



Image Courtesy Terry Carr

BC GREAT BLUE HERON SOCIETY
PO Box 307
Merville, B.C. V0R 2M0
778-428-5560
bcheronsociety@shaw.ca
fraserwildlifearea.com

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Old Growth Strategic Review Panel

Re: Public Submissions

Submitted by email to: oldgrowthbc@gov.bc.ca

Dear Panel Members:

We welcome the provincial government's decision to halt logging of the Donut Hole near Manning Park; yet we are dismayed that, despite taking office several years ago with a promise to protect old growth, they have continued to profit from the systematic and at times unlawful destruction of what remains of this iconic B.C. ecosystem. As a Times Colonist opinion piece noted,

“The B.C. NDP’s 2016 pre-election platform created hope for many by promising to “sustainably manage B.C.’s ecosystems, forests and old growth” ... However, selective amnesia might have set in, as

they have not mentioned their promise since coming to power. Instead, they have continued with the policies and talking points of the previous B.C. Liberal government, that logging old-growth forest is vital for jobs — which is akin to arguing that we need commercial whaling in order to have food.” (Saving old growth requires more than government talk, Times Colonist, November 24 2019)

“Victoria conservationist Vicky Husband said it’s an ecological crisis due to a century of overcutting the biggest and best trees. “[It] has resulted in the increasing collapse of ecosystems and rural communities... Even 20 years ago, there were intact watersheds and whole valleys to save, but now they are all gone, except in Clayoquot Sound, Husband said... The analysis is based on conservative calculations, said Ken Wu of the Ancient Forest Alliance. “The actual amount of logging is probably much higher... The depletion of larger trees has left the industry in a financial crunch as the trees get smaller, since they’re worth less but more expensive to reach”... The government counters that... “Of the 862,125 hectares of old-growth forest, it is estimated that over 520,000 hectares will never be harvested.” But Wu said those figures do not present the real picture. .. Much of the old-growth included in the government’s estimates are “bonsai” forests in bogs or at high altitudes, where the stunted trees have little commercial value. (Maps show impact of overcutting old-growth forests, conservation groups say, Times Colonist, May 13 2013)

And that was in 2013, when the magnificent old growth habitat of B.C. was already a remnant of its former glory! With its continued loss we have seen a corresponding decline in the health of the entire B.C. ecosystem with rising greenhouse gas production and once numerous mountain caribou herds extinguished or reduced to officially endangered populations, as well as the precipitous decline of our once glorious salmon runs. We are in the final stage where we continue to argue over the fate of the tattered remnants, yet instead of pursuing its promised vision for sustainable and restorative, prosperous forest management, the government sanctions and encourages this rapacious and morally irresponsible destruction to continue, ignoring desperate calls for conservation of an irreplaceable public asset.

The disingenuous farce of ‘management’ for the remaining old growth ignores the fact that the timber companies have destroyed the vast majority of our old growth, and now they want to ‘manage’ and ‘share’ what’s left. What’s left MUST be put into conservation areas for the sake of a planet where the permafrost is melting all over northern Canada and wildfires are raging every summer.

We urge you to make the following recommendations to Premier Horgan and his government members:

- 1. The Panel must call upon the Premier to institute an immediate moratorium on all old-growth logging in B.C. while the Panel finishes its work.**
2. An immediate ban on all logging in critical caribou habitat, including revoking permits issued before the moratorium that are allowing logging to continue in defiance of Species at Risk legislation.
3. In the absence of a B.C. endangered species act (and list) that requires the provincial government to protect the habitat of a threatened species, logging permits must be suspended as soon as a tree or affected wildlife species is listed under the federal Species at Risk Act. B.C. must move speedily to legislate a provincial Species at Risk Act.
4. There must be comprehensive compensation for affected forestry workers.
5. There must be a permanent end to old growth logging and the remaining remnants conserved for future generations in parks. This action can be part of B.C.’s contribution to the federal

government's plan to protect 30% of Canada's natural areas by 2030 as well as count toward B.C.'s commitment to lower provincial greenhouse gases. Only 14 -15% of B.C. is currently protected.

6. Since climate change is increasing threats to old growth, B.C. must end subsidies to fossil fuel industries (**\$830 million in 2017-18**) and instead direct those funds to the protection of old growth in permanent conservation areas, by buying private land or buying out logging rights on Crown land.
7. Create a provincial fund specifically for purchase of old growth with a minor component of grants to bolster 'old growth viewing' tourism.
8. Municipal, private and corporate carbon offsets and taxes should be used to purchase, conserve and restore old growth on public land, including grants to towns attempting to secure and protect their old growth.
9. All community watersheds must be mapped, particularly the old growth and endangered species habitat, and removed from timber permits. Communities should own their own watersheds, and the provincial government should help them buy out private land and Crown logging rights in their watershed.
10. The provincial government must require all municipalities and cities to map old growth and large trees in their jurisdiction including private lands and protect them wherever possible in conservation areas and sensitive development zones. Development permits must require rigorous sensitive area habitat protection for old growth and old urban trees.
11. In fulfilling the commitments of the B.C. Declaration on the Rights of Indigenous Peoples, recognize the cultural connection and rights of First Nations to old growth preservation.
12. The B.C. Government must re-organize the Forest Ministry from the ground up, with a completely different mindset for the 21st century that takes remaining old growth off the table permanently. Based on the principle that crown lands and forest are owned by the people of BC., holistic Area Plans must be instituted that consider planning for logging operations within a context that prioritizes management of an area, including adjacent areas, with a prime objective of conservation.
13. B.C. Timber Sales Agency must be abolished or completely re-organized with independent, meaningful public input and oversight and a new mandate for truly sustainable management that removes the requirement to log 20% of the annual allowable provincial cut.
14. B.C.'s forest management system must be overhauled to 'added value' second growth industry, where logging companies are required to work with mills to ensure a profitable and sustainable forest industry that benefits British Columbians as the owners of crown land.
15. Hold a public review of the sustainability of "ecobased" logging in the Great Bear Rainforest and in other areas where it has been implemented.
16. Eliminate or publicly review and correct the flaws in 'cruise-based' pricing (no oversight, etc.)
17. Destructive logging techniques must be changed. Ban clearcutting.
18. Legislate safeguards for native and migratory birds, their young and nests during logging operations.
19. Professional foresters are employees of the logging corporations, not public employees, and thus should not be part of the planning process. Forest companies should not have input to weaken land conservation and wildlife protection policies.
20. A fundamental change in regulation for land management and logging for private land. Forbid the rezoning of forest lands for residential use. Encourage instead the donation or sale of land for parks or conservation areas.
21. Eliminate most log exports from B.C.
22. There must be more effort put into apprehending timber poachers, with significant penalties for the poachers and the mills and private customers who buy the illegally harvested old growth.

- 23. The ecological value of old growth - carbon retention, critical wildlife habitat, water purification and retention, etc. - must be recognized as its ‘highest and best use’ - that its ‘value’ as a living (and some researchers say as a sentient) ecosystem – is worth more than its value as lumber.
- 24. The provincial government must work with the federal government to stop deforestation in Canada’s boreal forest.
- 25. The critical link between old growth and the health of remaining salmon populations must be recognized and protected in law. Old growth trees like cottonwood found in floodplains must be permanently protected.
- 26. Recognize the cultural and economic value of conserved old growth to communities.
- 27. Restore old growth forest ecosystems, repairing damage to salmon streams and replanting for old growth in centuries to come.

1. The Panel must call upon the Premier to institute an immediate moratorium on all old-growth logging in B.C. while the Panel finishes its work.

This is a critical first step. B.C. continues to log 140,000 hectares of old growth per year of what remains: if your Panel takes three months to produce recommendations and then another six months for the government to act, we will have lost another 100,000 hectares or 247,000 acres! This will lead to the conclusion that the intent of convening a Panel is to stall public outrage while the logging continues feverishly: but this is like sanctioning an open hunting or fishing season on an endangered species that is at 5% -10% of its original population while you decide how to best conserve its remnant populations.

Anticipated changes to the Forest and Range Practices Act (assuming they are conservation based) will come too late to save BC’s old growth. As we witness the collapse of British Columbia’s old growth populations, it is critical that you insist the government stop the assault on this ecosystem while you conduct your findings and draw up recommendations. As Ken Wu, executive director of the Endangered Ecosystems Alliance puts it,

“. If they [B.C. NDP] are cynically strategizing to drag this out into a “just elect us in 2021 and then we’ll do the right thing for old-growth forests afterward” plan, they will deserve the same fate as the ancient forests whose demise they are supporting.”

