

THREE KEYS TO HEALTHIER FORESTS: Prescribed Fire, Fire Adapted Communities, and Active Forest Management

*Compiled by Rocky Mountain Restoration Initiative
Social License Subcommittee*

THE NEED TO ADDRESS FOREST HEALTH ISSUES IN COLORADO IS URGENT AND IMPORTANT. The health of our forests is declining due to a severe drought, catastrophic wildfire, pandemics of forest diseases and insect infestations, changes in forest management and other factors. The current pace and scale of forest restoration work is not keeping pace with the threat to our forests. Climate change is increasing the frequency and size of wildfire and increasing the impacts of diseases and insects. To make our forests more resilient to climate change, we must change how we manage our forested lands.

Key #1: PRESCRIBED FIRE

1. Fire is a natural element in Colorado. Prescribed fire benefits wildlife and forests in the long term.

- Safety is our #1 priority.
- Fire is an essential, natural process and a natural component in many of Colorado's forest ecosystems. Due to decades of fire suppression and a lack of active forest management, our forests are unnaturally dense with high levels of forest fuels, making them less able to resist insects, disease and severe fire. Prescribed fire can achieve similar ecological benefits as natural fire.
- Prescribed fire can make forests more resilient to wildfire, and help protect clean water, wildlife habitat, and scenic landscapes.
- Prescribed fire is a cost-effective tool for securing the health of our forests, water resources and communities.
- Certain tree species, such as Ponderosa pine, need prescribed burns to create more natural conditions, reduce fuel loads and allow fire-resilient trees to grow. In a healthier forest, wildfires are less severe, go out naturally and/or allow fire managers more options for containing them.
- Prescribed fire is a tool for improving wildlife habitat. It improves forage for wildlife through improved nutrient cycling and invigorating the growth of herbaceous plants. It helps wildlife species that depend on fire-maintained habitats.
- Prescribed fire is a cost-efficient way to reduce hazardous fuels.
- The Colorado Department of Public Safety, Division of Fire Prevention and Control is responsible for Prescribed Fire Policy and Guidelines on non-federal land.
- All land managers who use prescribed fire are required to comply with applicable regulations, which vary by location and project.
- Prescribed burns are conducted by trained and experienced professionals who are required to have smoke management knowledge.
- Many prescribed fires are postponed due to poor forecasted smoke dispersion or wind directions and speeds which won't meet planned avoidance of smoke sensitive areas.

- The National Wildfire Coordinating Group outlines what is minimally acceptable for prescribed burns conducted by Colorado's land managers. RMRI Partners subscribe to all state and federal guidelines.
- Prescribed fires have short-term impacts to air quality, but are always planned in coordination with state air quality regulations. This planning helps mitigate smoke levels considered harmful to smoke sensitive populations.
- Prescribed fires are implemented and managed by professional fire managers under carefully prescribed conditions. Wildfires ignited by lightning or other ignition sources are sometimes allowed to play their natural ecological role, managed and monitored by wildland fire professionals and suppressed if needed.
- Prescribed fires are often planned months in advance, but the final decision to burn typically occurs the day before or day-of a prescribed burn. The 24 hours prior to a prescribed burn is when land managers confirm if weather conditions and other site factors are suitable for implementing the burn.
- Communities and residents need to work with their fire and forestry agencies to reduce the risk of wildfire on their own property by creating defensible space and reducing flammable fuels around structures.
- Prescribed fires present an inherent level of risk. However, Colorado's policy recognizes that there is inherent risk in not taking action.
- Prescribed burns require risk assessment and risk management throughout the burning process. We do not have the same ability, on the other hand, to assess and manage the risks for wildfires. Colorado's policy plans for and puts firefighter and public safety as its first priority.
 - Risk assessment includes a number of criteria, such as assessing the values that could be impacted, how severe the threat, and how likely are undesirable impacts.
 - Risk management includes taking actions that control hazards and minimize the remaining risk. These mitigation strategies and implementation activities improve outcomes and minimize negative consequences. Risk management is considered throughout prescribed burn planning and implementation.

