



## **Lower Glade and Upper McPhee Harvest Update - November 2018**

Kalesnikoff Lumber Company has been meeting and communicating with Glade residents since 2015. We appreciate your input and have made considerable revisions to our initial proposal in response to what we heard and learned. This update explains how we've incorporated community input, and next steps.

Later this month, we'll also be sharing a Feedback Form, asking for your input on our ongoing work including log-hauling scheduling, wildfire hazard mitigation and other related considerations. You'll receive the Feedback Form by mail and the questions will also be posted on our website. We'll provide instructions with the Feedback Form.

In the meantime, we hope you find this update helpful. We always welcome your feedback and questions emailed to [referrals@kalesnikoff.com](mailto:referrals@kalesnikoff.com), mailed to PO Box 3000 Hwy 3A, Thrums BC, V1N 3L8 or by calling 1-250-399-4211. Please also share your email address if you'd like to sign-up for ongoing email updates. Thank you.

## Who We Are:

---

### About Kalesnikoff:

---

Kalesnikoff Lumber Company is local, fourth-generation family-owned and based in Thrums, directly across the river from Glade. We care about the local community and our employees, contractors and suppliers who we consider extended family, many of whom live in and near Glade.

We make decisions based on almost 80 years of knowledge about our local forests, environment, community and on evolving best practices in sustainable forestry. We live here, and our forestry and business practices reflect our ongoing pride in our legacy of taking care of the land and local communities. We are committed to making the most of every tree we plant, harvest or process — ensuring we create the most benefit for our employees, the community and our customers.

We work with local communities in advance of a harvest to better understand their priorities, concerns and interests, and we develop our harvest plans based on community input as well as technical, regulatory and social considerations.

---

### Our Commitment:

---

Kalesnikoff will:

- a) adhere to government regulations and guidelines when planning and conducting forest harvesting activities,
- b) adhere to the results and strategies described within our approved Forest Stewardship Plan, available on our [website](#)
- c) carefully consider all harvest activities and seek the advice of a Qualified Registered Professional as necessary through our planning process,
- d) utilize the most up-to-date imagery and technology available to draft operational plans,
- e) prepare detailed drainage plans where warranted,
- f) use modern road building practices with attention to drainage control,
- g) use environmentally sound timber harvesting practices,
- h) carry out monitoring and maintenance of roads and structures on an on-going basis to avoid any drainage issues that may be caused by improperly functioning drainage structures, and
- i) carry out reforestation of all harvested areas in a timely fashion, with an appropriate species mix considering site-specific conditions and climate variables.