“The Environmental Law Centre report says that, across the province, in high-productivity areas such as valley bottoms, less than 10 per cent of the original old growth remains and an even smaller amount is formally protected. On Vancouver Island, only about a fifth of the original productive old-growth rainforest remains unlogged. More than 30 per cent of what remained standing in 1993 has been destroyed in just the last 25 years ... Forests Minister Donaldson has said that 50 per cent of old growth on Vancouver Island, or more than 520,000 hectares, is protected. But [Sierra Club B.C.’s Forest and Climate Campaigner] Wieting counters that Donaldson is referring to half the remaining old growth — therefore, the more old growth that is logged, the higher the percentage of protected forest...Watt [Ancient Forest Alliance] said provincial figures include low-productivity forests that grow at high elevation or in bogs. “Almost 80 per cent of the original productive old-growth forest and over 90 per cent of the low-elevation, high-productivity stands where the largest trees grow has already been logged,” (Times Colonist, The Old-Growth Logging Showdown, September 1 2019)

2. An immediate ban on all logging in caribou critical habitat, including revoking permits issued before the moratorium that are allowing logging to continue in defiance of Special at Risk legislation.

“The economy-versus-environment debate elevat[es] a changeable human construct to the same level or above the natural systems on which our health and well-being depend...in many cases, it would be more accurate to characterize it as “environment versus corporate interests ... bigger profits for company CEOs and shareholders at the expense of the common good... Many industry proponents oppose the requirement that ... governments maintain or restore boreal caribou ranges so that at least 65 per cent is undisturbed, arguing this will put jobs at risk. They often rely on exaggerated or false claims, including denying that industry is responsible for the caribou’s plight ...Caribou protection measures are based on research and evidence, and even so, the 65 per cent disturbance threshold only gives herds a 60 per cent chance of persistence. Boreal caribou are threatened with extinction from coast to coast to coast, their populations continuing to decline since the Federal Species at Risk Act was introduced in 2002... When populations are healthy, so are many other animal and plant species and the forests they share. Healthy forests provide services such as filtering water and sequestering carbon, which means protecting caribou and their habitat can safeguard water supplies and help reduce climate-altering carbon buildup in the atmosphere.... Room for Both, a new study by the David Suzuki Foundation, Alberta Wilderness Association and Ontario Nature, demonstrates that caribou conservation and industrial resource activity need not be mutually exclusive...Protecting undisturbed habitat is key to ensuring caribou populations survive.... Targets must be improved, forests must actually be restored rather than just “revegetated” and enforcement has to be stepped up... “restoration in fragmented boreal caribou habitat has the potential to create and replace jobs in northern rural municipalities and First Nations.” .. Resource companies could also benefit ... [from] worldwide demand ... [and] marketplace rewards for responsible practices ... and avoid negative financial repercussions such as boycotts and legal challenges....It’s up to governments and industry to ensure caribou survival. This means incorporating habitat protection and restoration into planning and economic modelling, basing discourse on evidence and knowledge rather than exaggeration and fear-mongering, requiring industry and government to share in restoration costs and ensuring subsidies for industry are linked to environmental performance...” (Science Matters: Can Caribou and Industry Co-Exist? June 28 2019, David Suzuki)

“Networks of roads and other disturbances increase stress levels and decrease breeding while creating easy access for wolves and other predators within fractured landscapes that give caribou, a species that evolved to spread out, no room to escape....Caribou also rely on disappearing old-growth forests for nutrient-rich lichen — frequently their sole winter food — that grows only on mature trees... In just one example, B.C.’s new 650-kilometre Coastal Gas Link pipeline will destroy and fracture habitat for three caribou herds at risk of local extinction. They include the Hart Ranges herd, in whose critical habitat the B.C. government also recently issued 78 new permits for industrial logging, covering a total area almost three times the size of the city of Victoria... [In] B.C., where the NDP government has backtracked on a campaign promise to introduce endangered species legislation — “we still don’t have any protection of caribou,”[Conservation planning director for WildLands League Anne] Baggio notes...in the Peace, an interim logging moratorium now prevents new cutting permits from being issued in critical habitat, yet clear-cutting continues because the provincial government issued almost four dozen logging permits before the moratorium took effect.” (Canada’s reindeer at risk of extinction, the Narwhal, December 22 2019)

3. In the absence of a B.C. endangered species act (and list) that requires the provincial government to protect the habitat of a threatened species, logging permits must be suspended as soon as a tree or affected wildlife species is listed under the federal Species at Risk Act. B.C. must move speedily to legislate a provincial Species at Risk Act.

Just as logging is continuing in critical caribou habitat through permits issued before the moratorium took place, so listed species are threatened by continued logging:

““Tens of thousands of ...Canada’s most imperiled trees[whitebark pine] are being logged in British Columbia despite the federal government listing them as endangered seven years ago [2012]....The companies doing the logging include a major forest company and an international mining giant. None have been ordered to curb their logging activities or faced penalties for doing so..... given the dire threats the tree faces, any logging has “extreme” consequences, the federal government says... The [provincial] database shows that since 2012 almost half of the endangered trees were logged by Canadian Forest Products Ltd., B.C.’s largest forest company. Significant numbers of whitebark pine were also logged by Canwell Timber Ltd. and mining giant, Teck. “Watching a species decline in this province and not doing what we need to reverse those trends, it really breaks my heart,” says Sally Otto, a biologist at the University of British Columbia and a member of a committee that advises the federal government on species at risk... Otto noted that nearly three-quarters of the known range of whitebark pine is expected to shift with climate change this century, further increasing the already sobering challenges facing the species. “Every single patch that we remove is basically removing one possible link from where the trees are now to where they need to be in order to survive,” ... Just how many of those patches are removed by logging is a vexing question because the information that is available ... likely understates the true extent of the losses....In 2017, the federal government noted that the logging of whitebark pine is “notable” in B.C. and resulted in a “net loss” of the species. The federal government also warned that such logging “is not well tracked as records often group it with other species or ignore it.” The ongoing logging of whitebark pine in B.C. plays out against the backdrop of a company in Alberta being hit with one of the largest fines ever under the Species at Risk Act.... Lake Louise Ski Resort, which operates inside Banff National Park, logged a patch of trees that included 38 healthy whitebark pine. The company subsequently plead guilty to the offence and was fined \$2.1 million in 2018 for what Alberta court judge Heather Lamoureux called its “reckless” behavior. .. No similar fines have been issued in B.C. for the ongoing logging of the endangered species, however, because few lands within the province’s borders are under direct federal control... the time lag between when the federal government lists such species, develops its own recovery plan and receives provincial recovery plans is typically years, during which time much critical habitat may be lost. “Unfortunately, it’s pretty typical under SARA (the Species at Risk Act) for there to be like a five or 10-year gap,” says Sean Nixon, a lawyer with Ecojustice, “That gap actually gives either the provincial governments or resource companies a perverse incentive to go in and just log the crap out of an area or a species.”... the [B.C. Forestry] ministry is “currently working on an implementation plan” for whitebark pine. The ministry provided no timeline for when such a plan would be completed ... [and] said that it has not ordered companies to avoid logging whitebark pine trees and it gave no indication that it intended to issue such orders any time soon... The approach varies considerably from that in Alberta... logging of whitebark pine trees in the province is now strictly prohibited in an area from Waterton Lakes National Park north to Kananaskis Country. Only trees that are deemed “unavoidable” to log will be permitted, and only then if written consent is received from the province’s Ministry of Environment... [Communications manager at Canadian Forest Products Valerie] Wonghen ... said that the company had received logging permits that

predated the listing of whitebark pine as endangered. Mining giant Teck ... logged more than 1,231 cubic metres of whitebark pine trees between 2012 and 2018.”(June 10 2019, B.C. Allows Logging, mining companies to cut down thousands of endangered trees, the Narwhal)

Logging of this endangered species has also continued on private land despite the Species at Risk listing (Thousands of B.C.’s endangered whitebark pine logged on private land, September 5, 2019)

4. There must be comprehensive compensation for affected forestry workers.

Workers and communities should not bear the brunt of decades of irresponsible government and industry action.

5. There must be a permanent end to old growth logging and the remaining remnants conserved for future generations in parks. This action can be part of B.C.’s contribution to the federal government’s international commitment to protect 30% of Canada’s natural areas by 2030 as well as count towards B.C.’s commitment to lower provincial greenhouse gases. Only 14 – 15% of B.C. is currently protected.