2. Prescribed fire reduces the intense smoke and harmful effects of wildfire.

- Prescribed fire is planned in the right place, at the right time. Land managers are committed to a balanced fire program that will reduce risks and reap the benefits of fire.
- Prescribed fire involves setting planned fires to maintain the health of a forest. Burns are only scheduled during the right forest conditions.
- Prescribed fires help reduce hazardous surface and ladder fuels, decreasing wildfire severity and protecting communities from extreme fires.
- Professional land managers can more safely administer prescribed fire, and work closely with air quality officials to reduce smoke near people.
- Clean air is important. Wildfire smoke can be intense and create health issues for a variety of people.
- Wildfire smoke is far more likely to result in harmful air quality and public health impacts than prescribed fires because they are unplanned and typically are much larger. Wildfires may last longer, and burn more vegetation than prescribed fires.

- Prescribed fire may be used to help mitigate the health concerns associated with smoke exposure. Prescribed fires and smoke are more predictable and regulated to minimize smoke impacts. Air quality standards are set by the US Environmental Protection Agency and the Colorado Department of Public Health and Environment - Division of Air Quality.
- Smoke from prescribed fire is a sign that we are reducing risks and reaping the benefits of fire.
- Prescribed fire can help protect water quality in the long term by decreasing sediment and ash in runoff.

3. Prescribed fire can help maintain the visual quality of forested landscapes.

- Prescribed fire helps restore and maintain natural landscapes. It reduces tree density, bringing the forest to a more open, natural-appearing setting.
- Prescribed fires help beautify Colorado.
- The immediate impacts of a prescribed fire are short term and forests green up shortly afterward.
- When and where possible managed wildland fires are another tool to increase the use of and benefit from fire on the landscape.

Key #2: FIRE ADAPTED COMMUNITIES

1. Wildland fire is a societal problem.

- Society has altered historic fire cycles, leading to a dangerous and difficult buildup of vegetation in our wildlands, causing fires to burn hotter, last longer, spread faster and are more difficult to manage. These fires can threaten water, residential development and recreation opportunities.
- Keeping our communities and firefighters safe is priority #1. Combined with strategic timber management, prescribed fire reduces hazardous fuel loads near developed areas, allowing wildfires to burn less intensely, providing firefighter safety and community protection.

2. We are currently doing important work, but it is not at the pace and scale necessary.

- There is a need for increased fire prevention activities, including vegetation management, in Colorado.
- Vegetation management and other fire prevention activities play a critical role in helping reduce the impacts that large, damaging wildfires have on our communities.

3. The need is urgent and we need people to be part of the solution.

- Human understanding of fire risk, mitigation measures and management efforts are an important part of the solution.
- People who live and recreate in fire-prone lands assume a certain level of risk and responsibility. People can live compatible with fire, by raising their awareness of the risks and taking actions to prepare for fire.
- Landowners and land users need to reduce fire hazards on private property, use recreational fire safely, and support land management efforts to reduce loss of life, property, and natural

resources. The more populated and closer a community is to fire-prone areas, the greater the need for proactive fire management.

Key #3: ACTIVE FOREST MANAGEMENT

- Trees need space for sunlight and water to flourish. Forest management brings back native and natural forests types.
- A fire program also may include non-fire treatments to prepare the land before natural or prescribed fire can be applied safely and effectively
- Forest thinning is a tool used to increase forest health by reducing wildfire fuel, creating distance between trees and encouraging a lush understory for wildlife
- Logging trees killed by disease or insects reduces fuel for wildfires, improves safety for forest users and increases aesthetics.
- Forest managers need a complete tool box to keep our forests healthy. Tools include a variety of forest treatments, such as mastication, lop & scatter, hand-thinning, commercial timber harvest, etc. Each tool has specific applications, benefits and trade-offs.