delivery and infrastructure. <i>See actions under Recommendation 3.</i> • HLTH implemented a new series of Drinking Water Leadership Council Monthly Webinar Series for drinking water program policy developers, enforcement officers and managers to improve policy implementation, best practices and address emerging issues. <p>c) Process for the evaluation and adjustment of Health's guidelines to ensure they are effective. This action has been completed.</p> <ul style="list-style-type: none"> • HLTH has developed the Drinking Water Guidance Development and Evaluation Process to support a transparent and consistent approach to assess the effectiveness of HLTH's guidelines. This has been posted on HLTH's Drinking Water website.

	<ul style="list-style-type: none"> • A draft standardized evaluation framework and timelines to evaluate all new and existing guidelines has been completed. An inventory of existing guidelines and the list of stakeholders to be consulted has been created, and consultation is underway. • An annual process is now in place that will gather and assess results is now in place with the Drinking Water Guidance Development and Evaluation Process. A survey is provided to the Drinking Water Leadership Council (DWLC) in the spring of each year.
Support for Planned action	<p>This action is now complete.</p> <p>Government has confirmed the governance model and clarified key accountabilities related to drinking water in the establishment of the LWRS. LWRS now has the mandate to provide provincial leadership on water policy and strategies including the coordination of government's S2TS to further protect drinking water.</p>
Additional comments	None

Rec # 5	Auditor General Recommendation: We recommend that the Provincial Health Officer: Take action to improve the oversight of drinking water, including the development of: a) policy and procedures for reporting significant impediments to the Minister of Health; b) guidance for drinking water officers on how and when to report situations to the Provincial Health Officer that significantly impact drinking water; c) a process for evaluating and tracking significant impediments; d) a process for monitoring drinking water officers' compliance with guidelines and directives.
Response for publication	
Status	<p>Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below.</p> <p>X Completed – the recommendation has been followed and all actions to address the findings have been taken.</p> <p>Not completed</p> <p>Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed</p> <p>Do not intend to complete – do not intend to fully complete the recommendation</p>
Summary	<p>In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 5.</p> <p>The OPHO has completed procedures for reporting and tracking significant impediments to the Minister, and guidance for drinking water officers for reporting significant impediments to the OPHO, which is now available in the <i>Drinking Water Officers Guide</i>. The OPHO has developed a set of indicators for monitoring compliance with guidelines and directives. The target date for health authorities to report out on these new indicators using their data systems is 2024. This date was set to allow health authority staff time to adapt their data systems as they are quickly becoming outdated and unsupported by their vendors.</p>
Detailed information for OAG use	
Support for actions taken to date	<p>In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions.</p> <p>a) Policy and procedures for reporting significant impediments. This action has been completed.</p> <ul style="list-style-type: none"> Sep 2021: The OPHO shared a revised draft of an internal policy and procedures for the OPHO for reports to the Minister under section 4.2 with Health Protection Branch (HPB) of HLTH. The internal guidance outlines the process the OPHO follows for determining what is an impediment to the protection of public health in relation to drinking water

	<p>and what steps the OPHO follows in terms of making a report.</p> <ul style="list-style-type: none"> • Nov 2021: The HPB provided feedback on the draft. The OPHO has addressed the feedback from HLTH and finalized the internal policy and procedures document. The OPHO will update the internal guidance as necessary pending any changes to which Minister to PHO reports problems to under section 4.2. <p>b) Guidance for drinking water officers. This action has been completed.</p> <p>Fall 2020: The OPHO shared draft guidance with members of Drinking Water Leadership Council (Regional Health Authorities (RHAs) and Health) for reporting situations that significantly impede the protection of public health in relation to drinking water. The OPHO solicited feedback from members of DWLC. By May 2021, the OPHO had received feedback from both the Ministry of Health and the RHAs. Based on that feedback the OPHO adjusted that guidance and updated section 4.3.12 of the Drinking Water Officers' Guide (DWOG) that dealt with "Reports of problems relating to provincial government actions". The OPHO worked with the HPB Branch during their DWOG update to improve the guidance. The updated guidance will be published online in the spring of 2022. The updated guidance provides more detailed information about what types of situations DWOs should bring to the attention of the PHO, and what would constitute a significant impediment to the protection of public health in relation to drinking water.</p> <p>c) Process for evaluating and tracking significant impediments. This action has been completed.</p> <p>The OPHO has a tracking spreadsheet and an internal folder for recording reports made under section 4.2.</p>
Support for Planned actions	<p>This action is complete.</p> <p>The implementation of the indicators is the responsibility of the health authorities and is underway.</p> <p>d) Process for monitoring drinking water officers' compliance with guidelines and directives.</p> <p>The target date for the next comprehensive PHO report with the new indicators remains 2024. Recommendation 8a of the PHO 2019 report sets this timeline.</p> <p>Health Authority data system improvement delays are anticipated resulting from competing demands on health authority program resources stemming from the pandemic response and recurring climate related emergencies such as flooding and fires.</p> <p>The OPHO will continue to work with HLTH to ensure the Drinking Water Information System (DWIS) project aligns and supports the development of a data system that includes the information that the OPHO requires for these indicators and our comprehensive reports.</p>
Additional comments	None

Rec # 6	Auditor General Recommendation: We recommend that the Provincial Health Officer: In collaboration with the Ministry of Health, review the legislative provisions regarding drinking water protection plans and report out to the Minister of Health on impediments to the protection plan's implementation.
Response for publication	
Status	<p>Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below.</p> <p>Completed – the recommendation has been followed and all actions to address the findings have been taken.</p> <p>X Not completed</p> <p>X Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed</p> <p>Do not intend to complete – do not intend to fully complete the recommendation</p>
Summary	<p>In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 6.</p> <p>The OPHO has concluded a preliminary review of DWPPs, including the impediments to recommending, developing, and implementing DWPPs; assessed additional source protection tools; and reviewed other planning tools available in BC. Preliminary recommendations were drafted with the Ministry of Health. With the creation of the LWRS, now the lead for implementing a S2TS, further review of source protection tools is required. The OPHO and HLTH will work with LWRS towards source water protection under the DWPA. This work will include carrying forward this work as part of a broader review of source water protection tools.</p>
Detailed information for OAG use	
Support for actions taken to date	<p>In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions.</p> <p>In February 2021, the OPHO created a temporary appointment position to review the legislative provisions for Drinking Water Protection Plans (DWPP) under the DWPA. The review included a review of the impediments to recommending, developing, and implementing DWPPs; a jurisdictional scan of source protection tools; and a review of other planning tools in BC under the <i>Water Sustainability Act</i>, the <i>Environmental Management Act</i>, and other community-based planning measures. The review included interviews of key stakeholders within the Ministry of Health, OPHO, the regional health authorities, and other Ministries with a role in source water protection.</p> <p>The OPHO in collaboration with the Ministry of Health drafted an internal research report which also included several recommendations. The</p>

