



Action for Healthy Communities: Benefits of a Provincial Law for Ecosystem Health

September, 2022



WEST COAST
Environmental Law

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Photos: Landon Parenteau; inset: Johnny McClung



INTRODUCTION

Communities across British Columbia grapple with the consequences of a provincial legislative framework that prioritizes resource development over ecosystem health.



Photo: Sandy Miller

These impacts include risks to drinking water quality from industrial logging, risks to fisheries and wildlife from mining and hydroelectric development, and risks of flooding that are amplified by urban sprawl and industrial agriculture.

This thought paper addresses the following questions:

1. What are the impacts and cumulative effects of the provincial prioritization of resource development over ecosystem health on local communities in British Columbia?
2. How can a new, overarching provincial law to protect biodiversity and ecosystem health support community and ecosystem resilience?

In highlighting the impacts of the current patchwork of provincial laws on local communities, our goal is to provide local leaders with the tools to advocate for an overarching legal framework that protects biodiversity and ecosystem health, establishing a foundation for healthy communities and a healthy economy.

Part 1

Communities at Risk:

Impacts of the Provincial Legal Framework on Local Communities¹

Photo: Jess Barnett

¹ In exploring instances where both Indigenous and non-Indigenous communities have experienced negative impacts from the current provincial legal framework, we do not equate the two. While local governments like municipalities and regional districts exercise powers given to them through provincial legislation, Indigenous peoples hold inherent title and rights within their territories, exercising jurisdiction flowing from their own laws and recognized by the Canadian Constitution and the United Nations Declaration on the Rights of Indigenous Peoples.

Case Study #1: Risks to Drinking Water: Private Forest Lands in the Alberni Valley

Photos: Robby Down; inset: Engin Akyurt



The City of Port Alberni and the Tseshaht and Hupacasath First Nations on central Vancouver Island are home to 19,000 residents who rely on China Creek for their drinking water supply. Their story provides one example of how weak provincial environmental laws negatively impact local communities.

The drinking watershed for all three communities is privately owned—a consequence of decisions of the provincial and federal governments more than a century ago to grant one-quarter of Vancouver Island to coal baron Robert Dunsmuir (“the E & N land grants”), including the forest lands above China Creek.

These private lands above the Alberni Valley’s water supply are governed by the *Private Managed Forest Land Act*, a provincial law that provides weak protection for biodiversity and ecosystem health. This legislation allows the economic interests of landowners to drive decision-making, while explicitly preventing local governments from restricting logging on private managed forest lands.

Under this current legislative framework, the long-term health of communities in the Alberni Valley depends on the decisions of foresters and corporate executives employed by private logging companies. The mandate of these private officials is to maximize profits, rather than safeguard public and ecosystem health. Government regulators provide little oversight of these private decisions. The result is that local communities in the Alberni Valley lack control over, and security of, their water supply.

The natural filtration of water provided by healthy forests and stability of slopes from landslides are at risk in places such as China Creek. Half of the old-growth forests above China Creek have already been logged. While the current owner of the lands, Island Timberlands (a logging company owned by BC pension funds), recently pledged to defer logging for 25 years, permanent protection is still lacking.²

A provincial law to protect biodiversity and ecosystem health could provide the tools to secure the Alberni Valley's drinking water supply in perpetuity—maintaining natural filtration, stabilizing the slopes above China Creek, and protecting vital habitat for the plant and animal species that rely on the area's old-growth forests.

Enacting such a law would fulfill the recommendation of the province's independent Old Growth Strategic Review (OGSR) Panel to: “Declare conservation of ecosystem health and biodiversity of British Columbia's forests as an overarching priority and enact legislation that legally establishes this priority for all sectors.”³

² Andrew Willis, “Mosaic Forest halts logging on some of its timberlands as it opts to sell carbon credits”, *The Globe and Mail* (16 March 2022), online: <<https://www.theglobeandmail.com/business/article-mosaic-forest-halts-logging-on-some-of-its-timberlands-as-it-opts-to/>>

³ Old Growth Strategic Review Panel, *A New Future for Old Forests: A Strategic Review of How British Columbia Manages for Old Forests Within its Ancient Ecosystems* (2020), p. 15 [OGSR Panel].

Case Study #2: Risks to Fisheries and Wildlife: Industrial Development in the Omineca and Northeast

Photos: Tomas Williams; inset: Terra Firma



The Omineca and Northeast regions of British Columbia are prominent areas where industrial development—particularly mining, oil and gas, forestry, and hydroelectric development—has compromised human and ecosystem health, impacting local communities, particularly Indigenous communities.

