As non-governmental organizations with decades of collective experience with the on-the-ground realities facing BC's forests and forest policy, we provide these comments on the Discussion Paper, *Forest and Range Practices Act Improvement Initiative* and recommendations for necessary changes to BC's *Forest and Range Practices Act*.

### **The Problem**

In the 1980s and early 1990s forests in BC were under a global microscope, and as BC developed its original forest practices framework there was extensive consultation around how to ensure BC's forest management was "the best in the world". What emerged were the principles of 'managing within the natural range', 'managing for connectivity', and 'keeping representative old forest and ecosystems'.

However, only small portions of these principles, which informed but were not fully given effect through the Biodiversity Guidebook, were ever implemented, and today the current state of public forests and grassland ecosystems reflects these short-comings: large parts of BC's forests have been ecologically and economically degraded, with greatly reduced biodiversity, cultural values for Indigenous peoples, timber supply and carbon stock. In addition, the climate crisis causes additional pressure that has not been acknowledged in policy resulting in: increased disturbances such as droughts, flooding, and landslides, both large and small scale; increased wildfire risk; and attempted regrowth of forest on many sites under new and increasing climate extremes. Current forest policy and logging practices exacerbate these impacts in many places.

Management of old forests remains BC's primary strategy to maintain both the unique values associated with BC's old forests and the biodiversity (species, ecosystems and processes) that characterizes super natural British Columbia. Yet current management sets targets far below natural levels (and then doesn't meet them in many areas of the province<sup>1</sup>), does not manage for low elevation connectivity, representation of productivity, and does not prioritize responding to climate change.

These problems are most acute in:

- Ecosystems which naturally have low levels of natural disturbance. These are the most visually spectacular ecosystems in the province, the most ecologically diverse, and tend to be the hardest impacted by logging and other cumulative impacts. This includes coastal temperate rainforests outside of the GBR land use planning region, inland temperate rainforest ecosystems (e.g. interior cedar hemlock ecosystems in the Kootenay / Columbia), and moist and wet mid elevation ecosystems (e.g. Montane Spruce zone).
- Ecosystems where the level of park protection is low. These are typically low elevation ecosystems which are extremely poorly represented in Parks (e.g. Coastal Douglas Fir <1%), Interior Douglas Fir (<2%), Ponderosa Pine ecosystems (~<4%), Boreal White and Black Spruce ecosystems (in the productive boreal forest of NE BC <1% protected).</li>
- Low elevation ecosystems in general. These areas have seen the most cumulative footprint development pressure across the province and are generally poorly managed for their ecological values. They also have the highest biodiversity values (most productive ecosystems), highest use by people, and highest need for connectivity.
- **Higher productivity forest ecosystems.** Within each ecosystem these areas coincide with largest trees, greatest accessibility, highest biodiversity values, and have been extensively logged.

# **Solutions**

We must modernize the *Forest and Range Practices Act* (FRPA) to ensure operational planning and forest practices maintain and where necessary restore healthy, fully functioning forest ecosystems that support ecological, cultural and community resiliency. We urge BC to do so by amending the FRPA, its regulations and related laws to address the following.

## **Climate Change and Resilient Landscapes**

**Resilience:** Ensuring that the full complement of existing species and processes is maintained increases the likelihood that the ecosystem can heal itself in the face of human and natural disturbances. This ability of an ecosystem to cope with disturbance or stress and rebuild itself without losing its defining characteristics is referred to as "resilience". Logging and road-building, along with cumulative effects from other human activities, have dramatically altered forest ecosystems over the past century in ways that have negatively impacted ecological resilience.<sup>2</sup> There is an urgent need for FRPA reforms to address the increasing risk to biodiversity, and to address the ways in which logging and associated access infrastructure exacerbates climate change impacts such as flooding, droughts, landslides and wildfires.

Sustaining our natural life support systems and biodiversity must become a high management priority across the landscape. Regrettably, options for doing so have been dramatically reduced due to past management practices enabled by the FRPA.

