

## Wildfire Risk Reduction Unit 6

Machine treatment and hand treatment combo

### Location/Ownership

- 164.7 ha total, three treatment units
- South of Brouse Loop, east of Crescent Bay, and southwest of Box Lake
- Crown ownership. Timber harvesting rights held by Interfor and NACFOR, Box Lake Recreation Site is within Treatment Unit C

The eastern boundary borders private land

### Cutting Specifications

#### Treatment Unit A (machine treatment, 105.5 ha):

Fuel reduction within Treatment Unit A will have two stages:

- Stage 1 will be conducted during harvesting treatment. Harvesting equipment will be used to reduce brush and ground fuels as much as possible. Small diameter trees and residual wood fibre will be removed from the treatment area as pulp, with the goal of increased utilization and reducing fuel left on site.
- Stage 2 will include additional reduction of brush and ground fuels using hand treatment crews. The crews will clean up material too small for machines to handle. These materials will be burned or chipped on site.

Typical order of operations:

- Develop roads (some roads are permanent, some temporary)
- Develop main logging trails (which will be rehabilitated after logging) to provide machine access
- Salvage dead and dying timber and windthrow to address forest health issues (e.g., Douglas-fir bark beetle, *Armillaria/Phellinus* root rot, White Pine blister rust)
  - Salvage will create small dispersed openings or areas of thinned trees. Maximum opening size will be approximately 0.5 ha, down to only single trees being

removed. This will depend on the forest type, including dead and dying trees, windthrow, etc.

- Leave trees/groups of trees will be retained in any openings where possible
- Thin forest to reach fuel reduction objectives
  - Overall target is 40% Basal Area retention within Treatment Unit A. This is approximately equivalent to retention of 50% of total tree volume

The goal is to provide crown separation to reduce the risk of crown fire initiation

**Treatment Unit B (hand treatment, limited machine treatment, 12.3 ha):**

- Steeper ground, much of the area will remain untreated
- Where terrain allows, treatment will follow the same principles and strategies as those outlined above for Treatment Unit A

**Treatment Unit C (hand treatment, 46.9 ha):**

- Cut all understory coniferous trees  $\leq 12.5$  cm diameter unless retention of smaller stems is necessary to achieve the targeted average spacing

Some equipment may be used to assist hand treatment. Due to recent windthrow events it may be possible/desirable to use limited equipment to salvage near the main trail which bisects the treatment unit

**Road Access**

- Approximately half of the proposed road system will be rehabilitated following harvesting. Rehabilitation is defined as returning the road to a natural state such that trees can be grown on it again. The remaining roads will provide long term access for future re-treatments, but will be deactivated following use. Deactivation means that culverts may be removed and water bars and/or cross-ditches will be put in place to minimize long-term environmental risk.
- Access to the area will be seasonal and periodic, coordinated with road users, and conforming with local bylaws.

Having road access would enable access to the area in the event of wildfire, to make the area a defensible space.

**Work and Assessments Completed To Date**

- Field reconnaissance, road and treatment unit layout
- Timber cruise

- Riparian assessments
- Forest health and Douglas-fir bark beetle assessment
- Visual Impact Assessment, December 2020
- Fuel management prescription, December 2020
- Forest Health flight, June 2021
- Terrain Stability Assessment, February 2021

Hydrogeomorphic Assessment – ongoing, to be completed in 2021

### **Water Resources**

- Box Lake and Nakusp Creek both lie immediately adjacent to Treatment Unit C. Several other small streams located within Treatment Unit C will be managed as fish-bearing streams. Appropriate reserves and management zones have been placed on all of these riparian features.
- There are no streams or significant riparian features within Treatment Unit A or B. However, there is a number of identified and mapped Non-Classified Drainages (NCD's) within TU's A and B. NCD's are defined as areas that transport water at some point during the year but do not carry significant flow – could be snowmelt channels or ephemeral streams.
- Two Points of Diversion (POD's, commonly known as licensed water intakes) have been identified within the treatment area. The water intake areas will be clearly marked, and a minimum 50-metre no harvest buffer will be established around each water intake to protect water supply and intake infrastructure (more distance may be maintained based on both the advice of a hydrologist and terrain features). The hydrologists' on-site analysis and report will guide water resource management.
- Preliminary watershed boundaries based on government data are identified on the Fuel Management Unit 6 Overview Map. These boundaries are defined by the direction of water flow, terrain features, and connectivity. All identified above-ground water in the treatment unit flows northward towards Nakusp Creek and Box Lake except one NCD on the west boundary of Treatment Unit A which flows west. Watershed boundaries will be confirmed and fine-tuned by the hydrogeomorphic assessment.

The fuel management prescription takes into consideration values that are regulated under the Forest and Range Practices Act, including riparian management, domestic water licences and licenced water works, soil disturbance related to roads, landslides and terrain stability, wildlife, biodiversity, recreation, archaeological and cultural heritage resources. The prescription meets legislated requirements of the Act and associated regulations.

