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Professional Reliance Review

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Background—Privatizing Public Forests

From the standpoints of forestry legislation, policy, and practice, professional reliance represents the culmination of several decades of lobbying and work by timber interests to de facto privatize public forests. A little history is in order here:

- In 1989, then Forest Minister Dave Parker attempted to privatize public forests through the conversion of Forest Licenses (FLs) to Tree Farm Licenses (TFLs). Court decisions have found that TFLs have rights similar to those of fee simple, private property. This attempt was subject to public meetings and public review, resulting in resounding defeat of the proposal.

- Under the latest liberal government in 2014 there was another attempt to privatize public forests through the conversion of volume-based tenures (primarily Forest Licenses) to area-based tenures, i.e. Tree Farm Licenses. This attempt to privatize forests was open to written comments from the public, but not subject to public meetings. Avoiding public meetings permitted greater government/industry control and avoided open exchange of thoughts about controversial topics in a public forum. Nonetheless the proposal was resoundingly criticized by comments from many sectors of society. The government of the day backed away from privatizing public forests. Attachment 1 to this document is my submission to the government on their proposal to increase area-based tenures.

- Thus, governments have been unable to further strengthen the private, industrial control of public forests through changes to the forest tenure system aimed at increasing the area managed under tree farm licenses, which convey rights similar to fee simple, private property. Failing on this front lead the government, with the encouragement of the timber industry and professional foresters, to the following forestry structure:
    - Replacing the Forest Practices Code Act with the Forest and Range Practices Act, which replaced clear standards for public accountability of forestry plans and practices with general objectives for forestry that lack clear standards thereby diluting, if not removing accountability to the public.

- Under the current system of forestry, the public is just expected to believe the assertions of forest professionals in the employ of the timber industry, as there are no uniform publicly available standards against which practices may be evaluated, nor is there ecologically and socially responsible planning and oversight by government agencies responsible to the public. This situation is unique to professional reliance as practiced by forestry, as I will explain in Professional Reliance in Forestry is Different than Other Professions below.
- Virtually eliminating the Forest Service through replacing the Ministry of Forests and Range, with the Ministry of Forests, Lands, and Natural Resource Operations (now further complicated by adding "Rural Development" to this portfolio). All planning and significant approval rights of the former Ministry of Forests/Forest Service were removed under FRPA.
- Enacting *professional reliance*, which handed exclusive decision-making power over to foresters in the employ of the timber industry, and gave them nearly complete discretion over selecting their approach to forestry, which may largely be characterized as *least cost logging of the best remaining timber*. Through this step, with the compliance of the Association of BC Forest Professionals, both by their silence on the matter and the support of many of their members, and without any public consultation and debate, public forests became private timber supplies in the hands of corporations.
- Professional reliance as practiced by BC forest professionals does not follow a clear, publicly available set of planning and operations standards, particularly when it comes to ecological standards and precautionary decision-making to avoid damage to forests, and adjacent or downstream landscapes.

  An oft used synonym for professional reliance is "results-based." In 2002 the government of the day put forth a "discussion paper" promoting a "Results Based Forest Practices Regime for British Columbia," which proved to be a forerunner of professional reliance. The lack of clear publicly available standards were a feature of that results-based discussion paper. Attachment 2 to this document provides my comments on that discussion paper. Note that key aspects of successful "results-based activities" are clear standards and accountability, neither of which are found in professional reliance forestry planning and operations.

Understanding the relationship between professional reliance and the privatization of public forests is extremely important in making decisions about how to "reform" professional reliance. In my opinion, retaining any vestige of professional reliance in the hands of forest professionals working for industry represents an unacceptable degree of privatization of public forests and their many vital common property resources — water, carbon sequestration and storage, and biological diversity, from soil microbes to large mammals that are essential for our survival and that of many other species.

If Earth, including humans, is to survive the growing crisis of climate change, public forests, our largest terrestrial carbon sink and water storage and filtration system, need to be conserved, planned, and managed in open and transparent ways by a public agency charged with making precautionary ecologically and socially responsible decisions. It is naïve to think that such responsibilities may be vested in organizations whose primary responsibility is short-term monetary profits, in the hands of professionals working for those organizations, or in self-regulating professional bodies that lack definitive standards for planning and management and rigorous oversight by independent experts.

Common Property Resources — Need Public Conservation, Planning, and Management

Far too often, irrespective of their ownership, we forget that forests are *common property resources*, i.e. "natural resources owned and managed collectively by a community or society rather than by individuals." (https://stats.oecd.org/glossary/detail.asp?ID=391)

To see forests as primarily "logs standing vertically," or to put short-term logging/forestry profits ahead of the ecological integrity of forests may be legal, but it is not ethical. Protecting, maintaining, and restoring the ecological integrity of forests is the ethical starting point for making decisions about how to conserve and use forests.

Expecting forest professionals and other qualified professionals in the employ of timber companies to make ethical decisions that err on the side of protecting ecological integrity does not fit within our society's organization. Timber corporations' first and legal priority is to maximize monetary return, not to protect the many ecological and social contributions of forests. In our capitalistic system, corporate bodies are the *efficiency experts*, not the ecological and social experts or advocates. In contrast, government bodies are charged with having *social and ecological responsibility*, and to advocate for decisions that protect ecological integrity in the interest of social well-being.

The protection and restoration of the ecological integrity of forests depends upon planning and management decisions and regulation being made by socially responsible bodies, whose activities are open, transparent, and readily accessible to the public, including all information and analyses. The need for a socially responsible body to plan, manage and regulate public forests is obvious from the following list of the ecological and social support systems of forests:

- provision of natural water quality, quantity, and timing of flow;
- cooling of temperatures through transpiration of water vapour;
- purification of air through the processes of photosynthesis and transpiration;
- sequestration and storage of carbon through photosynthesis to moderate the effects of climate change (intact, natural forests are the largest terrestrial carbon sink);
- providing biological diversity, much of which remains unidentified, that supports human health and well-being; and

- providing **diverse** composition that may be used as resources for human activities, subject to protecting natural forest composition, structure, and function to maintain ecological integrity, and provide necessary ecological and social services.

Interestingly, the support system provided by forests improves as the forest ages. Virtually all aspects of the services provided by forests are best in the old growth forest phase. However, old and old-growth forests contain valuable timber supplies sought after by timber companies and their cutting is facilitated by forest professionals. This reality places a greater emphasis on the need for an ecologically and socially responsible body to plan, manage, and regulate forest conservation and use.

Forestry as taught in universities, carried out by forest professionals, and utilized by timber companies to make monetary profits is not a science. Forestry is an "industrial construct," a definition of how to manage forests to convert trees into money in ways that that vary as to their impact on forest ecosystems and the well-being of society.

In this climate change era, in the Anthropocene, if "forestry" is to be ecologically and socially responsible, forestry needs to be redefined as an activity that conserves and restores the natural ecological integrity of forests. Under this definition, timber would continue to be produced, but as a byproduct of forest conservation and restoration, not as the primary focus of forestry. Achieving this type of forestry — forestry as though forests mattered — needs to be planned and regulated by a socially responsible body, which in our system is government, not professionals of any type in the employ of private organizations, particularly timber companies.

E.O. Wilson, eminent Harvard biologist recommends in his book, "Half-Earth: Our Planet's Fight for Survival," 2016 "a global network of inviolable reserves that cover half the surface of Earth." Wilson explains that this step needs to be taken not only to slow the rate of extinctions to natural levels, but also to avoid our own demise. Solutions like this to the climate emergency require a significant increase in forest reserves in BC, and a new forestry, designed, planned, and managed by a socially responsible government body. Neither of these goals may be achieved by professional reliance, because establishing reserves and initiating conservation-based forestry is a conflict of interest for forest professionals in the employ of timber companies.

