

**Revelstoke and Area**  
**Community Wildfire Protection Fuel Break Design**  
**DRAFT for COMMUNITY REVIEW – May 2015**

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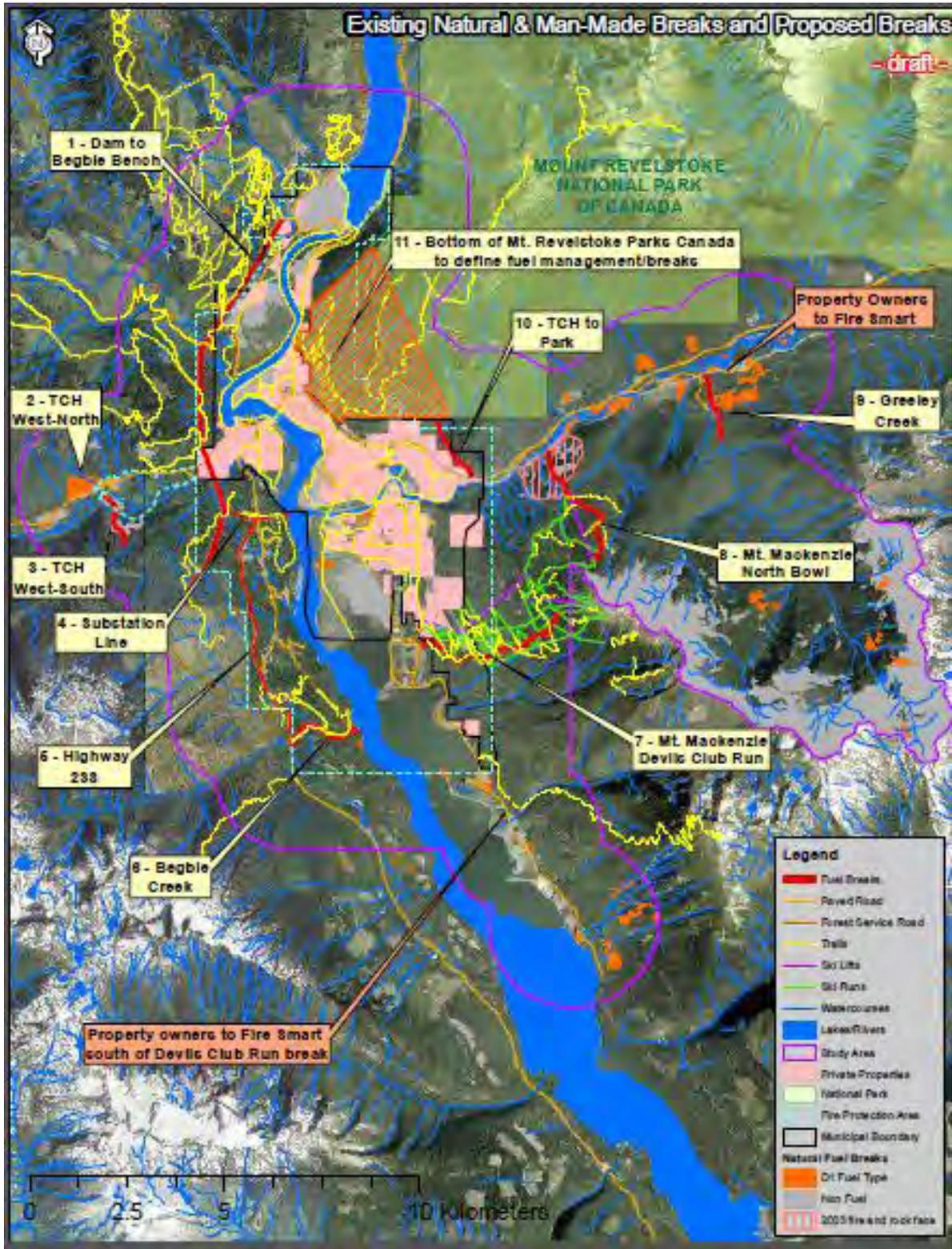
Revelstoke and Area Community Wildland Fire Protection Committee

**Note to Reader**

*See the [Revelstoke Wildfire Fuel Break Design Project Background](#) for an introduction to the project and a description of the process used to design these fuel breaks.*

The map on Page 2 illustrates the location of the recommended fuel breaks. A brief description of each break follows.

# Existing and Proposed Fuel Break Map – DRAFT



## Existing Natural and Man-Made Fuel Breaks

### 1. Dam to Begbie Bench – Main BC Hydro Transmission Line

The BC Hydro transmission line from the Revelstoke Dam southwards provides a man-made fuel break for the Westside road area, Big Eddy neighbourhood and the Begbie Bench neighbourhood for wildfires from the west. BC Hydro maintains the 300 metre wide corridor by brushing and mulching that meets BC wildfire fuel hazard abatement requirements. This portion of the transmission line is roaded.

