

Professional Reliance issues and Examples

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Professional reliance amounts to deregulation of environmental protection and sustainable forestry in our province. Deregulation is not in the broad public interest because environmental values that are not easily monetised lack rigorous protection. Professional reliance in forestry has created deregulation because FRPA was structured with other 4 other safeguards—namely the 3 pillars of strong and clear objectives; specific plan and practice requirements (presumably without wide abilities to propose weak alternatives); plus thirdly rigorous, transparent compliance and enforcement. The fourth safeguard is effectiveness evaluations.

Effectiveness evaluations were supposed to guide future modification to policy. Also effectiveness evaluations assumed that all 11 FRPA values would be monitored, including the tougher ones around landscape values. We were told at that time that issues identified in the FREP program would result in legislative changes. No legislative changes from FREP have yet occurred since FRPA was enacted in 2003. Minimal landscape level monitoring has been done.

All of the other 4 safeguards in FRPA have glaring deficiencies. In general, FRPA has received huge criticism from professional organisations such as the Forest Practices Board and the Auditor General.

My main point is that professional reliance on its own can not ensure sustainable forest management outcomes. Strengthening of the FRPA safeguard pieces and the regulations is needed to correct these deficiencies.

I recommend, restricting professional reliance to situations where competing values do not need to be balanced. This includes competition between any environmental value and the profit motive that industry professionals are under pressure to achieve. It will mean rehiring of government professionals and valuing RPFs, RPBios, forestry and wildlife technicians such that specialist knowledge is respected. And it will need a change in attitude from *“only non-regulatory solutions such as persuasion, training, extension notes are viable solutions”*.

One of the tools cited as controlling forest management outcomes are the Forest Stewardship Plans. Yet the FSP results and strategies do not go far enough, particularly for landscape issues and where external stakeholders also have competing interests to ensure outcomes desired by the public.

Below is a laundry list highlighting some deficiencies in professional reliance:

1. Loss of Landscape biodiversity

In a nutshell the landscape biodiversity issue and how it relates to professional reliance is this: It is generally agreed we have moose, fisher, goshawk etc declines in our province (see Gorley report re moose). Moose were once presented by foresters as an early seral ie clearcut tolerant species, because of the increased browse in openings. This population decrease is at least partially caused by the lack of winter, birthing and calving cover removed by the large,

aggregated clearcuts. It is likely these wildlife declines are linked to these large openings with the resulting lack of functional connectivity and insufficient mature in-block retention. Extremely large and aggregated openings have been created around the province, many—but not all of which were Mt Pine Beetle related. For example, a report referenced in the 2017 Chief Foresters Guidelines for Spruce Beetle Harvest, using data derived for 2016 for the Prince George Timber Supply Review by Forest Inventory and Analysis Branch of FLNRORD spoke to opening sizes. GIS analysis showed 14 functional openings greater than 10,000 ha, 2 of which were larger than an astounding 50,000 hectares in PG TSA (3 districts). These openings had a median in block retention of merely 8% and total mature forest of 16%—not nearly enough for wildlife connectivity.

This low retention percentage was in spite of the Chief Foresters guidance 2005 *“Guidance on Landscape-and Stand-level Structural Retention in Large-Scale Mountain Pine Beetle Salvage Operations”* (Snetsinger 2005). The Chief Foresters guidance advocated for both coordinated industrial planning of openings and retaining 25% mature timber in larger openings.

I submit that if professional reliance was an appropriate tool—this would not have happened. Foresters would have coordinated their openings and retained more inside openings.

The second issue around landscape biodiversity is the way the legislation is written and interpreted.

Section 12 of the Forest Planning and Practices (FPPR) regulation under FRPA allows the licensee to propose an alternative in their FSPs to the 60 ha max cut block size and adjacency, (FPPR 64, 65) requirements. These limits were immutable regulations under the Forest Practice Code. Any proposed FRPA Section 12 alternatives are approved by government by the District Manager in the licensee’s Forest Stewardship Plan (FSP). The district manager considers whether government objectives for landscape biodiversity are met by the alternative proposed by the licensee. It is generally accepted provincially, but without wildlife biologist’s or landscape ecologist’s input, that Landscape Orders are sufficient reasoning and best science to be an alternative for the cut blk size and adjacency requirements. For example, the Prince George Landscape Order allows very high amounts (40% -60%) of young forest. Such things as required moose or fisher ‘dash distances” to cover do not appear incorporated into biodiversity sections of FSPs.

