

RECEIVED

December 14, 2009

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Central Cariboo Forest District  
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Williams Lake, BC  
V2G 5G3

MINISTRY OF FORESTS  
640 Borland Street  
Williams Lake, BC V2G 4T1

4345

**Attention: Harold Stolar, Acting District Manager and Designated Decision Maker for the Tolko Cariboo Woodlands Forest Stewardship Plan**

Dear Sir,

**Re: Notification of proposed amendment to the Tolko Industries Ltd., Cariboo Woodlands, Forest Stewardship Plan (October 2006)**

**Amendment of the area within the FDU considered to be hydrologically sensitive (FSP Section 4.1.5.1 and Appendix I (map))**

Please accept this letter and the attached information as notification that Tolko will be making an application for amendment to reduce the area of the Forest Development Unit (FDU) considered hydrologically sensitive.

This notification is made so that you may initiate consultation with potentially affected First Nations and commence any review of the proposed amendment you feel necessary. Information sharing has taken place (proof enclosed) with those First Nations whose traditional territories overlap with those watersheds no longer considered hydrologically sensitive under this amendment. Advertisement will be undertaken.

Concurrent with consultation it is hoped that review of this amendment by the MOFR will commence, allowing timely approval of the amendment once submitted. The amendment will have been signed by all FSP holders when submitted for approval.

The amendment when approved will reduce the area of the FDU considered hydrologically sensitive within Section 4.1.5.1 and Appendix I of the FSP. Areas that will no longer be considered hydrologically sensitive are those sub-basins that do not contain migratory salmon habitat and that in general contain

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geographic features, such as extensive wetlands and lakes, which serve as storage and buffers reducing peak flow intensity.

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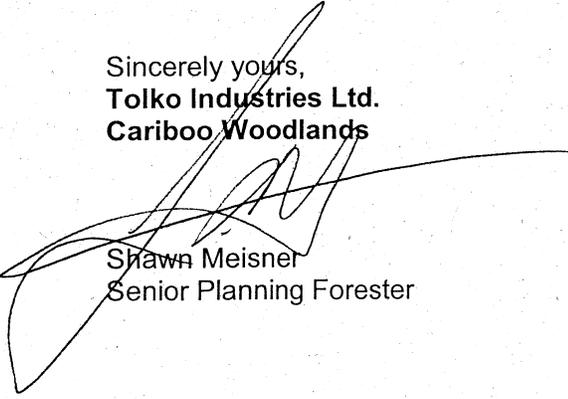
The specific sub-basins that will no longer be considered hydrologically sensitive are located in the Williams Lake TSA only. These sub-basins are: Jackson Hole, Tye Lake, Big Lake, Choate Creek, Morehead Lake, Upper Beaver Creek, Wiggins Creek, Beedy Creek and Bells Lake. These sub-basins are identified on the attached map.

Those sub-basins originally included within the Horsefly IWAP will remain hydrologically sensitive in deference to Moffat Creek's social values, and to salmon values and the long history behind the Horsefly IWAP.

Watersheds elsewhere within the region are not affected by this amendment.

If you have any questions please contact myself.

Sincerely yours,  
**Tolko Industries Ltd.**  
**Cariboo Woodlands**



Shawn Meisner  
Senior Planning Forester

CC: Pat Byrne, District Manager 100 Mile House Forest District; Gerry Grant, District Manager, Quesnel Forest District; Mike Pedersen, District Manager, Chilcotin Forest District

**December 12, 2009**

**Background to Amendment reconsidering the sub-basins of Jackson Hole, Tyee Lake, Big Lake, Choate Creek, Morehead Lake, Upper Beaver Creek, Wiggins Creek, Beedy Creek and Bells Lake to be not hydrologically sensitive**

Within the Williams Lake TSA multiple designations of hydrologically sensitive watersheds have been approved in Forest Stewardship Plans. Tolko's FSP has placed Tolko at a disadvantage to other licencees in accessing timber within the Horsefly-Quesnel River watershed, as Tolko's FSP considered the full Horsefly-Quesnel watershed as being hydrologically sensitive whereas other approved FSPs have considered only the Horsefly IWAP area to be hydrologically sensitive.

As a result of this discrepancy Tolko has reviewed in greater detail the Horsefly-Quesnel watershed. Through consideration of geographic and hydraulic features including lakes, wetlands and terrain, the presence/absence of migratory salmon habitat, man-made water control structures, the location of the sub-basin relative to critical salmon habitat, and elevation of the sub-basin relative to the H60 line of the watershed, Tolko has reconsidered which sub-basins are hydrologically sensitive. The proposed amendment is a result of this reconsideration. This proposed amendment seeks to remove the sub-basins of Jackson Hole, Tyee Lake, Big Lake, Choate Creek, Morehead Lake, Upper Beaver Creek, Wiggins Creek, Beedy Creek and Bells Lake from being considered hydrologically sensitive within Section 4.1.5.1 of the Tolko FSP. The process to amend the FSP is to amend Appendix I of the FSP. Appendix I contains the actual "list" of hydrologically sensitive watersheds.

