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Introduction

As B.C.'s largest wildlife conservation organization, the B.C. Wildlife Federation (BCWF) has the responsibility to raise awareness of on-the-ground conservation issues and make science-based recommendations on the wise use of British Columbia's fish, wildlife and habitat. These position statements promote accountability and transparency in B.C. Wildlife Federation's advocacy for specific, fact-based solutions that protect, enhance and promote the wise use of the environment for the benefit of present and future generations.



Adequate Funding

British Columbia is fortunate to have a wealth of biodiversity, but it is disappearing. The management of B.C.'s wildlife and habitat continues to be one of the most poorly funded in North America. For the past decade, the proportion of the provincial budget spent on renewable resource management has been less than two percent. The result is diminishing fish and wildlife populations, including some at risk of extinction.

Hunting license sales, excluding GST and Habitat Conservation Trust Foundation (HCTF) surcharges, averaged \$11.4M annually between 2017-2019. BCWF asks the Province of British Columbia to dedicate all fees collected for hunting, including but not limited to: hunting licence fees, species licence fees, limited entry hunting fees, and royalty fees for wildlife and trapping as funding for wildlife management in British Columbia that can be counted on now and in the future. The delegates at the BCWF's 2021 Annual General Meeting supported a resolution to approach government to double the HCTF surcharges — this request has been forwarded through the Provincial Hunting and Trapping Advisory Team. Any other fees, or portion of those fees, collected for activities that impact wildlife or their habitats on crown land should be dedicated to wildlife and habitat management (adopted at the 2018 Annual General Meeting (AGM), Kamloops).

BCWF, along with 206,000 partners in the Fish, Wildlife and Habitat Coalition are compelling the provincial government to recognize that the conservation (management, restoration and protection) of habitat across B.C. is fundamental to the needs of fish and wildlife and to ensure that all native species have abundant and self-sustaining populations. Fish, wildlife and habitat cannot rely on annual allocation from the Treasury Board; therefore, the government must create a permanent endowment for fish, wildlife and habitat stewardship. In addition, the BCWF believes that any commercial or industrial activity that benefits from the use of fish and wildlife, or impacts their habitats, must be required to financially contribute to fish, wildlife and habitat management.

What's next?

The ministry has committed to reviewing and making recommendations for dedicated funding and potential new creative funding models in 2021. Actions 12 and 13, Together for Wildlife Strategy, FLNRORD

Reference: <u>Together for Wildlife</u>, Strategy for Improving Wildlife Stewardship and Habitat Conservation in British Columbia, Ministry of Forest, Lands, Natural Resource Operations and Rural Development.



New Fish, Wildlife and Habitat Governance Model

The current provincial structure for fish, wildlife and habitat management is built to fail. Several functions related to our natural resources' sustainability are split between the Ministry of Environment and Climate Change Strategy (MoE) and the Forests, Lands, Natural Resource and Rural Development Ministry (FLNRORD). Senior leadership positions in these ministries are traditionally comprised of foresters and other natural resource professionals, leaving wildlife and habitat professionals largely a minority group in the discussion.

BCWF is calling on the province to create a new legitimate, accountable and transparent governance model for fish, wildlife and habitat. The delivery of fish, wildlife, habitat and water security needs to be centralized in a ministry with the legislative and regulatory mechanisms to support objectives and make land-based decisions that include all values and not just fibre production. The goal is to have legislation related to fish, wildlife and their habitats that cannot be negated by other natural resource-based legislation such as the Forest and Range Practices Act.

The current government structure needs an overhaul, and agencies related to fish, wildlife, and habitat need to be housed within a ministry with line-of-sight between headquarters and regions. The sustainability of our fish, wildlife and habitat resources must be the main priority for the responsible ministry.



Watershed Security Governance

BCWF, in partnership with the <u>Watershed Security Coalition</u>, called for increased investment in watershed security in British Columbia. Population growth, increased development and a warming climate are putting pressure on watersheds in every region of B.C. The solution is to invest in wetland and streambank restoration, invasive species removal, Indigenous and local government watershed monitoring programs, and fish and wildlife stewardship. We need to ensure we have sufficient water left in rivers to support salmonids' migration to their spawning grounds in regions most impacted by climate change.

