



DECISION NO. 2006-FOR-015(a)

In the matter of an appeal under section 82 of the *Forest and Range Practices Act*, S.B.C. 2002, c. 69.

BETWEEN: B & T Forest Products Ltd. **APPELLANT**

AND: Government of British Columbia **RESPONDENT**

BEFORE: A Panel of the Forest Appeals Commission
Alan Andison, Chair

DATE: October 10-11, 2007

PLACE: Prince George, BC

APPEARING: For the Appellant: Allissa Reynolds, Counsel
For the Respondent: Darcie Suntjens, Counsel

APPEAL

[1] B & T Forest Products Ltd. appeals the September 5, 2006 Determination of W.I. (Bill) Thiebeault, District Manager (the "District Manager"), Vanderhoof Forest District, Ministry of Forests and Range (the "Ministry"). In the Determination, the District Manager held that the Appellant contravened subsections 11(1) and 14(1) of the *Timber Harvesting and Silviculture Practices Regulation*, B.C. Reg. 352/2002 (the "*Regulation*") and imposed penalties of \$2,000 and \$5,000 for each contravention, respectively. Specifically, the District Manager found that the Appellant contravened section 11(1) of the *Regulation* by operating machinery within 5 metres of a stream bank. The District Manager further determined that the Appellant contravened section 14(1) of the *Regulation* by not constructing and using a temporary stream crossing. The Determination and subsequent penalties were made pursuant to section 71 of the *Forest and Range Practices Act* (the "*Act*").

[2] This appeal is heard pursuant to Division 4 of the *Act*. The powers of the Commission on an appeal are set out in section 84 of the *Act*, which states:

84 (1) On an appeal

- (a) by a person under section 82(1), or
- (b) by the board under section 83(1),

the commission may

- (c) consider the findings of the person who made the determination or decision, and

(d) either

(i) confirm, vary or rescind the determination or decision, or

(ii) with or without directions, refer the matter back to the person who made the determination or decision, for reconsideration.

[3] The Appellant requests that the Commission either rescind the Determination, or vary or rescind the penalties. Among other things, it submits that the watercourse which is the basis for both contraventions does not meet the definition of "stream" in the legislation. Therefore, the prohibition against operating machinery within 5 metres of a "stream bank" and the requirement to construct and use a temporary "stream crossing" do not apply.

BACKGROUND

[4] For a watercourse to be a "stream", which then requires protection under the forest legislation, it must meet the definition in the relevant Ministry guidebook. The definition requires a watercourse to have a continuous channel bed for at least 100 metres, and the conditions of either scour or alluvial deposition must also be satisfied. If the watercourse is not 100 metres or more in length, it still meets the definition of a stream if it flows directly into (i) a fish stream or a fish-bearing lake or wetland, or (ii) a licensed waterworks.

[5] Non-classified drainages and seepages (unchanneled surface water that occurs due to a seasonally elevated water table) do not have the above-noted features and are not classified as streams.

[6] The Appellant is the holder of Salvage Non-Replaceable Forest Licence A73936 (the "Licence"). The area covered by the Licence is located approximately 65 kilometres south of Vanderhoof, BC, in the Finger Lake watershed. It is the harvesting activities within Block 1, Cutting Permit 1, that led to the findings of contravention that are the subject of this appeal.

[7] Block 1 is irregular in shape, and located on a south facing slope that is bounded on the north by a Wildlife Tree Area.

[8] Operations within Block 1 started in July 2005. Roads were constructed, including the "Spur A" road which runs across Block 1 from the western boundary towards the eastern boundary, approximately 30 to 40 metres below the northern boundary of the block.

[9] During the Appellant's harvesting operations trees were removed using low ground pressure equipment, including a D5 tractor that was used for the skidding phase of the operation. Machines were used in the north of the block through a wet, boggy area during the harvesting operation.

