

Ouray County Community Wildfire Protection Plan



CWPP Certification

The Ouray County Community Wildfire Protection Plan was developed in accordance with the guidelines set forth by the Healthy Forests Restoration Act (2003) and the Colorado State Forest Service's Minimum Standards for Developing Community Wildfire Protection Plans (2022).

- This plan was collaboratively developed through planning meetings with representatives • from the fire protection districts, Ouray County, federal agencies, state agencies, communities, and other organizations invited to participate
- This plan identifies and prioritizes areas for vegetation-fuels reduction treatments to • reduce the wildfire threat to human welfare and economic values at risk in the county.
- This plan recommends measures to reduce the ignitability of structures and loss of life. •
- This plan provides recommendations on ways to improve wildfire response capabilities for • the fire protection districts.

The following entities mutually agree with the contents of the Ouray County Community Wildfire Protection Plan:

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Ouray County Community Wildfire Protection Plan | 2025

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List of Acronyms

BLM – Bureau of Land Management
CDC – Centers for Disease Control and Prevention
CSFS – Colorado State Forest Service
CWPP – Community Wildfire Protection Plan
FPD – Fire Protection District
GPM – Gallons Per Minute
PCL – Potential Control Location Suitability
PODs – Potential Operational Delineations
PPE – Personal Protection Equipment
SWPP – Source Water Protection Plan
USFS – U.S. Forest Service
WRAP – Wildfire Ready Action Plan
WRWC – West Region Wildfire Council
WUI – Wildland-Urban Interface

Executive Summary

The Need & Purpose

Wildfires are an escalating threat across the U.S., especially in Colorado, putting lives, homes, critical infrastructure, tourism, recreation, and natural environments at risk. Driven by climate change and prolonged drought, these fires are becoming more frequent and intense, leaving communities increasingly exposed. Decades of well-meaning fire suppression and pests have disrupted natural fire cycles and allowed dangerous fuel buildup, compounding the danger. In Ouray County, it's no longer a question of *if* a large wildfire will occur but *when*. When a large wildfire does occur, the county and residents need to be prepared by hardening their homes, creating defensible space, preparing for evacuation, and supporting fuel reduction projects.

The Ouray County Community Wildfire Protection Plan (CWPP) is a proactive blueprint for reducing wildfire risk and strengthening community preparedness. Created with broad collaboration, the CWPP can help secure critical fuel reduction and mitigation funding. It defines the wildland-urban interface (WUI), prioritizes high-risk areas for treatment, and outlines concrete actions the county and other stakeholders can take to reduce wildfire risks.

The CWPP Stakeholder Group led the planning process and development of the CWPP. This group consisted of representatives from Ouray County, Town of Ridgway, City of Ouray, fire protection districts, power companies, Colorado State Forest Service (CSFS), U.S. Forest Service (USFS), Bureau of Land Management (BLM), and West Region Wildfire Council (WRWC).

CWPP Goals

Goals are a critical component of a CWPP. They help to guide the planning process and ensure that the actions identified meet the needs of the residents and visitors of the county. Below are the three goals for the Ouray County CWPP.

Goal 1: Fire-Resilient Landscapes

Develop and maintain landscapes across the county that are resilient to wildfire, mitigate undesirable fire outcomes, and protect highly valued resources and assets.

Goal 2: Fire-Adapted Communities

Empower the county and its residents to "live with wildfire," including being prepared to withstand, respond to, and recover from wildfires.

Goal 3: Safe and Effective Wildfire Response

Enable safe and efficient wildfire response through improved planning, coordination, and capacity building.

Wildfire Risk Assessment

The image below shows the wildfire risk map created during the CWPP process. The CWPP Stakeholder Group felt that none of the created risk maps accurately reflected wildfire risk in the county. A new wildfire risk map was created using the inputs of fire intensity, burn probability, potential control location suitability, and overall watershed risk. Additional information about the map and risk assessment can be found in the plan's 3 Wildfire Risk Assessment section.



Figure 1: Combined Wildfire Risk Map

Action Plan

The two maps below show the shorter-term fuel treatment locations and the longer-term fuel treatment project locations. The shorter-term projects have already started the planning process or are underway. The longer-term projects are areas where the CWPP Planning Team identified that projects should take place in the future. These projects have not started the planning process. Additional project information can be found in the 4 | Action Plan section.



Figure 2: Shorter-Term Fuel Treatment Locations



Figure 3: Longer-Term Fuel Treatment Locations

Fuel treatments are not the only type of project that can be implemented to reduce wildfire risk. Other wildfire mitigation actions identified by the CWPP Stakeholder Group can be broken down into three categories: Watershed Actions, Fire-Adapted Communities Actions, and Safe & Effective Wildfire Response Actions. Watershed actions are those projects that can help reduce wildfire risk to drinking water and natural waterways. The fire-adapted community actions are projects that empower residents to withstand, respond to, and recover from wildfires. Safe and effective wildfire response actions are those projects that support first responders through planning, coordination, and capacity building. Specific actions related to each of the categories can be found below.

While these actions will help mitigate the impacts of wildfire, homeowners and residents must also do their part to protect themselves and their property. All individuals in the county need to have an evacuation plan in place. All property owners should also take steps to harden their homes and have defensible space.

Watershed Actions

- Implement Projects Identified in the Dallas Creek Water Company Source Water Protection Plan
- Implement Actions Identified in the Town of Ridgway Source Water Protection Plan
- Develop a Source Water Protection Plan for the City of Ouray
- Develop Wildfire Ready Action Plans
- Wet Meadows Improvement / Creation

Fire-Adapted Communities Actions

- Joint Task Force on Wildfire Education
- Wildfire Code Updates and Enforcement
- Neighborhood-Level Evacuation Planning
- Protect County Structures and Infrastructure
- Insurance Company Collaboration
- Subdivision Wildfire Requirements
- Conduct Rapid Wildfire Risk Assessments
- Promote the West Region Wildfire Council's Wildfire Ready Home Program
- City of Ouray Forest Management Program

Safe & Effective Wildfire Response Actions

- Water Source Improvements
- Emergency Response Radio and Emergency Alert Training
- Affordable Housing for Fire District and Governmental Personnel

1 Living with Wildfire

The Need

Every year, destructive wildfires sweep across areas of the United States and Colorado, even as more people choose to settle where wildfires pose a real threat. These fires endanger lives and properties, disrupt ecosystems, damage vital infrastructure, and impair air and water quality. Furthermore, climate change and prolonged droughts are intensifying the frequency and severity of wildfires, making communities increasingly vulnerable. Without proper planning, recovery efforts become more expensive, and the long-term environmental and social consequences worsen.

From the early 1900s until the 1960s, rangeland and forest management in the western United States has adhered to a simple strategy: "Prevent Wildfires." Initially, this approach was meant to safeguard human settlements, forest, and rangeland resources. However, decades of fire suppression have led to unintended adverse effects. Many natural ecosystems rely on wildfires to maintain healthy growth and trigger reproduction. Overgrown forests, excessive shrub growth, and invasive species like cheatgrass have reached hazardous levels without regular fire cycles.

For fire and forest management agencies at both county and state levels, it's no longer a matter of whether a wildfire will occur but when and what impact it will have. Identifying the areas most at risk and where fires could have the most significant consequences allows for implementing targeted mitigation measures before disaster strikes. As Ouray County continues to grow, developing a CWPP and completing the identified actions becomes essential for ensuring that residents can live safely alongside the risk of wildfire.

The Purpose

The Ouray County CWPP is a strategic plan identifying specific wildland fire risks facing communities and fire districts within Ouray County, Colorado. It provides prioritized mitigation projects and activities designed to reduce those risks. The CWPP brings together diverse local interests to discuss their mutual concerns for public safety, community sustainability, and natural resources. The plan provides prioritized access to state and federal grant funding to support identified vegetation-fuel management projects and other mitigation activities to reduce wildfire risks throughout the county. It also allows the county to establish a localized definition and boundary for the WUI. The planning area for the CWPP is the entire county.

Effective wildfire mitigation is an evolving process as forests and communities continually change. The CWPP implementation process is designed with built-in flexibility to adapt to this shifting landscape. Regular updates and annual plan reviews capture these changes and document progress. This CWPP is not a wildfire response plan, which focuses on the immediate actions taken during a wildfire event to protect life and property. While both are essential to wildfire resilience, this CWPP emphasizes long-term risk reduction.

CWPP Goals

Goals are a critical component of a CWPP, providing clear direction and focus for the plan and the planning process. By clearly outlining what the county strives to accomplish, these goals ensure that all efforts align with local priorities, resources, and capabilities. The Ouray County CWPP goals are detailed below, with corresponding actions outlined in the *Action Plan* section of this document.

Goal 1: Fire-Resilient Landscapes

Develop and maintain landscapes across the county that are resilient to wildfire, mitigate undesirable fire outcomes, and protect highly valued resources and assets.

Goal 2: Fire-Adapted Communities

Empower the county and its residents to "live with wildfire," including being prepared to withstand, respond to, and recover from wildfires.

Goal 3: Safe and Effective Wildfire Response

Enable safe and efficient wildfire response through improved planning, coordination, and capacity building.

County Overview

Ouray County, Colorado, has a striking and diverse landscape, earning it the nickname "Switzerland of America." The county is dominated by the rugged San Juan Mountains, which feature dramatic peaks, deep canyons, and alpine meadows. Elevations range from 6,257 feet in the lower valleys to 14,150 feet at the highest summits. Steep, forested mountains, jagged ridgelines, and cascading waterfalls characterize the southern part of the county. The northern region transitions into the fertile Uncompander River Valley and rolling foothills, eventually giving way to mesa lands. The area is rich in natural beauty, with towering rock formations, lush aspen and pine forests, and pristine high-altitude lakes. The Uncompander River flows northwesterly through the center part of the county and feeds into the Ridgway Reservoir.

Major transportation routes include U.S. Highway 550, which travels north-south through the center part of the county, and State Highway 62, which travels west-southwest from the Town of Ridgway. There are no rail lines or public airports in the county.

Population

There are two incorporated communities, the City of Ouray and the Town of Ridgway. The City of Ouray is in the southern portion, and the Town of Ridgway is in the county's central portion. According to the U.S. Census Bureau, Ouray County has an estimated population of 4,936 in 2022. Population growth has been significant, with a 24% growth from 2000 to 2022. Population in the unincorporated areas of Ouray County has been increasing, but at a slightly slower pace than the two communities. Homes and individuals in unincorporated areas may be at higher risk of wildfire due to additional nearby vegetation.

Jurisdiction	1970	1980	1990	2000	2010	2020	2022*
City of Ouray	741	684	644	813	1,000	898	1,007
Town of Ridgway	262	369	423	713	924	1,183	1,093
Unincorporated Areas of Ouray County	543	872	1,228	2,216	2,512	2,793	2,836
Total	1,546	1,925	2,295	3,742	4,436	4,874	4,936

Table 1: Population in Ouray County (1970-2022)

Source: U.S. Census Bureau^{1,2} *ACS Estimate

¹ U.S. Census Bureau. "2022 Census Bureau American Community Survey: S0101: Age and Sex." <u>https://data.census.gov/</u>.

² "2020 Census Bureau Decennial Census: P1: Race." <u>https://data.census.gov/</u>.

Social Vulnerability

Social vulnerability is crucial in wildfire risk analysis because it helps identify populations struggling to prepare for, respond to, and recover from wildfires. Social vulnerability encompasses demographic and socioeconomic factors that put populations at greater risk when facing hazards and other stressors.³ Specific social vulnerability factors for wildfire include the following.

- 1. **Evacuation Challenges** Older populations, people with disabilities, and those without reliable transportation may have difficulty evacuating quickly during a wildfire.
- 2. Access to Resources Some populations may lack the financial resources to implement fire-resistant home improvements or purchase insurance.
- 3. **Health and Safety Risks** Those with pre-existing respiratory conditions can be disproportionately impacted by smoke exposure and air quality issues.
- Recovery Disparities Wealthier communities typically recover more quickly after a wildfire, while socially vulnerable groups may face prolonged displacement, job loss, and difficulty securing assistance.

By being aware of where socially vulnerable populations are, decision-makers can prioritize resources, enhance emergency planning, and develop equitable strategies to protect at-risk populations. The diagram below shows variables that make up the Centers for Disease Control and Prevention's (CDC) Social Vulnerability Index.



Figure 4: Social Vulnerability Overview

Source: CDC⁴

³ CDC. 2022. "Social vulnerability Index." <u>https://www.atsdr.cdc.gov/place-health/php/svi/index.html</u>.

⁴ CDC. 2022. "Social vulnerability Index." https://www.atsdr.cdc.gov/place-health/php/svi/index.html.

The figures below show Ouray County's overall socially vulnerable population information and the four social vulnerability factors. Overall, the eastern and southern portions of the county have higher overall social vulnerability. When looking at the four main areas, the eastern and southern portions have high vulnerability in the Social Economic, and Housing Type/Transportation areas. Additional evacuation planning and economic support might be necessary in those areas of the county.





⁵ CDC. 2022. "Social vulnerability Index." <u>https://www.atsdr.cdc.gov/place-health/php/svi/index.html</u>.