	<p>temporary appointment ended in the summer of 2021, and HLTH and the OPHO have been collaborating on creating a finalized internal report along with a shorter briefing note for the Minister outlining the report's findings and recommendations. The intent is to include the recommendations of this work within the findings of the broader review of the DWPA.</p> <p>LWRS now has the mandate to provide provincial leadership on water policy and strategies including the coordination of government's S2TS to protect drinking water. As a result of this change, the OPHO and HLTH will continue this work with DWPPs with the LWRS as part of a broader review of source water protection tools.</p>
Support for Planned actions	<p>A review of source water protection tools is needed. LWRS now holds a lead role for coordinating government's strategy for source water protection.</p> <p>HLTH and the OPHO will collaborate with their new partners at LWRS to determine how the source water protection planning and enforcement tools under the DWPA work within this new framework.</p>
Additional comments	None

Rec # 7	Auditor General Recommendation: We recommend that the Ministry of Health: Report out to the public on the progress it is making in improving the protection of drinking water for all British Columbians.
Response for publication	
Status	Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below. X Completed – the recommendation has been followed and all actions to address the findings have been taken. Not completed Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed Do not intend to complete – do not intend to fully complete the recommendation
Summary	In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 7. HLTH and OPHO have clarified their roles and reporting scope as outlined in the <i>Public Health Act</i> , the <i>Drinking Water Protection Act</i> and Regulation, and the 2002 Action Plan for Safe Drinking Water. HLTH's reporting framework is outlined in the HLTH's <i>Annual Service Plan for Safe Drinking Water</i> which has been approved to be posted to the Ministry's Drinking Water website.
Detailed information for OAG use	
Support for actions taken to date	In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions. HLTH and OPHO have clarified their roles and reporting scope as outlined in the <i>Public Health Act</i> , the <i>Drinking Water Protection Act</i> and Regulation, and the 2002 Action Plan for Safe Drinking Water. HLTH's reporting framework is outlined in the HLTH's <i>Annual Service Plan for Safe Drinking Water</i> which has been approved to be posted to the Ministry's Drinking Water website. This action is now complete.
Support for Planned actions	None
Additional comments	None

Rec # 8	Auditor General Recommendation: We recommend that the Provincial Health Officer: Monitor progress and trends in the protection of drinking water and report on a timely basis to the Minister of Health and the legislative assembly on whether activities are mitigating risk.
Response for publication	
Status	<p>Please assess the status of the completion of the recommendation as of November 30, 2022, using the descriptions below.</p> <p>X Completed – the recommendation has been followed and all actions to address the findings have been taken.</p> <p>Not completed</p> <p>Intend to complete - actions to follow the recommendation are planned or in progress but not yet completed</p> <p>Do not intend to complete – do not intend to fully complete the recommendation</p>
Summary	<p>In 2019, the Ministry of Health (HLTH) and the Office of the Provincial Health Officer (OPHO) committed to specific actions in response to the OAG's audit on the protection of drinking water (July 2019, OAG report pages 13-17) and subsequently provided to the Select Standing Committee on Public Accounts (PAC) as an Action Plan and Progress Assessment (APPA) report. The following is the progress update on actions responsive to OAG recommendation 8.</p> <p>Monitoring progress and trends in the protection of drinking water is an ongoing commitment for the OPHO and action has been taken to improve the reporting process. The OPHO has established a reporting process for future use that includes:</p> <ol style="list-style-type: none"> 1. A simplified annual report of activities under the Act. 2. A multi-year progress report <i>Clean, Safe, and Reliable Drinking Water: An Update on Drinking Water Protection and the Action Plan for Safe Drinking Water in British Columbia</i> that monitors progress and trends in the protection of drinking water across government. <p>The OPHO is currently working on an update on activities covering 2017/18 to 2020/21 under the DWPA. The report will also include an extensive summary covering the unintended consequences of the COVID-19 pandemic and an update to the recommendations from the 2019 progress report.</p>
Detailed information for OAG use	
Support for actions taken to date	<p>In 2019 Government committed to an action plan that outlined specific actions that HLTH and the OPHO would undertake to address the OAG recommendations. Below is the progress update on those actions.</p> <p>Jan 2021: the OPHO created and filled a new position to support the Provincial Drinking Water Officer develop annual reports on activities under the DWPA.</p>

	<p>The OPHO is creating a simplified report structure to report out on activities under the DWPA annually. These annual updates will be separate from the larger, less frequent progress reports that monitor progress and trends in the protection of drinking water across government.</p> <p>The OPHO is currently working on an update on activities covering 2017/18 to 2020/21 under the DWPA. The report will also include an extensive summary covering the unintended consequences of the COVID-19 pandemic and an update to the recommendations from the 2019 progress report. An internal draft for executive and stakeholder review is anticipated to be completed in early 2023.</p> <p>The OPHO will provide annual reports to the Minister of HLTH and now also the Minister of LWRS. LWRS will table the report before the Legislative Assembly or file the report with the Clerk of the Legislative Assembly if the Legislative Assembly is not in session.</p> <p>Staffing shortages and competing demands because of the COVID response at the regional health authorities has caused significant delays in the reporting of data to the OPHO.</p>
Support for Planned actions	<p>This action is now complete.</p> <p>The OPHO expects to release the next report on Activities in 2023 after which the OPHO intends to release updates on activities annually provided timely access to health authority data and report writing staff.</p>
Additional comments	<p>Timely access to data from the health authorities due to antiquated data systems, staffing shortages, and competing demands continues to cause delays in OPHO reporting. Once data is received, staff at the OPHO must spend considerable time reviewing and cleaning the data before any analysis or reporting can begin. Implementing the PHO indicators and reporting metrics into DWIS will be critical for supporting PHO reporting timeline goals in the future.</p>

Subsequent Events

This is any event occurring after the cut-off date of November 30, 2022, and before the expected date of publication on July 2023, that significantly impacts the faithful presentation of the progress reported.