<u>Fixing Professional Reliance in Forest Management</u>

To start, any fix of professional reliance needs to recognize that professionals in the employ of industry, including consultants, will make decisions that meet the needs of the timber industry as a matter of self-preservation for their ongoing employment. Thus, we need to dispense with the current professional reliance model, and not fall into the trap that we can "fiddle" with this model. For example, putting government in charge of establishing lists of acceptable professionals from which industry can choose does not solve the problem. In this situation, as with the current professional reliance model the decisions of professionals will still be unduly affected by the goals of the timber industry. Such lists are also open to lobbying by strong interest groups, the strongest of which when it comes to forests is the timber industry.

"Fixing" professional reliance necessitates eliminating professional reliance, and replacing it with ecologically and socially responsible management of forests through the following:

- Under a Ministry of Forests, reestablish the Forest Service, with a clear priority to protect and restore the natural ecological integrity of public forests in British Columbia. This mandate is consistent with adapting to and mitigating the impacts of climate change, protecting and restoring water resources and biological diversity, and providing diverse, ecologically sustainable forest resources, including timber.
- The Forest Service would operate in open, transparent, and inclusive ways that provide full public access to information and analyses through meaningful public consultation, where accountable local community groups share in decision-making about the conservation, restoration, and use of public forests.
- The Forest Service would conduct regular inventories, at intervals not to exceed 5 years, of the ecological condition and services of public forests, making recommendations to the public that focus upon protecting and restoring the ecological integrity of public forests. These recommendations would include establishing an appropriate level of timber cutting (i.e. allowable annual cut — AAC) within ecological limits, while ensuring that other cultural and economic uses of the forests are protected.
- Landscape level, ecosystem based plans would be prepared by the Forest Service and include meaningful public consultation. These landscape level plans would designate networks of ecological reserves at multiple spatial scales to maintain acceptable levels of ecological services. Human activities would be designated by the Forest Service and other government agencies within the constraints of protection of the ecological reserves, as well as the integrity of areas outside of the reserves.
- Standards for planning, conserving, and operating within public forests will be established by the Forest Service, including meaningful public consultation about the standards. The Forest Service will regulate the timber industry's and other forest user's activities under the standards.

This model for planning, conserving, and managing public forests puts the "public" back in public forests, provides a system whereby vital ecological services are protected and/or restored, and furnishes a base for a viable timber industry and other forest based economic activities.

There will be criticism that this model is "too expensive" to implement. I would argue that not implementing this model is what is too expensive. Maintaining and restoring natural forest integrity is critical to adapting to and mitigating the impacts of climate change. Can we continue to afford the costs of:

- mega-wildfires that could be reduced or avoided with forest restoration, changes in timber extraction practices, and protection of old-growth forests;
- flood events fueled by clearcuts and tree plantations—short rotation forestry that changes the natural hydrological regime;
- super storms catalyzed in part by loss of the terrestrial carbon sink provided by intact natural forests; and

- droughts contributed to by the loss of natural hydrological cycles from clearcut and short rotation forestry?

Establishing a new forestry based on conserving and restoring the natural integrity of forests will significantly diminish the costs of climate change impacts, compared to maintaining our current approach to short cycle industrial timber extraction that society calls "forestry."

Scientific research reveals the sobering reality that when an old-growth temperate rainforest is clearcut, more than 200 years of forest growth and development is required to reach the same level of carbon storage and sequestration as that before cutting ("Effects on Carbon Storage of Conversion of Old-Growth Forests to Young Forests," Harmon, Ferrell, and Franklin, 1990, Science, Vol 147). In a montane forest, this timeframe is in the order of more than 180 years, while in a boreal forest it is in the order of more than 130 years. After initial logging of old-growth forests, forestry plans to cut trees again in these areas on cycles of 40-70 years. Thus, forests will never be permitted to reach the same levels of carbon sequestration and storage as natural old-growth forests. This forestry approach contributes significantly to climate change impacts, water problems, and loss of essential biological diversity. Society cannot afford forestry/forest management that creates these intergenerational ecological and economic debts.

The costs of reestablishing and operating a more ecologically and socially based Forest Service may be recuperated through license fees, stumpage revenues, and corporate taxes that maintain *viable* timber companies while ensuring public well-being based in part upon ensuring the maintenance and restoration of the ecological integrity of public forests.

Compared to the present stumpage appraisal structure, stumpage fees collected through regional log sort yards where timber companies purchase timber by bidding will provide significantly increased revenue per cubic metre of timber to government. We also know that innovative companies can "make more with less," by undertaking secondary and tertiary value added wood products manufactured.

<u>Professional Reliance in Forestry is Different than Other Professions</u>

In professions other than forestry, there is a very strong emphasis on *precautionary* decisions and actions to protect the public interest:

- Doctors work to prevent serious illness and death.
- Engineers design buildings and bridges that don't fall down, and airplanes that stay in the sky.
- Lawyers defend people's rights to avoid unjustifiable incrimination.
- Architects design buildings that don't fall down.

Such precautionary decisions do not characterize forestry, calling into question its status as a true profession. Foresters routinely work to minimize logging and road costs, and high grade remaining timber supplies, while presenting their actions as "in the public interest," when in fact their main focus is to protect their employer's interest.

The situation in forestry is facilitated by foresters' actions not being as directly connected to individual problems for people, like serious illnesses, collapsing bridges, airplane crashes, unjustified incrimination, and collapsing buildings. While forestry practices contribute significantly to ecological and social problems, like wildfire, floods, and climate change, proving the connection between forestry and these events is more difficult than situations addressed by many other professions.

Viewed in another way, there is often a level of uncertainty in forestry caused by the complexity and complex interaction of ecosystems, and the far reaching impacts caused by forestry practices to adjacent and connected ecosystems, e.g. downstream floods and/or droughts caused by a warming climate. If ecologically and socially responsible forestry were the norm, this uncertainty would place more onus on forestry to make precautionary decisions erring on the side of protecting natural ecological integrity. Unfortunately, this has not been the case with forestry planning and practices, particularly under professional reliance.

The tendency of forest professionals to err on the side of protecting their employer's interests, rather than broader, comprehensive public interests is also supported by the strong influence of corporate timber companies in the Association of BC Forest Professionals (ABCFP). This strong influence is evident in the lack of disciplinary cases pursued by the ABCFP related to ecological degradation and social problems associated with forestry practices.

Given the climate change emergency, the lack of the ABCFP actively pursuing a new, conservation and restoration based public interest forestry reflects the timber bias of the Association. Clearly, the services of intact, natural forests to sequester and store carbon, store and filter water, maintain biological diversity throughout the forest, and mitigate against floods and mega-fires are more important and broader public interests than protecting short-term timber supplies for the benefits of their employers.

<u>Professional Reliance — A Dangerous New Benchmark of Private Control of Public Forests</u>

Professional reliance in forestry not only occurs in an opaque fashion, lacking easily available standards by which the public can hold forest professionals accountable, but also occurs in the virtual absence of publicly available information about forestry plans and without meaningful public consultation. Professional reliance has also indirectly led to the elimination of regular forest inventories in British Columbia.

While forestry under the *Forest Practices Code Act* and regulations was far from perfect, public consultation was available at many steps from preparation of management plans and development plans to review of site plans. Standards for forestry practices, while often needing a stronger ecological and social influence, were readily available for public review and for holding forest professionals accountable through the Forest Practices Code Guidebooks.

Maps and technical analyses of forests and forestry plans were available to the public, often at little or no cost. For example, development plans were produced annually that showed the

proposed location, timing, and methods for timber company logging activities for the next 5 years. These maps, along with supporting documents and prescriptions were readily available to the public, and formed the foundation for public consultation to alter plans before logging occurred.