Figure 6: Social Economic (Left) & Household Vulnerability (Right)





Land Ownership

Ouray County shares borders with Montrose County to the north and northwest, San Miguel County to the west, San Juan County to the south, Hinsdale County to the southeast, and Gunnison County to the northeast. There is a substantial amount of federally owned land in the county. Notably, the Uncompany National Forest covers large portions of southern, northwestern, and northeastern Ouray and is owned by the USFS. The state and BLM own land in the north-central portion of the county. Figure 8 shows the land ownership in and surrounding

⁶ CDC. 2022. "Social vulnerability Index." <u>https://www.atsdr.cdc.gov/place-health/php/svi/index.html</u>.

⁷ CDC. 2022. "Social vulnerability Index." https://www.atsdr.cdc.gov/place-health/php/svi/index.html.

the county. Adjacent landowners include the USFS, BLM, State of Colorado, and private landowners.



Figure 8: Land Ownership

<u>Climate</u>

Ouray County has low humidity with annual precipitation and temperature that varies widely due to high peaks and low valleys. Rainfall in the county can be as much as 40 inches in the highelevation areas to as little as 13 inches in the Ridgway area. Afternoon thunderstorms are common in summer, and lightning causes many wildfires. Precipitation is highest in March, July, August, and September (Figure 9). The temperature in Ouray County ranges from an average high of 79°F in summer to an average low of 15°F in the winter (Figure 10).



Figure 9: Average Monthly Precipitation



Figure 10: Monthly Climate Normals Temperature (°F)

⁸ National Oceanic and Atmospheric Administration National Centers for Environmental Information. November 2024. "Data Tools: 1991-2020 Normals". <u>https://www.ncei.noaa.gov/access/usclimate-normals/</u>.

⁹ National Oceanic and Atmospheric Administration National Centers for Environmental Information. November 2024. "Data Tools: 1991-2020 Normals". <u>https://www.ncei.noaa.gov/access/us-climate-normals/</u>. Drought creates ideal conditions for wildfire to start, spread, and become more destructive. Droughts can lead to increased dry vegetation, winds, and water shortages. Historically, drought has occurred in the county in 25% of months.¹⁰ Climate change is anticipated to increase the likelihood, intensity, and duration of drought events, leading to increased wildfire risks.

Since 1895, Colorado's average temperature has increased by 2.1°F. While overall temperature shifts have not been consistent, the trend for rising temperatures is apparent. Climate modeling suggests warmer temperatures will continue in the coming decades and increase steadily into the mid-century. Additionally, the length of the frost-free season has increased nationally since the 1980s. These changes in temperature, water availability, pest pressures, and tree mortality may exacerbate wildfire event conditions.





Source: National Oceanic and Atmospheric Administration, 2020¹¹

Vegetation

Ouray County is approximately 44% forested, with many remaining vegetation types dominated by pinyon/juniper, oak shrubland, shrubland, grasslands, and agriculture. The forested areas are primarily spruce-fir (15.6%), hardwood (12.9%), ponderosa pine (8.4%), and mixed conifer (5.4%).¹² Figure 12 shows the existing vegetation for the county. Spruce-fir dominates the southern portions of the county, while a mixture of pinyon-juniper, shrubland, and conifer can be found in the northern portions.

The impacts of insects on the health of trees in Ouray County have been an ongoing concern. In 2023, the Western Balsam Bark Beetle, Western Spruce Budworm, Spruce Beetle, Douglas-Fir Beetle, Fir Engraver, Ips Pinon, and Pine Bark Beetle were all detected in the county.¹³ These insects can leave stands of dead trees that may increase fuel for wildfires throughout the county.

¹⁰ National Centers for Environmental Information. 1895-Oct 2024. "County Time Series". <u>https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CO-037/pdsi/all/9/1895-2023?base_prd=true&begbaseyear=1901&endbaseyear=2000</u>.

¹¹ National Oceanic and Atmospheric Administration, 2020. "Climate at a Glance: Statewide Time Series". Accessed May 2023. <u>https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series/5/tavg/12/12/1895-</u>

<u>2020?base_prd=true&begbaseyear=1901&endbaseyear=2000&trend=true&trend_base=100&begtrendyear=1895&endtrendyear=2020</u>

¹² Colorado State Forest Service. 2022. "2022 Colorado Wildfire Risk Assessment Summary Report."

¹³ Colorado State Forest Service. 2023. "2023 Report on the Health of Colorado's Forests".



Figure 12: Existing Vegetation

<u>CWPP Communities in Ouray County</u>

The table below lists the communities identified in this CWPP. These CWPP communities include incorporated communities (towns and cities), neighborhoods, and homeowner's associations. Later in the document (Table 6), each CWPP community will be listed along with the fire protection district that provides coverage to the community and a risk rating based on the combined wildfire risk map.

Community Name City of Ouray Town of Ridgway
City of Ouray Town of Ridgway
Town of Ridgway
· · · · · · · · · · · · · · · · · · ·
Colona
Cornerstone
Dallas Meadows
Dave Wood South
Elk Meadows
Horsefly Tracts
Idlewild
Juniper Hills
Lake Lenore/Panoramic Heights
Log Hill Village / Fairway Pines
Mineral Farms
North Log Hill Mesa
Park Estates
Piedmont Hills / Vista Heights
Pleasant Valley
Ponderosa Village / Indian Springs
Silverado Estates
Vista Terrace
Whispering Pines

Planning Process Summary

The Ouray County CWPP planning process involved several steps and included input from various governments, organizations, and individuals. This CWPP is tailored to follow the standardized steps (Table 3) for developing a CWPP as outlined in Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities¹⁴ and the CSFS Minimum Standards for Community Wildfire Protection Plans.¹⁵

¹⁴ Communities Committee et al. March 2004. "Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities."

https://www.forestsandrangelands.gov/documents/resources/communities/cwpphandbook.pdf. ¹⁵ Colorado State Forest Service. 2022. "Minimum Standards for Developing Community Wildfire Protection Plans." https://csfs.colostate.edu/wp-content/uploads/2022/03/2022-CSFS CWPP Min Standards.pdf.

Step	Task	Explanation
One	Convene Decision Makers	Form an operating group of representatives from local governments, fire authorities, and CSFS.
Two	Involve Federal Agencies	Engage local representatives of the BLM, USFS, and other land management agencies as appropriate.
Three	Engage Interested Parties	Contact and encourage participation from a broad range of interested organizations and stakeholders.
Four	Establish a Base Map	Develop a county base map to understand better communities, critical infrastructure, and forest/open space at risk.
Five	Develop a Risk Assessment	Develop a risk assessment that considers fuel hazards, community and commercial infrastructure, resources, and preparedness capability. Rate the level of risk and incorporate it into the base map as appropriate.
Six	Establish Priorities and Recommendations	Use the risk assessment and base map to facilitate a collaborative public discussion that prioritizes fuel treatments and non-fuel mitigation practices to reduce fire risk and structural ignitability.
Seven	Develop an Action Plan and Assessment Strategy	Develop a detailed implementation strategy and a monitoring plan to ensure long-term success.
Eight	Finalize the CWPP	Finalize the county CWPP and communicate the results to interested parties and stakeholders.

Table 3: CWPP Development Process

Source: Communities Committee et al., 2004

CWPP Stakeholder Group

The initial step in developing the CWPP was identifying a CWPP Stakeholder Group as the decision-making committee. The CWPP Stakeholder Group consisted of representatives from Ouray County, Town of Ridgway, City of Ouray, fire protection districts, power companies, Colorado State Forest Service (CSFS), U.S. Forest Service (USFS), Bureau of Land Management (BLM), West Region Wildfire Council (WRWC), and others. Members of the CWPP Stakeholder Group collaborated with residents and other stakeholder groups to help develop the plan, provide input on wildfire risk tools, and identify fuel reduction projects and other wildfire mitigation actions.

CWPP Meetings

As part of the planning process, four public CWPP meetings were held to discuss various key steps and pieces of the plan. Participants in the CWPP Stakeholder Group were directly invited through email to each meeting. These meetings were also open to the public, and meeting advertisements were made on the county's social media pages, county website, and the Ouray Plaindealer. Below are summaries for each of the CWPP meetings.

1st CWPP Meeting – August 19, 2024

The first CWPP meeting aimed to introduce the project, outline what a CWPP entails, discuss the benefits of developing a CWPP, and begin initial discussions on the wildfire risk assessment. A total of 32 individuals joined the meeting either in person or virtually.



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2nd CWPP Meeting - October 28, 2024

During the second CWPP meeting, the 29 CWPP Stakeholder Group attendees participated in an activity to rank values to protect from wildfire, further discuss wildfire risk maps, and started to define the wildland-urban interface.

3rd CWPP Meeting – December 16, 2024

A total of 28 individuals attended the 3rd CWPP meeting. Attendees included members of the CWPP Stakeholder Group and residents in Ouray County. During the meeting, results of the public survey were shared, risk maps and wildland-urban interface definitions were finalized, and wildfire mitigation project examples were shared.

4th CWPP Meeting – February 18, 2025

The 4th CWPP meeting primarily identified fuel projects and discussed other wildfire mitigation actions. The 30 attendees participated in a fuel projects identification activity where each person could vote on locations in the county where they would like fuel reduction projects to occur. The group then discussed other non-fuel treatment actions and reviewed the final combined wildfire risk map.

Public Survey

A public survey was developed with the ongoing Hazard Mitigation Plan update to engage the public

further and gather more local input on wildfire risks and concerns in the county. Postcards with QR Code links to the survey (Figure 14) were created and sent to every address in the county. Gunnison County also shared social media posts with links to the public survey. Hard copy versions were available at the Ouray County Courthouse and Land Use Office. There were 266 total responses to the public survey.

Of those who completed the survey, 77% said they had the highest or second highest level of concern that wildfire will impact them or the values they care about. Additionally, 70% felt that Ouray County would have a major wildfire in the next five years. Only 13% of respondents answered that they had not taken any measures to protect their homes from wildfire. Of those who had taken measures, 77% cleared litter, debris, and other combustible materials from around their property, and 45% used fire-resistant materials on their homes. The most commonly identified barriers to wildfire mitigation work on private property included cost, time, and knowledge of what to do. Cost and time can be challenging to overcome; however, public education can help address the "knowledge of what to do" barrier. A complete summary report of the survey responses can be found in *Appendix A: Public Survey Summary*.



Figure 13: Measures Taken to Protect Home or Property





CWPP StoryMap

To further connect the public with the CWPP and to provide additional public education, an online StoryMap was created. The online StoryMap includes an overview of the CWPP planning process, wildfire risk assessment, identified fuel treatment projects, identified mitigation actions, and steps that homeowners can take to protect their property. This StoryMap will continue to be updated by Ouray County as fuel treatment projects are completed and new information is gathered.

The online StoryMap can be viewed here: https://arcg.is/0OuHzv0.



2 Wildfire Preparedness

Preparing for wildfires is crucial to reducing risk and ensuring safety before a fire starts. In Ouray County, diverse land ownership and jurisdictional boundaries necessitate strong interagency coordination, planning, and collaboration for effective wildfire management. This cooperation is essential for fire suppression and prevention, preparedness, mitigation, and financial sustainability. This section will highlight key local planning documents and wildfire-related programs, examine the wildfire-urban interface, explore potential operational delineations, and provide an overview of local fire district capabilities.

Planning Preparedness

Wildfire planning is a crucial process that helps communities, land managers, and emergency responders prepare for, mitigate, and respond to wildfire threats. The plans and programs below relate to wildfire mitigation, response, and recovery within Ouray County.

Existing CWPPs

The previous Ouray County CWPP was completed and approved in 2011. The Ouray County CWPP is a valuable resource that provides the foundation for understanding wildfire risk and presents attainable milestones designed to reduce potential losses from wildfire. Communities, home-owner associations, and individual fire protection districts can take further action by developing their area-specific CWPP, which would tier the countywide CWPP. The following area-specific CWPPs can be found in Ouray County.

- <u>4 Neighborhood CWPP (2007)</u>
- Log Hill Mesa Fire Protection District (2012)

Firewise USA

The National Fire Protection Association administers the Firewise USA recognition program and provides a framework for neighborhoods and communities to increase ignition resistance of homes and reduce wildfire risks locally. Firewise participants in Ouray County include Log Hill Mesa and the Fisher Canyon South.¹⁶

Ouray County Hazard Mitigation Plan

The Ouray County Hazard Mitigation Plan identifies the natural and human-caused hazards that threaten the county and communities, the likely impacts, and the identified mitigation actions to reduce the effects of those hazards. The plan is being updated and is anticipated to be approved in the summer of 2025. Wildfire is directly discussed in the plan, and this CWPP's risk assessment has been integrated into it. Several wildland fire mitigation actions were identified in the plan and added to this CWPP as applicable. Once approved, the hazard mitigation plan will be found here: https://ouraycountyco.gov/272/Emergency-Management.

