



Community Fuel Management Plan

for the

Northern Village of Air Ronge

2026/2027

Prepared on behalf of Northern Municipal Services and
Saskatchewan Public Safety Agency

By
Michael Bendzsak
Saskatchewan Research Council
Environmental Performance, Sustainability and Climate
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Introduction

The community of Air Ronge was found to be at high risk in The Community Wildfire Risk Assessment Project (2005). Heavy forest fuel loads within and adjacent to the community were identified and representatives from the Village have expressed concern. To reduce fuel loads, the Saskatchewan Public Safety Agency successfully received Federal support from the Disaster Mitigation and Adaptation Fund to complete mitigation work (fuel load reduction) on municipal lands. The Fund supports infrastructure projects that help communities better manage the risks of disasters triggered by natural hazards. For work within Hamlet, Village and Town limits in the Northern Saskatchewan Administration District, Northern Municipal Services is the contract Administrator and the Saskatchewan Research Council is the Project Manager.

Objective

Two methods of wildfire fuel mitigation are proposed: new forest thinning and maintenance of previously thinned areas. Both are proven to reduce wildfire fuel loads, lower fire intensity, and improve the ability of suppression crews to safely and effectively respond to wildfires.

Forest thinning reduces the continuity of tree canopies, decreasing the likelihood of wildfire spreading from tree crown to tree crown. Surface and ladder fuels that can carry fire from the forest floor into the canopy will also be cleaned, resulting in less intense and more manageable wildfire behaviour.

Qualified hand-thinning crews will use chainsaws within identified treatment areas to selectively remove softwood species such as spruce, pine, and balsam fir. Residual woody material will be burnt under appropriate conditions. Treated areas will have a more open, park-like appearance and be less capable of supporting high-intensity wildfire.

Activities are typically conducted during winter when snow cover facilitates safe burning operations; however, deep snow can occasionally limit access to some ground-level fuels. It is important to note that thinning projects are not intended to stop wildfires; rather, they reduce wildfire intensity and slow the rate of spread. Maintenance of previously thinned areas allows crews to remove fuels missed during earlier treatments, as well as trees that have fallen, regenerated, or otherwise contributed to new fuel accumulation. Property owners are encouraged to implement FireSmart practices to further reduce wildfire risk to their property.

The proposed treatment areas are strategically located adjacent to previously cleared areas, existing road networks, and values at risk such as homes, cabins, utilities, and other infrastructure. By reducing potential wildfire impacts in these areas, the treatments can improve public safety, support suppression operations, and assist residents and seasonal visitors during a wildfire evacuation.

To learn more about the effectiveness of forest thinning as a wildfire mitigation strategy in Saskatchewan, including case studies and project examples, please visit:

<http://www.publications.gov.sk.ca/deplist.cfm?d=66&c=4476>

Project Area

Air Ronge is a northern Village on the west shore of Lac La Ronge, Saskatchewan. Located on Highway 2, the community is immediately south of La Ronge and 240 km north of Prince Albert.

Five parcels of land have been identified for thinning and maintenance. They can be accessed directly from the existing road and trail networks, please see Figure 1 for an overview.



Figure 1. Map of proposed mitigation areas (2.4 hectares manual forest thinning and 6 hectares of maintenance).

A total of 2.4 hectares of manual thinning and 6 hectares of maintenance is proposed within the municipal boundary, including portions of Plans 93PA07657 and 89PA00713. No new access is required or will be created. The thinning area is designed to minimize fire behavior along the central area of the Village and to break up the run of volatile forest fuels that run directly up to the built-up area of the community. The land consists of mainly boreal spruce and mixedwood forest.

Fuel Management Prescription:

Forest (Hand Crew) Thinning

The proposed work will be carried out during late fall and winter to facilitate safe brush pile burning, minimize smoke management concerns, and allow for timely project completion.

Hand crews will remove standing dead and downed trees, shrubs, and immature softwood trees within the treatment area. Mature softwood species, including balsam fir, pine, spruce, and tamarack, will be thinned to achieve a minimum crown spacing of approximately 2 metres. Remaining softwood trees will be pruned to a height of 1.5 to 2 metres to reduce the potential for surface fires to spread into the tree canopy. Healthy hardwood species, such as aspen, balsam poplar, and birch, along with healthy shrubs, will be retained. Trees suitable for firewood may be cut and piled on site for public use. Any firewood generated by the project may be collected by local residents but may not be sold or bartered.

Burn piles will be regularly inspected by thinning crews, and any ground fires identified will be extinguished immediately. Following project completion, SRC staff will continue to monitor burn sites to ensure no holdover ground fires remain. Burning will only occur when sufficient snow cover is present to minimize wildfire risk. Controlled Burn and Grass Fire notifications will be submitted as required and maintained until the project is officially classified out. Figure 2 provides before and after examples of a wildfire mitigation project completed in La Ronge during 2022/23.

Maintenance areas will be treated to the same standard as newly thinned areas, ensuring previously completed fuel breaks remain effective over time.

Use of Mechanical Aids for Manual Thinning

Small skid-steer loaders equipped with various attachments may be used as mechanical aids during project operations. Previous experience has shown these machines to be effective for handling slash, stacking firewood, constructing and maintaining burn piles, and managing snow. Mechanical aids will only be used where there is no potential for soil rutting, such as on solid mineral soils or under frozen ground conditions. A zero-tolerance approach will be applied to soil disturbance and damage to residual mature trees. If unacceptable damage is observed, it will be repaired where possible and the use of mechanical aids may be suspended or revoked.

Some immature trees and shrubs in the understory may be impacted by mechanical operations. Any damaged woody vegetation will be cut, piled, and burned. Understory vegetation typically regenerates vigorously due to established root systems and increased sunlight reaching the forest floor following treatment. All thinned material will be burned and/or piled in accordance with the prescription.



Figure 2. Before (left) and after (right) pictures taken of forest thinning in La Ronge, 2022/23.

Project Engagement Process

This plan is to be shared with the local stakeholders for comment and ultimately for sign off by the appropriate Village representatives, the area's Protection Officer, a senior Fire Manager, and a Registered Professional Forester.

Prior to project implementation, the project will go through the governments Duty to Consult process to ensure any legal duty to consult obligations are met.

Environmental & Heritage Considerations

A Saskatchewan Conservation Data Centre (HABISask) review of the proposed site showed no mitigation measures are required for rare, endangered, or at-risk species (S1 or S2 species) during the winter season.

The proposed work will be completed by hand crews, which is considered to be a low intensity activity as all work is to be done by chainsaws and brush saws. Small burn piles within the proposed site may generate localized smoke. No new access trails would be created as a result of these projects.

A Heritage Resource Review was also requested for the proposed project site. Experience has shown that hand crews and controlled use of mechanical aids have limited impact on Heritage sites.

Summary

Saskatchewan Research Council staff are available to meet to discuss the project in more detail, contact the representative below. Comments and suggestions are welcomed, and every effort will be made to incorporate any input into a final proposal.

Once the plan is approved by the listed stakeholders and any necessary Duty to Consult processes are complete then the project may be tendered. The approved project would be advertised as a Negotiated Request for Bids opportunity on the Sasktenders.ca website. All work must be completed by March 31st, 2027.

Michael Bendzsak

Saskatchewan Research Council
Wildfire Mitigation Project Manager
Bay 2D, 820 51st Street East
Saskatoon, SK
S7K 0X8
michael.bendzsak@src.sk.ca
Cell: (306) 930-9502
Fax: (306) 933-7817