During the 2020 provincial election, BCWF asked all major political parties to commit to water security and was pleased to receive positive responses from all. The NDP promised to protect clean water in British Columbia by creating a watershed security strategy to plan, manage and protect local watersheds for the public good.

<u>BCWF's Wetlands Education Program</u> received \$5M in stimulus funding to work with communities across B.C. to support wetland restoration.

What's Next?

The <u>mandate letter</u> for the Minister of Environment, which directs the ministry's work, includes the directive to move ahead with a water security strategy. The mandate letter states, "with support from the Minister of State for Lands and Natural Resource Operations and the Parliament Secretary for Fisheries and Aquaculture, lead work to protect clean water, including through the creation of a Watershed Security Strategy and the associated Watershed Security Fund."



Legislated Objective for Fish, Wildlife and Habitat

In August 2020, after reviewing how to improve wildlife management for several years, the government committed several actions that will lead to setting legislated objectives. They also created new public consultation processes to review the proposed strategy and actions. While nobody from the BCWF was appointed to the newly formed Minister's <u>Wildlife Advisory Council</u> table, we still have representation on the <u>Provincial Hunting and Trapping Advisory Team</u> (PHTAT) as well as on a number of the existing regional advisory and stakeholder groups.

BCWF's goal for 2021 is to ensure that fish, wildlife and habitat's statutory objectives are clear, achievable and measurable, clearly setting the standard for managers while enabling consistent results. Legal standards and objectives for managing fish, wildlife and their habitats need to be specifically addressed in legislation. Examples are moose densities, maximum densities for roads and other linear features and watershed security fund and strategy.

B.C. Wildlife Federation wants clear land-based objectives to be integrated between the Forest and Range Practices Act, the <u>Water Sustainability Act</u>, the Land Act and the Riparian Areas Protection Regulation, and other legislation to follow the same rules. Objectives for riparian areas, water quality, water quantity, and environmental flow protection are key to the sustainability of fish and wildlife habitat and the populations they support.

What's Next?

In 2021, through their <u>Together for Wildlife</u> Strategy, the provincial government has committed to drafting a renewed approach for setting objectives and linking wildlife populations and habitat, considering the interactions among species. Action 8, Together for Wildlife Strategy, FLRNORD

Funding for Managing Fish, Wildlife and Their Habitats

In order to really make a difference for fish, wildlife and their habitats, the BC Government needs to recognize the value of fish and wildlife and provide sufficient and dedicated funding for management. This means significantly increasing current budget levels for fish wildlife and habitat management, guaranteeing those funds stay in place for the long-term and be considered for increases after review, as per the budgets for other ministries such as education and health. The B.C. Wildlife Federation continues to advocate for spending on management of fish, wildlife and their habitats that is largely focused on meaningful on-the-ground actions, which really make a difference for fish and wildlife.

A resolution at the 2021 annual general meeting of the B.C. Wildlife Federation was passed and brought forward to government stating that the BCWF supports a doubling of the Habitat



Legislated Objective for Fish, Wildlife and Habitat

Conservation Trust Foundation surcharges on hunting and species licences as long as the money is dedicated to the management of wildlife and their habitats.

Consultation

The Province has committed to a public consultation on stewardship plans for priority species and populations through the Minister's Wildlife Advisory Council, and the Regional Wildlife Advisory Committees established or expanded upon in 2021. The B.C. Wildlife Federation does not currently have a representative on the council, which will advise the minister on new and existing provincial legislation for wildlife and habitat stewardship. The Minister's Wildlife Advisory Council, including Indigenous members and Indigenous governments, will be encouraged to join Regional Advisory Committees as the Province's government-to-government partners.