“Over the course of the 2019 election, the Liberals, NDP **and** Greens all announced they want to ... protect at least 30 percent of Canada’s land, freshwater and ocean territory by 2030, with the Liberals setting an interim target of protecting 25 percent by 2025... The public supports action. In April 2019, an Abacus Data poll found 9 out of 10 Canadians ... support the commitment to protect at least 17 percent of lands and fresh water by 2020, and over two-thirds of Canadians support federal investment in Indigenous protected areas... **There is growing scientific evidence that we must conserve between 30 to 70 percent of land, freshwater and oceans to maintain the ecosystems that support our well-being. Canada must continue working for completion of its international commitments to protect nature, including 17 percent of land and inland waters protected by the close of 2020, 25 percent of land and oceans protected by 2025, and 30 percent by 2030... Canada should champion and fund Indigenous protected areas as part of a commitment to the equitable and effective management of protected areas that respects the rights, responsibilities and interests of Indigenous peoples”** (<https://policyoptions.irpp.org/magazines/november-2019/an-epic-move-to-protect-nature-could-help-unite-the-country/>)

“The federal government’s support for increasing Canada’s international commitment to protect 17 per cent of its land base by the end of 2020 to 30 per cent by 2030, is also adding pressure on B.C. to expand its protected areas. Currently B.C. sits at 15 per cent and Canada at 12 per cent protection. The B.C. NDP have yet to support any of these protection targets, which are endorsed by the party’s federal counterpart.”(Island Voices: Saving old growth requires more than government talk, Ken Wu, Times Colonist November 24, 2019)

Canada is ranked one of the worst G20 countries in the world for failing to achieve the commitment we made under the Paris Agreement to cut greenhouse gas (Climate Emergency, Radio Canada November 12 2019), and our old growth destruction is part of that failure. With B.C. having eradicated as much as 95% of its original old growth, it is critical that what remains must be permanently protected in its entirety. This makes an immediate logging moratorium even more necessary.

A Globe and Mail article, *Trees Dying at Alarming Rate*, January 23, 2009, warns that our forests may become net sources of carbon dioxide as disease, drought, and wildfires are resulting in tree mortality:

“The death of old-growth forests in the western United States and Canada is increasing at a stunning rate ...Scientists have found that tree mortality has more than doubled in the past few decades, regardless of elevation, forest type or tree size as pine, fir, hemlock and other species are dying faster than new trees are growing.... “... western forests could become net sources of carbon dioxide to the atmosphere, further speeding up the pace of global warming”, said study co-author Dr. Phillip van Mantgem of the U.S. Geological Survey’s Western Ecological Research Station.... [a 2008]Canadian Forest Service report found that the beetle outbreak in B.C. had done so much damage that, by 2020, the forest will release more CO₂ than it absorbs....Data zeroed in on temperature as the culprit ..what would have been snow is falling as rain and evaporating more quickly. The snowpack is shrinking, spring is arriving earlier and summer is getting longer, and, along with it, the drought season. ... warm weather makes life more hospitable for insects and diseases that thrive on trees..... the changes could further increase the risk of forest fires ..[and] surviving forests are more vulnerable to sudden dying out...Dr. Jerry Franklin...,who was one of the report’s researchers, said any carbon agreement among nations and industry should avoid allowing any activity that leads to carbon releases such as chopping down ancient forests that hold huge accumulations of carbon...”

And that was in 2009! Since then B.C. old growth logging has roared ahead. We must have an immediate moratorium and permanent end to old growth logging.

- 6. Since climate change is increasing threats to old growth, B.C. must end subsidies to fossil fuel industries (\$830 million in 2017-18) and instead direct those funds to the protection of old growth in permanent conservation areas, by buying private land or buying out logging rights on Crown land.**

“The International Institute for Sustainable Development (IISD) [‘s] report, ‘Locked in and Losing Out’ showed that BC’s fossil fuel subsidies reached \$830 million in 2017–2018. New subsidies continue to be created, including significant support for the fracked gas industry.” (December 2019 (ierraclub.bc.ca/iisd-fossil-fuel-subsidies-report/))

- 7. Create a provincial fund specifically for purchase of old growth with a minor component of grants to bolster ‘old growth viewing’ tourism.**

We would also urge you to recommend the creation of a provincial land acquisition fund, allowing the government of BC to purchase high conservation or recreational value land from private sources. This is a critical step in removing vulnerable lands from the threat of logging and other industrial activities. Since only nine percent of the land base is provincial Crown land, the purchase of private land is critical in securing enough land to protect species-at-risk. We understand the Ancient Forest Alliance is calling for an annual \$40 million provincial and acquisition fund to purchase private land for conservation, rising to \$100 million annually by 2024. These funds could be linked to private fund-raising by environmental and foundation groups and work with the redirected fossil fuel subsidies.

Public funds to buy conservation lands are utilized by many regional districts and cities in BC, particularly the Capital Regional District of Victoria, which has spent over \$35 million to secure over

4500 hectares of land for public good. Provincial land purchases would help Canada reach its protected areas goal under the United Nations Convention on Biological Diversity.

8. Municipal, private and corporate carbon offsets and taxes should be used to purchase, conserve and restore old growth on public land, including grants to towns attempting to secure and protect their old growth.

Major flooding as a result of intense logging and climate change directly impacts homeowners and taxpayers in B.C. Conserving old growth is critical to climate change and flood mitigation.

Permanent conservation of old growth ensures carbon offsets are not temporary (i.e. – used to plant trees that are later cut down).

9. All community watersheds must be mapped, particularly the old growth and endangered species habitat, and removed from timber permits. Communities should own their own watersheds, and the provincial government should help them buy out private land and Crown logging rights in their own watershed.

Recognize the value of old-growth to water conservation, management and quality. The provincial government must move to protect drinking watersheds for towns and communities by removing private ownership of lands in these watersheds. The Comox Valley’s regular boil water advisories have required an investment of \$126 million dollar in a new water treatment system when many experts point to the irresponsible logging of private lands in that watershed as the major source of the silt that is polluting the formerly pristine drinking water. This issue is occurring all over the province, and the B.C. government should help fund community ownership of watersheds, which also serve as community recreation areas and air purification assets.

Ecological forester Herb Hammond writes,

“Forests, particularly old, natural, and intact forests, produce the highest quality water in moderate quantities throughout an annual cycle. As currently done, most logging degrades water quality, quantity, and timing of flow. This degradation contributes significantly to spring flooding and fall droughts. Restoring full hydrological functioning of forests after logging takes at least 5-7 decades, and it takes more than a century and a half to reach the water conservation of old/old-growth forests. Thus, changing the way forestry is done is vital to conserving water.”(Herb Hammond and Van Andruss, Restoration Forestry... The History, Diagnosis, and Cure for B.C.’s crummy forest practices, June 19 2018).

The sale of logging rights in Clack Creek Forest in the Sunshine Coast watershed that is also within a proposed addition to Mt. Elphinstone Park has been the subject of official objections registered with B.C. Timber Sales from the Sunshine Coast Regional District on at least four occasions:

“It is within the watershed...there has been a lack of consultation and a lack of land-use planning on the entirety of Mount Elphinstone,” said District chairwoman Lori Pratt. “We still need to work with the Sechelt and Squamish First Nations and we want more time from the government to do that.”... The remaining forest is roughly 150 years old and even though it fails to meet the province’s 250-year threshold for old growth designation in coastal forests... Conservation biologist Wayne McRory’s report describes these areas as “emerging old growth... “We have to start thinking about the life of a forest in

centuries, not years,” said ELF member Hans Penner. “If we cut it down now it will never come back, but if we leave it, our great grandchildren will live to enjoy it as true old growth.” Elphinstone Provincial Park currently includes 141 hectares divided into separate three “islands” at opposite ends of the 2,000-hectare proposed park. The Roberts Creek Official Community Plan supports the expansion of Mount Elphinstone Provincial Park to 1,500 hectares, noting that the environmentally sensitive slopes of Mount Elphinstone are “a source of pride and focus for residents and are attractive to visitors.” (Vancouver Sun, October 24 2019, Sunshine Coast group rallies to save forest with 1000 Hearts from loggers).

Keeping watershed habitats intact also benefit local wildlife and people:

“Canada lags behind other countries, including far more densely populated ones like Britain, Germany and France, when it comes to the percentage of land that’s protected from commercial exploitation and other degradation... Destruction of habitat and loss of biodiversity erodes economies, livelihoods, food security, health and quality of life... **We must conserve biodiversity and important ecosystems wherever they’re found, not just in places where few people live and work and commercial interests are low.**”(Canada should move faster on protecting land from development, Star Editorial Board, July 28, 2019)

10. The provincial government must require all municipalities to map old growth and large trees in their jurisdiction, including private lands and protect them wherever possible in conservation areas and sensitive development zones. Development permits must require rigorous sensitive area habitat protection for old growth and old urban trees.

Many large trees are found on city or municipal land or private land under city or municipal jurisdiction. These giants are often routinely removed during land clearing when they could be saved with a little initiative. Big trees in urban areas are critical habitats for urban wildlife, including herons, and provide numerous community benefits. Saving trees wherever possible complements tree planting programs.