Ouray County Master Plan

The master plan is designed to guide the future actions and growth of the county. Wildfire is directly discussed in the plan, and a specific wildfire strategy is identified. The plan calls for the county to "continue to maintain strong wildfire mitigation regulations and encourage fire protection

¹⁶ National Fire Protection Association. March 2025. "Firewise USA Sites." <u>https://www.nfpa.org/education-and-research/wildfire/firewise-usa#firewise-usa-sites</u>.

and water supply entities to work proactively to make further improvements for fire safety, including the possible creation of a unified fire protection district or entity that covers the entire county." Also discussed in the plan are natural environment, land use, emergency management, and infrastructure strategies. Strategies related to emergency management include supporting hazard mitigation and evacuation plans, integrating mitigation strategies into the Land Use Code, limiting development in areas where emergency services cannot be provided, and enhancing emergency services in Ouray County. To view the 2025 Ouray County Master Plan, visit: <a href="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/DocumentCenter/View/21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/Document-center-View-21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/Document-center-View-21045/OC-2025-Master-Plan-Final-021225?bidld="https://ouraycountyco.gov/Document-center-view-21045/OC-2025-Master-Plan-Final-021225?bidld="

Ouray County Multi-jurisdictional Emergency Operations Plan

The 2024 Ouray County Emergency Operation Plan outlines general guidelines on how the county manages operations related to the five phases of emergency management. It outlines the day-to-day management of incidents along with major emergencies and disasters. The plan covers emergency management operations, assignment of roles and responsibilities, emergency support functions, direction, control, and coordination, information collection and dissemination, communications, administration, finance, and logistics. During an emergency wildfire event, the emergency operations plan would help to guide the response approach. A copy of the plan can be found here: https://ouraycountyco.gov/DocumentCenter/View/20837/Ouray-County-Multijurisdictional-Emergency-Operations-Plan-EOP-1.

Ouray County Multi-jurisdictional Evacuation Plan

Ouray County completed its evacuation plan in 2024. Additional information about the plan can be found in the Evacuation Preparedness discussion later in this section.

Ouray County Wildfire Annual Operating Plan

The Ouray County Wildfire Annual Operating Plan establishes standard operating procedures and responsibilities to implement cooperative wildfire protection on all lands within the county. It contains information about interagency cooperation, preparedness, operations, state of emergency fire fund, and interagency fire resource use and reimbursement. During a wildfire event, the operating plan will help with interagency coordination. To view the plan, visit https://ouraycountyco.gov/DocumentCenter/View/18208/Ouray-County-Wildfire-Operating-Plan.

San Miguel and Ouray County Regional Climate Action Plan

Ouray County partnered with neighboring San Miguel County to create the 2021 San Miguel and Ouray County Regional Climate Action Plan. This climate action plan is a regional roadmap for reducing greenhouse gas emissions and creating a sustainable, thriving future. The plan establishes a timeline for high-priority, ongoing, mid- and long-term actions. While there are no specific wildfire actions, the overall goal will help to reduce the likelihood and impacts of wildfire. A copy of the plan can be found here:

https://static1.squarespace.com/static/52a753f8e4b049b53e3f219b/t/6171bd130ecd9d0e3e2f9c 5a/1634843945688/EAP_Regional+Cap.FINAL.pdf.

State of Colorado Wildfire Resiliency Code

As of April 2025, the Colorado Wildfire Resiliency Code Board is creating a statewide wildfire resiliency code. Once approved and adopted, all counties and communities must comply with this code. However, local wildfire regulations can exceed the state code requirements. For details on the code, visit <u>https://dfpc.colorado.gov/WRCB</u>.

Wildfire Mitigation Regulations - Land Use Code Section 16

Ouray County's 2022 wildfire regulations apply to all newly constructed or improved dwelling units in the county. It requires that dwelling units meet standards for roofing, siding, a five-foot hardened zone, exterior doors, gutters, and emergency vehicle access. Wildfire mitigation requirements for planned unit developments are also included. The regulations do not apply to vacant land or commercial structures. A copy of the wildfire mitigation regulations can be found here: https://ouraycountyco.gov/391/Wildfire-Mitigation-Regulations---Sectio. The county also has a design manual for building wildfire-resilient homes that can be used in conjunction with the Wildfire Mitigation Regulations: <a href="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/DocumentCenter/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/Bocument-center/View/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/Bocument-center-view/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/Bocument-center-view/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://ouraycountyco.gov/Bocument-center-view/16898/2024-02-01-Building-for-Wildfire-Resiliency?bidld="https://our

Wildland-Urban Interface

There are many definitions of the Wildland-Urban Interface (WUI). Most identify it as any area where improvements are built close to, or within, natural terrain and flammable vegetation and where potential for wildland fire exists. It was decided through many discussions at the CWPP meetings that the entire county would be identified as the WUI. The CWPP Stakeholder Group felt that the whole county should be identified due to potential impacts on recreation and vegetation, which are valued resources in the county.

While the entire county would be identified as the WUI, the CWPP Stakeholder Group felt it important to identify priority areas. These areas were defined as any location within a half mile of power lines, buildings, emergency response and governmental services, communication towers, highways, and water infrastructure. These would be the WUI priority areas where wildfire mitigation on private property would be focused. Figure 15 shows the WUI map for the Ouray County CWPP.

Wildfire mitigation on private property in WUI priority areas is essential because these are highrisk areas where property, infrastructure, and people come into direct contact with wildland vegetation. Without proper mitigation, wildfires in the WUI priority areas can spread rapidly, endangering lives, overwhelming emergency responders, and causing devastating economic losses. Strategies such as defensible space creation and reducing structural ignitability can significantly lower the risk of fire spreading to homes and critical infrastructure.

Defensible Space

The purpose of defensible space is to reduce the fuel near the home and provide a space for firefighters to protect the house. For a structure to survive a wildfire, radiated heat and fire intensity must be kept to a minimum. Defensible space is accomplished by a combination of clearing and thinning trees and other vegetation around the proposed or existing structures and along the driveway. Defensible space requirements are designed to minimize the impact on the property while providing safety for the structures, the inhabitants, and the firefighters.

During a large wildfire, there typically aren't enough firefighters and fire engines to get to and protect every home. Defensible space gives homes a much better chance of surviving a wildfire. Defensible space slows fire spread, creates buffer zones, and reduces ember ignitions.

The Home Ignition Zone Guide developed by CSFS provides guidelines for creating a defensible space. To develop the most effective defensible space plan possible, the property is evaluated and divided into 3 Zones (Figure 16).



Figure 15: WUI & WUI Priority Areas



Figure 16: Home Ignition Zones

Source: CSFS¹⁷

Zone 1 is the area nearest the home (0-5 feet). This zone requires the most vigilance to reduce or eliminate ember ignition and direct flame contact with your home. Use nonflammable, hard surface materials in this zone, such as rock, gravel, sand, cement, bare earth, or stone/concrete pavers.

Zone 2 is the area transitioning away from the home where fuels should be reduced (5-30 feet). This zone is designed to minimize a fire's intensity and ability to spread while significantly reducing the likelihood that a structure ignites because of radiant heat.

Zone 3 is the area farthest from the home (30-100 feet). It extends 100 feet from the home on relatively flat ground. Efforts in this zone are focused on keeping the fire on the ground and getting a fire that may be active in tree crowns to move to the ground where it will be less intense.

One of the significant issues confronting defensible space is the need for ongoing maintenance. Treatment projects in timber or shrub fuels have an effective life span of approximately 10 to 15 years before vegetation regeneration once again creates hazardous fuel loads.

Structural Ignitability

There are several characteristics of homes that make them more vulnerable to wildfires. These common characteristics are listed below.¹⁸

- Horizontal or nearly horizontal surfaces, such as wood decks
- Wooden or plastic fences
- Wood or shake-shingle roofs
- Roofs with eaves
- Combustible building materials
- Single-paned windows •
- Vents with gaps that exceed 1/8 of an inch

¹⁷ Colorado State Forest Service. 2021. "The Home Ignition Zone". https://csfs.colostate.edu/wpcontent/uploads/2021/04/2021 CSFS HIZGuide Web.pdf.

¹⁸ Colorado State Forest Service. 2021. "The Home Ignition Zone". <u>https://csfs.colostate.edu/wp-</u> content/uploads/2021/04/2021 CSFS HIZGuide Web.pdf.

- Fuels such as tall grass, woodchips, trees, or shrubs within five feet of a home or under decks
- Pine needles or leaves in gutters
- Firewood or propane tanks within 30 feet of the home

Using fire-safe building materials such as a Class A fire-resistant roof and reducing vegetative fuels surrounding homes are key to reducing structure ignitability. However, completely fireproofing structures can be prohibitively expensive. Conversely, trying to provide a defensible space large enough for a typical, combustible structure may not be practical because firebrands are known to be carried by winds over a mile away from a fire. Combining these two strategies may be the best alternative for a particular site.

Research has demonstrated that homes with a Class A-rated roof and a defensible space have an 85% chance of surviving a wildfire. The Class A-rated roof protects the home from firebrands that may blow onto the roof from a nearby wildfire. The house's structural integrity can be improved using fire-resistant siding and other building materials. Wooden decking should be avoided because it can be a significant source of home ignition, much like wood roofing material. Regular maintenance is also needed to reduce leaves, needles, and other fuels on or near the home. Improving the fire-resistant characteristics of a structure goes hand-in-hand with developing defensible space. Extensive recommendations can be found in CSFS publications available at https://csfs.colostate.edu/wildfire-mitigation/protect-your-home-property-fromwildfire/.

West Region Wildfire Council Programs

The WRWC has two programs to help homeowners with defensible space and structural ignitability. The first is the <u>Rapid Wildfire Risk Assessments</u>. WRWC conducts curbside assessments of properties and gives an assessment rating based on criteria from the Wildfire Research Center. These ratings have been undertaken on many homes in Ouray County (Figure 17).



Figure 17: WRWC Rapid Wildfire Risk Assessments - Ouray County

Source: West Region Wildfire Council

The other program is the <u>Wildfire Ready Home Program</u>. Homeowners can sign up for and learn practical steps to reduce risks around their homes. During the program, homeowners work with a Wildfire Ready Home Assessor who will provide a detailed Wildfire Ready Home Report that contains specific and targeted recommendations.

Potential Operational Delineations

Potential Operational Delineations (PODs) are planning units that can be used for fire containment during wildfire or prescribed fire.¹⁹ They symbolize the safest and most effective lines to prevent fires from spreading. PODs can be natural (ridges, fuel type transitions, etc.) or human-made (roads, fuel breaks, etc.). Ouray County has recently identified the POD boundary lines on non-USFS lands in the county (Figure 18). PODs had already been developed on USFS lands. These POD boundaries can be instrumental in identifying fuel treatment projects because of the strategic framework they provide. They can help predict fire behavior and identify areas where fuel treatments will most effectively slow or stop wildfire movement. Fuel treatments along POD lines can help create safer evacuation routes and provide a common framework for interagency coordination.

Fire District Capabilities

Four fire protection districts operate in Ouray County: Log Hill Mesa Fire Protection District, Montrose Fire Protection District, Ouray Fire District, and Ridgway Fire District. Only a tiny portion of the Montrose Fire Protection District falls within Ouray County, and the rest of the districts are located in the county. Figure 19 shows the locations of the fire districts. In addition to the fire protection districts, the Horsefly Volunteer Fire Protection Association is a donation-based, allvolunteer association that provides wildfire fire response and emergency services to properties along Government Springs Road, Wildcat Canyon Road, Mariposa Drive, and the Cornerstone subdivision in northwestern Ouray County and southern Montrose County. There have been discussions about combining all fire districts into one unified fire district that covers the entire county. However, nothing has been decided as of this CWPP.

Authority for wildland fire suppression on non-federal land rests with the local fire protection districts or the County Sheriff for any areas outside fire protection district boundaries. Federal jurisdictional agencies (USFS, BLM) are responsible for wildfire protection on federal land. The Colorado Division of Fire Prevention and Control does not have jurisdiction over any lands until authority and responsibility are transferred by mutual consent from the County Sheriff. If multiple agencies are engaged in a fire on or near common boundaries, agency representatives will convene to decide on the best fire strategy and delegate an Incident Commander. Mutual aid agreements among the agencies guide the initial wildfire attack and support during an incident. Wildfire protection within the county cannot be accomplished by solely one authority because of the complexity of land ownership. Cooperation and coordination are key to effective wildfire and fuels management, which is coordinated through the Ouray County Wildfire Annual Operating Plan.

The following information describes the updated capabilities assessment results sent to all fire chiefs. The capabilities discussed include training, personal protective equipment (PPE), communications, equipment, and water supply.

¹⁹ U.S. Forest Service. January 13, 2022. "PODs at a Glance." <u>https://research.fs.usda.gov/rmrs/understory/pods-glance</u>.



Figure 18: POD Boundaries



Figure 19: Fire Districts in Ouray County

Horsefly Volunteer Fire Protection Association



Training

The Horsefly Volunteer Fire Protection Association has done a commendable job in wildland fire training for a donation-based, all-volunteer fire association. All firefighters must take the entry-level wildland fire course S-130/190; a few have also taken S-131 Firefighter Type 1. Other wildland courses are sought and offered as available. All firefighters must take the annual fire refresher (RT-130) to retain wildland firefighter status and be allowed on fires. The work capacity test is not required. Department trainings occur twice monthly during fire season, typically May through September, and sometimes include a live-fire exercise for one of the trainings each year. The association has a dedicated training officer who coordinates training with the fire chief.

Personal Protective Equipment

Most PPE is provided to firefighters, including Nomex pants and shirts, fire packs, helmets, gloves, and new-generation fire shelters. Boots are not provided at this time.

