



Next Generation Community Wildfire Protection Plan

Community Summary



ENVISION CHAFFEE CO.

A FUTURE BUILT ON COMMON GROUND



“This innovative, community-driven wildfire plan delivers a disciplined approach to treat the right acres for the highest community benefit.”

Damon Lange,
Southwest Area Manager
Colorado State Forest Service

ENVISIONING A FIRE-READY FUTURE

Chaffee County typifies the new reality of wildfire in the West. Decades of fire suppression, drought and ensuing insect infestations have caused our forests to decline into very poor health. Fires are coming more frequently and they are more intense.

The risk is a top community concern highlighted by the Envision Chaffee County planning initiative. Through the participation of 1,500 citizens and more than 70 organizations since 2017, the community created a “vision” of healthy forests, waters and wildlife. Voters took action in 2018 to support this vision by approving new public funds to support healthy forests, build a fire-ready future and protect our watersheds, wildlife habitat, agriculture, recreation areas and local economy.

The Envision Forest Health Council developed the Next Generation Community Wildfire Protection Plan to harness community momentum and deliver solutions that reduce wildfire risk. We used the most current information and computer modeling technology to create Colorado’s leading forest health action plan. The plan explains risk posed by severe wildfire, prioritizes action to decrease that risk, and sets a course to improve forest health. It also engages the community to act - together - to address one of the community’s most serious and concerning challenges.

The plan guides us by mapping the level of risk to our most important assets and identifies areas where the risk can be addressed, or “treated” with the highest cost efficiency. The resulting action plan is to treat 5-10% of the total landscape for up to 70% reduction in fire risk to our most important assets.



PROTECTING OUR MOST IMPORTANT ASSETS

Chaffee County's natural resources support our quality of life and provide water to agriculture lands and millions of citizens who live downstream. In a 2019 Chaffee Wildfire Survey, 1,035 citizens prioritized the things they value that are at risk from severe wildfire including life, water, infrastructure, homes, wildlife, views and recreation.

All of these assets support local and regional economies that depend on tourism and outdoor recreation. Healthy forests support fishing, skiing, mountain biking, hiking, hunting, jeeping, rafting, kayaking, access to more 14ers than any other county in Colorado, gateway communities to the Colorado and Continental Divide Trail systems, and much more. Chaffee County has unusually rich natural resources that benefit residents, visitors and state-wide

business. All of these resources are increasingly at risk from severe wildfire.

The forests of Chaffee County, and the upper Arkansas River basin, are the source for critical water supply for local towns, 1 million people living downstream and even the city of Aurora. The same water also provides 102 miles of Gold Medal trout waters and recreation on the most rafted river in America. Wildlife in eight counties, migrating from Breckenridge to Lake George to Westcliffe, rely on Chaffee County's abundant winter habitat, according to Colorado Parks and Wildlife deer collar data. In addition, fire threats to local infrastructure present far-reaching implications, including power lines that supply the San Luis Valley with electricity and Highway 50, one of the busiest east-west transportation routes in the US.



“The beetle kill epidemic will transform local forests from five standing dead trees per acre to 120 in less than a decade.”

Jim Pitts, USFS District Ranger

WHAT IS THE RISK?

Decades of full fire suppression resulted in poor forest health across the West and in Chaffee County. Trees are standing too close together, they are all the same age, and they are being choked by dead wood also known as “fuel.” These unhealthy forests are further being ravaged by insects, including a beetle epidemic that will likely result in up to 90% mortality of all the spruce in the county and a budworm impacting fir trees.

Wildfire serves a healthy forest ecosystem by acting as a “broom” that can sweep the forest clean of dead wood and debris. However, as forests become overly dense and fuels accumulate, wildfires can burn so hot that soils can become damaged or “baked,” impeding vegetation regrowth for years and causing destructive post-fire mudslides, flooding and fish kills, like those created by the Hayden Pass Fire.