Under professional reliance, and with the absence of the Forest Service, the government neither disseminates information in readily available ways about forestry plans and practices, nor does it carry out consultation about potential forestry activities. The only public consultation that occurs is carried out by timber companies for Forest Stewardship Plans (FSPs), which are "pseudo plans," comprising essentially checklists of general requirements for forestry as opposed to meaningful plans. FSPs have five-year lifetimes and provide little or no information that the public can understand and relate to forestry practices in their watersheds and forest areas of interest.

The information about forestry practices is virtually under the sole control of timber companies. In most instances, timber companies consistently decline to provide meaningful and comprehensive information about their plans and practices. Such decisions are often made by forest professionals, while espousing that they protect the public interest.

I have significant examples of the lack of meaningful consultation and provision of public information that I would be happy to provide to substantiate the points made above, regarding professional reliance.

The control of token public consultation and of information about forestry plans and practices by timber companies, coupled with lack of accessibility to consistent standards for forestry practices are all indictments of public forests being converted to private timber supplies. This far-reaching problem needs to have a comprehensive, far-reaching solution if the public interest is to be protected.

Conclusion

I would be pleased to provide further examples and substantiating information about the failure of professional reliance in forestry.

Public forests need to be managed with priorities for ecological and social responsibility. Those management purposes may only be fulfilled by appropriately mandated government bodies, acting in precautionary ways.

I would encourage those responsible for the review of professional reliance to not craft a solution based on review by politicians and senior bureaucrats alone. Designing a solution to professional reliance through establishing a thoughtful group of people with experience in the needs of maintaining and restoring ecological integrity in forests, mitigating and adapting to the challenges of climate change through a new forestry, and establishing meaningful consultation

with the public is necessary in order to develop a just, lasting solution to the privatization of public forests that has been caused by ill-conceived professional reliance.

Sincerely,

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Attachments—2

Attachment 1

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Response to
Discussion Paper: Area-based Forest Tenures
BC Ministry of Forests, Lands and Natural Resource Operations

by Herb Hammond
Forest Ecologist and RPF

May 29, 2014

Introduction

Providing timber products is a relatively minor role that forests play in British Columbia and elsewhere on Earth. Necessities of life like clean air, pure water, carbon sequestration and storage, and climate moderation are all important functions of forest ecosystems. These functions are best carried out by old, natural forest ecosystems, as opposed to tree farms/managed forests. Providing the details of the myriad functions carried out by intact, natural forest ecosystems is beyond the scope of this paper, but I would be happy to provide these details, if desired by Ministry of Forests Lands and Natural Resource Operations (MFLNRO).

Given the critical nature of forests for our survival, we are fortunate that the vast majority of forests in BC are publicly owned as crown land. On the face of it, public ownership provides for socially responsible decision-making to ensure that the diversity of vital forest functions for supporting life are maintained, while providing for diverse economic benefits within ecological limits. However, since its inception the BC forest tenure system has significantly weakened public ownership by granting tenure with varying degrees of property rights to large private companies, whose sole interest is profit-taking from logging trees for timber.

The forest tenure with the highest degree of property rights, which have been determined by the courts to be just slightly less than fee simple property rights, is the *tree farm license*. In other words, TFL's provide the highest level of control over land and forest functions, compared to any other type of forest tenure in BC. By converting forest licenses (FL's) to TFL's government will make it much more difficult for the general public, and even government, to influence forest management plans and operations, to ensure the protection of vital forest functions, and to carry out non-timber economic activities, like ranching, tourism, recreation, and trapping. First Nations should be particularly concerned, because strengthened property rights within

TFL's will make it increasingly difficult to negotiate just and honorable treaty agreements, and interim protection for their land.

To ensure public participation and control of forests, provide for the maintenance and/or restoration of essential ecological services, provide the foundation for ecologically-based forest management, protect the interests of First Nations and facilitate the development of diverse, balanced economies from the forest landscape, I am totally opposed to converting forest licenses to tree farm licenses. I will explain this opinion further below.

Privatization of Timber Equals Privatization of Ecosystems

The proposal to increase the number of TFL's, by permitting licensees to convert FL's to TFL's is the final step in this government's de facto privatization of public forest land.

Privatization began with the dismantling of the BC Forest Service by removing their planning and management functions for BC forests, and stripping them of their approval authority for logging plans. The only plan that the MoFLNRO, which has subsumed the Forest Service, approves or disapproves is a *forest stewardship plan* (FSP). An FSP is little more than a generic list of commitments to meet general, often vague forestry requirements. An FSP does not show the location, timing, or methods for logging under a particular tenure. However, an FSP does entitle the tenure holder to plan and carry out logging in areas of their choosing, and MoFLNRO must approve this timber cutting once a forest stewardship plan is in place.

Effectively, replacing forest management plans and development plans with forest stewardship plans has turned the forest service into a cutting permit processing agency, rather than a steward of public land with the responsibility for approving or disapproving the activities of tenure holders.

The effects of dismantling the forest service and instituting FSP's extends to the public. The only place for public consultation is at the forest stewardship plan, which provides little or nothing to consult on. In particular, FSP's are mute about the location, timing, and method of logging to be carried out under a particular tenure. Hence, under current legislation and policy, the public has virtually no input into forest management decisions and activities.

This privatization is strengthened through the system of *professional reliance*. This simply means that if a forest professional in the employ of a timber company indicates that the requirements of an FSP have been met then that is all the authority needed for the timber company to proceed with its activities. Couple this with the dismantling of forest service and the removal of their approval/disapproval authority, the fox is clearly guarding the hen house.

Now, the government of the day proposes to further strengthen the privatization of public forests by converting forest licenses to tree farm licenses. This is unacceptable and benefits primarily the owners and shareholders of large timber companies.

Privatizing timber supplies, i.e. giving exclusive rights to timber in a TFL, effectively privatizes ecosystem services. If a member of the public wants to protect their water, they will have to hope they can convince a private company this is necessary. If a tourism operator wants to maintain the integrity of the landscape on which they depend for their livelihood, they will have to hope they can convince a private company to change their forestry practices. If society in general wants to protect intact forests to mitigate climate change, we will not only have to convince a private company this is necessary, but also compensate said company for their "loss of timber cutting rights."

The Strength of Property Rights in TFL's

One of the difficulties in maintaining public rights and public control over public forest land in BC has been the difficulty in regulating or canceling forest tenure rights. With a dismantled Forest Service this is particularly problematic. However, even with a strong Forest Service, disciplining forest tenure holders who do not meet the terms of their agreement is difficult.

A case in point is the Nishga (sic) Tribal Council and Tree Farm License no. 1. The Nisga'a carried out extensive research in the management of TFL 1 and the relationship between the BC government and Westar Timber Ltd, which showed mismanagement of forests and contravention of BC laws. In 1985 the ombudsman of British Columbia recommended suspension and/or cancellation of TFL 1 (*The Nishga (sic) Tribal Council and Tree Farm License no. 1—Public Report No. 4*)

The results of the Nisga'a's efforts were that the BC government dismissed the allegations of the ombudsman and the Nisga'a, and fired the ombudsman. I was responsible for the research carried out by the Nisga'a, and the Association of BC professional foresters attempted to censure me for my work exposing industry and government mismanagement in a TFL.

As a reflection of this strong industrial control, no TFL in BC has ever been canceled for cause.

Another example of the strength of property rights in TFL's may be found in McMillan Bloedel Limited's TFL 44. In December, 1991, the BC chief forester reduced the annual allowable cut for TFL 44, in order to meet government criteria for sustainable timber management. Subsequently, McMillan Bloedel appealed to the quasi legal Appeal Board, who reversed the chief forester's decision and set in place an annual allowable cut (AAC) that was essentially the same as the AAC proposed by McMillan Bloedel.