If this occurs, please inform us as soon as possible and we will discuss whether a subsequent event should be included in the final report.



Reference: 28732

DATE

VIA EMAIL: bcauditor@bcauditor.com

Michael A. Pickup, Auditor General
Office of the Auditor General of British Columbia
623 Fort Street
Victoria, B.C. V8W 1G1

Dear Michael Pickup:

Please find attached government's update on commitments made in response to the 2019 Office of the Auditor General's (OAG's) report "The Protection of Drinking Water".

In February 2022, government announced the creation of a new natural resource sector ministry, the Ministry of Land, Water and Resource Stewardship (LWRS). The new ministry is tasked with providing "provincial leadership on water policy and strategies including the coordination of government's "source to tap" strategy to protect drinking water"ⁱ. Mandating LWRS to lead drinking water protection for British Columbia (B.C.) is a significant deliverable alongside the province's commitment to develop a new Watershed Security Strategy (WSS), and responds directly to concerns around roles, responsibilities and accountabilities raised in reports by the Auditor General in *The Protection of Drinking Water* (OAG report) and by the Office of the Provincial Health Officer (OPHO), *Clean, Safe, and Reliable Drinking Water* (PHO Report) in 2019.

The OAG report made eight recommendations: five directed to the Ministry of Health (HLTH) and three to OPHO, to which government made responsive commitments in the form of an action plan subsequently accepted by the Select Standing Committee on Public Accounts (PAC). HLTH and OPHO have been reporting annually to PAC on progress in an Action Plan and Progress Assessment (APPA) report.

This year we are proud to report that five of the eight OAG recommendations to HLTH and OPHO have been fully implemented, two have been substantially implemented and one has been partially implemented. We are proceeding now on the key outstanding deliverables including the Source to Tap Strategy (S2TS) to protect drinking water and establishing roles, responsibilities, and accountabilities of partners agencies to LWRS, HLTH and OPHO involved in drinking water

One of the primary goals of the WSS is to manage our lands and resources in a way that will ensure all peoples of B.C. have access to clean drinking water, and that our lands and

Page 1 of 2

resources are managed in a way that protects our drinking water sources for future generations. The development of the WSS builds on the priorities of Indigenous peoples as committed to in the Action Plan for the *Declaration on the Rights of Indigenous Peoples Act*; as well as the recommendations by OAG and OPHO on improving drinking water outcomes, including increased efforts on protecting drinking water sources. It will also set the foundation for a provincial S2TS that will set out targeted actions for source water protection (source to intake), drinking water (intake to tap) for public health protection, strategic risk assessment, small water systems strategy, monitoring and reporting systems, emergency planning, infrastructure, financing, and land use planning.

Access to safe drinking water remains a top priority of Indigenous communities and the B.C. Government. Engagement with Indigenous peoples, and recognition of the *B.C. Tripartite Framework Agreement on First Nation Health Governance* along with the *Declaration on the Rights of Indigenous Peoples Act* will be foundational to the development of a S2TS.

I am pleased to provide you with this year's progress report on behalf of LWRS, HLTH and the OPHO and to answer any questions you may have regarding to this update.

Sincerely,

Lori Halls
Deputy Minister
Ministry of Land, Water, and Resource Stewardship

pc: Stephen Brown, Deputy Ministry, Ministry of Health
Dr. Bonnie Henry, Provincial Health Officer, Office of the Provincial Health Officer

i Honourable Josie Osborne's mandate letter February 25, 2022.

MEETING NOTE

DATE: October 25, 2022

PREPARED FOR: Lori Halls, Deputy Minister of Land, Water and Resource Stewardship

REGARDING: Kathy MacRae, Executive Director of the Commercial Bear Viewing Association
Scott Ellis, Executive Director, Guide Outfitter Association

INTRODUCTIONS: Jennifer Psyllakis, Executive Director, Wildlife, Habitat and Species Recovery
Logan Wenham, Director of Fish and Wildlife Branch, Integrated Resource
Operations Division
Lynn Brunsdon, Manager Policy and Lands Operations
Support, Rural Opportunities, Tenures and Engineering Division

SUMMARY:

- Kathy MacRae is Executive Director of the Commercial Bear Viewing Association of BC (CBVA), co-chair of the Adventure Tourism Coalition (ATC), and a representative for the Discovery Islands Working Group, and she is also Vice President of the Wilderness Tourism Association, a member organization of the working group.
- The CBVA was formed to promote sustainable bear viewing in British Columbia (BC) and aid in the protection of wild bears and their ecosystems. There are 23 CBVA member companies.
- Scott Ellis is Executive Director of the Guide Outfitters Association of BC (GOABC), which represents ~70 percent of the guide outfitters in the BC.
- Guide outfitting has a long history in the province and GOABC advocates for conservation, stewardship and sustainable use of wildlife.

Adventure Tourism Coalition

- The Adventure Tourism Advisory Committee (ATAC) was created in 2019 and aims to encourage collaboration among key players in the adventure tourism industry, influence regulatory decision making for sustainable development, and increase the awareness of the social, economic, and environmental importance of adventure tourism in BC.
- The ATC is made up of 18 different sector organizations, such as angling, mountain biking, heli-skiing, public recreation, outfitting, and wildlife viewing.
- The Coalition represents approximately 2,200 businesses – 90 percent of them are located/operate in rural communities and most are small and medium-sized enterprises.
- ATC generates in excess of \$3 billion in annual income (Source: ATC + sector studies).
- There have been three consistent requests to government for years:
 - A level playing field – bring the sector to parity with other natural resource sectors concerning tenures, policies and decision-making.
 - Provide enhanced long-term tenure security and business certainty.
 - A supportive government structure – preferably one accountable body for the adventure tourism sector, like the Mountain Resorts Branch.
- The Coalition has submitted to government a proposed extensive revision of the Adventure Tourism Policy – a land-use operational policy that applies to tourism operators who provide outdoor recreation activities for a fee or compensation.
- Tourism Sector Strategy Division Assistant Deputy Minister, Nick Grant, has monthly meetings with co-chairs Kathy MacRae and Scott Ellis of the ATC. At his most recent meeting with them on October 24 the Coalition informed him that they will be discussing with Ministry of Land, Water and Resource Stewardship (LWRS) Deputy Minister that “LWRS take the lead in administering the Adventure Tourism Policy and issuing adventure tourism tenures”.