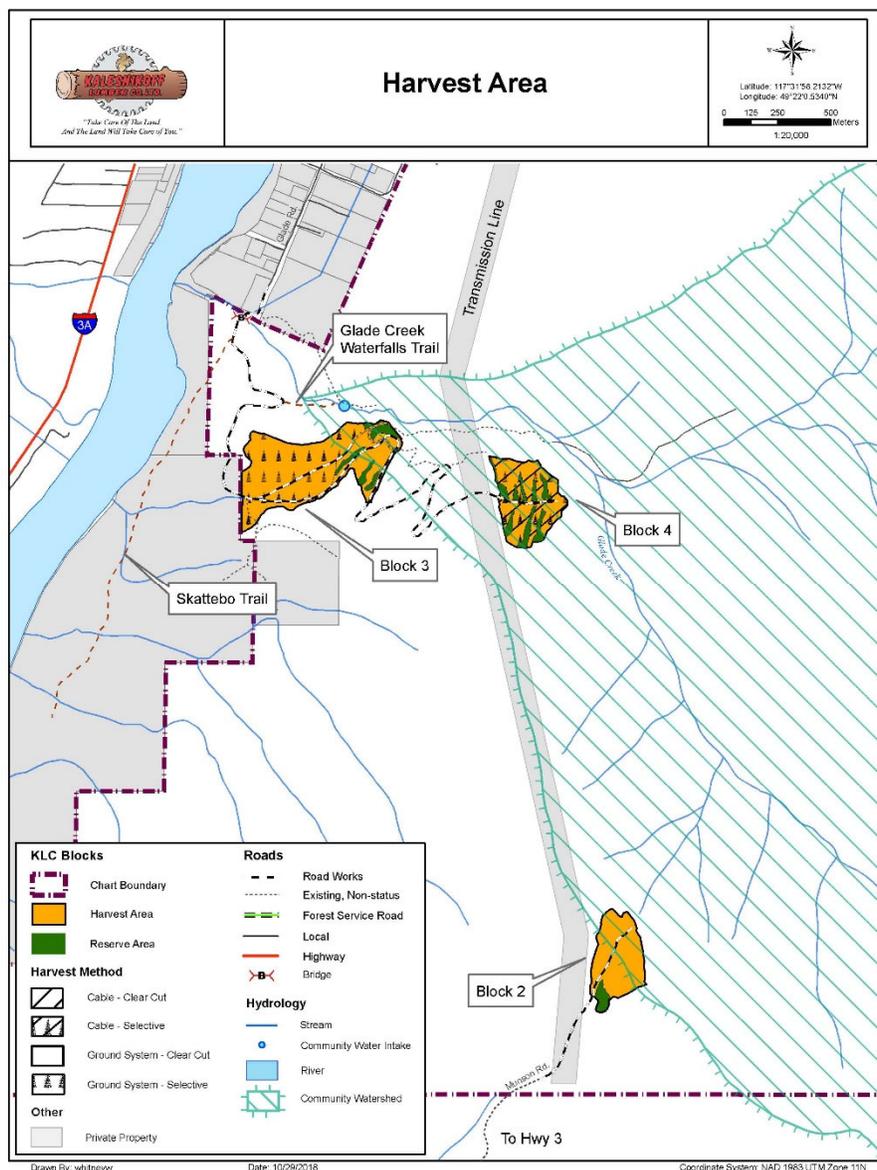
**Kalesnikoff's Responsibility:**

In the highly unlikely event that Kalesnikoff is found to have caused damage to the watershed, Kalesnikoff is responsible for mitigation. In such a scenario, Kalesnikoff will follow our "Emergency Preparedness and Response Manual" which outlines procedures for emergency awareness, preparation, and response with the purpose of preventing and/or mitigating environmental impacts.

## About the Lower Glade and Upper McPhee Harvest:

Logging and harvest rights — where and how much we can harvest — are determined by the Province of B.C. Kalesnikoff Lumber Company has been allocated rights to harvest in the Glade operating area and, consequently, will harvest three blocks within or partially within the Glade Community Watershed, shown below.

Kalesnikoff is committed to minimizing and mitigating harvesting impacts in all watersheds in which we operate. Our forest activities are carefully planned and implemented by experienced, registered forest professionals, following the recommendations of qualified geotechnical, hydrological and other professionals to minimize potential negative impacts to important resources and community values such as drinking water and fish habitat.



## Community Engagement:

Kalesnikoff hosted two community meetings: on September 30, 2015 and February 17, 2016. These meetings were held to introduce our Forest Stewardship Plan, inform Glade residents of proposed harvest plans, and review professional hydrologist Kim Green, PGeo, PhD's Hydrogeomorphic Assessment of the watershed.

Following these meetings and through ongoing communication, various members of the community have shared letters, notices, and e-mails with Kalesnikoff detailing questions or concerns related to our proposal and other issues. Relevant concerns have been considered in the development of the final harvest plan.

We've also posted updates on our website and shared them with those who had provided their email addresses for that purpose. This update has been mailed to each household in Glade and posted on our website at <http://www.kalesnikoff.com/public-stakeholder-engagement/>.

**It's important to note that Atco Wood Products Ltd. also hold separate harvest rights and permits in this area. Atco and Kalesnikoff have been collaborating to share and consider information and feedback which relate to their respective harvest plans.**

## What We Heard and How Input Was Considered:

Following is a list of the key themes we heard from the community during and following previous consultation meetings as well as significant mitigation measures we have incorporated into our plans in response to feedback.

---

### Water Quality and Fish Habitat:

---

#### ***What we heard:***

Residents expressed concern about potential negative impacts to the Glade Watershed, the community's sole public water source, and related fish habitat.

#### ***How we've responded:***

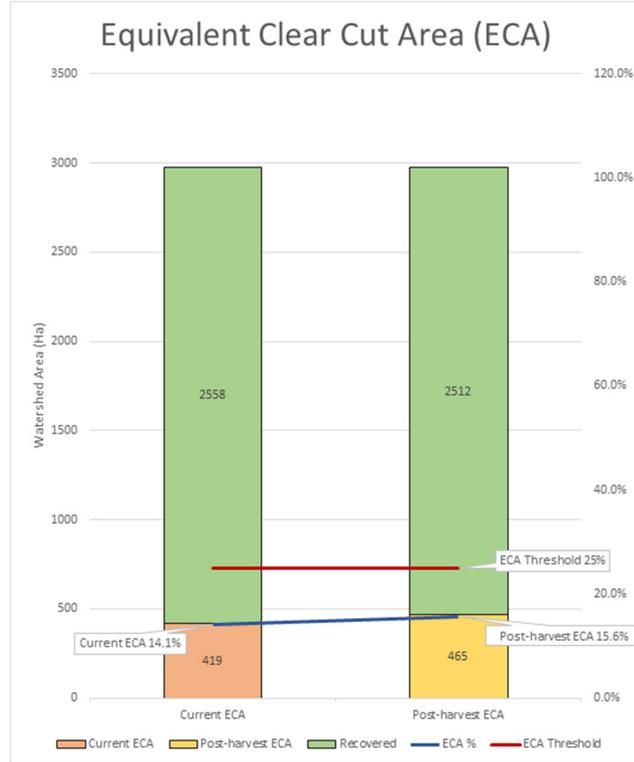
Kalesnikoff's harvest plan has been developed to:

1. Preserve and maintain the Glade Watershed, by maintaining existing water quality, quantity and timing of flows.
2. Preserve and maintain existing fish habitat.

