

Esk'etemc Community Forest

Site Visit with BCCFA Recipient
BCCFA Crown Land Wildfire Risk
Reduction Program

Report date: December 15, 2022
Site visit: September 27, 2022



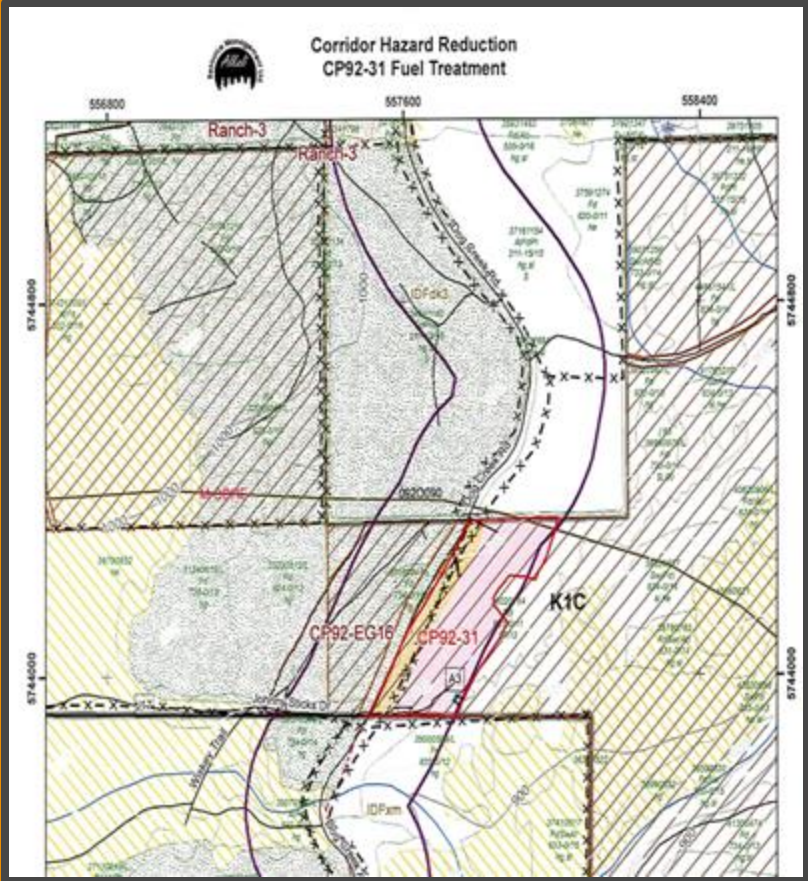
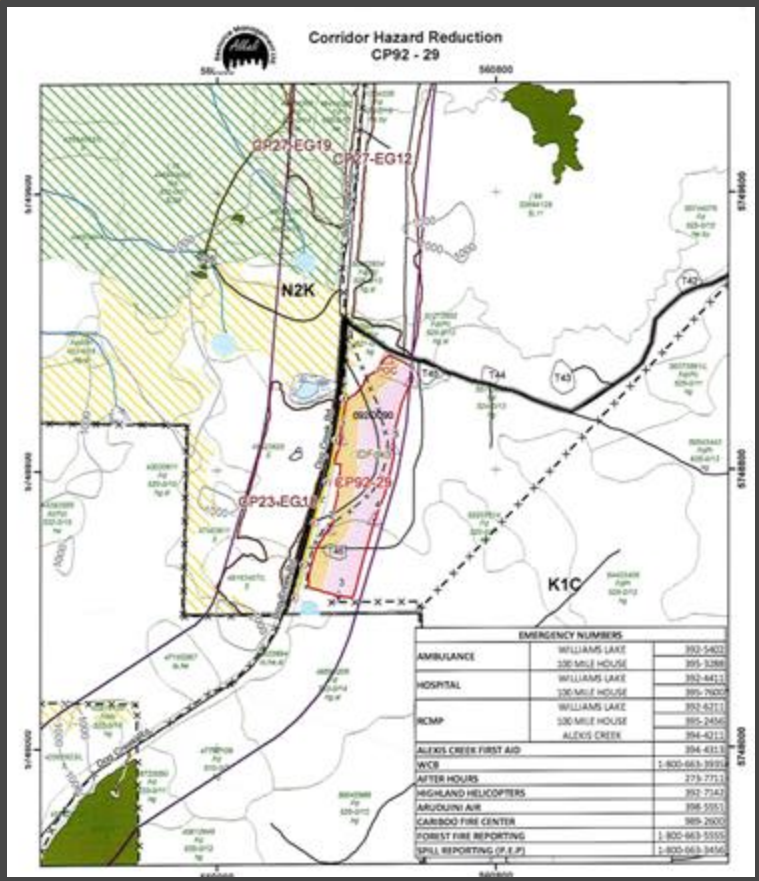
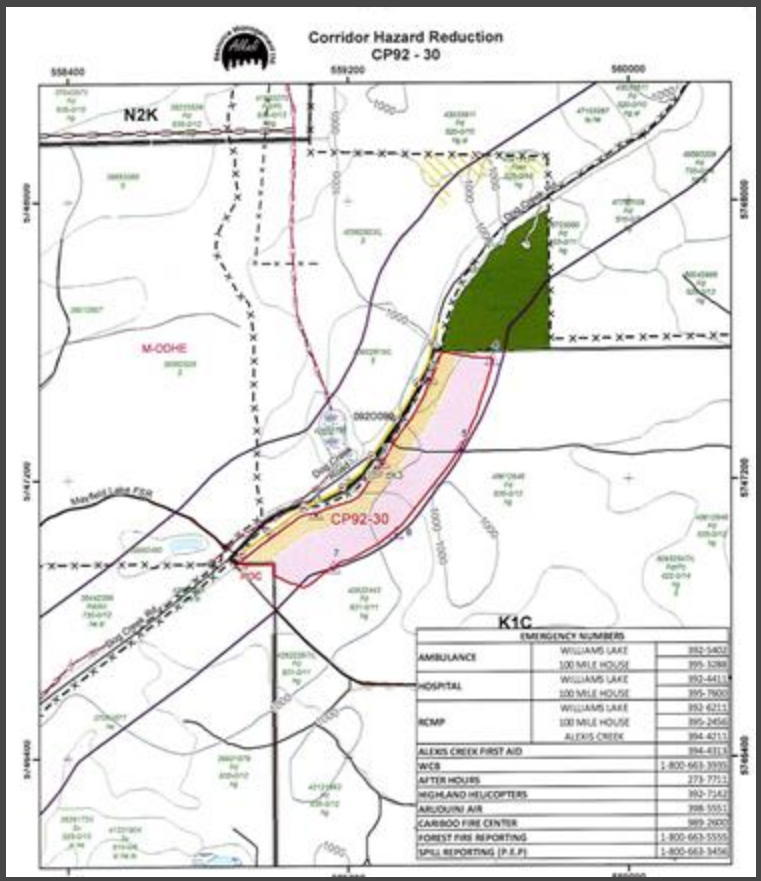
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Key information

