

OLD GROWTH FOREST MANAGEMENT IN BRITISH COLUMBIA : **TIME FOR A PARADIGM SHIFT**

**A Submission to the Old Growth Strategic Review Panel
Yves Mayrand - Victoria - 30 January 2020**

1. Summary of proposals

Proposal 1. The Panel should recommend a simple, clear, authoritative and enforceable working definition of the Old Growth Forest (OGF) in B.C., to be officially adopted by the Government and used for provincial legislation and public policies dealing with the OGF in B.C. This definition should be based on the absence of disruption from commercial or industrial logging or tree harvesting activities in the remaining patches of natural B.C. forest where stands of old-age trees are naturally present.

Proposal 2. The Panel should recommend as part of its Report that the Government propose for adoption by the Legislative Assembly of B.C. a specific act respecting the protection and management of the OGF in B.C. and propose related amendments to the *Forest and Range Practices Act* and the *Land Act* for consistency and implementation purposes.

Proposal 3. The Panel should provide as part of the Report a map, or series of maps, showing the geographical location and delineation of the OGF located within the territory of the Province of B.C., discretely on: 1) Crown land; 2) other public land, including national, provincial and local parks, reserves and conservancies; 3) First Nations lands; 4) First Nations land claim areas; and 5) private lands.

Proposal 4. The map, or series of maps, used and published by the Panel as part of its Report, should also separately delineate the geographical areas of the remaining patches of the OGF that are presently : 1) fully protected from commercial or industrial logging or timber harvesting activities under the existing laws and policies currently in effect in B.C.; 2) not fully protected from commercial or industrial logging or timber harvesting activities under the existing laws and policies currently in effect in B.C., i.e. still subject to being licensed or auctioned off in the future for such activities; and 3) already licensed or auctioned off for commercial or industrial logging or timber harvesting activities but not yet logged or harvested.

Proposal 5. The Panel should provide as part of its Report a current best estimation of, and a brief outline of the methodology used to estimate : 1) the area covered by the remaining patches of the OGF, in square kilometres or hectares; 2) the ratio of these remaining patches to the original natural OGF footprint; 3) the ratio of protected to non-protected OGF and their respective areas, in square kilometres or hectares; 4) the annual amount, in square kilometres or hectares,

and the annual rate of accretion of protected areas of the OGF over the last two decades (2000-2019); and conversely 5) the annual amount, in square kilometers or hectares, and the annual rate of depletion of the non-protected areas of the OGF through commercial or industrial logging or timber harvesting activities over the last two decades (2000-2019).

Proposal 6. The Report should include a description of the ecosystems found in the OGF within the territory of B.C., as well as an up-to-date and comprehensive survey or inventory of the plant and animal species present in the OGF, their diverse characteristics and currently estimated quantities, including the plant and animal species that are endemic to the OGF, those species whose presence and survival in the foreseeable future depend on the preservation of the OGF ecosystems, and those species that are actually listed as part of the species at risk list.

Proposal 7. The Panel should give due consideration to a statutory and legal framework that is broader than the current B.C. forest management policies and practices, and that fully takes into account the environment, biodiversity, climate change mitigation, and First Nations rights, claims and culture, including the B.C. *Declaration on the Rights of Indigenous Peoples Act*.

Proposal 8. The Panel should request and gather from the various Government Ministries, Crown corporations and Government agencies relevant information and data necessary or useful for the purposes of the Review and the ensuing recommendations on policy options respecting the OGF.

Proposal 9. The Panel should acknowledge that the remaining patches of unprotected OGF in B.C., particularly in the coastal region, should no longer be systematically treated as a renewable natural resource for commercial logging, tree harvesting and mining extraction purposes.

Proposal 10. The values to be considered by the Panel in assessing the various public policy options on the OGF should include heritage values.

Proposal 11. The Panel should acknowledge that a paradigm change must take place in the public policy framework applicable to the remaining patches of the OGF, from managing for the on-going, intensive and unabated commercial exploitation of the OGF to the protection and safeguarding of this irreplaceable natural heritage asset.

Proposal 12. The Panel should avoid giving preponderant weight to the submissions of the forest products industry participants, or giving preferential treatment in its recommendations to the protection of the forest products industry's sectoral economic interests in B.C.

Proposal 13. The Panel should include in the Report an assessment of the importance of the OGF for environmental objectives generally, and more

specifically the impact of the OGF on climate change and the attainment of the climate change mitigation objectives of the Government.

Proposal 14. As part of the assessment of tradeoffs and impacts amongst the various interests and values, the Panel should give due consideration to the comparative growth potential of the B.C. tourism industry and the B.C. forest products industry for employment, economic development and B.C.'s fiscal revenue.

Proposal 15. The new policy framework should provide for an effective and meaningful role to be played by the First Nations and their members in monitoring, protection and enforcement activities within the remaining patches of the OGF located on First Nations lands and land claim areas, and a fair share of the employment and economic rents to be derived from these activities in the remaining patches of the OGF located on First Nations land claim areas.

Proposal 16. The Panel should consider recommending forest management policies that are more effective in leading the B.C. forest products industry to transition, from an indefinite reliance on the commercial logging or timber harvesting of the remaining unprotected patches of the OGF, to fully sustainable second-growth tree harvesting and silviculture over a defined medium-term transition period, including in the areas of the OGF that have already been logged or harvested by the industry in B.C.

Proposal 17. While reporting on old growth forest management policies and practices currently in effect in other jurisdictions, the Panel should assess their relevance for B.C. based on the specific characteristics of the OGF in B.C., and the specific constraints that apply in B.C. with respect to First Nations rights and claims.

Proposal 18. The Panel should consider recommending in its Report, as an interim measure : 1) a requirement to replace the use of clearcutting by the use of partial or selective cutting in the remaining patches of the OGF; and 2) the protection of selected very old tree stands and very sensitive old tree stand areas from commercial logging or tree harvesting activities until the Government concludes its review process and gets a new Act adopted the Legislative Assembly of B.C. on OGF protection and management.

Proposal 19. The Panel should consider recommending in its Report, as an interim measure, a moratorium on permits for the export of raw logs from the remaining patches of the OGF until the Government concludes its review process and gets a new Act adopted the Legislative Assembly of B.C. on OGF protection and management.

2. About the author of this submission

My name is Yves Mayrand and I am a Canadian citizen residing in Victoria. As a resident and taxpayer living in the Province of British Columbia (B.C.), I have a keen interest in matters of importance for communities and residents of British Columbia, and this includes the issues relating to the old growth forest (OGF) in our province.

I have already responded to the online questionnaire (Questionnaire) of the Old Growth Strategic Review Panel (Panel). I consider however that the Questionnaire does not provide an adequate platform for more substantial comment by interested persons, hence the need to make this submission. The Panel's Terms of Reference (Terms of Reference) state under the Heading 'Inclusiveness' that the review process should 'Provide every British Columbian with an opportunity to express their views, as almost all old growth forests are on public land'. I trust therefore that my submission will be duly considered by the Panel.

I am retired, I am not affiliated to any government, party or organization, and I have no financial, commercial or business interest in making this submission. I am making my submission as a personal one, and not on behalf of, in conjunction with, or with the support of, any other person.

I confirm that my submission is intended to be made publicly available, as part of the report of the Panel or otherwise, and thus be in the public domain. I am satisfied that the purpose and contents of my submission meet all the criteria for public disclosure set forth by the Government of British Columbia (Government) on the Government's website (Website) applying to the Old Growth Strategic Review (the Review) initiated by the Government on July 17, 2019 with the appointment of the Panel.

