Mr. Garry Merkel, RPF Mr. Al Gorley, RPF Old Growth Strategic Review Panel

Dear Messrs. Merkel and Gorley,

## **RE: Old Growth Management Strategy**

As specified by the submission requirements, here is some information about me. I reside and Vancouver Island and have four decades of experience in resource management and environmental and land use planning for all levels of government in Canada, First Nations, and overseas, and have been employed in the public and private sectors (including MacMillan Bloedel) and academia. This submission reflects my views; I do not represent any organization.

My exposure to forest management in British Columbia began in the early 1970s, when I saw large areas of the San Juan watershed dotted with Douglas fir and cedar stumps standing oddly on raised pedestals. The deep forest soils had been washed away following logging. The forest ecosystem was destroyed and the productivity of the land was degraded. I have seen little in the intervening years to indicate a substantial improvement in the results of old growth removal.

As you have doubtless heard as you conduct your investigations, there are many scientific, aesthetic, ecological, cultural, economic, resource management, and ethical reasons for protecting the remaining area of old growth forest in British Columbia. Indeed, the majority of British Columbians believe that we should not be logging our old growth forests, so why do we continue to do so? Here are a few reasons.

**Historical.** One of the first acts of European settlers in coastal British Columbia was to begin removing the ancient forests, which were seen as dark, menacing, and an obstacle to farming, mining, and other development. The settlers and governments quickly learned that money could be made by logging these seemingly inexhaustible forests. Tough and virile "lumberjacks" who assail the big trees soon became venerated parts of Canadian culture, an image romanticizing the violence and destruction inherent in logging.

In the nineteenth century, the central European "sustained yield" model was adopted by North American logging companies and governments. This "policy disguised as science" advocates replacing old-growth forests with tree farms, ignoring or marginalizing the other substantial values of these ecosystems.

As British Columbia governments provided logging tenures to industry, towns were built to serve those who cut, transport, and process trees. With the systematic removal of British Columbia's old growth forests, many of the forest-dependent towns are now deserted or under severe stress. Historical but entrenched perceptions and forest practices contribute to the socioeconomic consequences of boombust resource extraction and, more recently, the environmental catastrophes of climate change and species extinction. The reluctance to change the 19<sup>th</sup> Century forestry systems and values to respond to conditions in the 21<sup>st</sup> Century is at the root of the old growth problem in British Columbia.

**Political.** Government allocation of rights to cut British Columbia's forests began in the early days of confederation. For instance, the E&N land grants exchanged public forest lands for provision of politically-favoured projects. Neither ecological value nor First Nations' rights were considered as tree farm licenses were granted that covered much of the province. Governments established a Ministry of Forests to facilitate the conversion of forests to tree farms. Pro-logging lobbies arose to seek industry-friendly forest policies and subsidies, and to oppose public calls to protect old growth.

Whether political parties gain support from resource industries or from unions, forest policies of successive governments remain the same. Recently, First Nations have been granted logging rights in parts of British Columbia. Though socially laudable, this action expands the number of organizations supporting logging-centric forest policy. The effect on old growth forests is disastrous regardless of who benefits financially. To the tree, it does not matter who operates the chain saw.

**Professional**. Forestry schools, with the support of industry and revenue-hungry governments, embraced the sustained yield model, promulgating the view that forests should be used to generate money and jobs. Students are trained in forest economics and the mechanics of timber extraction. A lexicon of aspersions of old growth has been developed, labelling the forests decadent, over-mature, and inefficient. Graduates of these schools, many of whom become Registered Professional Foresters (RPFs), have played a central role in removing old growth forests. The ecological complexity of old growth forests—particularly the low-elevation coastal forests—receives passing recognition in favour of utilitarian use (i.e., logging).

Spreadsheets, graphs, forecast models, geographic information systems, and similar technologies are employed to characterize British Columbia's forests and to shape forest policy. These tools, like all models and programs, simplify the real world in order to function. The social value and complex ecology of old growth forests are ignored in these models and in calculating annual allowable cut and other metrics. The Ministry of Forests famously misuses statistics to exaggerate the amount of old growth protected in the province. BC Timber Sales ignores the "sustainability" part of their mandate in a rush to liquidate remaining tracts of old growth in the face of growing public pressure to halt the practice. It is symptomatic that the Old Growth Strategic Review website allocates three brief paragraphs to the ecological value of old growth, whereas harvesting, employment and economy get several full pages plus many weblinks. Hence, calls to allow forestry decisions to be made by "professionals" bodes ill for old growth protection, as professionals' livelihoods and their organizations' doctrines are tied to continued logging of remaining old growth forests.

**Responses**. What needs to be done to overcome these obstacles? Here are some suggestions.

Acknowledge the limits to forest management and the extraordinary and poorly understood value of old growth forests. In 1949, Aldo Leopold said, "The last word in ignorance is the man who says of an animal or plant, 'What good is it?'...If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts?" Clearcutting old growth forests to turn 800-year old trees into plywood, dimensional lumber, shakes, or pulp while "discarding" the ecological and other values of the forests exemplifies such foolishness.

Every year, science discovers new and remarkable features, relationships, and values of old growth forests, whether it is the variety of life in the canopy, the complexity of below-ground ecology (e.g.,

soil biota and root interactions among trees), or carbon sequestration. There is much we do not understand about old growth forests, yet forest managers focus solely on timber volumes and denigrate or ignore everything else. Even when we learn that species' very survival depends on large areas of intact old growth forests (e.g., spotted owls, marbled murrelets, or woodland caribou), we continue logging. Such forest management must represent Leopold's "last word in ignorance."