Recipient	Esk'etemc Community Forest
Main contact	Francis Johnson, General Manager, Esketemc Community Forest
Responsible WPO	Matt Lees, Cariboo Fire Centre
District manager	Harold Stolar, DCC
Site visit date	September 27, 2022
Site location	Dog Creek Road; Joe Lake
In attendance	Francis Johnson (ECF), Andrew Flockhart (BCWS), Peter Holub (BCWS), Jennifer Gunter (BCCFA), Colin Campbell (PwC)
Investment schedule	<u>CA0000004</u>
Project plan	TX00000010 (92 Fuel Treatment), TX00000011 (96 Fuel Treatment), TX00000012(89 Fuel Treatment) and PF00000013 (Joe Lake 3km)
Authorizations	Various Cutting Permits (CP 89, CP 92, CP 96)
Estimated total person days	TX00000010 (800 person days), TX00000011 (1300 pd), TX00000012(200 person days pd) and PF00000013 (N/A - Project Cancelled)
Comments	<p>The Treatment projects were identified in the Alkali Wildfire Risk Management Plan for emergency evacuation (Alkali Lake egress route) and protection of critical infrastructure (BC Hydro and fiber optic lines). Objective was to create a shaded fuel break to reduce crown fire initiations, fire intensity for the safety of the Dog Creek road egress route and for ecosystem restoration. BCCFA CLWRR funding utilized to reduce the ladder fuels by thinning and pruning the residual trees. Surface fine fuels were further reduced through piling and burning. The Prescribed Fire project at Joe Lake was proposed as an understory burn to be completed in conjunction with the Cariboo Fire Centre, however the dry Fall of 2022 and subsequent burning restrictions resulted in this project not being completed. ECF plans to work with BCWS to complete this prescribed fire project in 2023.</p>

Field maps

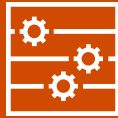


A close-up photograph of a person's hand holding a camera lens. The lens is held in a way that its circular opening is the central focus. Inside the lens's opening, a clear, vibrant image of a forest with tall trees and green foliage is visible, as if the lens were a window into another world. The background of the entire image is a blurred, sun-dappled forest, creating a sense of depth and connection between the technology in the hand and the natural environment.