Communications

The association has ten 800 MHz pack sets, four 800 MHz mobile radios as of the summer of 2025, and existing VHF handheld and vehicle radios. The association is seeking additional radio infrastructure.
2| Wildfire Preparedness

<u>Equipment</u>

The Horsefly Volunteer Fire Protection Association has two Type 3 engines and three Type 6 brush trucks at the Mariposa Road station. Additionally, some volunteers have personal brush trucks and water trailers staged around the hill.

Water Supply

The availability and location of water resources are limited throughout most fire association areas. The association fills tanks from fill stations along Government Springs Road and within the Cornerstone development. The association has a 5,000-gallon cistern at the firehouse. Many other areas serviced by the association lack available water supplies. Some homes have cisterns and seasonal ponds in certain areas, but they require time and effort to draft water from them. Shuttle trips can be set up to bring water back to the fire area; however, that takes additional time, personnel, and equipment.

Log Hill Mesa Fire Protection District

The Log Hill Mesa Fire Protection District has completed several wildfire mitigation projects since 2011. A summary is listed in Appendix B: Fuel Treatment History in Ouray County.



Training

Log Hill Mesa Fire Protection District members go through a relatively rigorous training program for a volunteer fire department. All firefighters must take the entry-level wildland fire course S-130/190 within two years of joining. Other wildland courses are also offered to department members, including those taught at the statewide fire academies and the Colorado Firecamp. All firefighters must take one of two fitness tests offered each year, including the standardized Work Capacity Test. Department trainings occur bimonthly on the first Wednesday and second Saturday of each month and include a wildfire component during the typical fire season months. An inhouse sawyer class is also offered annually to all department members.

Personal Protective Equipment

All PPE is provided to firefighters. PPE includes Nomex pants and shirts, fire packs, boots, and a new-generation fire shelter.

Communications

All firefighters are equipped with portable VHF radios compatible with federal and state agencies. The chief and assistant chief also have portable 800 MHz radios. All fire apparatus is equipped with mobile VHF radios, and select vehicles also have mobile 800 MHz radios.

Equipment

The Log Hill Mesa Fire Protection District has several wildland fire trucks. At the Log Hill Village station (Station 2), the district has one 750-gallon Type 3 engine with a 750-gpm pump; one 350-gallon Type 6 brush truck with a 150-gpm pump; one 3,000-gallon tender with a 500-gpm pump and a 3,000-gallon dump-tank; and one utility vehicle (UTV) with a 50-gallon tank and a 50-gpm pump. Additionally, at the North Log Hill station (station 1), the district has one Type 3 engine with 750 gallons of storage and a 750-gpm pump; one Type 6 brush truck with 350 gallons of storage and a 150-gpm pump; one Type 6 brush truck with 350 gallons of storage and a 150-gpm pump; one 3,000-gallon tender with a 500-gpm pump and a 3,000-gallon dump-tank; and one UTV with a 50-gallon tank and a 50-gpm pump.

Water Supply

The availability and location of water resources are an issue in some parts of the district. While adequate fire hydrants are within most of the Log Hill Village/Fairway Pines community, many other areas serviced by the FPD lack sufficient water supplies. Scattered hydrants and cisterns are available in these areas but may not be reliable or known by all fire personnel. See the individual community/planning area write-ups for details on water supply within the community/planning area.

Montrose Fire Protection District



2| Wildfire Preparedness

Training

The Montrose Fire Protection District (FPD) is composed of 47 members. All FPD members have taken the S-130/190 introductory wildland fire course. Additional wildland fire courses are also offered by the Montrose FPD and are paid for by the department. A regular training program is conducted on duty for FPD members. Furthermore, the Montrose FPD members take the work capacity test and fire refresher annually.

Personal Protective Equipment

Montrose FPD provides Nomex pants and shirts, wildland boots, helmets, fireline packs, and newgeneration shelters.

Communications

The department uses VHF and 800 MHz radios, with 21 mobile and 55 handheld units. All trucks are equipped with radios in their apparatus.

Equipment

The Montrose FPD has three Type 6 engines, one 500-gallon Type 3 engine, three 1,000-gallon Type 1 engines, one 750-gallon Type 1 engine, and one 3,000-gallon tender.

Water Supply

Water availability varies within the area; however, a minimum of 500 gallons per minute (GPM) is available in areas with newer subdivisions. Both hydrants and ponds are present and serve as water sources within the region. Flow rates for hydrants are not tested annually. However, flow rates vary from 100-500 GPM and depend on the hydrant location.

Ouray Fire District



Source: Geryll Zehr

<u>Training</u>

Though not required, firefighters of the Ouray Fire District are encouraged to take the entry-level wildland fire course S-130/190. However, the district attempts to have five department members current in this fire course. Additional wildland fire courses are also offered and paid for but not required. The work capacity qualification assessment is also offered should members choose to take it, but it is not required. The district has a scheduled training program, which occurs bi-weekly and includes a wildland component in the spring and summer months.

Personal Protective Equipment

All wildland PPE is available for purchase by all qualified cardholders in the district.

Communications

Communication occurs via VHF radios; the district has a VHF radio for every member. All officers have full access to 800mh communication with dual-band radios. All apparatus also have radios, VHF radios, and 800mhz. The City of Ouray operates under a cumbersome dispatch system, whereby the Ouray Fire is dispatched through WESTCO dispatch out of Montrose.

<u>Equipment</u>

The Ouray Fire District has five fire apparatus. These include one 500-gallon Type 1 engine (4x4) with a 1,500 GPM pump, one Type 5 brush truck with a 400-gallon tank and 350gpm pump, one 500-gallon Type 2 engine (4x4) with a 750 GPM pump, one 2,000-gallon tender with a 1,250 GPM pump. All five trucks are housed at the Ouray station. They also have two command/ rescue vehicles, which are crewed 24/7.

Water Supply

The availability of water resources within the communities in Ouray's district is not a significant problem. Hydrants are present throughout most of the city and outlying areas. The district's other communities have large ponds and creek and river resources for drafting. Water sources, including hydrants, are not marked, however.

Ridgway Fire District



Training

All Ridgway Fire Protection District members are required to take 130/190 within their first year of training. The work capacity test is not required for all members; however, a majority do take the test annually. Any additional wildland classes are open and paid for by the district to any member as they work their way through the progression. The department has a weekly training schedule with refresher courses and outside instructors. The department also has a Wildland Team that deploys statewide and nationally.

Personal Protective Equipment

All PPE is provided to firefighters by the district. PPE includes Nomex pants and shirts, fire packs, boots, gloves, helmets, eye protection, and fire shelters. The fire shelters are the new generation.

Communications

Communication occurs primarily via VHF radios; 800 MHz is available in every apparatus.

Equipment

The Ridgway Fire Protection District has several fire trucks in its fleet, including five brush trucks, three engines, two tenders, a ladder truck, and two UTVs set up for wildland firefighting and high-country rescue.

Water Supply

While most of the Ridgway Fire Protection District is rural, most of the district has an adequate water supply. In the areas where water is harder to come by, the Ridgway Fire Protection District uses mutual aid for water shuttles and other resources. Most homes being constructed now have larger cisterns with dry hydrants to tap into if needed. The district has identified and marked additional water supplies for drafting purposes.

Evacuation Preparedness

Access and evacuation are an essential component of any local wildfire response. Access characteristics dictate the efficiency of emergency evacuation and the effectiveness of emergency response. Preferably, road design provides multiple points of ingress and egress, supports two-way traffic flow, and offers adequate emergency apparatus turnaround radius on dead-end roads and cul-de-sacs.

Ouray County completed a county-wide emergency evacuation plan in 2024. It identified such items as the primary evacuation routes, challenges regarding evacuation, and roles and responsibilities during an evacuation event. Figure 20 shows the evacuation zones, routes, potential bottlenecks, and travel times. No evacuation centers are located in the county as this map assumes a county-wide evacuation.



Figure 20: Evacuation Zones and Routes

Designated evacuation routes include the following.

- North-bound towards Montrose via Highway 550 and Ouray County Road 1
- South-bound towards Silverton via Highway 550
- West-bound towards Placerville via Highway 62
- East-bound towards Cimarron/Gunnison via Ouray County Road 8

Several areas are at high risk due to limited transportation corridors throughout Ouray County. Many include, but are not limited to, the areas identified below.

Area Name	# of Ways In & Out	Road Identifiers
Black Lake	2	CR 17 North or CR 17 South
Colona	2	US Hwy 550 North, US Hwy 550 South, or County Road 1
City of Ouray	3	US 550 North, US 550 South, or CR 17
Elk Meadows	1	CR 5
Idlewild/KOA Campground	2	CR 23 or CR 17
Log Hill Mesa	3	CR 1, CR 24, or CR 22
Mineral Farms	1	CR 361
Park Estates	2	CR 17 North or CR 17 South
Panoramic Heights/Lake Lenore	1	CR 14
Pleasant Valley	1	CR 24
Ponderosa Village	2	US Hwy 550 North or US Hwy 550 South
Ridgway Reservoir State Park	2	US Hwy 550 North or US Hwy 550 South
Town of Ridgway	4	US HWY 550 North, US Hwy 550 South, US Hwy 62, or CR 5
Whispering Pines	1	US Hwy 550 North, US Hwy 550 South, or CR 17

Table 4: High-Risk Evacuation Areas

Residents and visitors to Ouray County should be aware that evacuation resources are limited. Everyone is responsible for evacuating as quickly and safely as possible. Given the scale of the plan, it was not feasible to identify evacuation routes for each house or neighborhood. Individuals at the neighborhood level should plan the best routes that lead to the main evacuation routes identified in the county plan. Individual plans will lead to residents becoming more prepared during an evacuation event.

3 Wildfire Risk Assessment

Assessing wildfire risk is essential for protecting lives, infrastructure, property, and natural ecosystems from the devastating impacts of wildfires. By identifying areas with high susceptibility and exposure, communities can implement proactive measures such as fuel reduction, home hardening, POD boundary hardening, and emergency response planning. Risk assessments help land managers and policymakers allocate resources effectively, prioritize mitigation efforts, and enhance public awareness. They also play a critical role in policymaking, guiding the development of building codes and land management practices that strengthen fire resilience. A well-informed risk assessment allows governments, organizations, and individuals to reduce potential losses, protect natural habitats, and build more fire-adapted communities.

Wildfire History

Multiple wildfire events occur annually in Ouray County. Most wildfire events are small (one acre or less), but a few larger wildfires have occurred. Figure 22 shows the location of historical wildfire events from 1992 to 2020. This map likely underrepresents the total number of wildfire events because there are few reporting databases, and not all local agencies report. Most fires in the county are from natural causes (i.e., lightning). Write-ups on the more significant wildfire events and a graph of the events by year can be found below.

While a devastating wildfire has not occurred in the county, the growing number of significant and damaging events across Colorado and the United States show that it can happen anywhere in Ouray County. The increasing frequency and intensity of wildfires, exacerbated by climate change and communities expanding into wildfire-prone areas, pose substantial risks to the lives, property, infrastructure, natural environment, water quality, and air quality in the county.



Figure 21: Wildfire Occurrence by Year in Ouray County

Source: U.S. Forest Service, 1992-2020²⁰

²⁰ U.S. Forest Service. 2022. "Spatial Wildfire Occurrence Data for the United States, 1992-2020". <u>https://www.fs.usda.gov/rds/archive/catalog/RDS-2013-0009.6</u>.



Figure 22: Wildfire History, 1992-2020

Tappan Fire (July 3, 2004)

The Tappan Fire began from a lightning strike on July 3, 2004, and burned 80 acres along the Ouray and Montrose county lines. It was fought by resources from BLM, Log Hill Fire, and Montrose Fire and burned for 5 days.

Red Creek Fire (June 27, 2006)

The Red Creek Fire was a lightning-caused fire burning 401 acres. The fire occurred on June 27, 2006, about eight miles northeast of Ridgway. The fire consumed 350 acres of timber and resulted in the closure of trails in a wilderness area. Smoke from the fire impacted communities to the north, including the City of Montrose.

Cow Creek Fire (October 16, 2019)

The Cow Creek Fire burned 850 acres in the Uncompany National Forest. The fire was caused by a wood-burning stove inside a wall tent in the Green Mountain Camp. This fire incurred significant suppression costs fighting the fire.



Figure 23: Cow Creek Fire

Source: 2019 Ouray County Hazard Mitigation Plan

Simms Incident (May 19, 2022)

The Simms Incident was a prescribed fire of 188 acres that escaped containment on May 19th due to high winds. The fire ultimately burned 314 acres and destroyed several structures before being fully contained. Suppression costs were estimated at \$3,000,000.

Figure 24: Simms Incident



Source: West Slope Fire Information

Spring Creek Fire (2023)

The Spring Creek Fire began on September 10, 2023. It took several days to contain and burned 16 acres. Several trails and roads were closed due to the fire. Suppression costs were estimated at \$1,000,000.

Wildfire Risk

Wildfire risk is the likelihood of a wildfire occurring in a specific area and its potential consequences on people, property, and the environment. It can be broken down into three main factors: wildfire likelihood, wildfire intensity, and susceptibility of people, resources, and values.