Logging at Summit Lake near Nakusp in the Kootenays is threatening the habitat of a world-famous population of western toads. The land is owned by the town of Nakusp, who have leased the logging rights, but the legislation that allows a private land owner to have jurisdiction over the habitat of a species at risk must be rectified.

11. In fulfilling the commitments of the B.C. Declaration on the Rights of Indigenous Peoples, recognize the cultural connection and rights of First Nations to old growth preservation.

The current lack of meaningful regulation for privately managed and public forest lands means that First Nations must often watch unceded territory and cultural areas being stripped of trees with dire consequences for wildlife, water quality, flooding, etc.:

“Current harvesting in the Nahmint Valley, which is located southwest of Port Alberni, shows a failure to consult with local First Nations, according to the Tseshaht. The First Nation said that between November 2017 and March 2018 five harvesting licences were auctioned off by BC Timber Sales from Tseshaht territory without their consent.....This area includes trees with some of the largest dimensions in Canada, including a Douglas Fir that measured 10 feet in diameter before it was cut down in May. That Douglas Fir ranked among the top 10 largest of its species in the country, according to the BC Big

Tree Registry, a public record managed by the University of British Columbia. The Nahmint Valley also contains a 14-foot-wide Western Red Cedar and a 12-foot -wide Douglas Fir, boasting dimensions that could age the fir tree to be over 1,000 years old. The Nahmint Valley’s current old-growth logging activity was first publicized by the Ancient Forest Alliance last spring.... But as trucks loaded with old-growth logs continue to pass through Port Alberni, NTC President Judith Sayers believes that the ongoing harvesting in Nuu-chah-nulth territories shows that the province is failing to uphold the United Nations declaration...“At least five articles within UNDRIP reference our right to make decisions in matters that affect our rights,” she said in the NTC media release. “The right to our medicines, the right to strengthen our spiritual relationship with our territories, the right to the protection of the environment and to give consent on any development that affects our lands and resources.”

(<https://hashilthsa.com/news/2018-11-06/old-growth-continues-be-threatened-due-weak-government-management-says-ntc>”, November 6, 2018).

B.C. Timber Sales continues to ignore indigenous concerns:

“The proposed cut blocks [Bluejacket area] threaten to destroy a sacred and historical site to the Haida Nation that contains CMTs, monumental cedars, yew trees and one of the oldest archaeological sites on Haida Gwaii. There is valuable archaeological history within this cut block that was ignored by BCTS. This, along with other oversights that we have discovered really call into question the competency and necessity of BCTS operating on Haida Gwaii.” (BCTS issues permit to log registered archaeological site 2019)

12. The B.C. Government must re-organize the Forestry Ministry from the ground up, with a completely different mindset for the 21st century that takes remaining old growth off the table permanently. Based on the principle that crown lands and forests are owned by the people of BC., holistic Area Plans must be instituted that consider planning for logging operations within a context that prioritizes management of an area, including adjacent areas, with a prime objective of conservation.

“Many are puzzled that logging practices have not changed under the NDP. TJ Watt, co-founder of the Ancient Forest Alliance, believes one difficulty is that there have been few staff changes within the Forests Ministry....“I think the NDP is being given the same information around the incorrect idea that old-growth forests aren’t endangered and there’s nothing to worry about ... when, in fact, we know that is not the case,” he said.... [Green Party House Leader Sonia]Furstenau agrees there has been little change within the ministry. “It’s very hard to change course in a radical or transformative way when you are still getting advice from the same people,” (The old-growth logging showdown, the Narwhal, September 1 2019).

“We need to restore the “public” in meaningful ways across BC’s public forest lands. These lands do not belong to industry, yet current policies and actions by forest professionals have resulted in active denial of information to the public, exclusion of public needs like water protection and climate change mitigation from forestry plans, and a level of industrial dominance of forest lands not heretofore seen in BC. There needs to be a focus on protecting and restoring the composition, structure, and function of natural forest ecosystems, not on logging to meet the needs of mills... The time has come for the mills to fit the needs of the forest and the public, not for the forest to fit the needs of the mills. Foresters need to stand up for that need – for Restoration Forestry.” (Herb Hammond)

“The combination of Professional Reliance, the virtual elimination of the Forest Service, and the failure to establish clear, publicly accountable standards for forest management, has de facto privatized public forest land.” (Herb Hammond).

Opportunity for public input into logging plans and access to Ministry decisions must be mandatory, based on holistic area plans. The conduct of the Forest Ministry speaks to a fundamental disconnection with environmental realities at a time when we rapidly approach what scientists are calling a catastrophic plunge into irreversible disaster. A public sickened by the disregard of the Campbell/Christy regimes for scientific concerns elected an NDP government that pledged to protect remaining old growth; yet almost three years later we continue felling these irreplaceable giants - so critical to endangered B.C. species - in what can only be called a planetary disgrace and a terrible thievery from our descendants. It is time for a new mandate for the Ministry and B.C. Timber Sales in which conservation is the most important criteria.

Why, for example, is the Ministry allowing logging in the critical habitat of the mountain caribou, in defiance of federal Species at Risk legislation protecting that habitat? Why is the B.C. government sanctioning logging of the remaining old growth spotted owl habitat when there are only a few breeding pairs left from an estimated 500 original pairs, and they have committed to increasing wild numbers to 250 birds?

“The Fraser Canyon is the last stand of the spotted owl in Canada. And the BC government’s own logging operation, BC Timber Sales, is clearcutting it to the ground. This callous disregard for the future of the spotted owl I witnessed a couple of days ago is clearly an emergency requiring urgent intervention.” (Western Canada Wilderness Committee)

13. B.C. Timber Sales must be abolished or completely re-organized with independent, meaningful public input and oversight and a new mandate for truly sustainable management that removes the requirement to log 20% of the annual allowable provincial cut.

“In its election platform, the NDP promised an “evidence-based scientific approach” to old-growth management, with the ecosystem-based management of the Great Bear Rainforest used as a model. Now that they’re in power, Premier John Horgan and Donaldson are not only allowing corporations to continue liquidating rare and important forests, they’re one of the worst offenders. Their agency is leading the way to the bottom of the barrel, logging endangered species habitat, old-growth and some of our province’s top protected-area candidates — all on the public’s dime”

((<https://www.timescolonist.com/opinion/op-ed/island-voices-ndp-is-destroying-key-forests-1.23397505>) August 12 2018

14. B.C.’s forest management system must be overhauled to ‘added value’ second growth industry, where companies are required to work with mills to ensure a profitable and sustainable industry that benefits British Columbians as the owners of crown land.

Mills must be retrofitted to process second-growth to produce value added products for a sustainable forest industry. B.C. wood products are more climate-friendly alternatives to cement and steel.

“The fact is that more than 80 per cent of B.C.’s productive forest lands are now second-growth, and the rest of the industrialized world is almost exclusively logging second and third-growth forests.” (Island Voices: Saving old growth requires more than government talk, Times Colonist, November 24 2019).

15. Hold a public review of the sustainability of ‘ecobased’ logging in the Great Bear Rainforest and in other areas where it has been implemented.

The 30% retention rate linked to this agreement appears to be allowing logging companies to log the prime oldest trees while retaining the 30% in the most marginal forest.

“Tavish Campbell says. “There’s so many different loopholes and ways for industry to make everything look good on paper, but still give the industry what it wants to cut, which is the most valuable wood, which is the big trees... So it’s business-as-usual, but it has this stamp of approval [that] the Great Bear Rainforest is saved.”... [biologist and project director with the Rainforest Solutions Project Jody] Holmes says in and around Gilford Island in the southern portion of the Great Bear Rainforest only about 11 per cent of all the trees that were actually there before the logging companies arrived were the iconic giant cedar, hemlock and fir trees found on “high productivity” sites. They’re very rare... “Only three per cent of what was originally old is still old. Ninety-seven per cent of it’s been harvested.” Back in 2009, Holmes says, the idea was that the Great Bear Rainforest’s forests would be protected representatively and that the industry would not be allowed to essentially target the biggest and best for logging while conserving everything else... “There were targets, specifically for different types of species and combinations,” Holmes says. “They actually had to set aside each of the species and productivity types.” But by the time the 2016 agreement was reached, “ecosystem-based” logging had morphed into something else, a commitment to protect “fully intact ecosystems” on the land base.... ecosystems began to be treated as monolithic, overlooking the variation of trees within. Companies have used this to their advantage, logging the biggest and oldest trees at location after location, while simultaneously claiming that what is left behind is adequate to protect the overall health and diversity of the forest. ... The 2016 agreement, Holmes now laments, “opened up an enormous loophole” that allowed the logging companies “to harvest every last stick of big, older trees,” while simultaneously claiming that they were meeting their conservation targets.... Other aspects of the Great Bear Rainforest agreement have opened up additional loopholes... The biggest of those are allowances that grant companies permission to build roads through nominally protected old-growth forests.... Farlyn [Campbell] said that she ... saw example after example of suspect road-building throughout the region; roads that were often built right next to or across older roads that could have been upgraded and used instead... “Right now, the only thing that’s going to actually save these large, rare trees, is these hard conservancies, these hard boundaries, these protected areas where there is just zero logging allowed,” [Tavish said].”(The Great Bear loophole: why old growth is still logged in B.C.’s ironic protected rainforest, November 29 2019).