Our observations related to the implementation of the project

Higher level planning



HLP for unit ECF projects included:

- Alkali Lake FSP
- Alkali Resource Management Wildfire Risk Management Plan
- GAR, Land Use Orders, Cariboo Chilcotin Land Use Plan, Mule Deer Winter Range Guidelines (wildlife tree retention targets)
- High Archeological potential area. Esk'etemc First Nation is a partner of ECF.
- Prescription was shared with DCC and BCWS, and input from both was incorporated into prescription

Fuel management prescriptions



FMPs completed by Alkali Resource Management Ltd.(ARM) Specs included:

- TX0000010: Mechanical harvesting followed by manual treatments. Surface fuel loading: Pre-treatment 18 tons/ha; Post treatment 13 tons/ha. Crown closure: Pre-treatment 48-59%; Post treatment 20-40%
- TX0000011: Thinning, spacing, pruning, pile/burn. Surface fuel loading: Pre-treatment 20 kg/m²; Post treatment <4 kg/m² or 40 tons/ha. Crown closure: Pre-treatment 40-70%; Post treatment 30-50%
- TX000012: Post harvest spacing, pruning, piling and burning
- PF000013: Understory burn in Fdi juvenile previously spaced stand. iDFdk3 Site Series 01. Fuel loading 80 to 300 tonnes/ha. Objectives: reduce fuels for community egress routes, reduce fire potential, improve biodiversity of plant community, learning/research.

Unit costs



BCCFA provided funding for manual treatments including spacing, pruning, piling, burning and administration:

- Overall costs by project
- TX0000010 = \$3,014
- TX0000011 = \$3,583
- TX0000012 = \$5,128
- PF0000013 = N/A - project cancelled due to unfavorable burning conditions

Opportunities and challenges



ECF has successfully built on previous WR projects (FESBC funding):

- Multiple years of WR funding in the Region has allowed ARM to establish a local crew of 40 people experienced in manual WR treatments.
- ECF does not possess a blanket Cutting Permit (one CP) which caused delays in applying for cutting authority (CP and Sec 52.1).
- Multiple MoF reviews of FMP are required (BCWS, District Stewardship and Wildlife). This process could be streamlined.
- Dry Fall in 2022 resulted in an extended fire season and prescribed fire project (PF-13) was cancelled.
- COVID-19 required "exposure control plan" using work pods (4 person/truck)
- Winter operations tested ARMs safety plan: uptick in injuries from slips, trips and falls

Overall project impression

Implementing important wildfire risk reduction treatment adjacent to the community of Alkali Lake and Alkali Lake access/egress routes

- Treatment was completed by Alkali Resource Management crews. Overall costs were in line with manual wildfire treatment costs in other parts of the Cariboo Region
- Alkali Lake is an isolated community. The treatments adjacent to community access/egress routes are very important. The 2017 Cariboo Wildfires highlighted the importance of the access/egress infrastructure.
- Prescribed fire projects are important for the community, not only for wildfire risk reduction, but also for cultural and ecosystem health/diversity reasons. It is hoped that more prescribed fire projects will be funded in the future.
- There is still a steep learning curve for prescribed fire projects! Organizations like ECF are eager to implement these types of treatments, but the experience/expertise in the Cariboo Region is currently very limited.
- Scheduling and implementation of prescribed fire treatments can be difficult if the weather conditions (eg. the dry Fall of 2022) are not appropriate.
- The local community has embraced WR treatments. ECF partner Alkali Resource Management now has a specialized WR crew that can provide up to 40 people to work on these projects.
- The 2017 evacuation of the City of Williams Lake and Alkali Lake highlights highlighted the importance of these treatments for the local community

Actions going forward:

- Consider continuing funding these types of treatments with existing and new funding sources
- Prescribed burn projects may need more than one year to be fully implemented, so these timelines should be incorporated into future funding programs.



Field pictures



Assessing heavy fuel loading in an area adjacent to the proposed prescribed burn area. This area would be a challenging prescribed burn.



Roadside at the proposed broadcast burn opening at Joe's Lake. The community of Alkali Lake is approximately 5 km NW.



Proposed prescribed burn area. A dry Fall in 2022 did not allow this burn to be completed

Field pictures



ECF Manager Francis Johnson, RPF assessing completed BCCFA WRR project



Assessing forest floor moisture content.



TX000012. Post harvest wildfire risk reduction (spacing, pruning, piling and burning). This stand is adjacent to the egress route from community of Alkali Lake.

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