Landscapes and Connectivity: Landscape connectivity is a key factor in enabling biodiversity adaptation to climate change.<sup>3</sup> Maintaining sufficient mature and old forest across landscapes – particularly across low elevations (where both species diversity and humans live), but also altitudinally, allows landscapes to potentially adapt to climate change. Mature forests prevent the immediate effects of climate change 'hitting the ground' today – they are resilient because they moderate ground and water temperature and allow movement of species and whole ecosystems.

Managing for landscapes in a climate context also means changing silvicultural practices: a primary goal in every cutblock should be to manage to moderate fire risks, not just 2km from communities – we have learned that is not enough. Maintaining appropriate tree species and avoiding extensive, even-aged, dense stands (which are harder to control when burning) should be the priority – not clearcutting and creating the next dense fuel type. As well, silvicultural practices must recognize the role deciduous species play in both ecosystem resilience and in reducing wildfire risk<sup>4</sup> and end herbicide spraying, which has both ecological and health impacts.

**Water:** Safeguarding this essential ecosystem service in the face of climate change will require enhanced watershed and riparian conservation to maintain water quality, quantity and timing of flow. "Increasing the protection of water sources is a crucial, common sense approach to ensuring better quality and quantity of water downstream for use by both humans and nature"<sup>5</sup> in a climate-impacted world.

**Avoiding further forest degradation:** In Canada and BC degradation of forest ecosystems, primarily from logging, is a major source of greenhouse gas emissions.<sup>6</sup> Degradation may be defined as "direct, human-induced reduction in the forest carbon stocks from the natural carbon carrying capacity of natural forest ecosystems" that does not meet the definition of deforestation.<sup>7</sup> In turn, "natural carbon carrying capacity" is: "the mass of carbon expected to be stored in a forest ecosystem under prevailing environmental conditions and natural

disturbance regimes, averaged over large enough spatial and temporal scales to capture the range of natural disturbance."<sup>8</sup>

FRPA amendments must consider the urgency to mitigate the loss of forest carbon storage and ability of forests to sequester carbon by strengthening protection of carbon rich forests, stopping unnecessary damage to living trees, ensuring longer harvesting cycles and ending practices such as slash burning that are extremely damaging to the climate and human health. Amendments should consider that mitigation in the coming decade will be critical to reduce the rate of warming, that young trees need decades before they start absorbing significant amounts of carbon, and that most carbon gets absorbed in the second half of a tree's natural life span.

Specific amendments proposed:

Amend FRPA to add new government objectives to:

- 1. Avoid further forest degradation and maintain forest carbon stocks.
- 2. Maintain and restore connectivity across landscapes and altitudes and refugia at a landscape level.
- 3. Manage all forest ecosystems with biodiversity as a high management priority.<sup>9</sup>
- 4. Maintain water temperature, quality, quantity and timing of flow.

Amend FRPA to:

- 5. Permit only silvicultural systems that maintain riparian shade, create shaded fuel breaks in landscapes, otherwise promote disturbance-resilient landscapes, and maintain or transition to climate appropriate species.
- 6. Prohibit logging of forests that are unlikely to grow back due to moisture stress.

### Landscape Level Planning

We support inclusive, multi-interest strategic planning exercises co-administered by the Crown and Indigenous nations, resulting in spatially explicit legal zoning and objectives. However, the original biodiversity goals of landscape level planning must not be lost in a new FRPA framework.

Planning must occur within a context of best available western and Indigenous science regarding the needs of ecosystems, rights and values. The old 'three-legged stool' model of planning from the 1990s that focused on political trade-offs between economic, social and environmental interests has been supplanted by experience with ecosystem-based approaches that recognize that healthy ecosystems are the foundation of healthy human communities, cultures and economies. This means managing forests for the long-term persistence of species, systems, communities, age-classes, and relationships.

Specific amendments proposed:

- 7. Legally establish in the FRPA minimum targets for old growth and mature forest retention, and where necessary recruitment, by ecosystem and productivity class. See Appendix 1 for proposed targets.
- 8. Mandate a provincial "Science Council" involving experts in both Western and Indigenous science to evaluate the condition of forest ecosystems and recommend old growth and other biodiversity targets (that exceed legal minimums) to be applied through landscape level planning as they become available.