The Kwikwasset’inuxw Haxwa’mis First Nations also protest their territory is being overlogged under the Great Bear Agreement.

16. Eliminate or review and correct the flaws in cruise-based pricing (no oversight, etc.)

“Interfor — one of the world’s largest lumber companies — logged a little more than 493,000 cubic metres of wood in the North Island-Central Coast Natural Resource District, which includes the southern Great Bear Rainforest, in the first 10 months of 2019.... leaving behind nearly 115,000 cubic metres of

logs. ... for every four trees logged and taken to market at least one tree was left behind to rot...[photographer Tavish Campbell said] the most extensive waste was higher up mountain slopes where the company was engaged in ... “heli logging,” operations. “There’s an incredible amount of waste in the heli blocks because they’re only wanting to take the most valuable wood off the hill,” There is reason to believe ... actual levels of wood waste are far higher than the numbers that the provincial government tracks... Interfor and other companies increasingly use an obscure formula ... [with] no independent auditing ... known as “cruise-based” pricing, small sample plots are analyzed and used to project the total number and value of standing trees to be logged on a larger parcel of land. .. it’s also used to calculate ... “stumpage” fees..... it only works if the sample plots that are selected truly represent the number, diversity and value of trees on the wider landscape. Because once the cruise assessment is accepted — there is no checking on what is logged after the fact. Mark Haddock, who recently completed a report on “professional reliance” for the provincial government, warned that there is potential “vulnerability” associated with cruise-based sales because there have been known cases where the volume and the value of trees were underestimated ...in one case a witness said he found this to be done deliberately.... “In the first 10 months of 2019, the amount of logging done by Interfor under cruise-based sales was a reported 298,000 cubic metres ... If the unrecorded log waste at the “cruise-based” sites matched that on the scale-based sites where the logging waste must be reported, then Interfor’s log waste levels would rise by nearly 176,000 cubic metres... Jody Holmes, a biologist and project director with the Rainforest Solutions Project, estimates ... the actual waste at logging operations throughout the Great Bear Rainforest may be much higher because of the potential for under-reporting with cruise-based pricing. She notes that next to Interfor, the largest entity using cruise-based pricing is actually BC Timber Sales...” (<https://thenarwhal.ca/left-behind-staggering-level-of-waste-at-great-bear-rainforest-logging-operations-data-reveals/>, November 30 2019).

17. Destructive logging techniques must be changed. Ban clearcutting.

“... Shifting harvesting from old to second growth will immediately reduce carbon emissions from logging. It will also help species that depend on old-growth forests. Improve logging practices. Heavy logging increases the rate of decomposition and release of carbon, particularly from soils. Improved management practices – like selective logging, longer rotation and increased retention – contribute to maintaining and enhancing carbon storage and habitat...” (Another inconvenient truth, Logging blows B.C.’s carbon emission target, Sierra Report Fall 2009)

Clearcutting is too detrimental to wildlife. Salvage logging for pine beetle killed trees (which does not regulate clearcut size) saw the Ministry permit logging companies to create clearcuts with no size limits, with some exceeding 10 000 hectares: as a result moose populations were decimated by predators with easier access to them, and habitat loss that forced the moose into smaller islands of habitat and cover, so the standard knee jerk reaction of predator control began. (Moose population ravaged by salvage logging, Vancouver Sun July 23 2012)

“Areas clearcut across B.C. between 2005 and 2017 total 3.6 million hectares, a combined area larger than Vancouver Island. These areas are “sequestration dead zones”: clearcut lands that release more carbon than they absorb.... For thirteen years after clearcutting, the carbon released into the atmosphere from decomposing organic matter and exposed soils is more than the carbon captured by the growth of young trees. ” (Sierra Club).

“It’s early September and ... British Columbia’s wildfires are still raging... There has been no time to assess the effects of the fires on the province’s fish, wildlife or their habitats including our rare and endangered species. Yet today one of British Columbia’s largest forest companies distributed a list covering all the fire areas in the southeastern corner of the province that they plan to salvage timber from. This tidal wave of timber salvaging will start to unfold across the rest of BC shortly as history repeats itself. ... small towns across BC are dying as their forest economies dwindle, fish and wildlife populations are collapsing and, in 2017, the management of the public’s natural resources will receive the lowest proportion of the province’s provincial budget in the last half century..... the province’s major forest companies are harvesting timber to the maximum while gradually decreasing investment in BC’s forestry infrastructure and increasing assets and holdings in the US. Getting approval to harvest burned and insect attacked forests at rates that exceed the government approved annual allowable harvest levels has become the norm in BC ... There are no specifically defined legislated objectives in British Columbia for fish or wildlife populations, their habitats or for measuring biodiversity. There is no legal requirement for the use of peer-reviewed science or scientific panels in forest management in BC. There are no legislated requirements to conduct scientific assessments of the impacts that large-scale proposed timber harvesting might have on the public’s fish, wildlife or habitat ... no legal requirement for a forest company to change timber harvesting plans based on public input. Under the current professional reliance model of forest management in BC, professional Foresters employed by the timber companies make a lot of the decisions on how the public’s resources will be treated. Government scientists, Biologists and Foresters have no authority to challenge or override the private companies’ plans to manage the public’s land as long as their timber harvest plans meet the bare minimum requirements of a severely deficient set of forest management laws in the province.... there are no laws in BC controlling road density to protect wildlife or habitat. Forest companies have no legal obligation to ensure logged over areas are free of the invasive weeds that choke out wildlife habitat ... fire improves huckleberry production for grizzly bears yet there are no laws to prevent logging machinery from impacting the re-growth of huckleberry bushes in critical grizzly habitat after a wildfire. There are no regulations that require wildlife forage and browse to be co-managed in concert with trees.... no legal mechanisms in BC for individuals or NGO organizations to legally challenge decisions to harvest timber in a given area if wildlife values are not being managed to the satisfaction of the public. The strongest objective set by government for wildlife management in BC is to “conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas”; however, mitigating impacts of timber harvesting on wildlife or habitat must be “without unduly reducing the supply of timber from British Columbia’s forests”. That’s the law in British Columbia. Timber supply trumps wildlife conservation.... By the year 2020 it is estimated that 20,000 square kilometers of BC’s lodgepole pine forests affected by the mountain pine beetle will be clearcut making it the [world’s] largest timber salvage logging ... Moose populations have crashed in many regions of the province as a result of the mountain pine beetle salvage logging that has already been completed. Aerially spraying herbicides to rid plantations of willow and alder continue to impact moose in the habitats where extensive pine beetle salvage logging has taken place...Prior to the start of the salvage logging of the mountain pine beetle effected forests, an independent group of forest ecologists advised the government that around 75% of the beetle attacked forests had substantial proportions of non-pine tree species that were not affected by the beetle. If these mixed forests were left unlogged they would have maintained timber supply for the next half century and made moose populations less vulnerable to decline. The scientist’s advice was not accepted and almost every hectare of forest with any amount of mountain pine beetle killed timber was clearcut.... “Catastrophic” fires or insect outbreaks are not catastrophic for forests ecosystems or biodiversity... researchers at Oregon State University that studied fires that burned in southern Oregon in

2002 reported that salvage logging destroyed about 70 percent of tree seedlings that had sprouted from the forest floor and that the slash and debris left on the ground after salvage logging actually increased the risk of future forest fires.” (Mark Hall September 24 2017, Salvage Logging British Columbia’s Wildfires – Will Wildlife Conservation and Science Matter?)

We must find a more sustainable alternative to slash burning:

“The province also vowed to limit the amount of wood waste that gets left behind following big harvests. Each year, millions of tons of excess fibre are burned. According to the province, the waste makes up 16 per cent of the total annual B.C. harvest.” (CBC January 17, 2019)

The Province must also ban the poisoning of alder with Monsanto’s glyphosate. Alders are natural fire retardants and the spraying of massive amounts of a suspected carcinogen in our forests, which eventually leaches into waterways, creates monoculture forests that provide far less wildlife habitat and make our forests more vulnerable to wildfires, all for the convenience of the logging companies.