Legislative Reform Needed

In 2021, the government has committed to complete a comprehensive review of land designations under the <u>Land Act</u>, Wildlife Act, <u>Oil and Gas Activities Act</u>, and <u>Forest and Range Practices Act</u> that contributes to conservation to ensure they effectively target the intended habitats now and in the future, and in light of climate change impacts and habitat alterations. The review results will identify gaps and opportunities to improve the effectiveness of those designations for wildlife. A more detailed assessment for 10 percent of these designations will begin in 2022. Action 10, Together for Wildlife Strategy, FLNORD

The government will also review the <u>Wildlife Act</u> in 2021 and make recommendations to address priority issues, such as reconciliation with Indigenous peoples, determination of objectives, improved wildlife stewardship, effective and accessible service delivery, and dedicated funding. Action 12, Together for Wildlife Strategy, FLNRORD

BCWF Recommendations

- Enshrine fish, wildlife and habitat protection into outcome-based legislation by reviewing and modernizing other existing related legislation to integrate the needs of fish, wildlife and habitat;
- Wildlife and habitat must have equal status to other land-use legislation;
- Create clear, transparent and achievable legislated objectives for habitat and wildlife;
- Dedicated funding focused on evidence-based landscape-level actions that treat causes and produce effects.



Forestry Objectives for Wildlife

A: Banning the use of glyphosate for aerial broadcast spraying

BCWF members oppose the spraying of glyphosates and other systemic herbicides except where this is the only effective method to address an invasive species issue. BCWF's position is that clearcuts be burned or manually prepared, as has been done in the past, rather than aerially treating them with herbicides. The former post-harvesting treatments help the new seedlings get established without the habitat damage and potential contamination with glyphosates and other herbicides. *Adopted 2019 AGM, Fort St. John

The <u>B.C. Wildlife Federation opposes the use of glyphosates</u> for the following reasons:

- Glyphosate [Roundup] is a systemic herbicide that kills ALL plant life, including their root masses.
- The roots of willows and some other browse species can be very old, in some cases, over hundreds of years. Because the herbicide kills the root masses, they will never grow back. Killing browse species reduces food and habitat for wildlife, particularly moose. Additionally, the loss of habitat and its diversity significantly reduces biodiversity.
- Destruction of supportive root systems may predispose some sites to landslides where soil stability has been compromised.
- A growing body of evidence suggests that glyphosates are carcinogenic and may even cause developmental abnormalities. In the U.S., glyphosate is listed by the Environmental Protection Agency (EPA) as a "class 3 carcinogen."
- The aerial application of glyphosates as a post-harvest, silvicultural treatment may augment the risk of forest fires through fuel loading. Leaving dead and dry material standing and killing deciduous trees, which act as natural fire breaks due to their water content, makes them less flammable than their cousins. A natural fire barrier becomes removed.
- In areas sprayed with glyphosates, the chemical is present in the groundwater, and its effects on amphibians, insects and many other life forms are largely unknown.

B. Prescribed burn, let burn plans and broadcast burning of cutblocks to restore ecosystems and wildlife

BCWF supports the use of prescribed burning and let burn plans as a sustainable, effective, and responsible forest management tool.



Forestry Objectives for Wildlife

Fire is a natural part of British Columbia's environment and fire suppression has resulted in losses to biodiversity, wildlife populations and people's property and life. The BCWF advocates for specific goals (hectares burned per year) and policy that will result in the restoration of ecosystems and wildlife populations.

C: Changes to the Forest and Range Practices Act

Forest Stewardship Plans:

- Forest Stewardship Plans (FSPs) must be assessed for environmental impact, and approvals must incorporate a test based on demonstrating how logging activities are sustainable.
- Additional objectives must be enacted to assure sustainability and protect non-timber values, including addressing climate change.
- To inform public input and government decision making, FSPs must contain meaningful content (locations of roads, cut blocks, and impacts on and measures to protect and restore non-timber values such as water quality, fish habitat, endangered species, etc.)
- Improved inventory monitoring.
- Cumulative effect assessments.

Government Authority

The government must retain authority to approve Forest Stewardship Plans (FSPs), site plans and licensee responses to orders and notices. Only those decisions which don't reduce the government's knowledge and authority below the point at which it can act as a "responsible owner" should be delegated to professionals.

Government approvals must incorporate public feedback, which must be addressed in publicly available approval rationales. To be successful internal government capacity must be rebuilt (staff and finances) to undertake the necessary oversight, monitoring and enforcement.

There is also acknowledgement that there is a great deal of frustration concerning harvesting on private land. To this end, amendments are also required to the <u>Private Managed Forest Land Act</u>, particularly concerning transparency and public consultation.



Changing the Professional Reliance Model

Professional Reliance Reform

The BCWF has long championed the need for public oversight of our natural resources. We advocate for the government to rebuild staff expertise and oversight capacity and restore compliance and enforcement regimes. We had some success with the introduction of Bill 49 Professional Governance Act in 2018, a legislative process we continue to monitor.