3. Preliminary remarks

First, I wish to note that I was not able to readily locate general public background information on the Website respecting the statements made and the issues raised in the Panel's terms of reference (Terms of Reference). The extent and quality of public comment on public policy issues is largely dependent on relevant public background information that interested persons can readily access, consult and refer to in their respective submissions, including, in this particular case: 1) a working definition and the essential characteristics of the subject matter under review, i.e. the OGF; 2) relevant official public statistics and data relating to the OGF in B.C.; 3) a summary of applicable treaties, laws, regulations, orders, public policy statements, land use concessions, auctions, licenses and permits issued by national, provincial and local government authorities and their respective corporations and agencies that apply to, or materially affect, the OGF in B.C.; and 4) earlier published studies and reports from national, provincial and local governments and from other sources on the issues to be considered under the Review by the Panel pursuant to the Terms of Reference.

Within the short timeframe that I had available from becoming aware of the Review on December 18, 2019 and the deadline of January 31, 2020 set by the Panel for the filing of submissions, I have attempted to gather as much basic relevant background information as possible, using general public research tools available to me over the Internet and the keywords, terms and acronyms listed in the Appendix to my submission. I have provided some references to the sources of the information that I have found and used for the purposes of my submission so that they can be verified, assessed and expanded by the Panel on its own initiative.

Second, I am not aware of the human, financial and material resources that have been provided specifically and directly to the Panel by the Government for the Review, and which other resources have already been, or will be, requested by the Panel from the Government, its Ministries, Crown corporations and agencies and thus provided in useful time before the Report deadline. I wish to note that the timeframe between the public submission deadline of January 31, 2020 and the Report deadline of April 30, 2020 leaves only three months to index, analyse, assess and summarize the submissions received by the Panel from the public, and that there is no timeline set for subsequent Government consultations and the further public policy development process that will be conducted by the Government.

Third, the Terms of Reference contain a general statement that 'Upon receiving the report, the B.C. government will consider the recommendations and, through consultation, develop new policies and strategies for the management of old growth forests'. There does not appear to be an opportunity for all interested persons who have made submissions to comment on the submissions made to the Panel by other interested persons as, if and when they are made publicly available by the Panel, or subsequently by the Government. Reactions on the positions, statements and recommendations of all the various interested persons would play an important role in clarifying the issues, verifying the facts and assessing the policy options during the following stages of the policy review process.

4. Definition and basic characteristics of the OGF

The starting point for the Review, as well as for the recommendations and the policy options that will follow, is a clear, simple, pragmatic and effective definition of the subject matter under review, i.e. what is the OGF in B.C. In the Terms of Reference, no definition is provided, nor is there any statement of the basic characteristics or attributes of the OGF in B.C.

The Government states that there is no commonly accepted definition of an old-growth forest, and that British Columbian scientists have developed a working definition based on the age when the province's different forest ecosystems typically begin to develop old growth characteristics, i.e. if they contain trees that are more than 250 years old, and some types of interior forests are considered old growth if they contain trees that are

more than than 140 years old¹. The Website then refers to a 24-year-old Biodiversity Guidebook (Guidebook) for a more detailed and technical definition of old growth forest.

The Guidebook² was issued in September 1995 under the authority of the *Forest Practices Code of British Columbia Act*³(FPCBCA), which was essentially repealed and replaced in 2002 by the *Forest and Range Practices Act*⁴ (FRPA). The Guidebook clearly states that Forest Practices Code guidebooks have been developed to support the regulations, but are not part of the legislation, and that the recommendations in the guidebooks are not mandatory requirements⁵. Furthermore, this 99-page Guidebook uses the acronym term ‘OGMA’-Old-growth management area⁶ in connection with the designing of a Forest Ecosystem Network (FEN)⁷, a forest management tool that has since been superseded, and ending with four bullet points under the heading ‘Old-growth management areas⁸. Finally, the Guidebook contains an entry in its Glossary on ‘old-growth management areas’⁹. Unfortunately, this does not amount to a clear, up-to-date, understandable and effective definition of the OGF for public consultation purposes, or indeed for an informed and sound discussion of public policy alternatives and recommendations for the OGF going forward.

The FRPA does not provide a definition of either ‘old growth forest’ or of ‘old growth forest management area’. The *Forest Planning and Practices Regulations*¹⁰ issued under the authority of the FRPA do contain however a definition of ‘old growth forest management area’, but this definition refers to sections 2 and 3 of the FPCBCA, which were repealed in 2002. I was otherwise unable to find a legal definition of the OGF in any of the other B.C. statutes and regulations issued thereunder.

¹ [https://engage.gov.bc/old growth/definition/](https://engage.gov.bc/old%20growth/definition/)

² <http://www.for.gov.bc.ca/hfd/library//documents/bib19715.pdf>

³ (RRSBC 1996) Chapter 159 ; see

http://www.bclaws.ca/civix/document/id/complete/statreg/96159_01

⁴ (SBC 2002) Chapter 69 ; see

http://www.bclaws.ca/civix/document/id/complete/statreg//02069_01.

⁵ See the Preface on page iii.

⁶ See page iv.

⁷ See pages 56 to 59.

⁸ See page 59. It is to be noted that the third bullet point states that ‘OGMAs can be harvested when equivalent old seral stage areas are available’, and the fourth bullet point states that ‘Replacement OGMAs can be brought on stream earlier than would naturally occur through silvicultural interventions designed to promote the key attributes, or through the retention of these attributes during harvesting’.

⁹ ‘**old-growth management areas** : areas that contain or are managed to replace specific structural old-growth attributes, and that are mapped out and treated as special management areas’ , on page 75.

¹⁰ B.C. Reg. 14/2004 O.C 17/2004 ; see

http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/12_14-2004

I was also unable to find generally applicable definitions in the laws or regulations of B.C. for legal OGMA's and non-legal OGMA's, which continue to be used in connection with forestry stewardship plans filed by, and tenure agreements concluded with, forest products industry participants in B.C. It is my understanding that legal OGMA's are in fact OGMA's that have been formally acknowledged by an Order of the Minister, and that non-legal OGMA's are OGMA's that have not been formally acknowledged by such an Order, or that are not intended to be acknowledged by such an Order. I have been unable to locate a consolidated index of legal OGMA's and non-legal OGMA's, which are the very basis for forest management practices currently applying to the OGF in B.C. together with the Biogeoclimatic Ecosystem Classification (BEC) variant, or the related Orders issued by the Minister.

Pursuant to the Cumulative Effects Framework (CEF) variant, the Provincial Old Growth Forest Technical Working Group of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development issued in December 2017 an Interim Assessment Protocol for Old Growth Forest in British Columbia, version 1.1, (Interim Protocol) for consideration by the Value Foundation Steering Committee of the same Ministry. I was unable to find an up-to-date organizational chart for the Ministry, but based on the B.C. Government Directory for the Ministry¹¹, it would seem that both the Working Group and the Steering Committee are no longer part of the current organization of the Ministry. At any rate, I was also unable to find any information on the implementation of the project initiated pursuant to the Interim Protocol.

The Interim Protocol provides an overview of the regulatory context for OGF management as follows :

'2.1 Regulatory Context

Objectives for old growth forest management are established under two forms of legislation in B.C. : the *Forest Practices Code of B.C. Act* and the *Land Act*. Default targets for management of old growth forest are specified in the Provincial Non-Spatial Old Growth Forest Order (PNOGO)(2004), which sets out a percent amount of old forest to be maintained across the province. PNOGO establishes landscape units and sets out targets for the percentage of old forest to be retained within each landscape unit by Biogeoclimatic Ecosystem Classification (BEC) variant, consistent with direction in the Biodiversity Guidebook and the Landscape Unit Planning Guide. Targets may vary by natural disturbance type (NTD 1 to 4) and biodiversity emphasis (Low, Intermediate or High). Separate targets for old growth forest retention for the Okanagan and Merritt TSAs are set out in Appendix 2 of the PNOGO.