Professional reliance and FSPs are insufficient to ensure proper maintenance of landscape level biodiversity.

2. Risk to Wildlife Populations

Insufficient landscape level planning is likely adversely affecting wildlife populations. For example a 2017 report by the Auditor General states *“Grizzly bear populations in some areas of B.C. are increasing, but this is likely happening independently from an adequate management framework,”* said Auditor General Carol Bellringer.

Improved processes are needed to address habitat impacts, which currently is primarily under the purview of professional reliance.

3. Risk to Sustainability from Over Development

A 2015 report by the Auditor General on the BC Cumulative Effects framework states:

“The tension between the need to protect the environment and the need to grow our economy is well documented in the news,” said Ms. Bellringer. *“We acknowledge that efforts to consider and manage the cumulative effects of natural resource development remain a fledgling practice in Canada. But, managing cumulative effects will become even more complex than it already is as development pressures on the province’s land continue to increase. It’s in the interest of British Columbians to address cumulative effects management without delay.”*

Clearly the Auditor General was not thinking that professional reliance was adequate to manage multiple and overlapping development.

4. Inadequate Small Stream Management

Small streams flow into bigger streams. The small streams need to be properly functioning because many of them have fish and because any sediment they contain then flows into the larger streams. Forest and Range Evaluation Program (FREP) sampling indicates that these smaller streams are not properly functioning and this is linked to the lack of reserves along them. (See 2017 FREP Extension Note 38. *The Importance of Small Streams in BC.*) Research showing the need for reserves on small streams has been around at least since the 1990s. (See Beaudry, Rex) The “influence model” with extension and continuous improvement has not worked to improve riparian practices.

Given that the science has been there, if professional reliance was a sufficient tool to improve practices, the FREP stream data results would reflect an improvement for small streams with adequate reserves. If professional reliance has not been effective in altering deficient practices as indicated by sound science data, then it would appear that legislation requiring small stream protection and reserves is an obvious solution.

5. Lowered plantation densities will reduce future timber supply.

Professional reliance should mean that ALL foresters professionals put the interests of “public good”¹ ahead of short term industrial profits. I have three examples how professional reliance was insufficient in maintaining future plantation yields. The examples show how the rules

¹ The BC Forest Professionals Code of Ethics states the member has a responsibility to “advocate and practice good stewardship of Forest land based on sound ecological principles to sustain its ability to provide those values that have been assigned by society” and to “uphold professional principles above the demands of employment”.

around measuring of stocking or seedling densities were weakened, which inevitably lead to reduced timber supply in the future.

The first is the uncapping of the M value which was approved in some prior FSPs. The M value, or maximum per plot value, is a technical term used in plantation surveying which caps the number of well spaced trees such that a very dense plot won't overly compensate for an area or plots within the block stratum which has lower seedling density or voids. It's a mechanism to ensure all of the ground—not just portions of it—are growing trees. That the plot average is consistent through the block stratum. The timber supply models we use assume full and even stocking. Silviculture foresters know that raising, or worse yet uncapping, the M value will allow patchily stocked areas of ground to be declared Free Growing ie properly stocked so that the stand itself won't actually achieve timber supply projections.

In my view, if professional reliance was a sufficient tool, then this lowering of standards would not have occurred because of the impact to future timber supply.

My second example is that planting densities have decreased and more reliance is being placed on natural ingress. The overall outcome is that more plantations are being accepted as Free Growing closer to minimums rather than target densities.

If professional reliance created the outcomes that future timber supply models, then industry and government BCTS foresters wouldn't be lowering planting densities because it comes at the expense of fewer stands meeting target densities with its resultant reduction in future timber supply. Short term industrial economics would not override long term productivity.

In a third example, consultant foresters declared multiple openings as "Free Growing" ie suitably stocked, but the number of well spaced seedlings were below the minimums. If professional reliance was a sufficient measure to ensure data reliability, then, those foresters, who must know the rules, would not have submitted that incorrect milestone declarations. I submit we need improved mechanisms / monitoring to ensure correct milestone declarations for plantations.

