Custer County | 2026

Community Wildfire Protection Plan

Signatories

The individuals listed below participated in the development of this Community Wildfire Protection Plan (CWPP) and serve as signatories in the adoption of the following plan. The signatories of this CWPP agree that it is viable, complete, and realistic in terms of wildfire risk reduction and implementation, at a minimum. The 2003 Healthy Forests Restoration Act requires Colorado State Forest Service (CSFS) to establish minimum standards for development of CWPPs in Colorado and must approve all CWPPs to ensure its content and certifies that it meets or exceeds CSFS CWPP minimum standards.

Daniel J. Schell Digitally signed by Daniel J. Schell Date: 2026.01.23 14:16:50 -07'00' — 1/23/26

Danny Schell, Supervisory Forester
Colorado State Forest Service — Date

Jeremiah Coleman — 1/13/26

Jeremiah Coleman, Fire Chief
Wet Mountain Fire Protection District — Date

Digitally signed by 742dffed-97d2-44ba-9c6d-1faf10da8812 Date: 2026.01.15 14:42:50 -07'00' — 1/15/26

Ross Gallegos, Fire Chief
Rye Fire Protection District — Date

1-13-26

Clayton Masar, Fire Chief
Wetmore Volunteer Fire Department — Date

21 JAN 2026

William R. Canda, Chairman
Custer County Board of County Commissioners — Date

1-20-2026

Lloyd "Rich" Smith, Sheriff, Fire Marshall
Custer County Sheriff's Office — Date

14 JAN 2026

H.A. "Buck" Wenzel, Mayor
Town of Silver Cliff — Date

1/20/26

Christy Patterson, mayor pro-tem
~~Paul Wenke, Mayor~~
Town of Westcliffe — Date

"Sincere thanks to the Custer County Fire Council members and the CWPP Planning Team—past and present—including our federal, state, and local agency partners and participating landowners. The Office of Emergency Management and the Fire Adapted Colorado team are to be commended for their collaborative approach, meaningful community engagement, and commitment to identifying cross-boundary planning opportunities across towns and counties. After extensive surveys, research, and analysis of the imminent wildfire risk facing our community, I am proud to present this plan to the residents of Custer County."

Robyn Knappe
Director, Custer County Emergency Management

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Commonly Used Acronyms

AAR	After Action Report
AOP	Annual Operating Plan
ARWC	Arkansas River Watershed Collaborative
BCR	Benefit-Cost Ratio
BLM	Bureau of Land Management
BoCC	Custer County Board of County Commissioners
CCCD	Custer County Conservation District
CCCSD	Custer County Consolidated School District
CCOEM	Custer County Office of Emergency Management
CCMT	Custer County Mitigation Team
CCSO	Custer County Sheriff's Office
CDPS	Colorado Department of Public Safety
CDC	Centers for Disease Control and Prevention
CFRI	Colorado Forest Restoration Institute
cNVC	Conditional Net Value Change
CO-WRA	Colorado Wildfire Risk Assessment
CSFS	Colorado State Forest Service
CSRMS	Colorado South Region Mitigation Stakeholders
CWPP	Community Wildfire Protection Plan
CWRC	Colorado Wildfire Resilience Code
DOA	Delegation of Authority
DFPC	Division of Fire Prevention and Control

EAS	Emergency Alert System
EFF	Emergency Fire Fighting Fund
EMS	Emergency Medical Services
eNVC	Expected Net Value Change
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
ESA	Endangered Species Act
FAC	Fire Adapted Community
FACO	Fire Adapted Colorado
FEMA	Federal Emergency Management Agency
FIL	Fire Intensity Level
FPD	Fire Protection District
GIS	Geographic Information System
HFRA	Healthy Forest Restoration Act
HIZ	Home Ignition Zone
HOA	Home Owners Association
HVRAs	Highly Valued Resources and Assets
ICS	Incident Command System
IMT	Incident Management Team
IWUIC	International Wildland Urban Interface Code
NEPA	National Environmental Policy Act
NGO	Non-government Organization
NIMS	National Incident Management System
NIST	National Institute of Standards and Technology

NRCS	US Department of Agriculture, Natural Resources Conservation Service
NWR	National Weather Radio
NWCG	National Wildfire Coordinating Group
PCLs	Potential Control Location Suitability
PODs	Potential Operational Delineations
PPE	Personal Protection Equipment
PSPS	Public Safety Power Shutoffs
RADS	Risk Assessment and Decision Support
RAWS	Remote Automatic Weather Stations
ROW	Right-of-way
SDI	Suppression Difficulty Index
SFB	Shaded Fuel Break
SFCWPP	Sangre Foothills Community Wildfire Protection Plan
SOW	Scope of Work
SSD	Structure-Separation Distance
TFRA	Temporary Fire Refuge Areas
UAWCD	Upper Arkansas Water Conservancy District
USFS	United States Forest Service
WEA	Wireless Emergency Alert
WRAP	Wildfire Ready Action Plan
WMFPD	Wet Mountain Fire Protection District
WMVO	Wet Mountain Valley Outdoors
WUI	Wildland Urban Interface / Wildland Urban Intermix

Executive Summary

Purpose & Need

The Custer County Community Wildfire Protection Plan (CWPP) has been developed in response to the Healthy Forests Restoration Act of 2003 (HFRA). This legislation established incentives for communities to develop comprehensive wildfire protection plans in a collaborative, inclusive process. Furthermore, this legislation directs the Departments of Interior and Agriculture to address local community priorities in fuels reduction treatments on both federal and non-federal lands.

Community Wildfire Protection Plans (CWPPs) provide a locally driven framework for understanding wildfire hazards and identifying strategic, cost-effective investments to reduce risk and strengthen preparedness. Through collaborative assessment and discussion, the CWPP process supports coordinated mitigation planning, helps residents prioritize risk-reduction actions, and provides valuable context for wildfire response and recovery.

The purpose of the Custer County Community Wildfire Protection Plan is to support informed wildfire mitigation decisions that enhance public safety and community resilience. The plan identifies wildfire risks across the county and outlines practical strategies to reduce potential impacts to people, property, infrastructure, and natural resources, while promoting long-term community and landscape resilience.

Wildfire is a natural and necessary ecological process across much of the West, but changing climate conditions, prolonged drought, and accumulated fuels have increased the likelihood of larger and more severe fires. In Custer County, wildfire is the highest-ranked hazard in the 2023 Hazard Mitigation Plan, underscoring that wildfire occurrence is inevitable and that proactive planning is essential to reduce consequences when fires occur.

This CWPP focuses on adapting how communities build, live, and manage land in fire-adapted landscapes. It emphasizes mitigation actions that improve defensible space, reduce hazardous fuels, strengthen evacuation and response capabilities, and support safer coexistence with wildfire. By aligning community priorities with science-based strategies, the plan provides a roadmap for reducing wildfire risk while recognizing fire's role in sustaining healthy ecosystems.

CWPP Planning Area

The CWPP planning area encompasses all of Custer County, including the towns of Westcliffe, Silver Cliff and all unincorporated communities in the county. The Rye Fire

Protection District, serving a portion of Custer County along SH165, in the southeast section of the county, is included in the plan. It does not include those portions of Fremont County within the Wet Mountain Fire Protection District.

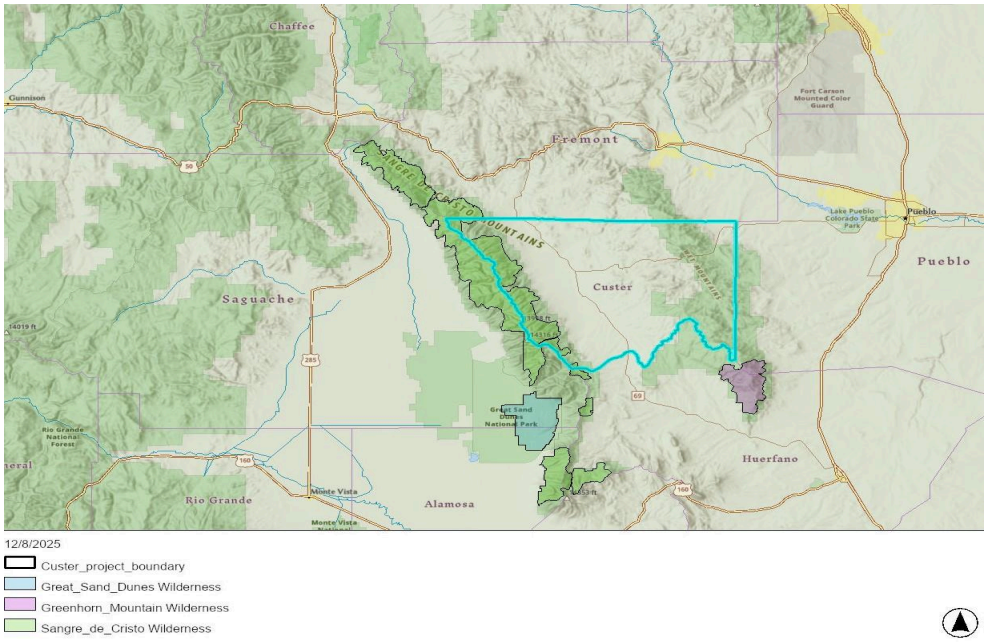
This CWPP is intended to supplement existing or future Community CWPPs, such as the Sangre Foothills and Cuerno Verde CWPPs, whether those plans are updated or new plans are established. (Figure 14)

The CWPP study area does not replace or correspond directly to the Landscape Neighborhoods defined in the 2007 Custer County CWPP. Instead, it takes a broader, current look at the county's communities and subdivision developments, aligning with the National Cohesive Wildland Fire Management Strategy's approach of assessing fire risk and mitigation needs at multiple scales.

Adjacent Counties:

The South Region Colorado counties adjacent to Custer County include: Fremont, Pueblo, and Huerfano, each presenting high wildfire risk in lands contiguous to Custer County. Saguache County lies west of the Sangre de Cristo Mountain Range, which features some of the highest peaks in southern Colorado, including several over 14,000 feet. These steep, rugged mountains generally reduce wildfire risk to Custer County from the west, although under extreme conditions, a fire could potentially cross the range.

Figure 1: CWPP Planning Area Boundary (*Source*: Custer County)

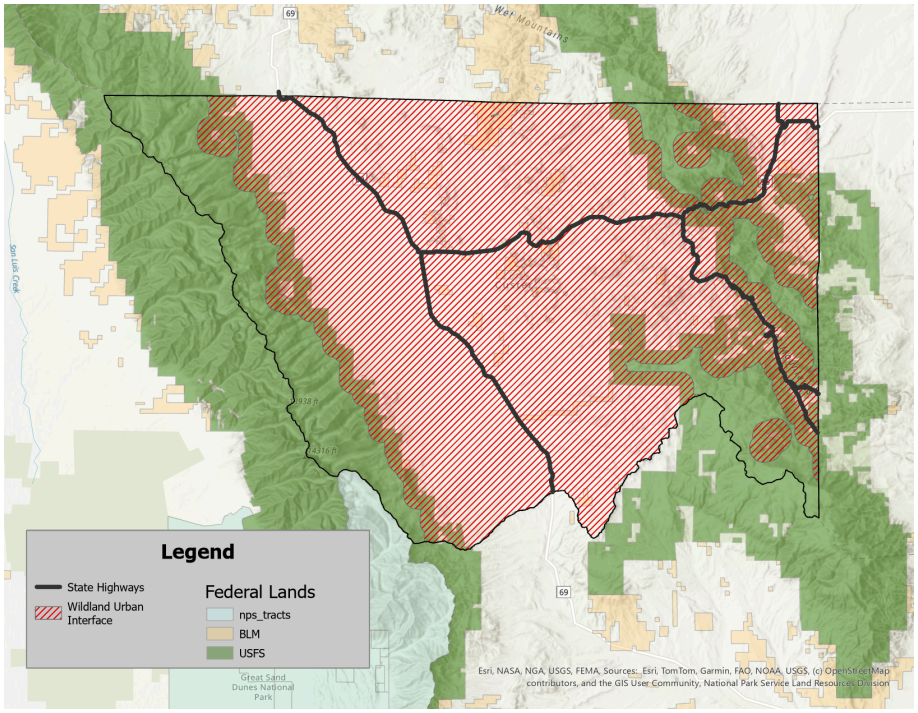


Wildland Urban Interface (WUI) Communities

> **The wildland urban interface (WUI) is any area where the built environment meets vegetative fuels and wildland fire. These communities are especially at risk as places where wildland fire can move from vegetative fuels to the built environment and result in negative impacts on the community and alter fire behavior. Additionally, WUI communities adjacent to urban communities can facilitate urban conflagration, where a wildfire in vegetation transitions into a WUI community and then transitions into urban areas where it becomes an urban fire.**[1]

For the purposes of *this* **Community Wildfire Protection Plan**, the Wildland Urban Interface (WUI) in Custer County is defined as all areas where public lands and human development intersect or influence one another. This includes all private lands—whether developed, subdivided, or undeveloped—as well as public lands within one mile of any private lands, structures, communities, or critical infrastructure. Smaller state and federal parcels, including BLM lands, are incorporated through this one-mile delineation. This definition reflects the extensive intermix of public lands and development across the county and emphasizes the shared wildfire risk, as well as the cross-boundary nature of wildfire behavior, response, and mitigation. (Figure 2)

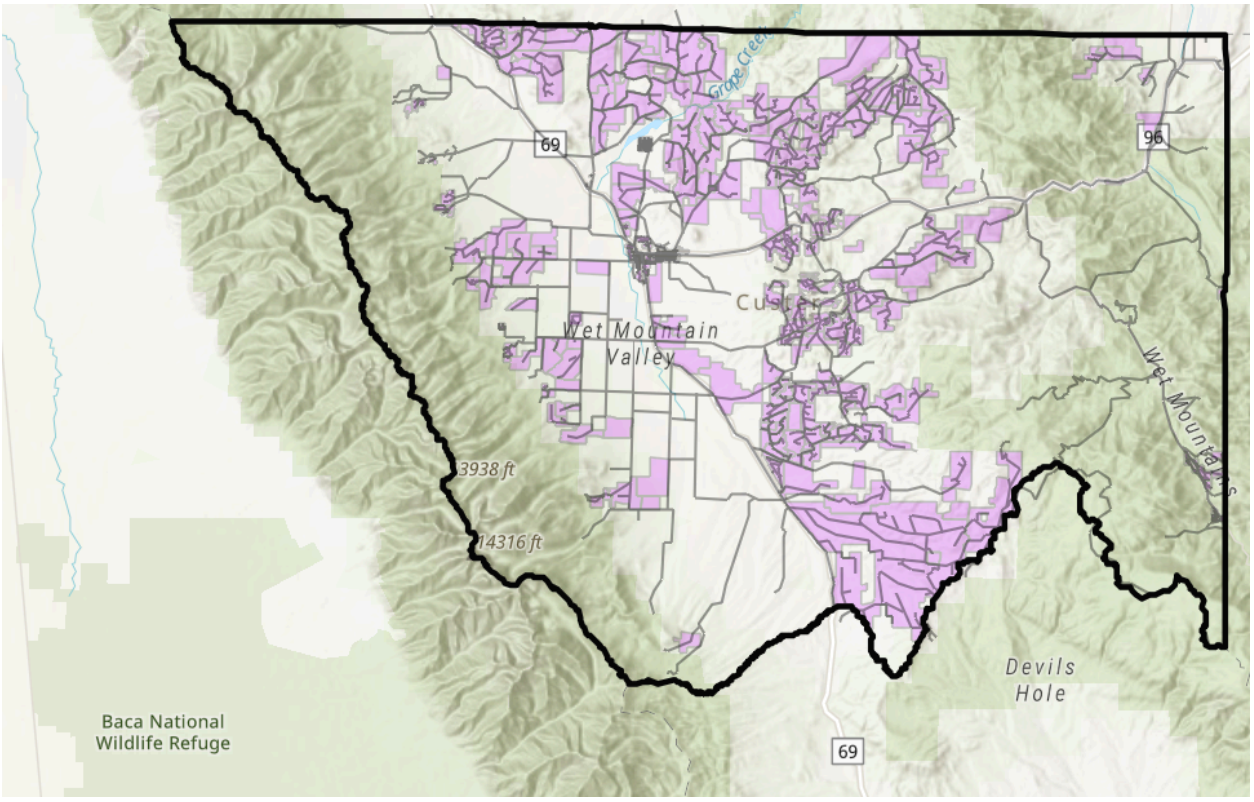
Figure 2: Custer County WUI Current and Potential WUI map layer (*Source*: Custer County)



[1] Colorado State Forest Service CWPP Template Wildland Urban Interface (WUI) definition.

A list of WUI communities shown within the CWPP area boundary is detailed in Appendix D: Community & Subdivision Table

Figure 3: Custer County Subdivision Map (*Source*: Custer County)



For the Custer County project area, it is estimated that 98% percent of the total project area population (5,050) live within the WUI.

A more detailed description of the risk assessment algorithms is provided in the Colorado Wildfire Risk Assessment (Colorado WRA) Final Report. (See Appendix B.)

Figure 4: Custer County Wildland Urban Interface (WUI) Density Map (*Source*: CSFS Colorado Forest Atlas Wildfire Risk Assessment Summary Report)

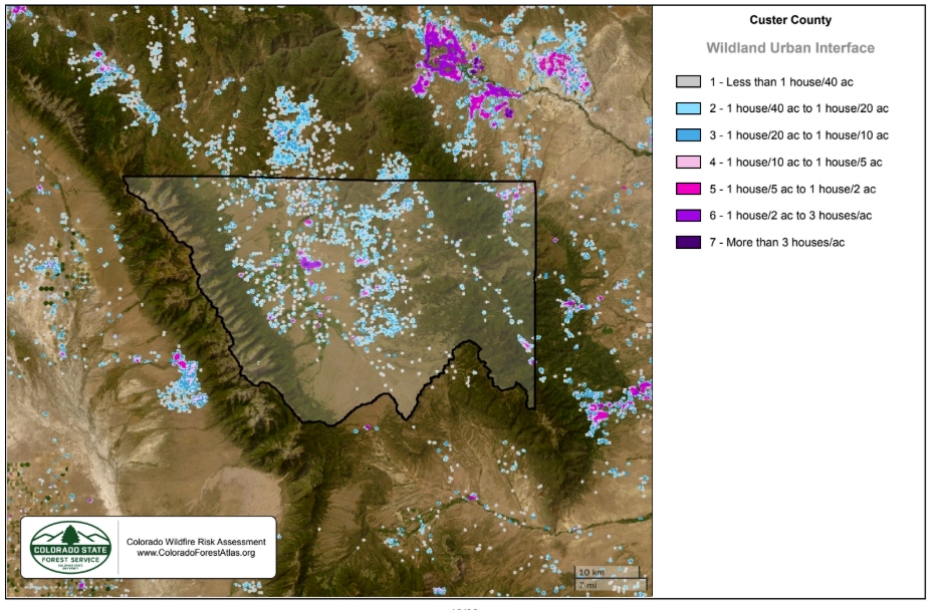


Figure 5: Custer County Housing Density (*Source*: CSFS Colorado Forest Atlas Wildfire Risk Assessment Summary Report)

Housing Density	WUI Population	Percent of WUI Population
1 - Less than 1 house/40 ac	411	8.2%
2 - 1 house/40 ac to 1 house/20 ac	796	15.9%
3 - 1 house/20 ac to 1 house/10 ac	806	16.1%
4 - 1 house/10 ac to 1 house/5 ac	804	16.1%
5 - 1 house/5 ac to 1 house/2 ac	483	9.7%
6 - 1 house/2 ac to 3 houses/ac	1,172	23.5%
7 - More than 3 houses/ac	521	10.4%
Total	**4,993**	**100%**

Housing Density	WUI Acres	Percent of WUI Acres
1 - Less than 1 house/40 ac	28,491	43.2%
2 - 1 house/40 ac to 1 house/20 ac	20,229	30.6%
3 - 1 house/20 ac to 1 house/10 ac	9,879	15%
4 - 1 house/10 ac to 1 house/5 ac	5,060	7.7%
5 - 1 house/5 ac to 1 house/2 ac	1,382	2.1%
6 - 1 house/2 ac to 3 houses/ac	854	1.3%
7 - More than 3 houses/ac	99	0.2%
None	**65,994**	**100%**

Wildfire mitigation on private property in the WUI is essential because these are high-risk areas where property, infrastructure, and people could be impacted by wildfire. Without proper mitigation, wildfire in the WUI can spread rapidly, endangering lives, overwhelming emergency responders, and causing devastating economic losses. Strategies such as: creating defensible space and reducing structural ignitability (home hardening) can significantly lower the risk of fire spreading to homes and critical infrastructure.

From 2010-2020, Colorado's population grew by almost 15% according to the US Census Bureau. Colorado may continue to be one of the fastest growing states in the nation, with much of this growth occurring outside urban boundaries. This increase in population across the state will impact counties and communities that are located within the WUI. (Demographics are detailed in Appendix E: Demographics)

Wildfire Resiliency Code Map

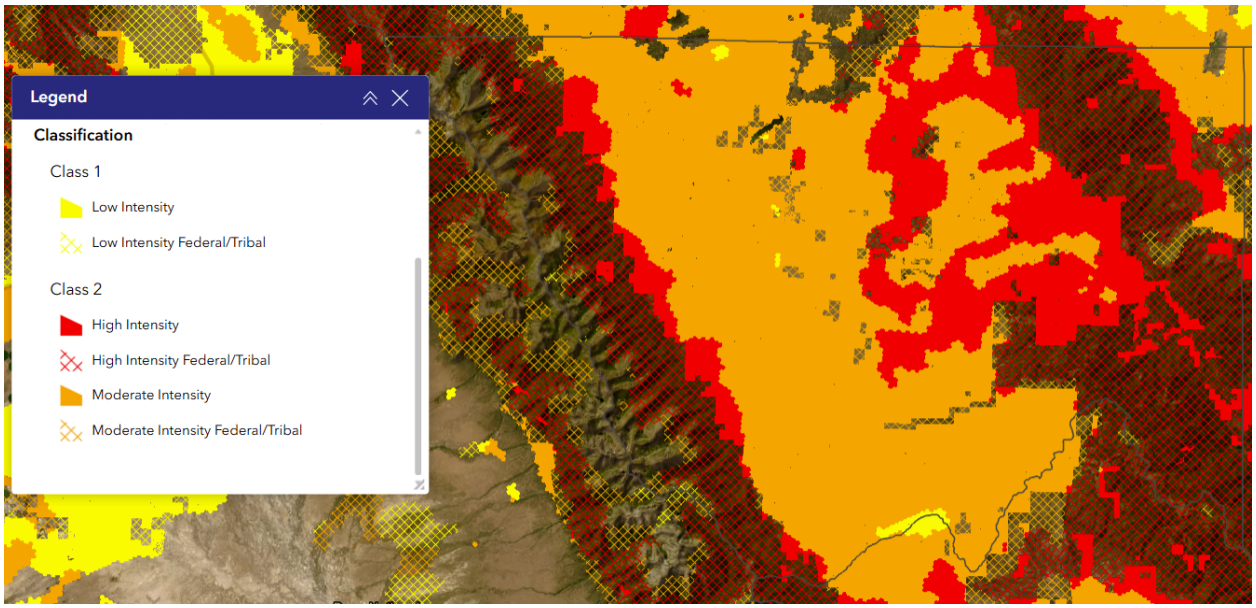
Colorado Senate Bill 23-166 established a Wildfire Resiliency Code Board (WRCB) in the Division of Fire Prevention and Control (DFPC) to help enhance community safety and resiliency from wildfires through the adoption of codes and standards. On 01 July 2025, the 2025 Colorado Wildfire Resiliency Code (CWRC) was adopted.

The Colorado Wildfire Resiliency Code Board (WRCB) also adopted a statewide map that delineates Wildland Urban Interface (WUI) areas . This map is a critical component of the new 2025 Colorado Wildfire Resiliency Code, which establishes minimum building standards for construction within these designated areas. The map defines areas of varying fire intensity (Low, Moderate, and High) based on factors such as vegetative fuels, topography, and weather patterns. These classifications determine the specific code requirements that apply to new construction and additions in a given location. The WRCB map is designed as a tool for the application of the 2025 Colorado Wildfire Resiliency Code. It is not intended for other use.

Custer County does not have its own WUI definition in the county's land use regulations, nor does it maintain a local WUI map layer of its own. As part of a future Master Plan update, the county (as the "Governing Body" or "Authority Having Jurisdiction") could develop its own WUI map layer, rather than relying solely on the state's version. A political subdivision's alternative WUI map must be formally submitted to the Wildfire Resiliency Code Board for review and approval. The WCRB will evaluate the map to ensure it meets or exceeds the state's minimum standards before the map may be adopted or used.

You can explore the WUI boundaries and fire intensity areas using the 2025 Colorado Wildfire Resiliency Code Map on ArcGIS Experience Builder. For a more general, educational assessment of wildfire risk, the Colorado State Forest Service provides a WUI map as well. (Figure 6).

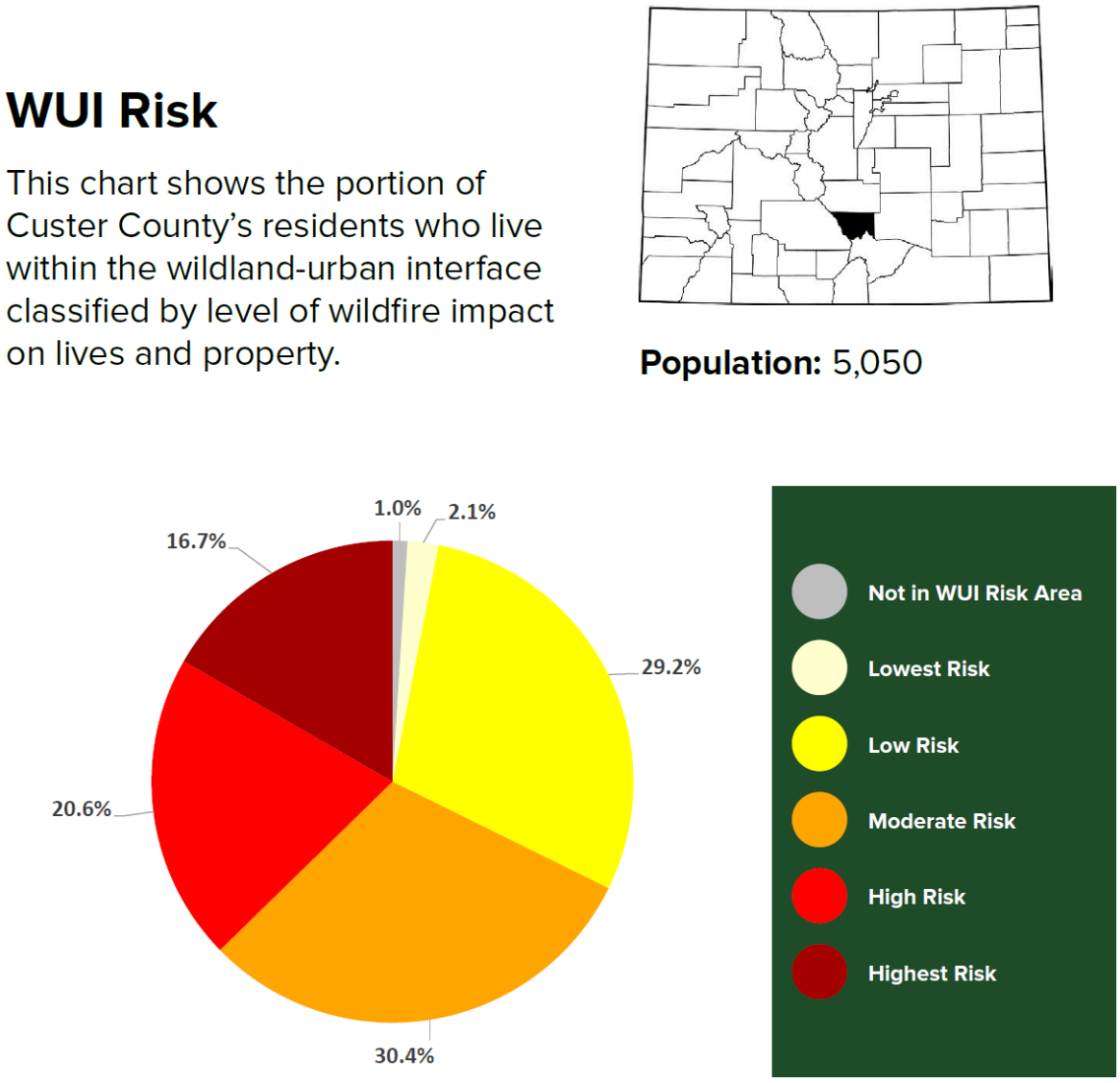
Figure 6: CWRC Current and Potential WUI map*(Source*: 2025 CWRC Code Map (DFPC/CSFS))



(This map is designed as a tool for the application of the 2025 Colorado Wildfire Resiliency Code. It is not intended for other use. Questions about the map can be sent to cdps_dfpc_wrcb@state.co.us.)

WUI Risk Chart

Figure 7: Colorado Forest Atlas Wildland Urban Interface Risk Index - Custer County Summary



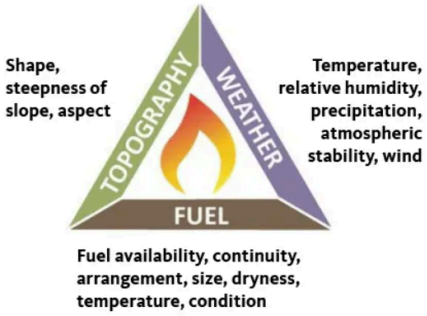
67.7% of residents are in the Moderate-to-Highest Risk WUI Zones.

Additional Localization Notes for Custer County WUI Mapping

Among WUI definitions, the overall concept of the National Institute of Standards and Technology (NIST) Wildland Urban Interface (WUI) Classification (2022) is that:

Structure-Separation Distance (SSD) is the key factor controlling parcel-to-parcel fire spread and guiding appropriate building hardening. NIST defines seven WUI types that fall within three density bands: high, medium, and low density.

In addition to the Structure-Separation Distance (SSD), there are several additional factors to consider, including the Fire Weather Triangle.



Fire Behavior Triangle: Fuel, Weather, and Topography as factors in determining fire behavior.
Credit: Oregon State University

The **fire weather triangle**, more commonly known as the **fire behavior triangle**, is an instructional model used in wildland fire management to illustrate the three primary environmental factors that determine how a fire will behave: **fuels, weather, and topography**.

Other considerations include:

- **Wind exposure:** High-wind corridors (Wet Mountain Valley and parts of Custer County are at risk for extreme wind-driven fire behavior).
- **Access limitations:** Dead-end roads, single-lane driveways, insufficient turnarounds. (Cuerno Verde HOA has thirty (30) dead end roads ending in cul-de-sacs that radiate off of five (5) main ingress/egress roads).
- **Water availability:** Areas lacking reliable hydrants or draft sites.
- **Slope & aspect:** Steep slopes in the Wet Mountains and Sangre de Cristo range could accelerate fire spread, with slope orientation influencing fire behavior during high-wind and dry weather events.
- **Auxiliary fuels:** Auxiliary fuels—including outbuildings, propane tanks, wooden corrals, and perimeter fences—represent common ignition pathways. These features are part of the “built environment” and are not typically represented as fuels in wildfire risk modeling frameworks.
- **Grass-fire potential:** Lower valley areas with flashy fuels and rapid spread potential.
- **Fire history:** Incorporate past incidents and near-misses into hazard weighting.

- **Fire response limitations:** Sparse apparatus, limited qualified personnel, and long travel distances increase response times and overall vulnerability.

Local Area Fire History 2000-2025

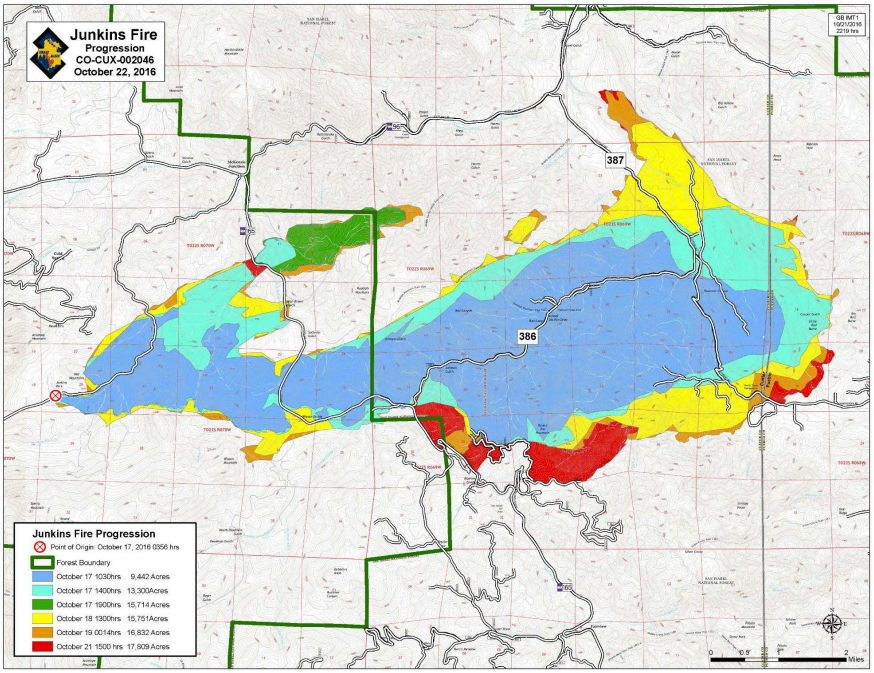
Table 1: Fire History 2000-20025

Date	Fire	Counties	Total Acres	Cause	Structures Lost / comments
06/22/24	Oak Ridge Fire	Pueblo/Custer	1,310	Lightning	0
10/14/23	Saint Charles Fire	Pueblo/Custer	492	Lightning	0
06/27/18	Spring Creek Fire	Costilla/Huerfano	108,045	Human caused	140 structures (+cattle)
10/17/16	Junkins Fire	Custer/Pueblo	18,403	Power line / Wind Event	9 residences / 17 outbuildings / 28 cattle
10/03/16	Beulah Hills Fire	Pueblo	5,232	Human caused / Excavator	8 residences
07/12/16	Hayden Pass	Fremont/ Custer	16,562	Lightning	2 residences in Fremont County
10/23/12	Wetmore Fire	Custer	1,998	Power line	15 residences
07/07/11	Mason Fire	Custer	154	Unknown	
06/12/11	Duckett Fire	Custer	4,690	Campfire	
04/26/11	Sand Gulch Fire	Custer	555	Lightning	Near Greenwood
06/14/06	Tyndall Gulch	Custer	541	Power line	8 miles E on SH 96
07/09/05	Mason Gulch	Custer/Pueblo	11,716	Lightning	
04/30/02	Cuerno Verde	Custer	442	Human caused/burning trash during a burn ban	4 structures incl. 2 residences
06/02/02	Iron Mountain Fire	Fremont	4,400	Tipped over charcoal grill during a burn ban	100+ structures, incl 88 homes

Fast Fires

A **fast fire** is a wildfire defined by its *rate of spread*—often thousands of acres per day—rather than its total size. These fires are driven by dry, easily ignitable fuels (especially grasses and shrubs) combined with strong winds. Although they represent only a small fraction of all U.S. wildfires, they account for the majority of structure loss.

Figure 8: Junkins Fire 2016 Progression Map (*Source: Great Basin Incident Management Team)*



High winds on October 17, 2016, fueled the Junkins Fire, growing over 15,000 acres in the first fifteen hours - and meeting the key characteristics of a fast fire. The Junkins fire was first reported shortly before 4 am, and moved into Pueblo County the same day. Widespread evacuations were ordered, including for the town of Beulah.

Key Characteristics

- **Extremely rapid growth:** Fast fires can expand at rates such as 4,000 acres per day- roughly two football fields per minute in some regions.
- **Highly destructive:** From 2001–2020, nearly **90%** of all U.S. homes destroyed by wildfire were lost to fast-moving fires.
- **Fuel- and weather-driven:** They commonly occur in grasslands and shrublands during dry seasons, when winds can carry embers far ahead of the flame front.

- **High societal impact:** Their speed leaves little time for evacuation or a coordinated emergency response, creating severe threats to life and property.

Why They Are Worsening

Recent research shows fast fires are becoming more extreme, with the average maximum growth rate of the fastest fires in the Western U.S. increasing by **about 250%** over the last two decades. These firestorms typically require three elements:

1. **An ignition source**
2. **Dry, receptive fuels**
3. **Strong winds**

How Common They Are — and How Much Damage They Cause

Nationwide analysis from 2001–2020 shows that fast fires:

- Represent only **2.7%- 3%** of all wildfires
- Cause roughly **89%** of all destroyed or damaged homes
- Are associated with a majority of wildfire-related fatalities and a substantial portion of suppression costs

Home Destruction, Embers, and the Home Ignition Zone

Research consistently shows that most homes ignite from **embers and small surface flames**, not from large flame fronts. Dr. Jack Cohen's (USFS) pioneering work in the late 1990s established the concept of the **Home Ignition Zone (HIZ) -** the home itself and the immediate surroundings where building materials, vegetation, and debris create vulnerability.

Cohen demonstrated that:

- Embers can ignite structures even when the main fire is far away.
- The condition of the HIZ largely determines whether a home survives.

- Managing vegetation, maintaining defensible space, and using fire-resistant materials significantly improves structure survival.

These principles form the foundation of the **Fire Adapted Communities** approach, which helps communities reduce risk by preparing homes, infrastructure, and residents to withstand wildfire impacts. Fire Adapted Communities (FAC) work is ongoing because it is not a one-time checklist or an end-point, but rather a holistic and adaptive framework for communities to **coexist with wildfire risk indefinitely**.

CWPP Goals

Goals are essential to establishing clear direction and focus for the CWPP. They define what the county seeks to achieve and help ensure that implementation efforts align with local priorities, available resources, and community capabilities. Below are the *overarching* goals for Custer County.[2]

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 education.

Planning Process

The development of the Custer County CWPP required multiple steps and the involvement of individuals from various groups and organizations. The first step in the process was to create the Custer County CWPP Fire Council, the planning team that would serve as the decision-making committee for the plan.

[2] Each of the three overarching goals should be considered independently; their order does not imply relative priority or sequencing.

This team consisted of residents and representatives from Custer County, the Wet Mountain Fire Protection District, the Rye Fire Protection District, the Wetmore Volunteer Fire Department, BLM, USFS, CSFS, NRCS, Wet Mountain Valley Outdoors Regional Partnership Initiative, and consultants from Fire Adapted Colorado and the Arkansas Watershed Collaborative (Table 2).

Members of the planning team began meeting in mid-2023 and throughout the planning development cycle to discuss plan components, review data, and plan upcoming activities.

Actively engaging stakeholders was essential to ensuring the plan's success. The Custer County CWPP Fire Council meetings provided an excellent way for the planning team to work with local stakeholder groups.

Two community meetings were held during the CWPP Public Comment period, one virtually on January 8th and an in-person meeting on January 10th, in addition to public comments.

Figure 9: CWPP community meeting engagement 1/10/2026 (*Source: Custer County)*

Community Engagement Survey

Other stakeholder engagements include a CWPP public survey and community meetings. The CWPP public survey received 163 responses *(Appendix A: CWPP Public Survey Summary*) and helped the planning team better understand community values, wildfire knowledge, and support for different wildfire mitigation options.

Not all questions were required to be answered, and the response rate varied from 96 to 163 responses for each question.

All 163 respondents responded to the question: *How do you perceive the wildfire risk to Custer County?* Only 3% (five responses) indicating a Low Risk. See Figure 10.

I believe my county and local community/subdivision are prepared for a wildfire - also received all 163 responses, with 45% of the respondents stating they disagree or strongly disagree that the county and their local community/subdivision are prepared for a wildfire. See Figure 11.

