

# **Chilcotin Ecosystem Restoration Update and Future Workplan April 2008**

## Background

An Ecosystem Restoration (ER) program was initiated in the Chilcotin Forest District in January of 2008. The goal of the program is to treat areas of encroachment within the district, in order to increase the overall amount and quality of grasslands in the Chilcotin. The program is part of a provincial wide ER program currently focused on restoring fire dependent ecosystems within British Columbia.

The Chilcotin district has been heavily impacted by grazing in the past, and therefore restoration treatments are required, in cooperation with other aspects of range management, to begin to restore the health of these grassland communities. In addition to increasing the amount of forage available for wildlife, cattle and feral horses, treatment of these encroached grasslands should also benefit many grassland dependent bird and mammal species, and will help to increase the abundance of many plant species traditionally used by First Nations in the region.

Grassland restoration treatments include four basic steps. In most cases, each step will require a separate contract.

1. Falling trees within the treatment areas and pull back of woody debris around the perimeter.
2. Pre-burn work to widen some portions of the pull back zone, fall any large standing dead or danger trees, limbing of remaining trees to reduce ladder fuels, and clearing fuel away from wildlife trees in the area.
3. Burning of the treatment area (lead by Protection staff).
4. Post burn mop up and monitoring.

Layout and long-term monitoring will be conducted by Range staff. Rare and endangered bird surveys are also planned prior to burning.

## Work Completed in 2007/2008 Fiscal

The first Ecosystem Restoration project began in February of 2008 just south of the Chilcotin River, between the Siwash gathering area and Bull Canyon. Figure 1 below shows this first treatment area. After obtaining funding approval for this project, a meeting was held with the TNG Stewardship council at the Stone Band office, at which the first treatment area was presented to and accepted by the Band.

