## Rocky Mountain Bighorn Sheep at Bull Mountain

This project could not be possible without the joint efforts and collaboration of MFLNRORD Habitat Section, the BC Wildfire Service, Crabbe Contracting Ltd, Bighorn Helicopters and funding from the Habitat Conservation Trust Fund, the Wild Sheep Society of BC, and the Eastern Chapter of Wild Sheep Foundation.

#### **ABOUT THE BULL RIVER HERD**

- The herd has declined 40% since 2014.
- Herd declines are attributed to cumulative impacts, however loss of suitable habitat is considered a key factor.
- Habitat suitability influenced by fire exclusion, invasive species and altered land use (mining, agriculture, range use etc.)
- Cougar predation also influencing herd's population decline.
- Resident population migrates from Bull Mountain down to the Bull River and Hatchery Ridge area to overwinter.
- Sheep rely on keen eyesight to detect predators and close proximity to escape terrain to outmaneuver predators, therefore sightlines and maneuverability are crucial habitat characteristics.

#### **BULL MOUNTAIN**

- Sheep use Bull Mountain for summer and migration habitat, based on radio collar and observation data.
- Provides movement corridors from rocky cliffs down to open forest.
- Recent forest ingrown inhibits safe sheep migration from high elevation to valley bottom, possibly increasing predation.

### PRESCRIBED FIRE AS A HABITAT ENHANCEMENT TOOL

- Will provide sightlines, maneuverability and productive forage for bighorn sheep.
- Human establishment and successful fire suppression has altered historic fire regimes, shifting ecosystem structure and plant communities, and significantly influencing the wildlife that depend on them.
- Prescribed burning acts to simulate the historic fire regime, in a controlled environment.

#### **OBJECTIVES OF PRESCRIBED BURNING**

- Enhance habitat in summer and transition ranges to support herd health.
- Rejuvenate forage to improve sheep body condition prior to winter.
- Provide safe migration routes in transitional habitat.
- Increase sightlines for predator evasion.

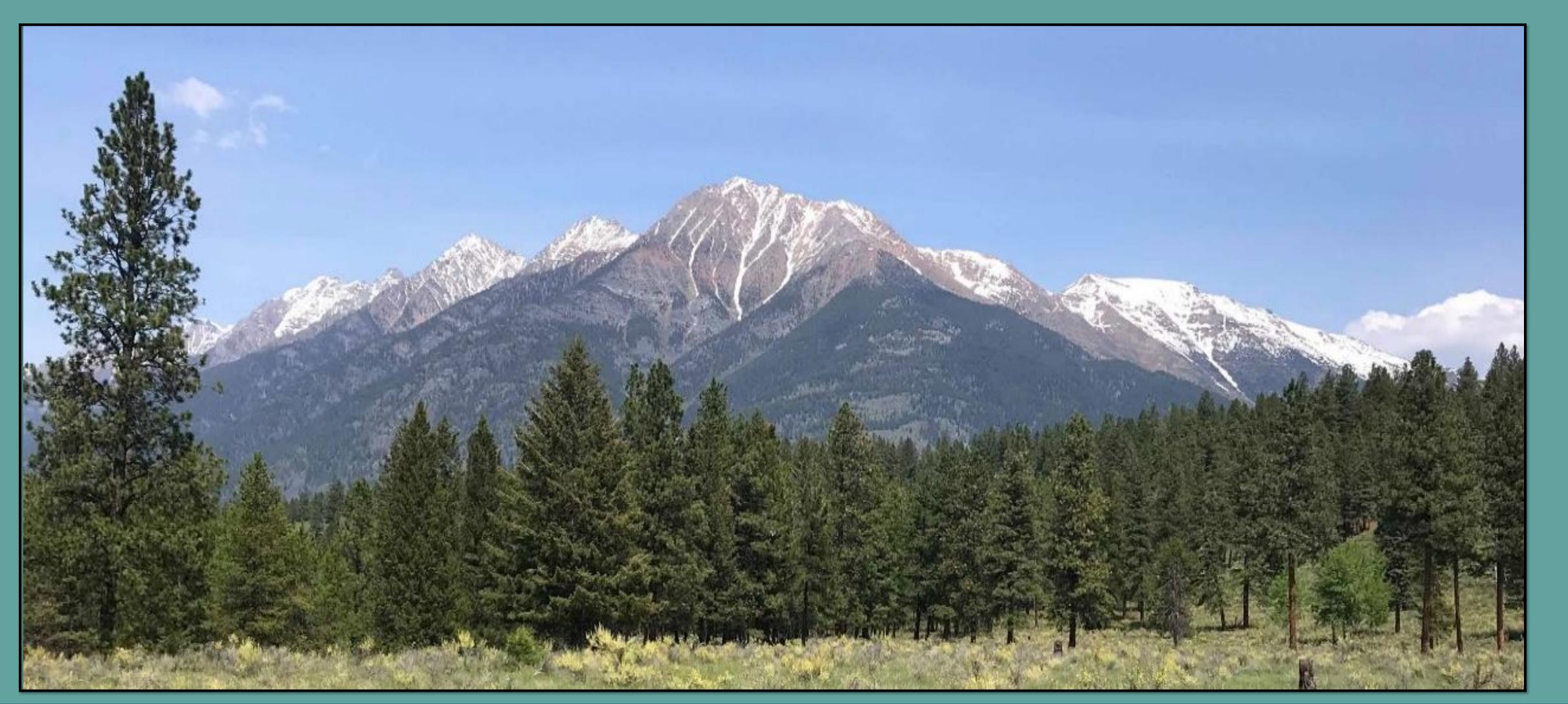
# Habitat Enhancement for *Ovis*canadensis at Bull Mountain through Prescribed Fire











#### PROJECT INFORMATION

- Prescribed burn initial treatment planned for fall 2020, with "maintenance" burns planned every five years following initial burn.
- A high elevation burn containing three burn units to target different objectives for bighorn sheep.
- The BC Wildlife Service will conduct the prescribed burn.
- Public will be advised when burn will happen, local residents and land users will be contacted.
- Prescribed burning will safeguard habitat values from catastrophic wildfire, as a high burn severity from wildfire would produce unsuitable habitat.
- By igniting a controlled burn in cooler weather, the fire will rejuvenate the ecosystem without major damaging effects.

#### **INVASIVE PLANTS**

- Invasive plant treatment has been conducted prior to burn and will be conducted once again following burn: this is a critical factor in burn success.
- By eliminating or reducing the seed source, exposed soil will be less vulnerable to invasive plant colonization via wind dispersal post-burn.
- A 'no burn' buffer is established to safeguard the burn area from infested areas that were not treated. This will give the native vegetation an opportunity to establish, which will provide high-quality forage for wildlife.

#### **RELATED PROJECTS AND INTIATIVES**

- Habitat enhancement treatment for the Bull River herd's winter range at Hatchery Ridge, project is ongoing.
- Thinning treatment with the objective to improve sightlines and movement, facilitating predator detection and safer travel.
- Additional creation of biodiversity piles and wildlife trees, aiming to increasing biodiversity in area.
- Project involves collaboration from FLNRORD, the BC Wildfire Service, The Nature Trust of BC and the Wild Sheep Society of BC
- Invasive plant control, fertilizing and seeding on winter ranges at Red Barn and Pickering Hills.
- Kootenay Region Bighorn Sheep Management Plan is underway.
- FLNRORD has sheep collared and conducts bighorn sheep inventories annually, attempting to inventory all East Kootenay bighorn sheep winter ranges.