Figure 10: Survey Bar Graph (*Source: CWPP Community Engagement Survey Dec. 2025)*

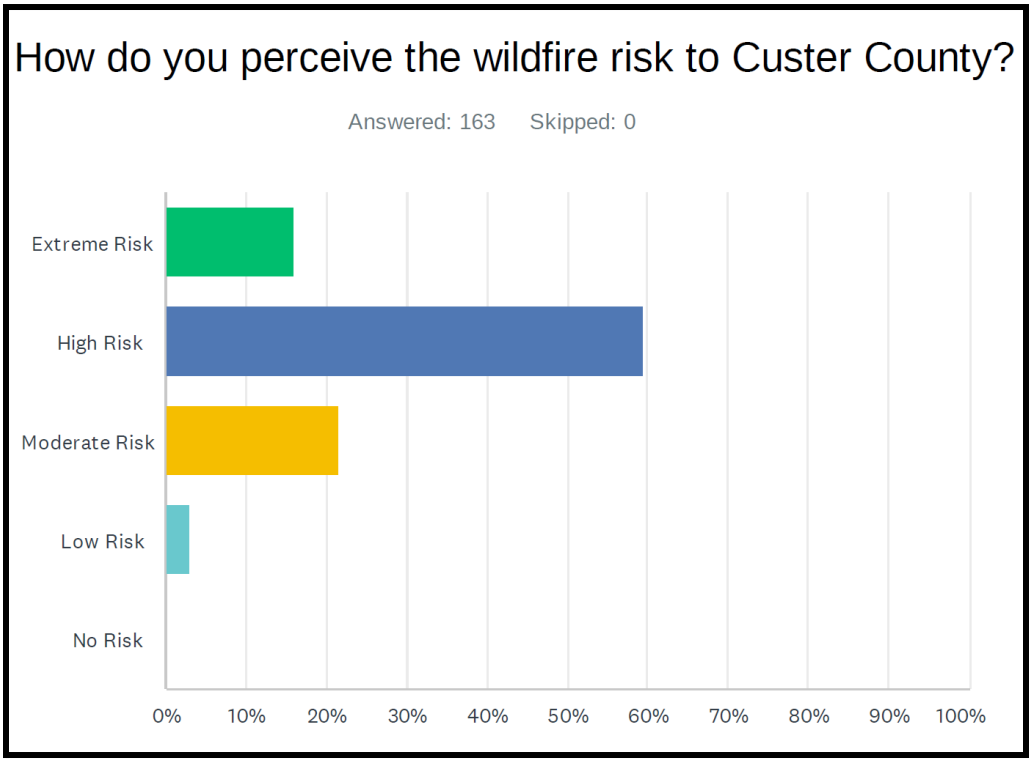
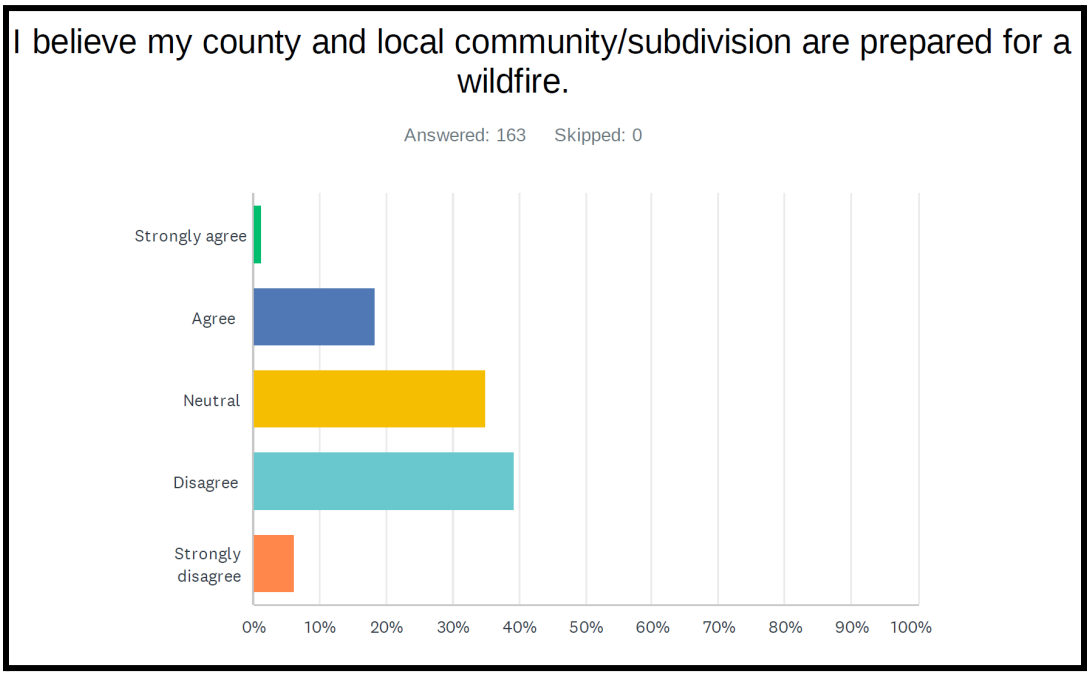


Figure 11: Survey Bar Graph *(Source: CWPP Community Engagement Survey Dec. 2025)*



CWPP Fire Council Planning Team Members

Table 2: Custer County CWPP Fire Council Planning Team Members

Name	Agency/Jurisdiction
Robyn Knappe	Custer County Emergency Management
Reggie Foster	CSU Extension, Custer County
John Mapes	Custer County IT/GIS Department
Steven Wiebke	Custer County Mitigation Team
Lloyd Rich Smith	Custer County Sheriff's Office
Susan Barnes	Custer County Sheriff's Office
Justin Robinson	Custer County Sheriff's Office
Jeremiah Coleman	Wet Mountain Fire Protection District
Ruth Roper	Wetmore Volunteer Fire Department
Ross Gallegos	Rye Fire Protection District
Destiny Chapman	US Forest Service, San Carlos Ranger District
Alfonso Montoya	US Forest Service, San Carlos Ranger District
Glenda Torres	Bureau of Land Management
Matthew Norden	Bureau of Land Management
Robert Bidner	Natural Resources Conservation District
Danny Schell	Colorado State Forest Service
John VanDoren	Wet Mountain Valley Outdoors (RPI Initiative)
Chris McKellip	Building & Zoning Town of Silver Cliff

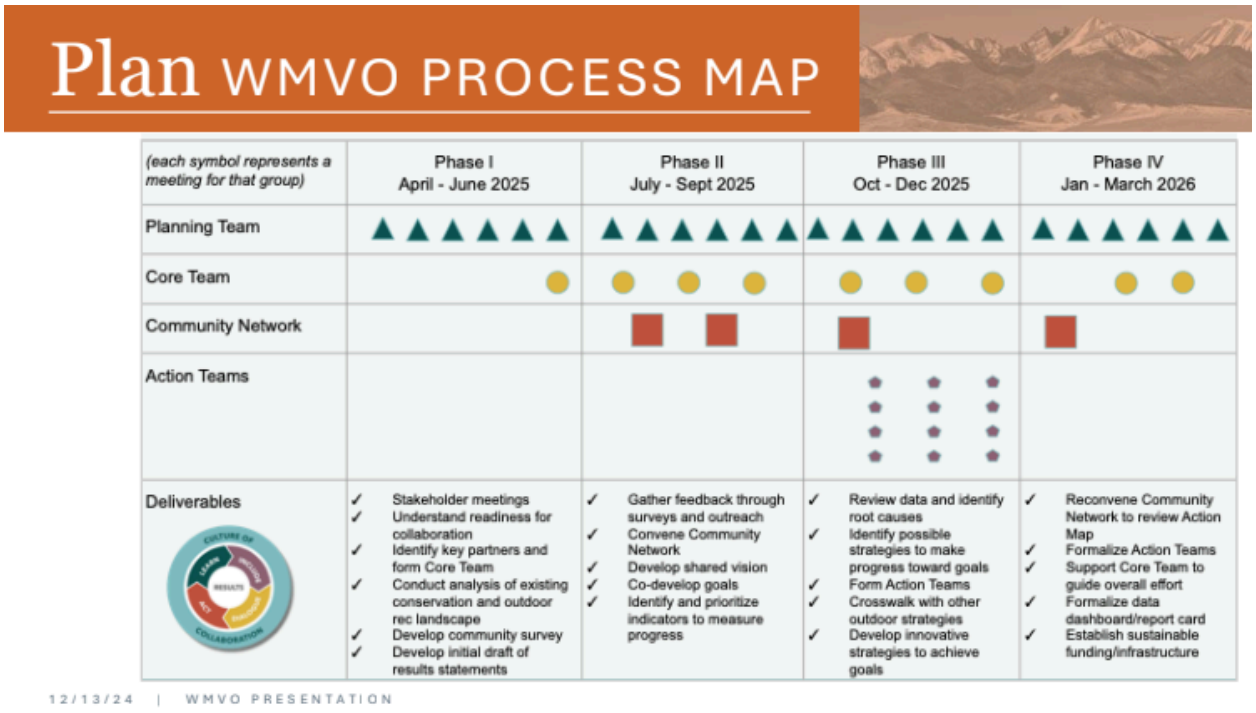
Melane Rella	Deputy Clerk Town of Westcliffe
Yates McConnell*	Arkansas River Watershed Collaborative (ARWC)
Sophie Pullen*	Fire Adapted Colorado
Cindy Howard*	Fire Adapted Colorado

**Served in a consultant/advisory role.*

Wet Mountain Valley Outdoors

The Wet Mountain Valley Outdoors (WMVO) Regional Partnership Initiative launched a planning process in April 2025. The WMVO RPI has held dozens of board, core planning team, action team, and public meetings, as well as several community surveys. Collectively, this engagement points to the same conclusion: wildfire resilience and watershed protection are among the community's most consistent and urgent priorities.

Figure 12: Wet Mountain Valley Outdoors Process Map (*Source*: WMVO)



The final piece of CWPP outreach was the project mapping and story map, which would serve as an interactive online version of the CWPP. The online StoryMap can be viewed here.

Community and Partner Engagement, Cross-Boundary Collaboration

Community engagement and diverse collaboration is an essential part of CWPPs. Engaging community members in wildfire preparedness and risk reduction activities is a critical component of wildfire resilience efforts and is based on communication and trust. The relationships and processes that are developed during the creation of this CWPP can be a great foundation for future mitigation efforts.

Wherever possible, the planning team worked collaboratively to align planning efforts with partners in surrounding regions. CWPP integration and cross-boundary collaboration strengthens wildfire risk reduction and community resilience by coordinating efforts with partners and other planning participants. Through this coordination, the goal is to establish an inter-connected mosaic of landscape treatments that work across boundaries.

Wildfire Mitigation Action Themes

- **Enhance Alert, Warning, Evacuation, and Reentry Systems:** Strengthen community life-safety response capabilities before, during, and after wildfire events.

- **Strengthen Evacuation Routes:** Improve road signage, reduce hazardous fuels along key corridors, and identify or establish Temporary Fire Refuge Areas (TFRAs).

- **Secure Resources for Implementation:** Obtain funding and staffing to carry out identified wildfire mitigation projects and actions.

- **Support Risk Assessment and Prioritization:** Fund and implement a Risk Assessment Decision Support (RADS) project to identify additional vegetation management and mitigation opportunities, improve project prioritization, and cross-boundary collaboration.

- **Protect and Restore Watersheds:** Improve or create wet meadows and implement other wildfire-related watershed actions identified in related planning efforts.

- **Integrate Wildfire Preparedness across Departments:** Promote and coordinate education and outreach by embedding best practices, preparedness actions, and appropriate land use actions into all relevant county (and town)

departments' standard operating procedures, ensuring consistent guidance before, during, and after wildfire events.

- **Enhance Wildfire Response Capabilities:** Strengthen operational readiness for wildfire suppression and emergency response.

- **Reduce Hazardous Fuel in High-Value Risk Areas (HVRAs):** Address fuel loading in areas where wildfire poses the greatest threat to people, property, and critical infrastructure.

- **Facilitate Beneficial Wildfire Management:** Allow for controlled or natural fire use where appropriate to maintain ecosystem health and reduce long-term risk.

About Custer County

Topography

Custer County encompasses 738 square miles of land area, extending from the high plains at its northeastern corner, across the Wet Mountains, into the Wet Mountain Valley, and to the Sangre De Cristo Range. Elevation ranges from 6,081 feet in the northeastern community of Wetmore to the 14,294-foot summit of Crestone Peak in the Sangre De Cristo Range. Other peaks in excess of 14,000 feet, framing the western boundary of the county, include Crestone Needle, Kit Carson, Challenger Point, and Humboldt Peak, with numerous additional peaks ranging from an elevation of 10,185 feet (Middle Knob) to 13,931 feet (Mount Adams). The Wet Mountain Valley lies at an elevation of approximately 8000 feet between the Sangre De Cristo Range and the Wet Mountains, which rise to an elevation of 11,784 feet at St. Charles Peak.

The natural topography of the landscape can either accommodate future land use activity or be a constraint to development. As slope increases, land generally becomes less suitable for development, with increased risks for wildfire and unstable soils, problems with road design, construction and maintenance, and access difficulties for fire protection equipment.

Slopes generally greater than 15 percent present specific challenges to development, with slopes in excess of 30 percent considered hazardous. Slopes in excess of 15 percent are generally found in the Wet Mountains and the Sangre De Cristo Range. Slopes less than 15 percent are generally found in the Wet Mountain Valley, surrounding foothills and within the incorporated communities of Westcliffe and Silver Cliff. The Zoning Resolution and Subdivision Regulations have been revised to address

development activities in environmentally constrained areas such as steep slopes, wildlife corridors, wildfire hazard areas, and areas with adverse soil properties.[3]

Ownership

Of Custer County's 474,424 acres, 190,524 acres (40%) is public land, and 283,881 acres (60%) is private land (Table 3). Agricultural land comprises approximately 75 percent of private land ownership in Custer County. (Table 4) See also Land Ownership Map, (Figure 12).

The majority of residential and vacant land is located in over 136 platted subdivisions. According to the 2020 Census, Custer County has 4,198 housing units; approximately 88.23% are owner-occupied.

Public land is managed by the United States Forest Service (USFS), Bureau of Land Management (BLM), State of Colorado, and the local governments of Custer County, Silver Cliff and Westcliffe. USFS lands include portions of the San Isabel National Forest, and the Sangre De Cristo Wilderness Area

Table 3: Public Land Ownership in Custer County - (*Source:* Custer County Assessor's Office; 2024)

Public Land	Number of Acres	Percentage of Total
U.S. Forest Service	163,647	85.90%
Bureau of Land Management	14,578	7.66%
State of Colorado	10,160	5.33%
Local Government	2,139	1.11%
TOTAL	**190,524**	**100%**

Table 4: Private Land Ownership in Custer County - (*Source:* Custer County Assessor's Office; 2024)

Private Land	Number of Acres	Percentage of Total
Agriculture	231,095	76.59%
Residential	42,862	14.21%
Commercial	558	0.18%
Industrial	11	0.00%
Vacant	24,936	8.26%
Religious	290	0.10%
Other	1,983	0.70%
TOTAL	**283,881**	**100%**

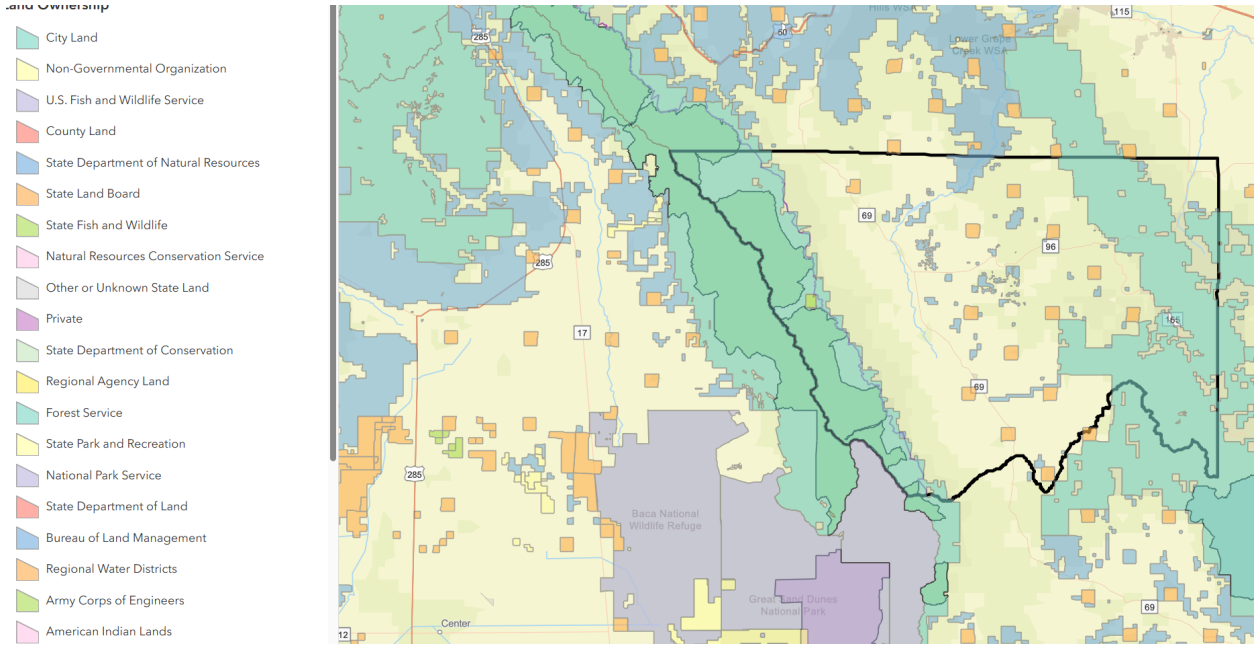
The Custer County Abstract of Assessment for 2024, total Residential Property valuations in Custer County of over $117 million. (Table 5)

[3] Custer County Master Plan 2016

Table 5: Assessed Valuation - Source: Custer County Assessor's Office; 2024

Private Land	Assessment
Vacant Land (residential)	26,739,760
Residential	90,468,340
Commercial	11,533,340
Industrial	321,820
Agriculture	18,797,950
Natural Resources	685,650
Producing Mines	0
Oil & Gas	0
State Assessed	6,567,600
Assessed Value	159,401,590
Exempt Value	14,767,020
TOTAL VALUATION	**174,232,580**

Figure 13: Land Ownership



Living with Fire - Wildfire Preparedness & Situational Awareness

Individual Preparedness

While the wildfire mitigation actions and vegetation management projects listed in this plan will help mitigate the impacts of wildfire, homeowners and residents must also do their part to protect themselves and their property.
All property owners in Custer County need to take steps to harden their homes and have defensible space. Research has demonstrated that homes with a Class A-rated roof and defensible space have an 85% chance of surviving a wildfire. Information and recommendations regarding structural ignitability and defensible space can be found in CSFS publications available here.

In addition to improving structure survivability, proactive mitigation is increasingly important in the context of insurance **affordability and availability.** Wildfire risk is fueling a recent, steep increase in the cost of insurance for Colorado homeowners, making it some of the most expensive in the country, according to a new report by Colorado State University's Regional Economic Development Institute.

The analysis of recent trends in Colorado's homeowners insurance market ranks Colorado as the sixth-costliest state for homeowners' insurance in the nation. The average insurance premium is $4,072 annually for $300,000 in coverage, and costs are rising — particularly in wildfire-prone areas. From 2018 to 2023, premiums increased a staggering 58%. [4]

Homeowners who take steps to reduce wildfire risk—such as implementing defensible space, using fire-resistant building materials, and maintaining safe landscaping—may improve their eligibility for coverage and reduce premiums. Conversely, properties lacking these protections may face higher insurance costs, limited coverage options, or even loss of coverage entirely. Taking mitigation actions not only safeguards lives and property but also helps address the financial and insurance challenges posed by growing wildfire risk.

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

[4] Regional Economic Development Institute - REDI@CSU report | August 2025

and programs below all relate to wildfire mitigation, response, and recovery within Custer County.

County Planning Documents:

- Custer County Zoning Resolution (2024)
- Custer County Land Use Master Plan (2016)
- Custer County Subdivision Regulations (2019)
- Custer County Emergency Operations Plan (2023)
- Custer County All Hazard Mitigation Plan (2023)
- Custer County Noxious Weed Management Plan (2025)
- Custer County Noxious Weed Management Plan - Implementation (2025)
- Custer County Homeowners Packet “Getting Started” (2019)

Existing CWPPs:

The previous Custer County CWPP was completed and approved in 2007. The Custer 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, homeowners associations, and individual fire protection districts can take further action by developing their own area-specific CWPPs, which would tie to the countywide CWPP.

The following area-specific CWPPs can be found in Custer County.

- Sangres Foothills (2018) (11 MB PDF)
- Cuerno Verde Homeowners Association (2019) (17.3 MB PDF)

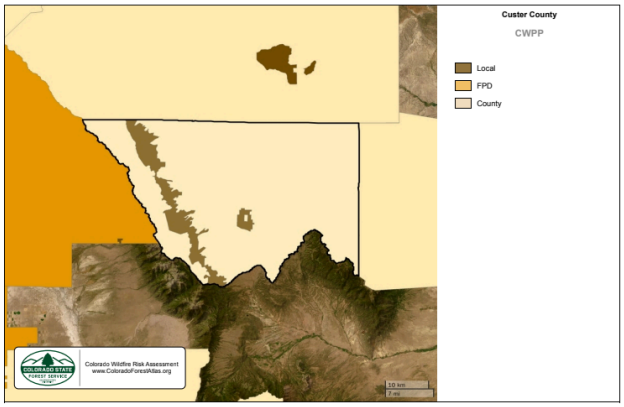


Figure 14: County CWPP’s (Source: CSFS)

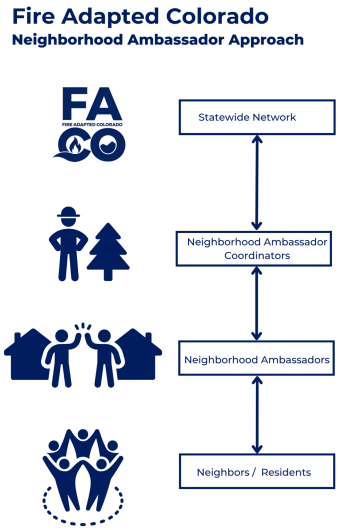
Firewise USA®: The National Fire Protection Association administers the Firewise USA recognition program and provides a framework for neighborhoods and communities to

increase ignition resistance of homes and reduce wildfire risks locally. There is currently one Firewise participant in Custer County:

- Spread Eagle Home Owners Association.

Neighborhood Ambassadors: The Neighborhood Ambassador Program empowers residents to drive wildfire adaptation in their communities, providing training, resources, and support to volunteers while fostering partner collaboration—effective regardless of Firewise status. The program in Custer County began in 2024, and there are currently several neighborhood ambassadors organizing efforts in thirteen homeowners associations:

- Blumeneau
- Bull Domingo Ranch
- Cuerno Verde
- Dipert Tracts
- Juniper Hills South
- Ley Subdivision
- Rosita Hills
- Schulze Ranch
- Silver Cliff Ranches
- Spread Eagle
- Wakefield Hills
- Wapiti Creek
- Woods at Buck Mountain



Custer County Mitigation Team:

Established in April 2024, the Custer County Mitigation Team (CCMT) is a volunteer-based program composed of community volunteers and participants from the Neighborhood Ambassador Program, the Custer County Sheriff's Office, and the Wet Mountain Fire Protection District. The CCMT maintains an ongoing commitment to training, community outreach, and on-the-ground wildfire mitigation projects.

CCMT provides training opportunities to its members through county support and a variety of State of Colorado grant programs. These resources help build workforce capacity, support equipment acquisition, and advance outreach, implementation, and mitigation efforts. The program supports Home Ignition Zone assessments and a broad range of wildfire prevention and risk-reduction activities.

Members receive training in home ignition and structural risk assessments for private landowners, prescribed fire implementation and mentoring, and fuels reduction skills

such as tree felling and slash removal or chipping. The program is further strengthened through regional partnerships and collaboration with fire-adapted community networks and related organizations.

The team is currently supervised by the Custer County Office of Emergency Management. Available equipment includes:

- 1 - 16’ dump trailer
- 1- Vermeer BC1500 chipper
- 4- Chainsaws, Personal Protective Equipment (PPE), and small tools

Emergency Notifications

Emergency notifications are used to communicate critical public safety topics, including evacuations, wildfires, and other emergency notifications. All residents, visitors, and family members are encouraged to sign up for alerts.

- These Opt-In Alerts can be received through landline phones, cell phones, text messages, and email - however, they won’t reach you without first signing up.

- When residents create an opt-in account, they choose how they want to receive emergency alerts. All landline phones are automatically in the system. If you would like to receive emergency alerts on your cell phone, text device or email, it is important that you register!

Targeted messages by location can be received if addresses are provided. It is essential that everyone listens to all emergency notifications and follows any directions within those messages. There are many areas in the county with limited cell coverage. These areas can be challenging for the county to reach folks with emergency messaging - Emergency personnel can't notify every house that could be in danger during an emergency. These alert notifications are the best way to stay updated on critical information, including evacuations.

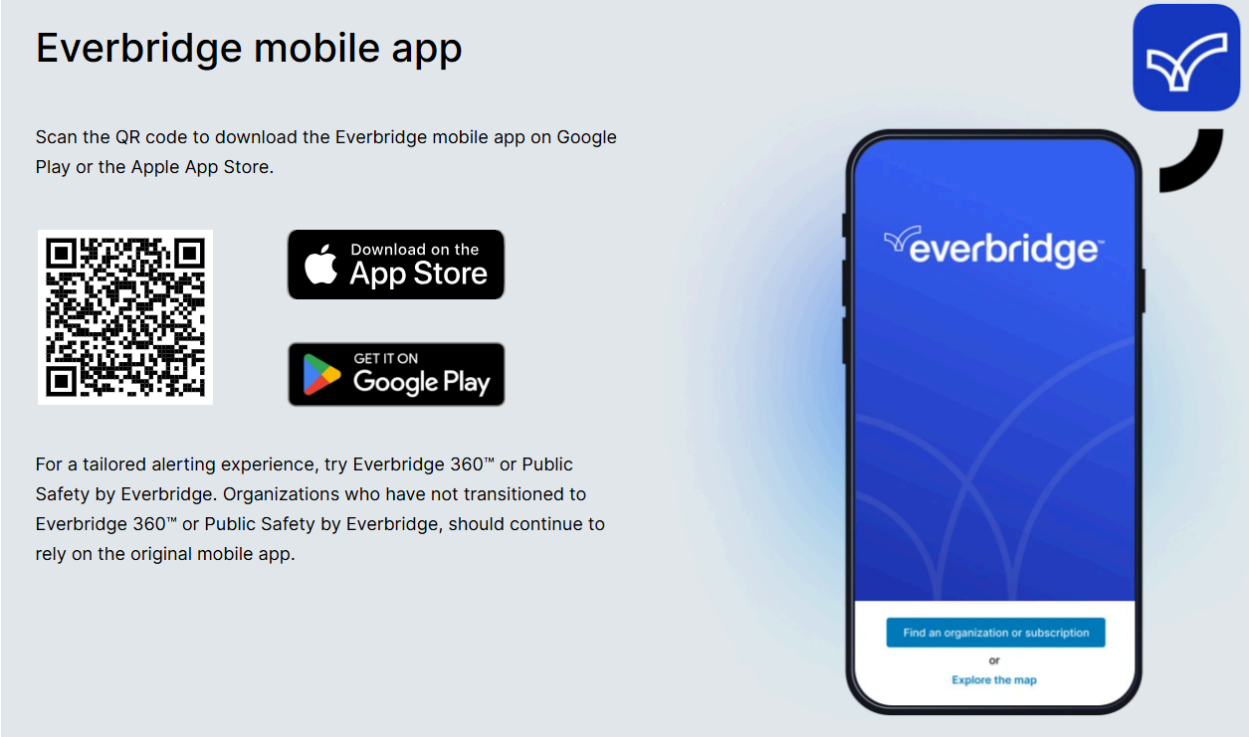
Custer County utilizes the Everbridge Mass Notification system - a trusted emergency notification system that allows you to receive critical alerts—such as severe weather and public safety information - directly to your phone or email.

Get alerted about emergencies and other important community news by signing up for the Emergency Alert Program. This system can provide you with critical information quickly in a variety of situations, such as wildfires, flooding, severe weather, unexpected road closures, missing persons and evacuations of buildings or neighborhoods.

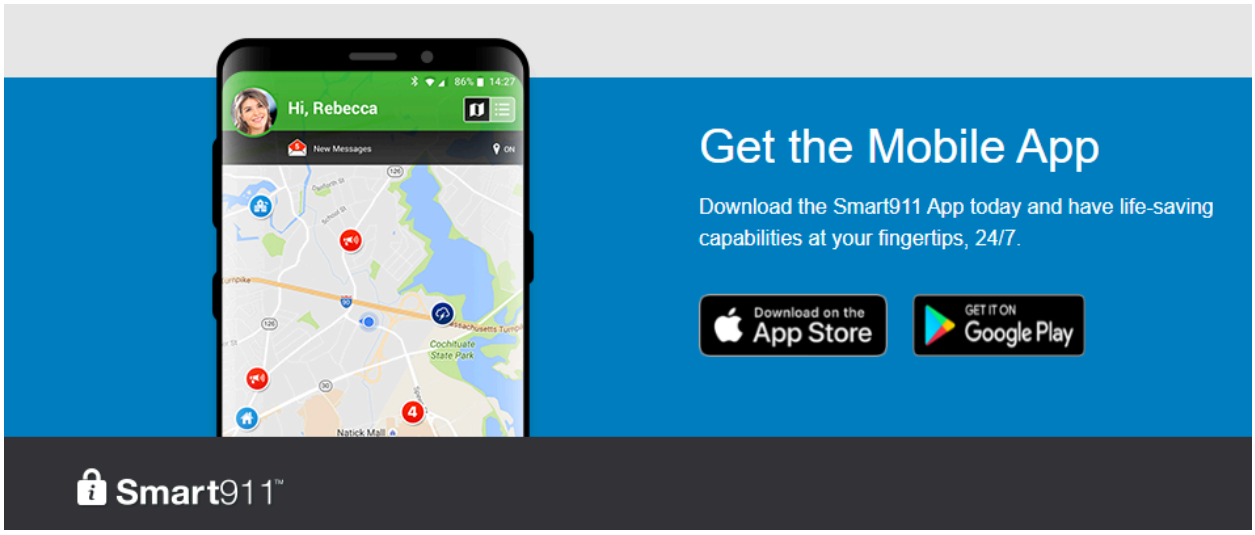
You will receive time-sensitive messages wherever you specify, such as your home, mobile or business phones, email address, text messages and more. You pick where and you pick how.

Signup for Everbridge notifications for Fremont and Custer Counties at:
https://member.everbridge.net/355009111785665/login.

The Everbridge app allows you to view Everbridge notifications in a map view, even when the alert is not targeted to your specific location. This feature offers situational awareness of emergency notifications that may be occurring in the area, but not at your location.



Pueblo County uses the Rave Alert System **Emergency Notification System (ENS)** The ENS is utilized by their emergency managers and 911 center to notify the public about critical situations, life-safety protective actions, and other important information. Smart911 is a core part of the Rave Mobile Safety Platform.



Rave Signup: https://www.smart911.com/smart911/login.action?lpse=1.
The number on your caller ID will be (719).

See also, the Pueblo County Emergency Status Board and Evacuation Report Links at https://www.pueblosheriff.com/394/Pueblo-Emergency-Status-Board.

- Custer County residents located in the Rye Fire Protection District inclusion are encouraged to sign up for the **Rave Alert system**[5] **- *AND Everbridge.***

About Wireless Emergency Alerts

During an emergency, alert and warning officials must quickly provide the public with life-saving information. Wireless Emergency Alerts (WEAs), made available through the Integrated Public Alert and Warning System (IPAWS) infrastructure, are one way public safety officials can quickly and effectively alert and warn the public about serious emergencies.

WEAs are short, geographically targeted emergency messages sent by authorized officials to WEA-enabled mobile phones via cell towers, without requiring app downloads or subscriptions. These warnings cover imminent threats, AMBER alerts, and public safety information, using a unique audio/vibration signal to grab attention.

What you need to know about WEAs:

[5] Rave Mobile Safety (Rave) acquired the SwiftReach Networks (SwiftReach)

- WEAs can be sent by state and local public safety officials, the National Weather Service, the National Center for Missing and Exploited Children, and the President of the United States
- WEAs can be issued for three alert categories – imminent threat, AMBER, and presidential
- WEAs look like text messages but are designed to get your attention and alert you with a unique sound and vibration, both repeated twice
- WEAs are no more than 90 characters and will include the type and time of the alert, any action you should take, as well as the agency issuing the alert
- WEAs are not affected by network congestion and will not disrupt texts, calls, or data sessions that are in progress
- Mobile users are not charged for receiving WEAs, and there is no need to subscribe
- To ensure your device is WEA-capable, check with your service provider
- How to Opt In to Wireless Emergency Alert Tests
    - https://www.fcc.gov/sites/default/files/weatest_opt-in_instructions.pdf

Emergency Alert System

- The Integrated Public Alert and Warning System (IPAWS) modernizes and integrates the nation's existing and future alert and warning systems, technologies, and infrastructure.
- The Emergency Alert System (EAS) is a national public warning system that requires broadcasters, satellite digital audio service and direct broadcast satellite providers, cable television systems, and wireless cable systems to provide the President with a communications capability to address the American people within 10 minutes during a national emergency.
- State and local authorities may also use EAS, in cooperation with the broadcast community, to deliver important emergency information, such as weather information, imminent threats, AMBER alerts, and local incident information targeted to specific areas.
- The President has sole responsibility for determining when the national-level EAS will be activated. FEMA is responsible for national-level EAS tests and exercises.

- EAS is also used when all other means of alerting the public are unavailable, providing an added layer of resiliency to the suite of available emergency communication tools.

NOAA Weather Radio

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information from the nearest National Weather Service office.

- NWR broadcasts official warnings, watches, forecasts, and other hazard information 24 hours a day, 7 days a week.
- It also broadcasts alerts of non-weather emergencies such as national security, natural, environmental, and public safety through the Emergency Alert System.

Vulnerabilities of Technology-Based Alert & Warning Systems

- **Power outages:** Wildfire, wind, and severe storms can knock out the electrical grid, disabling cell towers, internet routers, landline infrastructure, and home alerting devices. Even short outages can interrupt the flow of critical warnings.
- **Telecommunications failures:** Cell networks can become overloaded during emergencies, causing delays or preventing message delivery. Physical damage to towers or fiber lines can also disrupt service.
- **Opt-in limitations:** Many alerting platforms require residents to sign up manually. Participation is often low, leaving significant portions of the population unregistered and unreachable during fast-moving events.
- **Device dependency:** Alerts rely on people having access to a working device -charged phones,iinternet-connected computers, functioning landlines, or powered radio/TV receivers.
- **Geographic accuracy issues:** Systems that use geo-targeting may under- or over-alert depending on signal coverage, GPS accuracy, and network congestion. Rural and mountainous areas are especially affected.
- **Accessibility and language barriers:** Individuals with hearing, vision, cognitive, or language limitations may not receive or understand alerts unless the system supports accessible formats and multilingual messaging.

- **Human factors:** People may silence notifications, have weak signal areas in their homes, ignore tests, or assume alerts are false alarms, reducing the effectiveness of the system.
- **System-level failures:** Software glitches, delayed IPAWS (Integrated Public Alert & Warning System) processing, or coordination issues between agencies can slow or interrupt message delivery.

Related Content

- Integrated Public Alert and Warning System (IPAWS)
- FEMA.gov- Emergency Alert System
- NOAA Weather Radio All Hazards (NWR)

Defensible Space

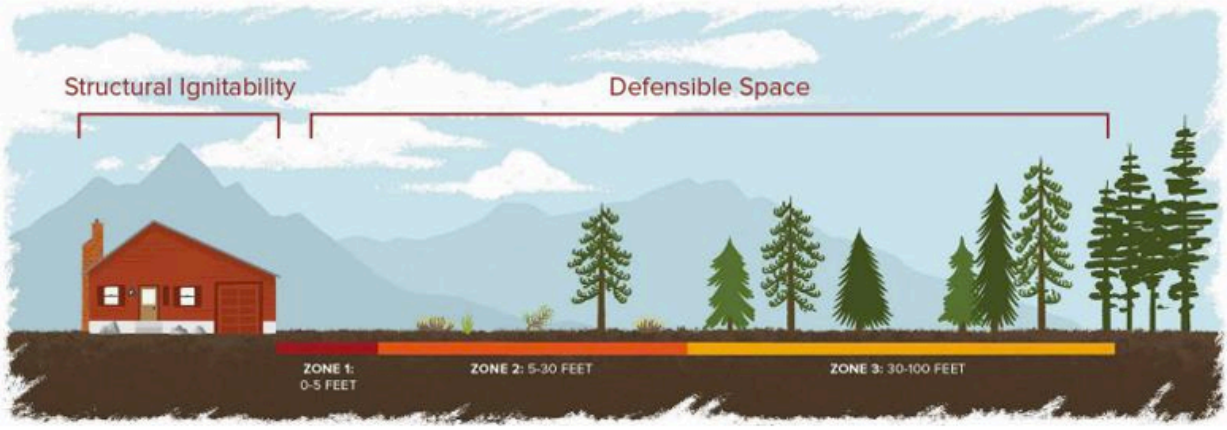
The purpose of defensible space is to reduce the amount of fuel near a home or structure. Defensible space can reduce the chance of home ignition and provide a safe space for firefighters to protect the house. For a structure to survive a wildfire, radiated heat and fire intensity must be kept to a minimum. Defensible space is accomplished by 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.

The Home Ignition Zone Guide developed by CSFS[6] provides guidelines for creating a defensible space. In order to establish the most effective defensible space plan possible, the property is evaluated and divided into three zones (Figure 15).

Home hardening refers to strengthening a house against wildfire by reducing the ways it can ignite. This includes using fire-resistant building materials and managing landscaping to limit exposure to embers, radiant heat, and direct flames. Key prevention measures involve sealing openings, upgrading vulnerable components such as roofs and vents, and removing flammable materials from the area immediately surrounding the home (defensible space).

[6] Alternatively, NFPA® and CalFire defines the three zones above as Zone 0, Zone 1 and Zone 2.

Figure 15: Home Ignition Zone Graphic (*Source: CSFS)*



Zone 1 (Immediate Zone) 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 (Intermediate Zone) 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 of a structure igniting because of radiant heat.

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

Beyond 100 feet: This outermost zone (sometimes labeled Zone 4) is managed for forest health and to further slow a fire's progress before it reaches the more critical inner zones. It may involve professional forest thinning or prescribed burning under supervision.

Overlapping Home Ignition Zones (HIZ) occurs when the Home Ignition Zones of neighboring properties meet or cross property lines. The HIZ - typically 100-200 feet around a home - is the area where wildfire mitigation efforts focus to reduce the risk of ignition.

When zones overlap:

- **Interconnected Risk:** Fire prevention (or lack thereof) on one property directly affects neighboring homes.
- **Shared Responsibility:** Collaborative mitigation across adjacent properties enhances community-wide resilience.

Figure 16: Overlapping Home Ignition Zone Graphic (*Source: King CD, Washington)*

Key home hardening measures

- Roof: Use Class A fire-rated materials (metal, composite, tile) and clear pine needles/debris.
- Vents: Install 1/8-inch metal mesh screens to block embers.
- Windows/Doors: Upgrade to multi-pane, tempered glass; seal gaps with weather stripping.
- Siding/Eaves: Use fire-resistant materials (stucco, fiber cement, metal) and enclose soffits/eaves.
- Decks/Attachments: Use non-combustible decking and ensure proper construction/maintenance. The area under a deck often traps embers and debris, creating a significant fire hazard.
    - **Under-Deck Enclosure:** Screen or wall-in areas below decks and patios with 1/8-inch metal mesh to prevent debris from accumulating.

    - **Surface Maintenance:** Keep the deck surface clear of flammable items like pine needles, leaves, and wooden furniture during high-risk seasons.
- Fences: Avoid wood fences that attach to or are located within 8 feet of the structure. Use metal or other non-combustible fencing materials in this zone.
- Gutters: Clean regularly and consider non-combustible covers.

Situational Awareness

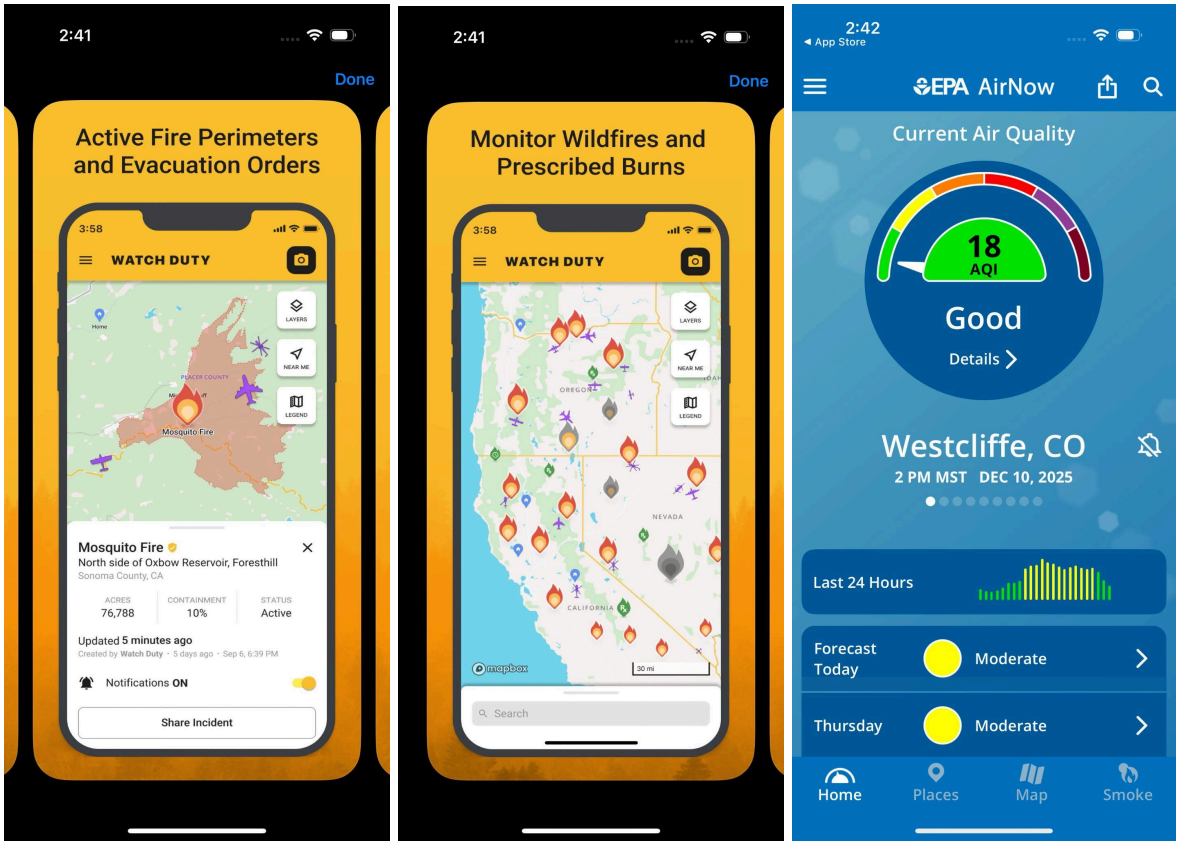
Maintaining strong situational awareness is essential for timely and safe evacuation during wildfire events. Residents should rely on trusted, real-time information sources to monitor fire activity, air quality, and preparedness guidance.

During fast-moving events, it is important to critically evaluate the information you receive - or recognize when information is delayed or unavailable - and rely on your own situational awareness. If conditions feel unsafe, if smoke or fire behavior is changing rapidly, or if your instincts tell you it is time to go, ***do not wait for an official pre-evacuation or evacuation notice****.*

Leaving early is often the safest option in wildfire-prone areas, especially where limited road access or fast-moving fire can quickly cut off escape routes.

Tools such as: **Watch Duty** and **InciWeb** offer real-time, verified wildfire updates from trained volunteers and first responders, helping people follow developing incidents and any evacuation changes. Watch Duty - https://app.watchduty.org/; InciWeb - https://inciweb.wildfire.gov/

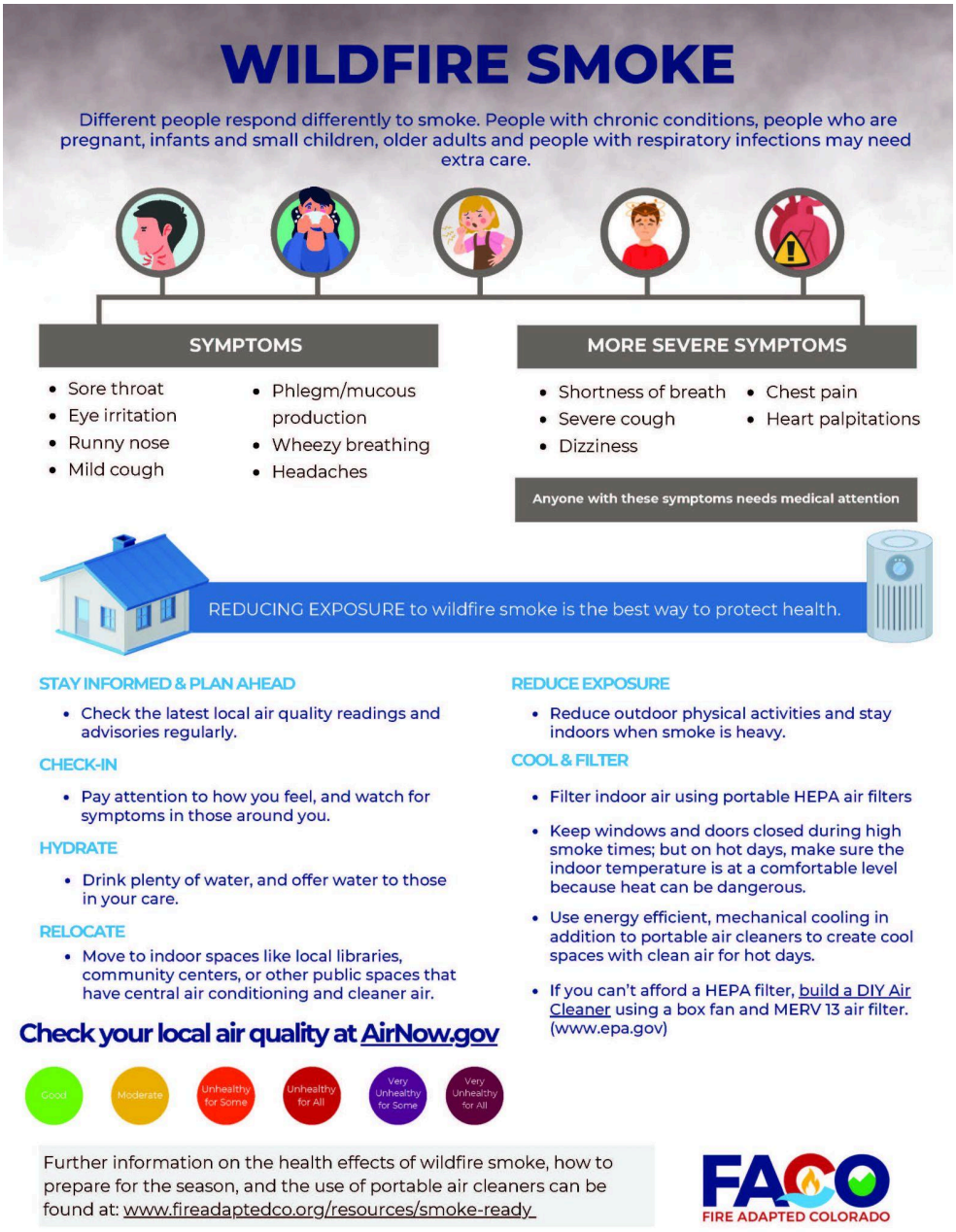
Mobile App Examples:



AirNow provides up-to-date air quality information that helps residents understand smoke conditions and make informed, health-protective choices during wildfire events. This resource is especially important for communities like Custer County, which has the oldest median age in Colorado - approximately 58.3 years compared to the statewide median of 38.5 - ***based on the 2020 census.***

Older adults, pregnant women and children are more vulnerable to smoke-related health impacts, making reliable air quality monitoring essential for knowing when to limit outdoor exposure, use clean-air spaces, or take other protective actions. Air Now - https://www.airnow.gov/

Figure 17: Wildfire Smoke graphic *(Source:Fire Adapted Colorado)*



Public Safety Power Shutoffs

Public Safety Power Shutoffs (PSPS) are proactive, temporary power outages implemented by electric utilities during severe, high-risk weather (e.g., strong winds, low humidity, dry fuel) to prevent wildfire ignition. These safety measures are commonly used in California and increasingly in other regions, including Colorado.