To minimize economic impacts to forest tenure holders, the PNOGO contains provisions that allow the use of younger forests to meet old growth forest objectives where equal or better conservation benefits would result. Additionally,

¹¹ <https://dir.gov.bc.ca/>

provisions exist to recruit from younger stands when there is insufficient old growth forest in a variant.

Subsequent land use orders have superseded the PNOGO in many parts of the province. The direction for managing old growth forest forests has evolved as new strategic land use plans are completed and legal objectives established. Earlier orders were established under the *Forest Practices Code Act* and subsequent orders are established under section 93.4 of the *Land Act*. **Some orders contain non-spatial objectives for old growth forest retention. Other orders establish OGMAs as spatially defined areas that meet old growth forest retention targets across the landscape.**' (pages 2-3)(emphasis added)

The Interim Protocol also provides an overview on OGF management approaches as follows :

'2.2 Approaches to Management of Old Growth Forest

Overall, there are generally three approaches to old growth forest management in B.C. :

1. Non-spatial objectives for old growth forest retention – **Targets are set by BEC unit (zone, subzone, variant or site series/site series surrogate) and are typically analyzed by Landscape Unit, unless otherwise specified in the order. Some orders reference their definition of old growth forest from the Biodiversity Guidebook but some have modified definitions.** In northeastern B.C. (Omineca and Northeast regions), old growth forest is managed by natural disturbance unit (NDU) to better emulate natural disturbance patterns in boreal forests.
2. Legal OGMAs – **The boundaries of OGMAs are spatially defined in an Order under the *Forest Practices Code Act* or the *Land Act*. Forest tenure holders must apply results and strategies to meet objectives for OGMAs in their FSPs and must abide by direction in the Order with respect to incursion limits and requirements for replacement.** A number of OGMAs in northern B.C. have also been established under the *Oil and Gas Activities Act* (OGAA).
3. Non-legal OGMAs - **In some regions, the Province has spatially defined OGMAs but they are either (a) in draft form awaiting legal establishment; or (b) will not be made legally binding. Where OGMAs are not intended for legal establishment, tenure holders can choose to use these OGMAs or choose another approach to meeting objectives for old growth forest retention. Once tenure holders include non-legal OGMAs in approved FSPs, they become legal.'** (page 3) (emphasis added)

Finally, the Interim Protocol points out various inconsistencies, deficiencies and data gaps in the OGF management system and concludes the following :

'...The current array of legal Orders represents **negotiated outcomes from strategic land use plans and subsequent processes over many years.** The conceptual model

for old growth forest assessment is simple (**sic**) but its **implementation is made complicated by the complexity of distinct seral definitions, reporting units and targets in the Orders**'. (page 18) (**emphasis added**).

In June 2012, the Forest Practices Board (FPB), continued under the authority of the FRPA, issued a Special Investigation report on the implementation of old-growth retention objectives under the FRPA¹². This report detailed a number of shortcomings in the Government's forest management system and made the following statements in its conclusions :

'The Board found that orders requiring old-growth retention are in place provincially on almost all Crown forested land – including areas where land use plans have not been initiated or completed. Currently, about 55 000 OGMAs (approximately 3 million hectares) have been identified and non-spatial retention requirements apply where OGMAs have not been identified. Approximately two-thirds of the OGMAs are non-legal with the rest made legal by government order.

'... the land use plans themselves are highly variable – some plans include percentages of old forest to be retained and additional direction for delineating OGMAs, while other plans are limited to recommending that the *Biodiversity Guidebook* and/or *Land Unit Planning Guide* be followed.' (page 30) (**emphasis added**)

I was unable to find an up-to-date number of OGMAs or number of legal and non-legal OGMAs currently administered by the Ministry of Forests, Lands, Resource Management Operations and Rural Development.

In short, it would seem that B.C. does not have an up-to-date, clear, authoritative and generally enforceable legal definition of the OGF, while the present regulatory framework applied by the Government to the OGF under the authority of the FRPA and the *Land Act* continues to rely on the use of a huge legacy patchwork of orders, guidelines and practices that are not consistent, up-to-date and effectively enforceable.

There is admittedly a considerable diversity of forests around the world in various stages of condition and growth. There is as well as a wide spectrum of scientific and other literature on what constitutes an old growth forest¹³. However, the whole purpose of the Review is about forests located in B.C., with a special public concern for its remaining patches of the OGF, particularly on Vancouver Island and the rest of the coastal region. Furthermore, the key issues that the Review must deal with for public policy purposes

¹² FPB/SIR/36

¹³ See for example https://en.wikipedia.org/wiki/Old-growth_forest and related references; <http://www.ancientforest.org/what-is-old-growth-forest/>; https://www.researchgate.net/publication/42090009_Old-Growth_Forest_Definitions_a_Pragmatic_view; <http://www.fao.org/3/xii/0042-b1.htm>

revolve around the ongoing commercial or industrial logging or timber harvesting in these remaining patches of the OGF on the one hand, and on the other hand the disruption and resulting depletion of old growth trees caused by such activities in these same forest patches.

The necessary task of adopting a robust and workable definition of the OGF for public policy purposes and the related legislation in B.C. is neither impossible nor intractable as some of the existing literature, Government and industry statements would seem to suggest. Indeed, a definition of the OGF is the first question asked in the Questionnaire. I have therefore looked at a range of definitions and basic characteristics used by various sources, with a view to proposing an answer to that question as requested by the Panel.

The basic characteristics of the OGF in B.C. are widely acknowledged to include the following : 1) absence of disruption from commercial or industrial logging or timber harvesting activities; 2) natural presence of old-age trees with a long lifespan to full maturity and their natural death; 3) presence of multiple natural layers of canopy, and natural gaps in the canopy; and 4) presence of snags (naturally dead standing trees) and naturally-fallen trees and wood debris. These characteristics are consistent with the criteria that the Government has been using *de facto* for the past 25 years for its forest management practices system in B.C. It is also consistent, for example, with statements of the Forest Products Association of Canada (FPAC)¹⁴ and the Ancient Forest Alliance of B.C.¹⁵.

The first of these four basic characteristics can be readily understood, surveyed and applied to a defined forest area because past commercial or industrial logging or timber harvesting activities have been effectively documented for licensing, accounting, corporate records, financial reporting and other purposes, the area can be delineated through the use of modern satellite and geomatic survey tools, and because these activities have left unmistakable and lasting evidence on the ground, including the presence of old growth tree stumps.

Proposal 1. The Panel should recommend a simple, clear, authoritative and enforceable working definition of the Old Growth Forest (OGF) in B.C., to be officially adopted by the Government and used for provincial legislation and public policies dealing with the OGF in B.C. This definition should be based on the absence of disruption from commercial or industrial logging or tree harvesting

¹⁴ See at FPAC.ca, Old-Growth Forests, the following statement : ‘In general, old-growth forests are characterized by one or more of the following structural aspects : the presence of old trees, a significant amount of large diameter coarse woody debris and a complex horizontal and vertical structure’.

¹⁵ <https://www.ancientforestalliance.org/learn-more/common-qas-about-bcs-old-growth-forests/>; under «What is the difference between a second-growth forest and and old-growth forest ?

activities in the remaining patches of natural B.C. forest where stands of old-age trees are naturally present.

The OGF is clearly of great significance and importance in many respects, as acknowledged by the Terms of Reference¹⁶. This submission comments further below on the various dimensions that make this subject matter important for all British Columbians. At present, the importance of the subject matter is however not reflected in a specific enactment voted on by the elected members of the Legislative Assembly of B.C.