Wildfires can be classified by how they are managed on a scale of Type 5 (very small fires) to Type 1 (large, complex fires and natural disasters). Ten years ago, the Upper Arkansas River

headwaters region in Chaffee and Lake counties had only experienced one Type 3 wildfire - ever. In the decade since, there have been two more Type 3's (Treasure and Lodgepole), our first Type 2 (Hayden Pass), and our first two Type 1's (Weston Pass and Decker). Action is urgently needed to reduce forest fuels by prescribed burns and tree thinning.

While lightning statistically causes the most forest fires, rapid growth in recreation use exacerbates the threat. In the Chaffee Wildfire Survey administered in 2019, citizens identified visitors as the second-biggest perceived threat to forest health, just after insects/fire.

The survey also shows that the community is not prepared for a wildfire emergency. More than 80% of respondents believe a major fire will happen in the next five years, yet 40% indicate they do not have an evacuation plan and more than half are unsure what to do to decrease risk on their property, or even where to go for information.

TAKING ACTION

The Next Generation Community Wildfire Protection Plan's [Fuel Treatment Priority map](http://centralcoloradoconservancy.org/land/wp-content/uploads/FuelTrtPriority.jpg) (centralcoloradoconservancy.org/land/wp-content/uploads/FuelTrtPriority.jpg) shows where treatment activities can most effectively reduce the risk. The next step is to treat these areas, but it is not a simple task. Work spans public (65%), private (30%) and state (5%) lands, and evacuation routes involve county and state rights-of-way adjacent to many different private landowners. The cost is substantial at \$50 to \$100 million.

Funding from diverse partners will be needed to leverage federal and local dollars to complete treatment in the priority areas over 10-20 years. [Chaffee Common Ground](http://chaffeecommonground.org) (chaffeecommonground.org) provided \$246K over three years to begin this work. Leaders formed the Envision Forest Health Council to ensure four key elements of the plan are implemented:

Treating Together identifies and develops projects to decrease wildfire risk and enhance forest health across land boundaries by connecting private landowners, land management agencies, non-profit organizations and funders. Working with wildlife managers and local ranchers offers further opportunity to leverage these activities to also enhance habitat and agricultural productivity.

Envision Healthy Landscapes promotes ongoing community engagement, education and preparedness. The goal is to empower citizens to feel in control of their own destiny even though they live in a wildfire zone. The program includes transparent tracking and annual reporting of progress toward decreasing risk to the community.

Chaffee Chips accelerates private land treatments by providing coordinated support to landowners to mitigate fuels, create defensible space around structures and improve forest health on their land. The service organizes events in Fuel Treatment Priority neighborhoods and supports landowners with education and services from the Colorado State Forest Service, Colorado Fire Camp, Fire Protection Districts, state and federal agencies and County of Chaffee.

Zoning and Code considers changes that other communities adopted after severe wildfire events and makes recommendations to the county to decrease risk.



“Fire intensity and frequency have fundamentally changed.”
John Markalunas, Decker Fire Incident Commander



THE PROCESS: ENGAGING COMMUNITY AND QUANTIFYING RISK

Fuel Treatment Priorities were created by first engaging the community and then quantifying risk with Geographic Information Systems mapping and modeling technology. More than 1,000 citizens provided input to the Chaffee Wildfire Survey, answering questions about awareness, preparedness and mitigation activities. Responses showed strong support for forest treatment, as 84% said they have “no concern” about land management activities such as thinning trees and 73% felt it would improve habitat for wildlife.