Key details regarding PSPS and utilities include:

- Primary Purpose: To prevent electrical infrastructure from sparking wildfires during hazardous conditions.
- Trigger Factors: Utilities monitor real-time data, including high wind speeds, low relative humidity, and dry vegetation.
- Affected Areas: Power may be turned off in specific high-risk circuits or areas, which can impact downstream customers even if they are not in the immediate risk zone.
- Notification: Utilities are required to provide advance warning, typically aiming for 72 hours, 48 hours, and 24 hours prior to shutoffs, though communication during initial events can be a point of friction.
- Restoration: Power is restored only after conditions improve and crews physically inspect lines to ensure it is safe to re-energize.
- Key Utilities: Major utilities in Colorado employing PSPS include Xcel Energy and Black Hills Energy.

Key Preparation Steps for PSPS

- Communications & Alerts: Update contact information with utility companies, to receive notifications up to 72 hours in advance.
- Emergency Supplies: Prepare a kit with flashlights, batteries, bottled water (3 gallons minimum per day per person), non-perishable food, and a first aid kit.
- Food Safety: Set refrigerators and freezers to their lowest temperatures. Keep doors closed to maintain cold for ~4 hours in the fridge and ~48 hours in a full freezer. (Consider freezing water jugs, or purchasing dry ice.)
- Backup Power: Utilize portable charger banks and ensure generators are used only outdoors, properly ventilated and away from windows and doors.
- Medical Needs: Contact medical providers to create a plan for devices dependent on electricity and for refrigerated medicine.
- Home Preparation: Unplug sensitive electronics to avoid damage from surges when power is restored. Learn how to manually operate electric garage doors.
- Consider a battery operated NOAA Weather Radio.

Additional Sources for Wildfire Mitigation and Preparedness

- **Colorado Insurance Support Tools**
  https://fireadaptedco.org/resources/property-insurance/
- **Colorado Division of Insurance** - https://doi.colorado.gov/
- **Neighborhood Ambassadors** - https://fireadaptedco.org/programs/fac-naa/
- **Firewise USA®**
  https://www.nfpa.org/Education-and-Research/Wildfire/Firewise-USA
- **Ready, Set, Go! Action Plan**
  Ready-Set-Go-Wildland-Fire-Action-Plan-Pages-8-11.pdf
  https://10afad46-e440-4c33-bd98-4a4b1a9a3288.filesusr.com/ugd/92b9d1_880c6b7d11304432b429434e8ca3e326.pdf
- **Colorado State Forest Service Resources for Home and Land Owners**
  https://csfs.colostate.edu/homeowners-landowners/
- **Colorado State Forest Service Home Ignition Zone Guide**
  https://csfs.colostate.edu/wp-content/uploads/2021/04/2021_CSFS_HIZGuide_Web.pdf
- **Wildfire Prepared Neighborhood Technical Standard**
  https://wildfireprepared.org/wp-content/uploads/Wildfire-Prepared-Neighborhood-Standard-2025.pdf
- **Nine Fact Sheets That Will Make Your Job Easier: NFPA Resources about Wildfire-Resilient Homes**
  https://fireadaptednetwork.org/nine-fact-sheets-that-will-make-your-job-easier-nfpa-resources-address-questions-from-residents-about-home-hardening/
- **Live Wildfire Ready - Live Wildfire Ready**
  https://csfs.colostate.edu/live-wildfire-ready/
- **Fire Adapted Colorado** - https://fireadaptedco.org/
- **CMAT: Pike San Isabel National Forest (2016): A Blueprint for Mitigation**
  fs.usda.gov/sites/default/files/media_wysiwyg/a_blueprint_for_mitigation.pdf
- **After the Flames - Post Wildfire Resources**
  https://aftertheflames.com/resources/

- **American Red Cross - Wildfire Preparedness Checklist**
  https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/wildfire.html

Fire District / Department Capabilities 2026

Wet Mountain Fire Protection District Apparatus

Chief 901	2011 Chevy Tahoe (Command) Take Home
Chief 902	Chevy Tahoe (Command) Take Home
Chief 903	Chevy Tahoe (Command) Take Home
Engine 911	2017 International (Type 1) Main Station
Engine 912	1992 Chevy (Type 1) Rosita Station
Engine 931	2024 Freightliner (Type 3) Main Station
Engine 932	1997 International (Type 3) Dewees Station
Engine 961	2008 Ford F550 (Type 6) Airport Station
Engine 962	2008 Ford F550 (Type 6) Main Station
Engine 963	2005 Ford F450 (Type 6) Dewees Station
Engine 964	2012 Ford F450 (Type 6/Rescue) Main Station
Engine 965	1990 Chevy (Type 6) Dewees Station
Engine 967	2011 Ford F550 (Type 6) Main Station
Rescue 971	2020 Ram (Rescue) Main Station
Tender 951	2012 International (Tactical Tender) Main Station
Tender 952	1974 Kenworth (Support Tender) Rosita Station
Tender 954	2005 Hawk Extreme (Tactical Tender) Main Station
Utility 991	2012 Polaris (UTV w/water) Main Station
Utility 992	2013 Polaris (UTV w/water) Main Station
Utility 993	2008 Chevy Truck (¾ ton truck) Main Station
Wet Mountain UAV 1	Drone (1) (Tracking, thermal imaging, oversight, etc) Main Station
Wet Mountain UAV 2	Drone (2) (Tracking, thermal imaging, oversight, etc) Main Station

Rye Fire Protection District Apparatus 2026

Vehicle ID	Year	Make/Model	Type of Vehicle
231	2010	Pierce	Engine Type 1 1500/500
232	1993	International	Engine/Tender Type 2 1000/1500
281	2001	Freightliner	Rescue
282	2016	Can-Am	ATV

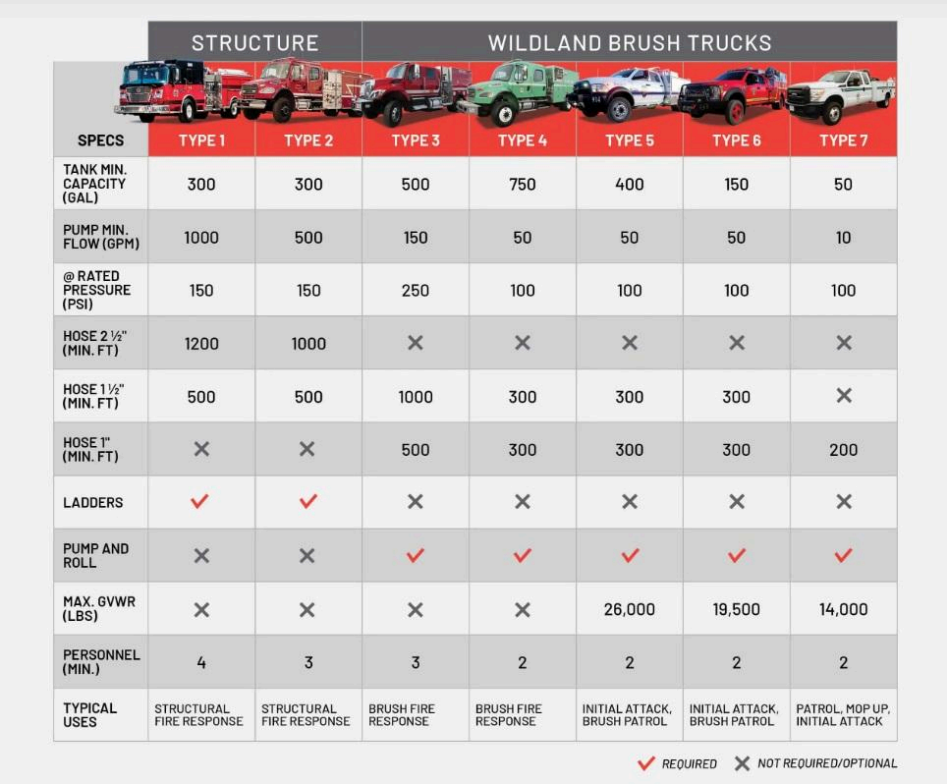
283	2008	Chevy Tahoe	Rapid Response Vehicle
284	2011	GMC Yukon	Rapid Response Vehicle
201	2014	Chevy Tahoe	Command Vehicle
211	2007	Ford F-350	Ambulance Type 1
212	2013	Ford F-350 XLT	Ambulance Type 1
213	2017	Dodge Ram 4500	Ambulance Type 1
214	2016	Chevy 2500 HD	Ambulance Type 1
261	2020	Ford F450 XL	Engine Type 6
262	1998	Ford F550	Engine Type 6
291	1987	GMC Brigadier	Tender Type 2 1000/3000
272	2009	International	Engine Type 3 750/500

Wetmore Volunteer Fire Department Apparatus 2026

2 - Type 5 Brush Trucks w/250 gallon tanks

1 - Type 4 Truck w/750 a gallon tank (state owned)

Figure 18: NWCG Types of Fire Engines (*Source: BME Fire Trucks)*



Wildfire Risk Analysis HVRAs

The planning team's assessment of **High-Value Resources and Assets** (HVRAs) began early in the CWPP process with an initial list of values, which were organized into broad categories and evaluated for inclusion in the modeling framework. The list was refined to better represent community priorities, critical infrastructure, and ecological and cultural resources. The planning team intends to further refine and validate these HVRAs using spatial data analysis through the RADs process, enhancing the accuracy of risk modeling and guiding targeted wildfire mitigation efforts.

The *Custer County Mapbook*, a report based on the **Colorado Forest Action Plan** contributed to the alignment of these priorities. (See Appendix B.)

1. Life Safety

- Primary evacuation, transportation routes and emergency access corridors, including State Highways 69, 96, 165, and 78.
- Communities with limited ingress/egress and development in high wildfire hazard areas.
- Socially vulnerable populations, including the county's aging population..

2. Buildings & Critical Facilities

- **Residential structures**: Represent over 50% of the county's tax base and are at the highest potential wildfire loss risk.
- **Non-residential structures**: commercial, government, and community service facilities.
- **Critical public facilities**: Fire Stations, EMS Facilities, and other government buildings essential for emergency response and continuity of operations.
- **Historic properties**: Contributing to cultural heritage and community identity.

3. Critical Infrastructure

- Transportation corridors supporting evacuation and emergency response.

- Utilities including electrical substations and distribution lines, communications towers, and water system components (wells, water storage facilities, water distribution and irrigation systems).

4. Water Resources

- Municipal water storage facilities, wells, and reservoirs essential for domestic use and wildfire suppression.

- Watersheds, wetlands, and riparian corridors supporting water quality, agriculture, and ecological resilience.

5. Recreation & Economic Assets

- Trails, campgrounds, lakes, and access corridors such as the Rainbow Trail and other trail systems and recreation areas in the San Carlos Ranger District of the San Isabel National Forest.

- Tourism and recreation areas that contribute to local economic stability.

- Agricultural lands and working ranches are integral to the county's economy and cultural landscape.

6. Wildlife & Vegetation

- Forests, grasslands, shrublands, and riparian areas within San Isabel National Forest, Sangre de Cristo Wilderness, State Wildlife Areas, and BLM lands.

- Habitat supporting big game and sensitive species (bighorn sheep, elk, deer, pronghorn antelope, cutthroat trout, Mexican spotted owl, Canada lynx, greater sage-grouse).

- Vegetation communities influencing wildfire behavior and restoration priorities: aspen, lodgepole pine, mixed conifer, ponderosa pine, piñon–juniper, spruce–fir, high-elevation meadows, sagebrush shrublands, scrub oak, agricultural lands, and riparian zones.

CSFS HVRA Analysis Context:

CSFS emphasizes **high-value areas where wildfire risk reduction can most effectively protect human life, property, and key natural and economic resources.**

Table 6: Highly Valued Resources and Assets (HVRAs)

Category	HVRA
Life Safety	Evacuation Routes
Buildings	Residential Buildings
	Non-Residential Buildings
	Historic Places (NRHP)
	Outbuildings
Infrastructure	Transportation & Critical Routes (SH 69/96/165/78)
	Communication Infrastructure
	Electrical Transmission Lines
	Substations/Electrical
	Public Safety & Ops Facilities
	Monitoring Infrastructure
	Substations/Electrical
	Water Infrastructure
Water	Wells Surface Water Distribution Systems Critical Watersheds
Recreation	Built Recreation Infrastructure
	Camping
	Trails
	Lakes
Wildlife	Bighorn Sheep
	Cutthroat Trout
	Mule Deer
	Elk
	Pronghorn Antelope
	Mexican Spotted Owl
	Pronghorn Antelope

	Canada Lynx
	Sage Grouse
Vegetation	Agriculture
	Aspen
	High Elevation Meadows
	Lodgepole Pine
	Mixed Conifer
	Pinyon-Juniper
	Ponderosa Pine
	Riparian
	Sagebrush
	Spruce Fir
	Shrubland

Vegetation and Wildfire Behavior in Custer County, Colorado

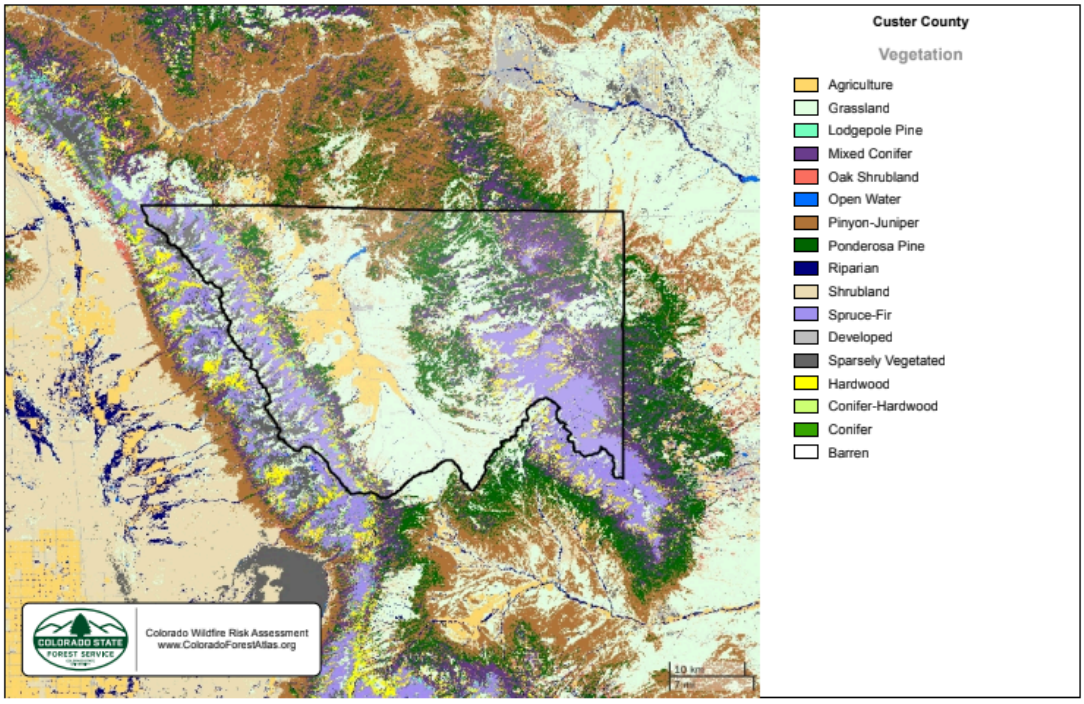
Custer County encompasses a diverse mix of vegetation types that influence wildfire behavior across varying elevations, terrain, and development patterns.

- Grasslands support fast-moving, wind-driven fires with high rates of spread during dry spring and early summer conditions.
- Pinyon–juniper and ponderosa pine forests contain continuous surface and ladder fuels that can produce moderate- to high-intensity fire, particularly on steep slopes and within WUI areas where development increases exposure.
- Lodgepole pine, mixed conifer, and spruce-fir forests are typically dense and capable of high-severity crown fire, long-range spotting, and rapid spread during drought and extreme weather events.
- Riparian areas and aspen-dominant stands generally exhibit higher fuel moisture and may slow fire spread, though embers can cross these features under high winds.

The built environment further elevates wildfire risk, as structure density, defensible space, and construction characteristics strongly influence potential damage.

Vegetation, fuel type, terrain, and structure density maps provide essential context for identifying wildfire hazards, assessing risk, and prioritizing mitigation efforts across Custer County.

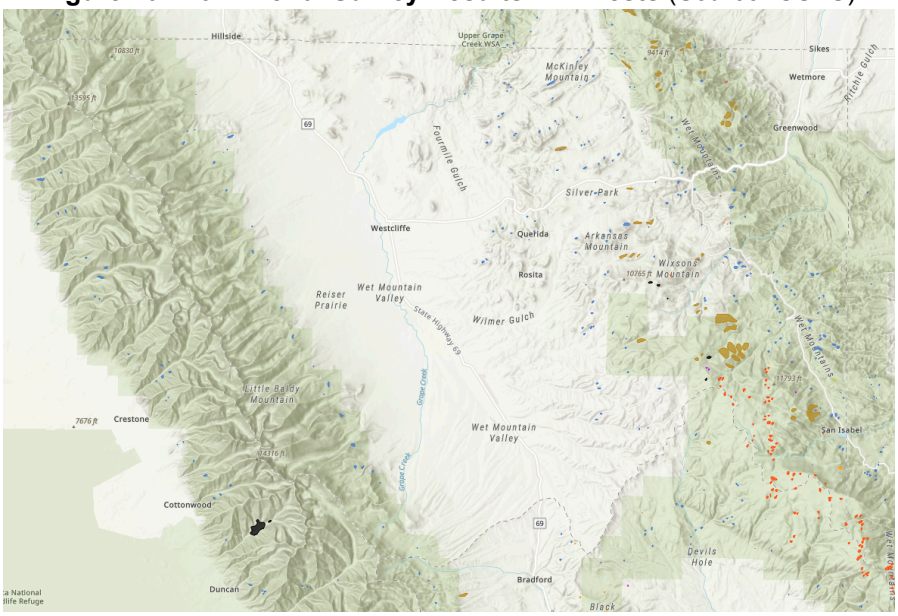
Figure 19: Vegetation Types in Custer County (*Source*: CSFS Colorado Forest Atlas)



2024 Insect and Disease Activity in Colorado

Explore the information and map below for data and insights on insect and disease activity in Colorado from the 2024 aerial forest health survey. More analysis, including a deeper dive into climate conditions, is available in the 2024 Forest Health ESRI StoryMap.

Figure 20: 2024 Aerial Survey Results - All Pests (*Source*: CSFS)



Goals & Objectives

Goals and objectives are essential to a CWPP because they help provide clear direction and focus for the plan and the planning process. Outlining what the county aims to achieve, along with its goals and objectives, ensures that efforts are aligned with local priorities, resources, and capabilities. Below are the goals and objectives of the Custer County CWPP as decided by the planning team. Specific actions related to the goals and objectives can be found 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, mitigating undesirable fire outcomes and protecting highly valued resources and assets.

- **Objective 1A: Develop and Leverage tools to prioritize vegetation management and wildfire mitigation actions.** [including a proposed Risk Assessment and Decision Support (RADs)*[7] project, the Custer County Evacuation Study,

[7] * *Risk Assessment and Decision Support Overview (Objective 1A)*
The Custer County Wildfire Council envisions an updated CWPP grounded in community values and local knowledge, integrating cutting-edge wildfire modeling and innovative planning tools. To advance this work, Custer County is seeking funding to activate a pending assessment with the Colorado Forest Restoration Institute (CFRI), which would enhance wildfire-risk modeling and help identify the areas where vegetation-management efforts would provide the greatest return on investment in reducing wildfire risk and impacts.

Potential Operational Delineations (PODs), and the Colorado Forest Atlas to prioritize vegetation management and wildfire mitigation actions.]

- **Objective 1B: Enhance safety and protect highly valued resources and assets** by implementing practical, effective strategies such as: site hardening, creating defensible space, and vegetation management. Prepare critical infrastructure to withstand impacts before, during and after a fire.

- **Objective 1C: Foster collaboration among stakeholders**, including governments, fire protection districts, land management agencies, non-profits, and landowners, to achieve effective cross-boundary project outcomes.

- **Objective 1D: Enhance watershed health** by exploring new and supporting existing watershed protection opportunities.

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.

- **Objective 2A: Engage the community** to increase public awareness of wildfire risks and benefits, improve personal preparedness, and reduce human ignitions.

- **Objective 2B: Provide resources and education** on best practices, including home hardening, defensible space, preparedness, and emergency notification.

- **Objective 2C: Build public support** for vegetation management, wildfire mitigation efforts, and prescribed fire.

- **Objective 2D: Engage socially vulnerable populations** to understand their unique challenges and opportunities for reducing wildfire risk, including identifying strategies to prepare for, withstand, and recover from power disruptions associated with wildfire and other hazard events.

Goal 3: Safe and Effective Wildfire Response

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

- **Objective 3A: Assess current wildfire response capabilities and identify opportunities to address gaps, while strengthening effective public**

communication strategies that keep residents and visitors informed before, during, and after wildfire events.

- **Objective 3B: Strengthen collaboration among key stakeholders**, including governments, fire protection districts, and other emergency responders, to improve pre-planning, coordination, and incident management.

- **Objective 3C: Educate residents and stakeholders** on appropriate actions to take before, during, and after a wildfire.

CWPP Action Plan

The Custer County CWPP's overarching goals and objectives can be translated into wildfire mitigation actions. The goals and objectives set a broad framework for the desires and outcomes Custer County and the stakeholders wish to achieve. The actions listed below provide more details and directions for achieving these goals and objectives. They represent plans of action to help reduce the risks and impacts of wildfire on people, infrastructure, buildings, and the natural environment.

The identified action items were created through a collaborative process with planning team members discussing the wildfire needs in the planning area. Members were allowed to identify and discuss various actions in many meetings. The following lists the identified action items related to each goal and objective to enable people to live better with wildfire.

While many of these actions will be easy to implement, others depend entirely on funding, staff availability, and local buy-in. These hurdles may impact the time it takes to execute actions or determine if they can be implemented at all. As discussed later, these action items will be reviewed regularly and updated as needed.

Vegetation Management and Fuel Reduction Objectives

Vegetation management and fuel reduction is the process of modifying, removing, or maintaining hazardous naturally-occurring fuel sources such as trees, shrubs, and grasses to reduce wildfire risk. Vegetation management can minimize the risk by breaking up fuel continuity to slow fire spread, reducing fuel loads so fires are less intense, and improving firefighter access. Table 7 shows some of the common techniques used for vegetation management.

Table 7: Common Vegetation Management Techniques Method Description

Method	Description
Chipping/Mulching	Turning cut vegetation into mulch to reduce fire spread.
Herbicides	Targeted chemical applications to control invasive or fast-spreading vegetation.
Mowing / Grazing	Reducing grasses with machines or livestock.
Prescribed Fire	Fire professionals set prescribed fires to reduce fuel loads safely.
Pruning	Cutting lower branches to prevent fire from climbing.
Thinning	Selectively removing trees or shrubs to reduce density.

The vegetation management and fuel reduction projects were put into three categories to better understand them, separate the planned projects, and prioritize focus areas.

- Short-Term Planned Projects
- Mid-Term Planned Projects
- Long-Term Planned Projects

In addition to the identified vegetation management projects, the planning team members identified wildfire mitigation actions. These actions were linked to the goals and objectives identified in the CWPP. They represent plans of action to help reduce the risks and impacts of wildfire on people, infrastructure, buildings, and the natural environment. While many of these actions will be easy to implement, others depend entirely on funding, staff availability, and local buy-in and resources.

Planning vs Implementation:

Vegetation management projects on public lands identified in this CWPP are often dependent on meeting federal requirements, including compliance with the National Environmental Policy Act (NEPA) and completion of necessary biological, cultural (archaeological), and other resource surveys. In addition, projects located within or adjacent to designated Wilderness Areas are subject to further statutory limitations that restrict the type, scale, and methods of allowable treatments, often emphasizing minimal intervention and non-mechanized approaches.

These planning and review processes can take several years to complete and do not guarantee funding for implementation, as project prioritization and funding availability are subject to agency budgets and competitive grant cycles. As a result, wildfire may occur on the landscape during the planning phase - before treatments are implemented - altering site conditions, priorities, or treatment needs and requiring adaptive management as projects move forward.

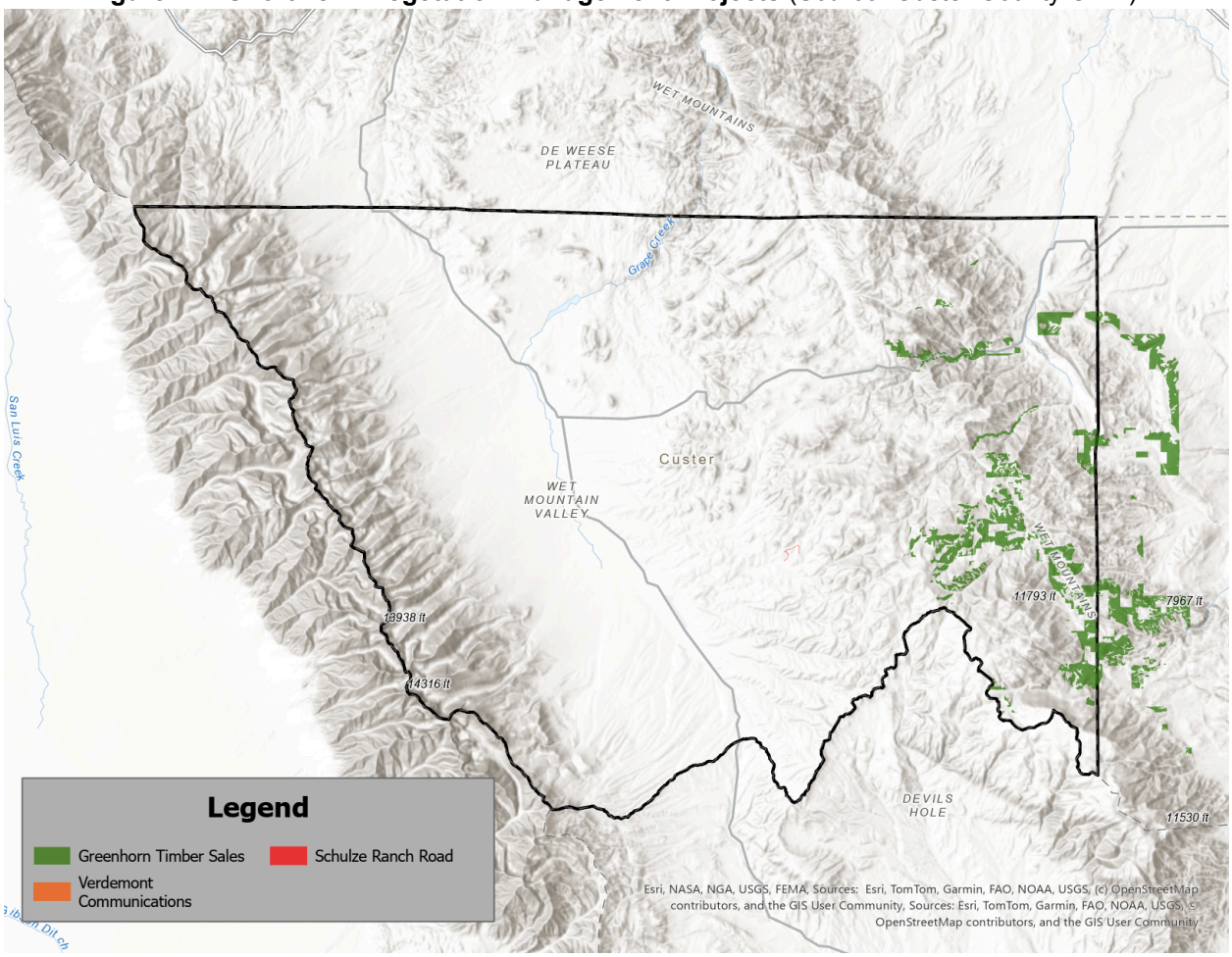
In certain circumstances, allowing naturally ignited fires to be managed for resource objectives may provide a more timely and cost-effective alternative.

The three maps below show the short-term (1-2 years), mid-term (3-5 years), and long term (6-10 years) planned vegetation management project locations. These vegetation management projects were identified over many meetings with the planning team, and various fire management professionals. Already planned or ongoing projects from multiple entities comprise most short and mid-term projects.

In addition to the identified vegetation management projects, the planning team members identified wildfire mitigation actions. These actions are linked to the goals and objectives identified in the CWPP. They represent plans of action to help reduce the risks and impacts of wildfire on people, infrastructure, buildings, and the natural environment. While many of these actions will be easy to implement, others depend entirely on funding, staff availability, and local buy-in and resources.. A complete list of wildfire mitigation actions and additional vegetation management project information can be found in the Expanded Goals and Objectives section.

Short-Term Planned Projects (1-2 Years)

Figure 21: Short Term Vegetation Management Projects (*Source*: Custer County OEM)



These projects are likely to be implemented and completed within the next one to two years. Some are already underway, while others are finishing the planning process or awaiting funding. Information about these projects was gathered from the USFS, BLM, and CSFS and HOAs. Figure 21 shows planned projects locations.

Greenhorn Timber Sales

The Greenhorn Timber Sales are ongoing forest management projects intended to support fuels reduction, forest health, and local timber utilization objectives within the Pike–San Isabel National Forests and Cimarron and Comanche National Grasslands (PSICC), San Carlos Ranger District. These projects have been underway since 2012, implementation of the final sale will begin in summer 2026.

Verdemont Communications Site D-Space - Annual Maintenance

Create defensible space by clearing fuels around the Verdemont Communications site adjacent to Silver Cliff Ranch on BLM property.

Centennial Ranch / Aspen Mountain Ranch Fuels Reduction - Proposed

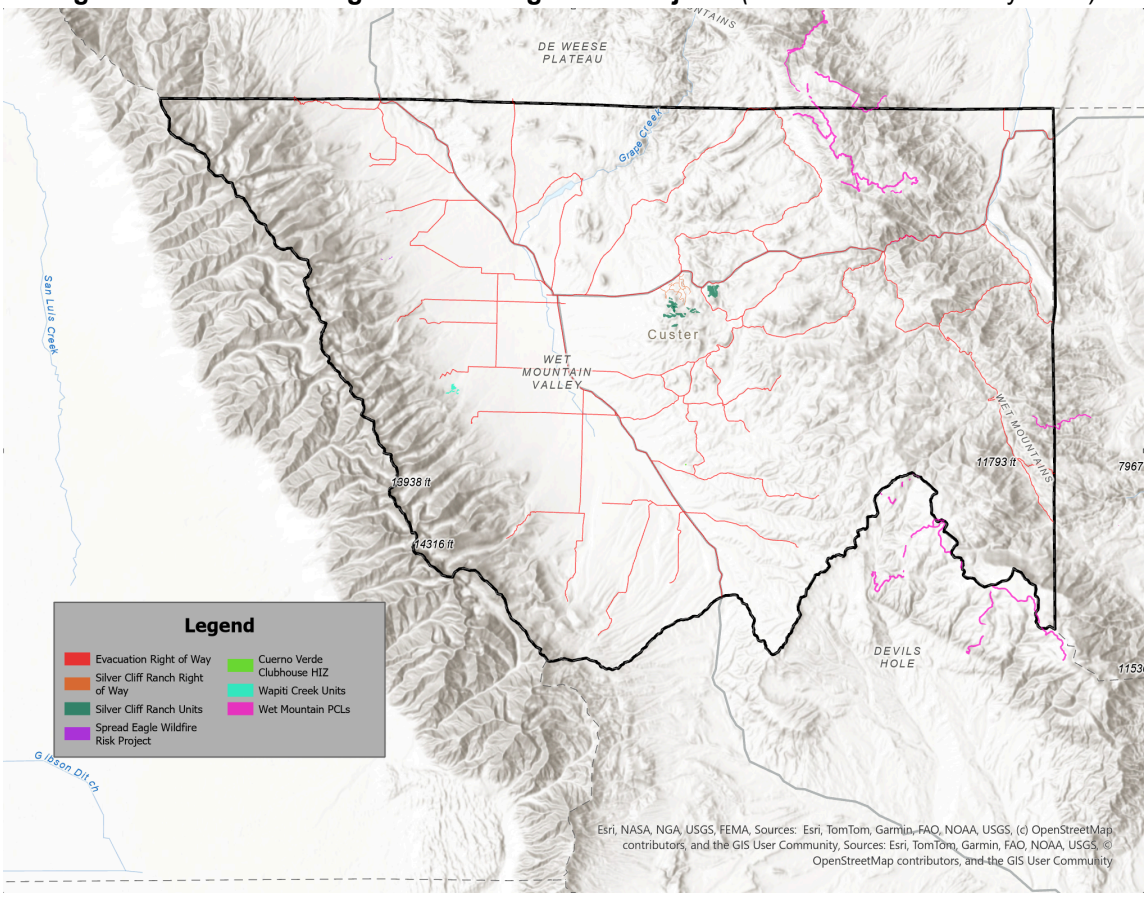
This project includes forest thinning and establishment of a shaded fuel break along Gardner Road and Williams Creek Road to reduce hazardous fuels along designated access and evacuation corridors and to improve firefighter safety and suppression effectiveness. The project builds on wildfire mitigation treatments completed in November 2025 on adjacent Mission: Wolf properties and extends treatment continuity across property boundaries. Treatments will emphasize ladder fuel reduction, increased canopy base height, and surface fuel reduction within mixed conifer forest stands. Implementation will be conducted by Colorado Firecamp in coordination with participating landowners. *(not mapped.)*

Schulze Ranch Rd ROW Fuels Reduction - Proposed

This project proposes targeted fuels thinning within the road right-of-way to improve emergency vehicle access and resident evacuation during a wildfire. Vegetation encroachment has reduced roadway clearance and increased roadside fuels; thinning will restore safe width and vertical clearance, reduce fire behavior, and improve visibility and maneuverability. The treated corridor may also serve as a potential control location, supporting safer evacuations and more effective suppression for residents with a limited evacuation route.

Mid-Term Planned Projects (3-5 Years)

Figure 22: Mid Term Vegetation Management Projects *(Source*: Custer County OEM)



These are currently planned projects that are not likely to be implemented for another three to five years. Most still have significant steps to complete in the planning process, such as land surveys and the NEPA process. Information about these projects was gathered from the USFS, BLM, CSFS, and HOAs.

Figure 22 shows where these projects are planned to be located. Additional projects may be added to this list as opportunities become available. For example, the Custer County Evacuation Study (Ladris) will likely identify additional detail for fuels projects along evacuation route ROWs, and could include adjacent private landowners, but specific locations have not been determined yet.

Evacuation Routes ROW Fuels Reduction - Proposed

This project will thin hazardous fuels within the road right-of-way along Sheriff's Office - designated county evacuation routes to improve emergency vehicle access and resident evacuation during a wildfire. Targeted thinning will restore roadway clearance, reduce fire behavior, and establish a safer evacuation corridor and potential wildfire control locations. (Evacuation Routes are mapped and specific treatment areas will be refined.)

Silver Cliff Ranch ROW Project - Proposed

Apply fuel treatments along right-of-ways (ROWs), by reducing hazardous vegetation, enabling safer evacuations, and protecting communities through mechanical or chemical methods. Removing invasive species and dense vegetation reduces the risk of catastrophic wildfire spread.

Silver Cliff Ranch Wildfire Risk Project - Proposed

Improve life safety and emergency response within the subdivision by installing clear, durable signage along evacuation routes and dead-end roadways, including reflective address signage to support rapid identification of homes during wildfire and other emergencies. In coordination with this effort, identify and prioritize Home Ignition Zone (HIZ) vegetation projects and complementary fuels reduction treatments to reduce wildfire risk, improve access and egress, and support safe, efficient evacuation and response operations.

Spread Eagle Wildfire Risk Project - Started

Create defensible space by clearing fuels along all town road right-of-ways, thinning 14 parcels totaling approximately 29.8 acres in mixed conifer forest type within the Spread Eagle HOA. Additionally, approximately 6 acres of community open space will be selectively thinned in 4 separate areas if funding allows.

Cuerno Verde HOA Clubhouse HIZ Project - Proposed

The purpose of this project is to reduce wildfire risk to the Cuerno Verde HOA Clubhouse by enhancing defensible space and reducing structural ignition hazards within the Home Ignition Zone (HIZ) out to 200 feet. This includes improvements in the immediate zone, such as: installing 1/8-inch metal screening around deck areas and replacing combustible ground cover with gravel in Zone 1 to reduce ember intrusion and ignition potential.

Wapiti Creek Wildfire Risk Project - Proposed

The project will cut and remove trees across diameter classes within the 100 ft. HIZs of 6 properties creating defensible space. The HIZ work will occur in primarily the mixed conifer and Gambel oak forest types and total approximately 13.1 acres of treatment. Additionally, approximately 50.6 acres of forested land has been identified for selective thinning. The acreage of this treatment will depend on bid prices and may decrease depending on cost per acre. The selective thinning will occur primarily in mixed conifer and lodgepole pine forest types. Logging systems will be a combination of hand-felling, traditional ground based logging and mastication.

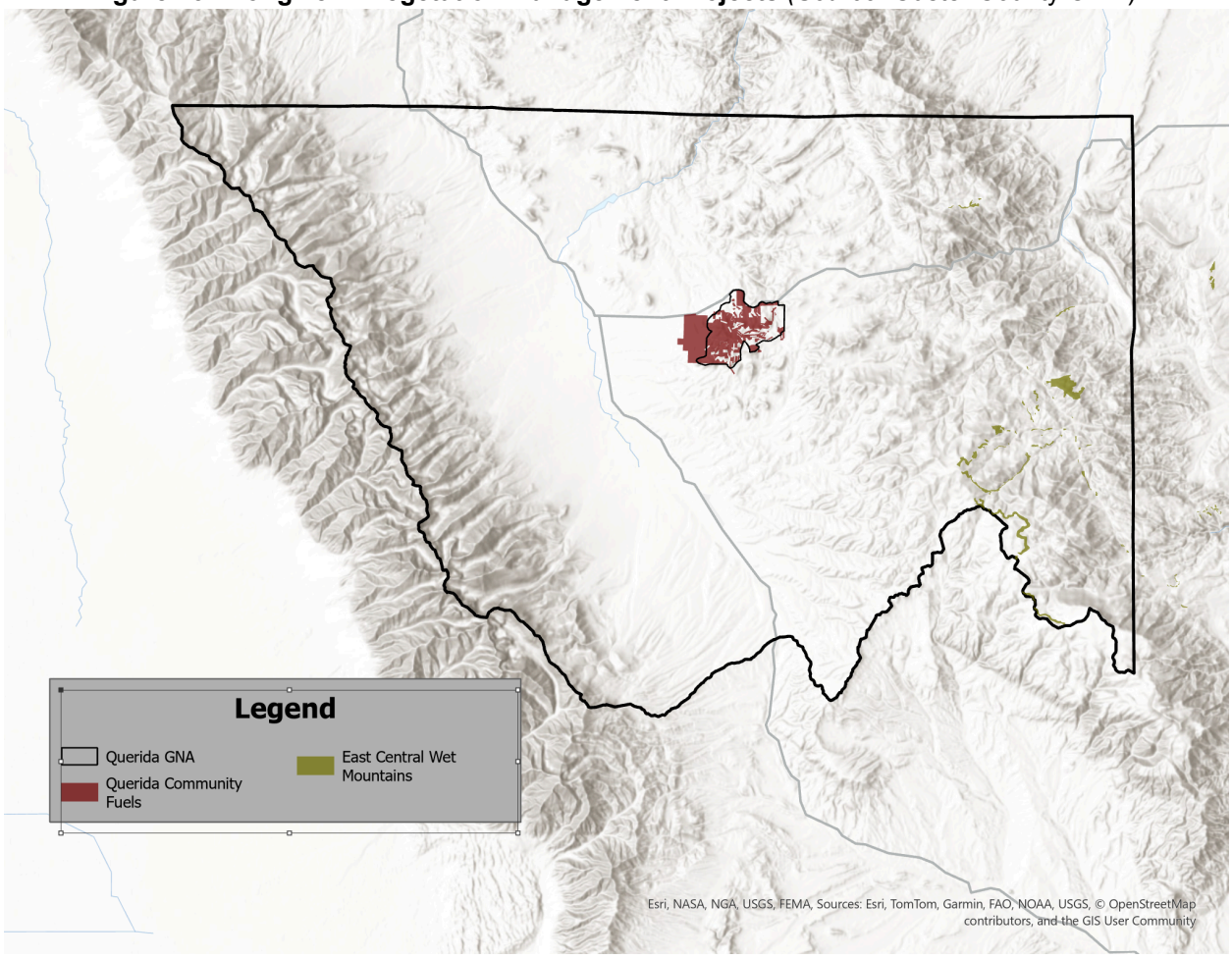
Wet Mountain Potential Control Locations - Proposed

The project will create fuel breaks (not fire breaks) and reduce hazardous fuels loading via mechanical, hand, and prescribed fire treatments in several treatment areas on Forest System lands around the approximately 235,000-acre Wet Mountains portion of the San Carlos Ranger District to improve and maintain Potential Control Locations (PCLs) for future wildfires. Treatment areas are up to 1,000 feet in width and contiguous with or incorporating existing

linear features (roads and trails). Treatments are intended to reduce the risk of uncharacteristic wildfire (flame lengths greater than four feet, and crown fire activity) on USDA Forest Service lands. The proposed treatments include 2,446 acres in numerous areas across the Wet Mountains. Treatments are proposed to occur in Custer, Fremont, Huerfano, and Pueblo Counties. The approximate width of treatments is 200' on either side, or are centered around roads or trails, with the widest distance from those features being 1,000 feet. The types of treatments include hand cutting, piling, mechanically thinning (mastication or removal), burning of piled material, and burning of proposed treatment areas. Treatments will vary, based upon the type and density of vegetation that occurs in the unit. No permanent or temporary roads would be constructed.