18. Legislate safeguards for native and migratory birds, their young and nests during logging operations.

Scientists all over the planet are raising the alarm about a mass decline in global bird populations. Business Insider notes, “North America has lost nearly 3 billion birds in the last 50 years — another sign that we’re in the middle of a 6th mass extinction” (September 19 2019). Yet in Canada,

“A study released in 2013 estimated that between ...214,000 - 1.6 million [breeding bird] nests [with young are] destroyed by [Canadian] forestry each year. The large range of estimates damage is partly a consequence of how little information is collected regarding where birds are nesting in our forests. ... the Canadian Wildlife Service [states], ‘In order to help ensure that you are complying with the Migratory Birds Convention Act, 1994 and the Migratory Birds Regulations, you should first determine the likelihood of the presence of migratory birds and their nests or eggs when planning activities to be carried out. It is recommended to use a scientifically sound approach that considers the available bird habitats, the migratory bird species likely to be encountered in such habitats, and the likely time period of encounters.’ ... [G]iven the lack of accurate monitoring for breeding birds in Canada and forestry practices that truly protect the ecological integrity of our forests, the Migratory Birds Convention Act is being violated. (Sierra Club Canada, Cut,Cut,Cut July 2019)

19. Professional foresters are employees of the logging corporations, not public employees, and thus should not be part of the planning process. Forest companies should not have input to weaken land conservation and wildlife protection policies.

Private logging companies should not be 'consulted' for their reaction to proposed government regulations on major issues like critical habitat for species at risk. The government's highest duty is to implement the law of the land: independent scientists working with peer-reviewed scientific data, rather than the logging companies, should best decide how these issues are implemented. The Globe and Mail wrote about the influence of corporate logging interests on provincial policy with regard to critical caribou habitat:

“... British Columbia's government has been meeting with the forest industry to develop plans to save endangered caribou, and the province appears to have launched its controversial wolf cull program to avoid putting further restrictions on logging... briefing notes prepared for meetings between B.C. Environment Minister Mary Polak and industry representatives in 2014 suggest the government was prompted by the forest industry to launch the wolf cull because of fears a federal recovery plan for caribou would demand more logging areas be set aside. ..."Tolko [Industries Ltd.] is concerned about potential impacts of the federal recovery strategy for the woodland caribou," says one of the notes, released in response to a Freedom of Information application. Ottawa's recovery strategy states that caribou need large tracts of "undisturbed habitat rich in mature to old-growth coniferous forest." It is up to the province to decide how much forest land to set aside. Environmentalists have long complained that B.C. has not made enough old-growth forest off limits to logging... The briefing notes also show that the forest industry and government were interested "in aligning strategies with respect to dealing with the federal government" on the caribou issue...One entry states that the province's caribou plan "had been 'tested' with numerous high-level stakeholders, including the Council of Forest Industries," which represents forestry companies in B.C., before it was posted for public comment...Wilderness Committee director Gwen Barlee, who filed the FOI application that pried the documents loose, said ..."Are we having the B.C. government write recovery strategies for species at risk, or are we having logging companies writing recovery strategies for species at risk? ... A recovery strategy is supposed to be a document created by science...the recovery strategies are becoming polluted with the economic interests of logging companies..." Sean Nixon, a lawyer with Ecojustice, also found the government briefing notes disturbing. "This looks like the forest industry in B.C. is either directing the government's policy on species at risk where that might affect timber harvesting, or at a minimum the provincial government is running the policy by the forest industry to make sure that it's okay with them. Either is troubling." (Documents indicate B.C. wolf cull linked to forest industry concerns, October 25 2015, Globe and Mail)

Similar concerns about private industries determining the public policy of the Province, even in matters as critical as federal Species at risk compliance, are found in the province's spotted owl management:

“Inter-office emails released under a 2007 Freedom of information request revealed complaints that “the B.C. government is using misleading figures to support its recovery plan for the [spotted] owl ... and assert[s] the province is catering to the logging industry at the expense of the species' future...much of the criticism stems from biologists in the Ministry of Environment ..but one of the strongest indictments comes from David Cunnington, senior species-at-risk biologist for Environment Canada ... who lambastes the province for its policy ofcaptive breeding while failing to protect sufficient old-growth habitat Myke Chutter, the province's bird specialist, said ... the provincial efforts amount to a ‘cop-out ‘and a ‘recipe [for] extirpation over time’. Chutter worries that discussions over owl recovery have ‘centred on what [timber] licensees may or may not be willing to do rather than what the owl needed.” Gene MacInnes, operations manager for the Chilliwack forests district, expresses concern in an e-mail about ‘long-term sustainability’ of logging in the Fraser timber supply area due to a provincial policy that requires no net loss of logging due to spotted owl protection.” (Bureaucrats slam B.C. plan for saving the spotted owl, Vancouver Sun, September 13, 2007).

“A growing reason to change the “forestry construct” in BC is that we are running out of timber. The models have not worked because of poor data and overly optimistic assumptions that encouraged high cutting rates. Forest professionals have ignored the need to alter timber cutting rates as the old growth was logged and “fall down” resulted, with logging now occurring in the remaining intact natural forests, and in younger and younger forests. The way that “sustainable” cutting rates are propped up is by cutting socially and ecologically sensitive forests, as well as younger and younger trees over larger

areas. These are the major reasons that logging has steadily crept into socially and ecologically sensitive areas, like domestic watersheds and steep slopes...The reliance by industry on employment of professional foresters with no government oversight means corporate responsibility is virtually always put ahead of ecological and social responsibility. In this regard, I believe that forest professionals are in violation of their code of ethics as it relates to protecting the public interest, and are certainly not upholding their obligations under the policy of "Professional Reliance." By ignoring the obvious need to change the forestry construct to mitigate and adapt to the effects of global warming's negative impacts on water and biological diversity, forest professionals are complicit with the timber industry and the former Liberal government's permissive policies. If you consult with the ABCFP (Association of BC Professional Foresters), keep in mind that this organization's views are largely that of the timber industry, because key positions in the ABCFP are consistently held by forest professionals directly or indirectly employed by industry." (Herb Hammond)

20. A fundamental change in regulation for land management and logging for private land. Forbid the rezoning of forest lands for residential use. Encourage instead the donation or sale of land for parks and conservation areas.

Landowners essentially cut the timber at will and may destroy wildlife habitat without any meaningful sustainable management plan, often in defiance of recommendations from biologists. B.C.'s forests are a provincial asset and should be managed to contribute to a sustainable and sound B.C. economy, even on private land. Logging on private lands must be rigorously regulated and monitored. The lack of regulation is highlighted in this Globe and Mail article (Flagged as 'critical' to deer habitat, area near Cathedral Grove was turned over to logging, November 5 2013):

"Decade-old government documents show that an area being logged near Cathedral Grove on Vancouver Island was identified by Ministry of Environment biologists as critical winter habitat for deer that had to be protected. Environmental groups have been ... arguing that a 40-hectare patch on Mt. Horne is an important wildlife corridor. But Island Timberlands is permitted to log there because the government took the land out of Tree Farm Licence (TFL) 44 in 2004, putting it under a private land management regime that allows the company to decide what's best for wildlife... several officials in the Ministry of Environment fought to protect ungulate winter ranges, describing them as the most important habitat of its kind on Vancouver Island. "We should be prepared to die in the trenches if designated [ungulate winter ranges] on these lands get thrown out," Doug Janz, then British Columbia's senior wildlife biologist, stated in one e-mail to ministry colleagues. "These drainages have the best quality ungulate winter ranges and the highest use by deer anywhere," wrote Bob Cerenzia, a wildlife technician at the time. "To have these areas arbitrarily removed from Government protection has me feeling that I have wasted the last 27 yrs. of my working life in which I spent considerable time 'keeping the hounds at bay' so to speak..." The government went ahead with the conversion of TFL 44 lands despite the protests from staff, but ministry officials signed a letter of agreement with Weyerhaeuser, which then held the land, to continue negotiations over the winter ranges. Mr. Cerenzia, who is now retired from government, said those talks stalled after Weyerhaeuser sold the lands to Island Timberlands. He said the amount of critical winter range left on Vancouver Island has hit rock bottom....But the logging company isn't violating any regulations, said Forest, Lands and Natural Resources Minister Steve Thomson. "Island Timberlands is fully within its rights to log its private land," he said in a written statement. "There was an ungulate winter range that covered part of the private land when it [was] managed as part of Tree Farm Licence 44 ... however; Island Timberlands now manages

for wildlife habitat in a way that meets their needs."... Mr. [Scott] Fraser, [NDP MLA] said the forest was considered a "no-go area" for decades by the two companies that previously held TFL 44, MacMillan Bloedel Ltd. and Weyerhaeuser. But after 70,000 hectares on Vancouver Island was removed from TFL 44, the new owners, Island Timberlands, began cutting into the areas identified as ungulate winter ranges, arguing that it could do so without putting deer at risk. Of the 2,400 hectares of land designated for wildlife protection, only about 900 hectares remain unlogged."