[10] On October 6, 2005, after approximately 90% of the area had been harvested and timber was decked at the roadside, Ministry Compliance and Enforcement Technician, Peter Prendergast, conducted an inspection of the area. He found a load of decked logs on the north side of the road with running water emerging from underneath. The water had eroded a channel across the road and then disappeared under a decked pile of logs on the south side of Spur A.

[11] Mr. Prendergast followed the water upstream (to the north) and found that it ran along a rut in a skidder trail, crossed the junction of two skid trails, and then crossed the northern block boundary into standing timber. At the northern boundary where he observed water entering Block 1, Mr. Prendergast noted that the land slopes up on both sides.

[12] Mr. Prendergast followed the water system above Block 1, through the standing timber for approximately 140 metres. He took digital photographs and hip chain measurements and noted stream bottom characteristics, such as alluvial sands, banks, gravel, fragmented rock and silt. His photographs and measurements were entered into evidence at the hearing before the Panel.

[13] From his inspection, Mr. Prendergast concluded that the watercourse on Block 1 was a "stream" and that there was no indication that the stream had received any protection during harvest or road construction phases of activity in the area.

[14] Following his site visit, Mr. Prendergast prepared a report alleging that the Appellant had contravened sections 14(1)(a) and (b) and 11(1) of the *Regulation* in the course of operations on the Licence area. The contraventions relate to the Appellant's operation of machinery within 5 metres of a stream and its failure to construct a temporary stream crossing where the Spur A road intersects with the watercourse.

[15] An Opportunity to be Heard was held on June 21, 2006.

[16] Prior to issuing the Determination, the District Manager asked the Ministry's regional hydrologist, John Rex, to visit the site and provide an opinion and advice on streams in general, and the site in question specifically. In particular, he was asked to answer the following question, "whether the stream above Block 1 became a seepage/NCD [non-classified drainage] at the upstream block boundary." Mr. Rex attended the site in mid-August of 2006, and provided the District Manager with an opinion letter. Mr. Rex also testified at the hearing.

[17] On September 5, 2006, the District Manager issued the Determination. In his findings, he began by setting out the licensee's position. He stated at page 6:

In order to assess if the asserted non-compliance did occur, it appears that one must first determine if the operations on the area in question impacted a stream. The assertion was made by the licensee during the opportunity to be heard that the drainage or water course at the area of operations was not a stream but was describes [sic] as a "seepage". This was based on the observations of Mr. Norman [B & T's logging foreman and woodland supervisor] at the time of layout of the block for harvest. He noted that the area above the block did have a S6 stream [non-fish bearing] with defined banks and an alluvial sediment bed. However, in the block layout he deliberately chose the line location based on the characteristics of the watershed/drainage that he observed. Based on this, the licensee asserts that the water course in question was not a stream at the location of the harvest and road construction operations.

[18] After considering the legislation and the hydrologist's comments, the District Manager concluded that the channel did not transition to a non-classified drainage or seep at the block boundary, that the operations did impact a stream, and that the channel in question was a stream.

[19] The District Manager then considered whether the Appellant had established a defence of due diligence under section 72 of the *Act*. He found that the contravention was reasonably foreseeable, and that the Appellant had not taken reasonable care to prevent the event from occurring. Therefore, the District Manager found that the defence of due diligence did not apply.

[20] In assessing the penalty, the District Manager considered the factors set out in section 71(5) of the *Act* and found the following:

- The gravity and magnitude of the contravention was significant, as the stream was impacted for a length of approximately 200 metres.
- The contravention was repeated or continuous in that the machine traffic occurred repeatedly through the harvest area.
- The contravention was deliberate, though not planned, as the Appellant had erroneously relied on its belief that the watercourse was a seepage rather than a stream.
- There was economic benefit to the Appellant, as it avoided the additional costs associated with drainage structures and was able to choose easier skid trails.
- The Appellant was cooperative in the investigation.
- There were no other previous contraventions by the Appellant.

[21] In light of the above, the District Manager levied a penalty of \$7,000, comprised of \$2,000 for the contravention of section 11(1) and \$5,000 for the contravention of section 14(1) of the *Regulation*.

