#### Submission to Old Growth Strategic Review Panel

**Submitted by:** Lyle Gawalko BSc – Cobble Hill, British Columbia.

- Previous Director Ecosystem Conservation Ministry of Environment (*retired*),
- Previous Manager, Fire Management, BC Wildfire Service Ministry of Forests, Lands, Range and Natural Resource Operations (*retired*),
- Previous Forest Ecosystem Officer BC Parks, Ministry of Environment (*retired*),
- Previous member with Association of BC Forest Professionals (*resigned RFT*).

### Summary

Old growth in British Columbia is irreplaceable on vast time scales dependant upon the natural disturbance type. Once an old growth forest is harvested, it is effectively extinguished forever, and in many areas most easily accessible old growth has been harvested. In this age of global threats to biodiversity, climate change and major loss of wildlife populations, loss of old growth is a loss of national and international importance. Management guidance for old growth in BC based upon natural disturbance type is well researched and documented; however, it has not been effectively applied. Cessation of harvesting in all old growth stands is not desirable as many natural disturbance types require disturbance either from fire or harvesting. A new model for forest management is required that recognizes management for social, cultural and ecological values as an equal or overriding priority to the generation of profit. Many models of forest management exist that are economically viable, engage First Nations and local communities, create local employment and still fully accommodate social, cultural and ecological values. A new tenure and appraisal method for management of old growth forests that recognizes management objectives from full preservation in the case of ancient forests, to limited modification for social, cultural or ecological objectives such as fire management or community forests. Major corporations may not be interested in this type of forest management, but local communities, First Nations, forest conservation advocates, and local forest management contractors will have a role to play.

## **Background:**

Old growth in British Columbia is irreplaceable on vast time scales dependant upon the natural disturbance type. Old growth coastal and interior rain forests may not fully recover from a major disturbance for many centuries. Interior forests may take a century or more to re-establish. Although harvested areas are replanted, plantations have little of the structure, function and processes of old growth forests. Also, once converted to "industrial forests," plantations are then scheduled to be reharvested on a very short timeframe compared to the recovery time of an old growth forest.

Once an old growth forest is harvested, it is effectively extinguished forever. In fact, due to the history of harvest in BC, few BC residents have seen a true old growth forest. At most, many residents have seen a few remaining large trees in small patches in parks or more likely, large tree stumps. On Vancouver Island, one must travel through hundreds of kilometers of harvested forests and plantations to reach the Carmannah Valley to experience a true coastal old growth forest.

So, why should it be a concern if old growth forests are lost to harvesting in British Columbia? After all, harvesting provides jobs and economic benefit to the province. Indeed, it historically has not been a concern as most harvesting in BC was old growth and this harvesting provided a huge return of wealth to the province and to corporations. Now, however, in many areas all easily accessible old growth has been harvested and old growth can only be found in extremely isolated valleys or high elevations stands. These remaining stands are a biological legacy nationally or internationally and require new management objectives. Ancient forests, those that have been undisturbed by humans for millennia are now extremely rare and will require full protection.

Along with the loss of old growth, the biodiversity, wildlife habitat, structures and functions associated with these forests disappears. Old growth stands are replaced by plantations that contain trees but are biologically impoverished. Loss of old growth has other impacts as well such as habitat fragmentation, siltation and dewatering of creeks and rivers, and loss of water retention capacity in key watersheds. These affects in turn degrade aquatic and terrestrial habitats. Cultural values are also largely lost. In this age of global threats to biodiversity, climate change and major loss of wildlife populations, these affects are magnified.

# The Problem:

Management guidance of old growth in BC to retain biodiversity, habitats, structures, functions and landscape connectivity for wildlife habitats at stand and landscape levels based upon natural disturbance type is well researched and documented. The *Forest Practices Guidebook for Biodiversity* and other associated guidebooks provided detailed guidance for management of old growth. The management guidance in these books, however, has not been effectively applied, however, due to the natural resource management model currently employed in BC.