When discussing wildfire risk in Ouray County, the CWPP Stakeholder Group felt that none of the previously modeled wildfire risk maps accurately depicted risk for the county. The group thought a more accurate depiction of risk included several different inputs. Ultimately, the stakeholder group decided fire intensity, burn probability, potential control location suitability, and overall watershed risk were the most accurate inputs when identifying wildfire risk in Ouray County. Descriptions and maps of those four individual inputs can be found in the pages below.

Four different inputs made it challenging to identify specific high-risk areas in the county where fuel treatment projects could occur. A combined wildfire risk map was created using sub-basin watershed areas and averages for fire intensity, burn probability, potential control location suitability, and overall watershed risk to represent wildfire risk visually. Figure 25 shows the combined wildfire risk map, and the paragraphs below provide additional information on the creation of the map.

Before the four risk inputs could be combined, they each needed a standard scoring value. To start, an average score for each input was calculated using ArcGIS for each of the small subbasin watershed areas in the county. Once the average scores for each input were calculated, a standard scoring value needed to be created. To do that, each input's average scores were split into five groups from least to highest risk. Those five groups were then given a value from 1 (least risk) to 5 (most risk). These values standardized scoring and ensured that no one risk input would hold more weight than another.

The risk input values were added within each small watershed to give a final combined wildfire risk score. An example of this is provided in the table below. With five groups across four risk inputs, possible combined scores ranged from 4 to 20. Areas with a score of 17 to 20 received the highest combined wildfire risk rating.

Input Values	Sub-Watershed 1	Sub-Watershed 2	Sub-Watershed 3
Fire Intensity Group Value	5	1	5
Burn Probability Group Value	3	2	5
Potential Control Location Suitability Group Value	4	1	4
Watershed Risk Value	4	4	5
Combined Wildfire Risk Score	16	8	19

Table 5: Example Combined Risk Scores

Ouray County locations with the highest combined risk (red on the map) include the heavily forested areas owned by the USFS along the eastern border, the central portion of the county between Ridgway and Ouray, and locations surrounding the City of Ouray. Adding to the concerns, these highest-risk areas cross critical evacuation routes, including Highway 550 and County Road 8. Most of the population in the county lives in areas with elevated wildfire risk (yellow or orange on the map). Many CWPP communities are in or near the highest-risk areas (Table 6). All individuals in the county need to have an evacuation plan in place. They should also take steps to harden their home and have defensible space. Areas with lower risk scores (green and blue on the map) include northern Ouray County and the highest elevation areas above the tree line, with little to no combustible vegetation.

Table 6: CWPP Communities & Risk Rating

Community Name	Fire Protection District	Risk Rating
City of Ouray	Ouray	Highest
Town of Ridgway	Ridgway	High
Colona	Montrose	Moderate
Cornerstone	Horsefly	Highest
Dallas Meadows	Ridgway	High
Dave Wood South	Montrose	High
Elk Meadows	Ridgway	Highest
Horsefly Tracts	Horsefly	High
Idlewild	Ridgway	Highest
Juniper Hills	Ridgway	High
Lake Lenore/Panoramic Heights	Ouray	Highest
Log Hill Village / Fairway Pines	Log Hill Mesa	High
Mineral Farms	Ouray	High
North Log Hill Mesa	Log Hill Mesa	High
Park Estates	Ridgway	Highest
Piedmont Hills / Vista Heights	Ridgway	High
Pleasant Valley	Ridgway	High
Ponderosa Village / Indian Springs	Ridgway	Highest
Silverado Estates	Ridgway	High
Vista Terrace	Ridgway	High
Whispering Pines	Ouray	Highest



Figure 25: Combined Wildfire Risk

Fire Intensity

Fire intensity shows where significant fuel hazards and potential for dangerous fire behavior exist. It consists of five classes, where Class 1 represents very low wildfire intensities and Class 5 represents very high wildfire intensities. Below are the fire intensity definitions for each class as provided by Colorado Forest Atlas²¹

Class 1 (Lowest Intensity): Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.

Class 2 (Low): Small flames, usually less than two feet long; a small amount of very shortrange spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.

Class 3 (Moderate): Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires challenging to suppress without support from aircraft or engines, but dozers and plows are generally effective. Increasing potential for harm or damage to life and property.

Class 4 (High): Large Flames, up to 30 feet in length; short-range spotting common; medium-range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective; indirect attack may be effective. Significant potential for harm or damage to life and property.

Class 5 (Highest Intensity): Huge flames up to 150 feet long; profuse short-range spotting; frequent long-range spotting; strong fire-induced winds. An indirect attack is marginally effective at the head of the fire. There is great potential for harm or damage to life and property.

Figure 27 on the next page shows the fire intensity map for Ouray County. There are no Class 5 areas located in the county. High-intensity regions in the county can be found in the south-central, eastern, and western edges. Areas of lowest fire intensity are in the county's north-central and high mountain peaks.



Figure 26: Fire Intensity Example

²¹ Colorado State Forest Service. 2022. "Colorado Forest Atlas." <u>https://coloradoforestatlas.org/</u>.

Source: Andrew Sullivan/CSIRO, 2021



Figure 27: Fire Intensity

Burn Probability

Burn probability is the annual probability of any location burning due to wildfire. The Ouray County CWPP utilized the burn probability map the Colorado Forest Atlas created. The information below provides an overview of how burn probability was calculated.

The annual burn probability was calculated as the number of times a cell was burned and the number of iterations used to run the models. The annual burn probability was estimated for Colorado by using a wildfire simulation approach where a total number of 2,342,334 fires were simulated. The ignition points were spatially distributed evenly every 500 meters across the state. Only high and extreme weather conditions were used to run the single fires. All fire simulations had a duration of eight hours. After simulating all the fires, some cells were not burned by any simulated fire, resulting in a burned probability value of zero. Some cells were non-burnable due to the associated fuel type (i.e., water, roads, urban, agricultural, barren areas). The wildfire simulator considered the number of times the simulated fires burned each cell. After that, results were weighted by considering the historical fire occurrence. The weighting was done by assessing the relation between the annual historical fire ignition density in Colorado, the total number of simulated fires with varying input data in high and moderate weather scenarios, and the historical spatial distribution of the ignition points."²²

The map and table below show the output from the burn probability analysis for Ouray County. Areas where burn probability is elevated include the eastern border and the county's northwest corner. Areas where burn probability is lowest include the north-central and southern portions of the county.

Burn Probability	Acres	Percent
Lowest	79,762	23%
	22,567	6.5%
Low	21,836	6.3%
	78,078	22.5%
Moderate	92,100	26.5%
	52,456	15.1%
High	475	0.1%
		0%
Highest		0%
Total	347,276	100%

Figure 28: Burn Probability Table - Ouray County

Source: Colorado Forest Atlas

²² Colorado State Forest Service. 2022. "Colorado Forest Atlas." <u>https://coloradoforestatlas.org/</u>.



Figure 29: Burn Probability

Potential Control Location Suitability

Potential control location suitability (PCL) shows where wildfire containment is most likely successful based on where fires stopped in the past. PCL is scaled from zero to one hundred, corresponding to conditions with a low to high probability of containing a fire. Areas where large fire containment is unlikely (PCL<10) suggest the need for an indirect suppression strategy, and areas with a PCL greater than 75 are where fires tend to stall or stop due to a combination of site conditions and suppression success. PCL considers fire containment successes and failures from 2002-2021, topography, fuels, accessibility, suppression difficulty, and potential fire behavior.²³

Figure 31 on the next page shows the Potential Control Location Suitability for Ouray County. Areas where containment is unlikely include the south-central portion of the county and the eastern border. Areas where potential containment is highest include the high mountain peaks in the county's southern portion and low-lying areas along the Uncompany River and Dallas Creek.



Figure 30: Wildfire Control Point

Source: West Slope Fire Information

²³ U.S. Forest Service. 2024. "Potential Control Location Suitability." <u>https://www.arcgis.com/home/item.html?id=c83484a8f54d4212a453cbec8f461491</u>.



Figure 31: Potential Control Location Suitability

Watershed Risk

Wildfires and the subsequent suppression activities can significantly affect watersheds and municipal water supplies. When wildfires burn across an area, they leave unstable soils vulnerable to erosion, landslides, and debris flows. This results in increased sediment and debris clogging streams and reservoirs. Ash, heavy metals, and pollutants from burned materials can wash into streams, degrading water quality and making water treatment more challenging. The intense heat from wildfires can also create hydrophobic soils that repel water, exacerbate runoff, and contribute to flash flooding. Chemicals used in firefighting, such as fire retardants and foams, can add to water quality issues when they get washed into water sources. These place increased strains on water treatment facilities, which may not typically be needed to treat these pollutants.

Planning for the impacts of wildfires on watersheds and drinking water is crucial because water is a vital resource for public health and the environment. Wildfires can significantly compromise water quality, leading to higher treatment costs, unsafe drinking water, and degradation of aquatic plants and animals. By planning, communities can implement mitigation strategies to help reduce these impacts and minimize long-term economic and environmental costs.

The Colorado Water Conservation Board's Wildfire Ready Watersheds Susceptibility Explorer was utilized to analyze watershed risk in Ouray County. This tool assesses the susceptibility of Colorado's watersheds to post-fire hazard risk to support the development of pre-fire planning. The Wildfire Ready Watersheds explorer contains four key summaries related to hazards and values at risk. These summary maps are Debris Flow Probability, Sedimentation Risk, Hydrologic Change Risk, and All Values-at-Risk and Hazards. These summaries are provided at a watershed (HUC-12) scale. Summary descriptions and maps can be found below. To learn more about how these summaries and maps were created, visit https://www.wildfirereadywatersheds.com/.

Debris Flow Probability

Debris flow probability, as shown in Figure 32, estimates the likelihood of a debris flow event after a wildfire. These estimates were created using the U.S Geological Survey's debris flow probability logistic regression model and burn severity inputs.²⁴

Sedimentation Risk

Sedimentation risk measures the expected change in sediment yield between pre-fire and post-fire conditions. Figure 33 shows the sedimentation risk for Ouray County. The larger the number, the more sediment is expected in waterways after a fire event.²⁵

Hydrologic Change Risk

Figure 34 shows the hydrologic change risk for watersheds in Ouray County. Hydrologic change looks at the expected magnitude of change in runoff from a watershed, assuming an estimated burn severity. A higher number means there is an increased amount of runoff and less infiltration that would occur.²⁶ More runoff can lead to increased risk of flooding downstream, sediment loads, and risk of debris flows.

²⁴ Colorado Department of Natural Resources. 2024. "Wildfire Ready Watersheds." <u>https://www.wildfirereadywatersheds.com/</u>.

²⁵ Colorado Department of Natural Resources. 2024. "Wildfire Ready Watersheds." <u>https://www.wildfirereadywatersheds.com/</u>.

²⁶ Colorado Department of Natural Resources. 2024. "Wildfire Ready Watersheds." <u>https://www.wildfirereadywatersheds.com/</u>.



Figure 32: Watershed Debris Flow Probability



Figure 33: Watershed Sedimentation Risk



Figure 34: Watershed Hydrologic Change Risk

Combined Watershed Risk

This summary combines all three risk types discussed above and susceptibility to life, property, and water infrastructure. The output is Figure 36, which provides an average overall susceptibility score between 0 and 100. Higher values mean higher overall susceptibility, whereas lower scores indicate lower overall susceptibility.²⁷ The combined wildfire risk map used this summary as the watershed risk input (Figure 25).

Forests to Faucets

The USFS Forests to Faucets project ranks areas within a watershed from 0 to 100 regarding relative importance to overall drinking water quality (100 being most important, 0 being least important). These rankings help identify critical watersheds for drinking water based on the population served, forest cover, riparian condition, and hydrology.²⁸ Forests to Faucets data can be helpful when identifying potential mitigation project locations to prioritize. Figure 37 shows that most of the county's watersheds rank between 30 and 60. Watersheds with the most relative importance are located in the county's southern portion and provide the City of Ouray and the Town of Ridgway with drinking water.

Figure 35: Wildfire River Pollution



Source: CNN. A confluence of two rivers. The bottom carried ash and burned soil; the other was unaffected by wildfire.

²⁷ Colorado Department of Natural Resources. 2024. "Wildfire Ready Watersheds."
 <u>https://www.wildfirereadywatersheds.com/</u>.
 ²⁸ USFS. "Forests to Faucets 2.0." Accessed March 2025.

https://storymaps.arcgis.com/collections/4e450a6c7ed24f0cbae4abc1c07843b7?item=1.



Figure 36: Combined Watershed Risk



Figure 37: Forest to Faucets - Drinking Water Importance

Values to Protect

Identifying important values and resources when planning wildfires is crucial because it helps ensure that the strategies and mitigation efforts protect what matters most. By understanding these priorities, actions can be tailored to protect key assets like drinking water infrastructure, residential areas, communication infrastructure, and key governmental services that support communities' long-term health and growth.

Furthermore, recognizing these values allows for a more efficient allocation of limited resources. It helps decision-makers prioritize actions, develop focused risk-reduction strategies, and coordinate with various stakeholders. This targeted approach minimizes potential damage during a wildfire event and facilitates a faster and more effective recovery, ultimately enhancing the county's resilience.

During the first meeting, the CWPP Stakeholder Group was asked to identify values and resources they wished to protect from wildfire. The values were organized and grouped into 12 categories from that initial discussion. Definitions and locations were then gathered for each value category. While not every category had a specific location that could be represented on a map (i.e., air quality and human life), the stakeholder group felt it was still important to include them in the analysis. During the second meeting, the CWPP Stakeholder Group was shown a list and map of the different value categories. They were then asked to rate the 12 different value categories from most important to least important. Figure 38 shows the 12 value categories and their relative importance based on the average ratings.