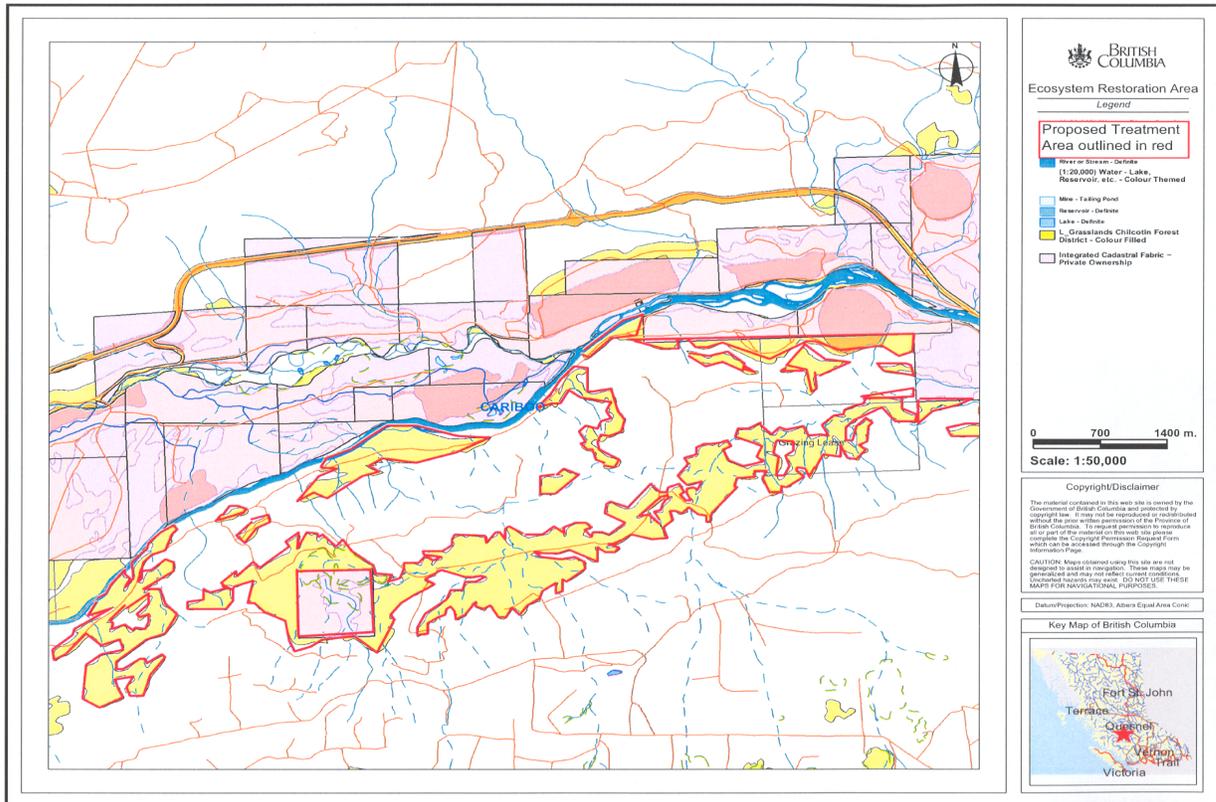


Figure 1. Map of Ecosystem Restoration Area 1. The treatment area is outlined in red and grasslands are shown in yellow. Note that private land is excluded from the treatment area.

Knockdown of encroachment began in the far west portion of “Ecosystem Restoration Area 1” (ERA 1), in a site known as “Iron Wood Springs”. All conifers less than 20cm diameter at breast height (dbh) and all aspen less than 2m in height were cut down in this area during February and March of 2008. A 5m woody debris free “pull back” was also created around the perimeter of all areas, as part of the knockdown contract. Knockdown of all Juniper <10cm dbh was initially included in the contract, but was removed after work commenced, due to time and budget constraints. It is expected that the Juniper will burn readily even if left standing.

To date, knockdown and pullback has been completed in a total of 65Ha. Figure 2 shows the area completed to date, known as Iron Woods Springs.