The reconsideration of the hydrological sensitivity of those sub-basins proposed as no longer being hydrologically sensitive is presented below.

This amendment only concerns the requirements within the FSP to undertake watershed assessments addressing peak flow, it does not reduce any requirements within the FSP or other legislation to prevent introduction of sediment or other deleterious impacts to fish habitat.

A map detailing the sub-basins reconsidered as not being hydrologically sensitive and their relation to the larger Quesnel-Horsefly watershed and critical salmon habitat is attached.

**Tyee Lake sub-basin**

Tyee Lake sub-basin does not support a population of migratory salmon. Kokanee (landlocked sockeye) are present within Tyee Lake. Stocking of Tyee Lake with kokanee occurred in 2005 (reference: Fish Wizard BC).

The Tyee Lake sub-basin is of relatively gentle topography and contains two relatively large lakes, Tyee and Howes. The sub-basin is below the H60 line of the Quesnel-Horsefly watershed. The Tyee Lake sub-basin is remote from identified critical salmon habitat.

The peak-flow buffering capacity offered by these lakes, the relatively gentle topography, the position of the sub-basin below the H60 line for the Quesnel-Horsefly watershed, and the absence of migratory salmon identifies this sub-basin as being not hydrologically sensitive in respect to Horsefly-Quesnel watershed salmon habitat.

#### **Big Lake sub-basin**

The Big Lake sub-basin is dominated by Big and Margeurite lakes, a grouping of lakes to the east of Big Lake, and Big Lake Creek. No migratory salmon occupy this sub-basin, however, kokanee are present in Big Lake. Big Lake was stocked with kokanee in both 2005 and 2008 (reference: Fish Wizard BC).

The topography of this sub-basin is considered gentle-moderately rolling with significant wetland area. Most of the wetland area is associated with Big Lake Creek and its accompanying lakes. The Big Lake sub-basin is remote from identified critical salmon habitat.

A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed; this area is within the SBS biogeozone which has lower snowpack levels than other above H60 areas further east within the watershed.

The peak flow-buffering capacity offered by these lakes, the relatively gentle topography, and the absence of migratory salmon identifies this sub-basin as being of low significance in respect to Horsefly-Quesnel watershed salmon habitat.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east. Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

#### **Bells Lake sub-basin**

The Bells Lake sub-basin is a plateau sub-basin with very gentle topography. As a result of this topography the sub-basin contains a significant wetland area. Bells Lake and its associated streams are not known to contain game fish, including salmon. The Bells Lake sub-basin is remote from identified critical salmon habitat.

A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed; this area is within the SBS biogeozone which has lower snowpack levels than other above H60 areas further east within the watershed.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east. Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

The gentle topography and the absence of fisheries habitat, salmon or otherwise, identify this sub-basin as being of low significance to Quesnel-Horsefly watershed salmon habitat.

### **Jackson Hole sub-basin**

The Jackson Hole sub-basin is tributary to the larger Beedy Creek sub-basin, neither Beedy Creek nor Jackson Hole sub-basins contain migratory salmon habitat. The Jackson Hole sub-basin has gently rolling terrain and extensive wetlands associated with its headwaters around Philemon Lake. The Jackson Hole sub-basin is remote from identified critical salmon habitat, separated from the Beavermouth area by the Beedy Creek sub-basin.

A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed; this area is within the SBS biogeozone which has lower snowpack levels than other above H60 areas further east within the watershed.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east. Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

The relatively gentle topography and the absence of fisheries habitat, salmon or otherwise, identify this sub-basin as not being hydrologically sensitive in respect to Quesnel-Horsefly watershed salmon habitat.

### **Choate Creek sub-basin**

The Creek sub-basin is composed of gently rolling terrain with few large lakes or extensive wetlands. As a result of this geography, Choate Creek is known to be very seasonal with a short period of peak flow occurring in spring. With its minimal storage capacity Choate Creek sub-basin is expected to be susceptible to more intense peak flows.

Choate Creek sub-basin is remote from migratory salmon habitat, separated from the critical salmon habitat at Beavermouth by the intervening Beaver Lake chain and the Lower Beaver Creek sub-basin.

This remoteness from salmon habitat allows Choate Creek sub-basin to be considered as not hydrologically sensitive in respect to Quesnel-Horsefly River watershed salmon habitat.

A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed, but the area is within the SBS biogeozone which has lower snowpack levels than other above H60 areas further east within the watershed.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east. Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

Its remoteness from salmon habitat allows Choate Creek sub-basin to be considered as not hydrologically sensitive in respect to Quesnel-Horsefly River watershed salmon habitat.