The B.C. government continues to allow logging of endangered species habitat on private land:

"... CanWel Timber Ltd. has logged more than 5,000 cubic metres of [endangered] whitebark pine trees since 2016. The company's operations include logging on 55,000 hectares of privately owned forest in the ... Elk Valley [a critical wildlife corridor] in southeastern British Columbia. ...The logging has occurred despite the federal government formally listing whitebark pine trees as endangered under Canada's Species at Risk Act in 2012... only one company has logged more of the critically endangered trees since they were listed... Canfor — B.C.'s largest forest company. The vast majority of Canfor's logging occurs on public lands... Eddie Petryshen, conservation coordinator for Wildsight, an organization working to protect lands in the Columbia and Rocky Mountain regions [says] ..."Two hundred-hectare, steep-slope clear-cuts are popping up all over the place...The whole landscape is increasingly becoming one giant cut-block."... on Crown lands and private lands under provincial government control in B.C., no fines have yet been levied for a single whitebark pine tree being logged in the province, despite more than 19,000 cubic metres of the trees being logged since being listed as a species at risk....a recently released report by the University of Victoria's Environmental Law Centre ... concluded that ... since the Private Managed Forest Land Act came into effect in 2004, "private forest land has been logged at unsustainable rates, without adequate protection of sensitive public resources." Among other things, the report recommends that the provincial government grant local governments the authority to introduce and enforce bylaws to protect streamside forests and community watersheds from private land logging; and for the provincial government to set "clear environmental standards that ensure private managed forests are logged sustainably....At a minimum," the ELC report concludes, "privately owned forests should be held to the same practice standards as crown forestland under the Forest and Range Practices Act." The report also addresses an issue of major concern on Vancouver Island, where the largest expanses of private forests in B.C. are found. Under current rules, there is little to stop private forest land owners from ... selling the logged lands for conversion into suburbs. The report concludes there should be strict limits on logging and flipping such lands and advocates for a return to the idea of a Forest Land Reserve, similar to the Agricultural Land Reserve.(Thousands of B.C.'s endangered whitebark pine logged on private land, September 5 2019, The Narwhal).

Why is B.C. and Canada allowing private contractors to break federal law? Logging must be regulated to ensure it is both sustainable in terms of both greenhouse gas emissions and landscape management.

21. Eliminate most log exports from B.C.

The C.B.C. reports that "Between 2013 and 2016, according to some reports, B.C. exported nearly 26 million cubic metres of wood worth an estimated \$3 billion. In B.C., logs are required by law to be manufactured domestically, but there are exceptions. Raw logs are subject to a "surplus test," where loggers must first advertise logs to the domestic market. If there are no fair offers, the logs can then be

sold and shipped overseas. In parts of the province where there are few or no processing plants, raw logs don't have to be offered to local industry.” (CBC news Jan 17 2019, B.C. vows to curb raw log exports).

22. There must be more effort put into apprehending timber poachers, with significant penalties for the poachers and the mills and private customers who buy the illegally harvested old growth.

We need not only more conservation officers on the ground, but more park rangers. Trees have been poached directly in B.C. parks and cut up in the parking lot, where the thieves were confident there would be no staff doing rounds (Timber Poaching a Growing Problem on Vancouver Island, Vancouver Sun, October 10 2018).

There must be more funding for conservation officers and public awareness campaigns. Poaching will likely become more prevalent without serious efforts to combat it.

23. The ecological value of old growth – carbon retention, critical wildlife habitat, water purification and retention, etc. - must be recognized as its ‘highest and best use’ – that its ‘value’ as a living (and some researchers say as a sentient) ecosystem – is worth more than its value as lumber.

“Forests are our most important terrestrial carbon sink. When we log natural, intact old forests, it requires 150-250 years to regain the same level of carbon sequestration as before logging. Most of the carbon stored in the trees cut (up to 65%) is back in the atmosphere within five years. Thus, the “long-term storage” of carbon in wood products is at best overstated by the timber industry and many forest professionals. In fact, carbon released from logging in the US has been shown to be greater than all other residential and commercial sources combined. Thus, changing the way forestry is done is vital to mitigating the effects of climate change and adapting to conditions associated with climate change.” (Herb Hammond)

The University of Vermont School of Environment and Natural Resources noted in their article (Older Forests resist change – climate change that is) that younger forests are more vulnerable to climate change than older forests.

“Vast amounts of old-growth logging – about 10,000 hectares each year on Vancouver Island alone – is causing major damage to our native biodiversity, water quality, wild salmon, the climate, scenery, and tourism economy, and to First Nations cultures. ... Despite their environmental, cultural, and economic value, our magnificent ancient forests are increasingly endangered by industrial logging. On BC’s southern coast, almost 80% of the original productive old-growth forests have been logged, including well over 90% of the lowland ancient forests where the richest biodiversity and largest trees are found. The logging of these carbon-rich forests contributes significantly to BC’s CO2 emissions and is driving old-growth dependent species towards extinction....”(<https://britishcolumbia.com/stand-up-for-bcs-endangered-old-growth-forests/>).

“... old-growth forests accumulate[e] carbon in soil, trees, and organic matter over millennia. Old-growth forests with exceptionally high carbon storage per hectare can only be found on a small percentage of the forested land base, particularly in valley bottom forest ecosystems. A 2018 study showed that the largest 1% of the world’s trees store 50% of forest carbon globally.... these highly productive stands have historically been the most targeted for logging. .. they are now the most

endangered ecosystems, reduced to a fraction of their former extent, with insufficient protection. Research increasingly shows that, contrary to industry claims, old trees store more carbon than young trees in proportion to their size, and that almost 70% of the carbon stored in a tree is accumulated in the second half of its life ... It makes no sense to cut down carbon-storing older trees at a time when scientists are desperately trying to invent carbon-capture technology”
<https://sierraclub.bc.ca/clearcutcarbon/>)

In mitigating climate change, old growth also helps with wildfire prevention.

24. The provincial government must work with the federal government to address deforestation in Canada’s boreal forest.

“Wildlands League is asking the federal government to revise rules for monitoring deforestation to address “the substantial risks and impacts” from logging roads and landings in the boreal forest. It’s also calling on the government to review and remedy underreporting of the carbon impacts from Canadian logging.”(Scars from logging operations show Canadian deforestation far worse than previously thought, December 4 2019, the Narwhal)

25. The critical link between old growth and the health of remaining salmon populations must be recognized and protected in law. Old growth trees like cottonwood found in floodplains must be permanently protected.

It is worth repeating what Herb Hammond said,

“Forests, particularly old, natural, and intact forests, produce the highest quality water in moderate quantities throughout an annual cycle. As currently done, most logging degrades water quality, quantity, and timing of flow. This degradation contributes significantly to spring flooding and fall droughts. Restoring full hydrological functioning of forests after logging takes at least 5-7 decades, and it takes more than a century and a half to reach the water conservation of old/old-growth forests. Thus, changing the way forestry is done is vital to conserving water.”

The logging of old growth produces a myriad of deleterious impacts for salmon: release of sediment, habitat destruction, inadequate water flows, climate change impacts, etc. Federal and provincial governments are implementing salmon restoration programs, but continued old-growth logging undermines those programs and wastes the tax dollars that pay for them.

26. Recognize the cultural and economic value of conserved old growth to communities.

“Only about 8% of Vancouver Island’s original, productive old-growth forests are protected in parks and Old-Growth Management Areas. Old-growth forests – with trees that can be 2,000 years old – are a non-renewable resource under BC’s system of forestry, where second-growth forests are re-logged every 50 to 100 years, never to become old-growth again.”(<https://britishcolumbia.com/stand-up-for-bcs-endangered-old-growth-forests/>).

“More than twice the number of British Columbians work in tourism as in forestry and, on the streets, there are demonstrations demanding that the province halt old-growth logging, backed by a petition

organized by Sierra Club B.C. and Leadnow, signed by 20,000 people. A letter last year from 223 international scientists urged the province to take immediate action to protect B.C.'s temperate rainforest, and the B.C. Green Party is among the groups asking for a moratorium on old-growth logging on Vancouver Island." (The old-growth logging showdown, Narwhal).