Current Roles and Responsibilities

- Ministry of Forests has statutory decision making on tenure decisions, administers the Adventure Tourism Policy and is reviewing proposed revisions recommended by the Coalition.
- Ministry of Forests is responsible for the Wildlife Act and makes decisions on permitting consumptive use of wildlife.
- Ministry of Forests and LWRS are co-leading a review of the Wildlife Act, policy consideration is underway to determine options to improve tools to manage non-consumptive commercial use.
- LWRS leads modernized Land Use Planning, Together for Wildlife, and the development of a declaration to prioritize ecosystem health and biodiversity. These initiatives contribute to certainty by reducing land use conflicts, establishing clear objectives, aligning work across multiple ministries and external partners, and improving outcomes for wildlife and ecosystems.
- LWRS is leading revisions to Wildlife Guidelines for Backcountry Tourism/Commercial Recreation.

Meeting Bullets

- Adventure tourism is an important sector in the province. Nature is a big aspect of the draw to BC.
- Through the Natural Resource Sector review, there were several recommendations including improved government structures to support the sector. It is important to note that Mountain Resorts Branch does not advocate for Mountain Resorts, rather provides coordination and accountability.
- We appreciate the initiative the Coalition took to review and provide recommendations for changes to the Adventure Tourism Policy. I understand that the suggestions are extensive and that Ministry of Forests are still reviewing the recommendations.
- LWRS is not intending to move into a tenure administration role or take the lead in administering the Adventure Tourism Policy; however, there are other areas that we can support improvements.
- Aligning the sectors interests to various initiatives, like the Wildlife Act review and a declaration on the prioritization of ecosystem health and biodiversity, provides opportunities to improve certainty and reduce conflicts.

PREPARED BY:

Jennifer Psyllakis
Executive Director
Wildlife, habitat and Species Recovery
(250) 387-5657

REVIEWED BY:

	Initials	Date
DM	LH	2022/11/16
ADM	DM	2022/10/28
Program Dir/Mgr.	JP	2022/10/26

MEETING NOTE

DATE: November 3, 2022

PREPARED FOR: Lori Halls, Deputy Minister of Land, Water and Resource Stewardship

REGARDING: Meeting with Land Title and Survey Authority of British Columbia
November 14, 2022

INTRODUCTIONS: Al-Karim Kara, Land Title and Survey Authority President and CEO
Gregory Steves, Vice President, Policy and Legal Services

SUMMARY:

- The Land Title and Survey Authority (LTSA) was established as a regulated authority by legislation and is a publicly accountable statutory corporation with the mandate to manage, operate and maintain the land title and survey systems of British Columbia.
- LTSA's mandate and authority was established by the Land Title and Survey Authority Act
- LTSA is required to meet obligations and performance targets established by the Province through legislation and contractual agreement. There is an Operating Agreement between LTSA and the Ministry of Forests. It is a 60 year agreement, subject to a budget review every 10 years from the date of signing, and a performance review every five years.
- The last performance review, in 2020, resulted in exceeding targets on all measures.
- At this meeting, the CEO will provide a summary of updates to the LTSA Business Plan and identify strategic priorities.
- LTSA has indicated they would like to hear about LWRS Strategic Priorities.

STRATEGIC CONSIDERATION AND MESSAGES:

- Section 3.01 of the Operating Agreement sets out that the province will provide reasonable notice and consult with LTSA in respect of any changes to the Acts for which they have delegated responsibilities (*Land Act, Land Title Act*)
 - LWRS's mandate is to support and enable cross-sector integrated strategic decision-making and provide a pathway to advancing and balancing Indigenous reconciliation, economic activity, and environmental sustainability.
 - Priorities include modernizing the natural resource sector statutory framework and permitting processes, developing a co-management strategy with First Nations, provincial leadership on water policy and strategies, biodiversity and modernised land use policy.
 - s.12; s.13
-
- Provincial representatives from Ministry of Indigenous Relations and Reconciliation, Ministry of Forests, Ministry of Finance, Ministry of Citizens' Services, Ministry of Energy, Mines and Low Carbon Innovation, Ministry of Environment and Climate Change Strategy, and Corporate Services Natural Resource Sector sit on the Public Sector Advisory Committee chaired by Gregory Steves provides two way communication and collaboration on new opportunities and initiatives.
 - BC appreciates the strong working relationships that have been developed with LTSA and wants to continue to work in partnership as Indigenous reconciliation continues to evolve.

PREPARED BY:

Jennifer Manuel
Director, Strategic Policy
NRS Strategic Policy and Legislation
(250) 312-7191

REVIEWED BY:

	Initials	Date
DM		
ADM	CW	
Exec Director	MG	Nov 4/22

BRIEFING NOTE FOR INFORMATION

DATE: November 21, 2022
PREPARED FOR: Honourable Josie Osborne, Minister of Land, Water and Resource Stewardship
ISSUE: Provincial Permitting Response to Housing Plan 2.0 BC Builds

BACKGROUND:

The Province announced the introduction of new legislation intended to increase the supply of housing in BC. The Housing Supply Act (the Act) will provide government with the ability to set targets in communities where there is an identified need for housing. The Act will require municipalities to ensure that policies, practices, and processes are in place to reduce administrative delays and burden for housing developments. The legislation was developed in consultation with Indigenous partners and key stakeholders, including the Union of BC Municipalities, the BC Urban Mayors' Caucus, the Urban Development Institute, and multi-culturalism and anti-racism groups.