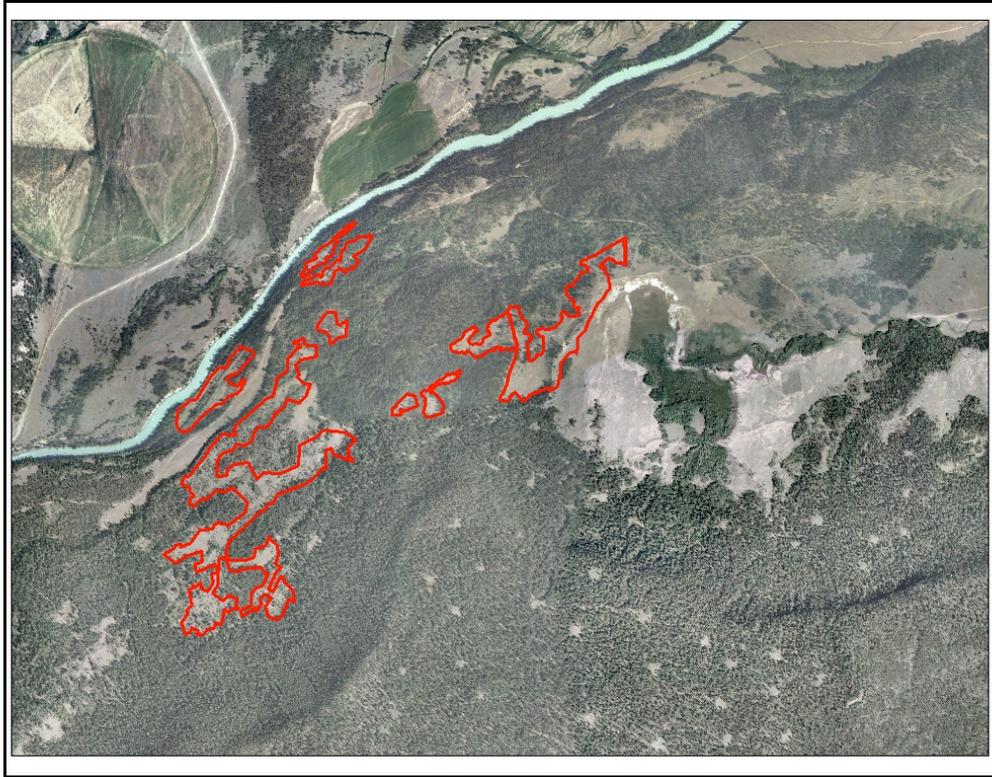


Figure 2. Far West Portion of Ecosystem Restoration Area 1, "Iron Wood Springs". Knockdown of encroachment has been completed within the areas outlined in red (65Ha in total).

### Future Treatments

#### *2008-2009*

As described above, knockdown has now been completed in 65Ha of the 260Ha area approved for treatment in ERA 1 (Figure 1, above). Layout of the remaining 195Ha been completed, and knockdown of this remaining area is scheduled to commence on May 1, 2008.

It is necessary for cattle to be kept off a burn area for 1 year prior to the burn to allow for sufficient fine fuel accumulation, as well as 1 year after the burn to allow the vegetation to recover. Therefore ERA 1 (Figure 1, above) has been divided into 3 burn units, based on the location of existing fencing that will keep cattle off of the burn units before and after the burn.

Since an individual rancher can only commit to keeping his cattle off of one burn unit at a time, the first round of treatments on ERA 1 will not be complete until 2014. Table 1 below summarizes the expected burn schedule for ERA 1.

Table 1. Estimated burn schedule for burn units within Ecosystem Restoration Area 1.

<b>Year</b>	<b>Burn Unit</b>	<b>Minimum Burn Area (Ha)<sup>1</sup></b>
Spring 2009	Iron Wood Springs	50
Spring 2011	Villa	70
Spring 2013	Christie's	120
		<i>240Ha</i>

In order to treat more area over a shorter period of time, the Chilcotin district would like to initiate restoration treatments in an adjacent Range Agreement Area, located in the southern portion of Haines creek unit, southeast of ERA 1. This new area will be referred to as Ecosystem Restoration Area 2 (ERA 2).

The grasslands in ERA 2 cover approximately 1230Ha in total. Of that, approximately 350Ha has experienced significant encroachment, reducing the area available for grazing and wildlife usage. Figure 3 shows the location of ERA 2 in comparison to ERA 1 and figure 4 shows ERA 2 in more detail. Figure 5 shows the average extent of encroachment in the area.

ERA 2 is within the grassland benchmark and is almost entirely designated as high benefit of treatment. The First Nations referral has been completed for ERA2, and layout of the treatment areas has begun and will be completed by the end of May, 2008. Two qualified contractors are available and ready to commence work as soon as the ER steering committee approves this second project.

By initiating treatment in ERA 2 this year, the rate of ecosystem restoration in the Chilcotin can be increased significantly. With two areas being treated concurrently, a burn can be planned for each year, by alternating treatment areas from year to year.

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<sup>1</sup>Area measurements are listed as “minimum burn areas” because it will depend on whether there is enough fine fuel accumulation during the pre-burn rest period to carry a fire through the open grasslands as well as the areas with heavy encroachment.