The Science Council could also be mandated to periodically evaluate the effectiveness of legal objectives.

- 9. Set out in legislation the content and approval requirements for landscape plans, as well as mechanisms for legalization of zones and objectives flowing from these plans so that they direct operational planning and practices. For example:
  - a. Spatial allocation of old growth management areas, prioritizing maintaining interior forest conditions and connectivity, to ensure an effective landscape level reserve system.
  - b. Access management planning for roads in watersheds/landscape units that minimizes road building, deactivates roads in a timely manner, and sets out road mitigation requirements.
  - c. Require mapping and reserves for core and connectivity habitat for carnivores, prey species and all species at risk. Minimum of 60% secure habitat (> 500m from road) in all LUs.
- 10. Ensure landscape planning is multi-interest (including, communities, environmental non-governmental organizations, among others) and co-managed by provincial and Indigenous governments.

# **Public Trust**

Regaining public trust will require substantive change in the way forests are managed in BC as well as greater transparency and opportunities for meaningful participation, particularly for communities most directly impacted by decisions. In addition, public trust is intimately linked to oversight and accountability: the public needs to clearly see public values set out in enforceable objectives that are demonstrably achieved on the ground, post-logging.

#### Specific amendments proposed:

- 11. Require licensees to provide sufficient information for provincial decision-makers to evaluate operational plans and proposed forest operations for consistency with legal objectives and approval tests. Require decision-makers to provide a publicly available, written rationale and supporting data for decisions that addresses public comment.
- 12. Provide meaningful and timely opportunities for public engagement at all levels of forest planning, including making publicly available information such as surveys, assessments and studies relied on by licensees to demonstrate consistency with government objectives, approval tests and statutory requirements. Require licensees and provincial decision-makers to demonstrate how public comment informed proposed plans, operations and approval decisions.<sup>10</sup>

These proposals are intended to create incentives for good planning and transparency regarding information about tenured lands and provincial forests. If they prove unsuccessful in doing so, mandatory requirements for specific assessments and studies could be regulated in future.

# **Resource Values and Objectives**

A new FRPA should legislatively establish clear, measurable legal objectives that prioritize the protection of ecosystem values over timber, and strengthen minimum practice standards for forest ecosystem values, based on best available Western and Indigenous science. Priorities for reform should include:

- 13. Remove the constraint "without unduly reducing the supply of timber from British Columbia's forests" from all FRPA legal objectives and from the Government Actions Regulation. Add the constraint "without unduly reducing the resilience of ecosystems" to timber and other 'use' objectives.
- 14. Legally establish a hierarchy of objectives that prioritizes maintaining and where necessary restoring ecosystem composition, structure and function, recognizing that without healthy ecosystems other social, economic and cultural objectives cannot be met.
- 15. Move legal objectives from the Forest Planning & Practices Regulation to the FRPA.
- 16. Establish biodiversity as a high management priority in all forest ecosystems through an explicit FRPA objective. Amend the FRPA to provide for spatially explicit old growth retention targets, which must be met in areas with representative productivity. See Appendix 1.

### **Oversight and Accountability**

The current degree of reliance on professionals, particularly their role in certifying legal compliance in the FRPA is both socially unacceptable and environmentally risky. The right and responsibility of the provincial government to act to protect the public interest and to uphold the Crown's constitutional duties to Indigenous nations is a critical aspect of accountability. As the province's recent Professional Reliance Review noted:

"Statutory decision makers should be able to reject plans that are unlikely to meet government objectives, that do not contain sufficient information to make that determination, or that present an unacceptable risk to third parties or resource values (Rec. 87, relates to FRPA, s.16).

We also concur with the Review's recommendation that the practice of compliance certification by professionals be ended. "The determination of compliance with legal requirements is a government function that should not be delegated" (Recommendation 92, relates to FRPA s.16(1.01), (1.2)).