In June 2022, the BC Urban Mayors' Caucus wrote to Honourable David Eby, then Attorney General and Minister Responsible for Housing and Honourable Nathan Cullen, Minister of Municipal Affairs identifying challenges they were experiencing that hampered progress on housing developments. In this letter they identified provincial permitting by Ministry of Transportation and Infrastructure (MOTI), Ministry of Environment (ENV) for contaminated sites, and Ministry of Forests (FOR) for archaeology, Water Sustainability Act authorizations and land authorizations as the cause for delay.

The Permitting/Authorizations and Statutory Decision-Making Solutions team (PASS) within the Ministry of Land, Water and Resource Stewardship (LWRS) has been directed to lead the efficient and effective delivery of permitting and authorizations services in support of housing; s.12

s.12; s.13; s.17

DISCUSSION:

Work led by PASS is focusing on short-term solutions to address current backlogs for priority projects, such as housing, and longer-term initiatives to address systemic challenges. To reduce delays in housing development, a coordinated permitting strategy must be implemented and resources invested that will address backlogs and meet the increased demand for provincial permits that are housing related while continuing to meet obligations for the entire permitting caseload.

A collaborative process led by the Ministry of Land, Water, and Resource Stewardship (LWRS), with ENV, FOR, and MOTI, will accelerate a modernized seamless approach to service delivery providing a singular point of information to track, report, advance and accelerate housing related permits. These improvements in provincial permitting will complement reduced timelines for local government housing project approvals facilitated through the Ministry of Municipal Affairs and Housing's Development Process Approvals Review.

s.12; s.13; s.17

PASS has led the development of a Permitting Solutions Strategy for Housing the immediate areas of focus are identifying existing housing-related applications in the permitting systems across the ministries, tracking progress and determining new and innovative process and systems approaches to establishing a single-window approach. Each of these tasks requires considerable resources and manual effort from existing staff to gain that preliminary line of sight and base metrics.

The team will focus on immediate opportunities to advance progress, identifying applications that are less complex, and/or require multiple overlapping authorizations to accelerate and bring housing units online. Analysis and review of opportunities to create a dedicated service channel or “hub” for housing wherein subject matter expertise, line of sight, and critical linkages and relationships between the social sector and natural resource ministries are maintained will be rapidly advanced for decision by deputy ministers.

Advancing the Permitting Solutions Strategy for Housing will require dedicated focus, multi-ministry coordination, additional resourcing and the commitment to try new and innovative approaches to working across ministries, legislation and systems. This work is critical if the Province seeks to advance changes not only in the space of housing, but across other activity types as well.

INDIGENOUS PEOPLES:

Addressing the housing crisis in urban and rural areas is imperative for Indigenous peoples. The prioritization process will apply a priority lens on projects that support Indigenous led or partnered housing initiatives or ones that will support Indigenous peoples as they can be identified.

NEXT STEPS

- s.13
- Work is underway across the ministries to set up the structure and approach required to advance identification of housing-related permits within the multiple systems and develop a future-facing tool for capturing housing-related applications.
- Metrics, analytics and a future dashboard tool are being developed to enable regular reporting across provincial ministries.
- Prioritization exercises will be undertaken to determine the best approaches across the ministries.
- Analysis and review of a dedicated service channel or “hub” for housing will be advanced immediately with proposed options advancing for approval by deputy ministers.

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REVIEWED BY:

	Initials	Date
DM	LH	Nov 22/22
ADM	JA	Nov 22/22
Program Dir/Mgr.		

BRIEFING NOTE FOR INFORMATION

DATE: November 29, 2022

PREPARED FOR: Deputy Minister, Lori Halls, Ministry of Land, Water and Resource Stewardship

ISSUE: Riparian Areas Protection Regulation: Overview

BACKGROUND:

- The Riparian Area Regulation was brought into force on March 31, 2006 under the *Riparian Areas Protection Act* (RAPA) (originally the *Fish Protection Act*).
- The Riparian Area Regulation (RAR) was replaced with the Riparian Area Protection Regulation (RAPR) in 2019 to address many of the recommendations that came out of the Ombudsperson report (*the Report*) from 2014 (*Striking a Balance*).
- The RAPR is a provincial regulation that is implemented through local government bylaws. To reduce administrative burden and cost to the local government, RAPR assessments are completed by third party environmental consultants generally hired by the developer.
- The RAPR applies to 15 designated Regional Districts in the southern half of the province, as these were experiencing the most rapid urban growth at the time that RAR was implemented in 2006.
- The RAPR assessment results in a Streamside Protection and Enhancement Area (SPEA) that is established as a result of new development activities, with the goal of protecting and enhancing riparian areas into perpetuity.
- SPEA buffers around streams are calculated based on stream type, fish absence/presence, shade requirements, food, and nutrient considerations for fish, and surrounding potential vegetation types in order to protect and enhance water quality for potential fish habitat.
- The RAPR not only meets Provincial environmental objectives but ensures British Columbia (BC) meets the Federal *Fisheries Act* requirements to avoid harmful alteration, disruption, or destruction (HADD) of fish habitat. In turn, this precludes Federal Government's ability to intervene and prescribe protection measures to BC on terrestrial and aquatic resources.
- Good quality riparian habitat (i.e., streamside vegetation communities) ensures healthy fish populations. British Columbia has lost hundreds of kilometers of riparian habitat in the past decades through incremental impacts brought about by urban development.
- Economic benefits of the RAPR include more desirable neighbourhoods creating higher property values, decreased flood hazard, shade and water retention to reduce drought hazards, and lower stormwater management costs.
- Under the RAPR, local governments may approve or allow development within 30m of a "stream" only if one of two conditions has been met:
 - A qualified environmental professional (QEP) submits a report to the ministry that follows the prescribed assessment methods available in the RAPR Technical Manual, or
 - The developer successfully obtains an Authorization from Fisheries and Oceans Canada (DFO) under section 35 of the *Fisheries Act*.

DISCUSSION:

The RAPR standards were developed with thorough consideration of both environmental and economic objectives. RAPR reports are submitted by third party QEPs who hold a valid accreditation with a professional governing body (such as the College of Applied Biology or the British Columbia Institute of Agrologists) in recognition of the professional reliance model. In response to the Ombudsperson report of 2014 and the concern with the low compliance within the professional

reliance model, the regulation was updated to include a mechanism which gives the province the ability to approve or reject reports, it does not require the province to approve or reject (NOTE: this is the only recommendation out of *the Report* that the Minister did not accept).

