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# FREQUENTLY ASKED QUESTIONS

July 25, 2017

Ministry of Forests, Lands, Natural Resource  
Operations and Rural Development  
BC Timber Sales

## Quartz Creek community watershed

### General

- 1. Why is B.C. Timber Sales (BCTS) proposing road building and timber harvesting in Quartz Creek, a community watershed and the water source for the small community of Ymir? Why is logging allowed in a community watershed? Can the proposed logging occur elsewhere?**

While Quartz Creek is a designated community watershed, it is also considered to be part of the provincial timber harvesting land base, or “working forest.” As such logging is allowed, however, special legal requirements must be followed.

- 2. What is the extent and timing of forest development currently being planned by BCTS? Are there plans for BCTS to clear cut the watershed?**

Planning is at a preliminary stage and is based on forest cover, topographic mapping, orthophoto interpretation and remote sensing (LIDAR) information. Beyond field reviews for a hydrologic assessment, little field work has taken place to date. Five cutblocks, approximately 65 hectares in total, as well as 5.2 km of new road construction are being proposed in the area. Of the 65 hectares, approximately 36 hectares are in the Quartz community watershed, equal to approximately six per cent of the watershed’s total area.

The anticipated timeline for development is:

- June 27 to September 1, 2017: Operating Plan advertising and public/stakeholder review and comment period
  - Late summer/fall 2017: Construction of two upper elevation helipads for field work access (e.g., road layout, timber reconnaissance, assessments etc.)
  - 2018: Road survey, design and other field layout and assessment work
  - 2019: Construction of 5.2 km of new road
  - 2019 & 2020: Completion of planning, assessments, site plans, cruising and cutblock layout
  - 2021: Advertising and award of Timber Sale Licence A95258
  - 2021-2023: Completion of timber harvesting and all licensee obligations
- 3. What are BCTS’ future development plans after the currently proposed roads are built and timber harvested?**

Following implementation of the current plans, BCTS will evaluate opportunities for further forest development in the Quartz Creek area, likely over the next five to seven years. Future forest development plans would follow a similar process with public notification and a review and comment period as well as new hydrologic, terrain stability and other assessments, while always considering cumulative (past and future) effects of logging and roadbuilding operations.

## **Water**

### **4. Water quality, timing of flow, quantity and sufficient flow during the hot dry months are critical for households in the area and for firefighting ability. How is this being addressed?**

Water is the highest value non-timber resource at Quartz Creek and is being considered by BCTS in all aspects of its forest development planning in the watershed. A professional hydrologic assessment was done as a first step before any on-the-ground road or cutblock designs were started. The purpose of the preliminary assessment was to evaluate the sensitivity of stream channels, and the watershed overall, in relation to the proposed development. The assessment indicated low risk to channel stability for the sub-basin where development is proposed and indicated very low risk to the main lower Quartz Creek channel. The assessment also concluded “changes to the flow regime, including peak flow timing and water yield, are unlikely to occur”.

BCTS plans to complete further hydrologic assessment, as well as terrain stability assessment work, as planning progresses and to use this information to guide planning and operations so there are no negative impacts.

### **5. The Ymir water system collects surface water that requires shade from tree cover to inhibit evaporation. Will there be increased evaporation due to the loss of forest cover, and will the already low stream flow in late summer and fall be affected?**

A common misunderstanding is that timber harvesting causes streams to dry up. Studies have shown that timber harvesting from snow dominated forests in the southern interior B.C. generally result in:

- Less interception of rain and snow by trees (more water reaches the ground)
- Reduced transpiration by trees (more water is left in the ground)
- And greater accumulation of snow in harvested areas versus the adjacent forest (more groundwater)

Therefore, timber harvesting can result in making more water available, including for deep percolation into the ground (more groundwater), although these effects are gradually reduced to pre-harvest levels as vegetation and trees regrow (termed “hydrologic recovery”).

As a result of the above processes, most scientific literature relevant to the southern interior of B.C. indicates stream flow rates during low flow periods either increase or do not change following timber harvesting, however, there is also some literature that contradicts this. Additional hydrological assessment, that is specific to Quartz Creek, will provide more analysis in this area.

### **6. What changes will happen to the overall amount and timing of stream flow in Quartz Creek?**

Logging can affect total water yield, level of peak flow and the timing of peak flow, through some of the effects described above in question five. This is why there are standards that must be followed to protect water quality and quantity. Generally, it is necessary to harvest beyond a certain threshold per cent (>20% is often cited in scientific literature) of a watershed before these changes are measurable. BCTS' proposed plans for Quartz Creek are well below this threshold level as the Equivalent Clearcut Area following harvest is at seven per cent.

Plans will be adjusted to incorporate the professional recommendations from all hydrological and terrain stability assessments. The preliminary hydrologic assessment of the proposed development indicates "changes to the flow regime, including peak flow timing and water yield, are unlikely to occur".

**7. What about contamination from spillage and machinery? Surface pollutants will travel with surface water into our collecting pond.**

BCTS licensees, permittees and contractors are required to be trained in, and to conform to, requirements of the BCTS Environmental Management System (EMS), which is certified to the ISO 14001 standard. A number of elements of the EMS are intended to prevent any contamination of soil or water from industrial operations and to quickly and effectively protect the environment should an incident occur. The EMS contains several Environmental Field Procedures related to project supervision, operations, fuel handling and spill response. In addition, the BCTS Forest Stewardship Plan (FSP) is committed to a number of results and strategies related to water for consumptive use, including the requirement for a qualified professional to monitor and document inspections to ensure all activities are consistent with approved plans and assessment recommendations.