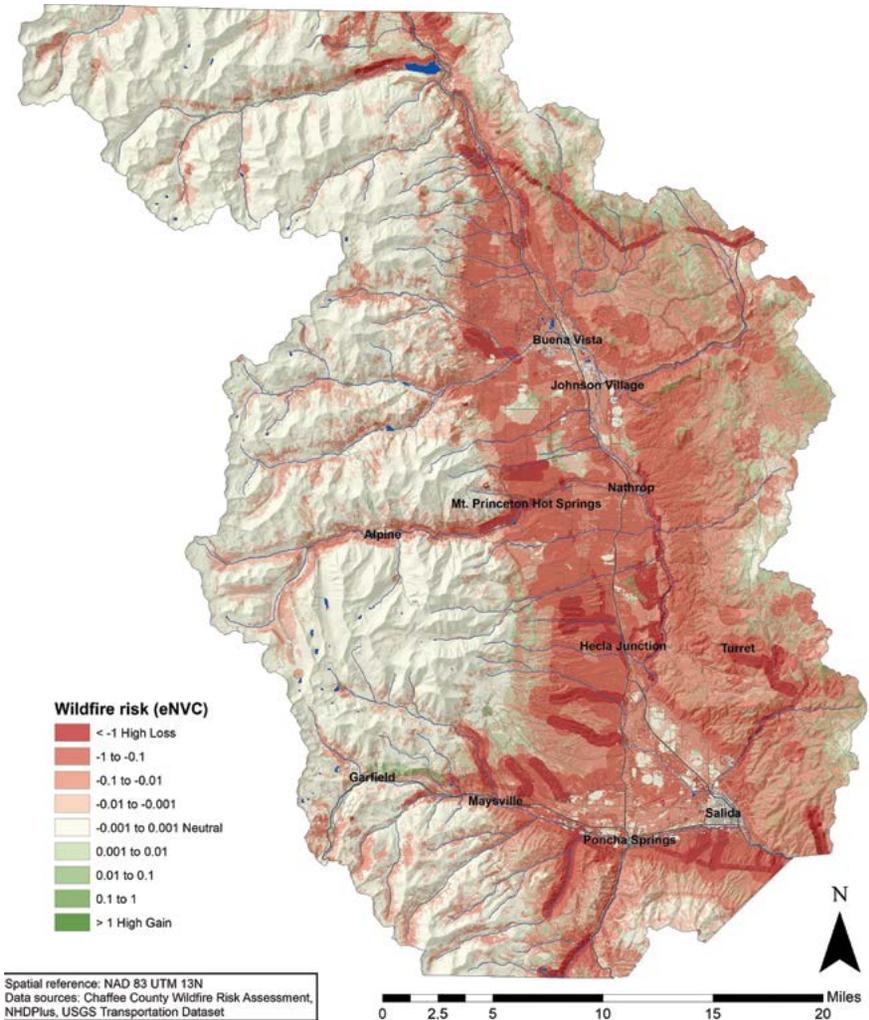
Public meetings were held throughout the process to collect additional input. All of the Next Generation maps described below were presented and about 140 citizens provided 220 written comments that were considered in the final plan.

The community also was asked to prioritize things they most want protected from severe fire and post-fire flooding. The seven assets, in order, are firefighter lives, human life, drinking water, infrastructure, homes, wildlife, Arkansas River recreation, scenic views and trail systems.

Wildfire Risk. Colorado Forest Restoration Institute at Colorado State University quantified and mapped risk to community priorities listed above and added a county-wide assessment of:

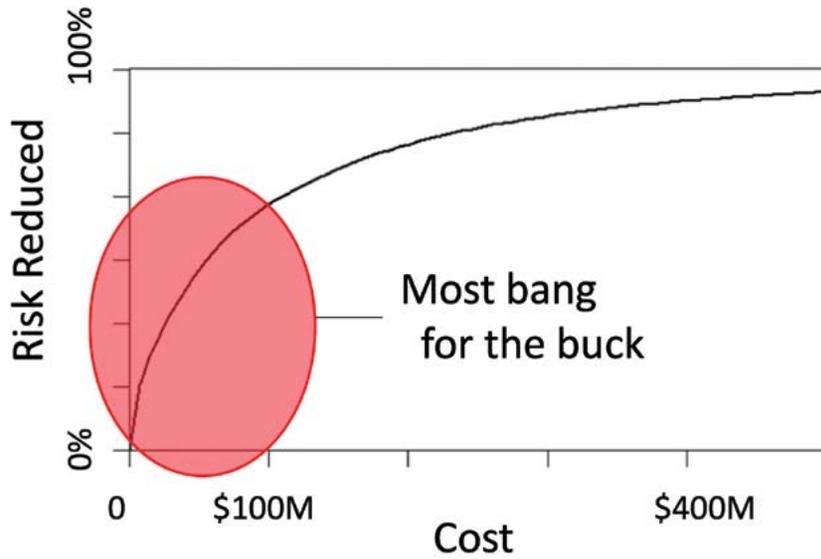
- **Asset locations**, such as power lines, evacuation routes, cell towers, water supply and infrastructure, critical bighorn sheep winter range, etc.
- **Burn probability**, or where fire is most likely to happen. Lower elevation forests that are dry during much of the year and areas impacted by insect epidemics show up on this map.
- **Fire Behavior**, or how intense fire is likely to be if it occurs, ranges from knee-high flames in grasslands to towering crown fires in various forest types depending on moisture levels, fuel types, slope, and other factors.