Wildfire Probability – Mixed	Values at Risk
<ul style="list-style-type: none"><li>• Patches of high risk fuel types</li><li>• High historical human &amp; lightning ignitions</li><li>• Potential for increased ignitions from recreation use</li></ul>	<ul style="list-style-type: none"><li>• Transmission line</li><li>• Highway 1</li><li>• CPR line</li><li>• Highway 23 South</li><li>• Tum Tum community watershed</li><li>• Big Eddy neighbourhood</li><li>• Begbie Bench neighbourhood</li><li>• West side road businesses</li></ul>



## 2. Trans – Canada Highway (TCH) West - North

The steep, unroaded hillsides in this area make it impossible to create a roaded fuel break. If the properties to the west of the BC Hydro main transmission line were threatened by a wildfire from the west, the deciduous forests at this location would provide the anchor for a fuel break that could be created with a prescribed fire to burn-off the upslope forests.

Wildfire Probability - Mixed	Values at Risk
<ul style="list-style-type: none"> <li>• Small area of high risk fuel types; extensive deciduous/mixed forest</li> <li>• Few historical ignitions</li> <li>• Three fuel concentrations at mill yards</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 1</li> <li>• CPR line</li> <li>• Tourism businesses</li> <li>• Few homes</li> <li>• Stella Jones Pole yard</li> </ul>

## 3. Trans – Canada Highway (TCH) West - South

The steep, unroaded hillsides in this area make it impossible to create a roaded fuel break. The 2006 wildfire now creates a natural fuel break for properties west of the main BC Hydro transmission line.

Wildfire Probability - Low	Values at Risk
<ul style="list-style-type: none"> <li>• Small area of high risk fuel types; extensive deciduous/mixed forest</li> <li>• Steep, rocky hillsides</li> <li>• Few historical ignitions</li> <li>• Three fuel concentrations at mill yards</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 1</li> <li>• CPR line</li> <li>• Tum Tum community watershed</li> <li>• Tourism businesses</li> <li>• Few homes</li> <li>• Stella Jones Pole yard</li> </ul>

#### 4. Substation Transmission Line

The BC Hydro transmission line from the main transmission corridor to the Downie sub-station across the River provides a man-made fuel break within the Begbie Bench area. This 30 metre wide corridor is regularly maintained by BC Hydro with brushing and mulching that meet BC wildfire fuel hazard abatement requirements.

Wildfire Probability - Mixed	Values at Risk
<ul style="list-style-type: none"> <li>• Patches of high risk fuel types</li> <li>• High historical human &amp; lightning ignitions</li> <li>• Potential for increased ignitions from recreation use</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 23 South</li> <li>• Highway 1</li> <li>• CPR line</li> <li>• Tum Tum community watershed</li> <li>• Big Eddy neighbourhood</li> <li>• Begbie Bench</li> </ul>

#### 5. Highway 23 South Corridor

The Highway 23 South right-of-way and the adjacent transmission line create a man-made fuel break for the Begbie Bench and MacPherson areas for wildfire coming downslope. This 30 metre wide corridor is adequate to protect community values in the area given the relatively low wildfire probability on this east facing, cold slope.

BC Timber Sales and Stella Jones Inc. have forest harvesting operating areas in this area. Timber harvesting adjacent to the corridor should be designed to create primarily deciduous shaded breaks adjacent to the corridor for up to a total of 150 metres wide (including the highway/transmission corridor). If resources are available for fuel management treatments, the corridor could be widened in the few patches of high risk fuel types on the west side of the corridor with primarily deciduous shaded breaks adjacent to the corridor for up to a total of 150 metres wide (including the highway/transmission corridor).

Wildfire Probability - Low	Values at Risk
<ul style="list-style-type: none"> <li>• East facing, cold slope</li> <li>• Few patches of high risk fuel types</li> <li>• High historical human ignitions with potential for increase with expanding summer recreation use</li> <li>• Primary winds toward community</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 23 South</li> <li>• Households</li> <li>• Businesses</li> <li>• Nordic Ski Lodge</li> </ul>

## 6. Begbie Creek

The Begbie Creek draw is an old-growth management area with open forests that create a natural fuel break for wildfires coming from the south of the MacPherson/Begbie Bench area. Road access is in place from both sides of the creek.

Wildfire Probability - Low	Values at Risk
<ul style="list-style-type: none"><li>• Few patches of high risk fuel types</li><li>• High historical lightning ignitions</li><li>• Primary winds toward residential area</li></ul>	<ul style="list-style-type: none"><li>• Few homes</li></ul>



## 7. Mt. MacKenzie Devils Club Run

The 70 metre wide Devils Club Run of Revelstoke Mountain Resort (RMR) on Mt. MacKenzie creates a man-made fuel break for the resort and the Arrow Heights neighbourhood for wildfires from the south. Glading and additional runs to the north of Devils Club strengthen this fuel break. The entire run is roaded, and regularly maintained.

The team explored options to establish a fuel break along the bottom of Mt. Mackenzie but the large parcels of private property make that unfeasible. However, most of the private properties along Camozzi Road have been cleared, and these wet, roaded areas create a man-made fuel break, until they are developed. If RMR develops access along the lower elevations of the mountain within Crown land in the future, this may create an opportunity for a fuel break to be created through fuel management treatments.