It is important to note that provincial staff have successfully implemented the recommendations out of *the Report* and the gains on riparian protection have improved. However, RAPR compliance and protection of SPEAs are still not at a standard that is acceptable. QEP non-compliance to the RAPR continues to exceed acceptable thresholds (the aim of the RAPR is to achieve at least 80% compliance), even with provincial staff reviewing 100% of RAPR assessments. Consequently, continued impacts to and destruction of riparian habitat has been observed. The provincial RAPR team is currently shifting focus to other strategic ways to improve compliance rates and riparian protection, including working closely with the professional associations who govern QEPs.

SUMMARY:

The RAPR is a key regulation to ensure riparian habitat is protected into perpetuity in light of high and increasing development pressure near sensitive fish habitat. The regulation is currently being applied by 15 local governments with the ongoing support of the RAPR team, who provide guidance on RAPR standards to local governments, QEPs and developers. Ongoing reviews of RAPR assessments provide opportunities for staff to recognize potential improvements to the legislation and directly contributes to the provincial review of professional reliance. Once RAPR is achieving its goals on the ground staff will be exploring options to expand the scope of riparian protection within BC.

Attachment(s): Attachment 1 RAPR 101 Dec 2022 DM briefing_FINAL

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REVIEWED BY:

	Initials	Date
ADM	JM	Nov 30, 2022
Program Dir/Mgr.	LN	Nov 30, 2022



Riparian Area Protection Regulation: Overview

December 2022

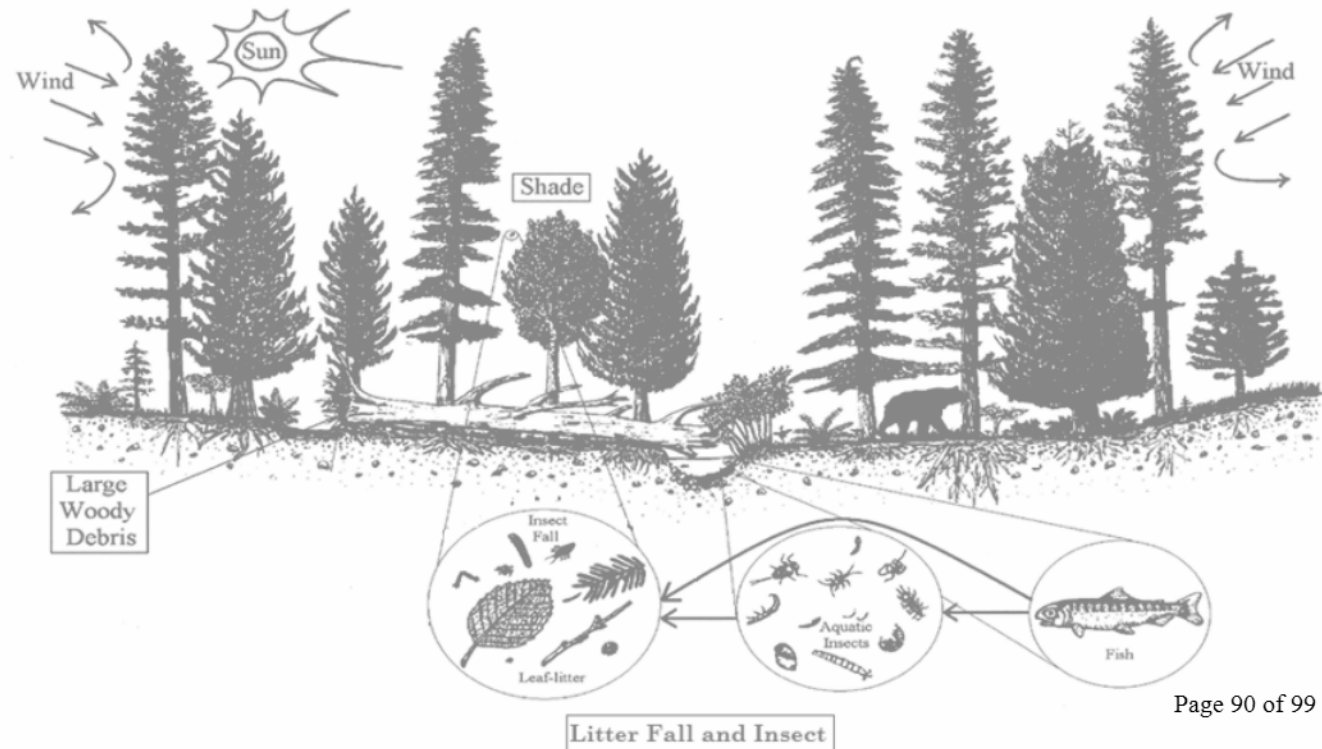
Prepared for Lori Halls, DM, LWRS

Prepared by Lora Nield, Director Aquatic Habitat, LWRS

What is a riparian area

Riparian areas are the areas bordering on streams, lakes, and wetlands that link water to land. The blend of streambed, water, trees, shrubs and grasses directly influences and provides fish habitat.

Provides buffers and support to changing weather, temperature, flooding and run off.



