Hazardous Fuel Reduction Options

LANDOWNER GUIDE



Slashing cuts down understory trees, by hand or with machinery, and leaves branches and trunks lying on the ground.

<u>Pros:</u> Reduces vertical fuels and the potential for wildfire to reach the forest canopy. Promotes habitats for small animals on the forest floor. Low carbon footprint.

<u>Cons:</u> Can increase fire risk in the short term from additional fuels on the ground if not followed by removal or further processing of the "slashed" material. Can be less aesthetically pleasing than other options.



Hauling removes all cut fuels from site, by hand or truck, to a disposal location.

<u>Pros:</u> Reduces fuels in the understory and lowers fire risk. Creates clear, clean ground to promote wildlife movement and natural tree regeneration.

<u>Cons:</u> Labor intensive, possibly expensive, and limited locations for disposal. Removes nutrients and erosion protection from forest soils.



Mulching shreds material into variable sizes and deposits mulch on the ground.

<u>Pros:</u> One machine capable of efficient work without the need for hauling or burning. Nutrients left in the forest for healthy soils. Changes fuels from vertical to horizontal.

<u>Cons:</u> Heavy machinery cannot access steep or wet areas and can result in significant ground disturbance. Elevated fire risk in the short term from continuous fuel bed on the forest floor. Mulched material can cover and crowd out native ground habitat. Coarse and nonuniform pieces can be less aesthetically pleasing.



Chipping shreds brush and small diameter trees into small, uniform pieces.

<u>Pros:</u> Lower impact on soil and surrounding vegetation. Chips are uniform, compostable, and accommodate easy movement through the forest. Changes fuels from vertical to horizontal.

<u>Cons:</u> Labor intensive and specialized equipment can have higher costs. Elevated fire risk in the short term from continuous fuel bed on the forest floor. Higher chance to interfere with regeneration of understory plants if chips are not properly dispersed.



Pile Building & Burning stacks cut fuels and burns them during favorable conditions, typically in the fall or winter.

<u>Pros:</u> Concentrates fuels until piles can be burned. Reintroduces fire to the ecosystem. Produces nutrient-rich soil for regeneration of fire dependent trees and berries.

<u>Cons:</u> Can be labor and time intensive. Poor pile construction or placement can damage surrounding trees. Creates liability for landowners - fires can rekindle over the following days or weeks, so active management is important.

ADDITIONAL NOTES

What are "Fuels?" Any flammable living or dead plant material in the forest.

Know your terrain. Slopes, access, and soil types will determine which of these methods are viable for your land, especially if bringing in heavy equipment or machinery.

Every situation is different. These methods can be used alone or in combination with each other. You decide how to best manage your materials and land.

Work with a forester. Your local Soil, Water, Conservation District (SWCD) offers free site visits and consultation to discuss forest planning and stewardship goals for your property.

Become Firewise. Contact your local Firewise coordinator for a free home evaluation to identify projects you can implement to protect your home and property and become more resilient against wildfires.

Explore cost-share programs. Natural Resources Conservation Service (NRCS), Minnesota Department of Natural Resources (DNR), and SWCD administer cost-share programs to assist private landowners with conservation and stewardship practices.



Fire Adapted Communities (FAC) is a framework for community wildfire resilience. It is a network of individuals and organizations who exchange information and work together to help their communities live safely with fire.

Communities throughout northeast Minnesota are part of a fire dependent landscape. Being fire adapted means understanding your wildfire risk, taking personal responsibility to care for the landscape, and implementing actions to reduce the risk of loss to wildfire for you and your community.

The MN Arrowhead FAC collaborates to empower communities with the knowledge, resources, and tools necessary to build wildfire resiliency.

We acknowledge and honor with gratitude the land itself in Northeastern Minnesota and the native Anishinaabe people who have stewarded and continue to steward the land for generations.