Composite Wildfire Risk

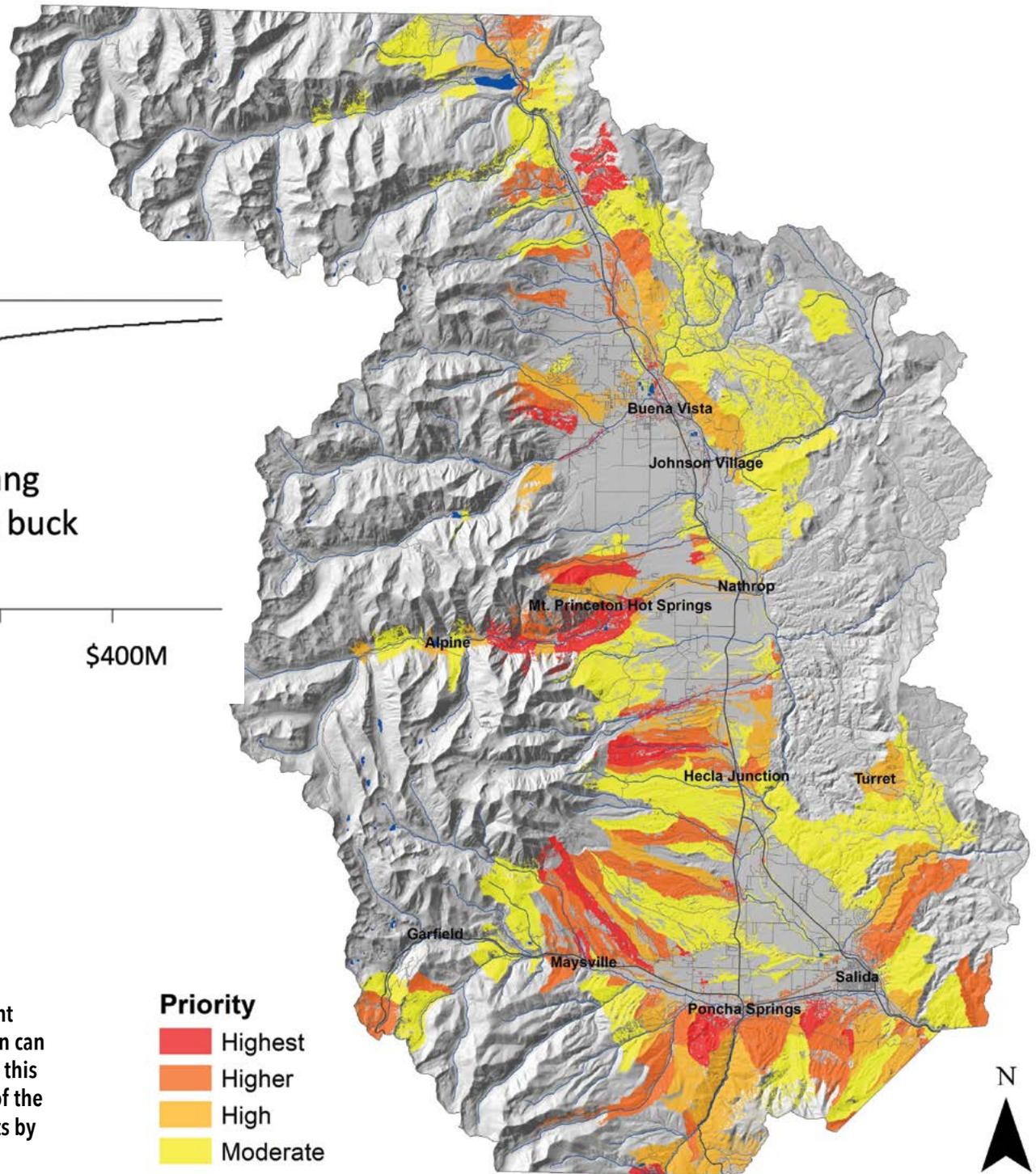


All of these factors combine to produce Composite Wildfire Risk (above). This important map shows where the community's valued assets are at the highest risk from severe wildfire (red) and areas where moderate wildfire may be of net benefit (green).

Treatment Priority Area "Bang for the Buck" Map



The areas in Chaffee County where forest treatment such as thinning, controlled burns and mastication can have the biggest impact for the cost are shown on this map in red and orange. Treating the right 5-10% of the landscape could decrease risk to community assets by 50-70%, as shown by the graph above.



- Priority**
- Highest
 - Higher
 - High
 - Moderate