#### **Morehead Lake sub-basin**

Morehead Lake sub-basin is dominated by Morehead and Bootjack lakes, these lakes provide significant storage capacity to reduce peak flow intensity. (The dam at the outlet of Morehead Lake is designed to pass the readily peak flow to prevent damage to the dam (MOE comment Dec 7, 2009)). The few wetlands do not offer significant storage capacity.

Though Morehead Lake sub-basin contains critical salmon habitat at its outlet, the presence of the lakes' large storage capacity can be expected to ameliorate potential peak flow effects resulting from higher equivalent clearcut areas within the sub-basin. The Morehead Lake sub-basin is thus considered to be not hydrologically sensitive in respect to Quesnel-Horsefly River watershed salmon habitat

A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed, this area is within the ICH biogeozone which has lower snowpack levels than areas further east and north within the watershed. The timing of snowmelt will also differ, snow melting from this area earlier than other above H60 areas to the east.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east.

Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

#### **Upper Beaver Creek sub-basin**

The Upper Beaver Creek sub-basin is rolling terrain with larger lakes found throughout the sub-basin. Relatively few wetlands are found in this sub-basin, storage potential is dominated by the lakes. Upper Beaver Creek is remote from critical salmon habitat, separated from Beavermouth by the intervening Lower Beaver Creek sub-basin. The sub-basin is below the H60 line of the Quesnel-Horsefly watershed.

With the storage capacity offered by lakes able to reduce peak flow intensity, and with the sub-basins' remoteness from critical salmon habitat, the Upper Beaver Creek sub-basin is considered to be not hydrologically sensitive in respect to Horsefly-Quesnel salmon habitat.

#### **Wiggins Creek sub-basin**

Wiggins Creek sub-basin is rolling topography. The hydrology of Wiggins Creek sub-basin is dominated by several small streams and a few medium sized lakes. This sub-basin is predominantly non-fish bearing due to the presence of falls on Wiggins Creek. Wiggins Creek sub-basin is remote from the critical salmon habitat located at Beavermouth. Both the Bell's Lake sub-basin and the Upper Beaver Creek sub-basin lie between the Wiggins Creek sub-basin and critical salmon habitat.

Given this remoteness from salmon habitat, Wiggins Creek sub-basin is considered not hydrologically sensitive in respect to Quesnel-Horsefly salmon habitat.

A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed; this area is within the SBS biogeozone which has lower snowpack levels than other above H60 areas further east within the watershed.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east. Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

#### **Beedy Creek sub-basin**

Beedy Creek sub-basin is gently rolling topography with little lake area but substantial wetland area. Burgess Creek is has a very substantial wetland area. These wetlands combined with Skelton lakes offer substantial storage area within

the sub-basin. A portion of the sub-basin is above the H60 line for the Quesnel-Horsefly River watershed, this area is within the SBS biogeozone which has lower snowpack levels than other above H60 areas further east within the watershed.

That a small portion of the watershed is above the H60 line is considered of no hydrological concern relative to the watershed. The area is small, and more importantly, has much lower snowpack levels than areas to the north and east. Because of their deeper snowpacks areas to the east and north are more hydrologically significant.

Beedy Creek sub-basin outflows directly into the critical fish habitat located at Beavermouth; however, no critical salmon habitat is contained within the Beedy Creek sub-basin. Beedy Creek (Beedy Creek sub-basin and Jackson Hole sub-basin combined) is responsible for approximately 20% of the flow, as measured by drainage area, entering this critical fish habitat.

With potential for intense peak flow reduced by the storage capacity offered by the wetlands within Beedy Creek, and with Beedy Creek contributing only 20% of the of the drainage area to the critical fish habitat located at Beavermouth, Beedy Creek is considered not hydrologically sensitive in respect to Quesnel-Horsefly salmon habitat.

**Lower Beaver Creek sub-basin** will maintain the requirement to conduct a watershed assessment by a qualified professional if Equivalent Clearcut Area within the watershed exceeds 25%. Overview indicates that the Lower Beaver Creek may be more hydrologically sensitive than the other sub-basins in this area because of: the amount of critical habitat within the sub-basin at Beavermouth, a relatively low storage capacity relative to the size of the sub-basin due to an absence of wetlands, the relatively large area of the sub-basin, and local knowledge regarding to the amount of flow present in this watershed during snowmelt. Hydrological sensitivity of the Lower Beaver Creek sub-basin may be reconsidered following a field evaluation/watershed assessment by a qualified professional.

Approval of this amendment will remain consistent with the objectives of FRPA and the CCLUP, and will maintain a high level of stewardship for the hydrologically sensitive Quesnel-Horsefly River watershed.

Shawn Meisner, RPF