6. Plantations no Longer Monitored by Crown

Every district used to have a forester that monitored Free Growing compliance full time. These professionals evaluated if the public's plantations that the Crown paid for were actually meeting expectations. A recent government contract on the coast checked a mere 30 portions of openings and found problems. The province has not been monitoring Free Growing Plantations for the last 3 years. This is a huge risk to future sustainability, regardless of actual outcome. The original premise of FRPA was that the more 'results based' "less-directive" regulatory regime would be supported by a pillar of robust Compliance and Enforcement. By neglecting this pivotal monitoring, the implication is that professional reliance will take up the slack. Is this a valid assumption for something so important to future sustainability?

7. Professional Reliance Model is Not Sufficiently Robustly Structured in BC

An effective professional reliance model has adequate checks and balances with firm,

enforceable consequences for failure. For example when we see that fewer plantations are reaching targets, the land owner ie the Crown, could enforce improving plantation densities. The professional reliance model, as structured in BC, relies on professional associations such as Association of BC Forest Professionals (ABCFP), College of Applied Biology to discipline members who do not meet professional standards of work or conduct. This structuring has several weaknesses. First the associations only respond to complaints by other members or the public—neither the association or government actively look for substandard work. Second members ie the people who actually understand our business, are extremely reluctant to criticize other members. Third this evaluation of the professional, alters the focus from objectively reviewing plan content for good stewardship and maintenance of public good to critiquing the person’s work and behavior—a much more subjective process. Fourth, the associations themselves tend to have loop holes in how they investigate professional work and conduct. Loop holes such as “client confidentiality” and “management prerogative”. Another weakness in how professional reliance is structured in BC is that the Crown has given away its authority to unaccountable third parties—the professional associations. The Crown is doing minimal monitoring itself. This would be less of a problem if government had stronger regulations—but we don’t. FRPA is structured on professional reliance.

8. No Firm Line between Management Prerogative and Professional Reliance

In many instances people hope that professional reliance ie responsible considerations by the professional, will ensure good forest stewardship but “management prerogative” interferes.

9. Cutting Permits Must be Approved.

Ministry culture no longer encourages managers to advocate for good stewardship when licensees push the line. In large part, this is because our legislative tools are few and weak. For example cutting permits MUST be approved if there is a valid tenure, current FSP and no outstanding First Nations concerns. The District Manager decision maker has no “adequately manage and conserve” test allowing him/her to properly balance out competing stakeholders and environmental interests as the decision maker did under The Forest Practices Code. The professional reliance model in BC assumes that licensee professionals will be able to balance competing interests and also coordinate decisions at the landscape level. For example while the first 10 cutting permits in a drainage may not compromise ecosystem integrity, the eleventh might. Industry Foresters are poorly equipped to manage at the landscape scale. I submit it is foolish and short sighted to structure our legislation on the assumption they can manage the landscape scale.

Multiple Forest Practice Board² reports have spoken to the weakness of professional reliance to deal with the broader landscape issues.

² See Forest Practices Board Bulletin 14, 2013. Professional Reliance in BC Forrest: Is it really the issue? Page 2 quote from this bulletin: “However the Board believes that it is unrealistic to expect professional reliance to carry the majority of the weight for balancing forest management interests.”

We need legislation that enables government to withhold cutting permits when they don't meet social objectives. And a requirement that mapped blocks and roads be publically available for input well prior to approval.

10. Increased Road Densities Degrade Wildlife Habitat and Lower Productive Landbase

Since the demise of the Forest Practices Code, road density has increased. More road goes to the back corners of the blocks and more roads are looped. Licensees didn't need these roads when roading was monitored, why are they needed now? The Gorley report on moose in 2016 recommended that roads be rehabilitated to improve moose habitat and reduce hunting opportunity. This much roading is not needed to harvest. Extra roading does reduce licensee skidding costs, basically because licensees have cost recovery for the roads under the appraisal system. But the costs are environmental (ie most wildlife) and reduced timber supply, due to lost land base. The professional reliance model has taken away government professional's ability to positively affect appropriate road density. (See FREP report 31 by government soil scientist Bill Chapman.)