Long-Term Proposed Projects (6-10 Years)

Figure 23: Long Term Vegetation Management Projects *(Source*: Custer County OEM)



Project Prioritization Activity Map These projects will likely take longer to be implemented and have not started the planning process. Because of this, specific types and methods of treatments have yet to be identified.

The proposed RADS process will be used to continue identifying and prioritizing long-term vegetation management projects, focusing on those that offer the greatest reduction in wildfire risk to high-priority values while maximizing cost-effectiveness. By integrating wildfire behavior modeling, community values, and treatment feasibility, RADS ensures that resources are directed toward projects that deliver the most significant benefits for risk mitigation, public safety, and landscape resilience. Projects identified through the RADS process will be incorporated into the CWPP revision upon completion of the study. Figure 23 shows where these projects are planned to be located. Additional projects may be added to this list as opportunities become available.

Querida GNA - Proposed

Forest sanitation treatment to remove dead and dying trees impacted by disease and insects. Heavily thin unhealthy white fir and favor retention of more drought tolerant/fire resistant ponderosa pine. Pockets of pine will also be removed when infested with dwarf mistletoe. Target residual basal area for forested stands will be 50 sqft/acre. Logging systems will consist of traditional ground based logging, mastication, and hand thinning on steep slopes. This project aims to tie in with additional treatments planned for private land.

Querida Community Fuels Reduction and Forest Health Project - Proposed

Treat private parcels within the Querida community for fire mitigation and forest health. Reduce stand densities on entire large and small sized private parcels to historic pre-fire suppression densities and species compositions. Create defensible space around homes by reducing hazardous fuels within HIZs. Target grant funding yearly to treat as many homes as possible for interested landowners. Accelerate outreach to the community to communicate risks, opportunities for mitigation funding and benefits to the community and forest ecosystem post treatment.

East-Central Wet Mountains Hazardous Fuel Reduction & Forest Restoration Project - Proposed

The project will complete the following vegetation treatments: thinning, creating openings, prescribed burning and fuel breaks on approximately 16,700 acres within the East-Central Wet Mountains Project Area. Approximately 2,352 acres of treatments are within Colorado Roadless Areas. No new roads would be constructed in Colorado Roadless Areas and the proposed activities are consistent with the Colorado Roadless Rule.

Table 8: Vegetation Management Projects Summary

Project Name	Short, Mid, Long Term	Implementation Leader
Greenhorn Timber Sales	Short-Term	USFS
Verdemont Tower Communications D-Space Maintenance - (Annual)	Short-Term	Custer County
Centennial Ranch / Aspen Mountain Ranch Fuels Reduction - Proposed	Short-Term	Colorado Firecamp / CRAMRA
Schulze Ranch Rd ROW Fuels Reduction - Proposed	Short-Term	Schulze Ranch HOA
Evacuation Routes ROW Fuels Reduction - Proposed	Mid-Term	Custer County
Silver Cliff Ranch ROW Fuels Reduction - Proposed	Mid-Term	TOSC
Silver Cliff Ranch HIZ Project - Proposed (not mapped)	Mid-Term	TOSC
Cuerno Verde HOA Clubhouse HIZ Project - Proposed	Mid-Term	Cuerno Verde HOA
Spread Eagle Wildfire Risk Project - Started	Mid-Term	Spread Eagle / CSFS
Wapiti Creek Wildfire Risk Project	Mid-Term	Wapiti Creek / CSFS
Wet Mountain PCLs Project - Proposed	Mid-Term	USFS
Querida GNA - Proposed	Long-Term	BLM, CSFS
Querida Community Fuels Reduction and Forest Health Project	Long-Term	County, ARWC, CSFS
East Central Wet Mountains Hazardous Fuel Reduction and Forest Restoration Project - Proposed	Long-Term	USFS

Expanded Goals & Objectives:

Goal 1: Fire-Resistant Landscapes

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

- Objective 1A: **Develop and leverage tools** to prioritize vegetation management and wildfire mitigation actions.

Action ID	Action Description	Lead / Partners	Timeline
1A.1	Conduct a Risk Assessment Decision Support (RADS) project to identify where targeted vegetation management can make the greatest impact in reducing wildfire risk to **high-priority values** in Custer County.	OEM, WMVO	Fund by Q4/26; Complete by Q4/27
1A.2	Plan and prioritize additional vegetation management and wildfire mitigation actions using primarily outcomes from the RADS process and/or other existing tools.	OEM, Fire Council, WMVO & Stakeholders	Q4/27-Q1/28 (Complete CWPP & HMP Updates Q1/28)
1A.3	Crosswalk Custer County Hazard Mitigation Plan updates with the Custer County CWPP Update	OEM, Fire Council, CES,WMVO & Stakeholders	Complete CWPP & HMP Updates Q1/28
1A.4	Map Critical Infrastructure and Cultural Resources for further prioritization of community values at risk of impacts from wildfire and/or post-fire flash flooding, and to inform the proposed RADS planning process.	OEM, WMVO	Q1/-Q4/2026
1A.5	Continuing to map past and ongoing fuels treatments is essential for understanding treatment effectiveness and demonstrating landscape-scale continuity.	OEM, Custer County CSRMS	Annually, Ongoing

- Objective 1B: **Enhance safety and protect highly valued resources and assets** by implementing practical, effective strategies such as: site hardening, creating defensible space, and vegetation management. Prepare critical infrastructure to withstand impacts before, during and after fire.

Action ID	Action Description	Lead / Partners	Timeline
1B.1	Implement the identified short-term planned vegetation management projects. Information about these projects can be found under	OEM, HOAs	Q1/26-Q4/27

	Short-Term Planned Projects above and is listed in Figure 20.		
1B.2	Implement the identified mid-term planned vegetation management projects. Information about these projects can be found under Mid-Term Planned Projects above and is listed in Figure 21.	OEM, WMVO, Federal and State Partners, Stakeholders	Q1/28-Q4/30
1B.3	Implement the identified long-term planned vegetation management projects. Information about these projects can be found under Long-Term Planned Projects above and is listed in Figure 22.	OEM, WMVO, Federal and State Partners, Stakeholders	Q1/31-Q4/35
1B.4	Identify and prioritize locations across Custer County with invasive and high-risk species such as cheatgrass (downy brome).	CCCD, Weed Board, Extension	Q1- Q4/2026
1B.5	Implement the 2025 Custer County Weed Plan actions across Custer County targeting all weed species, with emphasis on invasive and high-risk species such as cheatgrass (downy brome) - coordinating with landowners, agencies, and stakeholders to reduce ecological, agricultural, and wildfire-related impacts and promote resilient landscapes.	CCCD, Weed Board, Extension	Q1/2026-ongoing
1B.6	Promote and increase the installation of reflective address markers at parcel driveways by establishing, funding, and implementing a coordinated program to improve emergency response and evacuation efficiency.	Custer County, P&Z, WMFPD Auxiliary	Q1/2026-ongoing
1B.7	Develop, and implement a county-supported program, including funding mechanisms, to install signage along evacuation routes and dead-end cul-de-sacs, (including non-county subdivision roads), to enhance emergency response capabilities and evacuation efficiency.	Custer County, R&B, TOSC, Subdivisions	Q1/26-Q4/27
1B.8	Implement a county-supported vegetation management program for all egress right-of-ways, (including non-county subdivision roads), to reduce wildfire risk and maintain safe evacuation routes.	Custer County, R&B, TOSC	Q1/26-Q4/27, + maintenance

1B.9	Land Use and Access - Update land use policies to reduce wildfire risk by requiring multiple ingress and egress routes for new development.	TOWC, TOSC, Custer County P&Z, Planning Commissions	Q1/26-Q4/27
1B.10	Site Design and Development Standards - Revise development standards to increase setbacks, improve structure separation distances, and integrate defensible space requirements into subdivision and site design.	TOWC, TOSC, Custer County P&Z, Planning Commissions	Q1/26-Q4/27
1B.11	Building Codes and Construction Practices - Update building codes to incorporate the CWRC. Require NFPA-compliant spark arrestors and the use of fire-resistant construction materials for new construction and substantial remodels in wildfire-prone areas.	TOWC, TOSC, Custer County P&Z, Planning Commissions	Q3/2026
1B.12	Standardize local ordinances between jurisdictions, ex: Silver Cliff: Sec. 7-4-60. - Duty of property owner to cut.	TOWC, TOSC, Custer County	Q1/26-Q4/27
1B.13	Protect critical functions in key buildings by providing backup power sources where needed.	TOWC, TOSC, Custer County, FPDs	Q1/26-Q4/27

- Objective 1C: **Foster collaboration among stakeholders**, including governments, fire protection districts, land management agencies, non-profits, and residents, to achieve effective cross-boundary project outcomes.

Action ID	**Action Description**	**Lead / Partners**	**Timeline**
1C.1	Schedule and facilitate meetings where stakeholders can collaborate and plan cross-boundary vegetation management projects using outcomes from the RADS process.	WMVO; OEM, CSRMS, Fire Council, Federal and State Partners	Q4/27-Q1/28
1C.2	Secure funding and hire an individual to implement wildfire mitigation actions, possibly in partnership . This individual could assist Custer County Planning and Zoning with the CWRC (code) implementation.	WMVO; Custer County, TOWC, TOSC	Q1/26-Q4/26

1C.3	Work with neighboring private landowners and homeowners associations when planning vegetation management projects to expand the treated areas.	OEM, Council, NA, CCMT	Q1/26-Q4/27
1C.4	Partner with a qualified non-governmental organization to establish a Mitigation Fund. The fund will collect donations, grants, local tax revenues (under agreement), and other funding sources to support vegetation management projects and other wildfire mitigation actions, providing a flexible mechanism to advance risk-reduction efforts across the county.	WMVO, Council	Q1/26-Q4/27
1C.5	Explore working with county officials to establish a voter-approved levy or other funding mechanism that could direct local tax revenues into Mitigation Fund, providing an additional, flexible source of support for priority vegetation management and wildfire mitigation projects.	WMVO, Council	Q1/26-Q4/27

- Objective 1D: **Enhance watershed health** by exploring new and supporting existing watershed protection opportunities.
  [Wildfire risk assessment maps for the Upper Arkansas Watershed are available here.]

Action ID	Action Description	Lead / Partners	Timeline
1D.1	Create or improve wet meadows and other landscapes that burn less intensely and can act as fire breaks. Work with the UAWCD and other partners on locations that will help reduce fire risk and meet other resource objectives. Priority locations include: Taylor Creek, Horn Creek, Grape Creek, Colony Creek, South Hardscrabble Creek, Newlin Creek.	ARWC, UAWCD, CPW	Q1/26-Q4/27
1D.2	Develop a Wildfire Ready Action Plan (WRAP) plan that equips the Upper Arkansas Watershed Conservancy District with a shared roadmap for reducing wildfire risks and safeguarding critical resources in Custer County.	ARWC, WMVO	Q1/26-Q4/27

1D.3	Map irrigation ditches and infrastructure to support pre-disaster mitigation, identify funding opportunities for agricultural property owners, prioritize areas at risk of post-fire flash flooding, reduce threats to critical infrastructure, and inform the proposed RADS planning process.	WMVO, ARWC	Q1/-Q4/2026

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.

- Objective 2A: **Engage the community** to increase public awareness of wildfire risks and benefits, improve personal preparedness, and reduce human ignitions.

Action ID	Action Description	Lead / Partners	Timeline
2A.1	Coordinate education and outreach across all the partners (WMVO, Custer County, and local fire protection districts) for county-wide wildfire education, utilizing coordinated messaging	WMVO, FPDs, OEM, SO	Q1/26-Q4/27
2A.2	Target locations with elevated wildfire risk and/or elevated risk of ignitions with strategic messaging to promote preparedness, home hardening, defensible space, and reducing human ignitions. Include popular recreation sites and campgrounds.	OEM, Trails for All, USFS, BLM, CPW	Q1/26-Q4/27
2A.3	Promote the CWPP StoryMap. The StoryMap can be found here.	OEM, Media, Stakeholders	Q2/26

- Objective 2B: **Provide resources and education** on best practices, including home hardening, defensible space, preparedness, and emergency notification.

Action ID	Action Description	Lead / Partners	Timeline
2B.1	Share information about CWRC (code) and other best practices, encouraging voluntary compliance to increase insurance availability and insurability of homes.	Zoning - Custer County, TOWC, TOSC	Q2-2026-ongoing

2B.2	Share updates with Custer County HOAs on House Bill 24-109 **(C.R.S. § 38-33.3-106.5)** regarding fire-hardened materials, mitigation measures, exemptions, fencing, and the Home Ignition Zone, emphasizing that covenants cannot prohibit hazard reduction or the use of fire-resistant building materials in residential and common-interest communities.	P&Z - Custer County, TOWC, TOSC	Q2-2026-ongoing
2B.2	Establish a comprehensive property assessment program that uses a standardized structure-ignition model to evaluate and document ignition risks consistently. Use scheduling tools to maximize the number of assessments and improve efficiency by organizing them by geographic area and subdivision. | Consider utilizing an off-the-shelf program such as the REALFire® program.	WMVO, WMFPD, OEM,NA, CCMT	Q4-2026
2B.3	Share information and encourage homeowners to participate in the ASIP Program.	WMVO, WMFPD, OEM, NA, CCMT	Q4-2026
2B.4	Enhance the existing community chipping program to include: scheduled curbside chipping days, improve outcomes across subdivisions and increase cubic yards chipped.	WMVO, WMFPD, OEM, CCMT	Q4-2026
2B.5	Deliver "The Role of Wildfire Mitigation in Real Estate" continuing education program, to real estate agents in Custer County, providing 4 accredited CE credits and equipping realtors with practical, place-based knowledge on wildfire risk, mitigation, and real estate considerations relevant to the County.	RGAR / CAR, NA, OEM	Q1/26-Q4/27
2B.6	Explore the development of a slash collection and pile-burning training site in the Wet Mountain Valley, potentially at the WMFPD training facility, to support safe, hands-on training and vegetation management efforts, including the acquisition of any necessary specialized equipment such as: a curtain burner.	WMFPD, OEM	Q4-2026

Example Chipping Program – Chaffee Chips
Created by Chaffee County, Chaffee Chips empowers community members to create defensible space by coordinating neighborhood slash and removal and chipping services. More information can be found here.

- Objective 2C: **Build public support** for vegetation management, wildfire mitigation efforts, and prescribed fire.

Action ID	Action Description	Lead / Partners	Timeline
2C.1	Provide information on the importance of vegetation management via pre- and post-treatment photos, how treatments affect wildfires, and other outreach materials. Coordinate outreach between Custer County, WMVO, USFS, BLM, NRCS, CSFS, local fire protection districts, and other stakeholders.	CSRMS, Stakeholders	Q1/26-Q4/27
2C.2	Increase public awareness and support for prescribed fire as a tool for wildfire risk reduction and ecosystem restoration. Educate on planning versus implementation timelines, noting that naturally ignited fires managed for resource objectives can provide a timely, cost-effective, and safe way to restore fire to the landscape, reduce hazardous fuels, and enhance ecosystem resilience. Encourage certified burner training and certification for landowners and professionals as appropriate.	CSRMS, FPDs, OEM, Stakeholders	Q1/26-Q4/27

- Objective 2D: **Engage socially vulnerable populations** to gain insight into their unique challenges and opportunities to mitigate wildfire risks, including identifying strategies to prepare for, withstand, and recover from power disruptions associated with wildfire and other hazard events.

Action ID	Action Description	Lead / Partners	Timeline
2D.1	Engage socially vulnerable populations through accessible communications and outreach to understand wildfire risks, barriers, and community-identified mitigation needs.	OEM, PHA, NA	Q1/26-Q4/27

2D.2	Improve preparedness for wildfire-related power disruptions by promoting practical strategies that support health, safety, and communication during outages.	PHA	Q1/26-Q4/27
2D.3	Encourage neighbor-to-neighbor engagement to support socially vulnerable residents and improve community preparedness, response, and recovery.	OEM, PHA, NA, civic groups	Q1/26-Q4/27

Goal 3: Safe and Effective Wildfire Response

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

- Objective 3A: **Assess current wildfire response capabilities and identify opportunities to address gaps, while strengthening effective public communication strategies that keep residents and visitors informed before, during, and after wildfire events.**

Action ID	Action Description	Lead / Partners	Timeline
3A.1	Work with local and county building departments, the Custer County Workforce Housing Committee (WHC), and other local organizations to promote innovative housing solutions to increase the number of qualified firefighters living in the county.	WHC	Q1/28-Q4/30
3A.2	Improve cell coverage across the county to make it easier for citizens to report emergencies and to reach people for emergency messaging.	Cell Providers, County	Q1/28-Q4/30
3A.3	Increase water supplies and storage for wildfire response by enhancing existing infrastructure, creating redundancies, and increasing water storage capacity and location. Identify locations in the county that most need water supply or storage improvements.	WMFPD, County	Q1/28-Q4/30

- Objective 3B: **Strengthen collaboration among key stakeholders**, including governments, fire protection depts/districts, non-profit collaboratives, and

response agencies, to improve pre-planning, coordination, and incident management.

Action ID	Action Description	Lead / Partners	Timeline
3B.1	CRRF Updates: Create a list of available resources (equipment, radios, etc.) between Custer County, local fire protection districts, DFPC, USFS, BLM, and CSFS that can be shared between agencies.	OEM, SO, WMFPD, EMS	Q1/26-Q4/27, + (annually)
3B.2	Collaborate between agencies to help sponsor Incident Qualification Cards (Red Cards).	FPDs	Q1/26-Q4/27
3B.3	Develop an Evacuation and Reentry Plan for Custer County—or for specific areas within the county and exercise the plan.	OEM, SO	Q1/26-Q4/27
3B.4	Develop a communications strategy for mass notifications, utilizing mobile applications, the county website, and social media posts to connect and inform community members in an emergency within seconds, using best practices that reach the broadest audience possible. Include annual testing. Utilize media releases to promote annual (at a minimum) alert and warning systems testing, and increase signups.	OEM, SO	Q1/26-Q4/26
3B.5	Develop a communications strategy for Fire Restrictions (AHJ) and Burn Permits (FPDs) that includes the full text for all statutes, resolutions, and ordinances referred to. (and/or links to source documents)	SO, FPDs, USFS, BLM, DFPC	Q1/26-Q4/26
3B.6	Compile and verify GIS/E911 data and conduct E911 parcel/address updates twice per year, at six-month intervals (e.g., Jan-Jun and Jul-Dec cycles.	IT / GIS	Q4/26, + ongoing
3B.7	Compile and verify structure data layers with parcel/address updates twice per year, at six-month intervals (e.g. Jan-Jun and Jul-Dec cycles. Last updated 2017 by USFS on behalf of Custer County.	IT / GIS	Q4/26, + ongoing

3B.8	Compile and verify GIS data layers for both the WMFPD and Wetmore VFD that exclude all federal lands from the dataset. Publish a GIS layer for the WMFPD and update key stakeholders who currently share incorrect information.	WMFPD, IT / GIS	Q2/2026
3B.9	Promote and help create Continuity of Operations Plans for communities and organizations.	OEM, BoCC, Stakeholders, WMVCF	Q1/26-Q4/27
3B.10	Promote and support the creation of RED Books for communities and organizations, including conference centers, schools, assisted living facilities, and camps.[8]	OEM, SO, Stakeholders	Q1/26-Q4/27

- Objective 3C: **Educate residents and stakeholders** on appropriate actions to take before, during, and after a wildfire.

Action ID	**Action Description**	**Lead / Partners**	**Timeline**
3C.1	Coordinate education and outreach between Custer County Emergency Management, USFS, BLM, ARWC, CSFS, and local fire protection districts on actions to take before, during, and after wildfires.	County, All	ongoing
3C.2	Increase outreach and education to short-term rentals and second homeowners on appropriate actions to take before, during, and after wildfire.	P&Z, TOSC,TOWC,Tourism Board	Q1/26-Q4/27
3C.3	Encourage residents to sign up for Custer County Emergency Alerts . Educate residents on the importance of following emergency instructions and the limitations of the emergency notifications. Encourage Custer County residents within the Rye FPD to register for Rave Alert for Pueblo County .	OEM, SO,BoCC	Q1/26, + ongoing

[8] A RED Book is a written emergency plan that outlines procedures, resources, and responsibilities for responding to emergencies, including wildfire, evacuation, and other hazards. It serves as a reference for staff, residents, or visitors to ensure safety and coordinated action during a crisis.

The actions listed in this section of the CWPP are not all-inclusive. Conditions, funding, and opportunities change over time, and it is critical to update this CWPP. Custer County will add appropriate new actions to meet changing needs and opportunities and make this a living planning document.

Living CWPP

To fulfill the intended purpose and remain effective, this CWPP shall be reviewed and updated on a recurring basis, no less than once every five years for an official update. More frequent and less formal updates may occur to incorporate relevant information, such as: updates to hazardous fuel reduction treatment projects status, cross-boundary planning, or other relevant information. It is the intent of the Custer County CWPP Wildfire planning team to update this CWPP within 2-3 years by incorporating RADs data into the project and crosswalking the plan with the Custer County Hazard Mitigation Plan updates.

Appendices

Appendix A – CWPP Community Engagement Survey Synopsis

CWPP Public Survey Summary

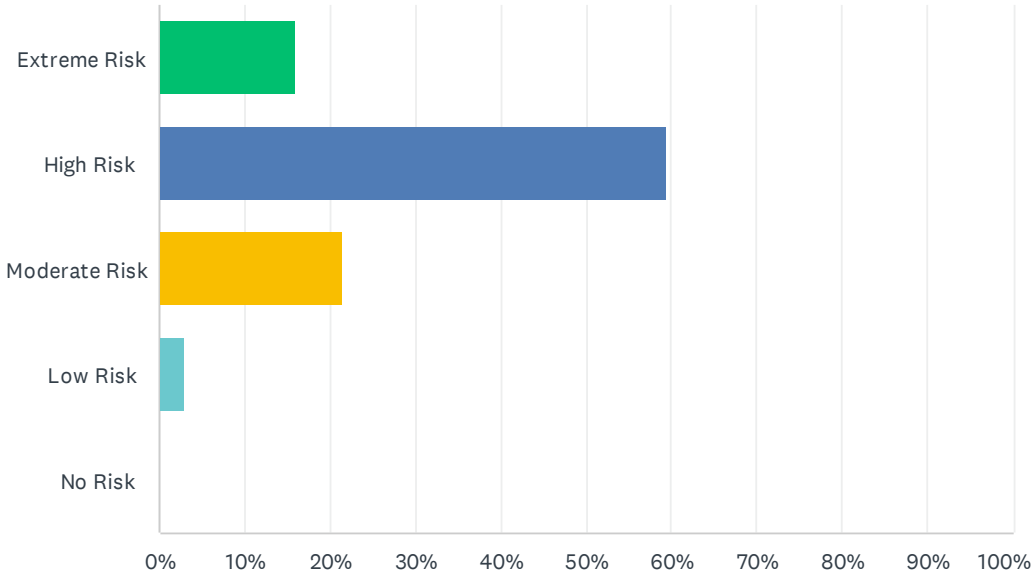
The following is a graphical summary of the Custer County CWPP Public Survey responses. The survey was conducted from December 1, through December 16, 2025.

The public survey received a total of 163 responses during this time. It was made available online and distributed widely on the county website and the Custer County Sheriff's Office Website and shared by other local pages and group posts. Fliers with a survey url and QR code were also posted at businesses and government facilities around the two towns.

Not all questions were required to be answered, and the response rate varied from 96 to 163 responses for each question. Names of the respondents were optional, and have been removed from this synopsis. The full report was made available to local response agency personnel.

How do you perceive the wildfire risk to Custer County?

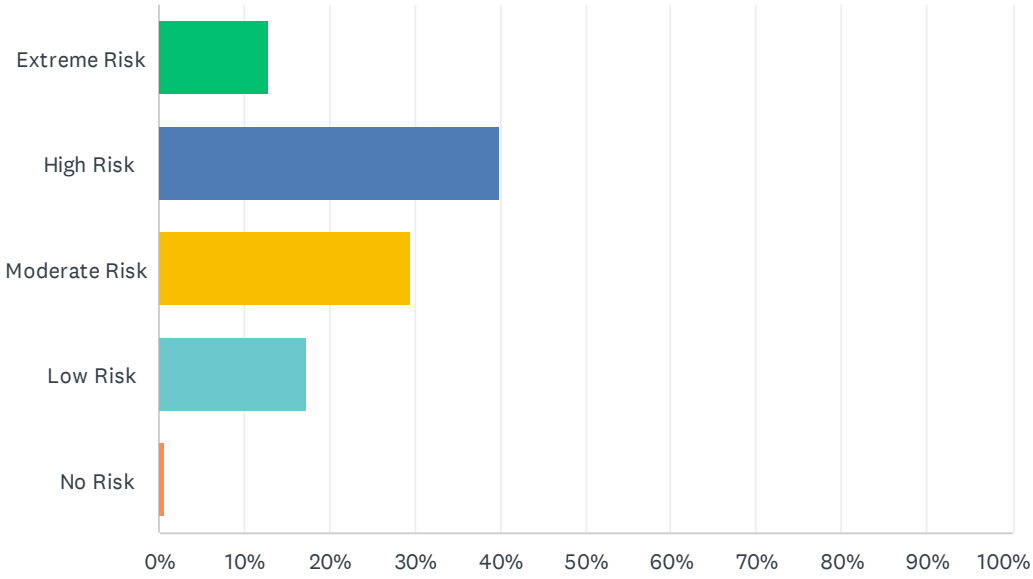
Answered: 163 Skipped: 0



ANSWER CHOICES	RESPONSES	
Extreme Risk	15.95%	26
High Risk	59.51%	97
Moderate Risk	21.47%	35
Low Risk	3.07%	5
No Risk	0.00%	0
TOTAL		163

How do you perceive the wildfire risk to your local community/subdivision?

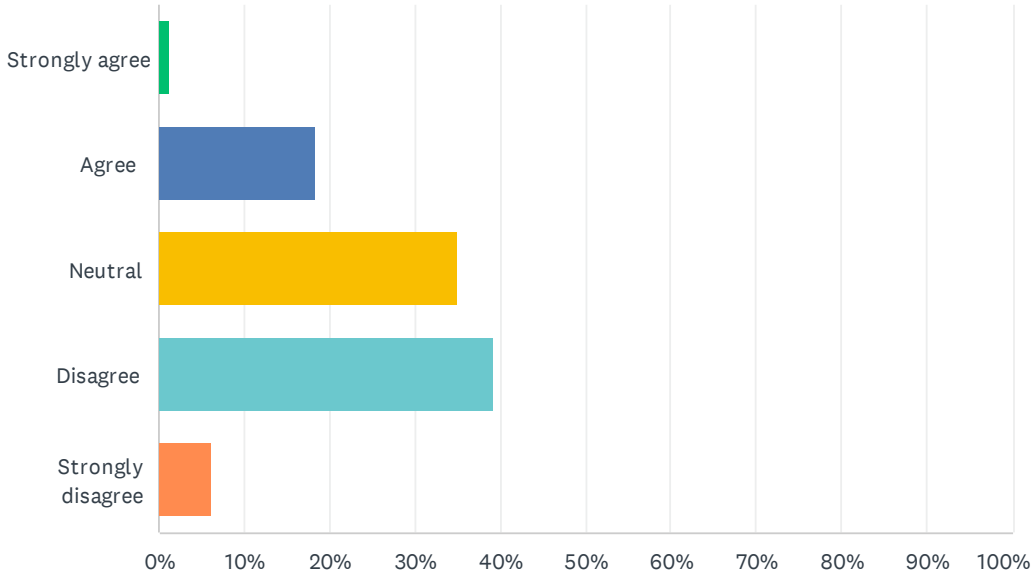
Answered: 163 Skipped: 0



ANSWER CHOICES	RESPONSES	
Extreme Risk	12.88%	21
High Risk	39.88%	65
Moderate Risk	29.45%	48
Low Risk	17.18%	28
No Risk	0.61%	1
TOTAL		163

I believe my county and local community/subdivision are prepared for a wildfire.

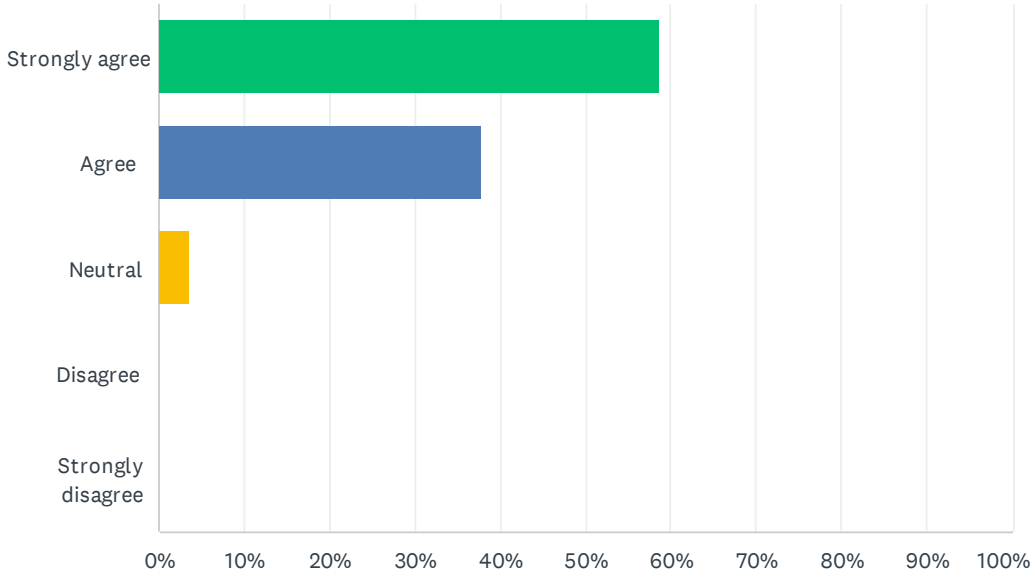
Answered: 163 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	1.23%	2
Agree	18.40%	30
Neutral	34.97%	57
Disagree	39.26%	64
Strongly disagree	6.13%	10
TOTAL		163

I believe actions should be taken to mitigate the wildfire risk.

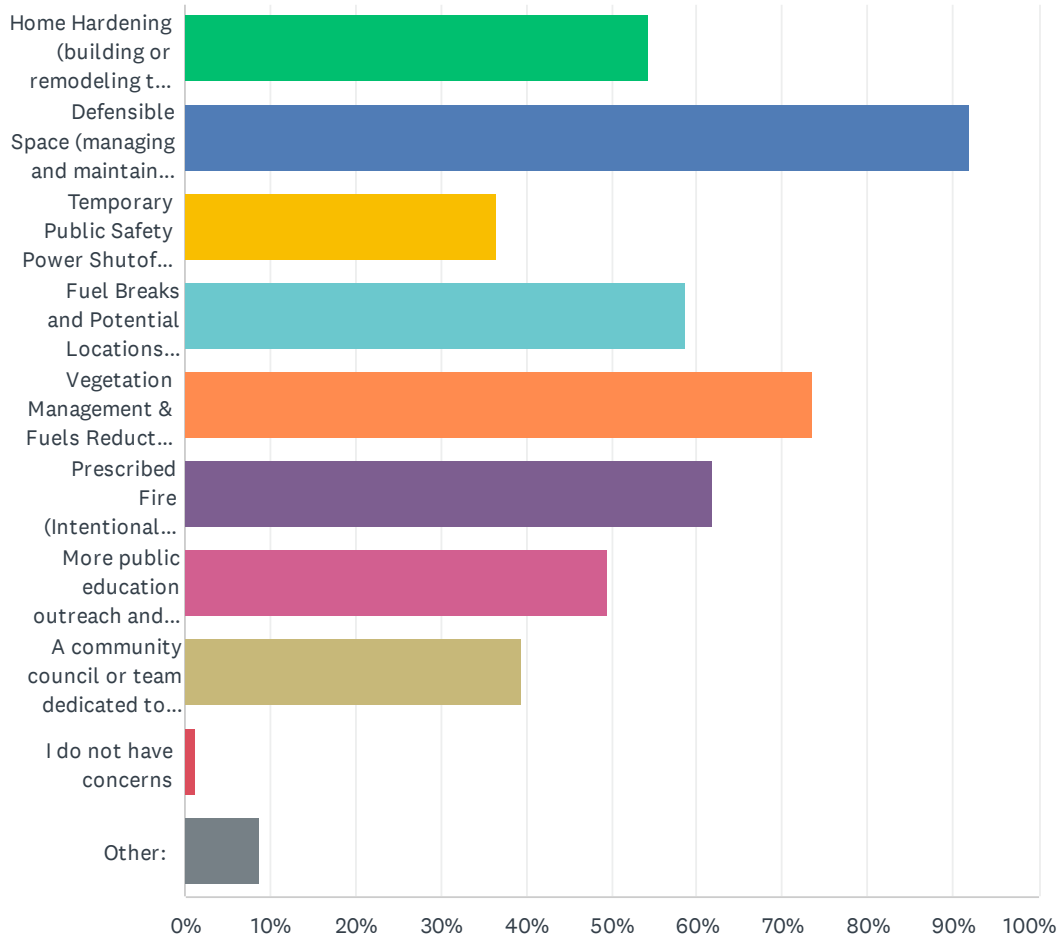
Answered: 162 Skipped: 1



ANSWER CHOICES	RESPONSES	
Strongly agree	58.64%	95
Agree	37.65%	61
Neutral	3.70%	6
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		162

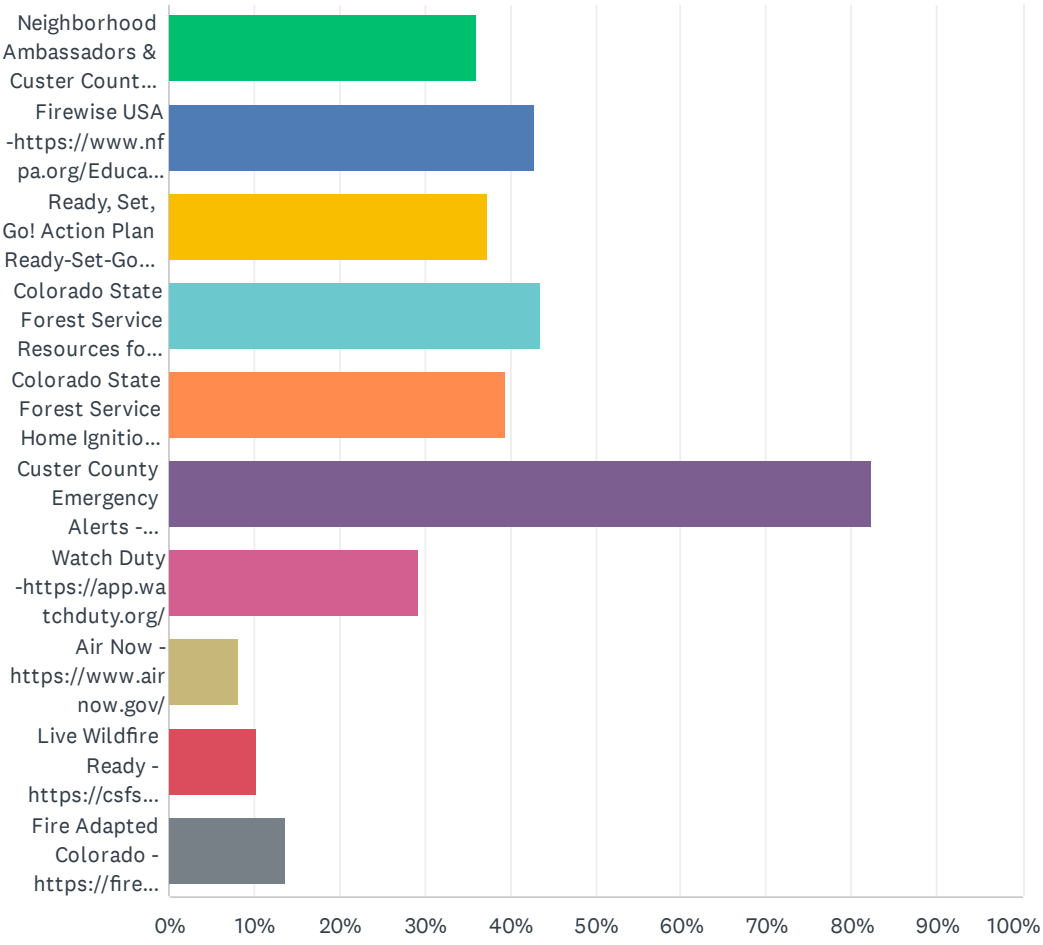
What do you think are the most effective methods of wildfire mitigation in Custer County? Select all that apply.

Answered: 162 Skipped: 1



Identify the following wildfire prevention and education resources you are familiar with, or applications that you use.

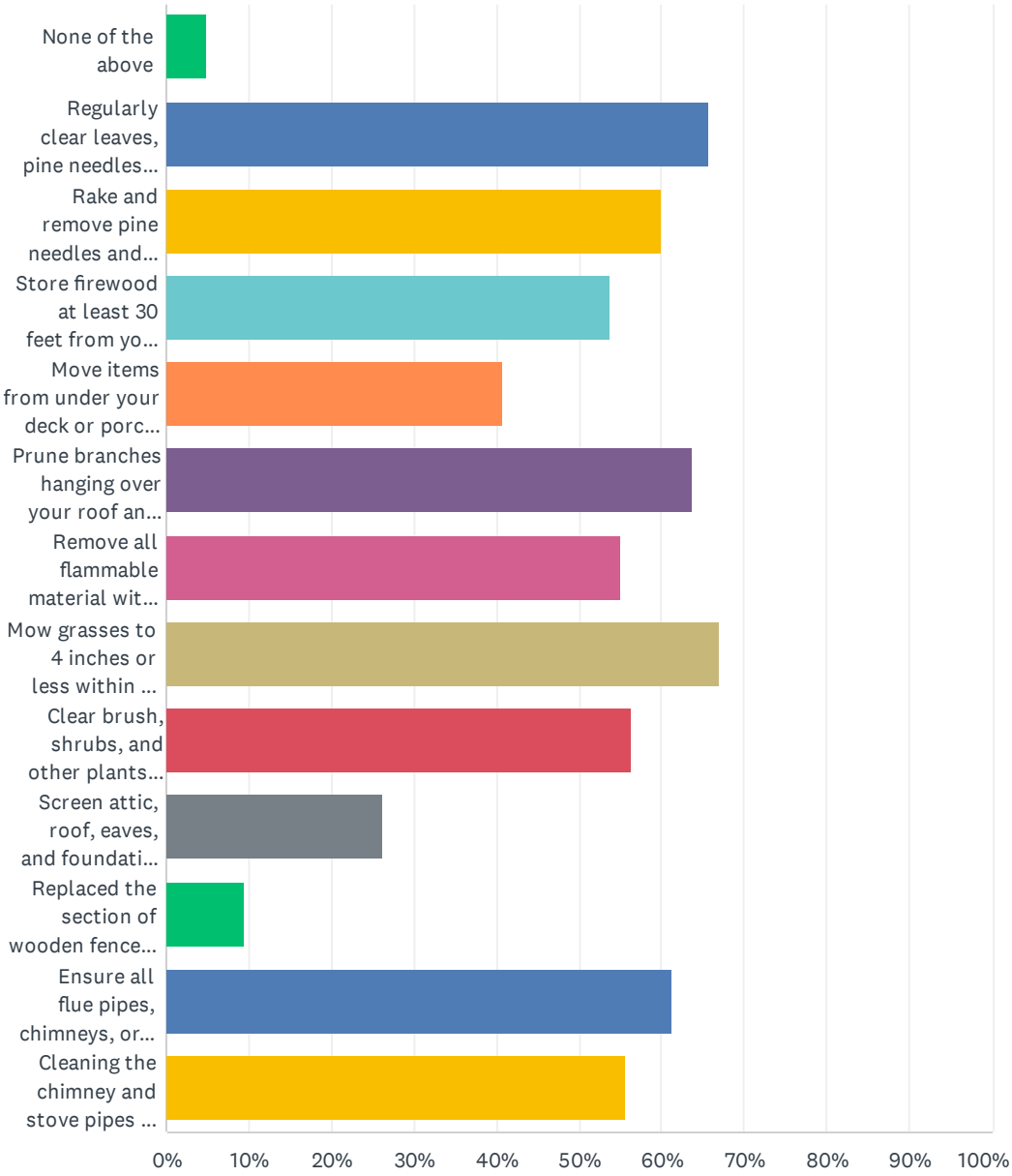
Answered: 147 Skipped: 16



ANSWER CHOICES	RESPONSES	
Neighborhood Ambassadors & Custer County Mitigation Team - https://fireadaptedco.org/programs/fac-naa/	36.05%	53
Firewise USA -https://www.nfpa.org/Education-and-Research/Wildfire/Firewise-USA	42.86%	63
Ready, Set, Go! Action Plan Ready-Set-Go-Wildland-Fire-Action-Plan-Pages-8-11.pdf https://10afad46-e440-4c33-bd98-4a4b1a9a3288.filesusr.com/ugd/92b9d1_880c6b7d11304432b429434e8ca3e326.pdf	37.41%	55
Colorado State Forest Service Resources for Home and Land Owners - https://csfs.colostate.edu/homeowners-landowners/	43.54%	64
Colorado State Forest Service Home Ignition Zone Guide- https://csfs.colostate.edu/wp-content/uploads/2021/04/2021_CSFS_HIZGuide_Web.pdf	39.46%	58
Custer County Emergency Alerts - https://member.everbridge.net/355009111785665/login	82.31%	121
Watch Duty -https://app.watchduty.org/	29.25%	43
Air Now - https://www.airnow.gov/	8.16%	12
Live Wildfire Ready - https://csfs.colostate.edu/live-wildfire-ready/	10.20%	15
Fire Adapted Colorado - https://fireadaptedco.org/	13.61%	20
Total Respondents: 147		

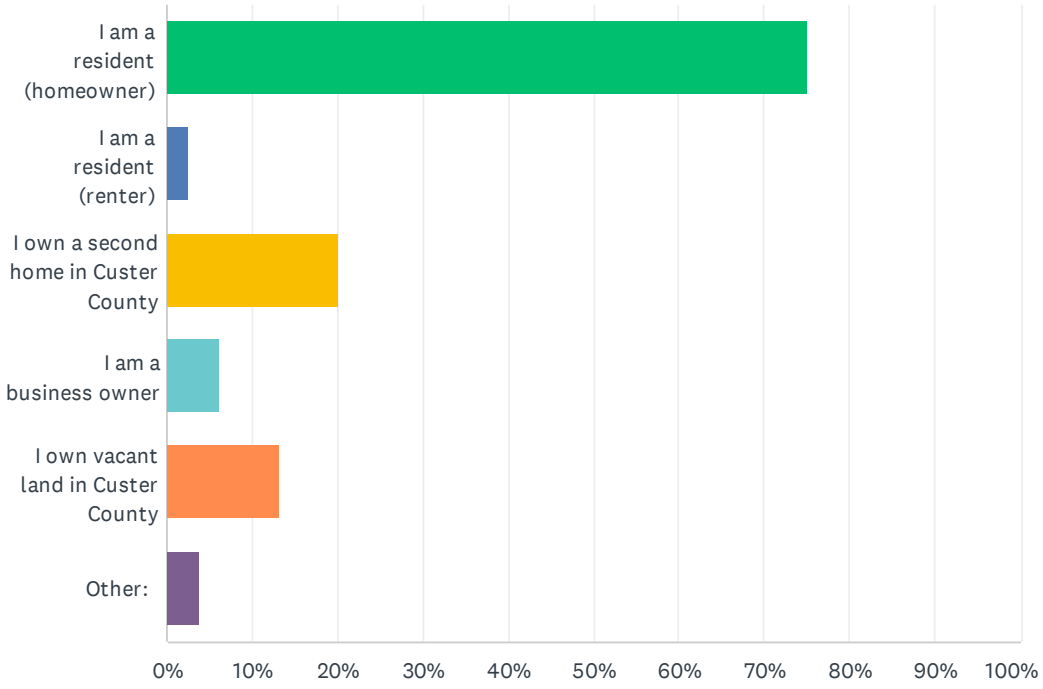
Which of the following steps have you completed to prepare your home and property for wildfire and reduce the risk of accidental ignitions?

