

## Elephant Hill Wildfire Recovery Principles for Access Management

The Joint Technical Working Group, under guidance from the Elephant Hill Wildfire Recovery Joint Leadership Council, has developed Access Management Principles for within the Elephant Hill Wildfire perimeter. The principles have been broken down into two categories. *Access Principles for New Development* which are intended to guide access development during timber salvage at the Cutting Permit level. The second category are *Principles for Landscape Level Access Management Planning* which are intended to guide access planning at the watershed scale after the majority of the timber salvage planning has been completed.

### **Access Principles for New Development**

- Minimize new road development
  - Utilize existing roads
  - No loop roads
  - No new Connector Roads
  - Construct roads to a minimum width and length
- Aim to achieve Net Zero New Road
  - Create Rehabilitation Plan for each Cutting Permit
  - Plan for *temporary roads*<sup>1</sup>, *rehabilitate*<sup>3</sup> roads not needed for long term use
  - Where temporary road is required for silviculture access only, consider leaving a quad trail for crew access on rehabilitated roadways
  - Where appropriate, install access controls on new *permanent roads*<sup>2</sup>
  - Consider roads outside of Cutting Permit for access management to mitigate cumulative effects of new roads
- Manage for invasive Species
  - Complete grass seeding within 1 year of disturbance
- Manage hydrologic risk
  - Maintain natural drainage patterns
  - Manage for peak flows - increase drainage structure size
  - Enhanced water control, install more waterbars and cross ditches prior to spring freshet
  - Increased inspection frequency of roads and infrastructure
  - Identify issues with existing infrastructure, plan/appraise for upgrade or replacement if needed
- Minimize/avoid roads near sensitive habitats, Ungulate Winter Range, wetlands, fish streams, Wildlife Habitat Areas, or other areas designed to provide for habitat recovery such as Wildlife Tree Retention, and Riparian Reserves.

## Principles for landscape Level Access Management Planning

- First Nation involvement at all levels of access management including prioritization of watersheds, planning, implementation, and effectiveness monitoring.
- Prioritize watersheds for access management planning
  - Identify environmental risks, values to protect, and cultural significance
  - Complete inventory of roads and infrastructure - roads/km<sup>2</sup>
  - Use cumulative effects and/or modelling tools to help determine priority
- Collaboration with stakeholders and license holders at planning stage
  - Engage with stakeholders and licensees to determine road use needs
- Strategic approach to what roads stay
  - Egress/safety
  - Infrastructure maintenance
  - Recreation
  - Access to resources and existing obligations
- Reduce loop and connector roads
  - Legacy connector and loop roads have high risks to wildlife and cultural values
- Identify other high risk roads and infrastructure
  - Barriers to fish
  - Terrain stability
  - Roads near critical habitat
- Increase Productive Landbase (THLB)
  - Rehabilitate and reforest. Consider alternate species for reforestation where ecologically appropriate (deciduous).
- Public/stakeholders education and outreach
  - Provide opportunity for public to provide input into plan
  - Advertisements and/or information bulletins
  - Signage for information and safety

<sup>1</sup>*Temporary Roads* are access structures in a cutblock that do not provide access for future timber harvesting or access to other activities that are outside of the cutblock.

<sup>2</sup>*Permanent Roads* are access structures in a cutblock that are needed to provide long term access to future timber harvesting or other activities that are not wholly contained within the cutblock.

<sup>3</sup>*Rehabilitate*: de-compact soils, redistribute side cast material and coarse woody debris over disturbed area, revegetate exposed mineral soil, and reforest



## Data Guide – Elephant Hill Access Management Subcommittee Watershed Prioritization

### Road Density

- Density of road by watershed unit

### Retention Strategy

- Slope Stability
  - o not a part of the retention strategy, added to this map for simplicity
  - o from this dataset: <https://catalogue.data.gov.bc.ca/dataset/terrain-stability-mapping-tsm-detailed-polygons-with-short-attribute-table-spatial-view>
- Retention Riparian
  - o Areas expected to be wet (eg. wetland, creeks, non-classified drainages, etc) as determined by spatial modeling
- Retention Forest
  - o Old Growth Management Areas and Visual Quality Areas
- Retention Terrain
  - o Slopes >40%, or slopes >30% with high burn severity
  - o The purpose of this retention category is to minimize the potential for erosion and mass wasting
- Retention Land
  - o Areas that are outside the timber harvesting land-base (THLB)
- Retention Watershed
  - o Intended to represent the 'Hydrologically sensitive areas' of fire-affected watersheds that contribute snowmelt to spring peak flows
  - o The area is delineated using the MS, ESSF, SBS and SBPS Biogeoclimatic Zones to approximate the area above the snowline at April 1st
- Retention Wildlife
  - o Mule deer winter range (includes draft and legal polygons)

### Moose Habitat – 100 Mile

- Based on Broad Ecosystem Inventory (BEI) capability mapping (BEI is an expert based mapping exercise that includes a variety of habitat and climate characteristics)
- More information about BEI can be found here:  
<https://catalogue.data.gov.bc.ca/dataset/broad-ecosystem-inventory-classification-spatial-layer>

### Moose Habitat – Thompson Rivers

- Probability of moose occurring based on climate factors known to limit moose distributions
- Also includes polygons for deciduous forest and wetlands

### Cumulative Effects – Watershed Maps

- Polygons derived from the Thompson Okanagan Cumulative Effects Hydrological Hazard effects protocol (also applied to the Cariboo Region for these purposes); this is a desktop-based analysis
- Riparian Hazard estimates the likelihood of loss of riparian function due to disturbance of riparian areas (ie. from private land, logging near streams, and cattle range near streams)
- Sedimentation Hazard estimates the likelihood of a sedimentation event given landscape sensitivity and landscape disturbance (eg. roads on steep slopes, roads near water)
- Peak Flow Hazard estimates the likelihood of a peak flow event given landscape sensitivity and landscape disturbance (eg. equivalent clearcut area)
- Further details about the analysis can be found here:  
[https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/cumulative-effects/watershed\\_assessment\\_procedure\\_final.pdf](https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/cumulative-effects/watershed_assessment_procedure_final.pdf)

### Mule Deer

- Includes mule deer winter range polygons for 100 mile
- Includes mule deer winter range polygons for Thompson Rivers
  - o Thompson Rivers polygons are shaded by an assessment of whether the target Snow Interception Cover (SIC) is currently being reached (scale in the legend is in hectares departing from meeting Snow Interception targets)