Figure 38: Values to Protect Ranking

General definitions for each value to protect categories can be found on the next page. Most of the definitions and locations of the categories came from Ouray County Emergency Management. Figure 40 shows a map of the top five values to protect in Ouray County. When layered on top of the combined wildfire risk map, it revealed that many of the most important values to protect were located in the high to highest-risk areas. Having many values in high-risk areas shows the

importance of large-scale fuel management needs, site-specific defensible space, and location hardening.

Human Life – All residents and visitors in the county.

Emergency Response & Governmental Services – Governmental buildings, schools, and fire stations.

Infrastructure – Communication towers, power substations and lines, roads, and water infrastructure.

Water Quality – Reservoirs, rivers, and streams.

Buildings – All addresses of buildings in the county.

Forest Health – Vegetation throughout the county.

Wildlife - Endangered species ranges in the county.

Historical Sites – Locations on the National Register of Historic Places.

Air Quality – How clean or polluted the air is in the county. It can be measured by the concentration of pollutants in the air.

Cultural Areas – Places that hold cultural significance. They reflect the traditions, values, beliefs, and expressions of particular groups or civilizations.

Livestock – Large farms and ranches in the county.

Recreation – Campgrounds, trails, golf courses, parks, pools, athletic fields, and other recreational-related locations.

Figure 39: Ouray County Courthouse



Source: Ouray County





4 Action Plan

Wildfire action planning involves identifying and implementing strategies to reduce the risk and impact of wildfires on people, property, infrastructure, and ecosystems. It consists of analyzing wildfire risks, determining vulnerabilities, and outlining specific actions to prevent or minimize damage to identified values. These wildfire risk reduction projects and actions support the overarching goals of the Ouray CWPP.

Goal 1: Fire-Resilient Landscapes

Develop and maintain landscapes across the county that are resilient to wildfire, mitigate undesirable fire outcomes, and protect highly valued resources and assets.

Goal 2: Fire-Adapted Communities

Empower the county and its residents to "live with wildfire," including being prepared to withstand, respond to, and recover from wildfires.

Goal 3: Safe and Effective Wildfire Response

Enable safe and efficient wildfire response through improved planning, coordination, and capacity building.

Ouray County, the local fire districts, BLM, USFS, and other regional stakeholders must work together to implement these wildfire risk reduction projects. Unfortunately, implementing these projects can be difficult due to limited budgets and staffing constraints from the local to the federal level. With limited resources, supported projects must be well-defined and address multiple goals and issues. Collaborative planning will be essential to maximize the benefits of the identified projects.

The actions listed below are not all-inclusive. Conditions, funding, and opportunities change over time, and it is critical to update this CWPP. Ouray County and the CWPP Stakeholder Group will add appropriate new actions to meet changing needs and opportunities.

Fire-Resilient Landscapes Actions

Fire-resilient landscapes aim to develop and maintain landscapes across the county that are resilient to wildfire, mitigate undesirable fire outcomes, and protect highly valued resources and assets. To do that, fuel treatment projects were identified during the fourth CWPP meeting and further refined through discussions with the county and other key local, state, and federal stakeholders. These fuel treatment projects fall into two main types: short-term projects where planning has already begun and longer-term prioritized projects where additional planning work is needed to refine the project. Additionally, watershed projects were identified to help protect the county's drinking water and other water resources.

Shorter-Term Projects

These projects are likely to be implemented and completed first. Some are already underway, while others have started the planning process but may still need funding or additional planning to get started. Below is the list of shorter-term projects in the county and a summary of each project. Figure 41 shows where these projects are planned to be located.



Figure 41: Shorter-Term Fuel Treatment Projects

Baldy Mountain

The USFS is leading and working with partners from USDA, BLM, WRWC, and many others on the Baldy Mountain project. This project will cover approximately 2,400 acres with treatments on public and private land. The project intends to treat existing vegetation to benefit wildlife habitat, reduce fuels, reduce post-wildfire flooding and soil erosion effects, and improve landscape resiliency. Activities began in 2023 with hand and mechanical treatments. Additional prescribed fire and mastication will continue until 2027. Total costs are expected to be over \$3.5 million. More information about the Baldy Mountain Project can be found on this ArcGIS StoryMap: https://storymaps.arcgis.com/stories/9eea6bb08bf6488482f9e0cd1955b2b6 and the USFS project website: https://www.fs.usda.gov/project/?project=58554.

As part of the project, the WRWC is working with qualified private landowners to provide free vegetation management on approximately 123 acres. Work will include tree thinning using hand crews, mastication, and brush control. The cut vegetation will be chipped, removed from the site, chopped into chucks, and dispersed on the ground.

Dave Wood

This project is being led by the USFS and is planned to cover approximately 850 acres. This project will primarily be a prescribed burn. Heritage clearance and funding are still needed before any work is done. The goal of this project is to reduce vegetation in a densely forested area that is adjacent to private land. This project will help to reduce the risk of a large wildfire moving across the region. The USFS is hoping to complete this project by 2028.

The USFS has recently implemented more stringent requirements for conducting prescribed burns on USFS land to enhance safety, accountability, and effectiveness. Changes include enhanced burn planning, safety protocols, increased personnel, and the inclusion of strategies to prevent escapes.

Ouray Community Forest Resilience

This proposed project has been in the making through the Ouray Forest Collaborative for a few years and will cover approximately 93 acres. The City of Ouray and Ouray County hired Spring Branch Forestry to lay out the project to mitigate the forest directly outside the City of Ouray. Several different fuel reduction methods will be used, including helicopter removal of trees, hand treatment, mastication, and aerial chipping. The estimated cost is approximately \$1.1 million. The project will likely start in the fall of 2026 or 2027 but largely depends on funding. WRWC has secured some funds through multiple grants, but additional funds are still needed to start the project.

Plateau Communities Wildfire Resiliency

This project led by BLM will cover 11,363 acres of primarily roadside and boundary thinning. Treatment methods will include cut, pile, and burn; mastication; and lop and scatter. Additionally, many treatments will be preceded and followed by herbicide application and seeding. Previously treated areas will be re-treated as well. The NEPA process for this project is currently underway.

Ridgway State Park

The CSFS is leading this proposed project. The project will treat approximately 90 acres around Ridgway State Park. Treatment for the project includes variable density thinning of pinyon-juniper with objectives of improving mule-deer habitat and mitigation risk of wildfire. Planning for the project is finished and awaiting funding.

Longer-Term Prioritized Projects

The CWPP Stakeholder Group prioritized these longer-term projects during the fourth CWPP meeting. Meeting attendees participated in a project identification activity where each was given three stickers to place on the combined wildfire risk map. These stickers acted as votes for the locations where vegetation management should occur. The seven locations that received the most stickers were identified as the longer-term prioritized projects (Figure 42). Only seven locations were prioritized due to limited budgets, staffing, and time. In future updates and reviews, additional project locations can be added.



Figure 42: Longer-Term Fuel Treatment Project Locations

Below is the list of longer-term projects in the county and a summary of each project. The locations provided in the map above are approximate, and the actual project may be outside the boundaries or in smaller, specific areas within the locations. These projects are likely to take a longer time to be implemented. For most, the planning process has not yet started. Because of this, the summaries will not be as detailed, with specific types and methods of treatments yet to be identified.

Other non-prioritized areas discussed include, but are not limited to:

- Blackbear Trail Area
- Blue Lakes Trailhead
- Buckhorn Lakes
- Cornerstone Area
- County Road 1
- County Road 24
- County Road 361
- East Horsefly Creek Area
- Elk Mountain Resort Area
- Highway 62
- Highway 550 south of Ouray
- Wildcat/Simms Area
- Wilson Creek Area

Elk Meadows

The Elk Meadows neighborhood is west of Highway 550 and approximately four miles south of the Town of Ridgway. These homes are located in the county's highest or second-highest wildfirerisk areas. Many of the homes are located in or near heavily vegetated areas. Evacuation of this neighborhood is a concern, with only one dirt road in or out (County Road 5).

All of the land within the neighborhood is privately owned, which means the county will need to work with private landowners, CSFS, and the WRWC to perform any significant fuel reduction projects. Possible treatment types include creating defensible space, thinning and precommercial thinning, logging, ingress/egress routes, fuel breaks, and possibly prescribed burns. In addition to the fuel treatment, this project includes possibly adding a second egress route.

City of Ouray Protection

The City of Ouray is surrounded by dense forests and is located in some of the higher wildfirerisk areas in the county. This project will identify possible fuel treatment locations surrounding the community and tie into the Ouray Community Forest Resilience Project where possible. The areas around the city are a mixture of private and USFS land. The Ouray Forest Collaborative will likely lead this project but will work closely with the USFS, WRWC, and private landowners. Thinning through hand treatment, mastication, and chipping are the most likely treatment types.

Dave Wood #2

The Dave Wood area is one of the county's more densely forested areas within USFS lands. It is also adjacent to private land that is densely forested. Seasonal winds favor a southwest flow, and any established fire in these areas is at risk of moderate to rapid growth in a northerly direction through the largely untreated areas adjacent to the forest.

This 1110-acre project would tie into the previously treated and planned treatment locations in the Dave Wood area. The primary suggested treatment type would be mastication of the Gamble Oak along topographic transitions, roadways, and structures. Areas with more Pinyon/Juniper could also be thinned, and ladder fuels could be removed through chipping or pile burning. There could also be opportunities to work with adjacent landowners to expand the treatment area. Heritage clearances need to be re-validated in the area, and the first Dave Wood Project will need to be completed before starting this project.

County Road 8

This future project would cover areas surrounding County Road 8 in the county's eastern portion. This stretch of road is located in the highest wildfire-risk regions in the county and could be used as an evacuation route. This portion of County Road 8 is an identified POD boundary line, so any fuel treatment work would help reduce the spread of wildfire. Possible fuel treatment types include thinning, prescribed burns, and expanding the fuel break created by County Road 8. Most of the surrounding area is USFS land, so they would likely be the ones to implement this project.

Log Hill Mesa Protection

This potential future project covers a large land area south and west of Log Hill Mesa. Log Hill has the highest density of homes in the unincorporated areas of Ouray County. Most of these homes are at elevated fire risk because they are located in heavily wooded areas. Log Hill has several highly ranked values, including communication towers, the Dallas Creek Water Company, and the Fairway Pines Sanitation Facility.

All the land is privately owned, so the county will need to work with private landowners, CSFS, and the WRWC to perform any significant fuel reduction projects. Treatment types could include defensible space work, thinning, improving ingress/egress, and POD boundary line hardening using fuel breaks.

Highway 550 Between Ouray and Ridgway

This future project would cover areas surrounding Highway 550 between the City of Ouray and the Town of Ridgway. This entire stretch of road is located in elevated wildfire risk areas. It is the primary evacuation route for the county's southern half, including the City of Ouray. While most of the land is privately owned, there are areas that the USFS or BLM federally owns. Ouray County would likely need to work with private landowners, CSFS, WRWC, USFS, and BLM.

Ideally, this project would tie into the Baldy Mountain project to create a larger treated area. Possible fuel treatment types could include thinning, prescribed burns, and POD boundary line hardening by expanding the fuel break created by Highway 550.

Highway 550 North of Ridgway

This project would cover areas surrounding Highway 550 north of the Town of Ridgway. While much of the project would be located in relatively lower wildfire risk areas, the entire stretch of road is the primary evacuation route leading out of the county. A mix of BLM, State, and private landowners owns the project area. The CSFS or BLM would be the most likely agencies to lead this project. Possible fuel treatment types could include thinning, prescribed burns, and POD Boundary line hardening by expanding the fuel break created by Highway 550.

Fuel Treatment Projects Summary

The table below summarizes the short-term and long-term fuel treatment projects described above. The table includes the priority level for each project and the recommended implementation leader. Priority levels may shift over time for many of these projects due to public and political support, available funding, and staffing. Implementation leaders may also change depending on the exact location and needs of the project.

Project Name	Short-Term or Long-Term	Priority	Implementation Leader
Baldy Mountain	Short-Term	High	USFS
City of Ouray Protection	Long-Term	Medium	Ouray Forest Collaborative
County Road 8	Long-Term	Low	USFS
Dave Wood	Short-Term	High	USFS
Dave Wood #2	Long-Term	Medium	USFS
Elk Meadows	Long-Term	Low	Ouray County
Highway 550 Between Ouray and Ridgway	Long-Term	High	Ouray County
Highway 550 North of Ridgway	Long-Term	Low	BLM & CSFS
Log Hill Mesa Protection	Long-Term	High	Ouray County
Ouray Community Forest Resilience	Short-Term	High	Ouray Forest Collaborative
Plateau Communities Wildfire Resiliency	Short-Term	High	BLM
Ridgway State Park	Short-Term	High	CSFS

 Table 7: Fuel Treatment Projects Summary

Watershed Projects

Implement Projects Identified in the Dallas Creek Water Company Source Water Protection Plan The Dallas Creek Water Company completed its Source Water Protection Plan (SWPP) in August 2016. Dallas Creek Water Company provides drinking water to Log Hill Mesa. The SWPP aims to better understand potential risks to the watershed and identify actions to protect and enhance the drinking water supply. The plan recognizes wildfires as a high-priority issue and identifies best management practices. The identified practices to implement are listed below. The Dallas Creek Water Company will implement these actions.