Answered: 160 Skipped: 3



What is your connection to the Custer County Community Wildfire Protection Plan (CWPP)?

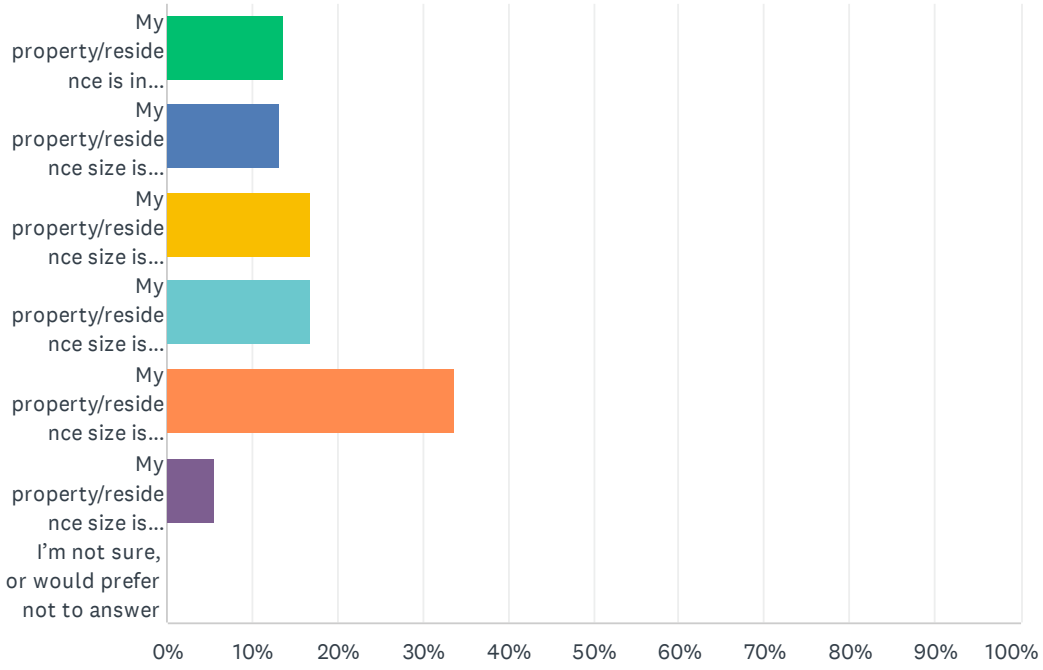
Answered: 160 Skipped: 3



ANSWER CHOICES	RESPONSES	
I am a resident (homeowner)	75.00%	120
I am a resident (renter)	2.50%	4
I own a second home in Custer County	20.00%	32
I am a business owner	6.25%	10
I own vacant land in Custer County	13.13%	21
Other:	3.75%	6
Total Respondents: 160		

Which one of the following best describes your property/residence?

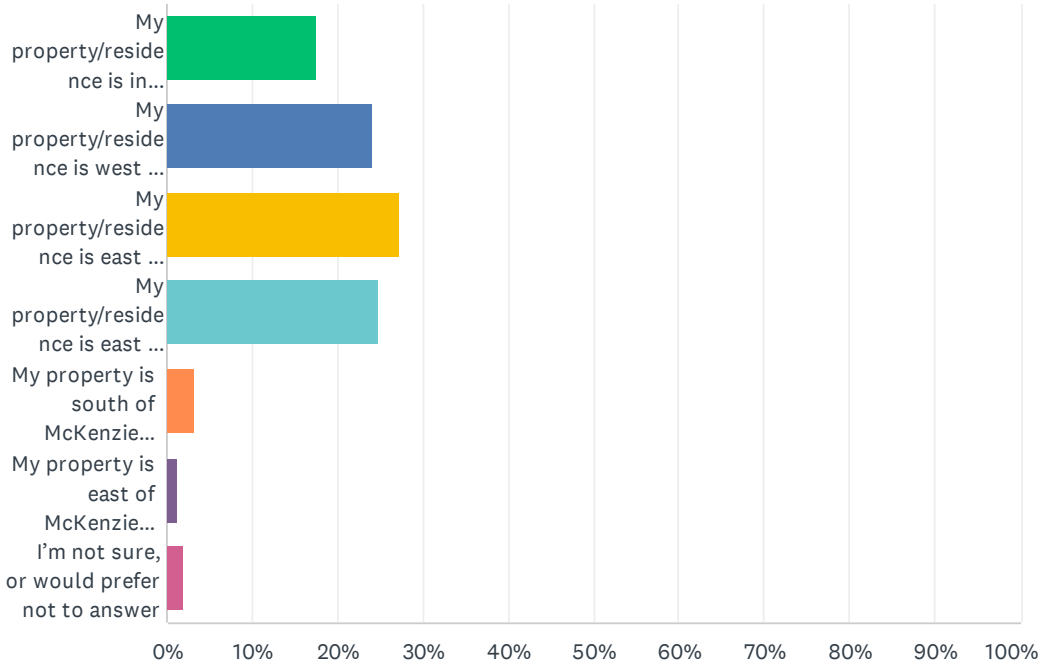
Answered: 160 Skipped: 3



ANSWER CHOICES	RESPONSES	
My property/residence is in Westcliffe or Silver Cliff	13.75%	22
My property/residence size is <5acres	13.13%	21
My property/residence size is between 5 and 10 acres	16.88%	27
My property/residence size is between 10 and 35 acres	16.88%	27
My property/residence size is between 35 and 80 acres	33.75%	54
My property/residence size is >80 acres	5.63%	9
I'm not sure, or would prefer not to answer	0.00%	0
TOTAL		160

Which one of the following best describes your property/residence?

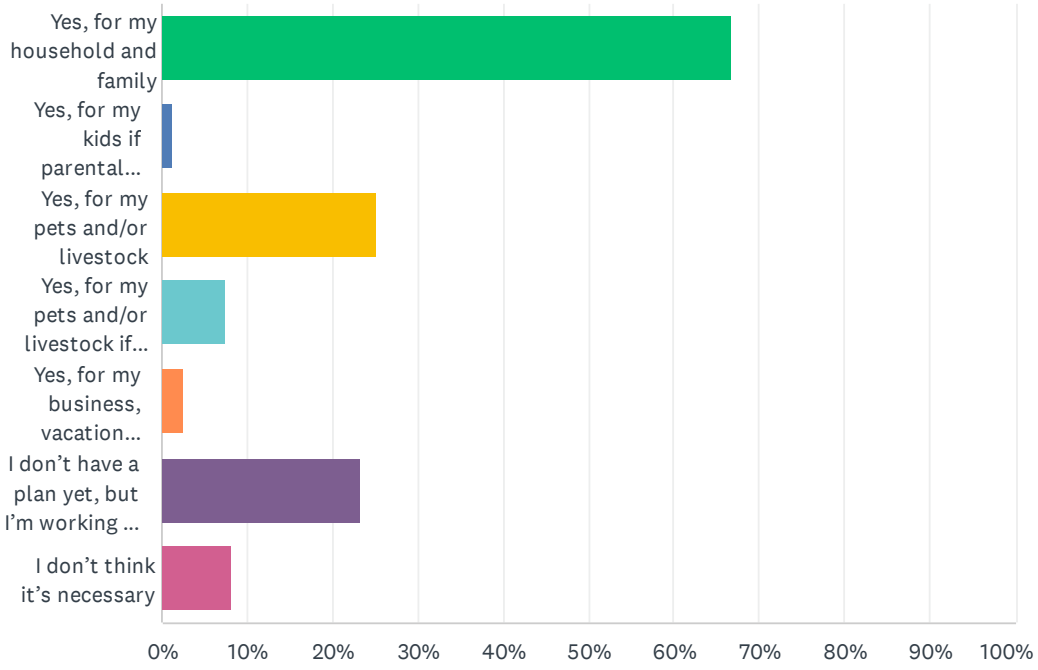
Answered: 154 Skipped: 9



ANSWER CHOICES	RESPONSES	
My property/residence is in Westcliffe or Silver Cliff	17.53%	27
My property/residence is west of SH 69	24.03%	37
My property/residence is east of SH 69, and north of SH 96	27.27%	42
My property/residence is east of H69, south of SH 96, and west of SH 165	24.68%	38
My property is south of McKenzie Junction, adjacent to or along SH 165 (including SH 78, Greenhorn Road, and the San Isabel area)	3.25%	5
My property is east of McKenzie Junction (includes Smith Creek, Greenwood, Wetmore, TV Hills, Adobe Creek, CR 387, etc.)	1.30%	2
I'm not sure, or would prefer not to answer	1.95%	3
TOTAL		154

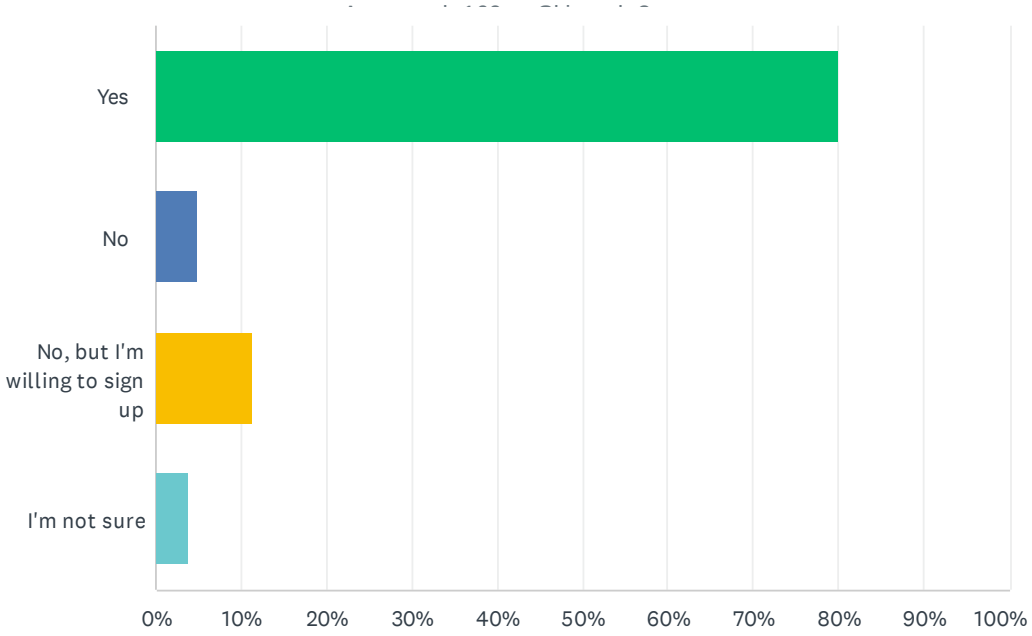
Do you have an Evacuation Plan? Select all that apply.

Answered: 159 Skipped: 4



ANSWER CHOICES	RESPONSES	
Yes, for my household and family	66.67%	106
Yes, for my kids if parental guardians are not home	1.26%	2
Yes, for my pets and/or livestock	25.16%	40
Yes, for my pets and/or livestock if I'm not at home	7.55%	12
Yes, for my business, vacation rental, or conference center	2.52%	4
I don't have a plan yet, but I'm working on it	23.27%	37
I don't think it's necessary	8.18%	13
Total Respondents: 159		

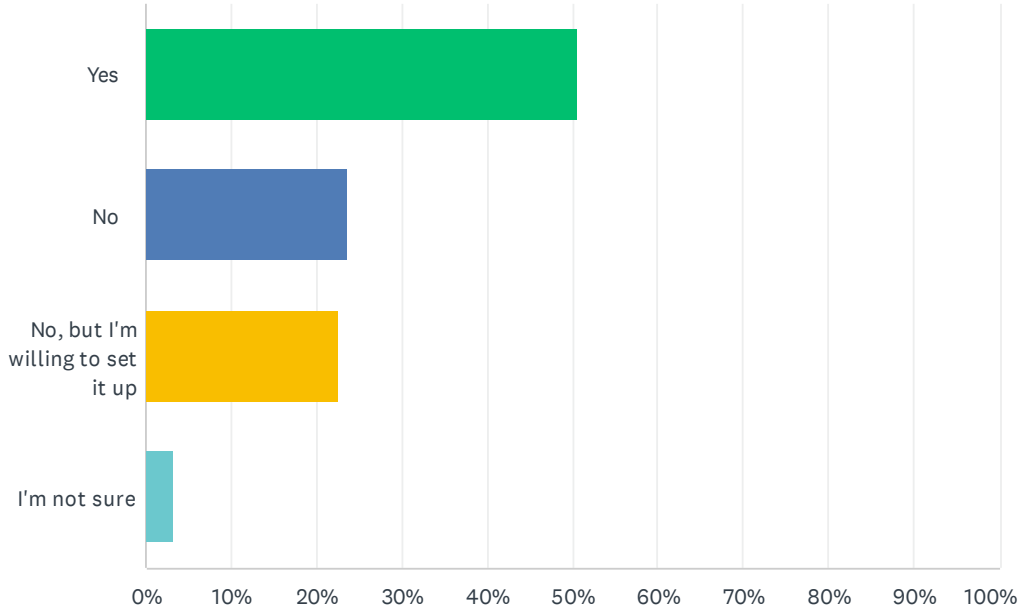
Have you signed up for the emergency alert system called Everbridge to receive notifications during wildfires and other incidents? https://member.everbridge.net/355009111785665/login



ANSWER CHOICES	RESPONSES	
Yes	80.00%	128
No	5.00%	8
No, but I'm willing to sign up	11.25%	18
I'm not sure	3.75%	6
TOTAL		160

Do you use the Everbridge Mobile App on your mobile devices?

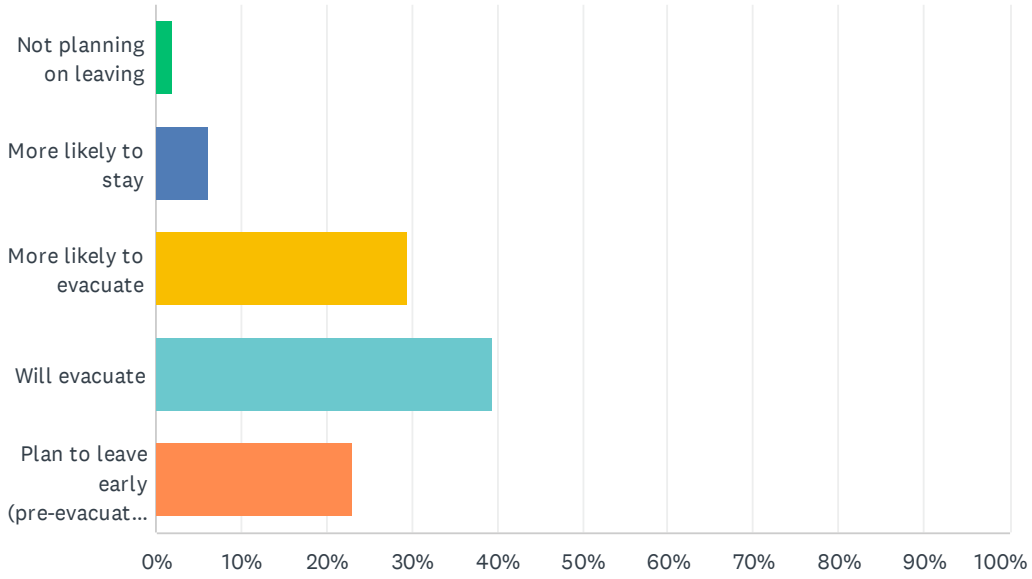
Answered: 160 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	50.63%	81
No	23.75%	38
No, but I'm willing to set it up	22.50%	36
I'm not sure	3.13%	5
TOTAL		160

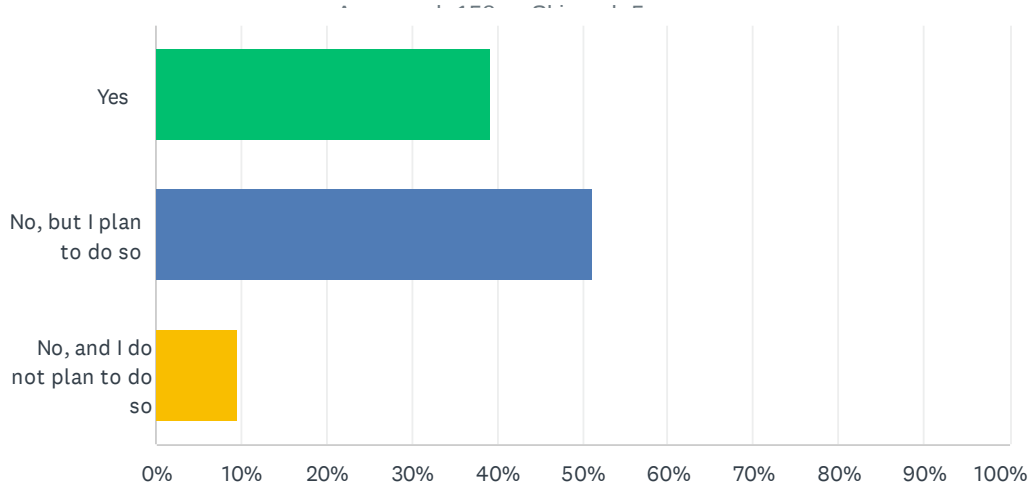
How likely are you to leave your home if it is imminently threatened by wildfire?

Answered: 160 Skipped: 3



ANSWER CHOICES	RESPONSES	
Not planning on leaving	1.88%	3
More likely to stay	6.25%	10
More likely to evacuate	29.38%	47
Will evacuate	39.38%	63
Plan to leave early (pre-evacuate) if time allows	23.13%	37
TOTAL		160

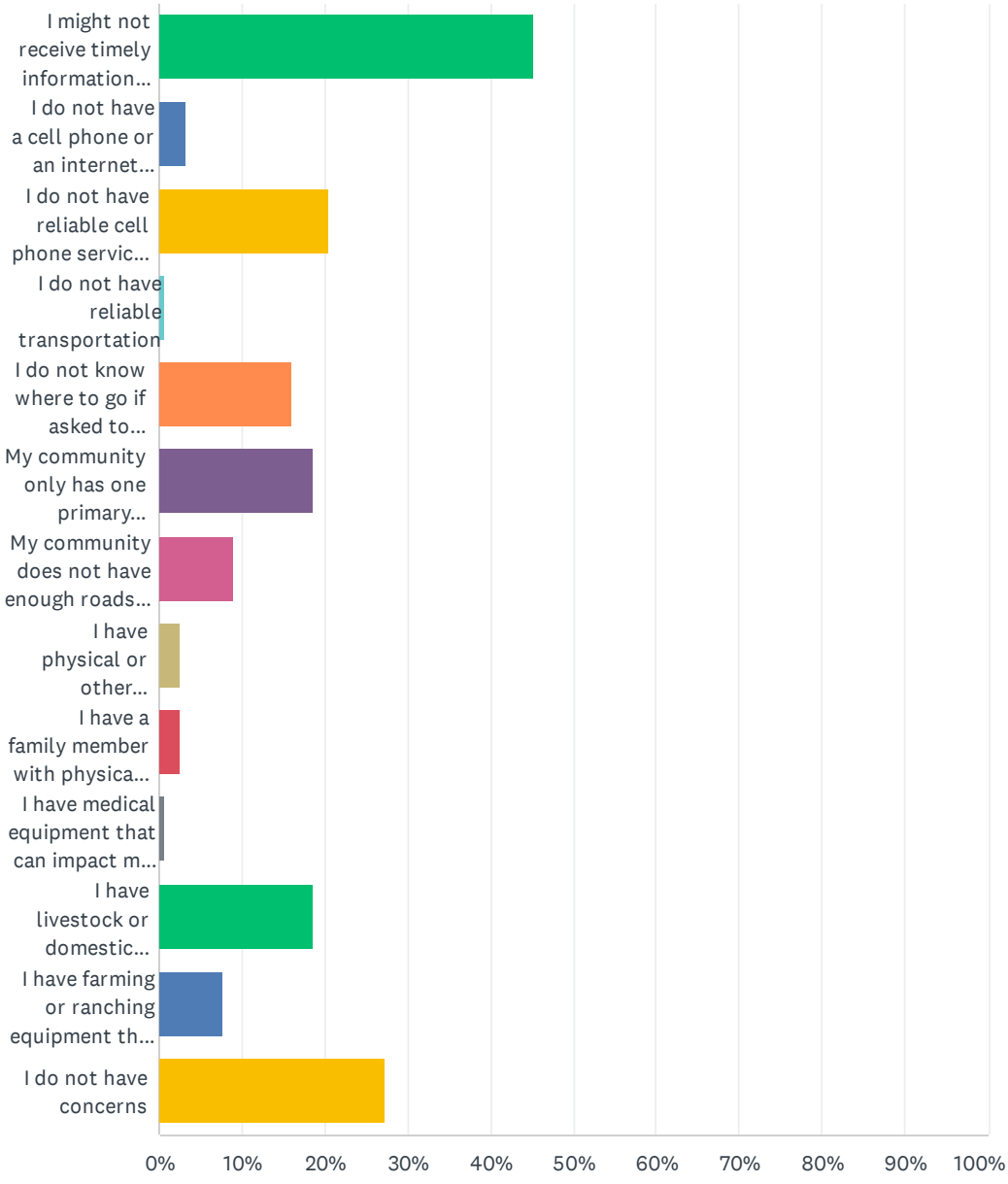
Have you prepared a written list of items to take and a “go-bag” for evacuation? https://csfs.colostate.edu/wp-content/uploads/2024/04/Ready-Set-Go-Wildland-Fire-Action-Plan-Pages-8-11.pdf



ANSWER CHOICES	RESPONSES	
Yes	39.24%	62
No, but I plan to do so	51.27%	81
No, and I do not plan to do so	9.49%	15
TOTAL		158

In the event of an evacuation, what concerns do you have?

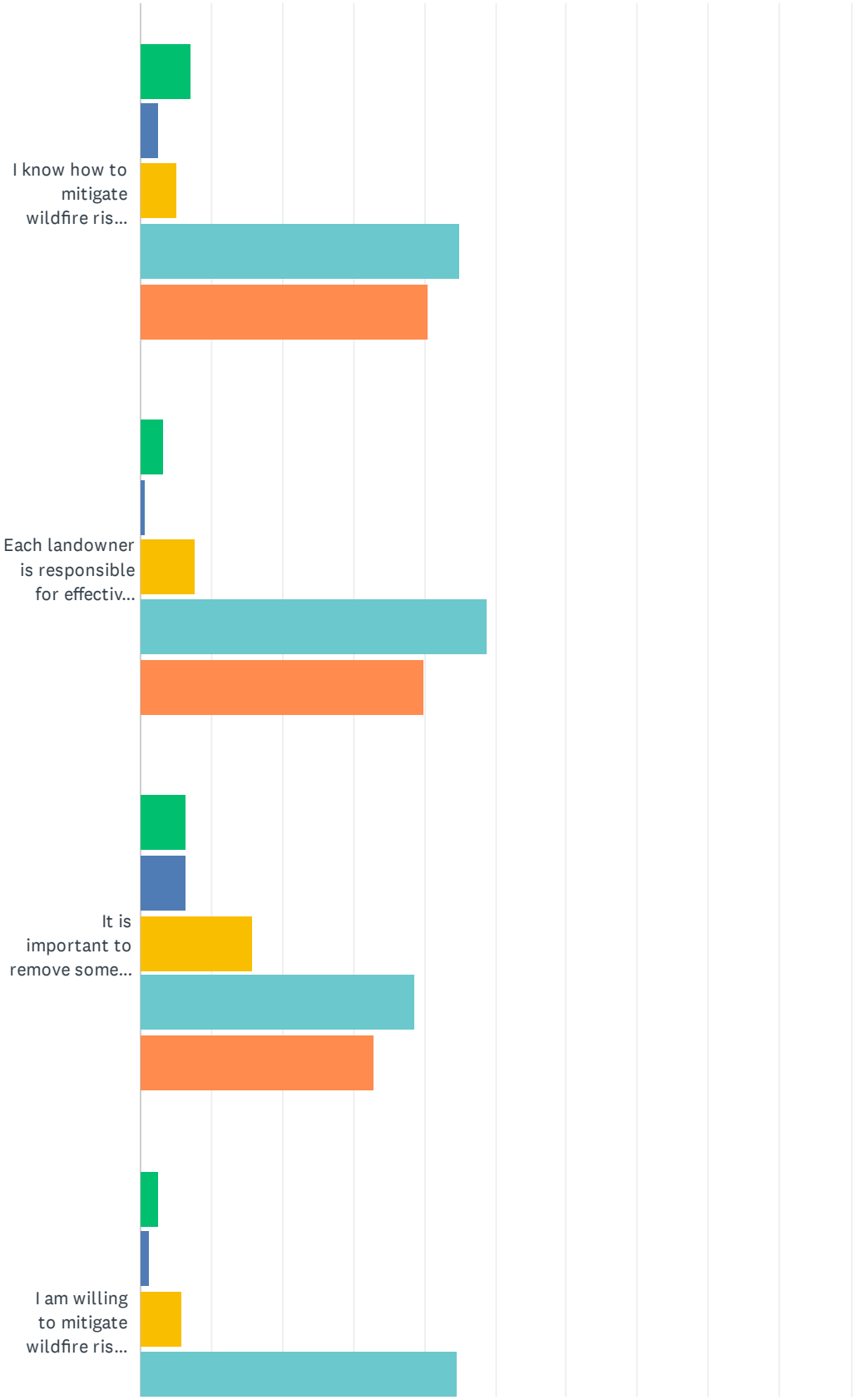
Answered: 157 Skipped: 6

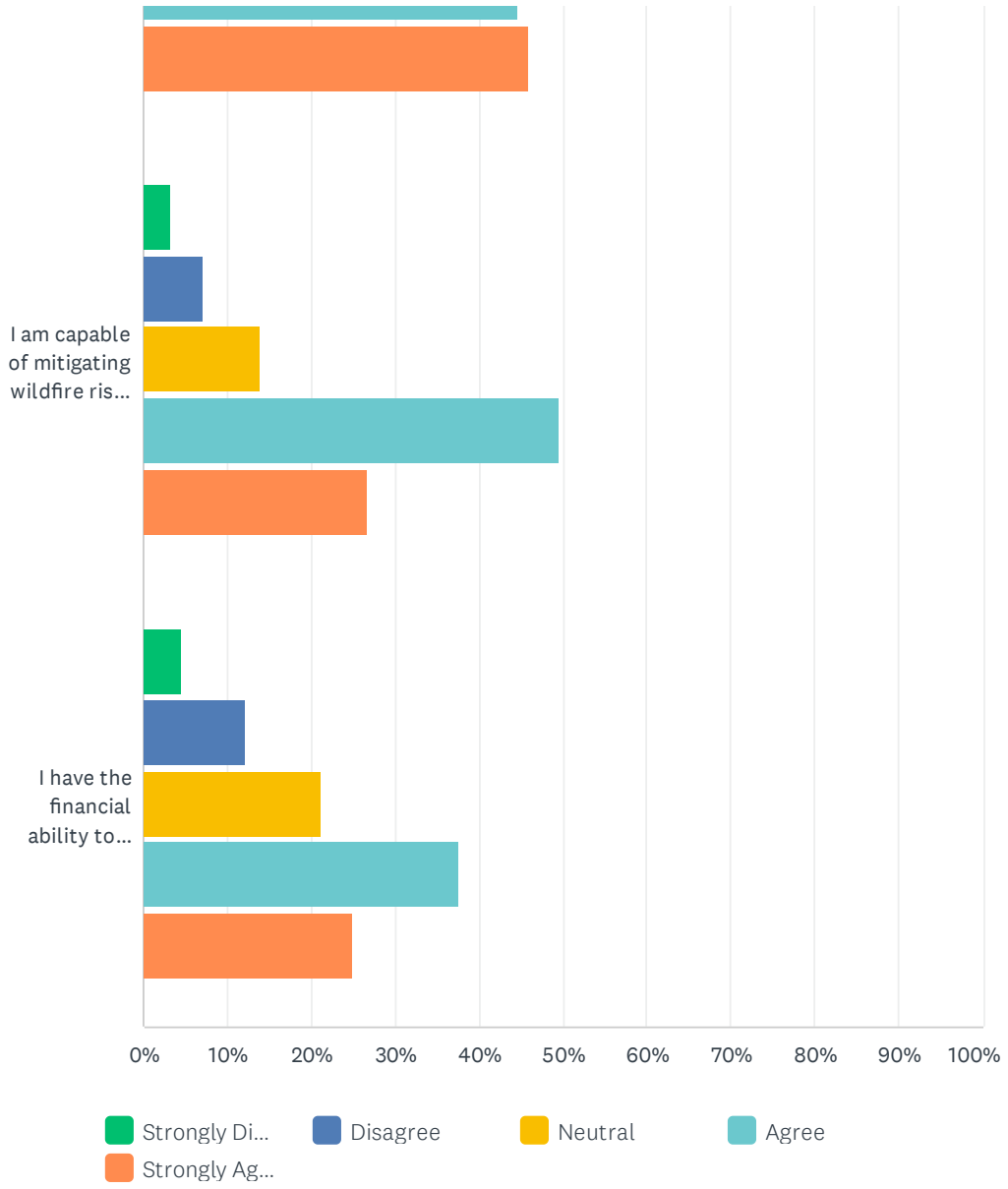


ANSWER CHOICES	RESPONSES	
I might not receive timely information about an evacuation	45.22%	71
I do not have a cell phone or an internet connection	3.18%	5
I do not have reliable cell phone service at my residence	20.38%	32
I do not have reliable transportation	0.64%	1
I do not know where to go if asked to evacuate	15.92%	25
My community only has one primary evacuation route	18.47%	29
My community does not have enough roads to handle evacuation traffic	8.92%	14
I have physical or other limitations.	2.55%	4
I have a family member with physical limitations.	2.55%	4
I have medical equipment that can impact my ability to evacuate	0.64%	1
I have livestock or domestic animals that need to be evacuated	18.47%	29
I have farming or ranching equipment that I am concerned about burning	7.64%	12
I do not have concerns	27.39%	43
Total Respondents: 157		

Please respond to the following statements:

Answered: 161 Skipped: 2

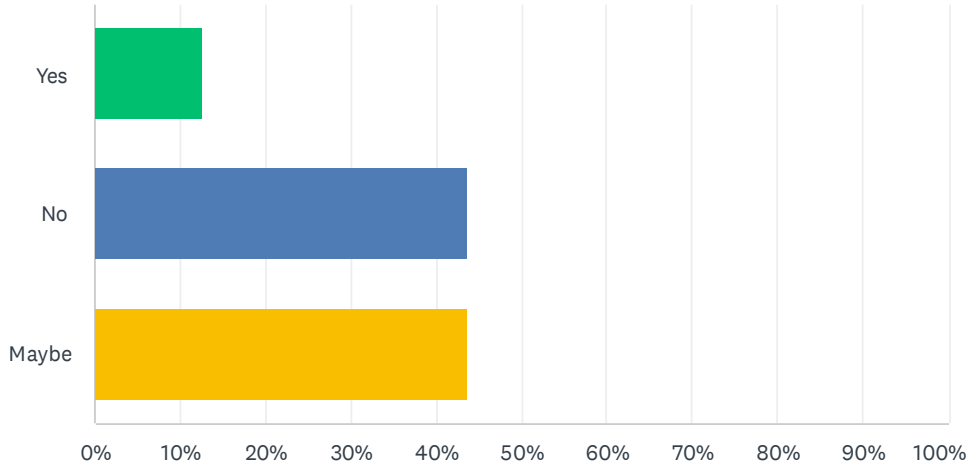




	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
I know how to mitigate wildfire risk on my own property.	6.96% 11	2.53% 4	5.06% 8	44.94% 71	40.51% 64	158	4.09
Each landowner is responsible for effective wildfire mitigation.	3.16% 5	0.63% 1	7.59% 12	48.73% 77	39.87% 63	158	4.22
It is important to remove some trees for wildfire protection on my own property.	6.33% 10	6.33% 10	15.82% 25	38.61% 61	32.91% 52	158	3.85
I am willing to mitigate wildfire risk on my property.	2.52% 4	1.26% 2	5.66% 9	44.65% 71	45.91% 73	159	4.30
I am capable of mitigating wildfire risk on my property.	3.16% 5	6.96% 11	13.92% 22	49.37% 78	26.58% 42	158	3.89
I have the financial ability to mitigate wildfire risk on my property.	4.46% 7	12.10% 19	21.02% 33	37.58% 59	24.84% 39	157	3.66

Do you plan to take advantage of the $1,000 Colorado Income Tax Credit for paid wildfire mitigation in tax years 2025, 2026 or and/or 2027? https://tax.colorado.gov/income-tax-topics-wildfire-mitigation-measures

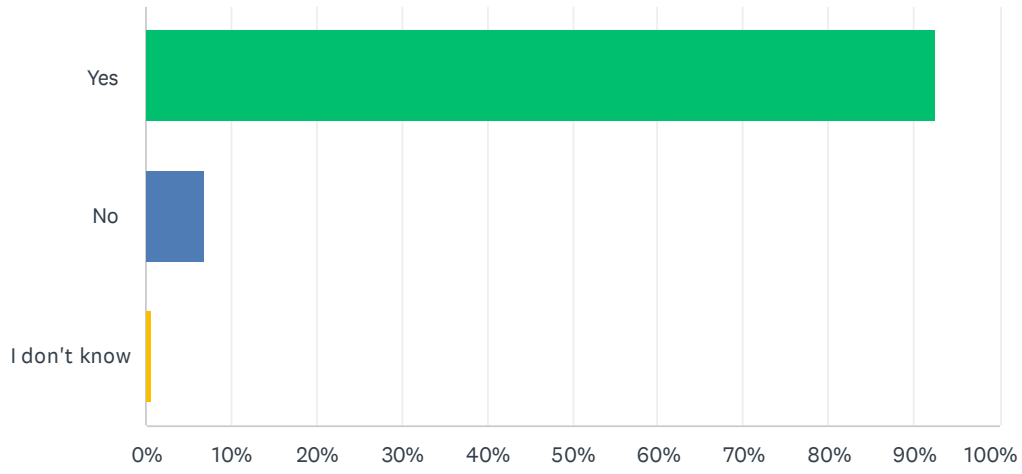
Answered: 160 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	12.50%	20
No	43.75%	70
Maybe	43.75%	70
TOTAL		160

Do you have homeowners or renters insurance?

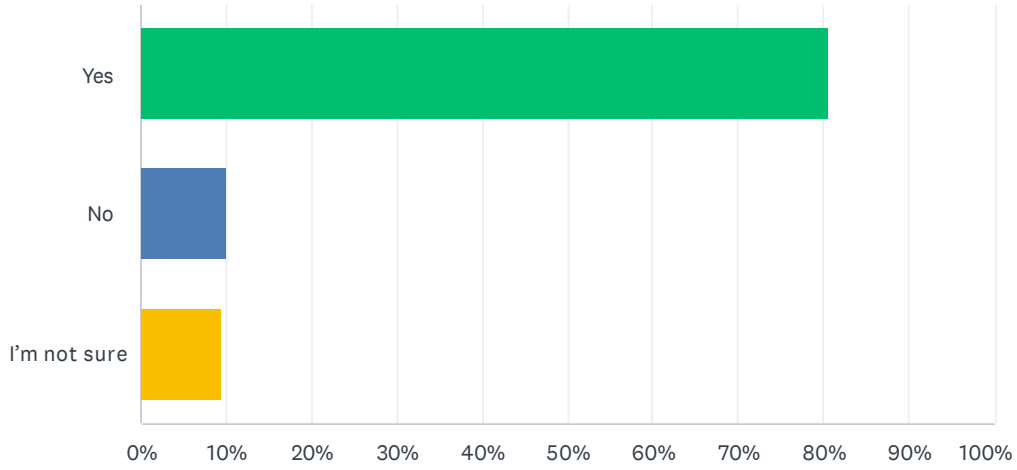
Answered: 160 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	92.50%	148
No	6.88%	11
I don't know	0.63%	1
TOTAL		160

Do you feel comfortable with your current level of insurance coverage?

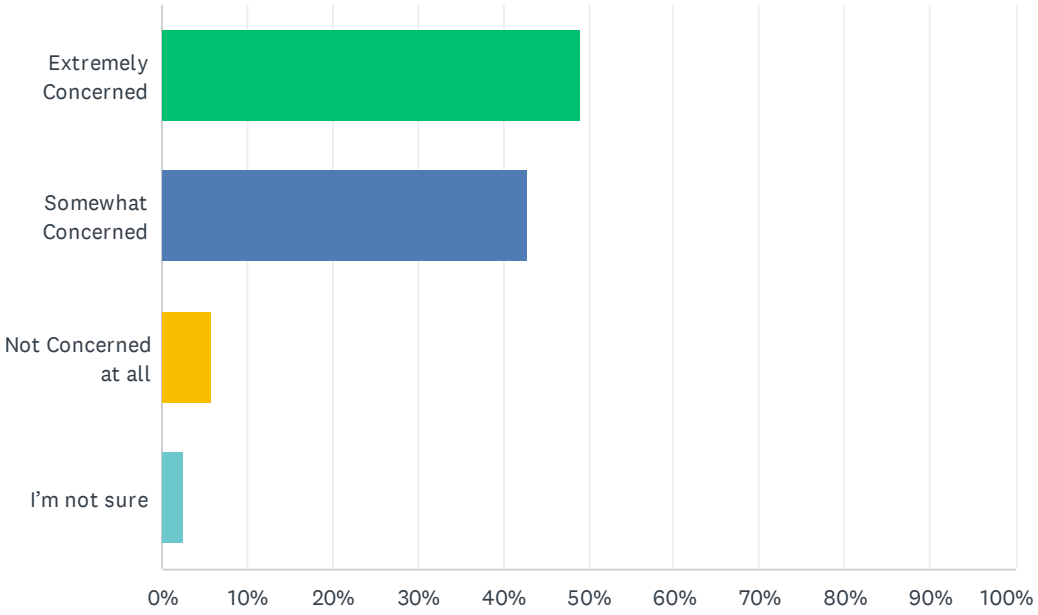
Answered: 159 Skipped: 4



ANSWER CHOICES	RESPONSES	
Yes	80.50%	128
No	10.06%	16
I'm not sure	9.43%	15
TOTAL		159

Are you concerned with the potential issues related to the availability and affordability of homeowners' insurance?

Answered: 159 Skipped: 4



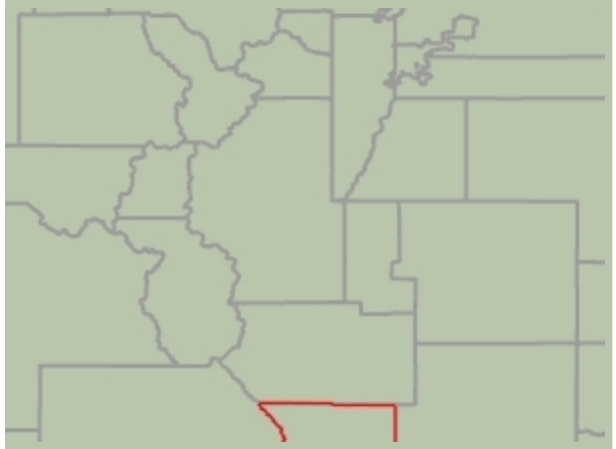
ANSWER CHOICES	RESPONSES	
Extremely Concerned	49.06%	78
Somewhat Concerned	42.77%	68
Not Concerned at all	5.66%	9
I'm not sure	2.52%	4
TOTAL		159

Appendix B - CO-WRA_Forest Action Plan Mapbook for Custer County

2022 Colorado Wildfire Risk Assessment Summary Report

COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY

Custer County



Report was generated using
www.ColoradoForestAtlas.org

Report version: 3.0.0
Report generated: 12-1-2025

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Disclamer

Colorado State Forest Service makes no warranties or guarantees, either expressed or implied as to the completeness, accuracy, or correctness of the data portrayed in this product nor accepts any liability, arising from any incorrect, incomplete or misleading information contained therein. All information, data and databases are provided "As Is" with no warranty, expressed or implied, including but not limited to, fitness for a particular purpose.

User should also note that property boundaries included in any product do not represent an on-the-ground survey suitable for legal, engineering, or surveying purposes. They represent only the approximate relative locations.

Introduction

Colorado Wildfire Risk Assessment Report

Welcome to the Colorado Wildfire Risk Assessment Summary Reporting Tool.

This tool allows users of the Risk Reduction Planner application of the Colorado Forest Atlas web portal to define a specific project area and generate information for this area. A detailed risk summary report can be generated using a set of predefined map products developed by the Colorado Wildfire Risk Assessment project which have been summarized explicitly for the user defined project area. The report is generated in PDF format.

The report has been designed so that information from the report can be copied and pasted into other specific plans, reports, or documents depending on user needs. Examples include, but are not limited to, Community Wildfire Protection Plans, Local Fire Plans, Fuels Mitigation Plans, Hazard Mitigation Plans, Homeowner Risk Assessments, and Forest Management or Stewardship Plans. Example templates for some of these reports are available for download on the Colorado Forest Atlas web portal.

The Colorado WRA provides a consistent, comparable set of scientific results to be used as a foundation for wildfire mitigation and prevention planning in Colorado.

Results of the assessment can be used to help prioritize areas in the state where mitigation treatments, community interaction and education, or tactical analyses might be necessary to reduce risk from wildfires.

The Colorado WRA products included in this report are designed to provide the information needed to support the following key priorities:

- Identify areas that are most prone to wildfire
- Plan and prioritize hazardous fuel treatment programs
- Allow agencies to work together to better define priorities and improve emergency response, particularly across jurisdictional boundaries
- Increase communication with local residents and the public to address community priorities and needs

Products

Each product in this report is accompanied by a general description, table, chart and/or map. A list of available Colorado WRA products in this report is provided in the following table.