Mapping Treatment Priority Areas. Factoring cost to Composite Wildfire Risk identifies the locations where treatment can do the most to lower risk for the least amount of money. Referenced as “Bang for the Buck” map. Options include thinning trees, prescribed fire, thinning to clean up slash, and mastication which is a patch-clearing method used in the piñon-juniper forest.

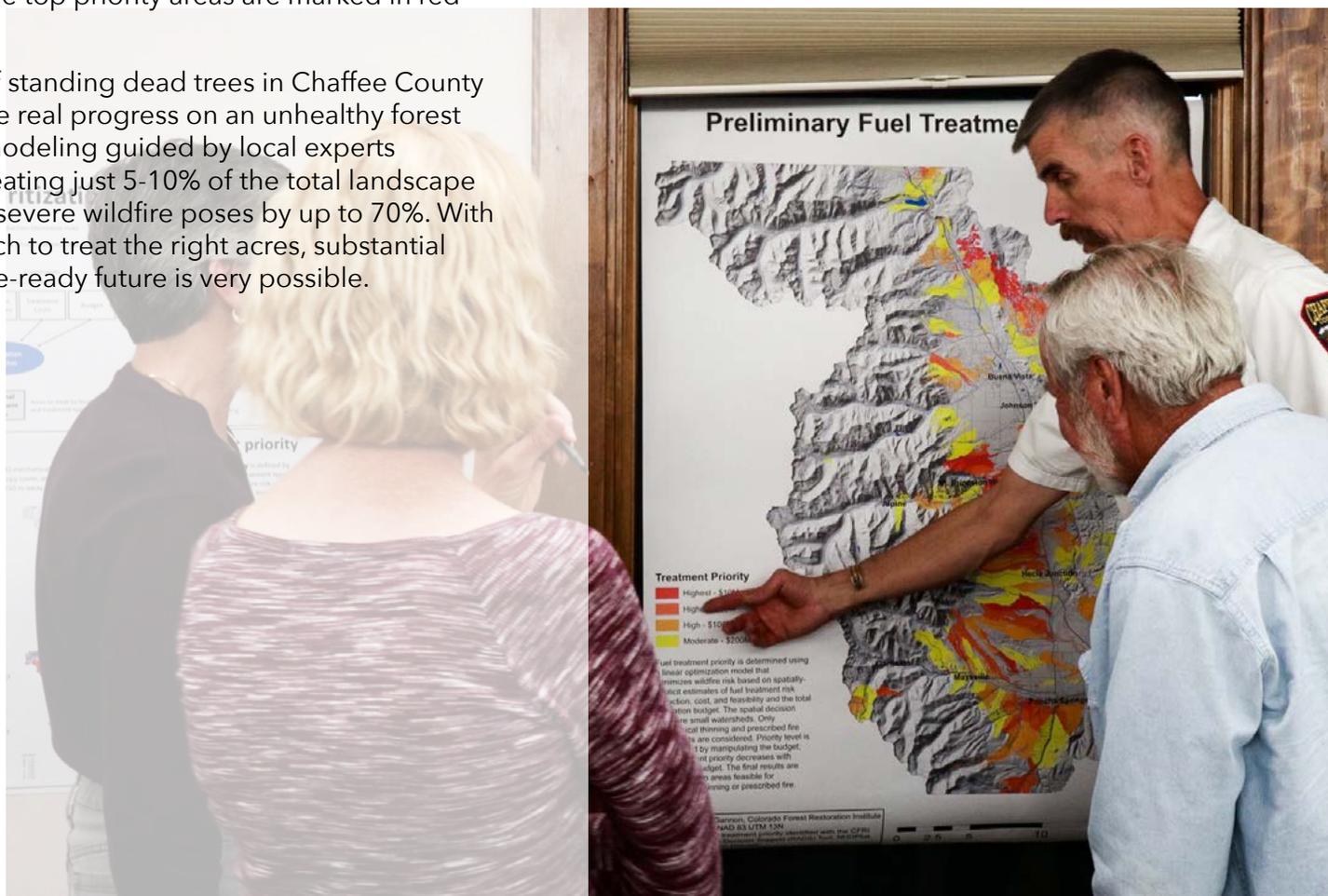
Fuel Treatment Priority areas are assigned by assessing the level of reduced risk and the cost and feasibility of each treatment type. Thinning is not possible in Wilderness or roadless areas, for example, and steeper terrain is more expensive to treat. The top priority areas are marked in red on page 7.