**8. Is there a risk of bank erosion and water sedimentation? More sediment will require more filtration, which costs taxpayers money. Because Quartz Creek is a fish-bearing stream, we can only dredge the collection pond once a year.**

The hydrology report states that the risk of increased bank erosion and sedimentation at the community water intake will remain "very low" after the proposed development. Despite this low risk, minimizing sedimentation is still an important objective in planning, layout and operations.

Roads can be a primary source for sediment generation. As part of the terrain stability assessment, an experienced geotechnical engineer will review planned road locations in the field, assess drainage patterns and prescribe construction and drainage control measures to minimize the risk of sedimentation.

In addition to the legal commitment for prompt grass seeding in the BCTS Forest Stewardship Plan (FSP), the measures prescribed by the geotechnical engineer will be made a contractual requirement of licences and permits and will be monitored for conformance by a qualified professional.

In addition, planning overall harvest levels that don't negatively affect flow regime as well as the establishment of riparian reserves, management zones and machine-free zones will help to ensure water quality, maintain stream bank and channel stability and reduce sedimentation risk.

## **Mountain Bike, Hiking and Recreation Trails**

- 9. There are eight kms of biking trails in the watershed that will be destroyed. The loss of shade on the trails is going to ruin the trails the community worked hard to build and that attract tourists to the area. The trails are also popular for nature walks, mushroom and berry picking and other activities.**

BCTS is aware that one of the planned cutblocks (Cutblock #5) overlaps with non-status trails currently in use. BCTS has no legal obligation to manage non-status trails, however, we recognize the local significance and met with representatives of the Salmo Valley Trail Society to discuss the extent to which the trails can be maintained during and after harvest. BCTS has operated in a number of areas where recreational values have been successfully integrated with forest management activities. Access to the trails will be restricted during harvesting and road building operations due to safety concerns; however, it is expected that access to the trails will be restored following harvest.

## **Wildlife and Species at Risk**

- 10. Many red and blue-listed species have been documented in areas surrounding the Quartz Creek watershed, including Red-listed Blue Heron, Harlequin Duck, Western Screech Owl, Red-listed Tall Bluebells, Rubber Boas and Bull Trout. Residents are in the process of locating these within the Quartz community watershed. There are concerns about the Northern Goshawk, which people claim to have seen in the area.**

BCTS planners and development staff appreciate receiving information regarding important local wildlife habitat features or species of management concerns. A legal requirement of BCTS' Forest Stewardship Plan (FSP) is the maintenance of: old and mature forest, riparian reserves and management zones, ungulate winter ranges and wildlife tree retention areas (WTRAs).

Regarding species at risk, BCTS reviews the location of wildlife habitat areas (WHAs) established by government for species' protection, requires field staff to complete awareness training and provides guidance and information packages to contractors and agreement holders regarding species identification and notification requirements. Where a species of concern is identified in relation to planned or active forest development activities, BCTS implements existing recommended protection/management strategies. BCTS may also incorporate important habitat features into no-harvest reserves and engage the services of a qualified registered professional to conduct an assessment and make recommendations to be implemented.

## **Increased Motorized Traffic in the Watershed**

- 11. There is a concern that new roads will lead to greater motorized-vehicle use in the watershed, with resultant spills, trash and impacts that will negatively impact the environment and water quality.**

Some options for managing motorized access may include gates, timing and extent of road deactivation or rehabilitation, signage and public engagement/education. Authority to close or restrict access to a forest service road rests with the district manager of the Selkirk Natural Resource District. BCTS is open to discussing available options for access management and to

work with the water licensee and other stakeholders to implement measures to protect water and environmental quality.

### **Non-Timber Forest Products**

- 12. The area is popular for mushroom and berry picking. There are hundreds of mushroom species in the Quartz community watershed, and their mycelial mat is responsible for a great deal of our natural water filtration.**

BCTS has experience in implementing strategies that can reduce impacts to the productivity of high value mushroom-growing sites and is open to reviewing options for areas popular for harvesting of mushrooms, berries and other botanical forest products. With regard to the natural water filtration role of mycelial layers and their protection, the locations and scale of the proposed development is unlikely to have an extensive impact. Factors such as selection of appropriate harvest systems and patterns, timing of operations and post-harvest silviculture treatments can be discussed.

### **Visual Quality**

- 13. What will be done to address the visual quality impact of cutblocks and road building?**

Because of the nature and orientation of the Quartz Creek valley, a large proportion of it is not visible from Ymir or from the main Salmo River valley corridor. Some areas that are visible from the main valley have visual quality objectives (VQOs) established by government. The majority of the forest development currently being planned by BCTS will not be visible, however, some harvested areas and roads will be visible on the north- and east-facing slopes closest to the main Salmo River valley corridor. These visible areas have a “Partial Retention” VQO, which means harvesting is visible but requires that alterations be small to medium in scale and natural (not rectilinear or geometric) in shape. Visual impact assessments will be undertaken and site plans prepared to ensure timber harvesting and roads meet this definition and objective.

### **Community Forest**

- 14. Local control of the forest resource is preferable. This watershed should be a community forest.**

Currently, Quartz Creek is designated as a BCTS operating area, and the volume harvested from BCTS area is used to provide representative price and cost data to government for provincial market pricing of timber. <https://www.for.gov.bc.ca/bcts/>

Land Use is determined by the Ministry of Forests, Lands and Natural Resource Operations and Rural Development, not BCTS.