[22] In a Notice of Appeal dated September 21, 2006, the Appellant appealed the Determination.

[23] The Appellant appeals on the grounds that it did not contravene the *Regulation* because the water body in question does not meet the definition of "stream". The Appellant further asserts that if the watercourse in question is a stream, it exercised due diligence with respect to the watercourse and operated under a mistake of fact, both of which are defences to the alleged contravention. Finally, the Appellant appeals on the grounds that the penalties imposed are too severe.

[24] The Respondent submits that the Determination and the penalty should be confirmed and the appeal dismissed.

ISSUES

[25] The issues raised in this appeal are as follows:

1. Whether the watercourse within Block 1 is a "stream".

2. If so, whether the Appellant contravened sections 11(1) and 14(1) of the *Regulation*.
3. If so, whether the Appellant has established a defence to the contravention.
4. Whether the penalty is appropriate in the circumstances.

RELEVANT LEGISLATION

[26] The sections of the *Regulation* that are relevant to the appeal are set out below. Other relevant legislation is set out in the "Discussion" portion of this decision, as needed.

Timber Harvesting and Silviculture Practices Regulation

Restricted operation of machinery

- 11** (1) A holder of an agreement under the *Forest Act* who carries out harvesting or a silviculture treatment must not permit tracks or wheels of ground based machinery within 5 m of a stream bank except in the following cases:
- (a) for carrying out fire fighting activities;
 - (b) in response to natural disasters;
 - (c) at stream crossings authorized by the district manager;
 - (d) if operations will be conducted in a manner that protects stream banks and minimizes damage to understory vegetation.

Temporary stream crossings

- 14** (1) A holder of an agreement under the *Forest Act* who is carrying out harvesting must locate, construct and use a temporary stream crossing in a manner that
- (a) protects the stream channel and stream bank immediately above and below the stream crossing, and
 - (b) mitigates disturbance to the stream channel and stream bank at the crossing.

DISCUSSION AND ANALYSIS

1. Whether the watercourse within Block 1 is a "stream".

[27] "Stream" is not defined within the *Regulation* itself. Rather, the *Regulation* refers the reader down a somewhat complicated path in order to determine the constituent elements of a stream.

[28] First, section 1(1) states that words that are not defined within the *Regulation* will have the meaning given to them in another regulation; specifically, section 1 of the *Operational and Site Planning Regulation*, B.C. Reg. 105/98. Section 1 of that Regulation defines "stream" as follows:

"stream" means any reach, flowing on a perennial or seasonal basis, having a continuous channel bed, whether or not the bed or banks of the reach are locally obscured by overhanging or bridging vegetation or soil mats, if the channel bed

- (a) is scoured by water, or
- (b) contains observable deposits of mineral alluvium.

[29] Section 1 of the *Operational and Site Planning Regulation* then defines a "reach" as having "the meaning defined in the Ministry of Forests' publication, 'Fish-stream Identification Guidebook', as amended from time to time."

[30] The Fish-stream Identification Guidebook (the "Guidebook") provides the key elements of a stream for the purposes of this appeal. It states:

For the purposes of the definition of "reach" in section 1 of the *Operational and Site Planning Regulation*, B.C. Reg. 105/98, "reach" means a watercourse that has a continuous channel bed that meets one of the following requirements:

- (a) the channel bed is at least 100 m in length, measured from any of the following locations to the next of any of the following locations:
 - (i) the location where the watercourse begins or ceases to have a continuous channel bed,
 - (ii) the location where there is a significant change in morphology such as the junction of a major tributary and mean width change sufficient to change the riparian class of the watercourse if it was a stream,
 - (iii) the location where (A) a significant change in morphology occurs such as the junction of a major tributary and (B) the mean gradient of the channel bed over a 100 m length changes from less than 20% to greater than 20% or more or vice versa.
- (b) the channel bed is at least 100 m in length, made up of one or more segments, the boundaries of which are locations referred to in (a);
- (c) the channel bed is less than 100 m in length, if the continuous channel bed (i) is known to contain fish, (ii) flows directly into a fish stream or lake that is known to contain fish, or (iii) flows directly into a domestic water intake.