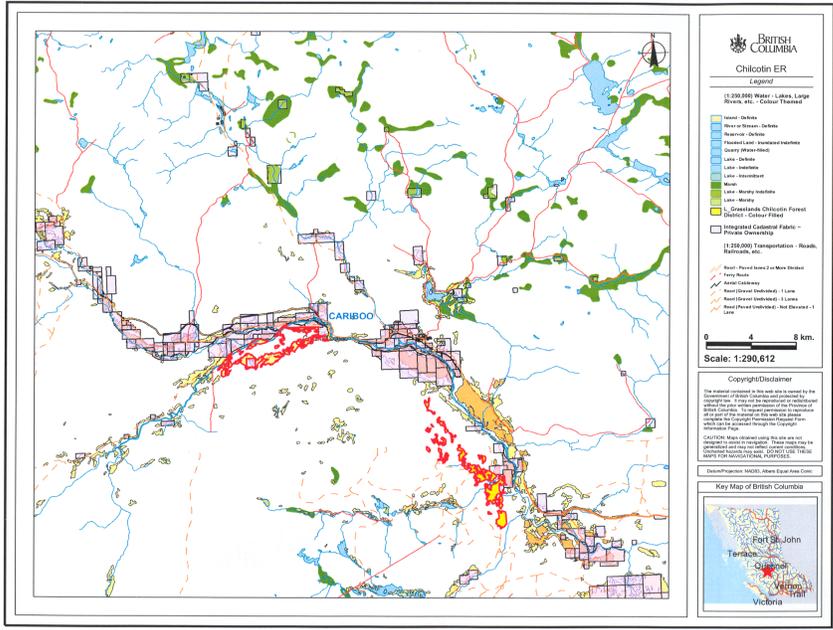


Figure 3. Overview of Ecosystem Restoration Area 1 and 2, south of the Chilko River.

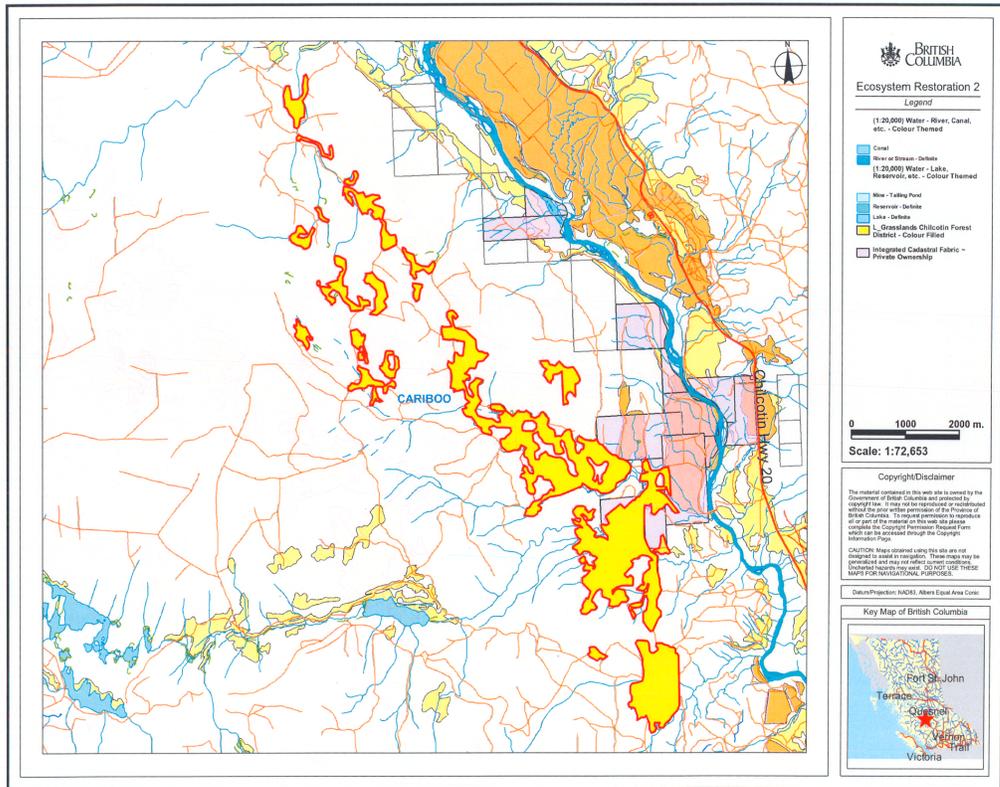


Figure 4. Ecosystem Restoration Area 2. Treatment areas are outlined in red.