The decision of the Appeal Board was subsequently upheld by the BC Supreme Court. A key finding was that McMillan Bloedel had better information about TFL 44 than British Columbia. How can government ministries and their officials regulate and administer the activities of corporations on public forest land when the government has poorer information than that of corporations holding land tenures, like TFL's? In such a situation, one must question whether public forest land is an illusion.

If we are serious about protecting the land that sustains our lives, providing for effective public administration of public land, and implementing sustainable economic and social activities on public forest land, then we need to return control of that land to socially responsible government agencies. In other words, instead of strengthening the privatization of public land through increasing the area of TFL's, we should be phasing out large, private forest tenures in favor of most public land being planned and managed by a government body like the forest service, who is charged with precautionary approaches to protect ecological services and facilitate the development of diverse timber and non-timber economic activities.

Privatization without Cost

As I have explained above, TFLs confer very strong property rights with exclusive rights to the cutting and management of timber. In exercising these rights, TFL holders have consistently degraded essential ecological services and foreclosed upon non-timber economic activities to the detriment of the public who allegedly own the public forest land.

Thus, TFLs provide significant benefits to their holders while building an ever-growing ecological debt for society as a whole, and limiting economic options. Having paid little or nothing for the TFL tenure rights, once the license holder no longer wants the TFL due to declining profits or other issues, the license holder is able to sell the tenure rights, profiting further at the public's expense.

Given such a circumstance, one would expect that government, representing society as a whole, would require the TFL holders to pay for their rights commensurate with the losses inflicted on other economic activities, and on society in general. However, there is no upfront charge that reflects the public interest for obtaining a TFL.

Under this proposal, after timber companies have benefited from non-sustainable timber cutting rates to "salvage" mountain pine beetle killed lodgepole pine (and cut significant volumes of green trees in the process), government now proposes to give them, at no cost, near private control of public forest land.

Such a decision is not in the public interest, and this proposal should be rejected for this reason alone, particularly since government is effectively giving up control of public lands when transferred to TFLs.

Assertions in the Discussion Paper

In regards to converting FLs to TFLs, the discussion paper states: "the major benefit of such a change is the increased certainty of timber supply than area-based tenure would provide to the license holder. This certainty would enable the license holder to make long-term investment decisions for the benefit of the company it (sic) workers and the community to which it pays local taxes."

This assertion is not supported by the history of TFLs. The focus in TFLs, like FLs, has been to maximize short-term monetary profits, not to reinvest in forests or communities. When the profits become marginal or nonexistent, the TFL is sold to another licensee who "logs the best of what is left." This practice in British Columbia has led to ever declining timber quality and timber volume, not to long-term benefits for employees and communities.

The discussion paper also states: "security of tenure and a robust fiber supply are crucial for companies to maintain their competitiveness and convince capital markets, investors and shareholders to commit investing in BC facilities that provide high paying jobs."

Again, this assertion is not supported by the history of TFLs. The majority of the TFL license holders, all of whom asserted long-term sustainability and benefits for local communities, no longer exist as companies, having profited from logging activities that high-graded timber supplies and then divested themselves of the TFL, no longer needing the "security of tenure and robust fibre supply."

Further, at one point in the history of TFLs, government required *appurtancy*, meaning that logs cut in a TFL needed to be manufactured in a facility owned by the TFL licensee. This required investments in the local community by the TFL holder and provided employment in the community and landscape where the TFL existed. However, this current government has eliminated the appurtenancy requirement. Thus, a TFL holder need not invest to benefit the local community.

There seems to be an underlying premise in the discussion paper that converting FLs to TFLs will reduce the worsening timber supply shortage, which has resulted from poor planning and administration of mountain pine beetle salvage forestry. This ignores the obvious: a tree is a tree, whether found within a forest license or a tree farm license.

In other words, rather than further giving away public control of public forest land with the illusion that this will fix forestry problems, we should be talking about how to develop ecologically and socially responsible solutions to the degradation of the forest landscape caused by irresponsible forestry policies and management. Part of these solutions would be the development of small-scale, diverse community-based economic activities, including forest restoration and value-added wood products manufacturing.

The Process Excludes Voices

In 1989 when the Social Credit government wanted to convert FLs to TFLs, then minister Dave Parker conducted 8 public meetings around BC to give the public a chance to express their opinions. People were given the opportunity to speak and/or provide written submissions. This format gave people from all walks of life, including loggers and mill workers, the opportunity to be heard and the result was a resounding "no" to the proposal.

In contrast, this current effort to privatize public forest land by converting FLs to TFLs only offers the public the opportunity to respond to the Discussion Paper through written submissions transferred via the Internet or via facsimile. This approach disenfranchises many people who find it difficult to prepare written submissions or use electronic media. As well, the "community voice" is eliminated.

The absence of public meetings doesn't give people the opportunity to voice their own ideas and support the ideas of others. In essence, without public meetings there is no discussion and debate; and the "community" is not heard from on the topic in question. For a matter as critical as the privatization of public forest land, formal public meetings, well distributed around the province, and with a full public record are essential to have a clear understanding of public opinion and needs, and to make a decision that is in the public interest.

The Elements of a Solution

Public forest land needs to be managed not as private timber supplies, but as diverse complex forest ecosystems that first provide essential ecological services, and second provide the resources for diverse, community-based economies. These two goals are the public interest. However, if we do not protect ecological services as a first priority, economic benefits will be gained at the expense of future generations, will benefit only a few, and will be increasingly temporary.

Decisions about the planning and management of public forest land need to be made by a socially responsible government agency that specifies precautionary ways to protect essential ecosystem functions like water production, air purification, carbon sequestration and storage, and biological diversity, while providing for diverse economic opportunities. This approach to public forest land recognizes that meaningful, forest friendly jobs are profits, in contrast to jobs that degrade forest ecosystems and their functions, while providing monetary profits for a few.

Within the rules to protect and use forests in ecologically and socially responsible ways, private enterprise plays the role of "efficiency experts." But, private enterprise doesn't set the rules or control the land. Those roles are played by people responsible to and in the employ of the public—government. This basic structure is the only way that we can find a system that provides for egalitarian economic benefits while maintaining the primary ecosystem that sustains our needs and the needs of future generations.

Converting FLs to TFLs is not a solution, and will only make the current problems worse, while permitting a few to profit at the expense of many people and of the forest.

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Attachment 2

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COMMENTS
on Results-Based Forest and Range Practices Regime for British Columbia
Discussion Paper
May 2002

by
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June 25, 2002

Introduction

The British Columbia government under Premier Gordon Campbell has announced their intention to move to a "results-based" Forest Practices Code. Ostensibly, this results-based Code will be "a scientifically-based, principled approach to environmental management to ensure sustainability, accountability, and responsibility." Further, the results-based Code "will maintain our existing high environmental standards." All of these goals are to be achieved by not telling "companies how to do their job," but telling companies what government "expects them to achieve."

My review of the results-based Code, as it currently stands, indicates that it will only meet these goals for a selected segment of society: industrial forest and range interests, who will be able to define the meaning of results-based forest and range management. I will explain this opinion in more detail below. My comments are organized in the following way:

General Issues . . . which reviews important underpinnings necessary to achieve a socially and ecologically responsible results-based Code; and

Specific Issues . . . which reviews particular aspects of the current draft of the results-based Code.