There is no opportunity to establish a roaded fuel break to protect the private properties to the south of this break. These property owners will need to be especially vigilant to FireSmart their properties to reduce wildfire risks – see <http://bcwildfire.ca/Prevention/firesmart.html>.

Wildfire Probability – High to Moderate	Values at Risk
<ul style="list-style-type: none"> <li>• Concentrated high risk fuel types at mid –elevation/mixed at lower elevation</li> <li>• Moderate historical ignitions</li> <li>• 1930's catastrophic fire from the north</li> </ul>	<ul style="list-style-type: none"> <li>• RMR infrastructure</li> <li>• Arrow Heights neighbourhood – many homes with treed properties</li> <li>• Airport</li> <li>• Hospital</li> </ul>



## 8. Mt. MacKenzie North Bowl

The two ski runs, gladed areas and chairlift in the North Bowl of RMR on Mt. MacKenzie, along with the 2003 wildfire and rock face just below create a man-made/natural fuel break for Arrow Heights neighbourhood for wildfires from the east. This area is has road access via RMR's operational road system.

Wildfire Probability – High to Moderate	Values at Risk
<ul style="list-style-type: none"><li>• Concentrated high risk fuel types at mid-elevation/mixed at lower elevations</li><li>• Moderate historical ignitions</li><li>• Winds down the Illecillewaet River valley</li><li>• 1930's catastrophic fire from the east</li><li>• 2003 persistent wildfire west of Greeley Creek</li></ul>	<ul style="list-style-type: none"><li>• Hospital</li><li>• Airport</li><li>• Water reservoir</li><li>• Arrow Heights neighbourhood – many homes with treed properties</li></ul>

## 9. Greeley

The old-growth management area along the lower portion of Greeley Creek as well as the young plantation and primarily deciduous forests adjacent to this area create a natural fuel break protecting the City water treatment plant and houses/developments to the west of the Creek from wildfires coming from the east. There is road access from both sides of the creek through the road to the plant and a forestry road on the east side of the creek.

There is no road access above the water treatment plant. The team has not recommended the creation of a fuel break along the remainder of the watershed because of the team's assessment that the wildfire probability is low.

The owners of the two private properties located to the east of this break will need to be especially vigilant to FireSmart their properties to reduce wildfire risks – see <http://bcwildfire.ca/Prevention/firesmart.html>.

<b>Wildfire Probability – Low to Moderate*</b>	<b>Values at Risk</b>
<ul style="list-style-type: none"> <li>• North facing cold slope</li> <li>• Patches of high risk fuel types at mid-elevation</li> <li>• Moderate ignition probability</li> </ul>	<ul style="list-style-type: none"> <li>• Water treatment plant</li> <li>• Community watershed</li> <li>• Private land</li> </ul>

\*The Wildfire Hazard Management System rates the wildfire probability in Greeley Creek as Moderate to High however this system does not take aspect (e.g. north or south facing) into account. As this watershed is a cold north facing slope, the team assesses the wildfire probability as Low to Moderate.

## **10. Trans-Canada Highway (TCH) to Park**

The primarily deciduous forests between the Trans-Canada Highway and Mt. Revelstoke National Park provide a natural fuel break for the Clearview Heights Heights and Downtown neighbourhoods for wildfires coming from the east. There is no established road access, however there are trails on private land that could be rehabilitated to create access if needed.

<b>Wildfire Probability - Moderate to High</b>	<b>Values at Risk</b>
<ul style="list-style-type: none"> <li>• South facing slope</li> <li>• Primarily deciduous with high risk fuel types at low elevation/private lands</li> <li>• Historical human ignitions</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 1</li> <li>• CPR line</li> <li>• Water reservoir</li> <li>• Clearview Heights and Downtown neighbourhoods</li> <li>• Bridge Creek community watershed (alternate City water supply)</li> </ul>

## **11. Bottom of Mt. Revelstoke**

The project team has identified a high priority to reduce wildfire risks to community values from wildfires from within Mt. Revelstoke National Park. Parks Canada is completing a Wildfire Management Plan that will include commitments to assess the need and options to create a fuel break, with fuel management treatment decisions to follow. The project team recognizes the challenges of balancing Park management objectives with community wildfire protection.

<b>Wildfire Probability – To be defined</b>	<b>Values at Risk</b>
<ul style="list-style-type: none"> <li>• Patches of high risk fuel types</li> <li>• Winds down Illecillewaet River valley</li> <li>• 1895 catastrophic fire from the east</li> <li>• Winds from Lake Revelstoke</li> </ul>	<ul style="list-style-type: none"> <li>• Highway 1 and Highway 23 North</li> <li>• City water reservoir</li> <li>• CPR line</li> <li>• Downtown neighbourhood</li> <li>• Log yard</li> <li>• Endangered species (mountain caribou) habitat</li> </ul>