The quick increase of standing dead trees in Chaffee County may make it seem like real progress on an unhealthy forest is not possible. But modeling guided by local experts demonstrates that treating just 5-10% of the total landscape reduces the risk that severe wildfire poses by up to 70%. With a disciplined approach to treat the right acres, substantial progress toward a fire-ready future is very possible.

GET INVOLVED!

Chaffee County is a unique place and a special community. By engaging many community members, Envision Chaffee County and the Forest Health Council have helped set the stage for a better future through a leading-edge fire resiliency plan that will improve forest health and protect resources that millions rely on. We invite you to join the plan!

Contact envison@centralcoloradoconservancy.org





ACKNOWLEDGEMENTS

The plan was developed by the community. 1,035 citizens engaged in the wildfire survey, and hundreds in community meetings. Top local and regional leaders from critical organizations provided over 1,500 hours – or 40 work weeks – of planning time and expertise to develop the plan. These community heroes include: USFS - District Ranger Jim Pitts, Fire Management Officer Chris Naccarato and Mountain Zone Fuels Specialist Andrew White. BLM - Rocky Mountain District Manager Cathy Cook, Field Manager Keith Berger, Fire Mitigation Specialist Ed Skerjanec, Fire Management Officer Ty Webb, and John Markalunas, Assistant Fire Management Officer for the Front Range Fire Management Unit. Colorado State Forest Service – Southwest Area Manager Damon Lange, Supervisory Forester Adam Moore, Supervisory Forester Sam Pankratz and Forester J.T. Shaver. Colorado Springs Utilities – Watershed Planning Supervisor Mark Shea and Forest Program Manager Eric Howell. Chaffee County Commissioner Keith Baker. Chaffee County Office of Emergency Management Director Richard Atkins. Salida Fire Department and South Arkansas Fire Protection District Chief Doug Bess and Fire Inspector Kathy Rohrich. Chaffee County Fire Protection District Chief Robert Bertram and Battalion Chief Kent Maxwell (also Director of Colorado Firecamp). Buena Vista Fire

Department Chief Dixon Villers. Colorado Parks and Wildlife Area Wildlife Manager Jim Aragon. Arkansas Headwaters Recreation Area Manager Rob White. Arkansas River Watershed Collaborative Director Chelsey Nutter, Lead Forester Andy Lerch, Mesa Antero Water Association President Rick Hum, Central Colorado Conservancy Executive Director Adam Beh. Photography by Lea Frye, Eric Lind, Mark Fox and Zach Tucker.

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CHAFFEE COUNTY WILDFIRE PROTECTION PLAN LEADERS AND FUNDERS