## Compliance with Professional Hydrologist Recommendations

In 2015 Kalesnikoff and Atco jointly engaged Dr. Kim Green of Apex Geoscience to conduct a thorough hydrogeomorphic assessment of the Glade Creek watershed to provide forest management guidance. This report provided recommendations on how forest management can be carried out while meeting our commitment to the community.

Dr. Green recommends Equivalent Clearcut Areas<sup>1</sup>(ECA) of less than 20% in the Glade south fork and 25% over the entire watershed. This would present a low likelihood of altering the water flow given the elevations and other aspects of this area. As shown in the chart to the right, both Kalesnikoff and Atco’s planned harvests combined will result in an ECA increase from 6.6% pre-harvest to 6.9% post-harvest in the south fork and from 15.1% pre-harvest to 15.6% post-harvest across the entire watershed.



Kalesnikoff will adhere to Dr. Green’s recommendations so as not to impact the quality and quantity of water in the Glade Watershed.

## Mitigating Known Issues with Existing Power-line Road/Creating Better Access Road

Residents have indicated that Glade Creek has experienced increased turbidity (cloudiness or haziness from suspended sediment) in recent years. A previous Glade Watershed Analysis conducted in 2001 by Carver Consulting for KRM Associates, following the installation of power-line poles by a third party, identified potential issues with two road segments that created possible ongoing sediment flow into Glade Creek. The study also cited third-party logging activity undertaken about 100 years ago before hydrology was well understood or studied as a potential contributor. The areas of concern noted in Carver’s report have not been remediated to date and are likely some of the principal sources of current sediment in the watershed.

Due to the presence of known sediment sources and previous cases of instability associated with the power-line access road, Kalesnikoff engaged Will Halleran, P.Geo, L.Eng of Apex Geoscience Consultants

---

<sup>1</sup> Equivalent clear cut area (ECA) is a measure of the “hydrological state of recovery” of a watershed, or its ability to absorb and intercept snow, rain and other water flow affecting runoff. ECA is a measure of the area that remains in a clearcut state, with a reduction factor for forest regeneration and regrowth particularly focused on the treetops or crown cover (crown closure), which intercepts snow and rain. Hydrological recovery typically starts after trees reach 6 meters in height with a 30% crown closure and accelerates as trees grow and the forest stand size increases. Once crown closure reaches 75 to 80% or more, recovery quickly approaches 100%.

to conduct a Detailed Terrain Stability/Road Drainage Site Review/Powerline Road Deactivation Assessment in 2016. This study provided recommendations to remedy drainage issues along the existing power-line access road, reviewed and commented on the new roads proposed by Kalesnikoff/Atco and reviewed existing and proposed roads that are in proximity to the failures on the power-line road.

To mitigate the previously identified sedimentation risk from the existing power-line access road, Kalesnikoff will de-activate this at-risk access road, except for the last road segment in order to maintain BC Hydro's access. This last segment will remain BC Hydro's responsibility as it is outside of Kalesnikoff's scope.

Kalesnikoff designed the new road layout consistent with Halleran's recommendations, which considered optimal natural drainage patterns.

---

## Changes to Views and Visual Impacts:

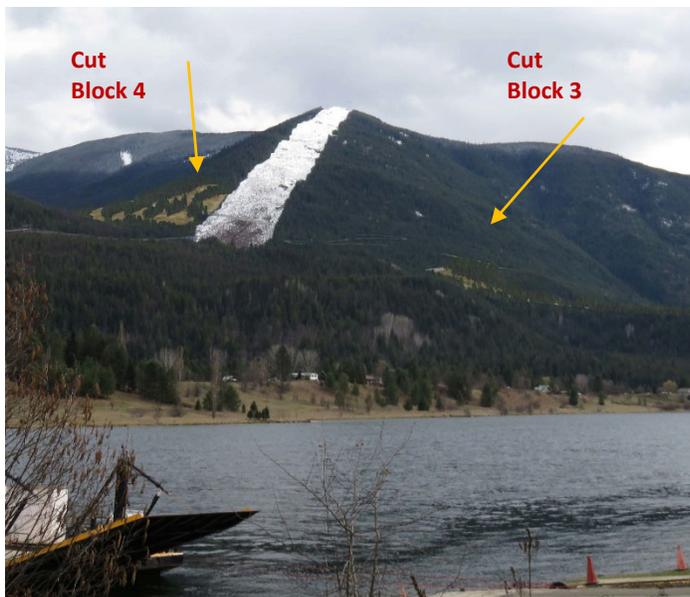
---

### ***What we heard:***

Some residents asked what the harvested area would look like from Glade and surrounding areas. Some respondents expressed concern about altering the forested hillside view.