The parties' evidence and argument

[31] The Appellant maintains that the water entering the block at the north boundary into the block is intermittent, appearing during wet periods as a moist, boggy area at the northern boundary of the block. The Appellant states that it then disappears to ground, and later reappears in a defined channel approximately 30 metres from the northern boundary. If water is flowing in the channel, it may eventually make its way to the wetland in the south of the block. It submits that the water observed within the subject area does not meet the definition of "stream" under the *Operational and Site Planning Regulation*, as it does not meet the definition of "reach" in the Guidebook.

[32] The Appellant called three witnesses at the hearing: Paul Ebert and Barry Kropp who were formerly employed by the Appellant, and Duane Norman, a current employee. All of these witnesses walked the entire area prior to the start of harvesting operations.

[33] Mr. Norman has a degree in forestry, has twelve years of experience in the forest industry and has taken a course in stream assessment. He testified that he first inspected the site prior to harvesting in the fall of 2004, at the wettest time of the year. He testified to finding a continuous channel bed of over 100 metres in length in what was later designated as the Wildlife Tree Area above the northern block boundary. That watercourse was found to be a stream and was deliberately excluded from Block 1. Mr. Norman testified that several small gullies severed from the stream near the northern block boundary, and that, while one of those gullies led into Block 1 and into a wet area, most of the water stayed in the main gully outside of Block 1 and flowed to the east.

[34] Regarding the wet area, Mr. Norman testified that it was approximately 50 to 60 metres in width below the northern block boundary. He testified that he walked across the wet area and relied on the Guidebook in determining whether or not it was a stream. He observed pools and pockets of water, but did not find a channel bed of 100 metres in length, and did not find any alluvial sediment. He testified that any individual sections of channel bed observed within Block 1 were no longer than 5 metres. As a result of those observations, he concluded that there was no stream within Block 1. Photographs of that area taken in June 2005, prior to harvesting, were entered into evidence.

[35] Mr. Norman also testified that, at the time Spur A road was being constructed, the site was completely dry.

[36] The Appellant's next witness was Mr. Ebert. Mr. Ebert was employed by the Appellant in late 2002 to 2005 as a field cruise supervisor and silviculture and forestry supervisor. He has a technical diploma, has 22 years of experience in forestry, and has also been trained in stream assessment. Mr. Ebert completed the Silviculture Prescription for Block 1, at which time he collected information on soils, vegetation, and watercourses within the block. Like Mr. Norman, Mr. Ebert observed a stream within the Wildlife Tree Area above Block 1, which then opened up into a flat area below the northern boundary of the block. Mr. Ebert observed patches of shallow water in that area. He did not see any definable channel banks or scouring other than a 5 to 10 metre area where scouring was observed. He concluded that the water found in the wet area was a "non-classified drainage or seepage".

[37] The Appellant's final witness was Mr. Kropp. Mr. Kropp has been a Registered Professional Forester since 1992 and has taken training in stream classification. He was formerly employed with the Ministry.

[38] Mr. Kropp first became involved with the site in the summer of 2004, before Block 1 was established. He said that he had been on the site three or four times prior to harvesting, three or four times after harvesting, and has recently attended the site. He testified that the only stream he observed was the one that forms the northern boundary of Block 1. While he observed water in the wet area within Block 1, in his view, this was a non-classified drainage or seepage. Below that

area, he observed short sections of channel bed with some scouring, but no continuous stream bed of 100 metres in length.

[39] In light of the evidence of these three witnesses, the Appellant submits that the only stream in the area is the one above Block 1, as there was a continuous channel bed of over 100 metres in length. Within the block itself, the Appellant submits that one of the small gullies from the stream entered the block and then spread out into a flat wet area consisting of shallow pools and pockets of water, under which no stream bed was observed. It points out that all three witnesses asserted that, in light of those observations, the water observed within Block 1 does not constitute a stream. Rather, it is more aptly described as a "non-classified drainage or seepage".