A simple, clear, authoritative and enforceable definition of the OGF in B.C. should be the cornerstone of a new B.C. statute that more specifically addresses public policy objectives and requirements for the protection and management of the OGF going forward. A clear commitment by the Government to draft and propose this new law for adoption by the Legislative Assembly of B.C. would signal that the Government is serious about tackling the OGF issues and would provide the necessary impetus for tangible solutions to these issues to come into effect in the near future. This a measure that has been clearly explained and advocated in a study published in 2013 by the Environmental Law Centre Clinic at the University of Victoria¹⁷.

Proposal 2. The Panel should recommend as part of its Report that the Government propose for adoption by the Legislative Assembly of B.C. a specific act respecting the protection and management of the OGF in B.C. and propose related amendments to the *Forest and Range Practices Act* and the *Land Act* for consistency and implementation purposes.

5. Geographical location and delineation of the OGF in B.C.

With a clear working definition of the OGF for the purpose of the Review, the next basic task is to provide an equally clear understanding of the geographical location and extent of the remaining patches of the OGF within the territory of B.C. and their delineation (boundaries). This requires the production of an up-to-date map, or series of maps, containing a delineation of the geographical location and extent of the remaining patches of the OGF in B.C., the relevant First Nations land and land claim areas covered by these patches, the areas that are fully protected, and the areas that are not fully protected but have already been licensed or auctioned off for logging or timber

¹⁶ The Terms of Reference state that ‘Old growth forests are important to British Columbians. They drive a significant portion of the forest industry, supply high-quality products, and support forestry employment. They are attractive sites for tourism and recreation, and provide important habitats for wildlife. They are important for climate change mitigation. Old growth forests and trees are culturally significant to Indigenous Peoples

¹⁷ The Environmental Law Centre Society : An Old Growth Protection Act for B.C.
www.elc.uvic.ca

harvesting activities, or that are still subject to future licensing or auctioning off for such activities under the existing laws and policies currently in effect in B.C.

The Website leads to a basic map of B.C. showing areas of protected and not protected OGF. However, the map is not specifically dated and there is not a time-based series of maps and associated data showing the extent of logging or timber harvesting or the deforestation of the OGF over time¹⁸. Furthermore, this map does not indicate which areas are located respectively on Crown land, other public land such as parks, park reserves and conservancies, First Nations land, First Nations land claim areas, or private lands.

The B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development (Ministry) oversees the delineation of Old Growth Management Areas (OGMAs) used in connection with Forest Development Units (FDUs) and the Forest Stewardship Plans (FSPs) prepared by holders of forest tenure agreements, which are approved by the Government before logging or timber harvesting activities can take place in the relevant OGMAs. A high level search¹⁹ shows that the OGMA datasets: 1) seem to have been published either in 2011 or 2014; 2) are in several cases reserved only for downloading by government users; and 3) are subject to an accuracy and usage warning.

It would seem that, although there is a Government mapping system used in connection with the OGMAs, or for other land use permits, the Ministry's detailed mapping and dataset resources are not necessarily standardized, fully consolidated, up-to-date, reliable and readily accessible to all interested persons.

It is important to note in this regard that the report of the FPB issued in August 2015²⁰ concluded that :

'3. FSPs alone continue to be inadequate as tools for public review and comment. They are difficult to understand, do not provide the type of information the public wishes to see, and often overlap with other FSPs that may have different results, strategies and measures'. (page 21)

It seems that the forest products industry of B.C. faces difficulties as well in finding out conversely the location and extent of the working forest land base for the purpose of commercial logging and timber harvesting activities in B.C.²¹.

¹⁸ <https://engage.gov.bc.ca/app/uploads/sites/563/2019/10/protected-not-protected.jpg>

¹⁹ Under <https://catalogue.data.gov.bc.ca/old-growth-management-areas-legal-all>, and related links

²⁰ FPB/SIR/44

²¹ Council of Forest Industries (COFI) : Smart Future ; A path forward for B.C 's forest products industry ; 'Recommendation 1. Define the working forest land base. Like conservation areas, designate the area that will be available for harvesting and lock in the commitment.'

Certain Environmental Non Governmental Organisations (ENGOS) active in B.C. have apparently attempted to overcome this geolocation deficiency by publishing maps on their own initiative showing the location and extent of the original OGF and the remaining patches of the OGF in the province based on a variety of sources²².

The Ministry has a Basic Mapping group with access to geomatics and spatial information tools, as well as a B.C. Timber Sales Branch (BCTS), a Resource Stewardship Division, a Forecasting and Reporting Section, a Resource Planning and Assessment Branch, a Land Use Planning group, a Forest Policy and Indigenous Relations Division, a Resource Practices Branch and a Forest Inventory group²³. The Ministry should be able to provide the relevant mapping information to the Panel.

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²² See for example <https://sierraclub.bc.ca/vancouver-island-old-growth-logging-speeding-up/>; <https://www.ancientforestalliance.org/learn-more/before-after-old-growth-maps/>

²³ See <https://dir.gov.bc.ca>

6. Survey or inventory of plant and animal species and of the OGF ecosystems

Given the Overview statement in the Terms of Reference²⁴, it would seem important for the purpose of the Review to have : 1) a description and basic understanding of the ecosystems present in the OGF within the territory of B.C. and their essential characteristics; and 2) an up-to-date and comprehensive survey or inventory of the plant and animal species present in the OGF, their diverse characteristics and currently estimated quantities, including the plant and animal species that are endemic to the OGF, those species whose presence and survival in the foreseeable future depend on the preservation of the OGF ecosystems, and those species that are actually part of the species at risk list.

In this regard, there is a wide range of information available from a variety of public sources, including government and other official websites, published academic research, ENGOs, as well as specialized and general publications with respect to ecosystems present in old growth forests that are specifically relevant to the OGF in B.C., including the Government itself through the Ministry of Forests, Lands, Natural Resource Operations and Rural Development²⁵, its various other Ministries, Crown corporations and agencies²⁶. What seems to be missing however is a clear, up-to-date and comprehensive inventory readily available to inform the general public.

Proposal 6. The Report should include a description of the ecosystems found in the OGF within the territory of B.C., as well as an up-to-date and comprehensive survey or inventory of the plant and animal species present in the OGF, their diverse characteristics and currently estimated quantities, including the plant and animal species that are endemic to the OGF, those species whose presence and survival in the foreseeable future depend on the preservation of the OGF ecosystems, and those species that are actually listed as part of the species at risk list.

7. Applicable statutory and legal framework

The Review is squarely placed under the responsibility of the Minister of Forests, Lands, Natural Resource Operations and Rural Development (Minister)²⁷. One could get the impression at first glance that the Review will be mainly conducted based on a timber resource management perspective pursuant to the FRPA and the Regulations thereunder. However, the statutory framework relating to forestry matters under the

²⁴ '(Old Growth forests) ... provide important habitats for wildlife'.

²⁵ The Ministry has a Species at Risk Recovery Branch, a Species and Ecosystems group, and a Wildlife and Habitat Branch with a specific Habitat group.

²⁶ See for example <https://www.for.gov.bc.ca/hfd/pubs/Docs/Mr/Mr113/forests.htm>

²⁷ The Terms of Reference require the Report to be provided to the Minister.

Minister's responsibility is more wide-ranging²⁸. Furthermore, the range of acts for which the Minister is responsible extends beyond forestry management matters²⁹.

On the environment and climate change dimensions, other B.C. acts for which the Minister of Environment and Climate Change Strategy is responsible are relevant for the purpose of the Review³⁰

The nexus of B.C. laws that should be considered in the Review process also includes the *Declaration on the Rights of Indigenous Peoples Act* passed by the Legislative Assembly of B.C. in November 2019 and the common law applicable in B.C. with respect to the duty to consult.

Canada's international treaty obligations or commitments on international trade, biodiversity and climate change mitigation, and some federal laws may also inform the Panel in the process of considering potential tradeoffs and impacts amongst the various interests and values pursuant to the Terms of Reference³¹.