Permitting processes and decision-making under resource statutes such as the *Mines Act*, *Oil and Gas Activities Act*, and *Environmental Management Act* have a long history of prioritizing development over ecosystem health, in part because they lack effective mechanisms for considering the cumulative effects of past, present and future development on important values and rights. While the *Environmental Assessment Act* seeks to “promote sustainability by protecting the environment and fostering a sound economy and the well-being of British Columbians and their communities”, key problems with the legislation include the fact that the Province is not pursuing regional assessments authorized under the Act, and that the statute is only applied to the largest projects, failing to address the problem of “death by a thousand cuts.”⁴

⁴ Gavin Smith, *When Should Projects Get an Environmental Assessment? A Background on BC’s Proposed Changes to the Reviewable Projects Regulation* (Vancouver: West Coast Environmental Law, 2019).



Photo: Eric Buermeyer

The cumulative impacts of a statutory framework that does not prioritize ecosystem health have been felt by Indigenous and non-Indigenous communities across the Omineca and Northeast over many years, from a multitude of industrial activities. In *Yahey v. BC* (2021), for example, the BC Supreme Court stated that “provincial regulatory regimes do not adequately consider... the cumulative effects of industrial development.” Madam Justice Emily Burke found that “the cumulative effect of oil and gas and forestry authorizations in the context of existing private land, agricultural and hydro-electric authorizations” have infringed the rights of members of Blueberry River First Nations, signatories to Treaty 8 in the Northeast.⁵ Madam Justice Burke noted significant declines in wildlife populations in Blueberry River First Nations territories, including negative impacts on caribou, moose, marten and fisher.⁶

The BC Wildlife Federation is among organizations calling on the Government of British Columbia to address the cumulative impacts of industrial development in Blueberry River First Nations territories.⁷ The Federation is also a key member of the Fish, Habitat and Wildlife Coalition, among more than two dozen organizations, over 900 businesses and over 273,000 British Columbians who support:

[P]rioritizing the conservation of fish, wildlife and habitat provincially and support[ing] this by enshrining it into legislative and regulatory mechanisms, decision-making, independent science oversight and planning functions, and establish new, dedicated funding to restore fish, wildlife and habitat.⁸

⁵ *Yahey v. British Columbia*, 2021 BCSC 1287, at paras. 1879–1881.

⁶ *Ibid* at paras 736-737, 789, 810.

⁷ “B.C. turns its back on science with changes to wildlife management”, (20 May 2022), online: *BC Wildlife Federation* <<https://bcwf.bc.ca/b-c-turns-its-back-on-science-with-changes-to-wildlife-management/>>.

⁸ “Fish Wildlife and Habitat Coalition,” <<https://bcwf.bc.ca/fish-wildlife-and-habitat-coalition/>>.



Photo: Derek Belsham

In the Omineca region in the central interior, the Dakelh (Carrier) people have also experienced negative impacts from provincially authorized industrial development.

Provincial and federal authorization for damming and reversing the flow of the Nechako River, by the Aluminum Company of Canada (now Rio Tinto Alcan) under authority granted in the *Industrial Development Act, 1949*, negatively impacted the fishing, hunting and other economic activities of Dakelh peoples.⁹ As Mr. Justice Nigel Kent of the BC Supreme Court recently found in *Thomas v. Rio Tinto Alcan (2022)*, this industrial activity “had hugely negative impacts”—including reducing sturgeon, chinook and sockeye stocks over a number of decades. However, because this harm was licensed by the provincial and federal governments, the Dakelh claim of private nuisance was dismissed at the trial level.¹⁰

Demonstrating the broad impacts of the decline in the health of the Nechako, as well as a shared commitment to address the risks to Indigenous and non-Indigenous communities, Dakelh Nations of the Nechako and the Regional District of Bulkley-Nechako signed a Memorandum of Understanding in 2021 pledging to work together to restore the health of the Nechako River.¹¹ In the words of the Regional District and the Dakelh Nation signatories, this agreement has “a particular focus on sturgeon and salmon populations that are on the precipice of extinction.”¹²

9 J.H. Mundie and R. Bell-Irving, “Predictability of the Consequences of the Kemano Hydroelectric Proposal for Natural Salmon Populations,” *Canadian Water Resources Journal*, vol. 11, no. 1 (1986): 14-25.

10 *Thomas and Saik’uz First Nation v. Rio Tinto Alcan Inc.*, 2022 BCSC 15, at para. 661.

11 “First Nations and RDBN sign MOU to restore health of Nechako river,” *Vanderhoof Omineca Express*, September 29, 2021.

12 Regional District of Bulkley Nechako, Saik’uz First Nation, Stelat’en First Nation, Nadleh Whut’en First Nation, “RDBN and the Nechako First Nations Sign MOU to Rehabilitate the Nechako River” (September 29, 2021), online: <<https://www.rdbn.bc.ca/media-status-updates/rdbn-and-nechako-first-nations-sign-mou-rehabilitate-nechako-river>>.