General Issues

As a general concept, results-based approaches may be practical and effective. However, there are key aspects that must be incorporated in a results-based approach to ensure that this method of management meets intended goals. Specifically, in the case of British Columbia forest and range management, a results-based approach must encompass the following aspects:

1. **Aboriginal title and rights . . .** First Nations have aboriginal title and rights over all forest and range land in British Columbia. The recent court case between the Council of the Haida Nation and Weyerhaeuser/British Columbia requires that both the province and

private companies accommodate Haida aboriginal title and rights. Therefore, the results-based Code must require, in a legally enforceable way, the accommodation of aboriginal title and rights. This is not only necessary for legal reasons, but also is fundamentally the fair, just position for government to take in their relationships with Indigenous people.

Accommodation of aboriginal title and rights does not exist in the current draft of the results-based Code. Indeed, there is little or no emphasis on meeting the needs and protecting the cultures of First Nations.

2. **Values and results . . .** The results we wish to achieve in any endeavour are rooted in our values. If we do not value having a warm dry place to sleep, we may accept the result of a house without a roof. In other words, before designing a results-based regime, like a Forest Practices Code, there is a necessity to be very clear about the values that will direct the results. In its current form, the results-based Code is silent or unclear about the values that will form the basis for defining and evaluating the results of forest and range management. Since both forest and grassland ecosystems are public resources, the results-based Code will need to carefully define and balance the spectrum of values found within the public of British Columbia. Defining and determining whether or not values have been balanced needs to be an open, transparent, and participatory process that involves the general public, as well as professionals and special interest groups.

   The current results-based Code does not define the values on which results will be based, thus leaving this critical decision to timber companies, range users, and, perhaps, government bureaucrats. In the absence of clearly defined, inclusive values that are balanced within the results-based Code, this approach to forest and range management will not protect either the ecosystems that provide the resources or many of the public interests that depend upon these resources.

3. **Socially-based management versus industrially-based management . . .** Planning and management of the forest, grasslands, and other associated ecosystems is carried out primarily for the overall well-being of our broader society, not primarily for the well-being of corporate balance sheets. This well-understood tenet of a democratic society and important ingredient of ecological and cultural sustainability is a necessary part of the foundation of any forest and range management regime. We need to recognize that industrial activities are only part of our social structure. Society needs to determine the framework within which industry functions, not the reverse. The broader social structure needs to set the values, principles, and standards that need to be adhered to by industries of all varieties in order to meet the short- and long-term social, economic, and ecological objectives of society.

   The current results-based Code does not recognize the appropriate hierarchical relationship between society as a whole and the strong special interest of industrial activities. Because of this error, the results-based Code does not provide a suitable framework for protection of the full range of social values and needs.

4. **Professional reliance and accountability . . .** Development and implementation of the results-based Code will place large responsibilities for setting values, prescribing practices, and evaluating results in the hands of professional foresters, professional agrologists, professional biologists, and professional engineers. I cannot evaluate the role of the other professional organizations, however, I feel qualified after nearly 30 years as a forest researcher and practicing forester to comment on the role of professional foresters.

Unfortunately, both forestry education and the demands of employers have led to many foresters assuming that the interests of their employers fairly represent the interests of First Nations and the general public. In my experience, this situation leads to homogeneous forest practices that are more about "least cost logging," and "maximizing the cut," than about achieving broader public interests. This approach is an oversimplification of the needs and values of First Nations and the general public. In general, foresters (in particular, industrial foresters) are poorly equipped to plan and achieve results that truly meet the full range of short- and long-term ecological, social, and economic objectives of First Nations and the general public. Hence, the results-based Code will place the primary responsibility for implementation in the hands of a professional group that has not demonstrated an ability to either understand the breadth and importance of the full range of social values associated with forests, or to protect these values in the forest landscapes they manage.

Accountability of foresters for their actions in forest landscapes is limited to a self-regulating body—the Association of British Columbia Professional Foresters. Over the course of the existence of this Association, it has tended to protect the dominant industrial forestry paradigm at the expense of non-timber forest values and activities. This bias has hindered the ability of the Association to hold its members accountable for practices that do not reflect the broader public good, and that do not represent practices well-grounded in current scientific understandings and social needs.

The results-based Code will place too much responsibility and authority in the hands of professional foresters working for the timber industry. This situation will result in an "industrial bias" in defining prescriptions and acceptable results of forest management practices.

5. **Thresholds and ranges for "results" . . .** In order to meet the broad range of ecological, social, and economic values associated with the management of public forest and grassland ecosystems, the results-based Code will need to define acceptable ranges of results for forest and range management. These "ranges of results" will provide for a wide range of professional and management flexibility, while ensuring that the broad needs of society are met.

   As well as establishing acceptable "ranges of results," there is also a need for a results-based Code to define thresholds for acceptable practices. In other words, thresholds need to be defined for such topics as the minimum area of old growth forest by ecosystem type to protect within each watershed; the minimum volume, distribution, and decay class by species of fallen trees to be maintained in riparian and upland ecosystems; and maximum road densities in each watershed. These thresholds represent a definition of unacceptable results that would lead to short- and/or long-term damage to ecological, social, and/or economic values. Thresholds may be challenged by industrial practitioners, using valid, current scientific rationale, but the final decision for adjusting a threshold needs to remain with government decision-makers who are charged with representing the broader social good.

   In order to be effective, the results-based Code needs to define acceptable ranges and thresholds for results. These definitions need to be comprehensive and clear, and to be incorporated into legislation. As well, the legislation needs to include a clear process for challenging and revising ranges and thresholds for results. Defining ranges and

thresholds for results will not be prescriptive, because the "ranges of results" will provide for adequate flexibility in management while protecting the range of public interests. In addition, "ranges of results" and thresholds will provide the public with an understanding of the range of practices they may expect on the landscape. This latter provision is a minimal obligation for private use of public resources.

6. **Ecosystem-based approaches . . .** Current scientific literature, as well as prevailing social objectives for forest use, overwhelming support the use of ecosystem-based approaches in managing forests. An ecosystem-based approach, in contrast to integrated forest management, is the foundation for both ecological and cultural sustainability.

   The current results-based Code does not support ecosystem-based approaches. In fact, by placing the primary responsibility for planning and managing forests with timber companies, the results-based Code will de-emphasize ecosystem-based approaches, because an ecosystem-based approach results in lower cutting rates and higher planning costs. Neither of these results are common industrial forestry objectives.

7. **Baseline information . . .** In order to determine whether a particular forestry practice results in changes, either negative or positive, to ecosystem composition, structure, and functioning, there needs to be baseline information to desire natural characteristics and conditions. A key aspect of the results-based Code requires the determination of whether or not negative impacts occur as the result of forestry practices. In order to make this determination, there needs to be a requirement for, and adequate definition of baseline information specific to various situations, i.e. slope stability, biological diversity, and hydrological regimes. In the absence of adequate baseline information, there will be no reliable way of determining whether a particular situation is a natural event or a management-induced event.

   Baseline information is neither required nor defined in the current results-based Code. Without adequate baseline information, determination of the cause of problems, from landslides and floods to loss of species, will not be possible.

8. **Enforceability . . .** In order for the results-based Code to be enforceable, the desired results need to be well enough defined that auditors clearly understand what they are evaluating. In other words, for each result, there needs to be comprehensive criteria and indicators that define the desired result. These criteria and indicators form the basis for audits of forest planning and practices. Without such comprehensive criteria and indicators, meaningful audits are not possible, and audits will not be reasonably replicable. That is to say that different auditors, particularly auditors with different values and backgrounds, are likely to derive substantially different conclusions without adequate criteria and indicators. This will lead to chaos and confusion in attempting to enforce the results-based Code.

   Adequate criteria and indicators to define results are not incorporated into the current results-based Code. These criteria and indicators need to be enshrined in legislation in order to ensure the enforceability of the results-based Code and to define for the public the results that they may expect in the management of public forest land.