As part of the Review process, the Panel should be reasonably briefed on the relevant treaties, statutes, regulations, orders, public policies, Government agreements and binding commitments, and pending land claim litigation materially affecting the management of the OGF, without the need however to specifically comment on or provide formal legal opinions in this regard as part of the Report.

Proposal 7. The Panel should give due consideration to a statutory and legal framework that is broader than the current B.C. forest management policies and practices, and that fully takes into account the environment, biodiversity, climate change mitigation, and First Nations rights, claims and culture, including the B.C. *Declaration on the Rights of Indigenous Peoples Act*.

²⁸ See the *Forest Act*, the *Forest Stand Management Fund Act*, the *Forestry Revitalization Act*, the *Great Bear Rainforest (Forest Management) Act*, the *Land Act*, the *Private Managed Forest Land Act*, the *Wood First Act* and the *Zero Net Deforestation Act*.

²⁹ See the *Environment and Land Use Act*, section 5(f) of the *Environmental Management Act*; the *Heritage Conservation Act*; sections 4(2)(d), 4(2)(b), (e), (f) and (g), and section 6.1 of the *Ministry of Environment Act*, the *Natural Resource Compliance Act*, the *Water Protection Act*, the *Water Sustainability Act*, the *Water Users Communities Act*, and the *Water Utility Act*.

³⁰ See the *Climate Change Accountability Act*, the *Ecological Reserve Act*, the *Environmental Assessment Act*, certain sections of the *Land Act*, the *Protected Areas of British Columbia Act*, and certain sections of the *Wildlife Act*.

³¹ See the *Canada Parks Act*, the *Canada Wildlife Act*, the *Export and Import Permits Act*, the *Federal Sustainable Development Act*, the *Indian Act*, the *Migratory Birds Convention Act* and the *Species at Risk Act*.

8. Information and data gathering

The Terms of Reference mandate the Panel to meet with a variety of governments and organizations and to examine old growth management from a variety of perspectives including employment, economic, social, cultural, environmental and climate change values³². It follows that several Ministries, Crown corporations and Government agencies have an interest in, and the responsibility to, assist in the gathering of relevant information and data by the Panel.

The Terms of Reference state that in order to facilitate an effective process, the Government will provide assistance as requested. The onus is therefore on the Panel to make such requests in an organized manner and on a timely basis.

Proposal 8. The Panel should request and gather from the various Government Ministries, Crown corporations and Government agencies relevant information and data necessary or useful for the purposes of the Review and the ensuing recommendations on policy options respecting the OGF.

9. Should the remaining OGF be treated strictly as a renewable natural resource?

The OGF forms a distinctive, unique and complex set of natural ecosystems that have evolved since the last ice age, with the presence of trees that have grown over several centuries and even beyond a millenium. Should these very long-living lifeforms be reasonably considered as a renewable natural resource? I submit that the answer is no.

First, I did not find empirical studies clearly and convincingly demonstrating that areas of the OGF that have been commercially logged or harvested in the past have actually reverted to their original condition, or that there is a high probability that they will ever do so over time. This is not surprising since the OGF was extensively clear cut in the past before its original condition was properly assessed and documented, and since the distinctive trees present in the OGF take up to several centuries, and in some cases more than a millenium, to fully mature. The probability of full recovery of logged old growth forest would tend towards zero where the logged tracts of the OGF have undergone, or will undergo in the future, further cycles of commercial logging or timber harvesting.

The actual recovery status of old growth forest tracts of land that were commercially logged or harvested in the past, particularly in clearcut areas, shows the extent and persistence of the disruption that results for the OGF ecosystems. The visual state of the landscape in commercially logged or harvested areas of the OGF is driven not only by the continued use of clearcutting practices but also by the apparent lack of effective replanting, silviculture or other restoration practices in some of the affected areas.

³² See note 13 above, and the statement in the Terms of Reference that 'To facilitate an effective process, the B.C. government will provide assistance as requested'.

The desolation left by OGF clearcutting clearly raises the level of concern by the general public about the forest management practices in effect.

There are reports by persons involved on the field with the replanting of seedlings and other reforestation initiatives to the effect that these initiatives have proved to be unsuccessful in some areas of logged OGF, particularly clearcut areas, or that it is not realistic to assume, in the present state of knowledge, technology and reforestation practices, that the OGF can actually be fully restored to its original condition through human intervention.

Second, even assuming that a full restoration of the OGF ecosystems can and will naturally occur over time after commercial logging or tree harvesting activities, the timespan required is such that several animal and plant species in the OGF will inevitably lose their unique ecosystems and critical habitat for many generations to come.

Third, as a result of continued commercial logging or tree harvesting activities in the OGF, more of the unique ecosystems of the OGF will be lost for many generations of humans to enjoy, whether as native residents or as visitors.

There is a substantial body of evidence on the disruptive effect of mining and extraction activities on natural ecosystems. The commercial exploitation of mineral deposits can also have lasting deleterious effects on natural forest ecosystems where they take place. This holds true for the OGF.

Proposal 9. The Panel should acknowledge that the remaining patches of unprotected OGF in B.C., particularly in the coastal region, should no longer be systematically treated as a renewable natural resource for commercial logging, tree harvesting and mining extraction purposes.

10. Does the OGF have a heritage value?

As noted earlier³³, the Minister is responsible for the the application of the *Heritage Conservation Act*³⁴. The Act contains three key interrelated definitions³⁵. The definitions

³³ See Note 25 above.

³⁴ (RSBC 1996) Chapter 187. See also the latest amendments <https://www.leg.bc.ca/parliamentary-business/legislation-debates-proceedings/41st-parliament/4th-session/bills/progress-of-bills>

³⁵See Section 1 : **'heritage value'** means the historical, cultural, aesthetic, scientific or educational worth or usefulness of a site or object ; **'heritage site'** means, whether designated or not, land, including land covered by water, that has heritage value to British Columbia, a community or an aboriginal people ; **'heritage object'** means, whether designated or not, personal property that has heritage value to British Columbia, a community or an aboriginal people;

of 'heritage value' and 'heritage site' are relevant for the treatment of at least some of the remaining patches of the OGF. The Ministry of Forests, Lands, Natural Resource Operations and Rural Development has a Heritage Branch that is presumably involved in the identification and protection of heritage sites³⁶.

The Terms of Reference clearly acknowledge that the 'Old growth forests and trees are culturally and socially significant to Indigenous Peoples'. This seems to fall squarely within the definition of 'heritage value'. However, I was unable to find information respecting policies specifically designed to protect heritage sites in the remaining patches of the OGF that are 'culturally and socially significant to Indigenous Peoples'.

A reasonable case can be made as well that the remaining patches of the OGF, in whole or in part, have heritage value for many other constituencies in B.C., and potentially world heritage value. The consideration of heritage values is therefore of material significance for public policy and strategic options with respect to the OGF in B.C.

Proposal 10. The values to be considered by the Panel in assessing the various public policy options on the OGF should include heritage values.

11. Should the OGF continue to be managed with a view to the indefinite commercial exploitation of the OGF?

The OGF is presently managed by the Government with a view to ensuring continuing commercial logging and timber harvesting activities within the OGMAs. It is also managed by the Government with a view to continued revenue generation through licenses, stumpage fees and log export fees. This system has led to an extensive and growing depletion of the OGF. Under the present policy framework, there is not only the opportunity but also an incentive for this to continue unabated for the foreseeable future, ultimately until the complete, or near complete, depletion of the OGF in unprotected patches of the OGF in B.C.