[40] The Respondent submits that the watercourse within Block 1 would have met the definition of a stream prior to the Appellant's road building and harvest operations. The Respondent argues that Mr. Prendergast found a stream above the boundary, and then part of a continuous channel bed that was scoured by water and contained observable deposits of mineral alluvium down towards the Spur A road. The Respondent's view is that, had the Appellant's machinery not interfered with "the wet area", it is likely that there would have been a continuous channel right up to the northern boundary thereby forming 100 metres of a continuous channel.

[41] At the hearing, Mr. Prendergast testified that, as he followed the watercourse up from the Spur A road, he found visible machinery tracks across it. This is not disputed. He measured the watercourse from the northern boundary of Block 1 upstream and found that it had a continuous channel bed for more than 100 metres (at least 144 metres).

[42] In addition, Mr. Prendergast observed the watercourse where it crossed the Spur A road and found that it spread out south of the road. Approximately 60 metres north of the southern boundary of Block 1, the watercourse narrowed and flowed into a wetlands area. Mr. Prendergast concluded that the watercourse on Block 1 was a "stream".

[43] The Respondent submits that these findings were confirmed by hydrologist John Rex. Mr. Rex was qualified to give expert evidence at the hearing in the field of hydrology and water flows. He first became involved in this case in August of 2006 when he was asked by the District Manager to visit the site and prepare a report. The District Manager relied on Mr. Rex's opinion when concluding that the watercourse was a stream.

[44] Mr. Rex visited the site on August 15, 2006, approximately two weeks before the Determination was issued, to investigate the question posed by the District Manager, i.e., whether the stream above Block 1 became a seepage/non classified drainage at the upstream block boundary. His observations are summarized in a letter to the District Manager dated August 17, 2006.

[45] In his letter, Mr. Rex states that he observed a channel upstream of the northern boundary of Block 1 that was greater than 100 metres, had definable banks, as well as gravel, sand, silt and cobble stream bottom materials. He concludes that "the channel immediately above the block boundary is representative of the stream, having scoured banks and deposited alluvium."

[46] Downstream of the northern boundary, Mr. Rex found that the defined channel banks "seem to disappear" and there were skid trails nearby. He then observed a dry channel located on the side of a skid trail, approximately 30 metres down from the block boundary. Of that channel, he states:

It had definable banks indicating scour as well as alluvial materials (Photo 4) indicating the channel was a stream at this point in the cutblock.

This stream channel extends approximately 70 m down from the block boundary where it intersects another skid trail and a debris pile (Photo 5).

He then states:

The skid trail was very close to the streambank near the upper block boundary and may have been in the channel for portions redirecting flow down the skid trail and towards a wood pile below which it emerged and cut a new channel during a previous higher flow period (Photo 6). The dry channel may have remained actively flowing had the flow not been altered by the skid trail. Below the road, the combination of debris and terrain made it difficult to identify past channel presence but there is a general depression running from the road to the toe slope which drains into the wetland and this path follows the cutting permit map's S4 stream lines.

[47] Mr. Rex concluded in his report that:

The channel upstream of the block boundary meets the definition of a stream This stream continued downslope of the block boundary as identified by the now dry channel bed. So, the channel did not transition to a NCD [non-classified drainage] or seep at the block boundary. Further, given that this visit occurred during summer low flow and both the upstream channel and skid trail were transporting water ... the dry channel identified in Photos 4 and 5 may have been wetted had the skid trail not altered the natural flow pattern. Downstream of the road, existing conditions prevented a concrete determination of stream channel presence but the depression identified as an S4 stream on the cutting permit map was observed, meaning it is probable that the channel continued downstream toward the wetland.

[48] During the hearing, Mr. Rex testified as to the contents of his report and the photographs that he took during his site visit.