- Explore opportunities for watershed health improvement grant funding.
- Share a copy of the plan and shapefiles with Ouray County, USFS, CFSF, and the West Regional Wildfire Council.
 - Work with USFS, CSFS, West Region Wildfire Council, and Ouray County to educate homeowners about creating and maintaining defensible space on private lands.
- Share a copy of the SWPP with the Ouray County Sheriff's Department regarding fire bans and restrictions. Encourage collaboration with the Sheriff's Department in reviewing fire prevention measures.
- Evaluate fuel conditions to develop fuel mitigation or treatment projects and fire response plans for the Source Water Protection Area with USFS, CSFS, Division of Fire Prevention and Control, Log Hill Fire Protection District, and Ridgway Fire Protection District.
Implement Actions Identified in the Town of Ridgway Source Water Protection Plan

The Town of Ridgway completed its Source Water Protection Plan in September 2012. The SWPP states that wildfire can impact the town's drinking water in several ways. Increased sediment can make it challenging to treat the water, and runoff changes could affect water availability in summer. Within the plan, several actions related to wildfires can be implemented. The Town of Ridgway will implement these actions.

Develop a Source Water Protection Plan for the City of Ouray

The City of Ouray does not have a Source Water Protection Plan. An SWPP can help the city better understand potential watershed and drinking water risks related to wildfires. It will also help the city identify possible actions to help protect the city's drinking water from wildfire impacts. The City of Ouray will lead the development of the SWPP.

Develop Wildfire Ready Action Plans

To better understand the watershed risks and vulnerabilities at the community level, the City of Ouray and the Town of Ridgway should look into developing a Wildfire Ready Action Plan (WRAP) for their drinking water sources. A WRAP will include hazard analysis and evaluations and identify pre- and post-fire management actions that can be taken. The Colorado Watershed Restoration Program has grant funds available to governmental entities to create a WRAP and implement projects identified in the plan.

Wet Meadow Improvement / Creation

Work with the Uncompany Watershed Partnership to coordinate low-tech process-based restoration projects to re-wet and green up meadows in the county. Implementing these wet meadow projects makes them less likely to burn and can act as fire breaks, reducing wildfire spread. Local fire protection districts, Ouray County, and the Uncompany Watershed Partnership can work together to identify locations where there would be both habitat and wildfire risk reduction benefits.

Snowpack Projects

This action contains two snowpack projects. These projects entail snowpack monitoring and highcountry vegetation manipulations to increase the snowpack. Snowpack monitoring consists of measuring and observing snow accumulations and changes over time. It can help predict drought and the severity and timing of the fire season. Vegetation manipulation by intentionally changing vegetation type, density, or structure can help retain more snow and slow its melt in high-country areas. It can help reduce fuel loads and create a more reliable spring/summer runoff.

Fire-Adapted Communities Actions

The goal of fire-adapted communities is to empower the county and its residents to "live with wildfire," including being prepared to withstand, respond to, and recover from wildfires. Several actions were identified during the CWPP meetings to help achieve this goal. A summary of these actions is outlined below.

Joint Task Force on Wildfire Education

This action creates a Joint Task Force to lead a programmatic wildfire education and outreach campaign. Currently, wildfire education in the county is done separately by the communities, county, local fire districts, federal agencies, HOAs, and other non-profit organizations. No entity can handle all education needs due to limited staffing, time, and budgets. By creating a Joint Task Force comprising all these entities, resources can be pooled, and a unified education campaign can be created. The task force will help to ensure a consistent message that maximizes impact

and enhances efficiency in delivering wildfire education to residents and visitors. West Region Wildfire Council created an email list for the Joint Task Force; one meeting has already occurred.

Wildfire Code Updates and Enforcement

The Colorado Wildfire Resiliency Code Board is creating a statewide wildfire resiliency code. Once approved and adopted, governing bodies in the WUI must adopt this code. However, local wildfire regulations can exceed the state code requirements.

This action ensures local codes meet or exceed the new state wildfire resiliency code. The county's code will likely exceed the state code. However, the county code should be reviewed against the state code and updated if needed. The City of Ouray and the Town of Ridgway may need to update their local codes to meet or exceed the state code. Another issue in the county and local communities is enforcing their codes. Capacity building within the county and local communities is needed to help enforce codes for both new construction and existing properties.

Neighborhood-Level Evacuation Planning

Ouray County completed a county-wide evacuation plan that identifies such items as the primary evacuation routes, challenges regarding evacuation, and roles and responsibilities during an evacuation event. Given the scale of the plan, it is not feasible to plan the best evacuation routes for each house or neighborhood. Individuals at the neighborhood level should plan the best routes that lead to the main evacuation routes identified in the county plan. These evacuation plans will make residents more prepared during an evacuation event.

Protect County Structures and Infrastructure

Many county-owned structures and infrastructure are located in high wildfire-risk areas with many sites, like the county radio/cell towers, that are surrounded by wildland vegetation. Ouray County Emergency Management, with assistance from local fire districts, will identify structures and pieces of infrastructure that either need to be hardened against wildfire or need defensible space. Once these sites have been identified, specific mitigation work will be performed.

Insurance Company Collaboration

As more and more large wildfire events occur across the country, insurance companies are starting to pull out of high-risk areas or increase premiums for wildfire coverage. In the CWPP public survey, reduced homeowner insurance rates would be the most encouraging factor for homeowners to reduce wildfire risks on their property. Most insurance companies use their own wildfire risk metrics and do not consider local risk indicators or mitigation work on individual properties.

This action aims for Ouray County and the West Region Wildfire Council to work collaboratively with insurance companies to discuss the possibility of offering lower insurance rates for homes with mitigation work. One possible solution is to tie in the Wildfire Ready Home Program discussed in the previous action. The West Region Wildfire Council and the county could work with insurance companies to see if they can offer lower rates for homes that have received a Wildfire Ready Home Certification of Completion.

Subdivision Wildfire Requirements

Ouray County will explore adding additional wildfire requirements for subdivision-planned unit development approvals. Possible additions include additional defensible space requirements, having a road rather than homes on the outside edge of a subdivision, and requiring the development of a CWPP. These wildfire requirements will help reduce further risk for the new subdivisions, which will likely be built in heavily vegetated areas.

Conduct Rapid Wildfire Risk Assessments

The West Region Wildfire Council can conduct curbside <u>Wildfire Risk Assessments</u> of properties in the WUI. These property-level wildfire risk assessments are based on attributes related to building materials, vegetation near the home, background fuels, topography, and access. The assessment rating gives a risk value relative to neighboring properties. This outreach tool can help inform residents of their risk and encourage them to seek education and resources. As seen on the map below, many homes in Ouray County have already been assessed.

This action aims to increase the number of properties with a risk assessment, especially in and around the City of Ouray. The West Region Wildfire Council will lead the outreach about the assessment and will lead the assessments as funding and capacity allow.



Figure 43: WRWC Rapid Wildfire Risk Assessments - Ouray County

Source: West Region Wildfire Council

Promote the West Region Wildfire Council's Wildfire Ready Home Program

The West Region Wildfire Council has a <u>Wildfire Ready Home Program</u> that homeowners can sign up for and learn practical steps to reduce risks around their homes. During the program, homeowners will work with a Wildfire Ready Home Assessor who will provide them with a detailed Wildfire Ready Home Report that contains specific and targeted recommendations. After completing the program, homeowners will receive a Wildfire Ready Home Certification for Completion.

This action aims to increase the number of residents who have taken the appropriate steps to understand their wildfire risk and the available resources in the area and to increase the number of homes mitigated by creating defensible spaces and hardening structures. West Region Wildfire Council will lead outreach and will operate the program.

City of Ouray Forest Management Program

The City of Ouray wants to create an active forest management and improvement program for all city-owned properties. This program will help ensure good land stewardship, wildlife habitat rehabilitation, and wildfire mitigation, promoting overall forest health. Specific wildfire mitigation projects have not been identified but will be during the program's creation. The city hopes to create this program over the next five to ten years.

Safe and Effective Wildfire Response Actions

The goal of safe and effective wildfire response is to enable safe and efficient wildfire response through improved planning, coordination, and capacity building. Actions were identified during the CWPP meetings to support this goal. A summary of these actions is provided below.

Water Source Improvements

Most fire districts have limited access to water and may have to travel long distances to refill tankers. Having few water sources can limit their ability to control and contain wildfire events quickly. Streams are an option to pull water, but it might not be possible during a drought year when wildfire risk has already increased.

This action aims to increase water source availability throughout the county. The first step is to pre-identify water sources that will likely be available during drought conditions. Listing water sources can help identify areas where water for firefighting is scarce. In these areas, fire districts and the county can work together to install above-ground cisterns and tanks, partner with local landowners to use irrigation equipment or ponds, and work with water providers to extend water mains and hydrants. In areas where there are natural water sources, fire districts can work to install dry hydrants and maintain access points. Local fire districts can also look into expanding the number and size of water tenders. The local fire protection districts and Ouray County Emergency Management will lead this project, and local communities will assist as needed.

Emergency Response Radio and Emergency Alert Training

Ouray County Emergency Management identified a need for training on the emergency response radios for all volunteers and emergency response personnel. Training will help ensure all organizations can communicate and promptly get the necessary resources and information. Training on emergency response radios should be held on at least an annual basis. The training will be organized and held by Ouray County Emergency Management. BLM and the Colorado Division of Fire Prevention and Control can also assist with radio training for local fire districts.

Currently, only three individuals in the county can send out emergency alerts. Most of these individuals would likely be out in the field during an emergency and unavailable to send the alerts. Ouray County would like to increase the number of staff trained on emergency alerts so they can serve as backups if needed.

Affordable Housing for Fire District and Governmental Personnel

Like many other mountain communities and regions, local fire protection districts and local governments in the county have a hard time with staffing. One of the big reasons for this is the lack of affordable housing in the county. Finding affordable housing for first responders and other key governmental staff will help to find and retain needed staff. Ouray County, the Town of Ridgway, and the City of Ouray should look into creating affordable housing plans if one has not already been made. In coordination with the Home Trust of Ouray County, these entities should also consider implementing workforce housing solutions such as down payment assistance, subsidized housing, and zoning adjustments for affordable housing development.

Project Funding

Grant funding is often necessary for vegetation management projects and can facilitate fuel reduction on private and public lands. Due to an ever-changing political and funding landscape, specific grant programs will not be discussed in this plan. On a federal level, wildfire grants have historically come from three primary sources: the USFS, BLM, and FEMA. On the state level, grants will likely come from the CSFS, Colorado Division of Fire Prevention & Control, Colorado Department of Natural Resources, and Colorado Water Conservation Board. It is recommended that the CWPP Stakeholder Group regularly check with these federal and state agencies on available grant funds. The Colorado Department of Local Affairs has also compiled a Local Community Funding Guide to help navigate various state and federal funding types. The Wildfire Risk to Communities also has combined funding information (https://wildfirerisk.org/reduce-risk/funding/). The Colorado Watershed Assembly has a watershed-specific funding overview page (https://www.coloradowater.org/funding-opportunities).

While grants can help fund wildfire projects, they are not the only option. Other resources include local funding options (local budgets, capital improvement programs, fees, etc.), public-private partnerships, donations, private foundations, and non-profit organizations. Funding projects and actions will likely take innovative solutions from various sources.

Implementation & Updates

The risk reduction projects and actions outlined in this plan will significantly reduce wildfire risk, but only if implemented. Converting strategy into action is the key to achieving the goals of the CWPP. Where possible, the identified fuel treatment projects and wildfire mitigation actions have identified who will oversee the execution of the project. However, many projects and actions will require collaboration among federal agencies, Ouray County, fire protection districts, communities, local organizations, and private landowners.

An essential component of the implementation process includes identifying a team that will move the plan forward, help implement the mitigation recommendations, and continue planning additional wildfire mitigation actions. This plan recommends that the CWPP Stakeholder Group become that implementation team as it already comprises all the key stakeholders. Regular meetings of the CWPP Stakeholder Group should occur and can be coordinated through Ouray County Emergency Management. The CWPP encourages individuals and homeowner associations to take an active role in this process by attending these meetings and continuing to provide input. The Ouray County CWPP is a valuable resource that provides the foundation for understanding wildfire risks and hazards and presents attainable actions designed to reduce potential losses from wildfire. This CWPP must be continually monitored and updated as conditions and community values change. It is recommended that Ouray County Emergency Management lead any updates with assistance from the CWPP Stakeholder Group. The CWPP should undergo a complete update every five to ten years. The update ensures that a wildfire risk analysis is as up-to-date as possible. It also allows for updating community values and wildfire risk reduction projects based on changing priorities and landscapes. More minor updates to the plan may be incorporated more frequently, especially in the event of a large wildfire in the county.

Appendix A Public Survey Summary

The following qualitatively summarizes responses to the Ouray County Community Wildfire Protection Plan (CWPP) public survey. The survey was available from November 14th, 2024, to November 30th, 2024. The public survey received 266 responses during this time and was made available online and in physical form at the county courthouse and Land Use Office. A postcard was mailed to all residents and businesses in Ouray County. The following is an analysis of responses collected through the online survey and handwritten responses collected during the comment period. Not all questions were required, and the response rate varied from 239 responses to 266 responses for each question.