Commercial logging and tree harvesting activities are essentially based on the exploitation of a finite pool of natural timber resources. There is an inherent economic and financial incentive for the forest products industry to increase marginal cost efficiencies and maximize profits in the short to medium term as part of its activities. This leads to the targeting of the higher-yield forest areas located in the OGMAs for logging and timber harvesting, and a reluctance to incur additional marginal costs in the form of logging or harvesting of lesser-yield forest areas, replanting logged or harvested areas and using silviculture instead of clearcutting. The resulting effect is the complete or near-complete depletion of the remaining patches of unprotected OGF.

From a Government fiscal standpoint, there is an equally perverse effect at play. As the player that sets the rules for the commercial exploitation of natural resources on Crown land but that also collects substantial annual revenue from this exploitation, the

³⁶ <https://dir.gov.bc.ca/>

Government has the opportunity and an incentive to set and apply the rules so as to maximize revenue from natural resource exploitation in the short to medium term in order to avoid troublesome budget and treasury realignments. Not surprisingly, there are reports that the Ministry's B.C. Timber Sales Branch (BCTS) may be exploiting the clearcutting of some of the remaining patches of the OGF in violation of the the old-growth logging rules in effect³⁷.

There is of course much discussion on sustainability and sustainable practices in forest management going forward. It is rather trite to state that the forest products industry of B.C. should be sustainable in the long run. The real forest management issue is setting new public policies and measures that will actually ensure the long-term sustainability of the forest products industry of B.C., because such measures inevitably require significant change from the *status quo*, as well as sustained efforts, monitoring, accountability and additional costs.

If one considers further that the remaining patches of the OGF are in fact an irreplaceable natural heritage asset, it follows that there must be a fundamental paradigm change in the relevant public policy framework, from managing the remaining unprotected OGF areas for on-going, intensive and unabated commercial logging and timber harvesting, to protecting and managing this irreplaceable natural heritage asset for the broader and more lasting benefit of present and future generations, as well as ensuring that the forest products industry of B.C. will actually achieve long-term sustainability without having to rely indefinitely on the commercial exploitation of the OGF.

Proposal 11. The Panel should acknowledge that a paradigm change must take place in the public policy framework applicable to the remaining patches of the OGF, from managing for the on-going, intensive and unabated commercial exploitation of the OGF to the protection and safeguarding of this irreplaceable natural heritage asset.

12. Should the public policy framework on the OGF be based broadly on the general public interest or on the narrow protection of a single economic sector?

A basic function of government in a democracy is to develop, promote and apply, through legislation and regulation, public policies that are in furtherance of the general public interest. The concept of public interest is broader and more encompassing than the consideration of a single economic sector and the private interests present in that sector. The Government should seek to achieve fair, reasonable and sustainable outcomes for the lasting benefit of a broad spectrum of constituencies. It should take into account fundamental concerns such as the environment, biodiversity and climate change. It also should ensure a fair, reasonable and effective balance between the interests of the majority and the legitimate interests of minorities, which in our country

³⁷See for example <https://thenarwhal.ca/indicative-of-a-truly-corrupt-system-government-investigation-reveals-bc-timber-sales-violating-old-growth-logging-rules/>

and province include the First Nations. Finally, it should take into account the interest of future generations.

The Terms of Reference state clearly that 'Considering all input, including potential tradeoffs and impacts amongst the various interests and values will be a key element of the panel's deliberations and work'.

Proposal 12. The Panel should avoid giving preponderant weight to the submissions of the forest products industry participants, or giving preferential treatment in its recommendations to the protection of the forest products industry's sectoral economic interests in B.C.

13. Environmental Considerations

The environment has become a fundamental dimension of public policy and an integral part of government operations, both in Canada and in B.C. The amount of interest in, and focus on, environmental issues during the last federal elections and the last provincial elections in B.C. are strong indicators of the importance of the environment for public policy development.

The environmental dimension can be seen to include the consideration of values respecting ecosystems, climate change, air and water quality, wildfire control, pest control, fish spawning, biodiversity and the protection of species at risk.

As noted earlier³⁸, B.C. has its own Ministry of Environment and Climate Change Strategy. The Minister of Forests, Lands, Natural Resource Operations and Rural Development has however direct responsibility for certain environmental considerations as part of his own portfolio³⁹. This is why the Ministry of Forests, Lands, Natural Resource Operations and Rural Development has various branches and groups specifically focused on environmental values⁴⁰.

However, it is not readily apparent how the work of internal environmental resources is reconciled and integrated with the work of natural resource operations and timber sales within the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, or how environmental resources are coordinated as between the two

³⁸ See section 7. Applicable statutory and legal framework above.

³⁹ See the *Environment and Land Use Act*, section 5(f) the *Environmental Management Act*, sections 4(2)(b), (d), (e), (f) and (g) of the *Ministry of Environment Act*, the *Riparian Areas Protection Act*, the *Water Protection Act*, and the *Water Sustainability Act*

⁴⁰ The Fish and Aquatic Habitat Branch, the Fish and Wildlife Policy group, the Cumulative Effects & Integrated Monitoring group, the Species at Risk Recovery Branch, the Species and Ecosystems group, the Wildlife and Habitat Branch, the Habitat Section, and the Climate Change and Integrated Planning Branch..

Ministries, more specifically in relation to the OGF. The Panel may be able to provide some clarity on how this is actually achieved, and how effective this is.

There is a considerable body of literature respecting the importance of old growth forests for the environment. There is even research on the effect of coastal forests on the mitigation of damage from tsunamis, which is a major risk factor for the B.C. coastal region. I will not attempt to summarize this literature. It seems however widely acknowledged that the OGF is a significant contributor to natural carbon capture and storage and the necessary base for unique forest ecosystems.

Climate change has brought to the fore a more pressing new environmental dimension in public policy. In line with the robust body of scientific research and empirical evidence now available on climate change and its devastating effects, the public in B.C.⁴¹, the Government⁴², the investment community⁴³ and the forestry sector⁴⁴ all acknowledge that climate change considerations must not only be on the radar screen but must also be an integral part of actual operational plans and strategies going forward.

There are reports that the clearcutting currently practiced by the forest products industry of B.C. on the OGF has a net negative effect on climate change mitigation measures and the attainment of government GHG reduction objectives⁴⁵.

Proposal 13. The Panel should include in the Report an assessment of the importance of the OGF for environmental objectives generally, and more specifically the impact of the OGF on climate change and the attainment of the climate change mitigation objectives of the Government.

14. Alternative non-depleting uses of the OGF

The potential for increased rents from non-depleting uses of the OGF is increasingly recognized by the Government and by the private sector. Tourism, hospitality, nature adventure, guided tours, kayaking, camping, hiking, recreational fishing and hunting activities are regularly and abundantly promoted by the Government and its agencies.

⁴¹ 120K people pack Vancouver, Victoria streets for Climate Strike, marches held around B.C. ; Global News ; September 27, 2019 ; <https://globalnews.ca/news/5962218/vancouver-climate-strike-2/>

⁴² See the Government's CleanBC Plan.

⁴³ See Mercer, Investing in a Time of Climate Change-The Sequel 2019

⁴⁴ See Forest Products Association of Canada (FPAC) ; <https://www.fpac.ca/sustainable-forestry/30by30/>

⁴⁵ See Sierra Club BC : 'Clearcut Carbon - A Sierra Club BC report on the future of forests in British Columbia – December 2019'.

The Ministry of Tourism, Arts and Culture reports on the importance and growth potential of this sector of the economy in B.C.⁴⁶. The revenue contribution of that sector to the economy of B.C. is growing year after year as the actual provincial tourism revenue growth was 7.9% in 2016/2017 and 8.4% in 2017/2018⁴⁷. Unfortunately, the 2018/2019 Annual Service Plan Report of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development does not provide comparable data on the contribution of the forest products industry sector to B.C.'s economy.