Management of any natural resource is based upon three main management concepts – economic return, social license and ecological impact. Historically, the prime objective for corporate interest in BC forests is to harvest to maximize economic return. Indeed, the *Forest Act* and associated tenure system was designed to accommodate this model. Social license under this model is achieved through local employment and associated economic returns to the local community. Ecological impact is considered, but only to the extent that specific ecological values are explicitly protected by law.

Forest harvesting for the maximization of economic return in BC has, in many cases, resulted in profits for international corporations, a boom and bust economy for local communities, and, a steady degradation of social, cultural and ecological values. The province and indeed the world can no longer sustain a model that maximizes economic return at the expense of other values. For any resource management activity, there must be an economic return, but appropriate management of social, cultural and ecological values means that maximization of economic return can no longer be the overriding priority. Social, cultural and ecological values need to be managed, of equal and in many cases, more importance, than maximized economic return. In many cases long term social, cultural and ecological values will be much higher priority than short term profits.

# A Solution:

Cessation of harvesting in all old growth stands in BC is likely not an option or even desirable as many natural disturbance types require disturbance either from fire or harvesting. Many coastal and interior

rainforest stands, however, will require higher levels of management and in some cases where harvesting has been extensive, protection, to retain viable ecological functions across the landscape.

Where old growth continues to be managed in more resilient natural disturbance types, a new concept for forest management in BC is required. If one removes the maximization of economic return as the highest priority and management for social, cultural and ecological values becomes an equal or overriding priority, the goal is no longer forest harvest, the goal then becomes true forest management for the full spectrum of values.

In my career working for the Government of British Columbia in Park Management, Fire Management and Ecosystem Management I have seen many models of forest management that have shown that forest management can be economically viable and provide an economic return to the government, First Nations, and local communities, and create local employment while still fully accommodating all social, cultural and ecological values.

BC Parks has conducted stand and landscape level tree removals where required for safety, fuel management and ecological restoration. These projects are largely self-financed by the sale of the trees, delivered by local communities and First Nations, create local employment and achieve the objectives, while retaining ecological vales.

Fire Management planning for the BC Wildfire Service supports fuel management that engages First Nations and local forest contractors to reduce wildfire fuels adjacent to communities and at a landscape level. When timber harvest is required, local contractors were able to sell the wood and offset project costs. High standards of forest management are observed on these projects.

Another highly successful model of forest management can be found in community forests where profits from forest management are directly returned to local community and First Nations while creating local employment and managing for all values.

The Rocky Mountain Trench Ecosystem Restoration Program is also a highly successful example of how landscape level forests can be managed for alternative objectives while working with a coalition of local stakeholders.

The key component that differentiates these models from the maximized revenue model is that while revenue is still present, it is not maximized. <u>What would have been profit for international corporate shareholders is now retained locally for the maintenance of social, cultural and ecological values</u>. This type of management may not be applied for all forest harvesting in BC, however, for management of old growth forests, it does provide a viable option. Major corporations may not be interested in this type of forest management, but local communities, First Nations, forest conservation advocates, and local forest management contractors will all have a role to play.

## **Options for Implementation:**

The above noted examples provide evidence that forest management can be accomplished with social, cultural and ecological objectives as a main priority with economic return being a by-product that supports the activity, but is not highest priority. Indeed in the projects noted, in many cases, the stands actually retain the old growth trees and are more ecologically resilient than the pre-treatment stand. The main challenges associated with the above noted examples is that the current Tenure System is

based upon the economic maximization model and social, cultural and ecological forest management objectives are not fully recognized in a tenure or stumpage appraisal system.

For areas where old growth harvest will continue, I would suggest that the above noted models be reviewed to develop a new forest management model for the province that recognizes social, cultural or ecological objectives with high management standards. Specialized objectives would be applied to identified management zones. Zones would be designated for management objectives from full preservation in the case of ancient forests, to limited modification for social, cultural or ecological objectives such as fire management, community forests or cultural management areas. For those areas where tree removal would occur, an appropriate tenure option with a stumpage assessment that both recognizes development costs and provides rebates for higher management standards would be applied.