



**Forest
Practices
Board**

Wood Waste in Bigmouth Creek

Complaint Investigation 090915

FPB/IRC/172

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Introduction

The Complaint

In September 2009, the Board received a complaint about large pieces of wood (i.e., logs) being left on a cutblock at the head of the Bigmouth Creek watershed, in the interior cedar hemlock (ICH) biogeoclimatic zone north of Revelstoke. While working in the area, the complainant observed large amounts of sound wood, including cedar, hemlock and spruce, in waste piles in cutblock A60881. He also saw that at least one large spruce taken was from outside the block boundary. The complainant was concerned that merchantable timber¹ was being left, rather than being removed to a mill. The complainant was also concerned about the impact that the harvesting in an old cedar ecosystem would have on threatened species, such as wolverine and caribou.

Background

Block A60881 is 28 hectares in size and was harvested between 2005 and 2007 through the BC Timber Sales program. The complainant was working in the Bigmouth Creek area in late summer 2009 in the vicinity of the block and observed the waste piles.

In 2003, mandatory species and log grade utilization requirements were abandoned when government implemented the Forest Revitalization Plan. The new 'Take or Pay' policy gave licensees the flexibility to leave logs behind in the cutblock. Stumpage is paid on what is removed and government conducts a waste assessment on standing or felled merchantable timber that is not removed, and the licensee is billed stumpage for that as well. The outcome of this policy is that licensees may leave larger pieces in the waste piles if it is not economical to utilize them. For a more detailed discussion of this policy, refer to the recent Board investigation report on government's accounting practices for wood waste left in cutblocks.²

The complainant was concerned and felt that the general public was likely not aware of the Take or Pay policy. The Board investigated whether the amount and type of waste left on the block was consistent with the policy, and whether the cutblock was consistent with existing plans or strategies for caribou and old growth management.

¹ In this report, the term 'merchantable' refers to wood that meets government's utilization standards for size and soundness, as defined in the *Provincial Logging Residue and Waste Measurement Procedures Manual*. This may be different than what the licensee considers merchantable, which would consider the costs of getting wood to the mill, utilizing it, and the market value for lumber and chips. <<http://www.for.gov.bc.ca/hva/manuals/rwprocedures.htm>>

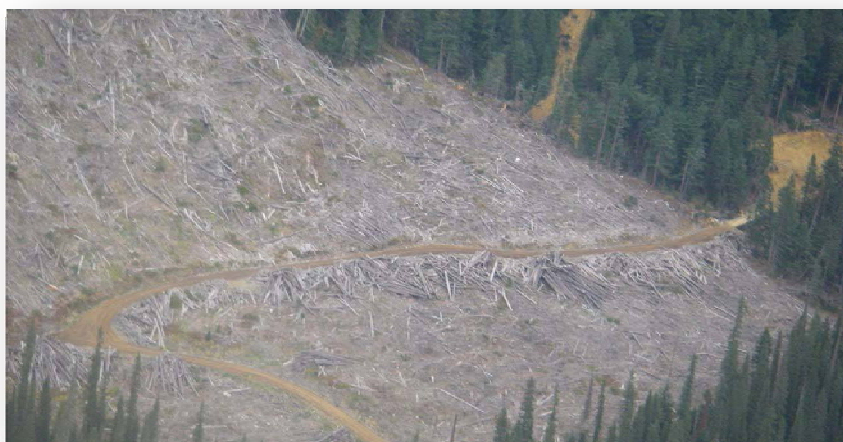
² Forest Practices Board, "Measuring Wood Waste in BC," 2010.
<http://www.fpb.gov.bc.ca/IRC170_Measuring_Wood_Waste_In_BC.pdf>

Discussion

Timber Left On The Block – Does It Comply With Waste Policy?

The key issue of the investigation was that of leaving merchantable timber on the cutblock. Under the Ministry of Forests and Range³ (MOF) 'Take or Pay' policy, licensees have the discretion to decide what they remove from the block. If the licensee leaves merchantable wood on the harvested area they are waste-billed by MOF following a waste assessment conducted by BCTS.

The Board inspected the cutblock in late October 2009 and found slash piles in the cutblock along the access road. The piles were primarily non-merchantable wood, along with some merchantable hemlock and cedar pulp logs. As well, four spruce sawlogs were left on the ground, either from road-building or harvesting. The Board also noted some trees taken from outside of the block. BCTS explained that these were danger trees. The Board was not able to confirm this, as the trees were removed and total condition of the trees could not be assessed. The Workers Compensation Board requires the removal of any danger trees within 1.5 tree lengths of the block.



Logging debris piled along access road in block A60881.

Merchantable hemlock pulp and non-merchantable logs piled ready for burning.



³ Now called the Ministry of Forests, Mines and Lands.

Spruce sawlog left on site.



Logging debris piled and ready for burning.

The volume sold for this cutblock was 14,331 cubic metres, but the actual volume removed from the cutblock was 9,968 cubic metres. Almost one-third of the volume removed (3,158 cubic metres) was in cedar and hemlock pulp logs. The rest was in sawlogs. Despite the number of pulp logs seen in the waste piles, a significant amount of pulp logs were removed from the site. BCTS conducted a waste assessment on the cutblock. The total volume of merchantable timber left on site (waste) was 2,977 cubic metres.