### ***How we've responded:***

We understand that it's important to mitigate visual impacts and retain a natural forest and mountain scene for residents and visitors alike. We have introduced the following measures:



*Visual simulation of temporary view from the Glade Ferry post-harvest, until newly planted trees grow in.*

- “Partial Retention” harvest approach, leaving some trees, may be easy to see immediately following harvest on a small to medium scale but will become increasingly less visible as the forest regenerates after planting.
- Will retain some forested area to avoid straight line borders and maintain natural shaped edges
- Rigorous digital visual landscape planning and modelling of the layout of the visible harvest area to minimize visual impacts. This included preparation of visual simulation of the view from the Glade Ferry, shown left.
- Consultation with BC Hydro to determine proximity to transmission lines and visual impacts of such considerations.
- Commitment to replant within two years, and sooner if possible.

---

## Harvest-Related Traffic Impacts

---

### ***What we heard:***

Some community members expressed concern about potential community disruption and safety considerations related to traffic activity including workers vehicles and logging trucks passing through the community on the Glade Ferry Road and Glade Road. These concerns included potential for physical wear and tear on the roads, safety of residents including local traffic and children playing nearby, noise and ferry congestion.

### ***How we've responded:***

Kalesnikoff understands and appreciates the community's concerns and is committed to ensuring all project related vehicles operate in a way that is safe and respectful to the local community and consistent with traffic laws.

To support this, Kalesnikoff has made the following commitments:

- No log-hauling will take place during school pick-up, drop-off or school summer break.
- No harvesting activity will take place on weekends or statutory holidays. As an exception and only if required, services and repairs of equipment may occur at the harvest site on weekends.
- Tree-falling operations will be restricted to 7 a.m. to 5 p.m. weekdays. Skidding, processing and log loading at the harvest site will be restricted to weekdays, primarily during daylight hours but with some exceptions.

The Ministry of Transportation and Infrastructure is responsible for road repairs and maintenance of public roads.

Kalesnikoff initially proposed a winter harvest timeline. Log-hauling in winter best protects the road because the surface and supporting foundation is frozen. There is also typically less outdoor activity, i.e. children playing outside, and windows are closed reducing noise impacts.

Kalesnikoff will undertake additional community engagement about log-hauling times, and seasonal preferences as part of the upcoming Feedback Form. Community input will be considered before roadwork or harvesting begins.

---

## Community Wildfire Hazard Mitigation

---

### ***What we heard:***

Wildfire risk is a frequent topic of interest and concern in Glade as in surrounding communities and we believe we can play a potential role in mitigation. The Regional District of Central Kootenay has identified wildfire hazard mitigation as a high priority across our region. The 2016 Community Wildfire Protection Plan recommends RDCK collaborate with Kalesnikoff to reduce hazardous forest fuel types found within and adjacent to communities and critical infrastructure.

### ***How we've responded:***

To develop a proposal to begin to address community wildfire concerns in this area, our Woodlands team surveyed this area by walking each site and assessing the forest for suitable trees to leave. We have identified healthy fire and drought resistant tree species (fir, larch, ponderosa pine) in sufficient numbers to leave behind, thereby achieving a partial cut silviculture (forest management) system.

We will now apply to the Forest Enhancement Society of BC under Wildfire Risk Reduction Treatments to further support this initiative. If successful, this would reduce forest fuel after harvest to well below the standard levels required by government. We will follow a Wildland Urban Interface stocking standard in reforesting this site, which specifies fire- and drought-resistant species to mitigate the future threat of wildfires in this area.

To gauge community interest in broader potential wildfire mitigation measures, we will explore this topic in our upcoming Feedback Form later in November.

### **Estimated Harvest Timeline:**

Kalesnikoff anticipates road work and harvest activities will take place sometime in 2019. To provide the community with some guidance on duration of various activities, we've prepared a timeline, below. Although actual durations may vary due to conditions and other circumstances, following is a typical harvest timeline which provides a reasonable guideline for this work:



*\*Clean-up includes road deactivation and slash disposal.*

### **Next Steps:**

Kalesnikoff will distribute and post a Feedback Form later this month, asking for community input on various topics related to harvest. We will continue to keep the community informed of timing of the planned roadwork, harvest and subsequent activities. If you'd like to sign-up for ongoing email updates, please send your contact information to [referrals@kalesnikoff.com](mailto:referrals@kalesnikoff.com).