[49] The Respondent submits that it would be illogical for a well-defined stream that ran more than 100 metres above the boundary to suddenly cease being a stream and become seepage upon entering Block 1. The Respondent argues that the reason the stream channel became less defined upon entering Block 1, and spread out into the "wet area" described above, is that the Appellant's harvest operations interfered with and diverted the water from its natural channel. Mr. Prendergast testified that the water could not naturally have dispersed into a wet

area of that width, as the land slopes up on both sides where the watercourse enters Block 1.

[50] In sum, the Respondent submits that the pre-existing channel of the stream was altered by the road building and harvesting activities of the Appellant. As a result, the stream now flows over the block instead of within its natural channel.

The Panel's findings

[51] There is no dispute that there is a stream above the Block 1 boundary. According to the Appellant's witnesses, the northern boundary of Block 1 was actually adjusted to its present location so that one of the streams did not fall within the block; it lies just above the northern boundary. The Panel found the evidence on this point to be credible.

[52] There is also no dispute that there is a channel with definable banks and alluvial materials approximately 30 metres down from the northern boundary. Mr. Rex observed this channel to extend for approximately 40 metres (to 70 metres below the boundary). The channel was dry in August when Mr. Rex attended the site, although the presence of the banks indicates scouring caused by the flow of water at other times.

[53] The real dispute in this case relates to the area between the northern boundary and the commencement of that dry channel, generally referred to in this decision as the "wet area". The Panel's findings in relation to this wet area will be determinative of this issue in the appeal. If the Panel finds, on a balance of probabilities that the wet area displayed the characteristics of a stream prior to harvesting, it would belong to a channel in excess of 100 metres. Conversely, if the Panel accepts that, on a balance of probabilities, the wet area did not display the characteristics of a stream prior to harvesting, then the continuity is broken and the water flowing within the block is a non-classified drainage.

[54] In this case the Respondent, and now the Panel, have been faced with the task of trying to determine what this site looked like before harvesting, before machines operated across the land, and when the land still contained trees and other vegetation. While many photographs have been taken of the area in question, only two of them were taken prior to harvesting and these photographs are of a small area, and not particularly clear.

[55] However, there were three witnesses who attended the site before the block was created and/or before harvesting began that were very helpful. The Panel found Mr. Norman, Mr. Ebert and Mr. Kropp, all very knowledgeable and credible witnesses with many years of experience in forestry. They have all been trained in stream classification and the Panel found their evidence of the conditions prior to harvest, convincing.

[56] The Panel accepts their evidence that the flat wet area below the northern boundary was present prior to harvesting and that it did not exhibit the characteristics of a stream. Although the map accompanying the Cutting Permit showed a small S4 (fish-bearing) stream running in a north-south direction on Block 1, it was clear from the evidence at the hearing that this map was not accurate. When these three witnesses attended the site, the Panel finds that they were all well aware of the stream classification issues, which led to the northern

block boundary being moved to exclude a stream. The Panel finds there was no indication in their evidence that they were trying to "cover up" an error to avoid a contravention.

[57] Although the Respondent's expert witness, Mr. Rex, is more qualified in the area of hydrology and water flows, he had the disadvantage of observing the site after harvesting had taken place. While expert evidence is generally given greater weight, in this case the Panel finds the first hand observations of the Appellant's witnesses, who the Panel finds are credible witnesses, leads the Panel to give Mr. Rex's opinion evidence less weight in this case.

[58] The Panel accepts the evidence that the wet area was a non-classified drainage or seepage prior to harvesting, insofar as it did not display any of the features of a channel bed. The Panel also accepts that downstream from that area, there is no evidence of a channel bed of 100 metres, with defined banks, water scouring or alluvial sediment. Therefore, the subject area does not contain a "stream" and the Appellant cannot be found to have contravened sections 11(1) and 14(1) of the *Regulation*.

[59] In light of this finding, the remaining issues need not be addressed.

DECISION

[60] In making this decision, this Panel of the Commission has considered all of the evidence and arguments provided, whether or not they have been specifically reiterated here.

[61] For the reasons provided above, the Commission rescinds the District Manager's determination.

[62] The appeal is allowed.

"Alan Andison"

Alan Andison, Chair
Forest Appeals Commission

February 19, 2007