9. **Liability of foresters . . .** Professional foresters in the employ of timber companies will be the primary decision makers under the results-based Code. While these people will not actually approve or disapprove the resource development permit (RDP), they will be the people responsible for collecting and interpreting the information behind the resource

development permit. Therefore, while the district manager will approve/disapprove the RDP, professional foresters will possess all of the key information that supports the RDP. In the event of a disagreement regarding the RDP, quasi-judicial bodies and courts are likely to support the decisions of the professional forester who collected and interpreted the information, as opposed to the decisions of the district manager or other approving authority. Therefore, the results-based Code needs to clearly define the liability of professional foresters for their decisions in all aspects of forest planning and management. Without this liability, the results-based Code will not be enforceable.

Liability of professional foresters is not defined by the results-based Code. This lack of liability of professional foresters in combination with the lack of definition of results, particularly criteria and indicators to define results, means that the results-based Code is not enforceable.

10. **Certification as a surrogate for government regulation . . .** One of the premises underlying the results-based Code is that fewer regulations are needed to govern forestry, because " . . . certification initiatives are solid proof that industry has the knowledge and the incentive to do its job properly." This assertion makes little sense. In the first place, certification initiatives have developed as a result of industry not doing many of their jobs properly. Certification is a program aimed at using market pressure to improve forest management practices. If the timber industry was practicing high quality forestry, there would be no need for certification programs.

    Proponents of the results-based Code have also suggested that certification can replace regulation and auditing by government. As an accredited Forest Stewardship Council certifier, I disagree with this suggestion for the following reasons:

    - Certification bodies are private organizations that reflect primarily the interests and objectives of their respective organizations. Many certification bodies are primarily focused on "marketing their label," as opposed to enforcing rigorous standards. This is in contrast to governments that are charged with representing the broad social interests of the full spectrum of society. Therefore, certification bodies are not structured to protect the broad social interests of society in the same way that governments are.
    - The various certification schemes (i.e., Canadian Standards Association, Sustainable Forestry Initiative, ISO, and Forest Stewardship Council) all have significantly different goals and areas of emphasis. Being certified under one scheme does not necessarily mean that a forest company would be certifiable under a different scheme. Therefore, different certification schemes do not provide for consistent evaluation of forest management.
    - There is no guarantee that certification bodies, or for that matter certification schemes, will be long lasting. From the standpoint of the broader society, good evaluation of forestry practices requires the guarantee of long-term continuity. That is the role of government, not of private organizations.

    Certification schemes should not be viewed as a surrogate for clear, comprehensive government regulation and auditing of forest management on public forest land. The various certification schemes are private initiatives to promote various kinds of forest management in the marketplace. In contrast, regulation of public forest management needs to be developed and carried out by public agencies.

Specific Issues

The specific issues discussed below are referenced to particular statements made in the discussion paper for the *Results-based Forest and Range Practices Regime for British Columbia* (the discussion paper):

1. **Aboriginal title and rights . . .** In the Introduction to the discussion paper, it states: " …forest practices legislation requires consultation with those who have a stake in forest resources and their management. . . . the Government of British Columbia is committed to addressing First Nations issues regarding forestry activities in the province and the relationship of those activities to their interests." (emphasis added) Aboriginal title and rights are more than a mere interest. This has clearly been defined by numerous court cases, most notably *Delgamuukw*. In order for the results-based Code to have meaningful legal standing, First Nations aboriginal title and rights need to be both recognized and accommodated.
2. **"Freedom to manage" . . .** The concept of freedom to manage is presented in Section 2 of the discussion paper. While professional discretion is an important and desired part of good forest management, this discretion needs to have clear bounds in order that the public understands the range of forest management practices that can be expected to occur in public forests, and that key forest functions are protected. Without these clearly-defined bounds, under the results-based Code freedom to manage will simply mean freedom for industrial foresters to do what their employers require.
3. **Key assumption—no joint statutory decisions . . .** A primary premise of the results-based Code is to eliminate joint statutory decisions. The current Forest Practices Code requires joint statutory decisions between the Ministry of Forests and the Ministry of Air, Water, and Land Protection (formerly Ministry of Environment) on sensitive issues like community watersheds and issues of biological diversity. These joint statutory decisions provide an important check and balance in planning and managing forests. As such, joint statutory decisions need to be maintained in the results-based Code to ensure fair, balanced decisions.
4. **Measurable, auditable, and enforceable . . .** The discussion paper states that the results-based Code will be measurable, auditable, and enforceable. As explained under General Issues, this is not achieved in the current results-based Code, because results are not defined by clear criteria and indicators.
5. **Risk . . .** Under Section 3, Legal Framework, the discussion paper indicates: "that licensees will manage risks associated with achieving specific results, and that the government will hold licensees accountable for achieving those results." Risk is a very value-laden concept, and in order to have any enforceable meaning, risk must be clearly defined as it relates to forest planning and management. There is no definition of risk in the current version of the results-based Code. In order to protect the public interest, the definition of risk must err on the side of protecting short- and long-term forest functioning, as opposed to protecting the short-term financial position of timber companies. Another important part of defining risk, is to clearly separate "natural risk" from "management-induced risk."
6. **Landscape-level zones and objectives . . .** Land and resource management plans (LRMPs) will be the basis for establishing land use zones and objectives. The current

results-based Code specifies that in the absence of LRMPs, "interim zones and objectives will be applied." It is not clear how interim zones and objectives will be defined, and who will be responsible for this decision. In order for such a decision to be valid, it needs to be an inclusive process that incorporates the needs of the full spectrum of interest groups. Also, it needs to be recognized that the establishment of interim zones and objectives will bias future planning initiatives that apply to the area where interim zones and objectives have been established. Therefore, the interim zones and objectives would be best defined by a properly constituted planning table for a particular area.

7. **First Nations and landscape-level zones and objectives . . .** Many First Nations have not participated in LRMPs in their territories, and do not recognize the results of LRMPs as accommodating their aboriginal title and rights. Therefore, the definition of landscape-level zones and objectives needs to be reconciled with First Nations in a government-to-government process that accommodates aboriginal title and rights. During the establishment of interim zones and objectives, First Nations need to have a special place that recognizes and accommodates their aboriginal title and rights.
8. **Insufficient LRMP statements . . .** The discussion paper indicates that "most LRMP statements are not currently suitable to support implementation of this results-based regime." (Pg 9) The discussion paper goes on to indicate the need to define more clearly LRMP statements so that they may be implemented through the results-based Code. However, the document is silent as to who will define the LRMP statements and how that definition will occur. The process of better defining LRMP statements needs to not only occur in an open process through the appropriate LRMP tables, but also to accommodate aboriginal title and rights.
9. **Resource development permit (RDP)–development unit . . .** The area of interest to which an RDP applies is being referred to as a "development unit." A development unit can refer to a single cut block, multiple cut blocks and connecting roads, and/or a corridor to connect other units where a road will be constructed within the corridor. The district manager will issue an RDP for a development unit provided that the units:
    - "do not conflict with tenures or legal rights conferred by government on other parties;
    - are consistent with landscape-level zones and objectives;
    - recognize and address specified hazards; and – are designed with due consideration of public concerns."

    All of these requirements are vague and subject to wide latitudes of discretion. In order to protect the public interest, concepts like "specified hazards" and "due consideration of public concerns" need to be clearly defined. In addition, the accommodation of aboriginal title and rights needs to be included as a requirement to obtain an RDP. Finally, the district manager needs to be given the latitude to not issue an RDP for unanticipated, but substantive reasons even though the above tests are met. This provides an important check and balance to ensure that RDPs meet the ecological, social, and economic objectives of the broader society.
10. **RDP—consultation with First Nations . . .** The discussion paper indicates that the results-based Code will require consultation with First Nations to the satisfaction of the district manager. There is not a definition of consultation, nor is there a requirement to

accommodate, as opposed to consult, aboriginal title and rights. As mentioned earlier, current court decisions require accommodation, not just consultation.