#### Specific amendments proposed:

- 17. Before approving operational forestry plans and before cutting or road permits are issued, require provincial decision-makers to determine whether proposed forest operations are consistent with:
  - a. maintaining and where necessary restoring healthy, fully functioning forest ecosystems that support ecological, social and cultural resiliency, and
  - b. the United Nations Declaration on the Rights of Indigenous Peoples.
- 18. Provide that statutory decision-makers may not approve an operational plan that proposes timber harvesting or road-building in an ecosystem that it is at high risk. High risk ecosystems must be defined to include:
  - a. Ecosystems in which spatially explicit old growth retention targets (as set out in Appendix 1) are not being met with forests of representative productivity.
  - b. Critical habitat of a species at risk or habitat necessary to meet provincial wildlife and habitat objectives.
  - c. If proposed logging would involve clearcutting in a domestic use watershed.

- 19. Other areas that should be considered for inclusion in the definition of high-risk ecosystems include:
  - a. Areas of cover needed to maintain cool temperatures and stream integrity for fish streams, in line with meeting fisheries objectives and the Wild Salmon Policy.
  - b. Areas identified by Indigenous nations or local communities as being at high risk (e.g., through Indigenous land use plans or local community plans).
- 20. Provide that a statutory decision-maker may not approve an operational plan or issue a cutting or road permit in the absence of sufficient information to satisfy themselves that the above tests are met.
- 21. Require that statutory decision-makers provide written reasons demonstrating how proposed logging and road-building are consistent with statutory tests, legal objectives, Indigenous rights and public comment.
- 22. Provide for appeals of operational planning approvals by any interested party to the Forest Appeals Commission.
- 23. Fully implement any other FRPA-related recommendations in the 2018 Professional Reliance Review.

Thank you for the opportunity to provide feedback on this important piece of BC forestry legislation. Several of the signatories below may also provide separate submissions with specific concerns, experiences and recommendations they have on FRPA. If you have questions about the coordination of this specific submission please contact Lisa Matthaus, Organizing for Change, at <u>lisa@organizingforchange.org</u> or 250-888-5194.

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Natural Disturbance	Old Minimums*	Mature (and old)
Type (NDT)		minimum*
1	>19 – 28%	51 – 54 %
2	13%	42 – 51%
3	10-21%	25 – 39%
4	19%	51%

#### **APPENDIX 1: Proposed Old & Mature Retention Targets**

\* range applies to different biogeoclimatic variants, as per Biodiversity Guidebook.



Figure 2. These are the proposed numbers – in relation to current and evidence based natural. Just showing NDT1 and 2 for reference

An alternative approach to address the conservation gap for old-growth forest and intact forests undisturbed by industrial logging has been recommended in a new report by University of Victoria's Environmental Law Clinic<sup>11</sup>. The key recommendation is to use the minimum threshold established in the Great Bear Rainforest and require 30% of old-growth set aside by ecosystem and landscape unit in other parts of the province where the majority of forests are naturally old-growth like in the Great Bear Rainforest (low level of natural disturbance, e.g. Vancouver Island, South Coast, Inland Temperate Rainforest). Where old-growth is reduced to less than 30%, this goal will require a restoration strategy.

Much of the scientific basis for old-growth targets, in particular for old-growth ecosystems with low levels of natural disturbance, already exists in form of reports by the Coast Information Team<sup>12</sup> for the Great Bear Rainforest.

In regions with forests with higher levels of natural disturbance and a smaller amount of natural old-growth, the 30% target should be applied to set aside those forests that have the highest value for biodiversity (in most cases these forests would have a combination of different stand ages, representative for the ecosystem). The recommendation to set aside 30% of the forest for ecological integrity is consistent with a call from experts recommending to aim for the goal for 30% protection globally by 2030<sup>13</sup>.

<sup>1</sup> In a 2018 analysis in the Kootenays, 47 of 220 LU x BEC combinations did not meet legal targets outlined in the land use plan. Mackillop 2018. FLNRORD Report.

<sup>2</sup> Biodiversity BC, Taking Nature's Pulse (2008). Online:

http://www.biodiversitybc.org/assets/pressReleases/BBC\_StatusReport\_Web\_final.pdf

<sup>3</sup> For the past thirty years, maintaining or improving connectivity across landscapes has been the action most frequently recommended by scientists for enabling biodiversity adaptation to climate change: See e.g., Nicole Heller and Erika Zavaleta, "Biodiversity management in the face of climate change: A review of 22 years of recommendations." Biological Conservation 142 (2009) 14 at 18.

