



Forest Service  
U.S. DEPARTMENT OF AGRICULTURE

Rocky Mountain Research Station | Colorado State Fact Sheet | June 2025

# Improving Lives and Landscapes in Colorado

The Rocky Mountain Research Station (RMRS) contributes to dynamic land management needs across public, State, and private land in Colorado. Innovation and research centered around local solutions and partnerships offer new methods for adapting and shaping land management decisions.

## Forests, Timber, Wood Products

RMRS partnered with Colorado State University to use **drones** and [drone-derived data to improve restoration and forest monitoring](#) efforts by more accurately mapping tree sizes, tree groupings, and canopy openings in ponderosa pine forests.

A new RMRS report for the Colorado Front Range landscape [identifies constraints on mechanical fuel reduction treatments](#) and areas where **mechanical treatments are most feasible**, analyzes operability, and provides information and recommendations that may be used to overcome physical and policy limitations. [Similar data is available across the West.](#)

[Forest Inventory and Analysis \(FIA\)](#) monitoring data supports forest planning decisions, timber harvest, and silviculture prescriptions. This data **guides significant financial investments** in timber mills, wood products and manufacturing, and **identifies landscapes at high risk of wildfire**. A comprehensive suite of data and tools is available on the [FIA geospatial webpage](#) with [State-specific fact sheets](#). This report provides a [snapshot of Colorado timber harvest and forest products industry](#) in 2020.

A [2025 report](#) by RMRS explores opportunities for using **woody biomass** in Colorado and generating revenue to offset costs of forest restoration and fuel reduction work, as well as create opportunities for local economic development. RMRS is a leader in biochar research and has partnered with industry to develop mobile technology to produce biochar in the forest for direct application.

## Fire Preparedness, Response, Recovery

The Forest Service is working through a multiyear, science-based [national strategy](#) for creating safer and more fire-resilient landscapes and communities, reducing wildfire risk to critical infrastructure and natural resources, and fostering strong collaboration across all lands.

The [Wildfire Research \(WiRē\)](#) team, led by RMRS, collaborates with local organizations across the western U.S. to help communities reduce wildfire risk through data-driven research and direct engagement with homeowners. Their research has revealed misconceptions about community wildfire readiness, aiding in more effective outreach alongside ongoing partner efforts like [Colorado's Live Wildfire Ready campaign](#). A notable example is the [Genesee community near Denver](#), which partnered with WiRē to refine evacuation routes and treat fuels in common areas. A Colorado State Supervisory Forester, Adam Moore, was recognized alongside other WiRē team members who received the 2024 Colorado Governor's Pathfinding Partnerships Award, highlighting their role in shaping proactive wildfire management.

In 2024, the [Wildfire Risk to Communities](#) tool incorporated new data reflecting more recent weather observations, vegetation data, and information about structures. Explore and view the new data at [wildfirerisk.org/explore](#).

[This RMRS case study](#) shares lessons learned from six fires in Southwestern Colorado during 2023. Engaging with partners and local collaboratives has fostered a sense of shared responsibility and identified opportunities to safely manage fires in ways that can reduce future fire severity.

Preplanning exercises such as defining [potential operational delineations](#) (PODs) and using tools available on the [Risk Management Assistance Assessment dashboard](#) help incident management teams and fire managers make, document, and communicate complex and nuanced decisions with the community.

The historic 2020 fire year in northern Colorado prompted a landscape assessment to guide [postfire forest management](#) strategies and reforestation efforts. The [postfire restoration project](#) in the Colorado Front Range leveraged decades of watershed research to develop and test strategies for protecting water resources after wildfires, focusing on [recovery in burned areas](#) and restoration effectiveness.

To foster healthy rangelands and a more resilient livestock industry, RMRS has partnered with universities and private data companies to develop online tools such as [StockSmart](#) and the [Rangeland Monitoring Service](#) to help range managers and livestock operators determine future forage production, fire risk, and appropriate stocking rates.

## Recreation and Wildlife

The [Lake George Dam removal project](#) in Eleven Mile Canyon on the South Platte River monitors aquatic diversity and stream habitat for this recreational fishery. This collaborative effort involves partners from the University of Colorado, Boulder and the Pike and San Isabel National Forests to help improve fish passage, wildlife habitat, and recreational opportunities.



The CharBoss® is an air curtain burner-style mobile biochar production machine. USDA Forest Service photo by D. Weseman.

A recent effort to refine habitat maps for lynx in Colorado has resulted in removing unnecessary management constraints from nearly three million acres that were determined through research to not be used by lynx. Scientists used modern mapping technology and GPS collars to refine overly-broad, legally-binding maps of threatened and endangered species habitat, [enabling targeted conservation](#) while making it possible to remove constraints related to timber harvest, recreation conflicts, and other projects on millions of acres.

RMRS scientists have been meeting with staff on the Grand Mesa, Uncompahgre, and Gunnison National Forests to discuss the design of a study that would inform trail placement to minimize impacts to a residential elk population in Telluride.

## RMRS Facilities and Experimental Forests and Ranges in Colorado

Headquartered in Fort Collins, Colorado, RMRS has locations across 12 States in the Interior West and boasts 14 experimental forests and ranges. The Fraser (near Winter Park) and Manitou (near Colorado Springs) Experimental Forests provide long-term silviculture and watershed data for Colorado.

## Potential Research-Management Collaboration Opportunities in Colorado

- Tracking investments and performance outcomes for fuel reduction treatments
- Exploring use and markets for biochar as an economic offset for forest health and fuel reduction treatments
- Creating tools and standards to aid in sustainable grazing in consideration of increasing drought
- Developing tools for using FIA and other forest data at smaller scales, stand levels
- Expanding WiRē fire mitigation outreach efforts across Colorado communities

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<https://research.fs.usda.gov/rmrs>