TIMBER SUPPLY, THE FALLDOWN AND OLD GROWTH.

ISSUE:

- Changing the forest management paradigm from the current timber prioritisation to one that prioritises ecosystem health will reduce harvest levels, in order to maintain ecological and cultural values.
- Today, although no forest management policy has yet changed to maintain ecosystem health, the available timber / fiber supply is already dropping.
- The lack of 'fiber-flow' or 'timber supply' in BC, is creating social and environmental challenges.
- Understanding how we got into this fiber-flow situation is a pre-requisite for identifying how to prioritise ecosystem health and also develop a vibrant forest economy for tomorrow.

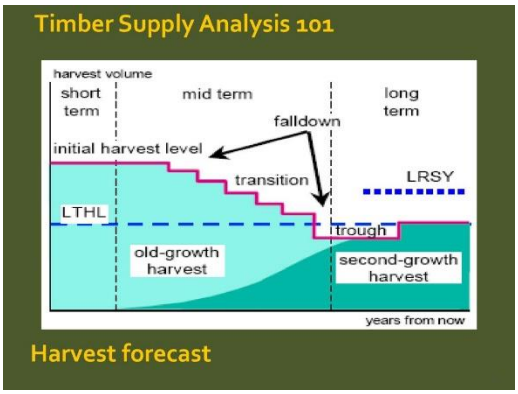
QN: IS THE CURRENT FIBRE-FLOW "CRISIS" A SURPRISE?

ANSWER: NO. IT HAS BEEN UNDERSTOOD AS A VERY LIKELY OUTCOME FOR AT LEAST 50 YEARS.

British Columbians began to realize that the transition from first growth to second growth logging would be accompanied by a "falldown" in timber supply, a drop made inevitable by the fact that the second growth forests generally do not produce the volumes of timber found in first growth stands. By 1980, pessimistic projections about the scope of the falldown phenomenon had begun to receive official endorsement and implications, with the Ministry of Forests predicting that wood supply falldowns would begin within five to twenty years in at least one TSA in every region ...

From Wilson, 1987. [1]

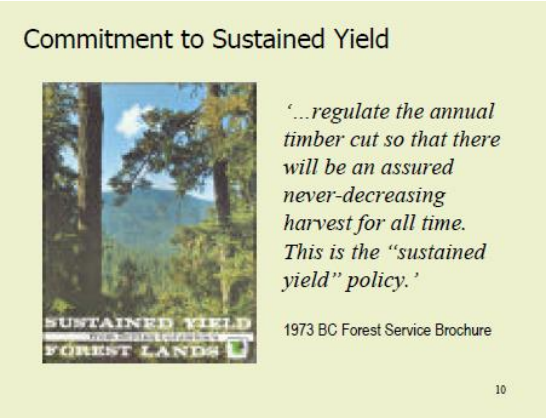
THE FALLDOWN



The 'falldown' is the drop in timber volume that occurs moving from high volume old growth stands to lower volume second growth stands. This image was shown in a presentation given by the Ministry of Forests in 2016 to Prince George City Council[2].

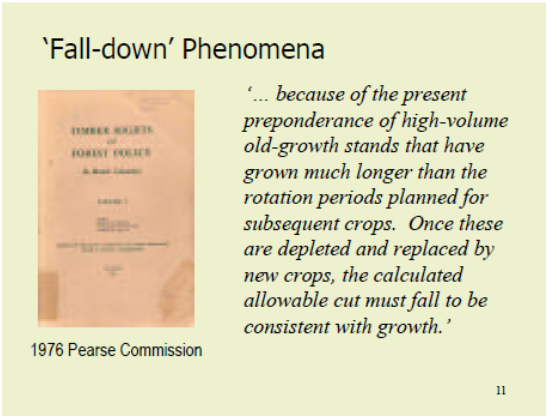
[1] https://doi.org/10.14288/bcs.v0i76.1275
[2] Source: https://slideplayer.com/slide/14661406/

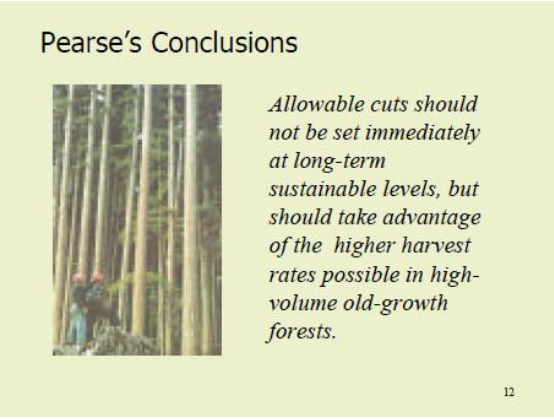
In 2003, then Chief Forester of the Province Larry Pedersen gave the UBC Faculty of Forestry Jubilee Lecture – entitled: Allowable Annual Cuts in BC – The Agony and the Ecstasy[3]. Slides from Mr Pederson's talk are shown below with yellow backgrounds.