From an ecological perspective, trees not used are best left standing, however, there are often economic and sometimes safety reasons for not doing this. Partial harvesting is usually more difficult and costly than clearcut harvesting. Variables such as: the demand for wood waste; available volume; proximity to the processing plant; technology; and value of the end product, all affect decisions on whether to haul or leave timber on the block. And it is not uncommon in this area, and elsewhere in the province, to fell all trees in a cable harvested block, particularly with downhill cable yarding. It can be dangerous to leave hemlock and balsam fir trees standing outside of retention areas. Retained standing timber has to be windfirm, however, hemlock, cedar and spruce are shallow rooted and susceptible to wind.

Logs may be considered saw logs or pulp logs, depending on the species and condition of the log and the market at the time. In this area, the nearest facility that processes pulp logs is the pulp mill in Castlegar, which is 370 kilometres south. The logs must be transported by logging road and highway to Shelter Bay at the north end of Arrow Lake, and then towed to Castlegar. If the mill isn't accepting logs at that time; the price paid for pulp is less than the cost of yarding and transporting the wood; or, if the log dump at Shelter Bay is closed, then the licensee may choose to leave pulp logs on the block.

Where unused trees are cut and left on the block, the coarse woody debris can provide habitat for a variety of furbearing animals and other organisms. However, wood is often removed to landings to be burned to reduce fuel accumulations and make the site easier to reforest. The Board noted that debris was spread throughout the cutblock, in addition to what was piled at the roadside. This wood is also considered in the waste assessment.

A recent report by the MOF Forest and Range Evaluation Program (FREP) identified that volumes of coarse woody debris on recent cutblocks were good, however piece sizes were small. It also found that in many ecosystems, including the ICH, there was a significant reduction in the amount of large pieces of woody debris left in cutblocks, compared to unharvested stands.⁴ A subsequent guidance document from BC's chief forester recommends a 20 percent improvement in the median density of large pieces of coarse woody debris left on harvested areas.

Ultimately, it's the licensee's decision whether it makes economic sense to remove timber or leave it. However, based on the waste assessment, the licensee will be charged stumpage for any merchantable timber that is included in the terms of the cutting permit and left behind.

Finding

The waste left on block A60881 was consistent with government's Take or Pay policy.

Habitat Issues

The Revelstoke Higher Level Plan contains objectives for caribou and grizzly bear. For grizzly bear, the objectives generally address protecting habitat near avalanche chutes and are not spatial. The cutblock in question is outside of the managed caribou winter range, as defined in *Government Actions Regulation* (GAR) Order U-3-005, which replaced earlier objectives. Recently, revisions were proposed for the GAR Order to protect more forest close to this cutblock and to protect most of the operable forest further upstream in the Bigmouth watershed. The Board found no other spatial objectives for this area, relating to other species such as the wolverine.

⁴ "Coarse Woody Debris Backgrounder," FREP Extension Note #8, May 2010.

To plan and manage for old forest retention, the government developed retention targets under the *Forest Practices Code of British Columbia Act*. These targets were considered policy. Retention objectives became legal requirements in the Revelstoke Higher Level Plan Order. The Order identifies that the objective for the ICH, in the Bigmouth Creek landscape unit, is 13 percent retention of stands greater than 250 years old. Old growth retention is managed through meeting non-spatial retention targets at a landscape level or through spatially planning old growth management areas. In this watershed, some of the retention target was used for the caribou areas identified in the GAR Order. The Integrated Land Management Bureau advised that there is sufficient forest within this watershed to meet the retention objective for the landscape unit.

This complaint investigation does not consider whether current approaches to harvesting and waste management in the ICH are ecologically appropriate. Recent concern raised in the northern area of the ICH zone identified where landscape level old growth retention policy did not capture rare old cedar stands.⁵ The Board is currently conducting a province-wide investigation into the planning and management of old growth management areas, and will be communicating with the responsible agencies to determine how objectives in land use plans and orders are being addressed.

Finding

The harvesting on the cutblock was consistent with government objectives for this area.

Conclusion

The issue of waste in a harvested cutblock has often been a concern for the public. In this case, the Board found that merchantable wood was left in debris piles in the cutblock and concluded that this practice is consistent with government's Take or Pay policy. The block was not part of government's caribou strategy and did not preclude achieving old growth retention objectives.

The Board acknowledges that there are potential habitat management concerns with the harvesting of trees that are later left in the cutblock. This habitat loss may be partially offset by leaving some larger pieces on site to provide coarse woody debris habitat, consistent with the conclusions of the FREP study noted on page 4 of this report.

⁵ Forest Practices Board, "Biodiversity in the Interior Cedar-Hemlock Forests Near Dome Creek," 2008. http://www.fpb.gov.bc.ca/Biodiversity_in_the_Interior_Cedar_Hemlock_Forests_Near_Dome_Creek.htm?_taxonomyid=130