"... the evidence and research shows that protecting nature bolsters the economy by creating and attracting wealth from a diversity of sectors. Protected areas and old-growth forests not only boost the tourism and recreation industries (witness the economic rise of Port Renfrew as Canada's "tall tree capital," and the prosperity of Tofino), B.C.'s No. 1 employer, but also enhance real estate values in nearby communities, provide carbon offsets and attract skilled labour such as high-tech workers who locate in communities with a higher environmental quality of life." (Island Voices: Saving old growth requires more than government talk, Ken Wu, Times Colonist November 24 2019).

"The BC Chamber of Commerce said in 2016 that "many local communities economically would stand to receive a greater net benefit in revenues and jobs over the ensuing decades from the protection of key old-growth forests in their region. Also in 2016, the Union of British Columbia Municipalities (UBCM) passed a motion calling for the protection of old-growth forest on Vancouver Island because of its "significant economic, social and environmental value as wildlife habitat, tourism resource, carbon sink and much more." Even the Public and Private Workers of Canada (PPWC) has called for the protection of old-growth rainforest on Vancouver Island, for forestry companies to transition to second-growth logging and for an end to raw-log exports."

(<https://www.nationalobserver.com/2018/05/28/opinion/people-are-furious-about-destruction-these-ancient-old-growth-giants>)

"Their unique characteristics require centuries to develop: the immense trees that support tourism and First Nations longhouses, their distinctive structure that supports unique wildlife, and their massive storage of carbon, more per hectare than even the Amazon rainforest. However, under B.C.'s system of forestry, they are to be re-logged every 50 to 80 years, never to become old growth again. Therefore, old-growth logging in B.C. is a non-renewable activity akin to extracting fossil fuels." (Island Voices: Saving old growth requires more than government talk, Ken Wu, Times Colonist, November 24, 2019)

Half a million tourists visit Cathedral Grove in McMillan Provincial Park annually (Government of BC, Ministry Transportation). The BC Chamber of Commerce notes,

"Demand by the tourism industry is high for many remaining old-growth stands. Port Renfrew has been transformed in recent years into an old-growth forest tourism destination as thousands of visitors are coming from around the world to visit some of the world's largest trees and grandest groves...Visitor expenditures by tourists coming to visit old-growth forests near Port Renfrew also generate revenues in other B.C. communities, including Vancouver, Victoria, Sooke, Lake Cowichan, Duncan, Ladysmith, and Nanaimo. Many tourists fly, boat, or drive into B.C. from international destinations to see the old-growth forests. The appeal of the tall trees is attracting significant investment into Port Renfrew, including generating a boom in the real estate market as new residents and real estate investors focus their attention on the town with its surrounding natural beauty and enhanced tourism appeal. Near Port Renfrew, on Crown land, the Walbran Valley is 13,000 hectares in extent, of which 5500 hectares lie within the Carmanah-Walbran Provincial Park and the other 7500 hectares lie outside the park. A 500-hectare area, known as the Central Walbran Ancient Forest, is the most intact and recreationally significant portion of the valley and lies outside the park. Thousands of people have

visited the Walbran Valley for recreation. ... The most heavily visited areas in the Walbran Valley lie outside of the park in the Central Walbran.... Significantly greater numbers of visitors can be expected to visit the region if the area is protected... Across British Columbia, many local communities economically would stand to receive a greater net benefit in revenues and jobs over the ensuing decades from the protection of key old-growth forests in their region...Perhaps a most vital example of the economic value of protecting the old growth forest can be demonstrated in an anecdote from the Port Renfrew community....Port Renfrew has for many years been known as the location on the south coast of Vancouver Island for excellent sport fishing. Fishermen come from all over North America to fish out of San Juan Bay and out to Swiftsure Banks. However, because of its exposure to the open ocean and limited marina facilities, fishing in Port Renfrew is seasonal and until recently the community was busy only from the May long weekend until mid-September. October to April in Port Renfrew was quiet. The restaurants closed or kept limited hours and people moved away for the winter to find work and other opportunities....In February of 2012, the Ancient Forest Alliance was successful in getting the B.C. government to protect an old growth forest only a few kilometers from Port Renfrew called Avatar Grove. The designation by the Province gathered much media attention and by summer, visitors were coming to Port Renfrew to see the massive trees and to hike in the old growth forest. Since that summer, local accommodation providers in Port Renfrew have reported that demand for accommodations has increased 75% to 100% year over year. What is especially noteworthy is that the off-season activity has steadily increased when sport fishing charters are not operating or operating on a limited schedule. Thanks to the trees, Port Renfrew is no longer a one-industry tourism town and has been able to successfully brand itself the “Tall Tree Capital of Canada.”...In 2012, a kayaking company in Discovery Islands did an economic analysis. It calculated the economic value of 60 hectares of timber scheduled to be logged above and around the kayaking base camp across from the world-famous Robson Bight. It was determined that the value of the 60 hectares of timber was worth about \$3,600,000. Since the regeneration cycle meant the area could be cut only once every 60 years, the yearly economic value of the timber was \$60,000. The economic value to the kayaking company, however, was \$416,000 per year, or \$24,960,000 for the same 60-year period. In contrast to the approximately 300 person-days employment from logging the 60 hectares just once, the kayaking company provided 20,160 person-days of employment during the 60-year cycle. And this simple economic analysis didn’t include the employment and earnings for the 40 other eco-tourism businesses using the same area.” (2016, <http://www.bcchamber.org/policies/protecting-old-growth-rainforest-economic-benefit-tourism-based-communities>).

Clearly, the economic benefits that BC Timber Sales notes – 8,000 jobs that continue to disappear as the supply of trees declines - cannot compare with the generally sustainable tourism industry that depends on the protection of natural ecological beauty such as remaining old growth forests:

“British Columbia’s tourism industry ranks as one of the province’s largest economic sectors in terms of employment and revenue, with more than 302,700 jobs in the industry, and generating \$18.4 billion in visitor revenues in 2017... Based on industry growth and replacement of employees exiting the industry, BC tourism will create 106,000 job openings in the next 10 years...There are approximately 302,700 jobs in the BC tourism industry with 137,800 jobs supported by visitor spending.... the tourism industry returns approximately \$1.2 Billion to the provincial treasury in the form of consumption taxes every year.”(<https://www.go2hr.ca/about-us>)

27. Restore old growth forest ecosystems, repairing damage to salmon streams and allocating areas where old growth may be restored in centuries to come.

“Restoration forestry will re-establish ecological integrity, improve ecological resilience in the face of climate change, and meet timber needs. The timber that results will not be the focus, but rather a by-product of maintaining natural forest integrity for the full spectrum of society’s needs. Meaningful employment from restoration forestry will exceed current levels of “timber focused” employment. Restoration forestry has the potential to supply adequate (if not higher than current levels of) revenue to the government through secondary and tertiary manufacturing, and better marketing of wood products.” (Herb Hammond, Restoration Forestry June 19 2018)

One of the aspects of logging that must be addressed in restoration is the permanent damage that logging roads do to the forest ecosystem, which impedes regeneration and also affects Canada’s calculations of carbon sequestration from forests. The surface of remnant infrastructure like roads is so heavily impacted that it impedes the growth of seedlings. As much as 25% of the area that is logged is thus removed from future regeneration, a significant loss of carbon storage that belies claims of sustainable forestry (The Guardian, Long-term damage from logging hits ability of Canada's forests to regenerate, December 4 2019). The logging companies should be required to return to previously logged sites and repair this impaction.

The world’s scientists warn that we are in a planetary crisis. Alarms are ringing stridently everywhere: burning fires from the Arctic to the Amazon, in combination with melting permafrost, are releasing vast amounts of carbon: we are close to a freefall into climactic chaos that will undermine democracies and human progress all over the world, as well as inflicting great losses and enormous suffering on global wildlife. The desolating loss of old growth in B.C. has released vast stores of carbon, and the people of B.C. are sickened by this destruction and the loss to our descendants. The Province must move urgently to implement an immediate moratorium on the logging of any more old growth on both private and public lands, and then move to permanently protect what remains.

Finally, we feel any further public sessions and participation or public review of the recommendations needs to be advertised more in advance. By the time we knew about the meetings in our area, they were long over. We understand the Vancouver Island visits were announced the day before the event, with no instructions on how to sign up to speak. We would also like more details on the plan of action for the Panel recommendations.

We thank you all for your consideration of our concerns.

Yours very truly,
B.C. GREAT BLUE HERON SOCIETY



Gillian Anderson
Chair

Cc: Premier John Horgan
The Honourable Doug Donaldson, MLA, Minister of Forests, Lands, Natural Resource Operations and Rural Development
The Honourable George Heyman, Minister of Environment and Climate Change Strategy
Sonia Furstenuau, MLA, Green Party Forest Critic
John Rustad, MLA, Opposition's critic on Forest, Lands, Natural Resource Operations and Rural Development