<sup>4</sup> Terrier, Aurélie & Girardin, Martin & Perie, Catherine & Legendre, Pierre & Bergeron, Yves. (2013). Potential changes in forest composition could reduce impacts of climate change on boreal wildfires. Ecological applications : a publication of the Ecological Society of America. 23. 21-35. 10.2307/23440814.

https://www.researchgate.net/publication/236050043\_Potential\_changes\_in\_forest\_composition\_could\_reduce\_impacts\_ of climate change on boreal wildfires

<sup>5</sup> Bob Sandford, Climate Change Adaptation and Water Governance: Background Report (Vancouver: Simon Fraser University Adapting to Climate Change Team, 2011) at 3.

<sup>6</sup> Recent provincial data re BC's emissions from forests indicates 43 million tonnes from logging and 4 million tonnes from slash burning. See Jim Pojar, "Forestry and Carbon in BC", prepared for Skeena Wild, page 20-21, page 20-21. <u>http://skeenawild.org/images/uploads/docs/Pojar-7mythsfinal-2019\_copy.pdf</u> Or see Sierra Club BC's report 'Hidden, ignored and growing': B.C.'s forest carbon emissions, prepared by Jens Wieting, January 2019 <u>https://sierraclub.bc.ca/wp-content/uploads/SCBC-Forest-Emissions-Report-Jan-19.pdf</u>

<sup>7</sup> B. Griscom, D. Ganz, N. Virgilio, F. Price, J. Hayward, R. Cortez, G. Dodge, J. Hurd, F. L. Lowenstein, B. Stanley. 2009. The Hidden Frontier of Forest Degradation: A Review of the Science, Policy and Practice of Reducing Degradation Emissions. The Nature Conservancy, Arlington, VA. 76 pages; see also Gupta, R.K. & Rao, D.L.N. (1994) Potential of wastelands for sequestering carbon by reforestation. Current Science, 66, 378–380. The authors further note:

"In maintaining consistency with the Kyoto Protocol, we stress the importance of limiting definitions of forest degradation to anthropogenic activities, such as logging, fire, and fuelwood harvest. The emphasis on carbon stocks provides a real means to measure degradation. Natural carbon stock fluctuations (such as natural fire and hurricane damage) are not designated as degradation in our definition and would be encompassed within the natural carbon carrying capacity. Time-averaged natural carbon carrying capacities vary with landscape, and provide the best indicator of the appropriate baseline state from which to gauge degradation. The use of a different indicator than carbon carrying capacity risks reducing incentives to maintain forests in their natural state and could result in diminished opportunity for credited emissions reductions. In specifying performance periods as the time frame, we exclude temporary changes in carbon stocks, while at the same time provide a realistic means to operationalize the definition. By excluding areas that would be considered "deforested" by current definitions, we avoid double counting issues."

<sup>8</sup> Ibid.

<sup>9</sup> High Biodiversity Emphasis Option as understood in the Biodiversity Guidebook. A political decision was made more than twenty years ago with the advent of forest practices regulation that 90% percent of the landscape would be managed as though biodiversity were not a "high management priority," and up to 55% would be managed so that "the pattern of natural biodiversity will be significantly altered, and the risk of some native species being unable to survive in the area will be relatively high", i.e., Low Biodiversity Emphasis Option. See Province of British Columbia, *Biodiversity Guidebook*. Online: https://www.for.gov.bc.ca/hfd/library/documents/bib19715.pdf

10 Ibid.

<sup>11</sup> Applying Solutions from the Great Bear Rainforest Agreements to Vancouver Island, the South Coast, and Beyond <u>https://sierraclub.bc.ca/wp-content/uploads/ELC-Applying-solutions-from-GBR-2019.pdf</u>

<sup>&</sup>lt;sup>12</sup> Coast Information Team reports https://www.for.gov.bc.ca/tasb/slrp/citbc/abo.html

<sup>&</sup>lt;sup>13</sup> https://www.nationalgeographic.com/environment/2019/04/science-study-outlines-30-percent-conservation-2030/