*ECOSYSTEM RESTORATION AREA 2*

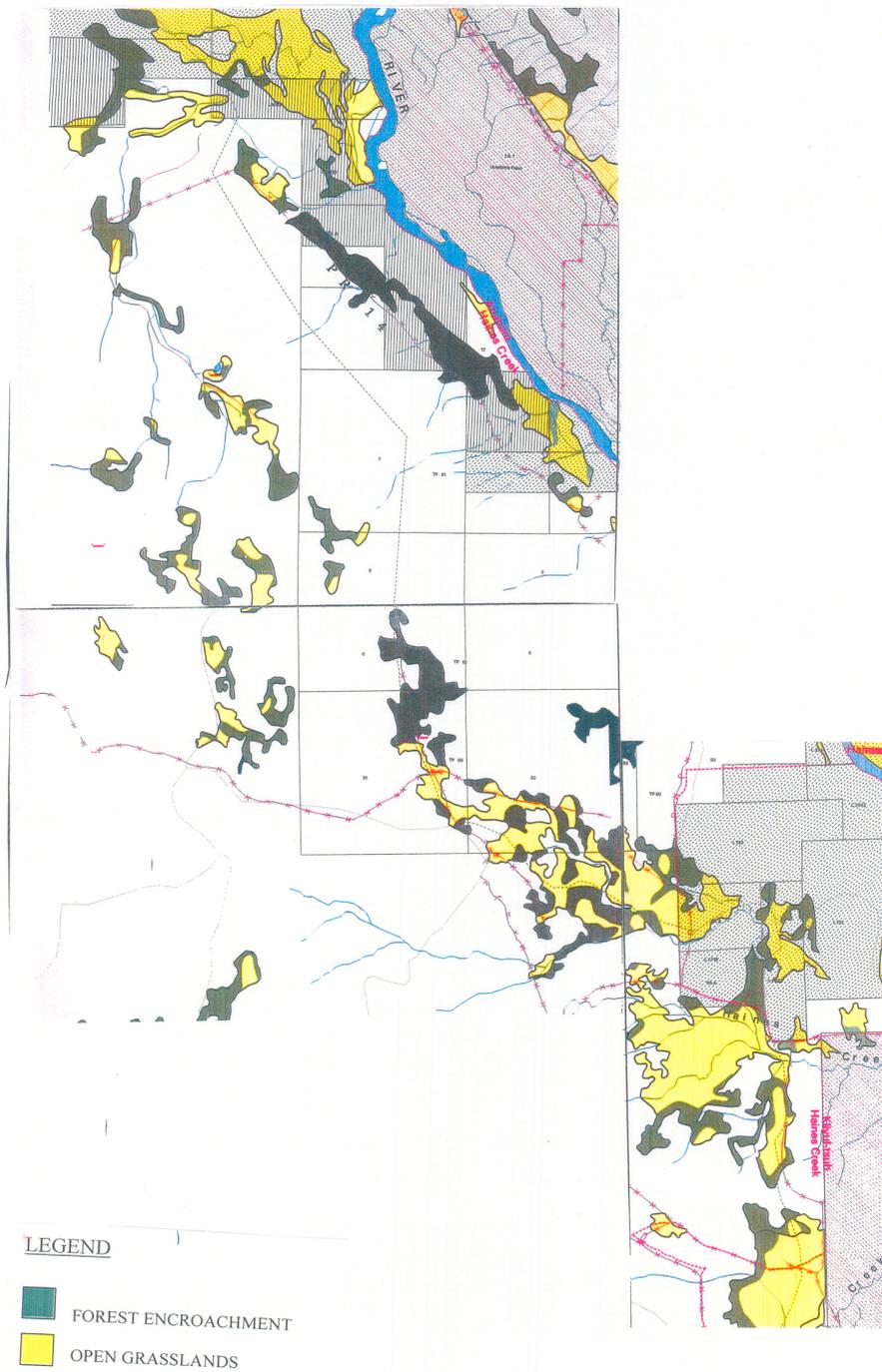


Figure 5. Average extent of encroachment in Ecosystem Restoration Area 2.