COWRA Product	Description
Wildland Urban Interface	Housing density depicting where humans and their structures meet or intermix with wildland fuel
Wildland Urban Interface Risk	A measure of the potential impact on people and their homes from wildfire
Wildfire Risk to Assets	The overall composite risk occurring from a wildfire derived by combining Burn Probability and Values at Risk Rating
Burn Probability	Annual probability of any location burning due to wildfire
Terrain Difficulty Index	Reflects the difficulty to suppress a fire given the terrain and vegetation conditions that may impact ground resource access and capabilities
Characteristic Flame Length	A measure of the expected flame length of a potential fire
Fire Intensity Scale	Quantifies the potential fire intensity by orders of magnitude
Fire Type	Potential for canopy fire type for extreme weather conditions (canopy fire potential)
Rate of Spread	The speed with which a fire moves in a horizontal direction across the landscape
Surface Fuels	Characterization of surface fuel models that contain the parameters for calculating fire behavior outputs
Vegetation	General vegetation and landcover types
Watershed Protection Risk	A measure of risk to watershed protection areas based on the potential negative impacts from wildfire.
Riparian Assets Risk	A measure of the risk to riparian areas based on the potential negative impacts from wildfire
Forest Assets Risk	A measure of the risk to forested areas based on the potential negative impacts from wildfire

COWRA Product	Description
Building Damage Potential	Estimates the potential for building loss
Defensible Space Index	The arithmetic mean of the three defensible space components: canopy, fuels, and slope. The colors shown represent the relative range and are the average for all of the buildings in the hexagon.

Wildland Urban Interface

Reflects housing density depicting where humans and their structures meet or intermix with wildland fuels

Colorado is one of the fastest growing states in the Nation, with much of this growth occurring outside urban boundaries. This increase in population across the state will impact counties and communities that are located within the Wildland Urban Interface (WUI). The WUI is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. Population growth within the WUI substantially increases the risk from wildfire.

The Wildland Urban Interface (WUI) layer reflects housing density depicting where humans and their structures meet or intermix with wildland fuels. In the past, conventional wildland-urban interface data sets, such as USFS SILVIS, have been used to reflect these concerns. However, USFS SILVIS and other existing data sources did not provide the level of detail needed by the Colorado State Forest Service and local fire protection agencies, particularly reflecting encroachment into urban core areas.

For the **Custer County** project area, it is estimated that **4,993** people or **98%** percent of the total project area population (5,044) live within the WUI.

The new WUI data set is derived using advanced modeling techniques based on the Where People Live (housing density) data set and 2021 LandScan USA population count data available from the Department of Homeland Security, HSIP data. WUI is simply a subset of the Where People Live data set. The primary difference is populated areas surrounded by sufficient non-burnable areas (i.e. interior urban areas) are removed from the Where People Live data set, as these areas are not expected to be directly impacted by a wildfire. Fringe urban areas, i.e. those on the edge of urban areas directly adjacent to burnable fuels are included in the WUI. Advanced encroachment algorithms were used to define these fringe areas.

Data is modeled at a 20-meter grid cell resolution, which is consistent with other CO-WRA layers. The WUI classes are based on the number of houses per acre. Class breaks are based on densities well understood and commonly used for fire protection planning.

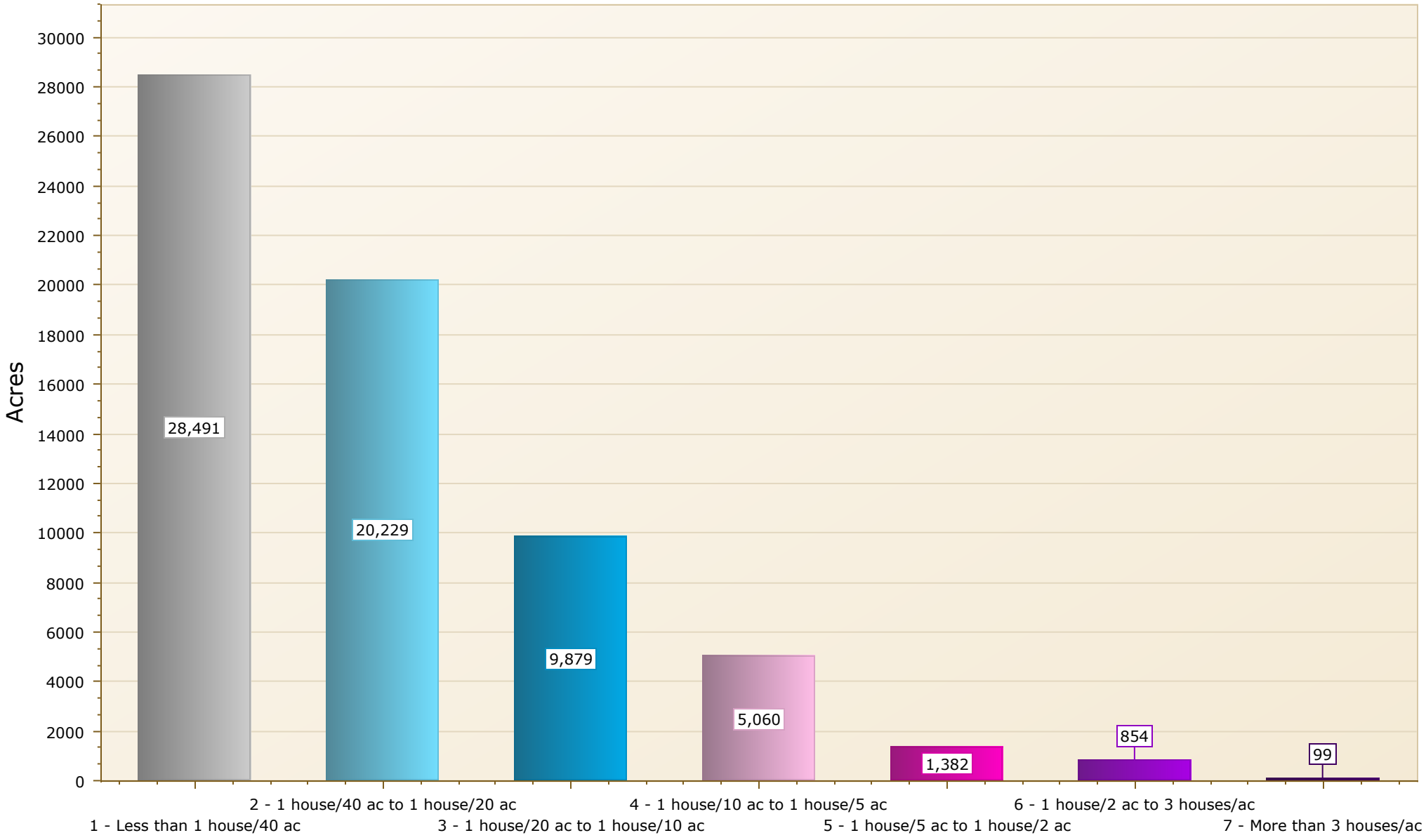
A more detailed description of the risk assessment algorithms is provided in the Colorado Wildfire Risk Assessment (Colorado WRA) Final Report, which can be downloaded from www.ColoradoForestAtlas.com

Housing Density	WUI Population	Percent of WUI Population
1 - Less than 1 house/40 ac	411	8.2%
2 - 1 house/40 ac to 1 house/20 ac	796	15.9%
3 - 1 house/20 ac to 1 house/10 ac	806	16.1%
4 - 1 house/10 ac to 1 house/5 ac	804	16.1%
5 - 1 house/5 ac to 1 house/2 ac	483	9.7%
6 - 1 house/2 ac to 3 houses/ac	1,172	23.5%
7 - More than 3 houses/ac	521	10.4%
Total	**4,993**	**100%**

Housing Density	WUI Acres	Percent of WUI Acres
1 - Less than 1 house/40 ac	28,491	43.2%
2 - 1 house/40 ac to 1 house/20 ac	20,229	30.6%
3 - 1 house/20 ac to 1 house/10 ac	9,879	15%
4 - 1 house/10 ac to 1 house/5 ac	5,060	7.7%
5 - 1 house/5 ac to 1 house/2 ac	1,382	2.1%
6 - 1 house/2 ac to 3 houses/ac	854	1.3%
7 - More than 3 houses/ac	99	0.2%
None	**65,994**	**100%**

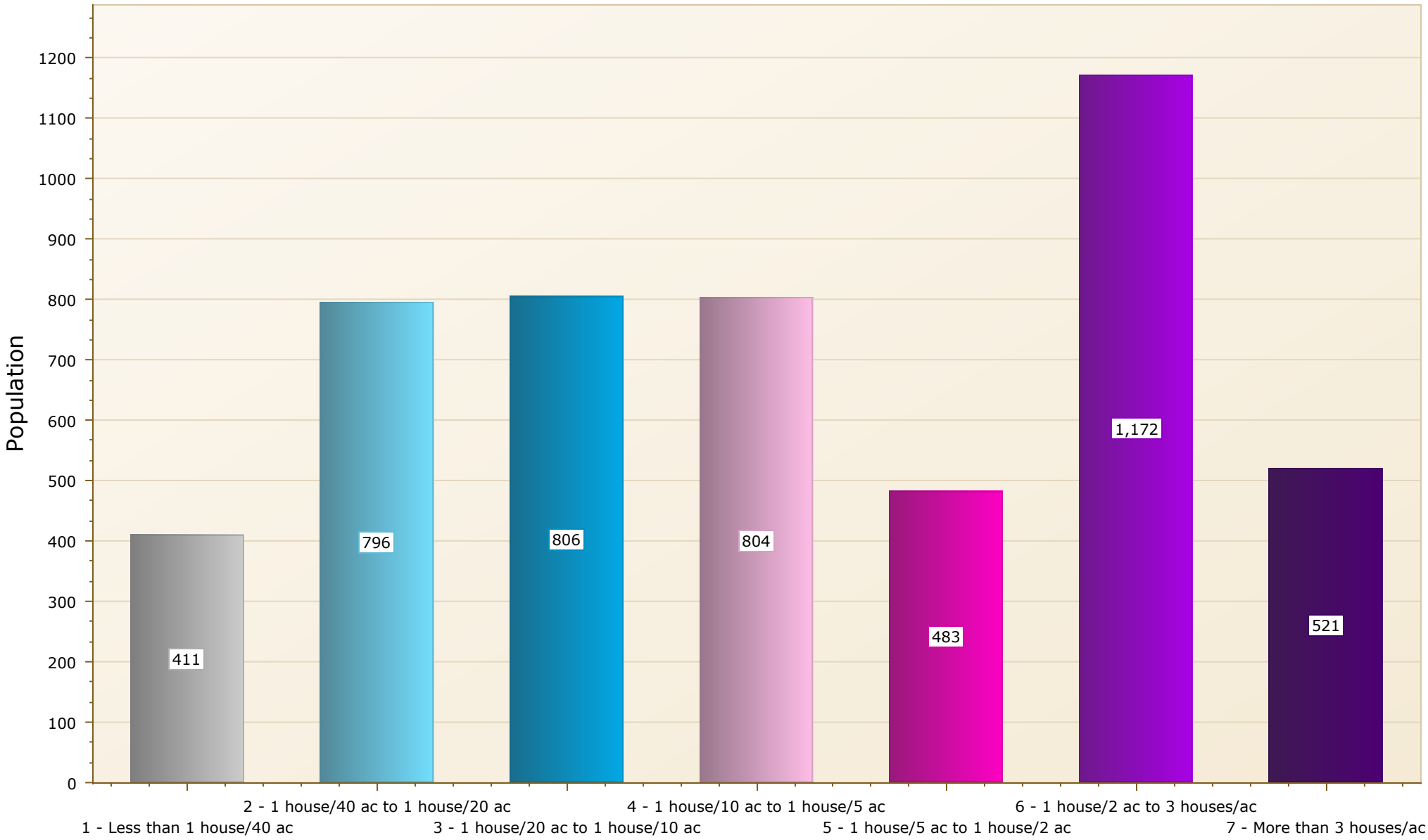
Wildland Urban Interface - Acres

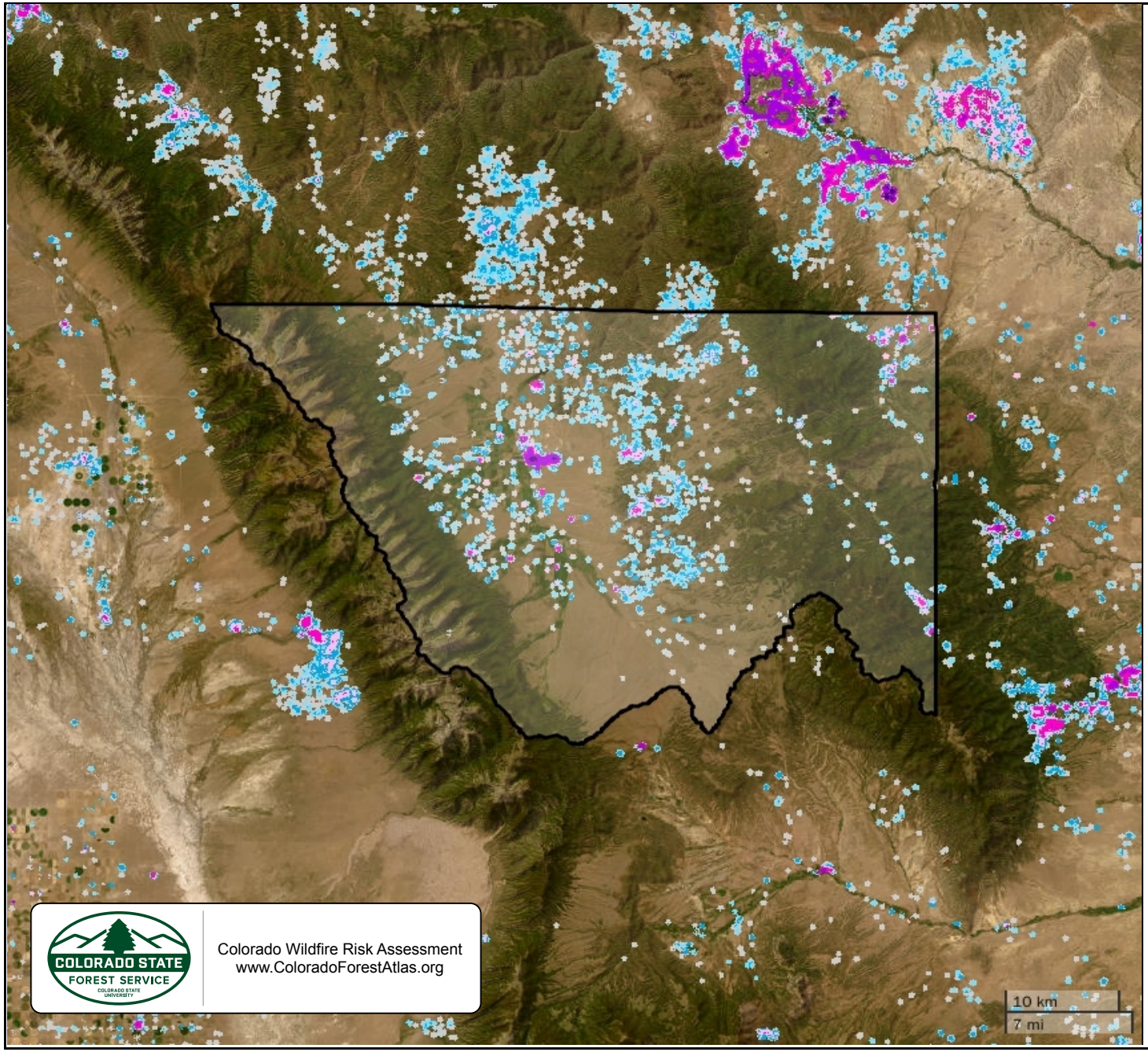
Custer County



Wildland Urban Interface - Population

Custer County





Custer County

Wildland Urban Interface

- 1 - Less than 1 house/40 ac
- 2 - 1 house/40 ac to 1 house/20 ac
- 3 - 1 house/20 ac to 1 house/10 ac
- 4 - 1 house/10 ac to 1 house/5 ac
- 5 - 1 house/5 ac to 1 house/2 ac
- 6 - 1 house/2 ac to 3 houses/ac
- 7 - More than 3 houses/ac

Wildland Urban Interface (WUI) Risk

The Wildland-Urban Interface (WUI) Risk Index layer is a rating of the potential impact of a wildfire on people and their homes.
The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the wildland-urban interface and rural areas is essential for defining potential wildfire impacts to people and homes.

The WUI Risk Index is derived using a response function modeling approach. Response functions are a method of assigning a net change in the value to a resource or asset based on susceptibility to fire at different intensity levels, such as flame length.

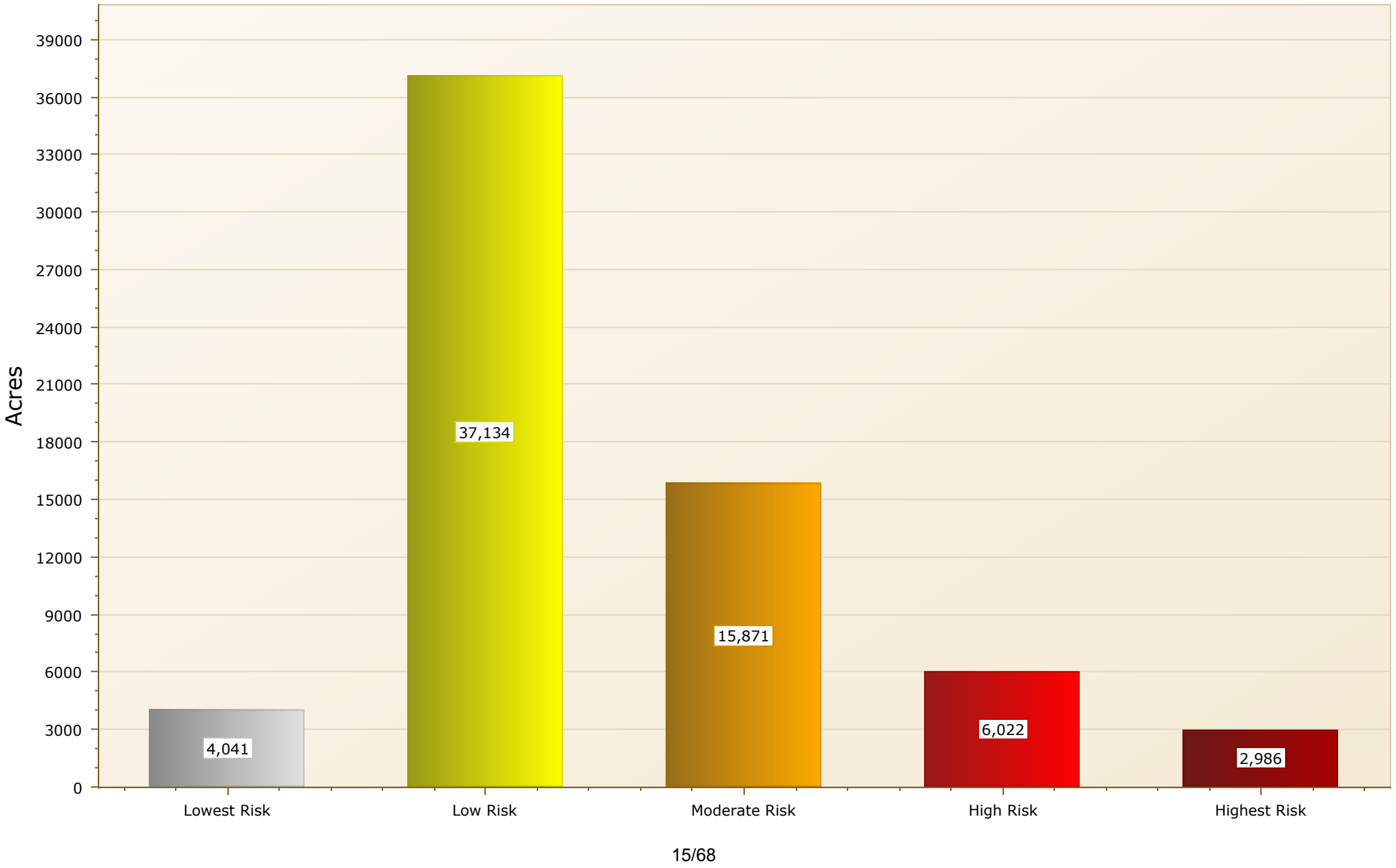
To calculate the WUI Risk Index, the WUI housing density data were combined with flame length data and response functions were defined to represent potential impacts. The response functions were defined by a team of experts led by Colorado State Forest Service mitigation planning staff. By combining flame length with the WUI housing density data, it is possible to determine where the greatest potential impact to homes and people is likely to occur. Customized urban encroachment algorithms were used to ensure those fringe urban areas were included in the WUI Risk outputs. Encroachment distances into urban areas were based on the underlying fuel models and their fuel types and propensity for spotting and spreading.

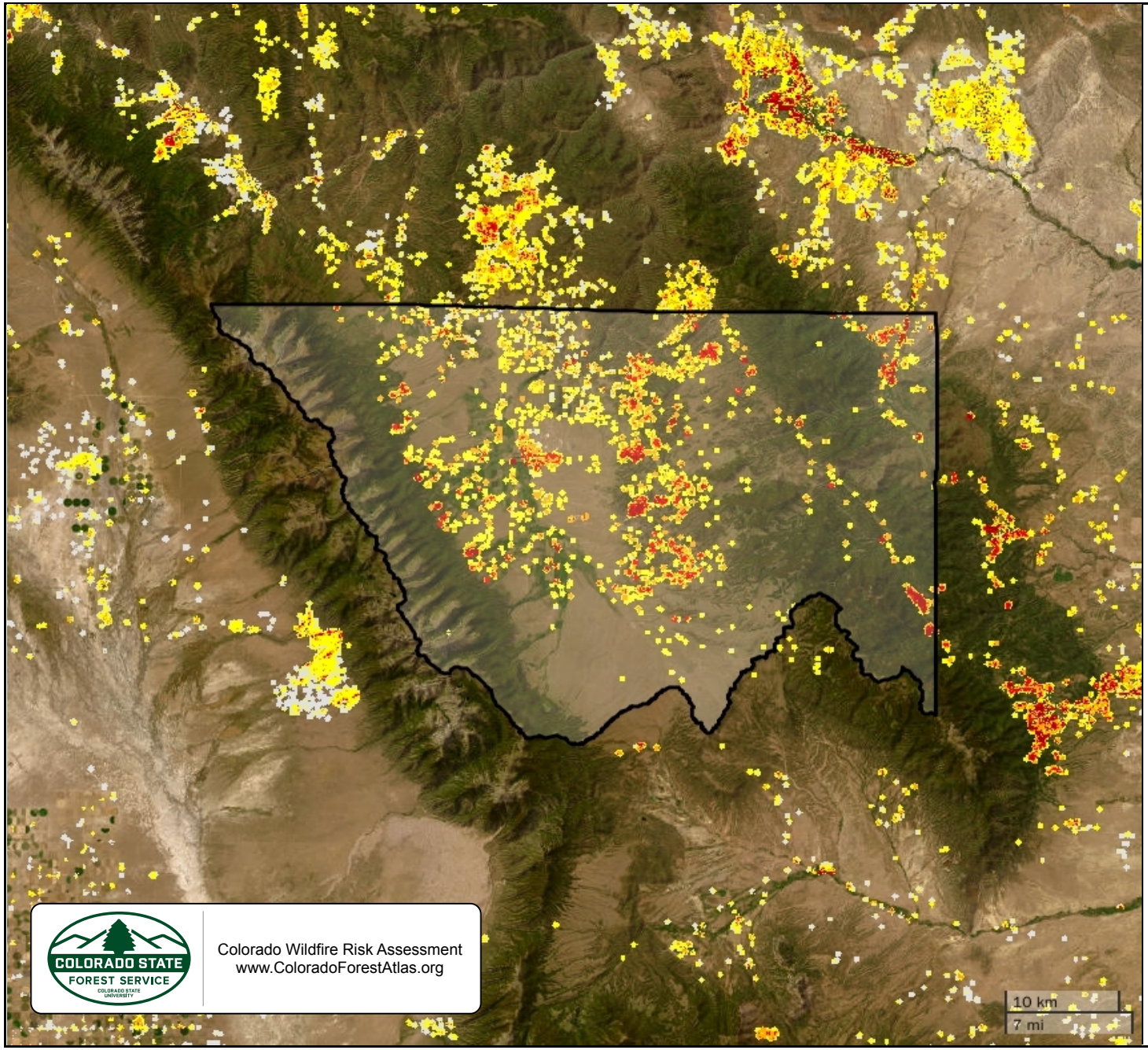
The WUI Risk Index has been calculated consistently for all areas in Colorado, which allows for comparison and ordination of areas across the entire state. Data is modeled at a 20-meter cell resolution, which is consistent with other CO-WRA layers.

WUI Risk Class	Acres	Percent
Lowest Risk	4,041	6.1%
Low Risk	37,134	56.2%
Moderate Risk	15,871	24%
High Risk	6,022	9.1%
Highest Risk	2,986	4.5%
Total	**66,053**	**100%**

Wildland Urban Interface Risk

Custer County





Custer County

Wildland Urban Interface Risk

- Lowest Risk
- Low Risk
- Moderate Risk
- High Risk
- Highest Risk

Firewise USA Recognized Sites

Description

Firewise USA® is a national recognition program that provides resources to inform communities how to adapt to living with wildfire and encourages neighbors to take action together to reduce their wildfire risk. Colorado communities that take the following five steps can be recognized as Firewise:

1. Form a Firewise board or committe
2. Obtain a wildfire risk assessment from the CSFS or local fire department, and create an action plan
3. Hold a Firewise event once per year
4. Invest a minimum of $24.14 per dwelling unit in local Firewise actions annually
5. Create a National Fire Prevention Association (NFPA) profile and follow the application directions located at https://portal.firewise.org/user/login

The Firewise USA® dataset defines the boundaries of the recognized communities. Mapping Firewise USA® boundaries will generally be completed by CSFS staff.

Note: These are estimated boundaries using a variety of methods with varying degrees of accuracy. These are not legal boundaries and should not be construed as such. The boundaries may overlap with CWPP areas and are subject to change over time as the communities develop, change, and continue to implement wildfire mitigation efforts.
To learn more about the Firewise USA® recognition program or to fill out an application, visit https://www.nfpa.org/Public-Education/By-topic/Wildfire/Firewise-USA - OR https://csfs.colostate.edu/wildfire-mitigation/colorado-firewise-communities/

The designated area does not contain data for this section.

Community Wildfire Protection Plans (CWPPs)

Description

A Community Wildfire Protection Plan (CWPP) is a document developed and agreed upon by a community to identify how the community will reduce its wildfire risk. CWPPs identify areas where fuels reduction is needed to reduce wildfire threats to communities and critical infrastructure, address protection of homes and other structures, and plan for wildfire response capability. The Colorado State Forest Service (CSFS) supports the development and implementation of CWPPs and provides resources, educational materials and information to those interested in developing CWPPs.

The CWPP dataset represents the boundaries of those areas that have developed a CWPP. Note that CWPPs can be developed by different groups at varying scales, such as county, Fire Protection District (FPD), community/subdivision, HOA, etc., and as such, can overlap. In addition, the CWPPs can be from different dates. Often a county CWPP is completed first with subsequently more detailed CWPPs done for local communities within that county or FPD. CO-WRAP provides a tool that allows the user to select the CWPP area and retrieve the CWPP document for review (PDF).

At a minimum, a CWPP should include:

- The wildland-urban interface (WUI) boundary, defined on a map, where people, structures and other community values are most likely to be negatively impacted by wildfire
- The CSFS, local fire authority and local government involvement and any additional stakeholders
- A narrative that identifies the community's values and fuel hazards
- The community's plan for when a wildfire occurs
- An implementation plan that identifies areas of high priority for fuels treatments

CWPPs are not shelf documents and should be reviewed, tracked and updated. A plan stays alive when it is periodically updated to address the accomplishments of the community. Community review of progress in meeting plan objectives and determining areas of new concern where actions must be taken to reduce wildfire risk helps the community stay current with changing environment and wildfire mitigation priorities.

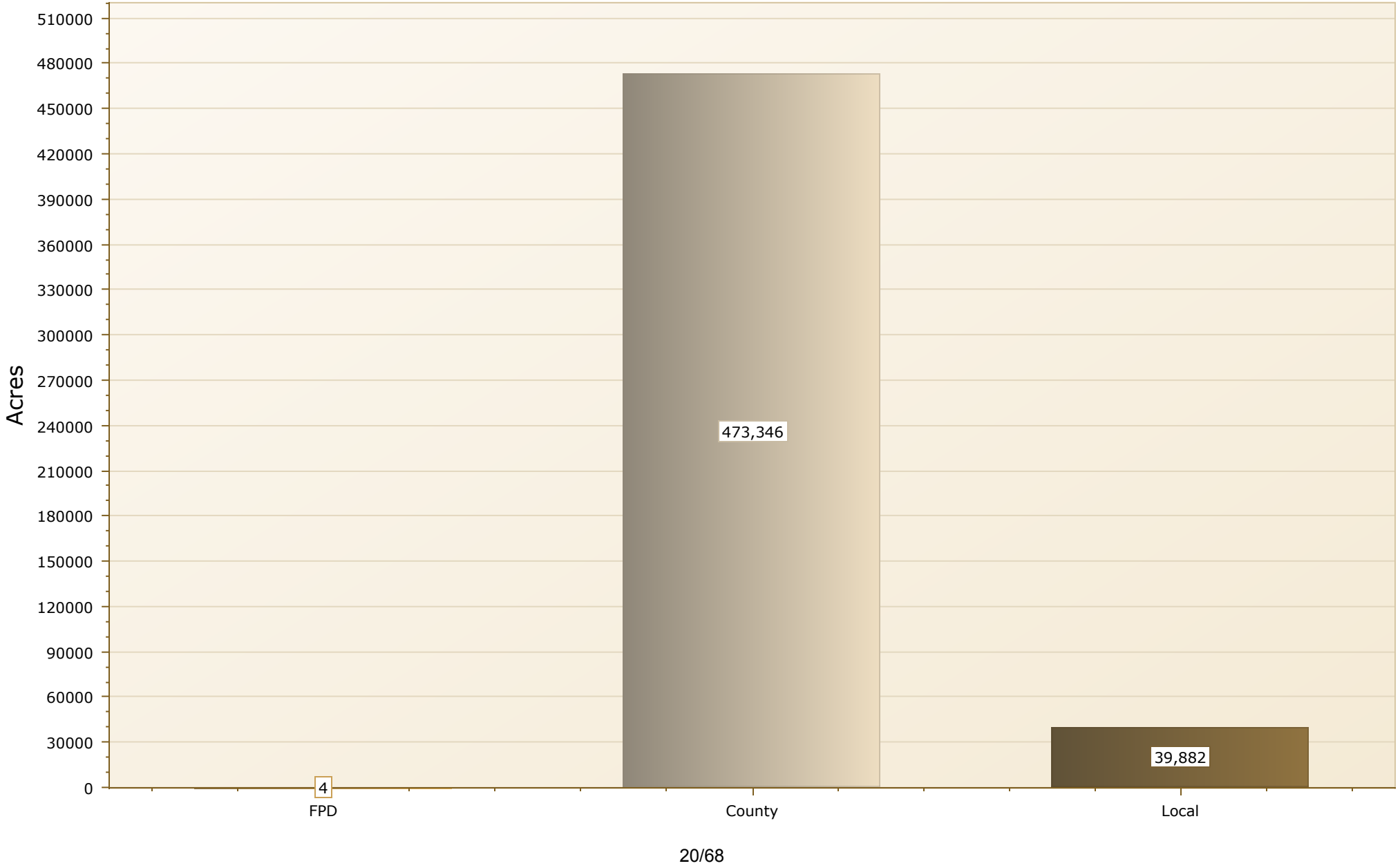
Community input is the foundation of a Community Wildfire Protection Plan that identfies community needs and garners community support.

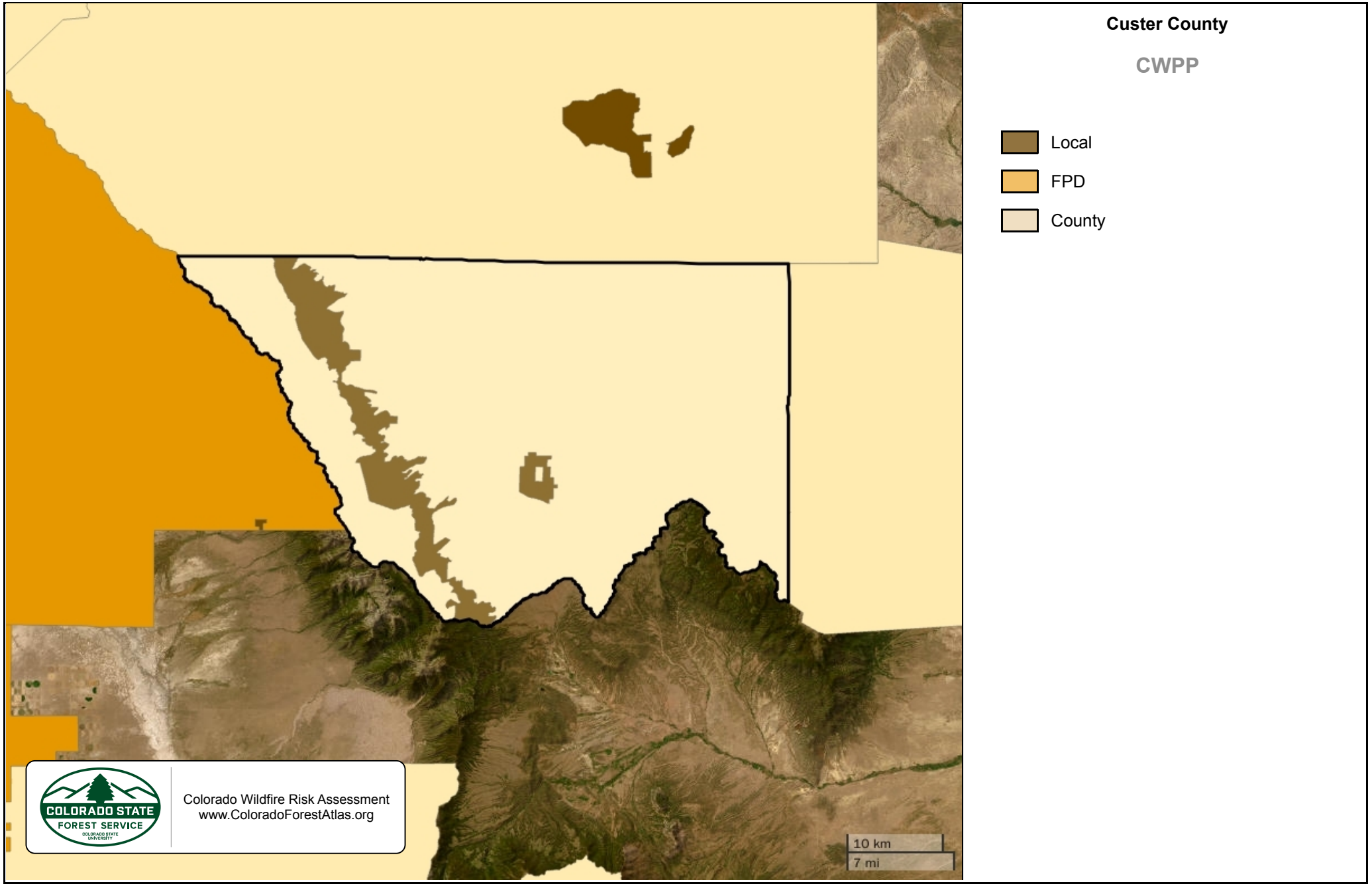
If your community is in an area at risk from wildfire, now is a good time to start working with neighbors on a CWPP and preparing forfuture wildfires. Contact your local CSFS district to learn how to start this process and create a CWPP for your community: http://csfs.colostate.edu/pages/your-local-forester.html
For the **Custer County** test project area, there are 6 CWPPs areas that are totally or partially in the defined project area.

CWPP Name	CWPP Type	CSFS District	Acres inside project area	Total Acres
Northern Saguache County FPD	FPD	Alamosa	4	1,048,410
Southwest Pueblo County	County	Canon City	242	264,926
Fremont County	County	Canon City	15	980,972
Custer County	County	Canon City	473,089	473,188
Cuerno Verde Owners Association	Local	Canon City	3,696	3,697
Sangres Foothills	Local	Canon City	36,186	36,202
Total Acres			**513,232**	**2,807,394**

Community Wildfire Protection Plans

Custer County




Custer County
CWPP
Local
FPD
County
COLORADO STATE
FOREST SERVICE
COLORADO STATE UNIVERSITY
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Wildfire Risk to Assets

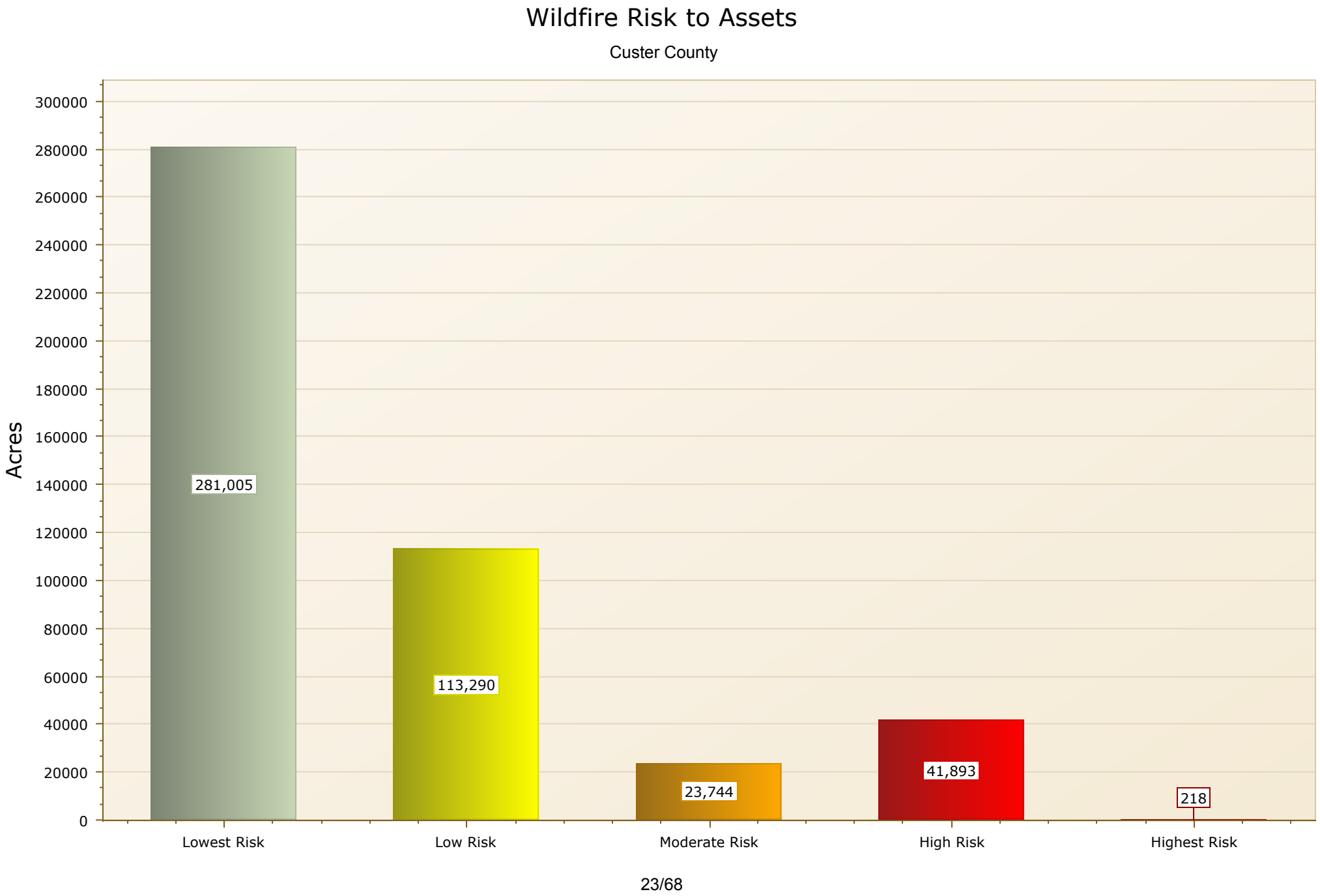
Description

Wildfire Risk is a composite risk map created by combining the Values at Risk Rating and the Burn Probability layers.
It identifies areas with the greatest potential impacts from a wildfire – i.e., those areas most at risk when considering the four values layers.

The Values at Risk Rating is a key component of Wildfire Risk. It is comprised of several individual risk layers including Wildland Urban Interface (housing density), Forest Assets, Riparian Assets and Watershed Protection risk outputs. The WUI component is a key element of the composite risk since it represents where people live in the wildland and urban fringe areas that are susceptible to wildfires and damages. The found individual risk layers are weighted to derive the Values at Risk Rating layer.

The risk map is derived at a 20-meter resolution. This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county, or local planning efforts.