In his talk, 20 years ago, Mr Pedersen outlines the history of forest policy, and its concern with long-term sustainability. He notes that in 1973, the BC Forest Service published a pamphlet on sustained yield identifying the commitment to:
'regulate the annual timber cut so that there is an assured never-decreasing harvest for all time".

Yet the falldown was already known. In 2003, Chief Forester Mr Pederson expressed the optimism (over-optimism?) of the Ministry of Forests that this short-fall in volume (the falldown) may not occur **if** new forests were more productive than old forests, **if** utilization of wood increased (less waste), and **if** the rotation length was shortened (basically assuming we could keep harvesting now, because more wood would come online later – the allowable cut effect).





In 1976, the Pearse Report described the "falldown phenomenon",[4] yet chose to recommend continuing with the current high level of harvest designed with the explicit intent of "*liquidation of the old-growth stock*". The report argued that reducing the cut immediately to avoid a future decline would "*simply shift these costs from the distant and uncertain future to the present*".

Unfortunately, we find ourselves today in that "distant future", facing all the costs.

[3] https://veridianecological.files.wordpress.com/2024/04/the-agony-and-the-ecstasy-by-larry-pederson-chief-forester-2003.pdf Yellow slides are from Mr Pederson's lecture.
[4] Pearse PH 1976. Report of the Royal Commission on Forest Resources p.227. https://a100.gov.bc.ca/pub/eirs/finishDownloadDocument.do?subdocumentId=1173

For the last four decades, many people have argued in the TSR process that *assuming* these hopeful outcomes will materialize before *realizing* them, and continuing to harvest at the high rate available from old growth was a risky strategy.

Akin to: Eating your cake today, before knowing for sure if there is more cake for tomorrow.

Note that we are focused here on management decisions around economics and timber supply and not ecological or cultural values. Many people have also pointed out that liquidation of all the remaining productive globally rare old growth is a poor ecological choice. Systematic over-optimism from provincial decision-makers, combined with old growth liquidation has been a poor choice for the economy, jobs and workers, and has had extremely significant ecological and cultural impacts (as outlined in the OGSR[5] report, resulting in the call for a forest management paradigm shift).

Remember that during this period, basically no policies were in place to maintain environmental or cultural values.

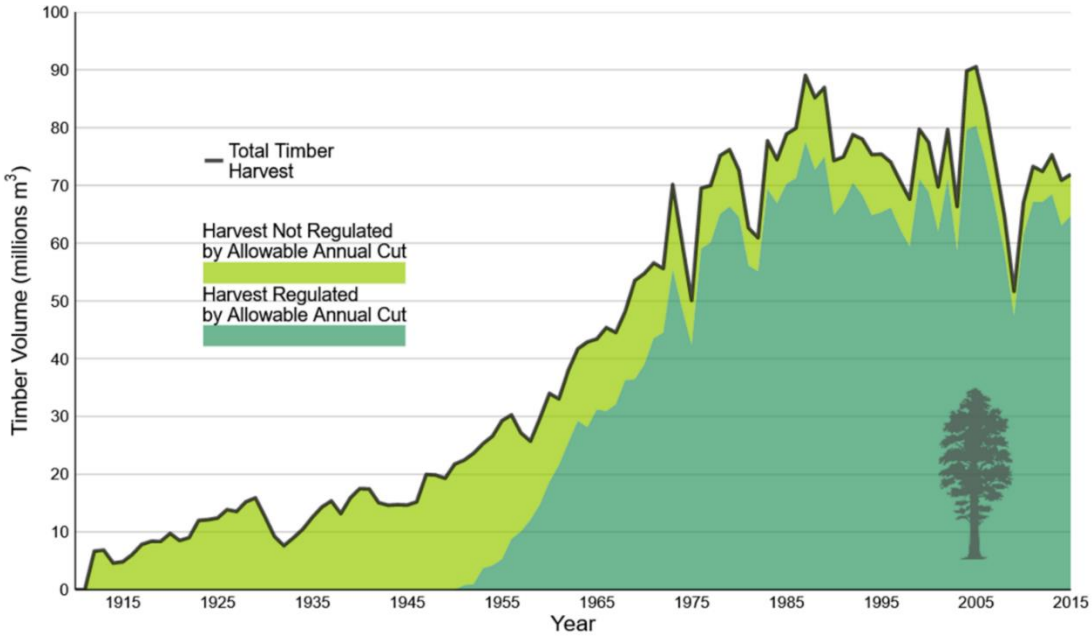
Photo: Coastal Temperate Rainforest adjacent to Clayoquot Sound in the 1980s.