In 2017 and 2018, the Province conducted an open public engagement process to undertake a much-needed reform of the Professional Reliance model of governing natural resources that had been in place for a decade in British Columbia. The Professional Reliance approach removed clear legal standards from our laws through regulatory outsourcing. This outsourcing model, which relies heavily on industry-paid professional expertise, has been described as "the fox guarding the henhouse."

The BCWF participated in the reform process, joining a working group to address the legislated reforms with other concerned non-governmental and labour organizations and directed by member resolution. An *independent <u>Professional Reliance Review</u>* was published in 2018 by Mark Haddock, which made 121 recommendations for legislative reform.

In response to this feedback, the government enacted <u>Bill 49 Professional Governance Act.</u>



Changing the Professional Reliance Model

The BCWF stance on Professional Governance

The BCWF supports the regulation of firms, and in particular, we support regulating resource extraction companies that employ professionals as firms. We believe that regulation of engineering, oil, gas, mining and forestry companies as firms is a high priority.

While we support the Province's commitments to address environmental assessment, wildlife habitat management, endangered species, land use planning, agricultural land and water sustainability, each of these reforms requires a comprehensive professional reliance framework to be successful. Without such a framework, these reforms will mostly fail.

What's next?

The implementation of Bill 49 and the Professional Reliance Review recommendations are going to take several years. In the meantime, it is unclear how the management of B.C.'s natural resources will change on the ground and how long it will be for 'current business practices' to change in the field.

Provincial scientific integrity policies need to be developed that improve scientific transparency, minimize political interference in policy-making, and protect scientific professionals that speak out.



Population recovery strategies must be instituted where a species population drops below the designated threshold. BCWF supports using coordinated natural resource management planning to address the recovery of individual Species at Risk, including supporting maternal penning and predator management programs to protect Species at Risk.

Legislation

<u>Species at Risk legislation</u> needs to be strengthened to maintain biodiversity and public trust in the stewardship of B.C.'s natural capital. The problem is that current measures to protect biodiversity, such as Wildlife Management and Habitat Areas, are subservient to economic objectives, most notably in the Forest and Range Practices Act (FRPA). The Ministry of Environment and Climate Change Strategy's compensation policy, including the hierarchy of avoiding, mitigating, and offsetting, is rarely applied rigorously, either at a project level or at a landscape level, to address cumulative effects on valued ecosystems or species.

Species at Risk legislation is one component or tool to address the larger picture of balancing sustainability with development.

Government initiatives around land use planning, professional reliance, strengthening the environmental assessment process, improving wildlife management and mountain caribou recovery are related to Species at Risk and have interwoven themes.

Species at Risk legislation must be adequately supported through science, information, monitoring and enforcement transparently. The roles of government, industry stakeholders and First Nations must be clear in protecting species and landscapes at risk. The analysis of alternate scenarios must be based on science. Where trade-offs between sustainability and development are made, the accountabilities of both the decision-maker and the proponent(s) relative to the impacts need to be clear.

Recommendations

R1. Legislation should apply to ecosystems and species in terrestrial and freshwater habitats, including fish, and be more effective and responsive than the federal Species at Risk safety net.

R2. Legislation should use clear and consistent terminology and definitions that are adopted across resource management legislation in B.C.



- **R3.** The recommendation to list ecosystems or species should be made on the basis of scientific criteria by technical experts. The government's decision to accept or not accept the recommendation should be made based on principles in the Act and following adequate consultation with indigenous and non-indigenous community sectors and stakeholders given socio-economic impacts. The reasons for the decision should be made public and subject to appeal.
- **R4.** Actions required to protect species and ecosystems under risk should be included in plans, authorizations, permits authorized under other resource legislation.
- **R5.** For listed ecosystems, species authorizations should not be approved on Crown land if activities that affect their viability cannot be avoided or mitigated. On private land, activities may use the full range of strategies to avoid, mitigate or offset.
- **R6.** Resource management planning and objectives that prevent ecosystems and species from becoming listed should be developed at a landscape and watershed scale in collaboration with indigenous and non-indigenous communities.
- Separate science (how ecosystem system works) and socio-economic analyses (how the system is valued);
- Ensure the scale is appropriate to encompass threats and required actions to meet objectives;
- Ensure information is transparent, accessible and can be verified by independent parties.