Wildfire Risk	Acres	Percent
Lowest Risk	281,005	61.1%
Low Risk	113,290	24.6%
Moderate Risk	23,744	5.2%
High Risk	41,893	9.1%
Highest Risk	218	0%
Total	**460,150**	**100%**


Wildfire Risk to Assets
Custer County
Acres
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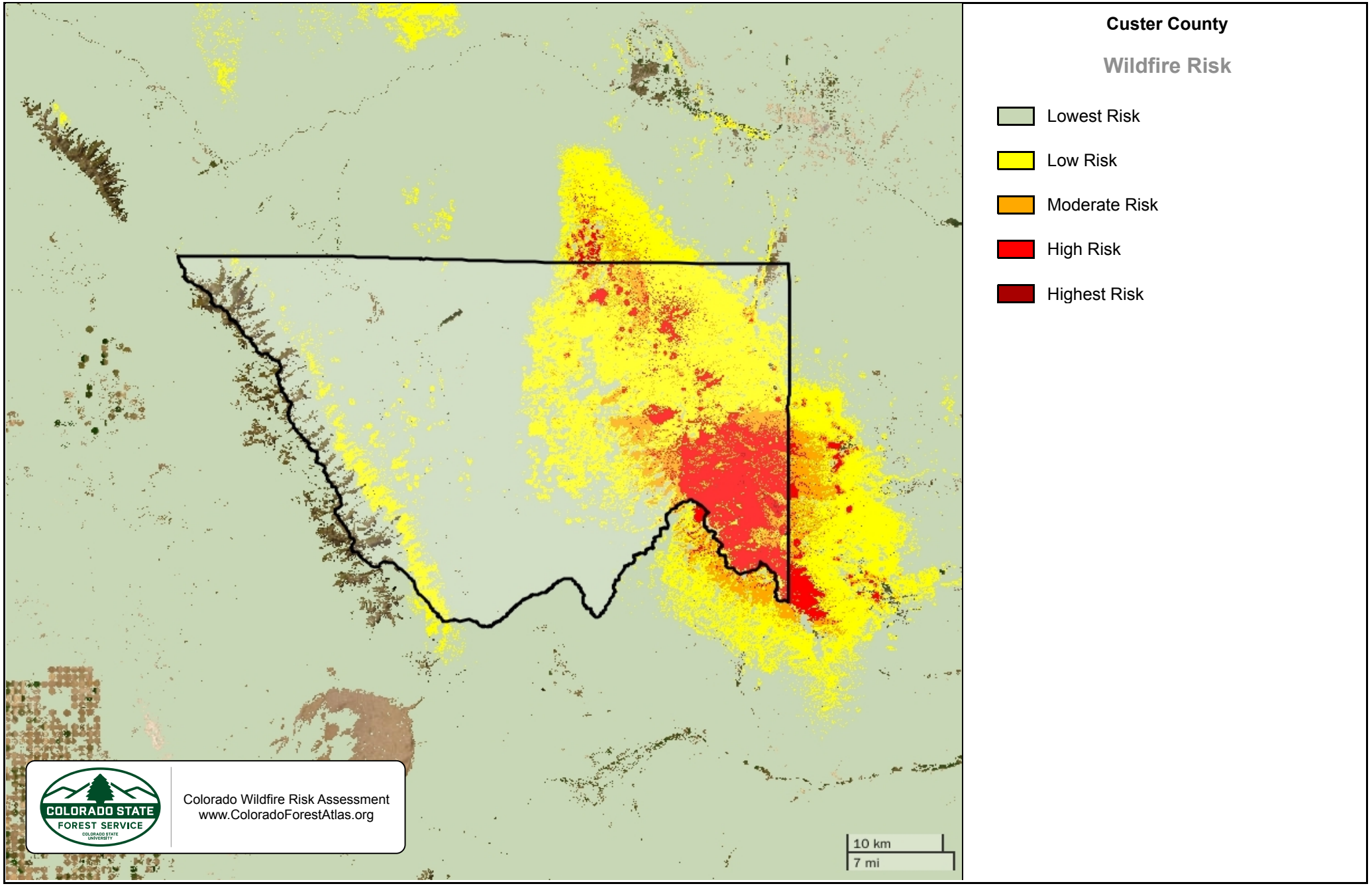
280000
260000
240000
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
281,005
113,290
23,744
41,893
218
Lowest Risk
Low Risk
Moderate Risk
High Risk
Highest Risk


Custer County
Wildfire Risk
Lowest Risk
Low Risk
Moderate Risk
High Risk
Highest Risk
COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Burn Probability

Description

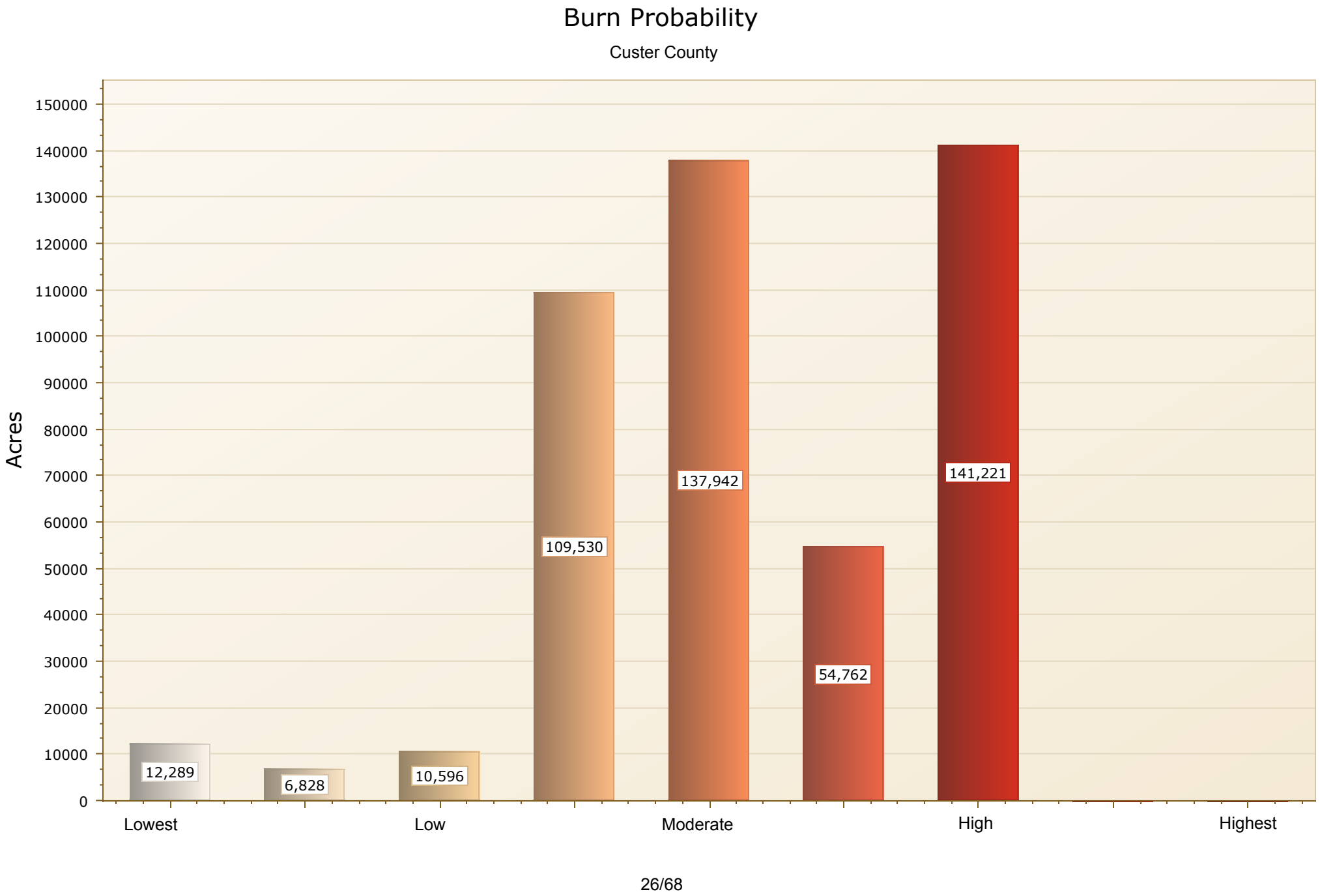
Burn Probability (BP) is the annual probability of any location burning due to a wildfire.

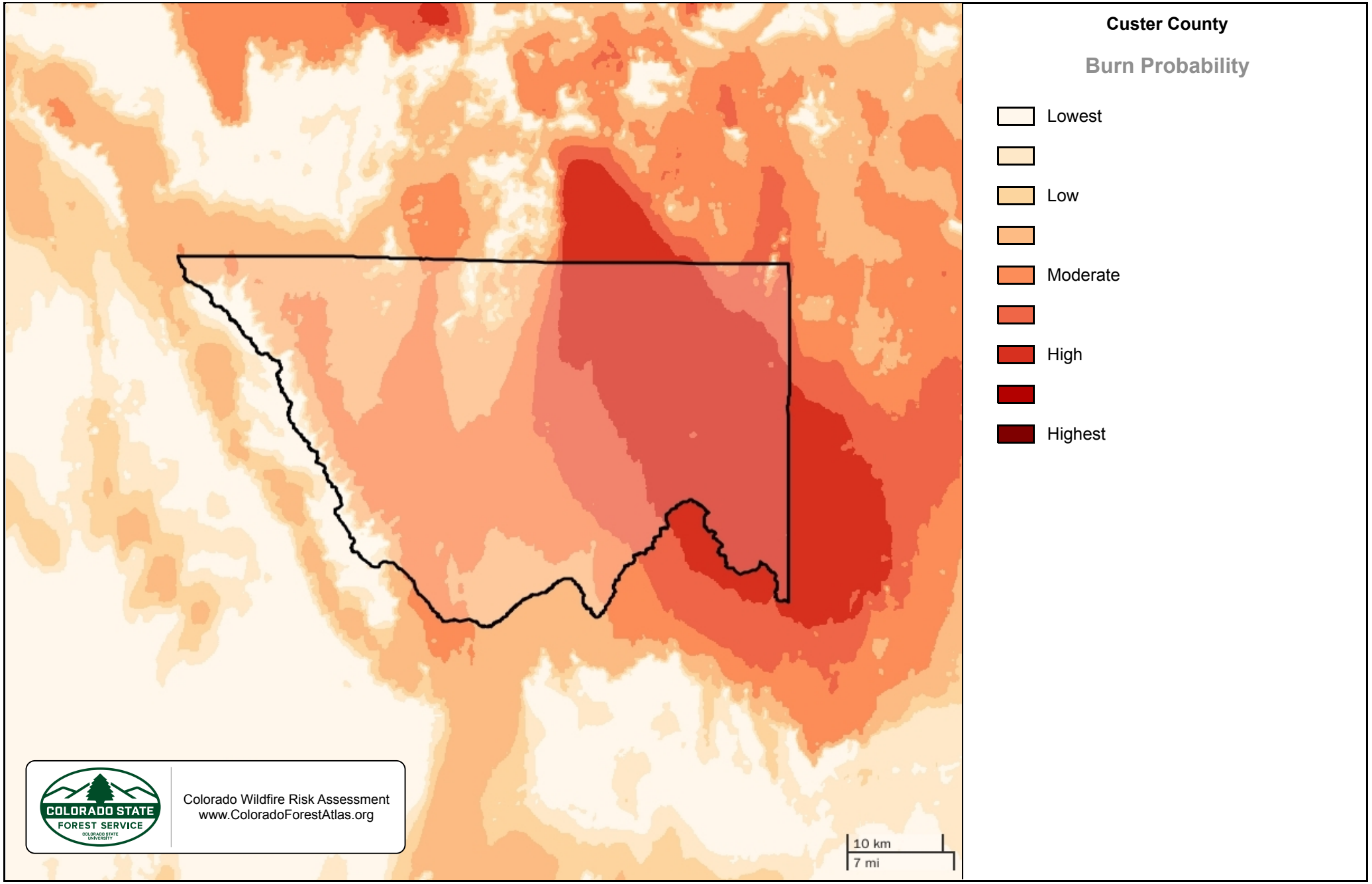
The annual BP was calculated as the number of times that a cell was burned and the number of iterations used to run the models. The annual BP was estimated for Colorado by using a wildfire simulation approach with Technosylva's Wildfire Analyst software (Wildfire Analyst). A total number of 2,342,334 fires were simulated (3,200,000 if we consider those fires outside the Colorado border which were used in a buffer area around the study area to compute BP) with a mean ignition density of 8.68 fires/km2. 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 because they usually burn most of the annual burned area. All fires simulations had a duration of 8 h. After simulating all the fires, some cells were not burned by any simulated fire, resulting in a BP value of zero. Some cells were non-burnable due to the associated fuel type (i.e. water, roads, urban, agricultural areas, barren areas). However, the lowest BP value found in "burnable" cells was assigned to cells where the simulated fires did not reach.

The Wildfire Analyst fire simulator considered the number of times that 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 and 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.

The probability map is derived at a 20-meter resolution. This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county or local protection mitigation or prevention.

Burn Probability	Acres	Percent
Lowest	12,289	2.6%
	6,828	1.4%
Low	10,596	2.2%
	109,530	23.1%
Moderate	137,942	29.2%
	54,762	11.6%
High	141,221	29.8%
		0%
Highest		0%
Total	**473,169**	**100%**


Burn Probability
Custer County
Acres
150000
140000
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
12,289
6,828
10,596
109,530
137,942
54,762
141,221
Lowest
Low
Moderate
High
Highest


Custer County
Burn Probability
Lowest
Low
Moderate
High
Highest
COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Terrain Difficulty Index

Description

The 2012 and 2017 CO-WRA included a simple metric that described suppression difficulty based on fireline dozer rates. For 2022 CO-WRA, this standalone metric has been updated to reflect a more enhanced definition of areas where access to fires and suppression from ground resources is difficult. Although not a component of the standard risk assessment outputs, this metric is provided as it helps inform which areas may have limited suppression capabilities, especially for initial attack, across the State.

The Terrain Difficulty Index (TDI) is a metric that describes the characteristics of the landscape which evaluates the difficulty of extinction, especially in initial attack, although it can also be extrapolated to extended attacks. This static index quantifies the availability of access for the arrival of terrestrial means, the ability to penetrate the area where the fire originates, and the difficulty of extinguishing fuels.

Indicators such as the Accessibility Index, Penetrability Index and Fireline Opening Index (construction) have been used for the formulation of TDI. This index is based on other indices such as the Wildfire Suppression Difficulty Index (terrestrial) (SDIt) (Matthew P Thompson et al, 2018. Francisco Rodriguez and Silva et al, 2020.) which is a quantitative rating of the relative difficulty to perform fire control work. However, TDI is dynamic as it incorporates changes in surface fuels over time providing a less static perspective for a planning point of view.

The designated area does not contain data for this section.

Wildfire Behavior Outputs

Description

Fire behavior is the way a fire reacts to the following environmental influences:

1. Fuels
2. Weather
3. Topography

Fire behavior characteristics are attributes of wildland fire that pertain to its spread, intensity, and growth. Fire behavior characteristics utilized in the Colorado WRA include fire type, rate of spread, flame length and fireline intensity (fire intensity scale). These metrics are used to determine the potential fire behavior under different weather scenarios. Areas that exhibit moderate to high fire behavior potential can be identified for mitigation treatments, especially if these areas are in close proximity to homes, business, or other assets.

Fuels

The Colorado WRA includes composition and characteristics for both surface fuels and canopy fuels. Assessing canopy fire potential and surface fire potential allows identification of areas where significant increases in fire behavior affects the potential of a fire to transition from a surface fire to a canopy fire.

Fuel datasets required to compute both surface and canopy fire potential include:

1.Surface Fuels are typically categorized into one of four primary fuel types based on the primary carrier of the surface fire: 1) grass, 2) shrub/brush, 3) timber litter, and 4) slash. They are generally referred to as fire behavior fuel models and provide the input parameters needed to compute surface fire behavior. The 2022 assessment uses the latest 2022 calibrated fuels for Colorado. The following custom fuels were included to improve the fire modeling in timber, WUI and agricultural areas:

- Timber: 2 new categories (171 and 191)

- Urban: 7 new categories (911,912,913,914,915,916 and 919)

- Roads: 5 new categories (941,942,943,944 and 949)

- Agriculture: 4 new categories (931,932,938 and 939)

- Water: 3 new categories (981,982 and 989)

2. Canopy Cover is the horizontal percentage of the ground surface that is covered by tree crowns. It is used to compute wind-reduction factors and shading.

3.Canopy Ceiling Height/Stand Height is the height above the ground of the highest canopy layer where the density of the crown mass within the layer is high enough to support vertical movement of a fire. A good estimate of canopy ceiling height is the average height of the dominant and co-dominant trees in a stand. It is used to compute wind reduction to mid-flame height, and spotting distances from torching trees.

4.Canopy Base Height is the lowest height above the ground above which sufficient canopy fuel exists to vertically propagate fire (Scott & Reinhardt, 2001). Canopy base height is a property of a plot, stand or group of trees, not an individual tree. For fire modeling, canopy base height is an effective value that incorporates ladder fuels, such as tall shrubs and small trees. Canopy base height is used to determine whether a surface fire will transition to a canopy fire.

5. Canopy Bulk Density is the mass of available canopy fuel per unit canopy volume (Scott & Reinhardt, 2001). Canopy bulk density is a bulk property of a stand, plot, or group of trees, not an individual tree. Canopy bulk density is used to predict whether an active crown fire is possible.

Weather

Weather data (1979-2022) from gridMET was used to analyze potential weather scenarios in which assessing fire behavior and spread. gridMET is a dataset of daily high-spatial resolution (~4-km, 1/24th degree) surface meteorological data covering the contiguous US. Air temperature data at 2m, relative humidity at 2m, and wind speed and direction at 10 m were all downloaded and used.

After computing the weather percentiles of the gridMET variables, data was interpolated using IDW algorithms (Inverse Distance Weighting) at 20-meter pixel resolution.

Dead fuel moisture content was estimated using the model of Rothermel and Rinehart (1983). Both temperature and air relative humidity at 2m from gridMET was used to define the fuel moisture model. The model also considered elevation and aspect to take into account the accumulated solar radiation at 14h (local time). 1% and 2% were added to the 1h-dead fuel moisture content to estimate 10h and 100h dead fuel moisture content, respectively.

For the first time in CO-WRA risk assessments, both herbaceous and woody live fuel moisture content was modelled using Technosylva's proprietary models based on optical imagery, drought indices and phenology. The models were trained with the WFAS National live fuel moisture content. Foliar moisture content in the canopies was considered as a constant value (80%) across the entire state.

Wind speed at 10 m was estimated at 20 ft applying a wind adjustment factor to use 20-ft wind speed in the fire spread and behavior equations. Afterward, wind speed percentiles were computed to use these data in the FB analysis at 20-meter pixel resolution. Wind direction for Colorado was analyzed for a 40-year period (1979-2022) considering the calculated wind speed percentiles from gridMET data. Predominant wind direction is from SW to NE, especially when wind speed is high or very high.

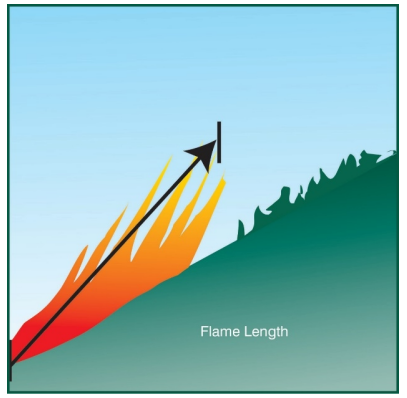
Characteristic Flame Length

The typical or representative flame length of a potential fire based on a weighted average of four percentile weather categories.

Flame Length is defined as the distance between the flame tip and the midpoint of the flame depth at the base of the flame, which is generally the ground surface. It is an indicator of fire intensity and is often used to estimate how much heat the fire is generating.

Flame length is typically measured in feet. Flame length is the measure of fire intensity used to generate the Fire Effects outputs for the CO-WRA and it is influenced by three environmental factors - fuels, weather, and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high, and extreme weather days for each 20-meter grid cell in Colorado.

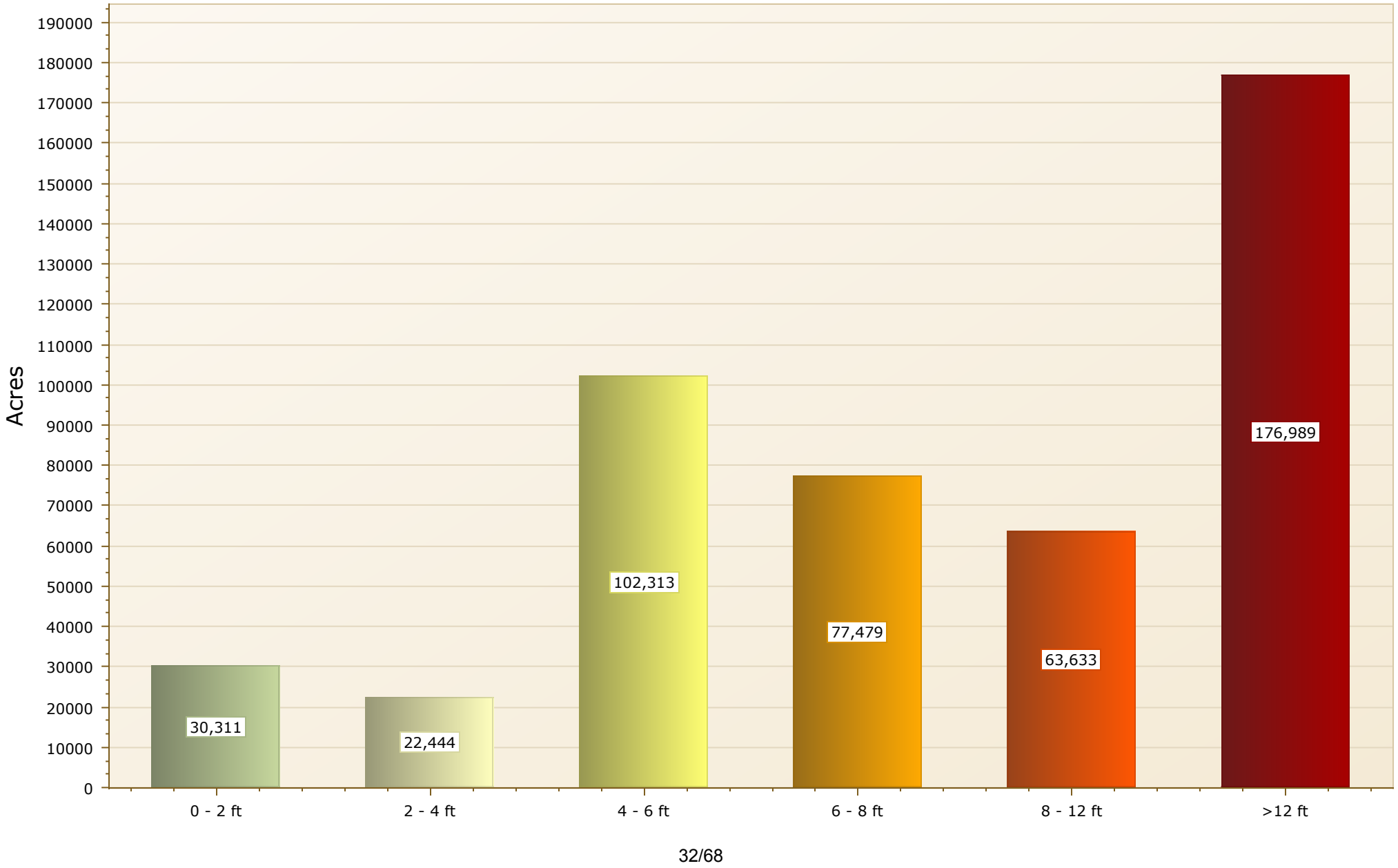
The Characteristic Flame Length represents the weighted average for all four weather percentiles. While not discussed in this report, the individual percentile weather Flame Length outputs are available in the CO-WRA data.

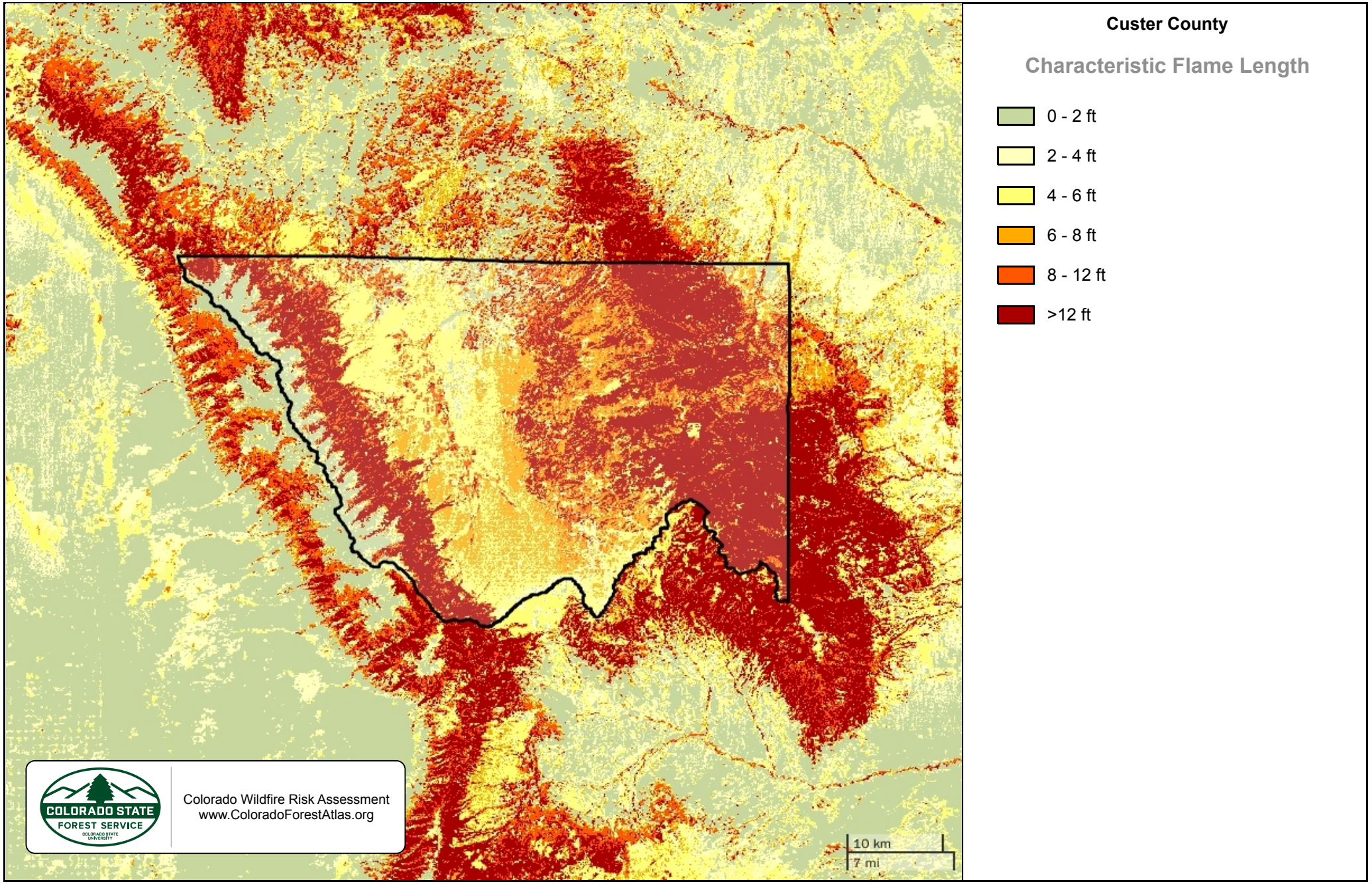


Characteristic Flame Length	Acres	Percent
0 - 2 ft	30,311	6.4%
2 - 4 ft	22,444	4.7%
4 - 6 ft	102,313	21.6%
6 - 8 ft	77,479	16.4%
8 - 12 ft	63,633	13.4%
>12 ft	176,989	37.4%
Total	**473,169**	**100%**

Characteristic Flame Length

Custer County




Custer County
Characteristic Flame Length
0 - 2 ft
2 - 4 ft
4 - 6 ft
6 - 8 ft
8 - 12 ft
>12 ft
COLORADO STATE
FOREST SERVICE
Colorado Wildfire Risk Assessment
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10 km
7 mi

Fire Intensity Scale

Description

Quantifies the potential fire intensity by orders of magnitude.
Fire Intensity Scale (FIS) specifically identifies areas where significant fuel hazards and associated dangerous fire behavior potential exist. Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consist of five (5) classes where the order of magnitude between classes is ten-fold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities.

1. 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.

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

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

4. 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.

5. Class 5, Highest Intensity:
Very large flames up to 150 feet in length; profuse short-range spotting, frequent long-range spotting; strong fire-induced winds. Indirect attack marginally effective at the head of the fire. Great potential for harm or damage to life and property.

Burn Probability and Fire Intensity Scale are designed to complement each other. Unlike Wildfire Threat, the Fire Intensity Scale does not incorporate historical occurrence information. It only evaluates the potential fire behavior for an area, regardless if any fires have occurred there in the past. This additional information allows mitigation planners to quickly identify areas where dangerous fire behavior potential exists in relationship to nearby homes or other valued assets.

Since all areas in Colorado have fire intensity scale calculated consistently, it allows for comparison and ordination of areas across the entire state. For example, a high fire intensity area in Eastern Colorado is equivalent to a high fire intensity area in Western Colorado.

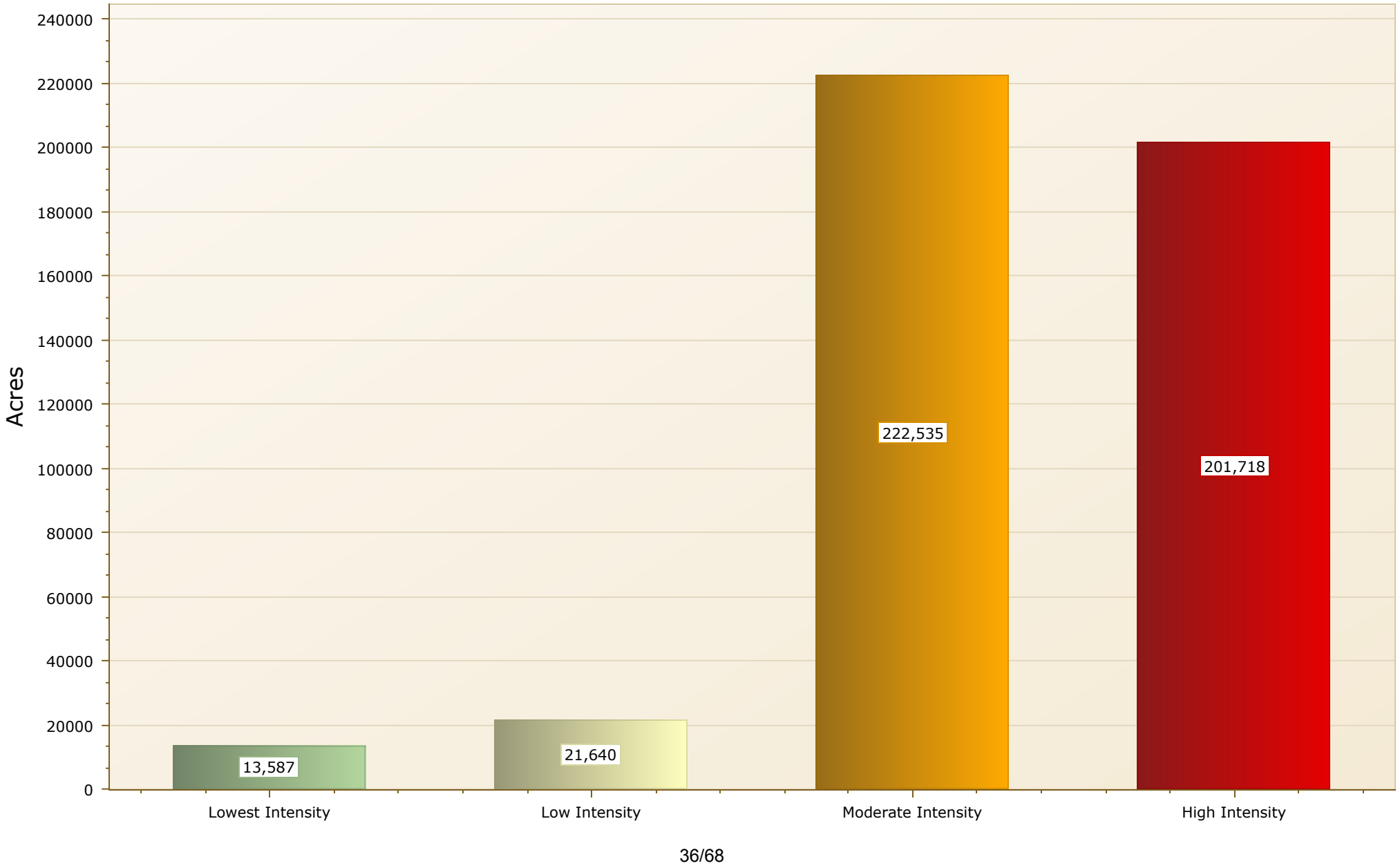
Fire intensity scale is a fire behavior output, which is influenced by three environmental factors - fuels, weather, and topography – and the spread itself (back, flank or head fire influences fire behavior for a given pixel for a specific fire simulation). Weather is by far the most dynamic variable as it changes frequently. Thus, each pixel may burn many times with different fire spread patterns based on the aforementioned factors. The fire intensity scale maps represent an average fire intensity map.

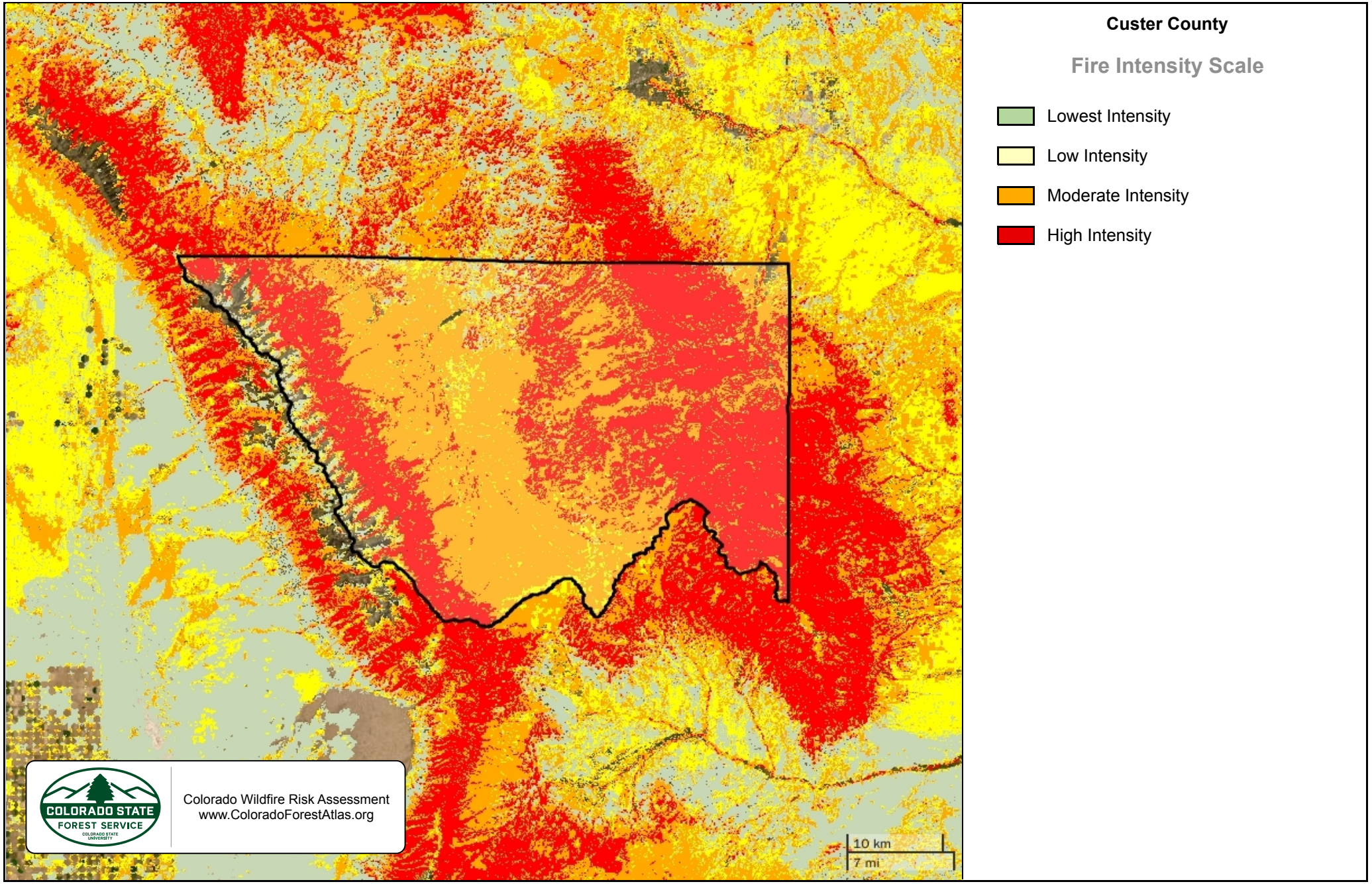
The fire intensity scale map is derived at a 20-meter resolution. This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county, or local planning efforts.

FIS Class	Acres	Percent
Lowest Intensity	13,587	3%
Low Intensity	21,640	4.7%
Moderate Intensity	222,535	48.4%
High Intensity	201,718	43.9%
Total	**459,479**	**100%**

Fire Intensity Scale

Custer County




Custer County
Fire Intensity Scale
Lowest Intensity
Low Intensity
Moderate Intensity
High Intensity
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Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Fire Type

Represents the potential fire type under the extreme percentile weather category.

Canopy fires are very dangerous, destructive and difficult to control due to their increased fire intensity. From a planning perspective, it is important to identify where these conditions are likely to occur on the landscape so that special preparedness measure can be taken if necessary. The Fire Type layer shows the footprint of where these areas are most likely to occur. However, it is important to note that canopy fires are not restricted to these areas. Under the right conditions, it can occur in other canopied areas.

There are two primary fire types – surface fire and canopy fire. Canopy fire can be further subdivided into passive canopy fire and active canopy fire. A short description of each of these is provided below.

• Surface Fire - A fire that spreads through surface fuel without consuming any overlying canopy fuel. Surface fuels include grass, timber litter, shrub/brush, slash and other dead or live vegetation within about 6 feet of the ground.

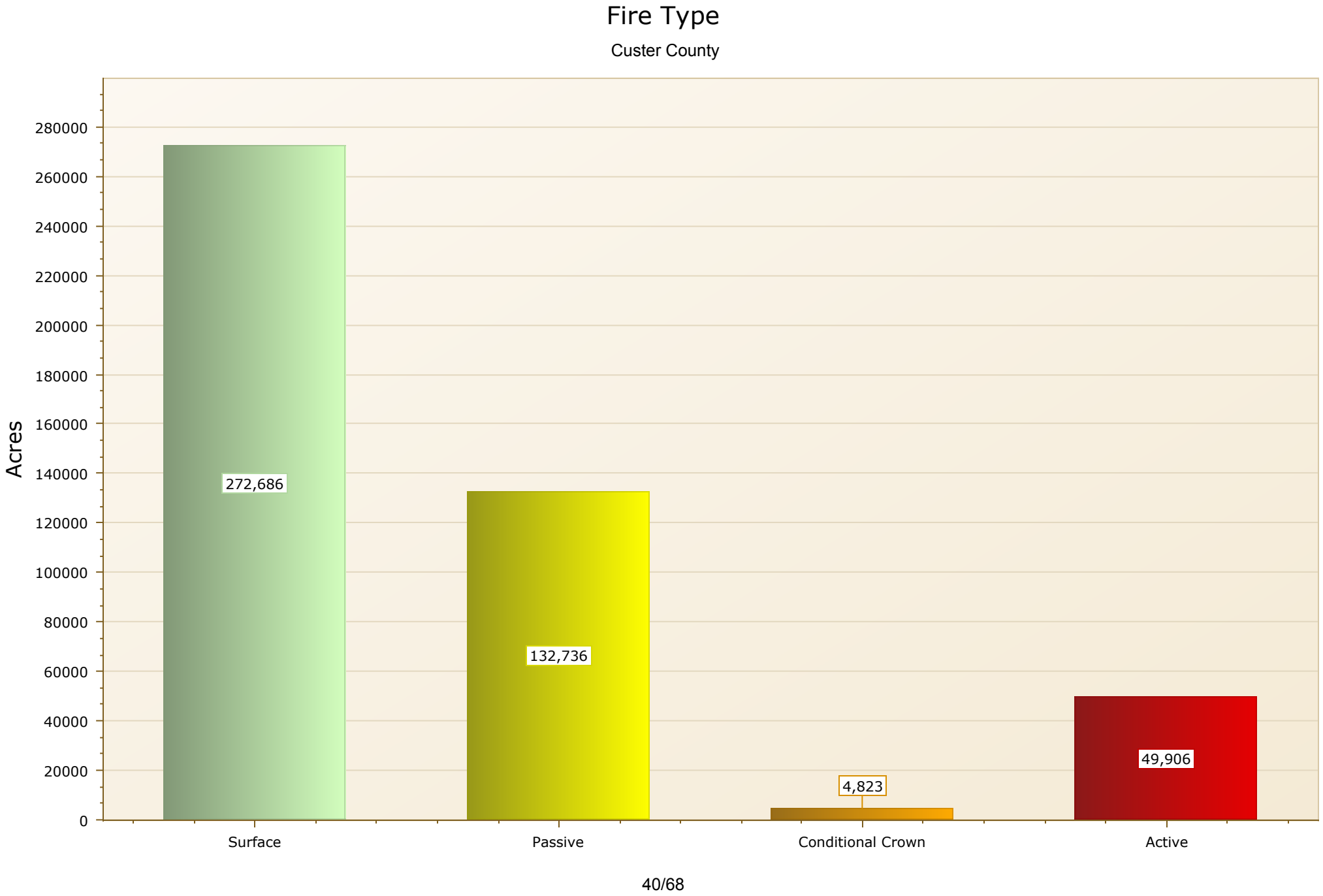
• Passive Canopy Fire – A type of crown fire in which the crowns of individual trees or small groups of trees burn, but solid flaming in the canopy cannot be maintained except for short periods (Scott & Reinhardt, 2001).

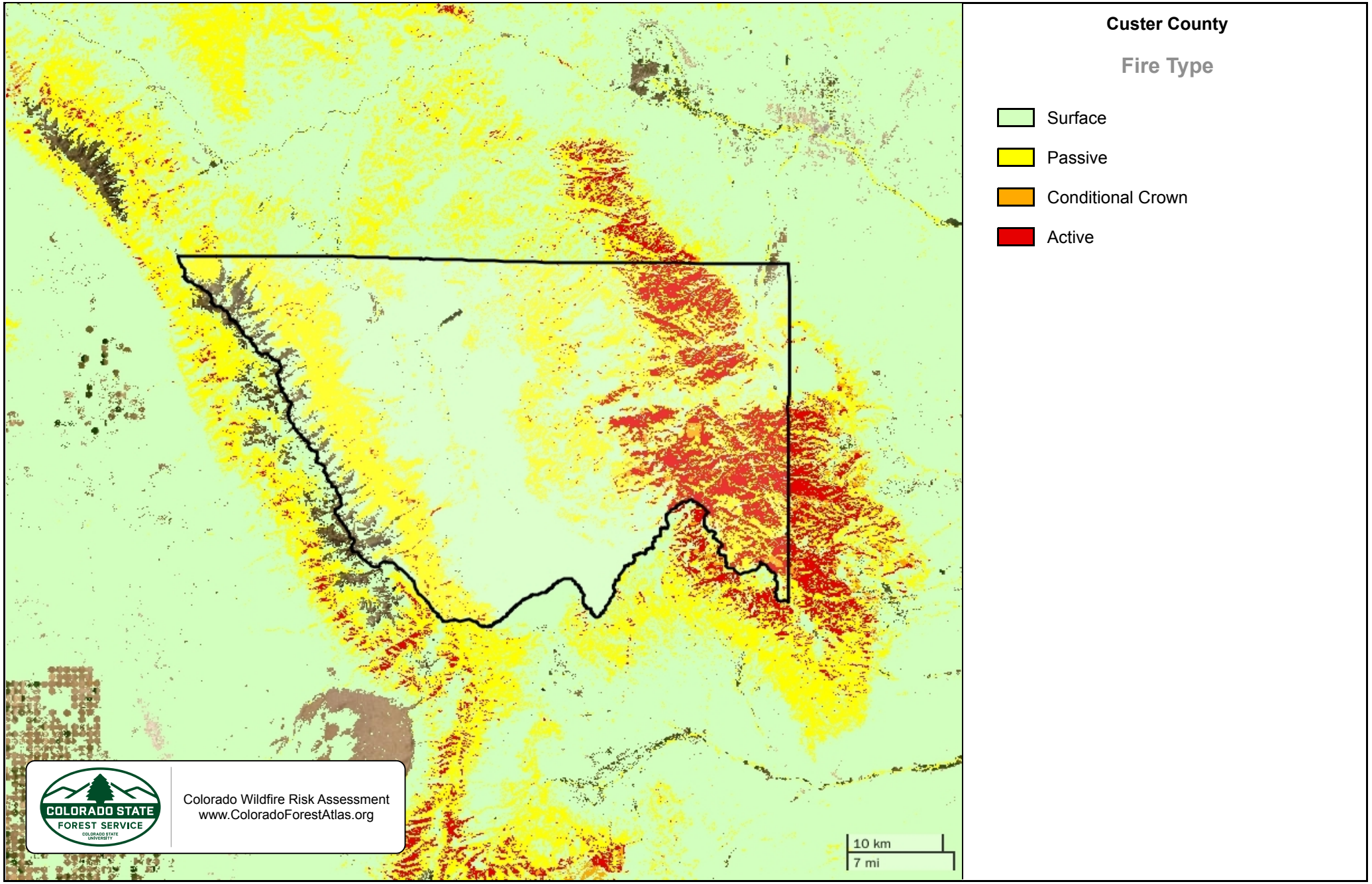
• Conditional Crown Fire – A type of crown fire in which an active crown fire is possible but one would not be predicted to initiate. Two outcomes are possible in that situation: surface fire if the fire starts in the stand as a surface fire, or active crown fire if fire enters the stand as an active crown fire.