Purpose of the Regulation

To protect riparian areas from development so that the areas can provide natural *features, functions and conditions that support fish life processes.*

Primary

- The RAPR is a FISH PROTECTION Regulation.
 - Fish have strong cultural, spiritual, and economic values for all British Columbians
- Its methods don't consider other riparian species or values

Secondary

- Offers umbrella protection to riparian and aquatic species
- Economic benefits (e.g. more desirable neighbourhoods creating higher property values, stormwater management, safer siting of homes)
- Decrease flood hazard and drought impacts
- Fire break/buffer



Where it applies

Currently 15 RD's and Islands Trust

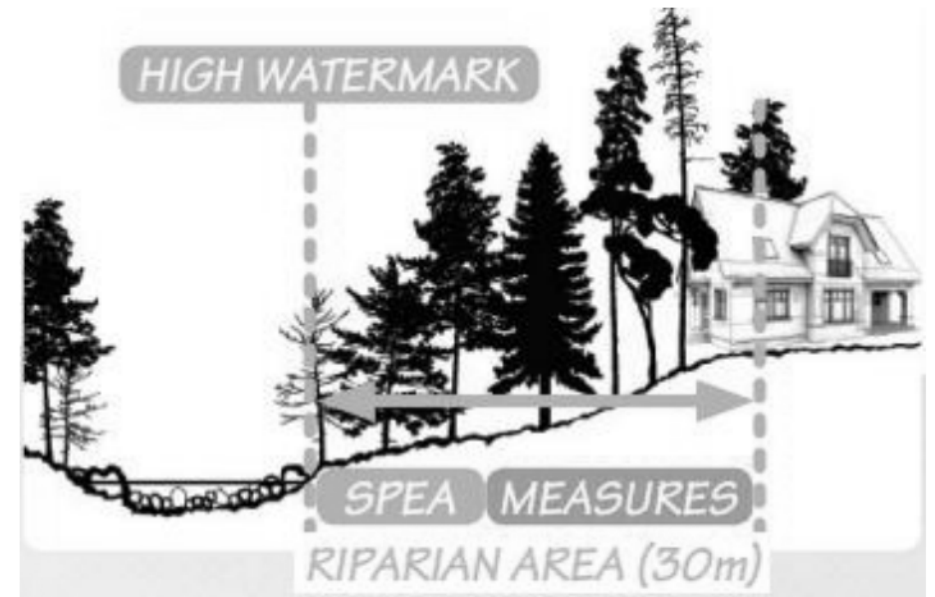
Regional Districts- Grey outline
Incorporated Municipalities- Red

- Originally established where development pressures were flagged as being high (in 2004)
- Development pressures have changed over time
- Over the next 3-5 years, team will be exploring possibility of expanding RAPR to other local governments



How it works (generally)

- Proponent wants to Develop.
- If development is within 30 meters of a stream, the Proponent needs to get RAPR report completed by a qualified environmental professional (QEP).
 - The QEP is a third party environmental consultant, who would have received training through Vancouver Island University.
- The QEP(s) will submit their RAPR reports to RARNS.
- A notification is provided to the local government to let them know that the proposed development meets RAPR standards.



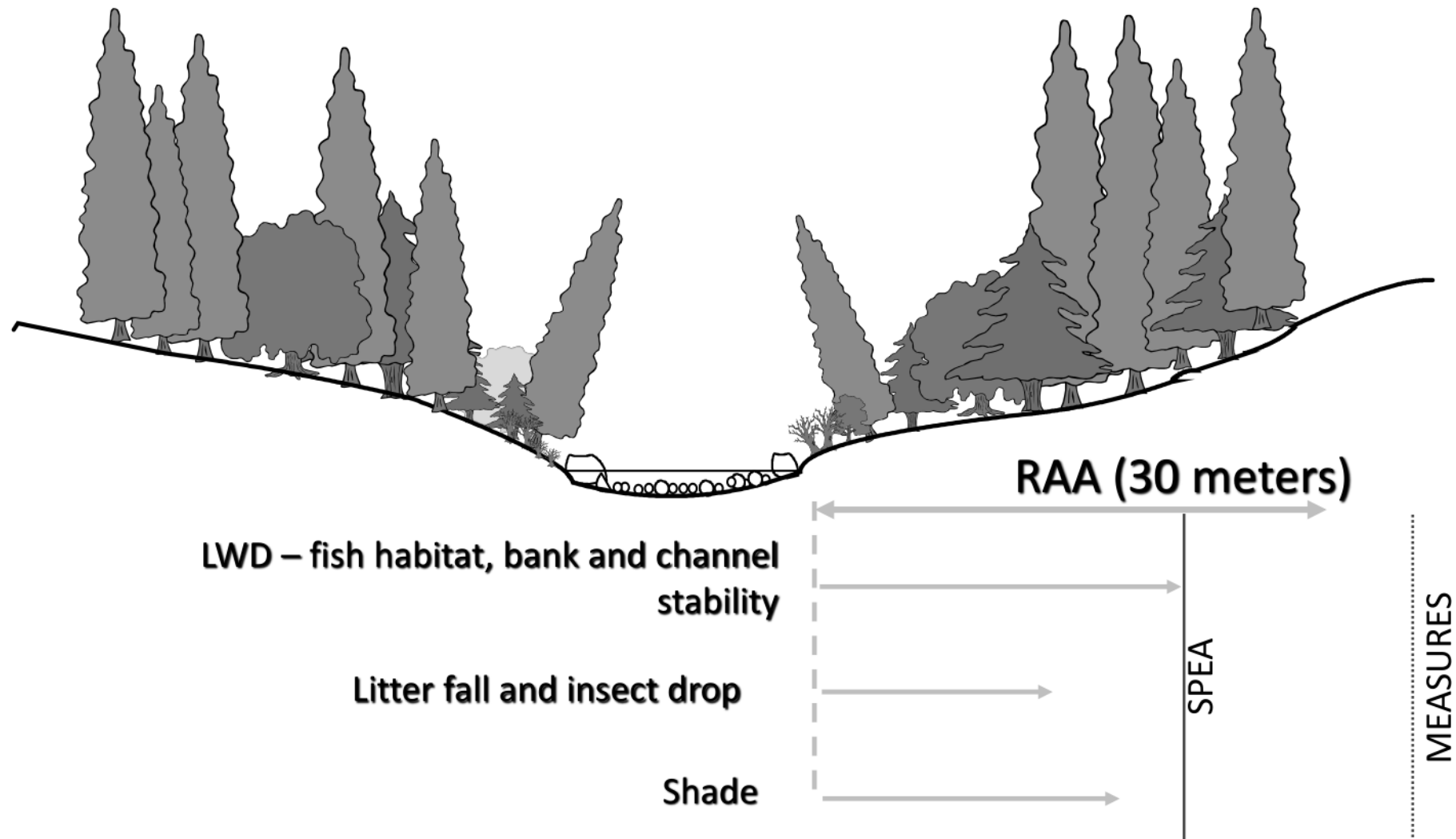
So the questions are:

1. Am I in a RAPR regulated area? (one of the 15 local governments)
2. Is the development residential, commercial, or industrial?
3. Is the proposed development within the 30m Riparian Assessment Area (RAA)?