Trade and Invest BC provides some relevant information on the characteristics and prospects of the B.C. forest industry⁴⁸ and the B.C. tourism sector⁴⁹ respectively. It is interesting to note the Tourism Sector Snapshot in this document, which makes the following statements :

'Tourism is one of British Columbia's leading economic sectors and is significant in every region of our province'

'The tourism industry makes a significant contribution to the B.C. economy compared with other primary resource industries, **including forestry**, agriculture and fisheries, and mining and oil and gas extraction'. (**emphasis added**)

A significant factor in the growth of the tourism industry and related activities is undoubtedly the unique natural treasures of B.C., which are marketed under the Super, Natural B.C. registered trademark and brand, and the province's local, national and international reputation and goodwill in this regard.

Conversely, the reputation and goodwill of the B.C. tourism industry may well suffer from reports of further clearcutting and depletion of the OGF, the destruction of unique ecosystems, or the ensuing negative impact on climate change mitigation.

Proposal 14. As part of the assessment of tradeoffs and impacts amongst the various interests and values, the Panel should give due consideration to the comparative growth potential of the B.C. tourism industry and the B.C. forest products industry for employment, economic development and B.C.'s fiscal revenue.

⁴⁶ See Ministry of Tourism, Arts and Culture, 2018-2019 Annual Service Plan Report, page 8 : 'Tourism is a key sector of B.C.'s economy, contributing \$9 billion in 2017 in provincial GDP with the potential for even further growth. B.C.'s international reputation for our natural beauty and recreation opportunities are the foundation to sustained success. B.C. tourism businesses attract people from around the world to our province and bring jobs and economic growth to our communities. Tourism presents an opportunity for reconciliation and economic development in Indigenous communities'.

⁴⁷ Ibid., page 9.

⁴⁸ <https://www.britishcolumbia.ca/invest/industry-sectors/forestry>

⁴⁹ <https://www.britishcolumbia.ca/invest/industry-sectors/tourism>

15. First Nations rights and claims in B.C.

With the passage last Fall of the *Declaration on the Rights of Indigenous Peoples Act* by the Legislative Assembly of B.C., it has become even more necessary to take into account the rights and claims of the B.C. First Nations in provincial public policy. Consultations with First Nations are obviously an essential part of the Review process. The actual involvement of First Nations and its members in the protection, monitoring and enforcement activities related to the remaining patches of the OGF, and obtaining a fair share of the employment and economic rents derived from these activities, is also of material importance for the Review.

The settlement of outstanding First Nations land claims in B.C. is a complex process that will likely take many more years to reach a comprehensive, satisfactory and definitive resolution. While this process continues, it would seem important however to avoid a proliferation of protracted litigation arising from the clearcutting of timber in the remaining patches of the OGF located in First Nations land claim areas⁵⁰.

Indigenous peoples have taken good care of the OGF for centuries. They provide a resident human presence in the OGF year round and have a vested interest in ensuring its protection and management on the ground. They should play a central and front line role in the protection and management of the remaining patches of the OGF going forward.

Proposal 15. The new policy framework should provide for an effective and meaningful role to be played by the First Nations and their members in monitoring, protection and enforcement activities within the remaining patches of the OGF located on First Nations lands and land claim areas, and a fair share of the employment and economic rents to be derived from these activities in the remaining patches of the OGF located on First Nations land claim areas.

16. The B.C. forest products industry and its challenges

The importance of the forest products industry of B.C. (FPI) is widely documented in terms of its contribution to jobs, economic benefits, trade and support for many communities located in the province. Its challenges in terms of the availability and cost of wood supply, forest infestations, wildfires, competition from other countries, trade barriers, technological change, overcapacity of existing mills and economic cycles are also widely documented.

However, the most fundamental structural challenge for the FPI is that it is a mature industry in an resource-based economic sector that depends on a declining resource pool increasingly prone to widespread disruption from natural disasters such as wildfires

⁵⁰ See for example *Nuchatlaht v. British Columbia* (now pending in the Supreme Court of British Columbia, Docket S170606).

and infestations. This fundamental structural challenge drives the need for a transition of the FPI from a depletion-based business model to a long-term sustainability business model. This transition inevitably requires hard choices and measures that are unpalatable in the near term, with the understanding, cooperation and support of investors, businesses, workers, governments, local communities and taxpayers in B.C. The more there is procrastination in making these hard choices and adopting the required measures, the more the necessary transition will be disruptive and painful for all concerned.

Statistics Canada reports on Labour force characteristics by industry for B.C. Based on this report, which uses the North American Industry Classification System (NAICS), the labour force of the Forestry and logging and support activities for forestry in B.C. declined from 19,400 in 2015 to 16,100 in 2019⁵¹. Also, over the 10 years from 2005 to 2015, the reported amount of timber harvested annually on public land in B.C. has been below the Allowable Annual Cut⁵². These are telltale signs of a mature industry facing future decline unless there is a paradigm shift in its business model and practices.

I was not able to get a clear up-to-date picture of the actual extent to which the FPI or its individual industry participants are presently dependent on commercial logging and timber harvesting activities in the remaining unprotected patches of the OGF. However, it appears that forest management policies and practices in effect since the enactment of the FRPA in 2002 and its predecessor act the FPCBCA in 1996 have not led the FPI to transition from an indefinite reliance on the commercial logging or timber harvesting of the remaining unprotected patches of OGF, towards fully sustainable second-growth tree harvesting and silviculture.

Proposal 16. The Panel should consider recommending forest management policies that are more effective in leading the B.C. forest products industry to transition, from an indefinite reliance on the commercial logging or timber harvesting of the remaining unprotected patches of the OGF, to fully sustainable second-growth tree harvesting and silviculture over a defined medium-term transition period, including in the areas of the OGF that have already been logged or harvested by the industry in B.C.

17. OGF management and protection measures in other jurisdictions

The Terms of Reference mandate the Panel to consider how other jurisdictions manage old growth forests. This presumably includes other provinces as well as other countries. There is a considerable body of literature on this subject, but the literature is often either dated or not clearly relevant to the specific characteristics of the OGF in B.C.

First, while the OGF in B.C. is almost entirely located on land that is publicly owned, mainly Crown land, this is not the case in many other countries. Second, the frameworks

⁵¹ See Table : 14-10-0023-01 for British Columbia.

⁵² <http://www.env.gov.bc.ca/soe/indicators/land/timber-harvest.html>

in many other countries have been predicated on legacy complete depletion, or near complete depletion, of old growth forests and on legacy deforestation for urban development or agriculture purposes. Third, the framework in many countries has been unevenly or inconsistently applied over time. Fourth, but not least, it does not seem that other jurisdictions in the world have the same legal constraints as B.C. with respect to First Nations rights and claims.

Proposal 17. While reporting on old growth forest management policies and practices currently in effect in other jurisdictions, the Panel should assess their relevance for B.C. based on the specific characteristics of the OGF in B.C. and the specific constraints that apply in B.C. with respect to First Nations rights and claims.

18. Public policy alternatives

Public policy alternatives proposed by various interest groups will likely fall into four broad scenarios : 1) the impossibility of determining a suitable definition of the OGF for the purpose of forest management policies and practices, and the need to continue addressing the commercial logging and timber harvesting activities in the remaining patches of the OGF flexibly on a case-by-case basis under the existing framework (the *status quo* scenario); 2) some incremental changes to the existing framework by way of further studies and more granular clarifications of the existing framework (the incremental scenario); 3) a paradigm change for the OGF, from managing for indefinite logging and timber harvesting in the OGF to protecting the remaining patches of the OGF (the paradigm shift scenario); and 4) an immediate radical ban on all commercial logging and timber harvesting activities in the remaining patches of the OGF (the radical ban scenario).