11. **RDP—multiple licensees/multiple development units . . .** The discussion paper proposes that a number of licensees can jointly submit an RDP and/or that a number of development units may be proposed in a single RDP. Such a structure is both confusing to the general public and open to manipulation. By combining several licensees' areas of interest or several development units, key differences between areas of interest/development units may be minimized or lost in an RDP. This is particularly true given the lack of specific requirements for supporting information to accompany an application for an RDP. Also, people in the general public attempting to influence management practices under an RDP may be confused as to what specifications and information requirements apply to the various areas of interest, companies, and/or development units within an RDP. For these reasons, I believe that an RDP needs to apply to only one company and to one area of interest/development unit.
12. **RDP—contents . . .** The RDP is only required to consist of a "geo-referenced map, at a scale satisfactory to the district manager, showing the proposed location of development units." The only standard set for this map is "that it is meaningful to the district manager when applying the tests" for evaluating an RDP application (see 9 above for description of tests). These tests are very general in nature and require few details to be included with the RDP map. For example, the discussion paper indicates that "it is not necessary to provide the specific location of any particular timber harvesting and/or road construction activity." The discussion paper goes on to indicate that an RDP might contain "a limited number of details regarding development activities." However, the details that may be required are not defined, other than providing a few general examples.

    Given that the RDP is the only point where public consultation occurs, and that the district manager is required to issue an RDP if the tests are met, an RDP application and eventual permit needs to contain significantly more substantive information than is currently specified in the discussion paper. Specifically, the RDP needs to contain enough map/spatial information and technical information so that First Nations may fully evaluate the potential for a proposed activity to infringe upon their aboriginal title and rights, and/or that members of the general public may determine the risks to their interest as a result of the issuance of an RDP. I wish to emphasize that an RDP must be a comprehensive plan particularly if it constitutes the only place where public consultation occurs. It is a minimal responsibility for developers of public resources to provide full details of their plans for review by First Nations, the general public, and statutory decision-makers prior to receiving approval that a development may proceed.
13. **RDP—degree of risk . . .** The standard of proof for a district manager to be satisfied that an RDP passes a test is "commensurate with the degree of risk to the values or interests at stake." As explained under General Issues, risk is a very value-laden concept. Hence, how risk is determined and who makes that determination will significantly affect the standard of proof required. The definition of risk to be applied by the district manager in evaluating an RDP must be a rigorous definition that is developed through a process that protects the diversity of public interest.
14. **RDP—consultation . . .** As a part of the tests to "address specified hazards," and to provide "due consideration of public concerns," the licensee is required to follow

"appropriate consultation processes to gather and consider information from local communities and other interested members of the public." "Appropriate consultation processes" must be carefully defined in order that consultation processes are uniform between various licensees, and adequate to meet the diverse needs of various public interests. In short, licensees need to be directed to carry out meaningful consultation, and to be given the requirements for meaningful consultation. Without these provisions in a results-based Code, the public interest will not be protected.

15. **RDP—specific hazards . . .** Information required to be provided regarding specific hazards is limited to the legal objectives for land use zones (includes old growth forest targets), community watersheds, and watersheds with significant downstream fisheries values. While these particular areas require careful attention to specific hazards, all forest areas require attention to specific hazards in order to avoid cumulative degradation of forest landscapes and to ensure sustainability of the public forest resources and values at all levels. Therefore, each RDP needs to include information regarding the full spectrum of specific, potential hazards in all forest areas, including downstream and cumulative effects in the larger landscape in which a development unit is situated. For example, each RDP needs to include information regarding potential hazards to biological diversity at multiple spatial scales, riparian ecosystem characteristics, terrain stability characteristics, and ecological limits to the long-term sustainability of timber and non-timber forest resources.
16. **Results-based management regimes by values . . .** The term "values" as used here means "forest values currently addressed under the Forest Practices Code," and should not be confused with the broader definition of First Nations and public values for forests (see General Issue #2). In short, the "management regimes by values" are by and large simply a restructuring of information and management specifications contained within the current Forest Practices Code. The "goal statements" that define each value will have "no legal standing." All the goal statement is to achieve is to "articulate the desired outcome for each value" and "as the basis for continuous evaluation and improvement of the results-based code." Based on this wording, I conclude that a goal statement can mean almost anything the government wants it to mean at any particular time. Because government policy drives the achievement of goals, the goals are subject to frequent change, depending upon the objectives of the day for government. Hence, results-based management regimes by values is largely legally unenforceable, and provides little assurance to the public that various forest values will be protected in the short and long term. These problems are closely connected to General Issues 2, 3, 5, and 8 discussed earlier in this document.

The review of Specific Issues that follows is related to some of the technical issues regarding the management regimes by value outlined in the discussion paper. My discussion of these technical issues is not intended to imply that these are the only technical problems or omissions in the current results-based Code, but is intended to provide examples of the problems that characterize the attempts to achieve forest management goals in the discussion paper. A full review of the proposed results-based Code requires a more comprehensive analysis of technical issues that need to be defined and legally embedded in the results-based Code.

17. **Landscape-level biodiversity . . .** The list of landscape scale attributes is missing the following important attributes that are necessary to protect in order to maintain landscape-level biodiversity: naturally rare and anthropogenically rare ecosystem types, special

features, representation, and habitat for focal species. These attributes need to be defined and required, in addition to the attributes mentioned in the discussion paper to protect landscape-level biodiversity.

18. **Exemptions to retention of old forest . . .** The district manager is able to exempt an RDP from meeting old forest objectives:
    - "when necessary to address a forest health factor;
    - when necessary for road development;
    - where no reasonable or cost-effective alternative exists; or,
    - when necessary to achieve timber supply objectives as per existing code impact policy."

    These exemptions are comprehensive and would apply to virtually every RDP. Therefore, the district manager is able to exempt every RDP from retention of old forests. Implementation of these exemptions is both a mockery of conscientious, professional forest management, and will also compromise maintenance of biological diversity at multiple spatial scales.
19. **Landscape connectivity . . .** The discussion paper indicates that landscape connectivity will only be conserved "where objectives for landscape connectivity have been legally established." This provision is completely inadequate for protecting biological diversity, because connectivity must be maintained in a forest landscape at multiple spatial scales in order to meet the needs of a range of species.
20. **Temporal and spatial distribution of cut blocks . . .** The discussion paper indicates that "the District Manager must be satisfied that cut-blocks within a proposed RDP will achieve objectives for other resource values." In order for this statement to be effective, there is a need to define the criteria and indicators that would be used by a district manager to ensure that cut blocks protect non-timber forest values. Such criteria and indicators are not defined in the current results-based Code. This is an example of where appropriate criteria and indicators not only need to be included in the results-based Code, but also an example of General Issue 5, **Thresholds and ranges for results,** and General Issue 8, **Enforceability**.
21. **Temporal and spatial distribution of cut blocks—exemptions . . .** Green-up standards may be increased "for hydrological reasons, to manage wildlife values, or to manage recreation or scenic values or for other similar reasons." These are good reasons to increase the green-up standard. However, to be effective, criteria and indicators need to be established to define the situations where green-up standards may be increased. As with other criteria and indicators, these need to be legally enforceable.
22. **Wildlife trees—exemptions . . .** The discussion paper indicates that designated wildlife trees "can be harvested to address a forest health factor." This is another "universal exemption," similar to that discussed above regarding old forests (#18). Such sweeping exemptions open up the results-based Code for broad manipulation by timber companies and district managers. Such broad exemptions need to be restricted with carefully defined criteria that indicate when an exemption is possible.
23. **Coarse woody debris . . .** Retention of coarse woody debris includes "large pieces that can last the whole rotation." To be biologically effective, and to maintain biological diversity, the results-based Code needs to require the maintenance of coarse woody debris

in perpetuity, not for one rotation. The way to achieve this goal is for the results-based Code to require the designation and protection of appropriate full cycle trees in all areas that are scheduled for logging.