[5] Gorley and Merkel. 2020. A new future for old forests.

QN: HOW HAVE POLICIES INTENDED TO MAINTAIN ECOLOGICAL VALUES IMPACTED TIMBER HARVEST?
ANSWER: THEY GENERALLY HAVE NOT.

Since the 1990s, concern has been constantly raised that ecological values were being significantly degraded in BCs forests. Significant effort has been taken to create environmental change, including measures for Clayoquot Sound (1993), Forest Practices Code (1995), Great Bear Rainforest (between 2001 – 2014), provincial concerns about caribou, marbled murrelet, goshawks, the CORE process identifying parks and protected areas in the 1990s, plus inclusion of First Nation interests – all have occurred during the last 40 years.

The Province's State of Environment reporting summarises actual harvest levels over the last century (last updated by the province in 2015).

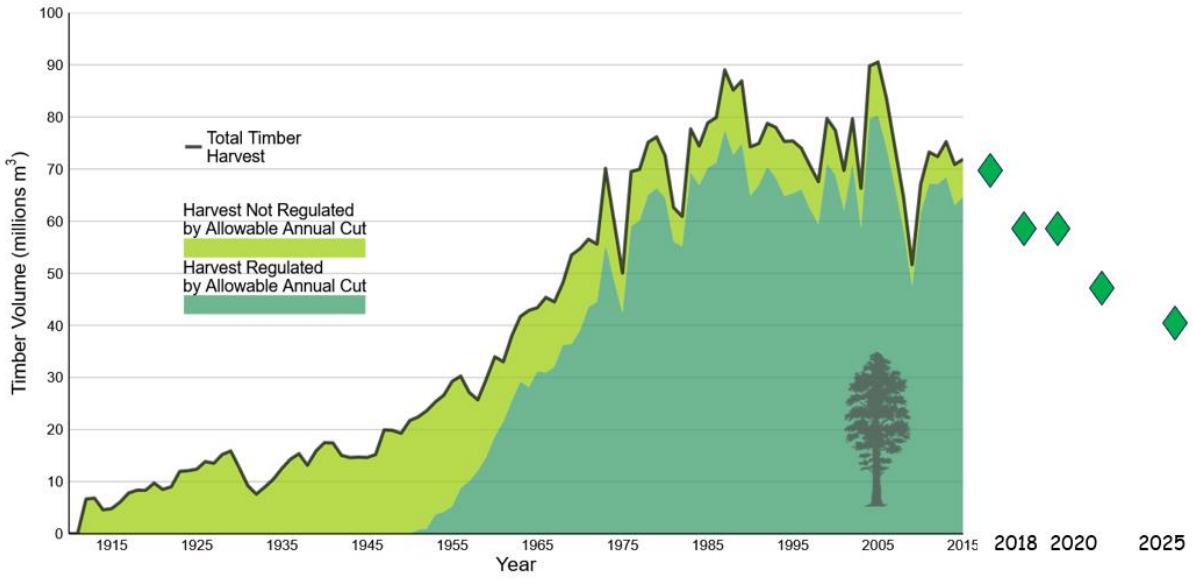


It is clear that, despite all this process - the actual harvest level has stayed high at between 70 – 90 million m3/ year, with fluctuations driven by 'unexpected' events (e.g. the mountain pine beetle uplift in early 2000s, and global economy downturn around 2008). A combination of continued positive assumptions in the timber supply analysis itself, failure to acknowledge and plan for the 'unexpected' events that always occur, combined with the timber supply caps[6] have allowed ongoing high levels of harvest to continue. Today, although the 'without unduly impacting the timber supply of the province' clause has

[6] The timber caps of 4.1% and 1% associated with 'without unduly impacting the timber supply of the province' have prevented the strategies intended to maintain broad values (old growth and identified wildlife) from having any significant protection of productive forest, and therefore on ecological outcomes across the province.

recently been removed, the default targets for old forest protection remain the same. And no ecological protection policies have yet changed since the current NDP came to power[7].

Adding in the last few years of harvest to the provincial graphic (below) demonstrates the precipitous declines that have occurred in the last few years[8]. Today in 2023, the current harvest level has dropped to around 45 million m3, only 3 years after harvest level being at 72 million m3. The mountain pine beetle effects (MPB) have exacerbated the trend, yet even in that case, the failure to implement basic policies to reduce the negative effects of the MPB on both timber supply and conservation values were not implemented. A chief forester policy to implement a landscape level 'conservation uplift' to match the AAC uplift was not implemented by industry and not enforced by the ministry[9], leading to the devastated landscape of the central interior today, with destroyed moose habitat and significant additional wildlife and hydrology implications, including increased susceptibility to flooding and wildfire.