Based on all the information that I have been able to find and absorb in a very short period of time, I am of the view that the *status quo* scenario and the incremental scenario cannot be justified because the present forest management framework for the OGF is structurally flawed, unworkable and essentially unenforceable. and it cannot be fixed incrementally⁵³. Furthermore, the FPB has made the following statements in its special investigation report of June 2012 entitled 'Conserving Old Growth Forests in BC'⁵⁴ :

'Significant gaps in government's oversight of old-growth, including tracking and monitoring were found in this investigation. For many management areas, particularly where non-legal OGMA's have been identified, government does not know the extent of OGMA incursions or if licensees have appropriately replaced harvested areas with other areas having equal or better old-growth attributes. In some management areas where old-growth retention is achieved non-spatially,

⁵³ See Sections 4. and 5. above.

⁵⁴ FPB/SIR/36

gouvernement does not always ensure that the requirements are being met. Fifteen years after planning commenced, government has not yet started to assess if its objectives for old-growth retention are effective.

Finally, requirements for old-growth retention do not apply to all users of the Crown forest. The Board believes that to meet the underlying objectives of old-growth management, the requirements must apply to the land itself, not just certain users of the land, as is presently the situation.’ (page 30)

The FSB’s special investigation report entitled ‘Forest Stewardship Plans : Are They Meeting Expectations?’ published three years later in August 2015⁵⁵ and the ‘Special Report on The Forest and Range Evaluation Program’ published five years later in November 2017 do not show how the situation has materially changed, or that the structural flaws have been fixed, or indeed how they could be fixed in what timeframe and at what cost to the taxpayer of B.C.

The radical ban scenario would not allow for the mitigation of impacts for the forest products industry of B.C. and the affected communities to transition over a defined medium term to a fully sustainable business model that relies entirely on second-growth logging and timber harvesting silviculture and other intensive forest development practices, and that completely forgoes logging and timber harvesting in the remaining patches of the OGF.

For these reasons, I support the paradigm shift scenario. As discussed earlier in this submission, the paradigm shift scenario includes working on, and proposing on a diligent and timely basis to our elected representatives in the Legislative Assembly of B.C., a bill for a new discrete statute on the protection and management of the OGF in B.C. I use the terms ‘protection and management’ not for the purpose of entrenching the current management framework further in time, but rather for extending the paradigm change to a front line and central role for First Nations and their members in the protection, monitoring and enforcement of the new specific OGF framework going forward.

19. The case for interim safeguarding measures

The Terms of Reference do not explicitly seek, nor do they explicitly exclude, any recommendations on interim safeguarding measures respecting the remaining patches of the OGF after the Report is transmitted to the Government, or during the up to six-month period until the Report is made public by the Government, or subsequently while the Government further considers its policy options. It is of public knowledge that there have been calls for interim protection measures. These include a moratorium on clearcutting of the remaining patches of the OGF while policy options are being considered, so that they do not get further depleted and eventually make the whole policy review process academic or simply moot down the line.

⁵⁵ FPB/SIR/44

The continued use of clearcutting practices in the remaining patches of the OGF is the lightning rod for the growing public outcry on the destruction of the OGF and its resulting negative effects on climate change mitigation and the interests of the First Nations in B.C. While there have been discussions on the use of partial cutting practices as opposed to clearcutting practices, the B.C. forest products industry is still extensively using the latter, which is not surprising given the marginal cost differential between the two sets of practices. The Government's decision to protect 54 known big trees with a one hectare protection area for each one of them ⁵⁶ announced at the same time as the Review on July 17, 2019 does not go the distance in reassuring the public, or steering the forest products industry of B.C. away from clearcutting of the OGF.

There is merit in considering some interim mitigation of the widespread clearcutting practiced in the remaining patches of the OGF and replacing it with less destructive partial or selective cutting practices in the coastal regions of B.C. This interim measure would provide an incentive for the forest products industry of B.C. to immediately start transitioning from commercial logging of the remaining patches of the OGF to a more fully sustainable business model that no longer depends on it.

Proposal 18. The Panel should consider recommending in its Report, as an interim measure : 1) a requirement to replace the use of clearcutting by the use of partial or selective cutting in the remaining patches of the OGF; and 2) the protection of selected very old tree stands and very sensitive old tree stand areas from commercial logging or tree harvesting activities until the Government concludes its review process and gets a new Act adopted the Legislative Assembly of B.C. on OGF protection and management.

There is also merit in considering an interim measure dealing with the export of raw logs logged in the remaining patches of the OGF. There appears to be a correlation between raw log exports and the outright ban of certain logging activities in countries that import raw logs from B.C. The export of raw logs does not generate any economic value added from the depletion of timber resources in the form of mill processing and the jobs that the mills support in mill-dependent communities.

The Government should not aid or abet other countries to unduly or unfairly profit from our most important and valuable timber resources, particularly countries that apply outright logging bans or export quotas on their own territory and forest products industry, or that apply illegal trade sanctions to the forestry or to other sectors of the economy in Canada, or that use state subsidies to compete unfairly with the forest products industry of B.C..

Proposal 19. The Panel should consider recommending in its Report, as an interim measure, a moratorium on permits for the export of raw logs from the remaining patches of the OGF until the Government concludes its review process and gets a new Act adopted the Legislative Assembly of B.C. on OGF protection

⁵⁶ <https://news.gov.bc.ca/releases/2019> FLNR0189-001452

and management.

Concluding remarks

The Panel's task is indeed very challenging, given the broad range of values to be considered, the conflicting positions of various interest groups on the policy issues to be addressed, and the short timetable for the issuance of the Report to the Minister. I can only wish the Panel well with this Review. I will be pleased to meet or correspond with the Panel or its staff to further discuss or clarify my submission, should this be considered necessary or useful.

Appendix – List of keywords, terms and acronyms used for information gathering

Allowable Annual Cut (AAC)
Ancient Forest Alliance
Association of BC Forest Professionals
B.C. Council of Forest Industries (COFI)
B.C. environment protection
B.C. Federation of Labour
B.C. Timber Sales (BCTS)
Biodiversity Guidebook
Biogeoclimatic Ecosystem Classification (BEC)
Canadian Forest Service (CFS)
Canadian Wildlife Service (CWS)
Clearcut logging
Clearcut logging of old growth forest
Clearcutting
Crown Forested Landbase (CFLB)
Cumulative Effects Framework (CEF)
Depletion economics
Environment and Land Use Act
Environmental Management Act
Environmental Management System Food and Agricultural Organization (FAO)
Forest Act
Food and Agricultural Organization (FAO)
Forest and Range Practices Act (FRPA)
Forest Biodiversity Technical Working Group
Forest Planning and Practices Regulations
Forest Practices Code of British Columbia Act
Forest Stewardship Plan (FSP)
Forest Practices Board (FPB)
Forest Products
Forest Products Association of Canada (FPAC)
Forest products industry of B.C.
Forest Stand Management Fund Act
Forestry companies
Forestry practices
Forestry Revitalization Act
Forestry standards
Greenpeace BC
Heritage Conservation Act
Interim Assessment Protocol for Old Growth Forest in British Columbia
Land Act
Landscape Unit
Land Unit
Land Unit Planning Guide

Log exports
Marginal cost definition
Ministry of Forests and Range Act
National Resource Permitting Project
Old growth forest definition
Old growth forest in B.C.
Old growth forest maps in B.C.
Old growth forest protection
Old growth forest safeguards
Old Growth Forest Team
Old growth logging
Old growth log exports
Old Growth Management Area (OGMA)
Old growth trees
Private Managed Forest Land Act
Protected Areas Forests Compensation Act
Provincial GIS Data
Provincial Non-Spatial Old Growth Forest Order (PNOGO) (2004)
Public interest definition
Public policy development
Raw log exports
Renewable natural resources
Renewable resources
Sierra Club of BC
Sustainable forestry practices
Timber Sales Managers
Timber Supply Areas (TSAs)
Wilderness Committee
Zero Net Deforestation Act