R7. Plans protecting and recovering habitat and species at risk include:

- Decisions are made on the best available science;
- Identify the cause of decline;
- Determine the most cost-effective tools for recovery;
- Protect intact habitat and restore habitat if the cause of decline;
- Apply multi-tiered ecosystem and single-species approaches as appropriate;
- Implement adaptive management approach with adequate monitoring to evaluate and improve recovery plan performance;
- Are adequately funded to be implemented.

R8. Funding supporting Species at Risk activities should be held in an independent trust outside of government.

- Funds should be distributed by a Species at Risk Board appointed by the government to implement recovery activities required under the legislation;
- The Act should define the role of the trust and the eligible activities funds can be expended on for Species at Risk, e.g. planning, monitoring, population management, habitat restoration research and evaluation, stewardship and public education;
- A diversity of sources should fund the trust in order to leverage the maximum financial support, including but not limited to general revenue, carbon tax, resource use licence permits, fines and penalties;
- Funds should be allocated to technically qualified people and organization to conduct the recovery activities based on priority, cost-effectiveness and return on investment in terms of species at risk recovery;
- Offsets should not be used to fund Species at Risk activities and only applied for private land and the same habitat type in the same area.



R9. Information, education and outreach

Sharing the responsibility for stewardship is important environmentally, economically and culturally. The importance of having functioning landscapes and watersheds that are resilient to climate change is critically important domestically and internationally.

- Examine the return on of the investment of protecting biodiversity using case histories in B.C.;
- Communicate the benefits to various levels of government, industry and the public, particularly through school programs;
- Continually engage and examine the opportunities for improving regulatory nonregulatory means of protecting biological diversity and species at risk.

R10. Reporting

A report on Species at Risk should be produced every five years with clear objectives and measurable recovery plans with long-term monitoring of key biodiversity indicators from the conservation framework.



Pinnipeds (seals and sea lions) are near the top of the marine food chain and serve as both prey species and predators. Although they are not currently commercially exploited in B.C., their continued presence and occurrence in natural ecosystems at appropriate levels of abundance are an important resource management consideration.

BCWF supports the harvest of pinnipeds on a site-specific basis, particularly in estuarine habitats, to protect migrating adult and juvenile salmon from pinniped predation. The harvests must be supported by science, adequately monitored, enforced and evaluated to examine ecosystem-level effects on salmon and other species.

Context:

The federal Department of Fisheries and Oceans (DFO) is the responsible agency for the Marine Mammal Regulations, enacted under the federal Fisheries Act in 1993. They prohibit anyone from disturbing a marine mammal except when fishing under the authority of these Regulations. They further provide that any attempt to kill a marine mammal must be made in a manner that is designed to kill it quickly, the equipment necessary to retrieve it must be available, and a reasonable effort must be made to retrieve a dead animal immediately after it is killed. Subject to section 6, no person shall fish for marine mammals except under the authority of a licence issued under these Regulations or under the Aboriginal Communal Fishing Licences Regulations. SOR/93-336, s. 2. or 6 (1) An Indian or Inuk other than a beneficiary may, without a licence, fish for food, social or ceremonial purposes.

Authorizations have been provided to kill pinnipeds on the Pacific Coast on a site-specific basis, particularly to protect net cage aquaculture facilities.

A study titled "Estimates of Chinook salmon consumption in Washington State inland waters by four marine mammal predators from 1970 to 2015" states the harbour seal population in the Salish Sea is estimated at 80,000 today, up from 8,600 in 1975. The study also says seals and sea lions now eat six times as many chinook salmon than are caught in the region's commercial and sports fisheries combined. A recent study has shown that Wild Chinook salmon productivity is negatively related to seal density and not related to hatchery releases in the Pacific Northwest.²



Pinnipeds are a major prey species of transient Killer Whale populations on the Pacific Coast and compete for Chinook salmon with both Northern Resident and Southern Killer Whales. All three populations use the Salish Sea (Strait of Georgia).