If the answer is “yes” to all three questions, then the RAPR applies.

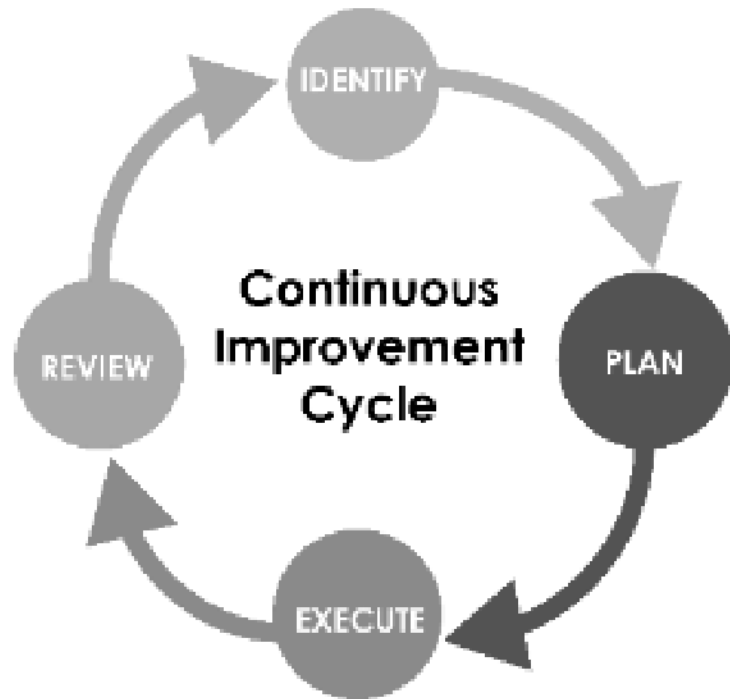
****However****, there is a “meet or beat” consideration with RAPR, which allows local governments to create their own development permit process to exceed RAPR setbacks.

These are pre-established riparian setbacks.



Features, Functions and Conditions

Where we are at - December 2023



- RAPR like other regulations has its challenges
- Many were addressed by Ombudsperson but still some outstanding challenges to address

Team Approach

- Continuous improvement
- Strategic thinking (bigger picture)
- Prioritization (staff time and actions)
- Action – accountability
- Reporting out



OUR PLANNING PROCESS

- ✓ Reviewed recommendations out of ombudsperson report
- ✓ Listed areas of concerns still not addressed
- ✓ Prioritized areas of concern using PAT and professional opinion
- ✓ Starting work immediately on some
- ✓ Built a work plan to set achievable goals
- ✓ Sought funding
- ✓ Implementing work plan



APPENDIX A: Detailed RAPR Workplan¹

Action Identified by Team	PAT Output	2022/2023				2023/2024				2024/2025			
		Action	Delivery Mechanism	FTE needs	Resources Required	Action	Delivery Mechanism	FTE needs	Resources Required	Action	Delivery Mechanism	FTE needs	Resources Required
Report review	N/A	Review reports submitted through RARNS	Internal	N/A	Charlotte Nick Angela								
Monitoring and auditing of report review and triage approach	N/A	Audit report review as well as triage approach to determine if what we are doing is acceptable	Internal	10 days	Charlotte								
Effectiveness monitoring protocol development and program delivery	1	Develop and implement coarse filter monitoring	Contract	10 days	Charlotte to run contract ~20K	Refine and implement coarse filter protocol	contract	10 days	40,000 (funding required)	review results, identify concerns, develop next steps	internal	10 days	(Funding required)
Regulatory/agency integration (MOTI/WSA/Lands)	2	Review regulatory overlap/conflicts in process with Regions (problem definition)	Internal	10 days	Nick (regional support)	Develop potential solutions (via MoU) to reduce operational deficiencies	Internal	10 days	Base (RAPR Biologists OR Habitat Policy Analyst OR Riparian Supervisor)	Develop potential solutions (via MoU) to reduce operational deficiencies	Internal	10 days	Base (RAPR Biologists OR Habitat Policy Analyst OR Riparian Supervisor)
Professional Reliance liaison	3	Submit reports on key 'bad players' to CAB	Internal	20 days	Lora Charlotte Angela	Submit reports on key 'bad players' to CAB	Internal	20 days	NA	Follow up with CAB on outcomes	Internal (Director)	2 days	NA
Proactive local government outreach program	4	/	/	/	/	To support changes under RAPR from RAR – Oversight)	Internal	10 days	8,000 (travel)	To support changes under RAPR from RAR – Oversight)	Internal	10 days	8,000 (travel)
Initiate data & mapping program	4	Develop a data plan and start implementation	Internal	20 days	Luke (COOP)	Utilize data outputs from EM contract and data plan	Internal (COOP)	20 days	NA	Review and update data plan, identify outstanding gaps	internal	5 days	NA
Policy development PMFL, MOTI, Fire smart, Ag, Emergency support	4	/	/	/	/	Continue with additional regulatory issues	Internal	10 days	Base (RAPR Biologists OR Habitat Policy Analyst)	Continue with additional regulatory issues	internal	10 days	Base (RAPR Biologists OR Habitat Policy Analyst)
LG delivery review	5	Review LG implementation of RAPR and determine next steps	Contract	5	Charlotte to run contract ~15K	Use outcomes from EM contract to develop outreach program	internal	15 days	Effectiveness monitoring contract	Action next steps	internal	15 days	Effectiveness monitoring contract
Field audit protocol development and program delivery	5	/	/	/	/	Pilot field audit protocol	contract	10 days	50,000	pilot field audit protocol	contract	10 days	50,000
Guidance development	6	Complete and post technical manual	Internal	3 days	Nick	Complete and post additional materials	Internal	5 days	Base (RAPR Biologists)	Complete and post additional materials	Internal	5 days	Base (RAPR Biologists)

Next steps

- Continue to implement RAPR Workplan
- Hire staffing to support backlog and help address actions in RAPR plan
- Develop summary reports for the end of fiscal years to keep you and executive better informed