Carbon storage in old growth forests now is known to exceed that of tree farms. The myth that "fast growing" trees store more carbon than "decadent" old growth has been debunked by recent studies showing that the reverse is true. Not only do old trees hold carbon for centuries, but old growth stands are more resistant to fire than tree farms (meaning that the carbon remains sequestered) and avoiding logging activity (repeated at regular intervals in tree farms) prevents the release of carbon stored in soils and woody vegetation into the atmosphere.

Admit that logging old growth will not save the industry. Dozens of mills have closed in British Columbia even with rapid logging of old growth forests. Mills close for many reasons—market factors, corporate decisions, labour strife, technological change, and others. Mill owners have known for decades that they should retool their mills for smaller logs. Those who have failed to invest in the transition should not be rewarded by granting permits to log remaining old growth.

The forest industry asserts that protecting old growth would be "disastrous" or "the death knell" for their sector. If so, then they should be terrified by maps showing rapidly shrinking areas of old growth left in coastal British Columbia. The industry will run out of old growth to cut; the only question is when. Their arguments are reminiscent of those of the Maritime cod fishing industry, overfishing the stocks until they collapsed. What will happen when all economically viable old growth outside of parks has been logged? Will the logging in parks be next? (Worryingly, I know RPFs who see nothing wrong with logging in parks.)

The most recent forest industry crisis has triggered the usual calls for reduced stumpage rates, access to more trees, and subsidies; tired measures that will not solve the structural problems of the industry. Fleeting respite for workers and industry does not justify the permanent loss of British Columbia's irreplaceable old growth forests. Indeed, one could argue that the present crisis is an opportune time to revamp our antiquated view of forests and forestry.

**Support our mills, not others'**. If the province wishes to protect forest jobs and communities, then halt raw log exports to other countries' mills. This change can be easily accomplished, though objections from truck loggers can be expected. I have seen 600-year old clear Douglas firs reduced to chips for pulp production because "the market for lumber is poor". Such practices are environmentally abhorrent and a gross waste of resources, but exporting logs does even more damage to British Columbia's communities and economy.

**Practice forest management only in previously logged areas**. Old growth forests do not need to be managed (particularly the management practiced in British Columbia). Rather, old growth needs protection from industrial incursions. The recent protection of "big trees" is welcome but ecologically absurd. Entire old growth communities need to be saved. Should the fire department save only the biggest resident of a burning house?

Industry and government have long claimed that forest harvesting is a sustainable practice. It is time to make the practice match the rhetoric by creating a stable forest industry on the vast area of forest land that has already been logged. Better management of second growth forests would improve productivity and job stability. Indeed, such management of previously logged land is crucial to sustaining the forest industry. The longer we delay the end of old growth logging, the more severe the transition will be. The "fall down effect" will not get better by ignoring it.

**Shrink the industry to a sustainable size**. Though the notion is politically abhorrent, the forest industry is too big. Much of the turmoil in the forest industry results from a capacity to cut and process trees that greatly exceeds the biological limits of tree growth and the extent of economically viable second growth stands. The Ministry of Forests should determine the likely productivity of previously logged areas (after excluding remaining old growth stands from the "timber harvesting land base") as a basis for estimating the size of a forest industry that can operate sustainably in British Columbia. Promoting an industry that exceeds this size results in socioeconomic distress and permanent ecological harm.

**Stop logging while talking**. Even as consultation on old growth is proceeding, logging continues and BC Timber Sales actively markets remaining old growth stands. The "talk and log" routine has characterized British Columbia's public engagement for decades. Through this unethical practice, government launches studies, meetings, conferences, consultation, and reports that distract those who would protect forests, all the while maintaining the industrial *status quo*. Old growth has not been protected by "talk" initiatives, which are mainly intended to convey the impression that modernized forest policy is being seriously considered.

**Prepare a forest industry transition strategy**. By failing to wisely manage British Columbia's forests and by promoting unrealistic expectations, the provincial government has contributed to the stresses in forest communities. If the government decides to protect old growth, a transition strategy will be needed to buffer the impacts on workers and communities. The transition strategy should include such measures as helping forest workers gain skills in non-forest sectors and identifying and supporting community economic development opportunities in green and stable sectors. In some cases, public investment in retooling old mills to handle second growth trees may be appropriate.

After old growth-dependent industry runs out of trees to cut, workers and communities doubtless will demand a transition strategy. It is better to implement the strategy now, retaining some old growth that would protect ecosystems, species, and opportunities in tourism and recreation.

**Conclusion**. I have travelled widely around the world, and nowhere have I seen forests to match our low elevation coastal old growth. To reduce these forest remnants to logs, lumber, and pulp is a travesty.

Our old growth forests are too important to leave to those with narrowly focused financial interests in forest removal, including the forest industry and industry-dependent professionals and agencies. Decisions about protection or liquidation of old growth need to be made by people with a broader understanding of forests, their value, and global importance.

We need to recognize and accept the challenge of transforming societal assumptions and past practices and overcoming institutional inertia. The social, ecological, and inherent value of old growth forests, which we still poorly understand, justify the necessary changes to provincial forest policy and the forest industry. Arresting and reversing global environmental degradation requires us to learn how to live on Earth without destroying it. We have an ethical duty to guarantee that our grandchildren's grandchildren can experience British Columbia's old growth forests.

Let us move British Columbia's forest management regime out of the nineteenth century, sustain the forest industry on lands already logged, and protect the remaining old growth forests that have thrived here for thousands of years.

Wishing you the best in your deliberations,

DEHayper

**David Harper**