There is now good science available to give some insight into what has happened to the <u>pinniped populations</u> in B.C. and how these out-of-control populations are affecting many species of fish.³ Amongst a number of scientists, Dr. Carl Walters of the University of British Columbia <u>has produced studies</u> that show that Stellar Sea Lions alone consume over 1,000,000 Fraser River sockeye.

Seals are also of great concern. Their population has also expanded wildly in the last 50 years. Though the seals consume far less from a total consumption perspective, seals are calculated to consume over 40% of chinook and coho smolts in the Salish Sea (Gulf of Georgia).⁴ It is estimated that seals can consume up to 85% of outbound salmon smolts in some river systems. With predation levels this high, when these smolts are just heading out to sea, it is hardly surprising that some rivers get any more than a handful of adult fish returning at the end of their life cycle.

Call for Pinniped Harvest:

Increasing conflicts between fishers and pinnipeds and the declining salmon productivity have raised <u>calls for seal harvest in British Columbia</u>. The proponents state that the harvest will achieve two goals: reduce the population of seals, thereby increasing the abundance of salmon, and providing a source of income and wealth through the harvesting and marketing of seal products for coastal communities.⁵

Management objectives:

Clear management objectives and performance criteria must be established by DFO prior to the implementation and initiation of pinniped harvest, both locally and regionally. The decision-making process to approve pinniped harvest must be open, inclusive, transparent and must involve the coastal First Nations who have a right to harvest seals for food and social or ceremonial purposes. The development of the harvest should adhere to the policy for emerging fisheries.⁶



Science-Based:

Information is required on an ongoing basis by DFO to:

- estimate the size of predator and prey populations,
- to detect if predators are limiting prey numbers or affecting prey population trends,
- forecast what effects predator control might have in given areas, and
- evaluate the results of predator control programs as they are implemented, particularly on Killer Whale populations and other ecological community components.

The ecological functioning of the Salish Sea and other coastal regions should be the priority. The harvest level should not be set by economic concerns. Harvest methods should be humane and result in the best utilization of the animals.

Program Prerequisites:

Prior to authorizing pinniped harvest, data for the following must be assessed by DFO:

- Significant reduction in predation will be achieved. If one predator is responsible for significant levels of mortality, control may increase prey survival, and if there are multiple predators, the actions may not be effective. Ecosystem level analysis is required.
- Pinnipeds will be reduced for a sufficient amount of time. A program must exert sufficient influence long enough to allow increases in prey survival over several years.
- Habitat is enough to support more prey.
- Harvest is conducted in the appropriate area and time: The numbers of predators that must be removed to achieve program objectives may be unique to each area. Not all areas have the same suite of predators and prey or require the same approach (i.e. estuaries vs open water).



Performance is measured and evaluated on an ongoing basis:

- The management objectives are being achieved.
- The ecological dynamics are monitored to ensure the long-term viability of the ecosystem.
- There are no other practical alternatives to pinniped harvest that would increase salmon abundance.



Notes

- 1. Brandon Chasco, Isaac C. Kaplan, Austen Thomas, Alejandro Acevedo-Gutiérrez, Dawn Noren, Michael J. Ford, M. Bradley Hanson, Jonathan Scordino, Steve Jeffries, Scott Pearson, Kristin N. Marshall, and Eric J. Ward. "Estimates of Chinook salmon consumption in Washington State inland waters by four marine mammal predators from 1970 to 2015," no. 8, Vol. 74 (2017): 1173-1194; Canadian Journal of Fisheries and Aquatic Sciences. https://cdnsciencepub.com/doi/10.1139/cjfas-2016-0203
- 2. Benjamin W. Nelson, Carl J. Walters, Andrew W. Trites, and Murdoch K. McAllister. "Wild Chinook salmon productivity is negatively related to seal density and not related to hatchery releases in the Pacific Northwest," (2017): 1-16; Canadian Journal of Fisheries and Aquatic Sciences. https://doi.org/10.1139/cjfas-2017-0481
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- 6. Department of Fisheries. "Emerging Fisheries Policy," Government of Canada, 2019. Accessed from: https://www.dfo-mpo.gc.ca/reports-rapports/regs/efp-pnp-eng.htm



By supporting the B.C. Wildlife Federation you are helping to enhance and promote the wise use of fish, wildlife and habitat for present and future generations.

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