In signing the MOU, Regional District Chairperson Gerry Thiessen stated: “Local First Nations and non-Indigenous communities alike have suffered from the impacts of the Nechako water management regime, which has prioritized energy production over a healthy river and fish populations.”

Decisions of the provincial government that prioritize mining have also impacted local communities –from the provincial ‘free entry’ mineral claim system that assumes mining is the highest and best use of most lands in BC—to the economic and ecological impacts of the release of tailings and effluent from the Gibraltar and Mount Polley mines. These mining impacts have imperiled fish stocks, including contributing to a 2020 closure of the T̓silhqot̓in Nation’s fishery.¹³

Fisheries—and communities that rely on healthy fish stocks—have also been negatively impacted by weak regulation of the forestry sector throughout BC. The OGSR Panel noted that “the best timber growing sites... are also high in biological diversity, often critical to water and fish.”¹⁴ The richest valley bottoms have often been the first to be logged off, harming fish stocks. Most logging in BC continues to be clear-cutting, in part because forest practices regulation only requires environmental objectives to be met to the extent that they do not “unduly reduce the supply of timber from British Columbia’s forests. The OGSR Panel noted that: “Alternate silviculture systems tend to preserve more of the inherent ecosystem services (e.g., Shelter for seedlings, filtered water, cooler streams for fish, carbon storage, habitat).”¹⁵

Turning the tide on this legacy of negative impacts to fish and wildlife will require a holistic, cross-cutting approach that addresses the legal shortcomings of multiple resource statutes. This is one reason why the OGSR Panel recommended that a new law establish conservation of biodiversity and ecosystem health as a priority across all sectors, not just forestry, stating:

There is only one land and every land-based sector has some potential to compromise that land, some to the point of undermining provincial ecosystem health goals, if they do not adhere to a common standard. Aligning all sectors towards an overarching goal improves our chances of achieving our ecosystem health goals, reduces conflict between sectors and fosters a common target for everyone involved.¹⁶

13 G.G. Pyle, R.D. Plomp, L. Zink, and J.L. Klemish, “Invertebrate metal accumulation and toxicity from sediments affected by the Mount Polley mine disaster,” *Environmental Science and Pollution Research*, (2022); “Fish studies continue on Quesnel Lake six years after Mount Polley Mine breach,” *Quesnel Cariboo Observer*, August 2, 2020; “‘This is a catastrophic situation’: First Nations leaders close salmon fishery in T̓silhqot̓in,” *Williams Lake Tribune*, August 19, 2020; “Gibraltar Mine,” T̓silhqot̓in National Government website (viewed May 25, 2022) < <https://www.tsilhqotin.ca/gibraltar/> >.

14 OGSR Panel at 37.

15 OGSR Panel at 37 and 65.

16 *Ibid* at p. 49.

Case Study #3: Risks of Flooding and Landslides: Failure to manage

Photos: Jake Hills; inset: Terra Firma



In November 2021, communities from the Nicola Valley to the Lower Fraser experienced devastating floods and landslides. The immediate cause was heavy rainfall from atmospheric rivers. These events revealed the underlying vulnerability of many communities in the floodplains, as well as on the major transportation corridors and farmland in the Lower Fraser.

In the Lower Fraser, local governments are largely responsible for the operation and upkeep of hundreds of kilometres of dikes to manage flood hazards. However, a 2015 study from the Province of British Columbia found that most of the dikes were not up to current standards and that upgrades would be prohibitively expensive¹⁷. As well, a number of First Nations

¹⁷ Minister of Forests, Lands and Natural Resource Operations “Lower Mainland Dike Assessment Final Report” (2015) <https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/integrated-flood-hazard-mgmt/nhc_final_lower_mainland_dike_assessment.pdf>.

communities do not even benefit from the limited protection the dikes provide, being situated outside the diked areas. Dikes and pump stations also have harmful impacts on fish and fish habitats, ranging from barriers to fish passage to channelization and loss of riparian areas and wetlands. It is clear that more than a diking strategy is needed to support resilient communities and healthy ecosystems.

Further, there is evidence that increased flooding and landslides are not only caused by atmospheric rivers and a changing climate but by failure to manage forestry activities in upper watersheds. A 2019 UBC study confirmed that there is a very sensitive link between tree harvesting and increased flood risk¹⁸. A new law for biodiversity and ecosystem health can be a critical piece of an integrated approach to reducing flood and landslide risk for downstream communities and transportation corridors.



¹⁸ XuJian Joe Yu & Younes Alila, “Nonstationary frequency pairing reveals a highly sensitive peak flow regime to harvesting across a wide range of return periods” (2019) 444 *Forest Ecology and Management* 187–206.