11. Compliance and Enforcement Staffing Causes Problems.

The ratio of harvest inspections to harvest has reduced over time. Are there sufficient staff to properly monitor harvesting?

Recent C&E hiring ONLY targets people with enforcement training, to the exclusion of a forestry background. While these enforcement people bring a valuable perspective, I submit the enforcement training should be coupled with staff who understand forestry business. There are far fewer forest professionals left in C&E. The new people are less equipped to recognized contraventions like stream damage.

C&E's expanded mandate spreads the resourcing thin as well. Less time is spent of forestry. The FRPA legislation never intended professional reliance to carry the entire load. Rigorous compliance and enforcement with real penalties was supposed to be a stronger part of it. The efficacy of professional reliance is affected by the adequacy of the other safe guards.

12. Increased Soil Degradation

During Forest Practice Code days, machine rutting in wet soil was limited by area. As I recall, no more than perhaps a 1/3 of a hectare was allowed. Rutting, soil compaction results in lowered site productivity and reduced timber growth—core Crown forestry objectives.

Now site degradation is limited as a % of the standards unit. With standards units often 50 to 250 ha, seldom do loggers exceed the limits. No question, I see more site degradation on blocks than I did in the Code days.

Unlike the Code days, when soil limits were defined, limited and measured, if the professional reliance model were sufficient to reduce soil degradation, the logging supervisors, usually forest professionals and the professionals who write the plan would ensure harvesting stopped when degradation occurred.

Again, the strength of supporting regulations affects how well professional reliance works.

Under FRPA, professional reliance was not meant to operate in a vacuum.

13. Bridges Underbuilt for Safety

The 2014 Forest Practice Board Special Investigation outlined that many bridges were unsafe because the professionals involved had either inadequately planned or implemented the bridges. This Investigation specifically spoke to the need for professionals to follow their professional standards and requested that both the ABCFP and the Association of Professional Engineers and Geoscientists address the professional practice issues identified.

If professional reliance worked, bridges would be built and maintained to safety standards and the 2 Associations would not been requested to remedy the situation.

14. Are Professional Reliance Enforcement Mechanisms Sufficiently Robust?

The Discipline and Ethics Committee of the ABCFP may occasionally weigh its considerations in a somewhat skewed light. For example, although FPB Complaint Investigation 2014, *Haida Gwaii Visual quality Objectives*, the FPB concluded the VQO was not achieved, government enforcement was not appropriate and that the *“licensee did not engage in the kind of dialogue and information exchange expected with professional reliance”*. But when subsequently this licensee professional was investigated for professional conduct by the ABCFP, their conclusion was that *“client confidentiality”* superseded these requirements around visuals. Why would *“client confidentiality”* be sufficient defense in that situation, given there were no monetary considerations and that the FPB had already deemed the professionals involved as lacking in their actions? The ABCFP did not explain what the aspects of *“client confidentiality”* were in this situation. How can the discipline and ethics be seen to be effective when *‘client confidentiality’* can trump good and appropriate stewardship? I know they are members like me doing the best they can but.... how can professional reliance work if the enforcement mechanisms are so flimsy? This type of response by the Association can erode public and member trust.

15. Qualified Professional vs Qualified Person

The defining of *“professional reliance”* may be further weakened due to changes in wording in at least one major Forest Stewardship Plans. Wording has moved from assessments carried out by *“Qualified Professionals”* to *“Qualified Persons”* for the values of riparian, Cultural Heritage, wildlife. Qualified persons is less precisely defined and clearly are less qualified than the relevant professional.

In conclusion the FRPA regulatory regime was structured with professional reliance as only 1 of the 5 safeguards. Rigorous enforcement, adequate regulation, strong, measurable government objectives, and effectiveness monitoring under a continuous feedback loop were also included. I submit that professional reliance has taken a role much larger than the public was presented when FRPA was enacted. To ensure outcomes in the long term interests of communities, maintenance of wildlife populations and good forest management, the other pieces need substantial strengthening, particularly the regulatory piece, which is the standard licensees truly manage to.

Additionally the number of government forest and wildlife professionals needs restoring, at least to 2000 levels, to ensure that the public landowner has adequate oversight on our Crown land.

Thank you for listening. I realize my submission is long, but the inter relationships and implications of professional reliance under FPRA are not simple and in some cases swayed by bias.