



CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701

Department of Fire and Emergency Services
Fire Prevention Division

1930 Promise Rd
(605) 394-5233
Fax (605) 394-5235

Wildland Urban Fire Mitigation Plan & Rapid City Survivable Space Initiative

The sole purpose of a Wildland fuels mitigation plan is to create a setting within the Wildland Urban Interface where in the event of a fire, the fire spread and overall negative impact can be reduced for both your specific property and neighborhood community.

Mitigation plans have historically been utilized to create defensible properties, when they actually are intended to create *survivable* properties. Survivable, meaning they will be able to withstand a wildfire without intervention and direct protection provided by firefighting forces. In reality during a wildfire event it is likely that there will not be adequate firefighting resources available, or conditions will not allow for protection of all properties.

The Rapid City Fire Department works in conjunction with the South Dakota Department of Agriculture to make grant money available to homeowners who need assistance making their homes and property survivable in a wildfire. Through the Rapid City **Survivable Space Initiative**, this program provides information and education to homeowners and neighborhood communities about living with wildfire, and assists with the costs of fuel mitigation.

Emergency preparedness for an imminent threat from wildfire should include familiarization with escape routes, assembling emergency supplies and belongings in a safe spot, and ensure all residents within the home are on the same page. Remember to stay aware of the latest news on the fire from local media and the fire department, and always follow your own personal action plan and *leave early*.

The following list of items should be addressed or referenced within a mitigation plan for your property. These are general guidelines and would coincide with your site specific wildfire risk assessment. They are based on three common mitigation strategies which can greatly reduce loss due to wildfires; the maintenance of survivable space, vegetation management, and the use of fire resistive construction techniques.

General Requirements:

- Remove and properly dispose of any dead and down vegetation.
- Review the pine stand and thin as needed to maintain an approximate average spacing of 20 feet between canopies, this does allow for specific pockets of trees for aesthetics but overall provides for a discontinuous canopy.

- Reduce the ladder fuels such as low hanging branches up to 10ft, shrubbery below the tree canopy, jack pine growth ect. Significant jack pine growth that has occurred must be thinned to reduce the potential for ground fire to extend into the mature tree canopy.
- As the slope steepness increases, the vegetation management must be more aggressive such as increased separation of fuels, further reduction of ladder fuels, and increased area of fire resistant vegetation.
- The primary fuel treatment area should be approximately a minimum of 100 feet around structures, depending upon the slope this distance may increase to 200 feet or more on the down slope side of the structures. Fuels management in this area would be the elimination of ladder fuels, maintain discontinuous open canopies, mowed grass, careful selection and the use of fire resistant landscape vegetation which is maintained and watered to maintain acceptable fuel moisture levels which will inhibit fire spread.
- Non-fire resistive vegetation shall be kept clear of buildings or structures in a manner as to provide a clear and unobstructed area for fire suppression operations.
- Maintain any additional lot improvements away from the slope edge as well as out of drainage areas is desirable, as the typical fire behavior experienced in such areas is increased significantly.
- Building materials exposed to the exterior should be fire resistant in nature, such as siding, soffits, decking material, and shingles.
- Special attention should be given to areas of the home that increase the vulnerability of the structure to fire brand intrusion, such as vents, window wells, inside corners, underneath decks or walkways, and general areas that collect windblown debris.
- Long term maintenance of the property and vegetation management must be addressed to minimize the threat from wildfire.
- Storage of firewood and like items must be positioned away from structures.

Please contact me if you would like a personal assessment of your property, or if you would like me to present the information to your neighborhood or Homeowners Association. The fundamental goal is for you as a home owner in a Wildland Urban area to understand the concept of fire resistive construction and landscapes. Gaining this knowledge will further your ability to maintain a survivable space and live in a community that is compatible with nature.

Sincerely,

Tim Weaver
Lieutenant
Rapid City Fire Department

Office: 605-394-5233
Cell: 390-4114
tim.weaver@rcgov.org