Part 2

The Path Forward:

Shared Security and Prosperity through a Provincial Law to Protect Biodiversity and Ecosystem Health

The preceding case studies have highlighted some of the local impacts of the current fragmented provincial statutory framework that prioritizes industrial development over ecosystem health.

Photo: Trevor McKinnon

We now turn toward the solution: community benefits arising from an overarching provincial law that protects biodiversity and ecosystem health across all sectors, supporting community and ecosystem resilience.

This new provincial statutory framework must be grounded in recognition of Indigenous title and land-management practices and embed ongoing mechanisms for governance and co-management by Indigenous and non-Indigenous governments and communities.

Any new law should legislatively establish conservation of biodiversity and ecosystem health as an overarching priority for all government decisions affecting the environment or natural resources. The law should include a “biodiversity shield” provision, mandating that a biodiversity lens be applied to all decisions across all sectors and prohibiting the Province from taking decisions that have the potential to jeopardize key ecosystem values (for example, through permits and authorizations for use of ‘Crown’ land, infrastructure development, or decisions on how financial resources are allocated).

Proactive planning for ecosystem health and biodiversity protection at all scales, and legal tools for implementing plans across all resource sectors, are other high potential approaches that could be embedded in new legislation. A new, funded panel of Indigenous and western scientists, independent of the Crown, could be created to help ensure that conservation designations, management objectives, cumulative effects thresholds and similar legal tools enabled by the law are based on best available science and Indigenous knowledge. Such a panel or body could also play a key role in publicly reporting the state of biodiversity and ecosystem health over time.



Photo: Monika Sojckova

The provincial law must recognize that Indigenous nations exercise inherent jurisdiction in their territories according to their own laws with respect to the conservation of biodiversity and ecosystem health and any resource development that may affect them. The new law must be co-developed with Indigenous peoples, and ensure that Indigenous understandings of their relationships with the biodiversity and ecosystems of their territories are recognized and respected in the Act. Further, the new law could provide tools that Indigenous nations can use to require the Crown to recognize and collaborate with them when they exercise their own laws to protect and conserve biodiversity, for example through the development of Indigenous Protected and Conserved Areas and Guardian programs.

These steps could go a long way toward “mainstreaming” a critical biodiversity lens into every environmental and natural resource decision the government makes, based on independent western and Indigenous science.

Embracing this new provincial statutory framework would place the long-term health of ecosystems at the centre of land use decision-making, benefiting local communities in several ways. Forestry, agriculture, energy, community development and other activities would be pursued in a manner that aligns with the healthy functioning of natural systems and conservation of biodiversity, rather than working at cross-purposes with these systems.

Activities where the ecological consequences were too high would be avoided, while investment and human effort would be concentrated in those activities that are consistent with maintaining healthy ecosystems and living within the carrying capacity of the province and planet Earth.

Benefits of this new provincial statutory framework include integrated rather than fragmented decision-making and greater local control of decisions impacting local Indigenous and non-Indigenous communities. Decisions would be grounded closer to home, integrating local impacts into decision-making processes. Cumulative impacts on local communities would receive thorough and proper consideration.

Prioritizing biodiversity and ecosystem health would also result in reduced infrastructure and emergency-managements costs for local communities, embracing the wisdom of “natural asset management”: working with nature to ensure clean drinking water, healthy fisheries and waterways, and mitigation of floods, landslides, wildfires and other risks. Working with nature empowers communities to avoid costly infrastructure spending on water treatment plants, dikes, pumps and other facilities needed to mitigate risks arising from industrial activities, building more resilient local economies.

Conclusion

This thought paper has examined local impacts of the current provincial legislative framework that prioritizes industrial development over other considerations, while highlighting local benefits of an overarching provincial law that protects biodiversity and ecosystem health.

Photo: Ivan Bandura

Indigenous and non-Indigenous communities from Vancouver Island to the Northeast grapple with risks to drinking water from industrial logging, risks to fisheries and wildlife from mining and hydro-electric development, and risks of flooding from industrial agriculture and urban sprawl.

Embracing integrated rather than fragmented decision-making, and prioritizing biodiversity and ecosystem health, holds the promise of empowered local communities with greater local control of decisions, reduced infrastructure and emergency-management costs, and more resilient local economies.

We hope that readers will advocate for this change, securing healthy communities and healthy local economies through a provincial law for ecosystem health.¹⁹

¹⁹ West Coast would like to thank articling student Ben Isitt and Staff Lawyer, Whitney Lafreniere Vicente for their work on this paper.

WEST COAST ENVIRONMENTAL LAW

#700–509 Richards Street
Vancouver BC V6B 2Z6
xʷməθkʷəyəm (Musqueam),
Skwxwú7mesh (Squamish) &
səlilwətaʔt (Tsleil–Waututh) Territories

Tel: 604.684.7378
Toll-free: 1.800.330.WCEL
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Photo: Ben Den Engelsen