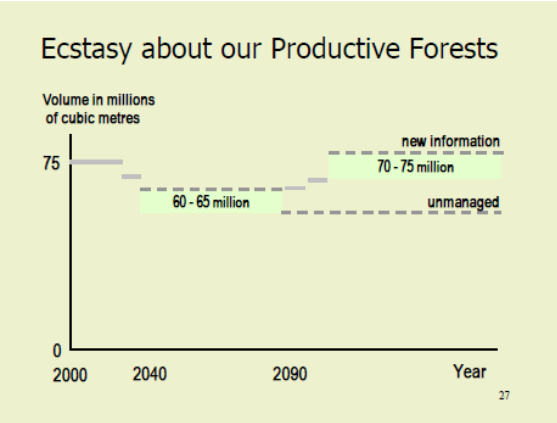


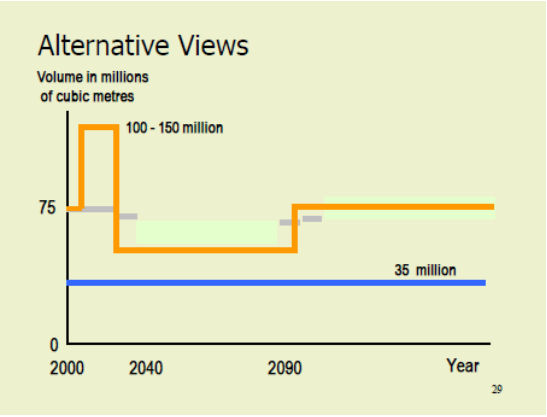
And, today, the Ministry of Forests is suggesting the actual long term harvest level may be around 35 million m3.

[7] The old growth deferrals are temporary and do not represent a long-term policy change, or protection for old growth. Many potential changes are promised, through the Biodiversity and Ecosystem Health Framework and other changes. They do not yet exist in the real world of the forest.

[8] Based on data from state of the forests from for.gov.bc.ca

[9] Personal observation, and https://www.bcfpb.ca/wp-content/uploads/2016/04/SR35-Salvage-Logging.pdf





The Chief Forester Mr Pederson in 2003 summed it up as he said:

In an 'ecstasy version of the future, the harvest level would be maintained, and even increased into the future (LEFT). In the 'alternative' view, if all the mitigating factors did not occur, the long-term harvest level would end up closer to 35 million m3/ year (RIGHT).

Chief Forester Mr Pederson showed on his slide in 2003, that a potential option of long-term harvest level was perhaps around 35 million m3. This is very similar to the current situation that BC is facing today.

Conclusion: The Agony version of reality has come true, but should not be a surprise. The current timber supply "crisis" has been foretold by senior government for five decades. HOPING that current harvest levels could be maintained has not worked. There have been many opportunities to reverse the approach recommended by Pearse that have not been taken. Moving forward, embracing a more realistic approach must be an important component of the future forest industry in BC.

Key Recommendations include:

- Message clearly that the current timber supply concerns are a direct result of past planning and policy;
- Overhaul the TSR process to ensure a more realistic approach;
- Direct the Chief Forester, and other decision-makers, to ensure that decisions prioritise ecological values, and take a lower risk approach when interpreting information;
- Direct a significant portion of remaining available fiber on the landscape towards value-added to build the new BC industry (e.g., direct a 25-35% of harvest volume to true value-added[10]);
- Close loopholes in existing legislation intended to keep fiber in BC but that continue to allow export of rough sawn lumber with no taxes paid[11];

[10] Pellets are currently considered a value-added product by BC. Ensure value-added strategies prioritise products that create jobs and do not undermine ecological priorities.

- Plan longer rotations especially in wetter forests to provide the same volume and increased lumber quality, while prolonging ecological health and resilience;
- Ensure that forest policy does not destroy jobs in other sectors (e.g., fisheries and tourism);
- Use restoration funding to support the transition, provide jobs and restore lost values;
- Acknowledge and plan for the increased pressures on the forest caused by climate change; including planning to continue to retain existing large carbon stores in BC's forests, and factoring in management practices that build resilience to projected risks from wildfire, insects and disease and extreme weather events.

The reality of the falldown, combined with the old growth liquidation policy is stark on the ground. And the ecological impacts of over-harvest in the short-term have been devastating for many values.

[11] Products shipped more than 3000 miles are STILL exempt from fees, even after other changes to this Manufactured Forest Products Regulation. Why? https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/log-exports/manufactured-forest-products-regulation/mfpr_qa_january_26_2024.pdf