Rank the level of concern that wildfire will impact you or the values that you care about.

Most respondents ranked the impact of wildfires on their values as high or the highest concern. 77% of respondents indicated that they have moderate or the highest concern that a wildfire would impact their values.



In your opinion, how likely is it that a major wildfire will occur in Ouray County in the next 5 years?

Seventy percent of respondents indicated that they thought a major wildfire would likely or very likely occur in Ouray County within the next five years.



What would you like to see the county, communities, and fire authorities do in the future to protect people, resources, and infrastructure from future hazard events? (Circle each option 1-5, 1 = Not Important, 5 = Very Important)

Residents identified that they would like to see most of the actions taken. "Increase local fire funds to increase fire response capabilities" received the highest average score of 3.48 out of 5. "Provide financial assistance for private vegetation and fuels mitigation/removal" received the lowest average score of 2.98 out of 5.

Expand early warning systems / emergency notification	23	72	7	71	50	50
	32	63		76	51	44
Landslide and rockfall mitigation						
Stormwater management – bank stabilization, drainage improvements,.	29	47	80		59	51
Dealure generatore at low facilities	32	48	83		50	53
Backup generators at key facilities						
	30	50	71		57	58
Assist with home wildfire risk assessments					•••	
Increase public education on hazards, risks, and household mitigation	30	59	7	5	48	54
Remove hazardous fuels from public lands and roadways	29	44	71		55	67
Provide financial assistance for private vegetation and fuels mitigation/removal	42	56	3	81	40	47
Increase local fire funds to increase fire response capabilities	26	40	60	59)	81
	0	50	100	150	20) 250

1 (Not Important)	2	∎3	4	■5 (Very Important)
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Action	Weighted Average Importance
Expand early warning systems/emergency notification	3.12
Landslide and rockfall mitigation	3.05
Stormwater management – bank stabilization, drainage improvements, culverts	3.21
Backup generators at key facilities	3.17
Assist with home wildfire risk assessments	3.24
Increase public education on hazards, risks, and household mitigation	3.14
Remove hazardous fuels from public lands and roadways	3.33
Provide financial assistance for private vegetation and fuels mitigation/removal	2.98
Increase local fire funds to increase fire response capabilities	3.48

Please indicate how important it is to protect the following from hazard events (Circle 1-5, 1 = Not Important, 5 = Very Important)

The highest-ranked value was Human Life, followed closely by Water Quality. The following table shows the values ranked by weighted average importance.

Values	Weighted Average Importance
1) Human Life	4.56
2) Water Quality	4.42
3) Infrastructure (communication, power, roadways, water)	4.23
4) Forest Health	3.99
5) Emergency Response & Government Services	3.83
6) Wildlife	3.70
7) Air Quality	3.52
8) Buildings	3.32
9) Historical Sites	3.32
10) Cultural Areas	3.06
11) Livestock	3.00
12) Recreation	2.85

What measures have you taken to protect your home or property from wildfire? (Select all that apply)

Only 13% of the respondents reported not taking any measures to protect their homes. Respondents who selected "other" reported engaging in various activities to protect their property, including purchasing equipment and discussing wildfire risk with neighbors.



What are the barriers you face when protecting your home or property from wildfire? (Select all that apply)

Cost was the most selected barrier, with 57% of respondents identifying it, followed by Time with 43%. 21% of respondents identified that none of the barriers were a factor. Common themes among those who marked "other" included being a renter and the forest near their home being too large to manage.



What factors/information would encourage you to reduce wildfire risks on your property? (Circle 1-5, 1=very encouraging, 5= not encouraging at all)

Survey participants indicated that reduced homeowner insurance rates and assistance removing vegetation would most effectively encourage them to reduce wildfire risks on their property.



Do you support the following vegetation management techniques? (Yes or No)

Most respondents supported all vegetation management. Planned prescribed burns were the least supported, with 89% agreeing with the management technique. Mulching of vegetation was the most widely supported technique, with 97% of respondents indicating their support for it.



If you selected "No" to any of the vegetation management techniques in the question above, please explain why.

The following is a summary of comments, lightly edited for clarity. The survey received 63 comments.

Mowing of grass and shrubs

Respondents who marked "No" to mowing grass and shrubs indicated that mowing can destroy habitat, be unnatural, and feel that grass does not pose as significant a threat to wildfire.

Related Comments

- Mowing damages habitat and is useless for fire mitigation with the forest types we have.
- I want my "yard" to look natural, not a manicured Kentucky Bluegrass city lawn that requires constant maintenance and watering and harmful chemicals.

Mulching of vegetation

Respondents who marked "No" to mulching vegetation felt that the vegetation was important for wildlife habitat and that mulch could become fuel for wildfires.

Related Comments

- Vegetation, grass, and shrubs are important wildfire habitat
- The mulch becomes fuel in this climate. It is too dry for traditional mulching to be effective for fire mitigation here.

Forest thinning

Respondents who marked "No" on forest thinning discussed the lack of effectiveness, expense, and the impact on forest health.

Related Comments

- Forest thinning is too massive and disruptive.
- This will affect the long-term health of the forest and wildlife habitat.
- I'm not sure the benefit would be worth the costs.

Burning of piled vegetation in winter

Respondents who marked "No" on the Burning of piled vegetation in winter are worried about air quality, issues with containing the fire, and the establishment of noxious weeds after the pile is burned.

Related Comments

- Scars left by burning piles provide for noxious weed establishment.
- Adverse effects on air quality when they could be mulched instead.

Planned prescribed burns

Respondents who marked "No" on planned prescribed burns are concerned about air quality and the ability to control the fire.

Related Comments

- Prescribed burns resulted in a fire beyond the scope of the plan
- Let nature take its course. There is no need to spend money on speculative mitigation.
- (Prescribed Burns) Harm wildlife and air quality.

Demographic Information

Where is your primary residence?

The largest percentage of respondents came from Log Hill, at 27%, followed by Unincorporated Areas at 23%, the Town of Ridgway at 22%, and the City of Ouray at 20%.



What is your household income?

54% of households earn over \$100,000 per year. 17% of households made between \$75,000 and \$100,000, and 15% of households made between \$50,000 and \$74,999—finally, 13% of households made between \$25,000 and \$49,999.



Are you of Hispanic, Latino, or Spanish origin?

Most respondents were not of Hispanic, Latino, or Spanish origin.



Please select your race (Select all that apply)

Two individuals identified as American Indian or Alaska Native, two identified as belonging to more than one race; the rest identified as White/Caucasian.



What is the highest level of school completed?

84% of respondents hold a bachelor's degree or higher, and no respondents did not complete high school.



What is your age?

Most respondents fell within the age range of 65 to 84, followed by those aged 45 to 64. There were no respondents between 18 and 24 in the survey.



Appendix B Fuel Treatment History

The following is a summary of the historical fuel treatment data in Ouray County. Between 2000 and 2023, 48,860 acres were treated.¹ This data includes projects that had portions occur outside the county. Below, you will find graphs, tables, and a map to help describe the fuel treatment history in Ouray County.

Breakdown of Acres Treated by Agency

From 2000 to 2023, the Bureau of Land Management treated the largest amount of land at 32,693 acres, followed by the U.S. Forest Service with 11,680 acres, the Colorado State Forest Service with 3,050 acres, the West Region Wildfire Council (WRWC) 1,174 acres, and finally, Colorado Parks and Wildlife contributed 263 acres.



Agency	Acres
BLM	32,693
CPW	263
CSFS	3,050
USFS	11,680
WRWC	1,174

¹ CSFS. 2000-2023. "Colorado Forest Tracker." https://experience.arcgis.com/experience/7eac80a824a64d77864e3e0948ff4f1e/page/Landing-Page/.

Breakdown of Types of Treatment Performed

From 2000 to 2023, canopy treatments were used on 36,321 acres, followed by prescribed fire (Rx Fire) at 8,934 acres, surface treatments were used on 3,096 acres, and finally, 509 acres were reforested.



Agency	Acres
Canopy	36,321
Reforest	509
Rx Fire	8,934
Surface	3,096

Canopy Treatment – Managing the upper layer of trees to improve forest health through thinning trees, reducing canopy bulk density, and increasing canopy base height. **Reforesting –** Planting trees after a clear-cut or high-intensity wildfire to reintroduce native species to the landscape.



Source: USFS



Source: USFS

Rx Fire – Prescribed fire is a planned and controlled application of fire to land to manage forest health.

Surface Treatments – This strategy targets dry grasses, pine needles, fallen branches, and small shrubs to reduce wildfire risks.



Source: USFS

Source: USDA

Acres Treated Each Year Since 2000

The amount of land treated per year has increased since 2000, with a notable increase in 2016 when 20,728 acres were treated. The fewest acres were treated in 2000 when no projects were completed in the county.





Figure 1: Fuel Treatment History in Ouray County

Log Hill Mesa Fire Protection District Actions Completed

Since the 2012 CWPP, Log Hill Mesa Fire Protection District (LHMFPD) has completed many fuel treatment and wildfire mitigation actions. The following is a summary of projects completed by year.

2011

- Began work on LHMFPD CWPP and finished the first draft, which would be completed in 2012.
- Completed over 600 structure surveys.
- Completed renovation project on Station 2 (Old Building) to provide fire-resistant roof and siding.
- Refurbished Brush 31 and ATV 31 to provide better pump capacity and water storage.
- Completed Dwarf Mistletoe removal project at Station 2.

2012

- Completed LHVFD CWPP and Initial Attack Plans. CWPP received the Firewise Community Protection Award from the National Fire Protection Agency. The CWPP has fostered an interest in mitigating around homes in the district.
- Worked with the community to form a Firewise Committee to encourage preparation for significant incidents.
- Received Firewise Community Designation for LHMFPD to become the 3rd Firewise Community on Colorado's western slope.
- Held an Emergency Preparedness Open House with Second Chance Humane Society representatives, Ouray County EMS, Ouray County Emergency Management, West Region Wildfire Council, and Log Hill Mesa First Responders.
- Completed initial attack plans with maps showing fire spread, fire intensity, individual home parcels, and fire hydrants.

2013

- Worked with the community Firewise committee to encourage preparation for a significant incident. This renewed the Firewise Community Designation for Log Hill Mesa. They also received the Firewise Project Achievement Award for an Evacuation Exercise.
- Completed a wildfire mitigation project adjacent to Station 2 in coordination with Parks and Rec District, WRWC, and CSFS. Mitigated 17 acres, providing a shaded fuel break protecting Station 2, Dallas Creek Water, and roadside thinning protecting the Ponderosa Drive evacuation route.
- Purchased and fielded a new brush truck skid unit for Brush 31.

2014

- Purchased Brush 32 Foam Unit Upgrade.
- Increased emphasis on higher wildland fire certification. Two personnel are working on the Engine Boss Task Book, and three are working on the Crew Boss Task Book.
- Mitigated all green space in Fisher Canyon North. This led to their status as a Firewise Community.

2015

- Worked with the community Firewise committee to encourage preparation for a significant incident. Renewed Firewise Community designation for Log Hill Mesa. Fisher Canyon South is also designated Firewise Community.
- Log Hill Fire hosted a Wildfire Mitigation Workshop presented by WRWC, BLM, CSFS, and Sheriff's office and attended by approximately 75 residents.

2016

- Hosted the Colorado Association of Realtors Firewise Kick-off open house attended by approximately 75 residents, which provided information on wildfire mitigation to residents.
- Assistant Chief Austin received national recognition, winning the Fire Adapted Communities Fire Service Leadership Award.
- Completed a Waterview Subdivision project that treated 17 acres and protected fire approaching the state park.

2017

• Completed re-evaluation of all structures over 700) in the district and provided mitigation recommendations. WRWC is developing webpages for all structures.

2018

- Hosted a Wildfire Preparedness Day meeting to educate residents about wildfire risks and mitigation opportunities. Over 70 residents attended.
- Completed the first wildland fire assignment since 2004 by sending Tender 32 to the Bull Draw Fire on short notice. This 2.5-day assignment netted the department over \$3,900 in income.
- Instituted the district's delegation of authority process, providing incident commanders with proper funding for extended attack incidents.

2019

- Hosted a video showing of The Era of Megafires with the Ouray County Planning Commission to educate residents about wildfire risks and mitigation opportunities. This event had the largest attendance in Ouray County.
- Completed first prescribed burn assignment by sending Tender 31 to the WIMP 5 RX. 1-day assignment, which netted the department over \$1,700 in income.
- Completed wildfire mitigation at Station 1 through a training program with DFPC for Faller candidates. They used the WRWC Chipping Program to dispose of slash. Contracted for removal of 11 diseased or dead ponderosa pines at Station 2.

2022

• Completed a Yucca Drive project, which treated 93 acres to protect the County Road 1 evacuation route.

2023

- Divide Ranch completed the construction of an auxiliary water line from Dallas Creek to pump winter water rights up to Mesa and store it in one old reservoir and one new reservoir. Water is available for drafting or dipping for fire attacks.
- Dallas Creek Water Company and Tri-County Water completed an emergency system interconnection that can supply water in an emergency.