24. **Forest health . . .** As with the current Forest Practices Code, the results-based Code as presented in the discussion paper confuses "timber health" with forest health. Forests are built on, and require an on-going supply of dead trees to protect biological diversity, maintain high quality water, and sustain soil fertility. The section on forest health needs to be rewritten so that it recognizes the ecological niches of various "forest health" factors, and ensures that management practices maintain forest health factors, while keeping short-term losses of timber to a minimum. Revising the forest health provisions in this way requires revision of the exemptions to protecting sensitive areas and meeting land use objectives during salvaging for forest health reasons. In other words, forest health provisions should not provide a carte-blanche reason to log sensitive ecosystems and ignore land use objectives.
25. **Forest health—private land . . .** The discussion paper gives broad powers to the regional manager to order a person on private land to treat forest health factors. This power needs to be constrained by the need to maintain the ecological functions of forest pests, and by the land use objectives and values of the private land owner.
26. **Silviculture . . .** Silviculture activities are required to "sustain or enhance the productive capacity and value of the land and forest for timber and non-timber resources at the stand and landscape levels." (emphasis added) This is an important goal but is another example of a place within the results-based Code where legally enforceable criteria and indicators are needed to achieve the goal. For example, achieving this silvicultural goal requires the establishment at multiple spatial scales of networks of protected ecosystems. This goal also conflicts with the requirement to "establish and maintain a healthy, well-stocked and free-growing stand with no less than the required minimum well-spaced stems per hectare of commercially valuable trees that are ecologically suitable to each site." This contradiction needs to be fixed so that timber management is blended appropriately with the need to sustain non-timber resources.
27. **Soil conservation—rules . . .** The rules for soil conservation refer to "soil disturbance," and not to soil degradation. Does soil disturbance mean soil degradation, or does it have some other meaning? Terms like soil disturbance and sensitive soils need to be defined in order for the results-based Code to be effective and enforceable.

    The rules permit maximum soil disturbance of 5% per hectare for sensitive soils in the net area to be reforested and 10% per hectare for all other soils. Without knowing precisely what is meant by "sensitive soils," my first reaction is that operations should not be permitted on sensitive soils, and, therefore, the maximum permissible soil disturbance on sensitive soils should be 0%. However, this opinion may change depending upon the meaning of "sensitive soils." I also believe that the 10% per hectare maximum for all other soils could be reduced to 7%.

    The rules go on to permit higher levels of soil disturbance for both sensitive soils and other soils where multiple harvest entries occur. This provision is not necessary. With appropriate harvest planning, soil disturbance levels with multiple entry harvesting will not be higher than with single entry clearcutting.

Soil conservation rules also permit higher levels of soil disturbance for temporary access structures where "soil conditions on these sites are suitable for rehabilitation." The rule goes on to indicate that rehabilitation must be completed within one year of the completion of harvesting operations. This is an unattainable requirement, because most soil rehabilitation requires at least decades, if not centuries.

28. **Terrain hazard management—rules . . .** Where forest practices cause landslides, forest managers must promptly report such events and carry out emergency measures. This is an example of a situation which occurs in numerous places in the discussion paper where a method of determining cause is not defined. Without knowing how cause is determined, such provisions in the results-based Code are not enforceable.
29. **Riparian management . . .** The importance of riparian areas is not limited to maintaining aquatic ecosystem functioning, but also includes "water's influence on the land," or maintaining the functioning of terrestrial ecosystems. The importance of riparian areas to terrestrial ecosystems, including terrestrial biodiversity, needs to be included in the results-based Code.
30. **Riparian management—rules . . .** The rules are unclear as to whether riparian reserve zone and management zone requirements will adequately protect small, non-fish bearing streams. These small streams need to be adequately protected, because their characteristics are responsible for the characteristics of large fish-bearing streams.

    Riparian rules require that "sufficient trees" be retained in a management zone to meet the results. This is another example in the discussion paper of inadequate definition of terms that results in a lack of enforceability. "Sufficient trees" need to be defined in relation to their size, species, and spatial distribution.
31. **Cultural and heritage resources . . .** Management of cultural and heritage resources is to be done "in accordance with the legislation or with written direction from the district manager." Where cultural and heritage resources refer to First Nations culture and heritage, these resources need to be managed in accordance with the requirements of the appropriate First Nation. Similarly, if culture and heritage resources are those of non-Indigenous people, these resources need to be managed in accordance with the people whose culture and heritage is reflected by these resources.
32. **Regime for fire management . . .** This portion of the results-based Code, as defined in the discussion paper, refers to the protection of values and resources from destruction by fire caused by forest or range practices. There are no specifics in this section, and protection of values and resources from fire can take on many and sometimes contradictory meanings. For example, some might argue that clearcutting an area removes fire hazard. However, the most fire-prone stands are young, even-canopied stands that result from clearcutting. Also, protection from fire may be achieved by burning some portions of a landscape to reduce fuel loads, create canopy gaps, and develop a "fire-proof" forest. None of these issues are addressed in the results-based Code regime for fire management. Hence, this is another example of lack of adequate definition, and a lack of clear enforceable criteria and indicators.

This concludes my review of Specific Issues related to some of the technical issues regarding the management regimes by value outlined in the discussion paper.

33. **Non-legislated realm . . .** The discussion paper indicates that non-legislated components, like the best available science and forest practices guidebooks, will be outside of the

legislated realm of the results-based Code. While portions of best available science and forest practices guidebooks belong outside of the legislated realm, many key scientific understandings and forest practices standards need to be included in the legislated part of the results-based Code in order to provide adequate definition of results and to ensure that the definition of results is enforceable. This matter was discussed in more detail in the General Issues portion of this paper.

34. **Appendix 1—Land Use Zones and Objectives . . .** The discussion paper contains a list of land use zones by "value" that also specifies the "products" for each proposed land use zone. The list of products is very general, and raises the question of whether some land uses are mutually exclusive of other land uses. To be effective, land use zones need to be defined in ways that describe if, and/or how different, and often competing, land uses will be accommodated in various zones. The discussion paper is silent on this matter. Since industrial foresters will be primarily responsible for planning, I wonder if all land use zones will be essentially timber zones with some provisions made for non-timber values and resources. This question cannot be answered without significantly more definition of land use zones and the interrelationship between zones than currently occurs in the discussion paper.

Summary

As described in the discussion paper, the results-based forest and range practices regime appears to be a method of turning over planning and decision-making authority for forest management from socially responsible bodies (i.e. government agencies) to industrial forestry interests. This transfer of power is being proposed in the absence of clear definition of expected results, and with a lack of inclusion of important forest, cultural, and economic issues in the results-based Code. This will lead to a management paradigm that emphasizes the narrow interests of large industrial timber companies at the expense of First Nations and non-timber forest values. This conflict will be magnified by the lack of enforceability of the results-based Code that may lead to significant uncertainties and conflict around forestry practices in British Columbia. In other words, without significant change, including development of an enforceable forest practices code that incorporates broader social values, accommodates Aboriginal title and rights, and incorporates leading scientific understandings about forest ecosystems, the results-based Code, as proposed in the discussion paper, will result in regressive forestry practices and likely foster a new era of conflict and uncertainty in British Columbia forests.