• Active Canopy Fire - A crown fire in which the entire fuel complex (canopy) is involved in flame, but the crowning phase remains dependent on heat released from surface fuel for continued spread (Scott & Reinhardt, 2001).

The fire type map is derived at a 20-meter resolution and was estimated based on the extreme weather scenario (percentile 97th). This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county or local planning efforts.

Fire Type	Acres	Percent
Surface	272,686	59.3%
Passive	132,736	28.8%
Conditional Crown	4,823	1%
Active	49,906	10.8%
Total	**460,150**	**100%**


Fire Type
Custer County
Acres
280000
260000
240000
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
272,686
132,736
4,823
49,906
Surface
Passive
Conditional Crown
Active


Custer County
Fire Type
Surface
Passive
Conditional Crown
Active
COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Rate of Spread

The typical or representative rate of spread of a potential fire based on a weighted average of four percentile weather categories.

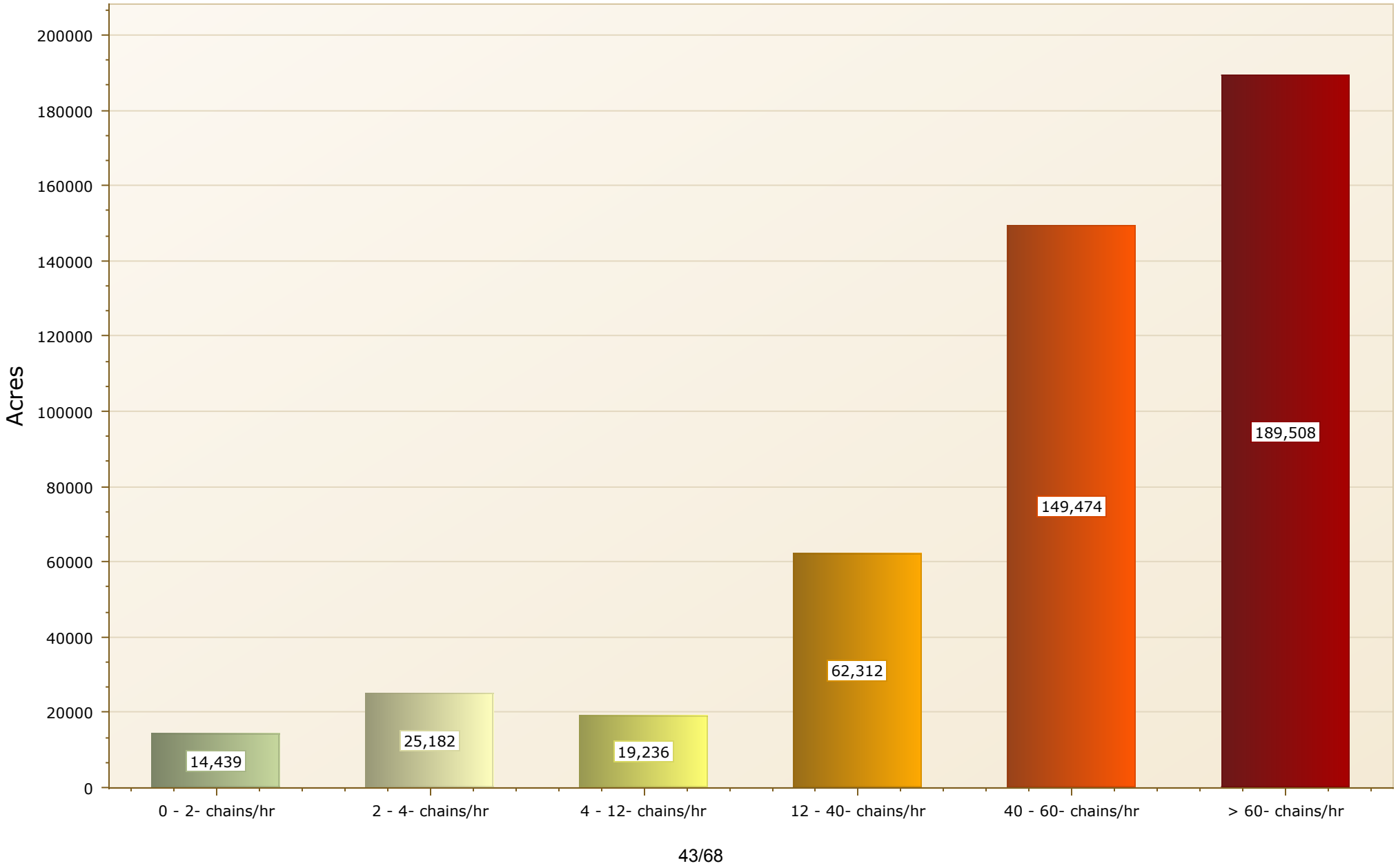
Rate of spread is the speed with which a fire moves in a horizontal direction across the landscape, usually expressed in chains per hour (ch/hr) or feet per minute (ft/min). For purposes of the CO-WRA, this measurement represents the maximum rate of spread of the fire front.

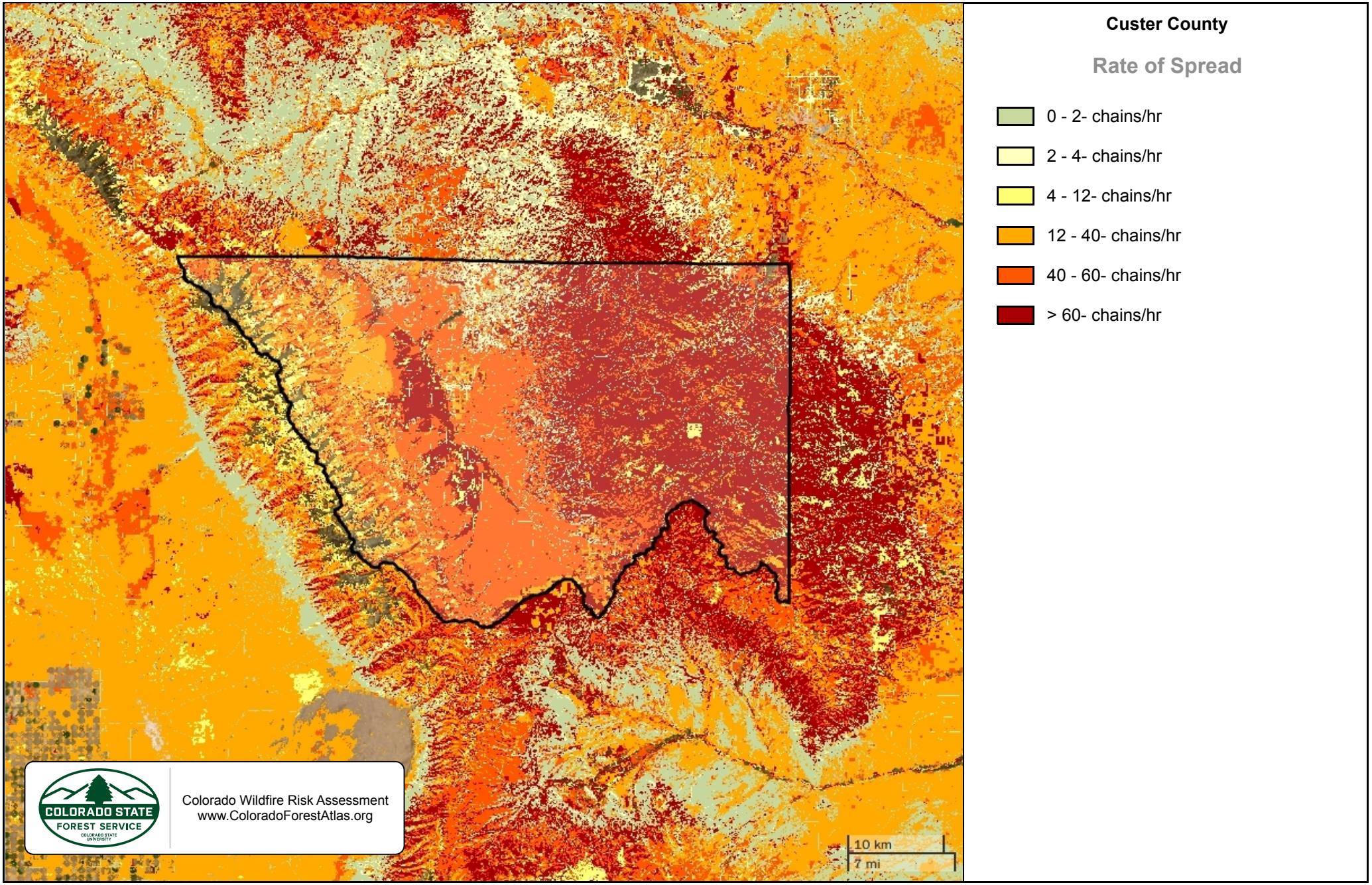
Rate of spread is a fire behavior output, which is influenced by three environmental factors - fuels, weather, and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high, and extreme weather days for a 20-meter grid cell in Colorado.

Rate of Spread	Acres	Percent
0 - 2- chains/hr	14,439	3.1%
2 - 4- chains/hr	25,182	5.5%
4 - 12- chains/hr	19,236	4.2%
12 - 40- chains/hr	62,312	13.5%
40 - 60- chains/hr	149,474	32.5%
> 60- chains/hr	189,508	41.2%
Total	**460,150**	**100%**

Rate of Spread

Custer County




Custer County
Rate of Spread
0 - 2- chains/hr
2 - 4- chains/hr
4 - 12- chains/hr
12 - 40- chains/hr
40 - 60- chains/hr
> 60- chains/hr
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Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Surface Fuels

Fire behavior fuel models that contain the parameters required to calculate fire behavior outputs.

Surface fuels, or fire behavior fuel models as they are technically referred to, contain the parameters needed by the Rothermel (1972) surface fire spread model to compute surface fire behavior characteristics, e.g. rate of spread, flame length, fireline intensity, and other fire behavior metrics. As the name might suggest, surface fuels account only for surface fire potential. Canopy fire potential is computed through a separate but linked process. The CO-WRA accounts for both surface and canopy fire potential in the fire behavior outputs.

An up-to-date surface fuel dataset at 20-meter (m) resolution was developed for this project, based on Scott and Burgan (2005) fuel models, enhanced with custom fuels created by Technosylva. The custom fuels distinguish this assessment from previous ones performed in Colorado as they allow a better characterization of fire behavior across the landscape. Additionally, the urban and road custom fuel models included in the assessment are key for better characterizing the exposure, vulnerability and risk of both buildings and population in the Wildland Urban Interface (WUI). This also allows for better modeling of fire encroachment in urban areas considering the building density, community structure and fuels surrounding the buildings and urban areas.

The following custom fuels were included in order to improve the fire modeling in timber, WUI and agricultural areas:

- Timber: 2 new categories (171 and 191)
- Urban: 7 new categories (911,912,913,914,915,916 and 919)
- Roads: 5 new categories (941,942,943,944 and 949)
- Agriculture: 4 new categories (931,932,938a and 939)
- Water: 3 new categories (981,982 and 989)

Additionally, we also considered canopy fuel data to better simulate crown fire behavior. This includes:

- canopy bulk density (CBD),
- canopy base height (CBH),
- canopy cover (CC) and
- canopy height (CH).

Unmanaged forest with dead amd dowmed trees and branches

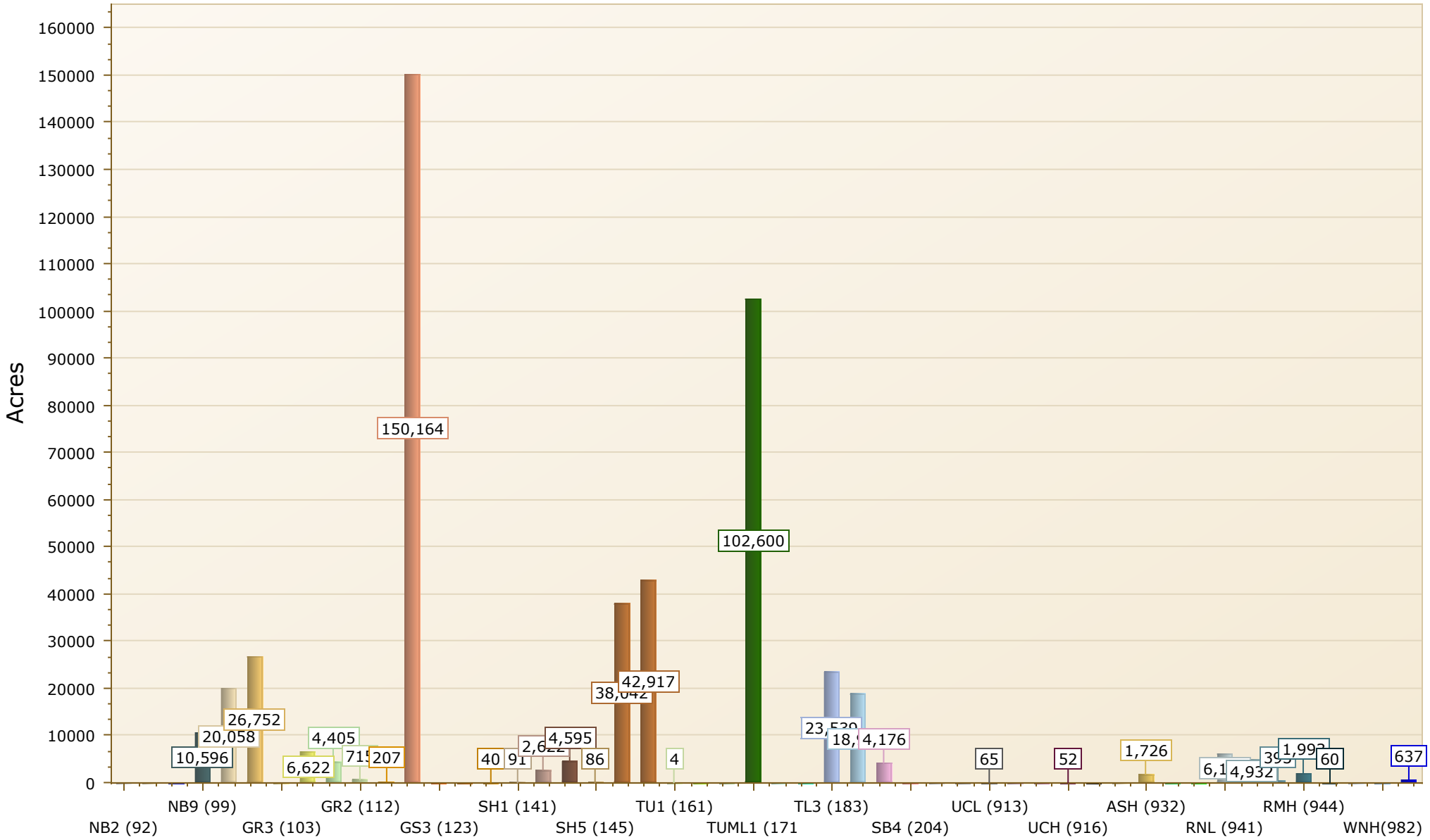
Slash on the ground indicates that forest management treatments have occurred in this area

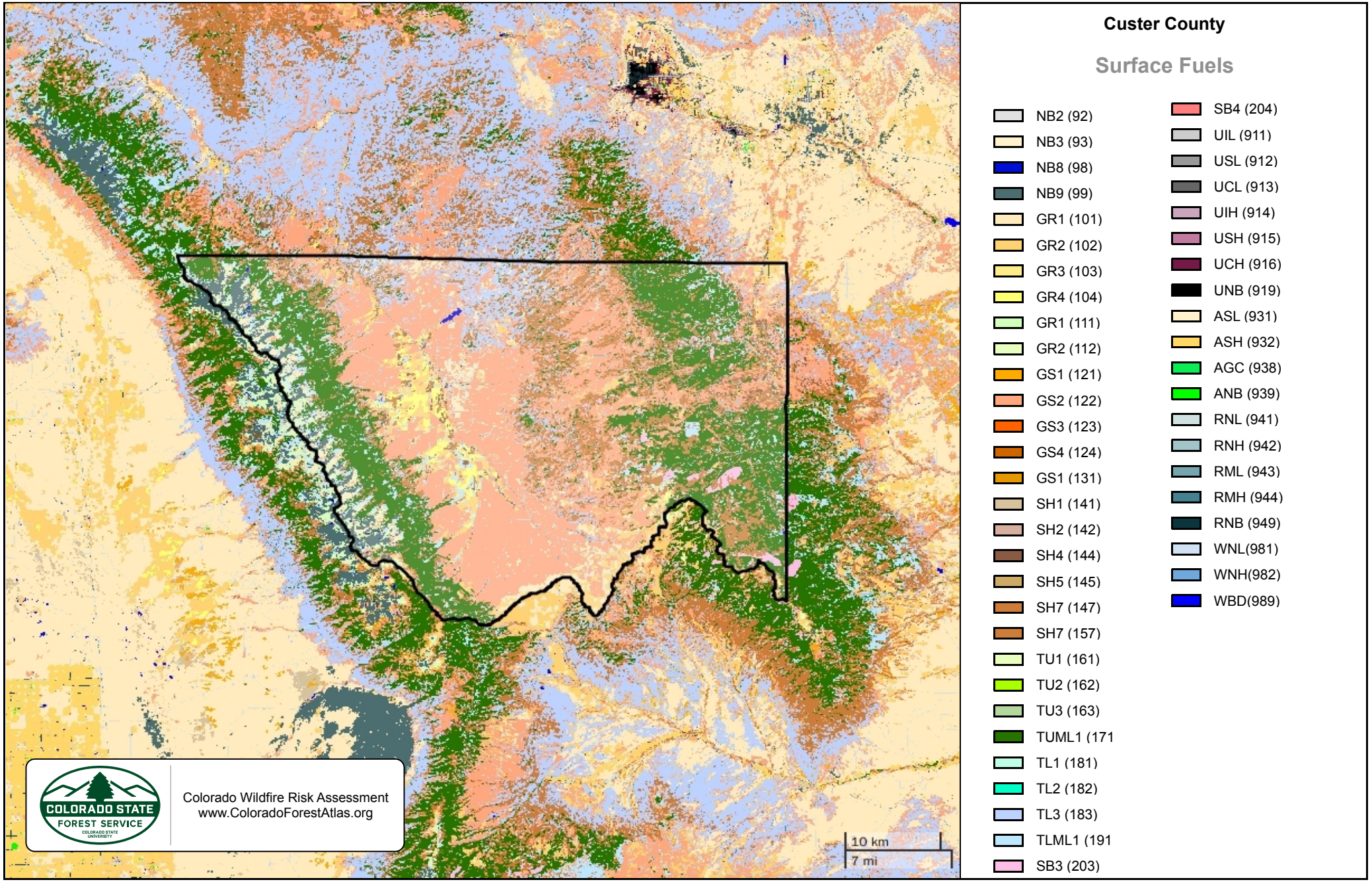
The updated fuel dataset also considered the effects of natural disturbances on vegetation (fires, insect and disease, and harvesting/fuel treatments) that occurred in Colorado from 2013 to 2022. More information about the methods used can be found in the Colorado 2022 Fuels Mapping Final Report.

Surface Fuels	Description	Acres	Percent
NB2 (92)	Snow/Ice		0%
NB3 (93)	Agricultural		0%
NB8 (98)	Open Water		0%
NB9 (99)	Bare Ground	10,596	2.2%
GR1 (101)	Short, Sparse Dry Climate Grass	20,058	4.2%
GR2 (102)	Low Load, Dry Climate Grass	26,752	5.6%
GR3 (103)	Low Load, Very Coarse, Humid Climate Grass		0%
GR4 (104)	Moderate Load, Dry Climate Grass	6,622	1.4%
GR1 (111)	Short, Sparse Dry Climate Grass - ALPINE	4,405	0.9%
GR2 (112)	Low Load, Dry Climate Grass - ALPINE	715	0.2%
GS1 (121)	Low Load, Dry Climate Grass-Shrub	207	0%
GS2 (122)	Moderate Load, Dry Climate Grass-Shrub	150,164	31.7%
GS3 (123)	Moderate Load, Humid Climate Grass-Shrub		0%
GS4 (124)	High Load, Humid Climate Grass-Shrub		0%
GS1 (131)	Low Load, Dry Climate Grass-Shrub - ALPINE	40	0%
SH1 (141)	Low Load Dry Climate Shrub	91	0%
SH2 (142)	Moderate Load Dry Climate Shrub	2,622	0.6%
SH4 (144)	Low Load, Humid Climate Timber-Shrub	4,595	1%
SH5 (145)	High Load, Dry Climate Shrub	86	0%
SH7 (147)	Very High Load, Dry Climate Shrub	38,042	8%
SH7 (157)	Very High Load, Dry Climate Shrub	42,917	9.1%
TU1 (161)	Low Load Dry Climate Timber-Grass-Shrub	4	0%
TU2 (162)	Moderate Load, Humid Climate Timber-Shrub		0%
TU3 (163)	Moderate Load, Humid Climate Timber-Grass-Shrub		0%
TUML1 (171	Timber Understory Dynamic ML (TSYL 2022)	102,600	21.7%
TL1 (181)	Low Load Compact Conifer Litter		0%
TL2 (182)	Low Load Broadleaf Litter		0%
TL3 (183)	Moderate Load Conifer Litter	23,539	5%
TLML1 (191	Timber Litter ML (TSYL 2022)	18,927	4%
SB3 (203)	High Load Activity Fuel or Moderate Load Blowdown	4,176	0.9%
SB4 (204)	High Load Blowdown		0%
UIL (911)	Isolated urban surrounded by Low FB fuel		0%
USL (912)	Scattered urban surrounded by Low FB fuel		0%
UCL (913)	Urban core surrounded by Low FB fuel	65	0%
UIH (914)	Isolated urban surrounded by High FB fuel		0%
USH (915)	Scattered urban surrounded by High FB fuel		0%
UCH (916)	Urban core surrounded by High FB fuel	52	0%
UNB (919)	Unburnable urban areas		0%
ASL (931)	Agricultural Low Load Fuels, with seasonal changes of its Burnable condition		0%
ASH (932)	Agricultural High Load Fuels, with seasonal changes of its Burnable condition	1,726	0.4%
AGC (938)	Golf courses - Non-Burnable (no encroachment)		0%
ANB (939)	Agricultural Fields, maintained in a Non-Burnable condition		0%
RNL (941)	Minor roads Low FB	6,153	1.3%
RNH (942)	Minor roads High FB	4,932	1%
RML (943)	Major roads Low FB	393	0.1%
RMH (944)	Major roads High FB	1,993	0.4%
RNB (949)	Roads surrounded by non-burnable fuels	60	0%
WNL(981)	Minor Water streams surrounded by Low Load Fuel (moderate encroachment)		0%
WNH(982)	Minor Water streams surrounded by High Load Fuel (high encroachment)		0%
WBD(989)	Water Bodies	637	0.1%
Total		**473,168**	**100%**

Surface Fuels

Custer County




Custer County
Surface Fuels
NB2 (92)
NB3 (93)
NB8 (98)
NB9 (99)
GR1 (101)
GR2 (102)
GR3 (103)
GR4 (104)
GR1 (111)
GR2 (112)
GS1 (121)
GS2 (122)
GS3 (123)
GS4 (124)
GS1 (131)
SH1 (141)
SH2 (142)
SH4 (144)
SH5 (145)
SH7 (147)
SH7 (157)
TU1 (161)
TU2 (162)
TU3 (163)
TUML1 (171
TL1 (181)
TL2 (182)
TL3 (183)
TLML1 (191
SB3 (203)
SB4 (204)
UIL (911)
USL (912)
UCL (913)
UIH (914)
USH (915)
UCH (916)
UNB (919)
ASL (931)
ASH (932)
AGC (938)
ANB (939)
RNL (941)
RNH (942)
RML (943)
RMH (944)
RNB (949)
WNL(981)
WNH(982)
WBD(989)
COLORADO STATE FOREST SERVICE
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Vegetation

The Vegetation map describes the general vegetation and landcover types across the state of Colorado.

In the CO-WRA, the Vegetation dataset is used to support the development of the Surface Fuels, Canopy Cover, Canopy Stand Height, Canopy Base Height, and Canopy Bulk Density datasets.
The 2020 LANDFIRE program data product (Existing Vegetation Type) was used to compile the Vegetation data for the CO-WRA. This reflects data current to 2020. The LANDFIRE EVT data were classified to reflect general vegetation cover types for representation with CFA.

Oak shrublands are commonly found añlong dry foothills and lower mountain slopes, and are often situates above Piñyon-juniper.

Piñyon-juniper woodlands are common in southern and southwestern Colorado

Douglas-fir understory in a ponderosa pine forest

Grasslands occur both on Colorado's Eastern Plains and on the Western Slope.

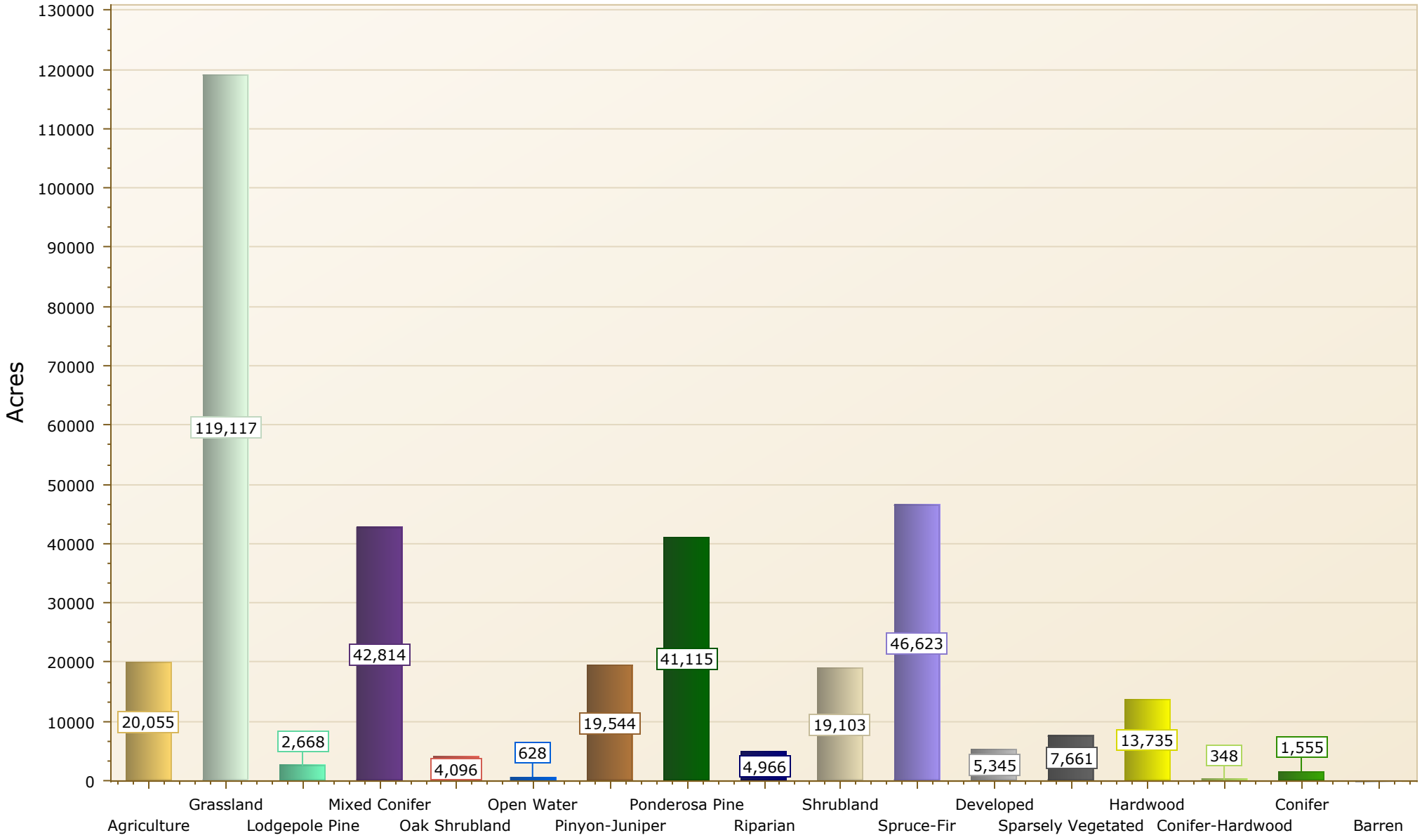
Wildland fire threat increases in lodgepole pine as the dense forest grow old

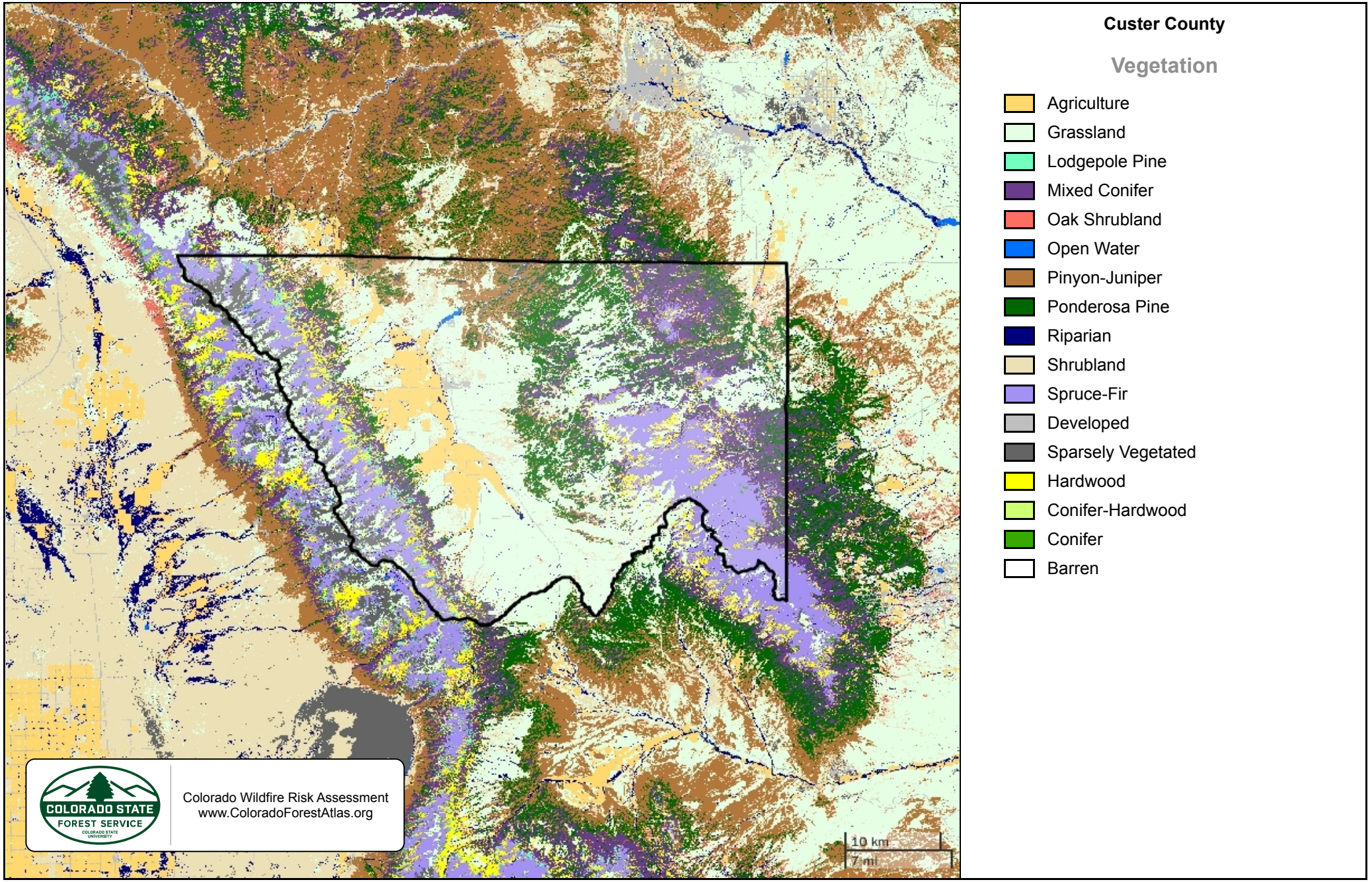
Overly dense ponderosa pine, a dominant species of the montane zone

Vegetation Class	Acres	Percent
Agriculture	20,055	5.7%
Grassland	119,117	34.1%
Lodgepole Pine	2,668	0.8%
Mixed Conifer	42,814	12.2%
Oak Shrubland	4,096	1.2%
Open Water	628	0.2%
Pinyon-Juniper	19,544	5.6%
Ponderosa Pine	41,115	11.8%
Riparian	4,966	1.4%
Shrubland	19,103	5.5%
Spruce-Fir	46,623	13.3%
Developed	5,345	1.5%
Sparsely Vegetated	7,661	2.2%
Hardwood	13,735	3.9%
Conifer-Hardwood	348	0.1%
Conifer	1,555	0.4%
Barren		0%
Total	**349,371**	**100%**

Vegetation

Custer County




Custer County
Vegetation
Agriculture
Grassland
Lodgepole Pine
Mixed Conifer
Oak Shrubland
Open Water
Pinyon-Juniper
Ponderosa Pine
Riparian
Shrubland
Spruce-Fir
Developed
Sparsely Vegetated
Hardwood
Conifer-Hardwood
Conifer
Barren
COLORADO STATE FOREST SERVICE
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Watershed Protection Risk

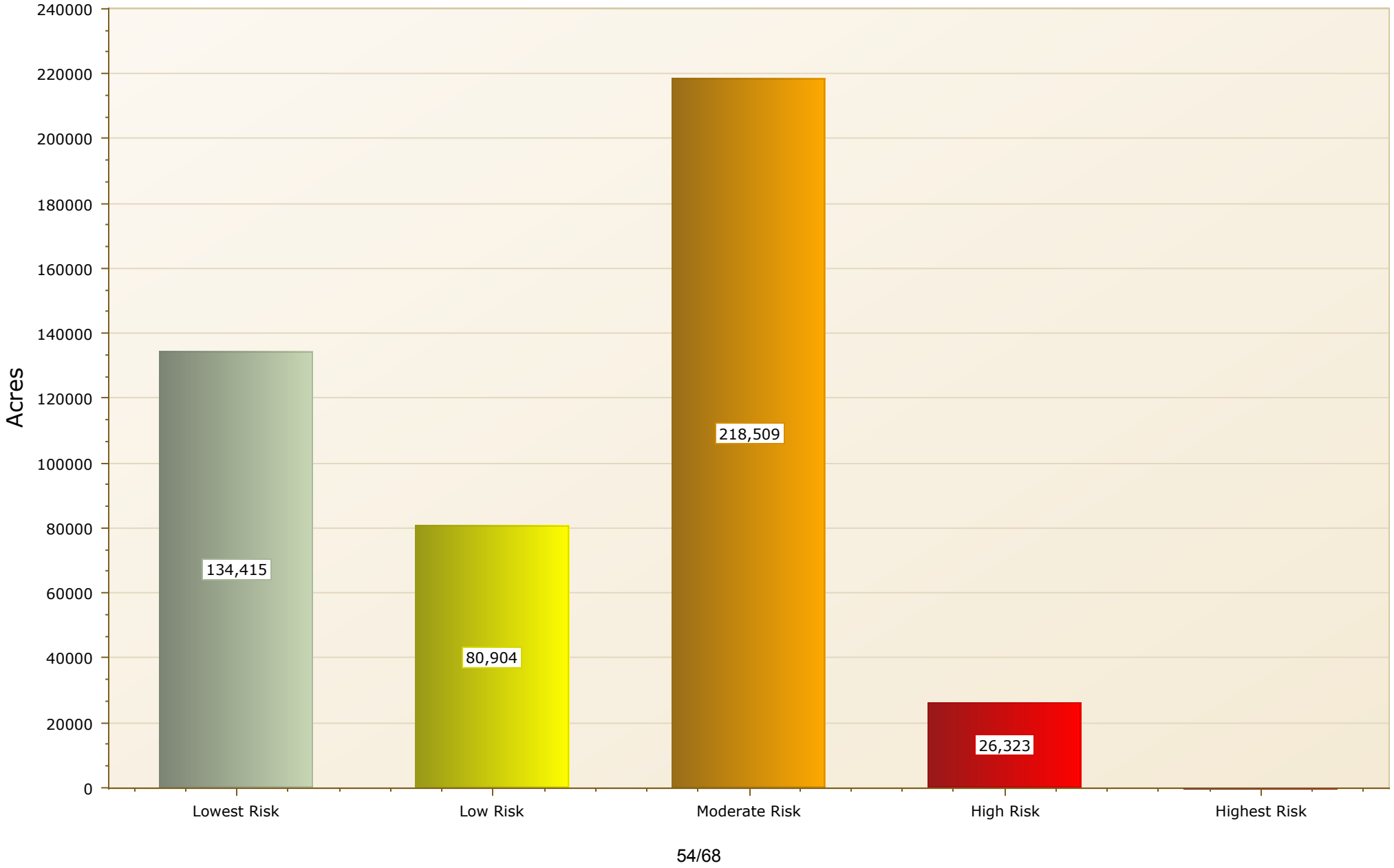
A measure of the risk to Watershed Protection Areas based on the potential negative impacts from wildfire.

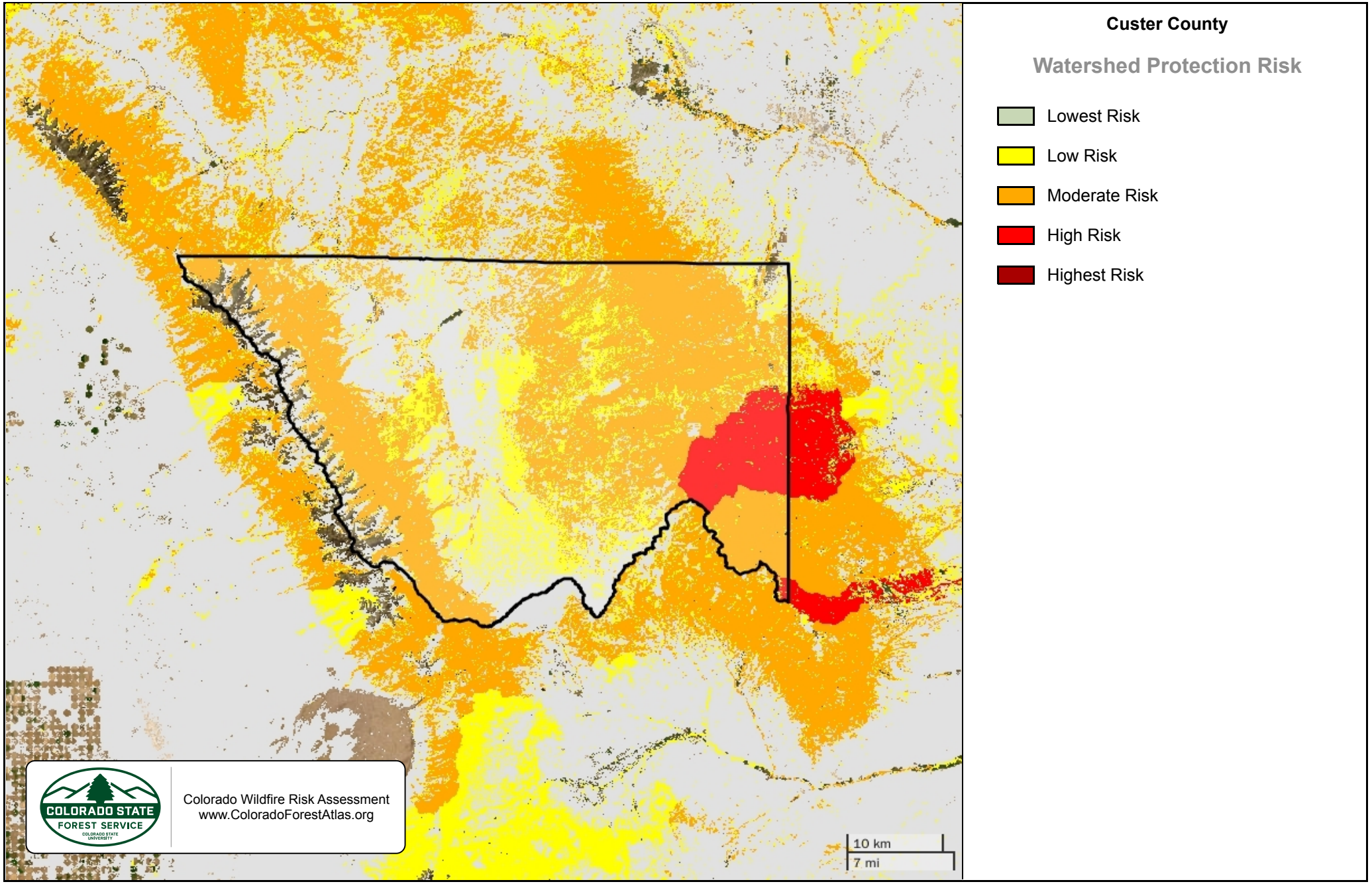
In areas that experience low-severity burns, fire events can serve to eliminate competition, rejuvenate growth and improve watershed conditions. But in landscapes subjected to high, or even moderate-burn severity, the post-fire threats to public safety and natural resources can be extreme.
High-severity wildfires remove virtually all forest vegetation – from trees, shrubs and grasses down to discarded needles, decomposed roots and other elements of ground cover or duff that protect forest soils. A severe wildfire also can cause certain types of soil to become hydrophobic by forming a waxy, water-repellent layer that keeps water from penetrating the soil, dramatically amplifying the rate of runoff.
The loss of critical surface vegetation leaves forested slopes extremely vulnerable to large-scale soil erosion and flooding during subsequent storm events. In turn, these threats can impact the health, safety and integrity of communities and natural resources downstream. The likelihood that such a post-fire event will occur in Colorado is increased by the prevalence of highly erodible soils in several parts of the state, and weather patterns that frequently bring heavy rains on the heels of fire season.
In the aftermath of the 2002 fire season, the Colorado Department of Health estimated that 26 municipal water storage facilities were shut down due to fire and post-fire impacts. The potential for severe soil erosion is a consequence of wildfire because as a fire burns, it destroys plant material and the litter layer. Shrubs, forbs, grasses, trees and the litter layer disperse water during severe rainstorms. Plant roots stabilize the soil, and stems and leaves slow the water to give it time to percolate into the soil profile. Fire can destroy this soil protection.
The risk index has been calculated by combining the Watershed Protection data with a measure of fire intensity using a Response Function approach. Those areas with the highest negative impact (-9) represent areas with high potential fire intensity and high importance for ecosystem services. Those areas with the lowest negative impact (-1) represent those areas with low potential fire intensity and a low importance for ecosystem services. The response function outputs were combined into 5 qualitative classes.

Watershed Protection Risk	Acres	Percent
Lowest Risk	134,415	29.2%
Low Risk	80,904	17.6%
Moderate Risk	218,509	47.5%
High Risk	26,323	5.7%
Highest Risk		0%
Total	**460,150**	**100%**

Watershed Protection Risk

Custer County




Custer County
Watershed Protection Risk
Lowest Risk
Low Risk
Moderate Risk
High Risk
Highest Risk
COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

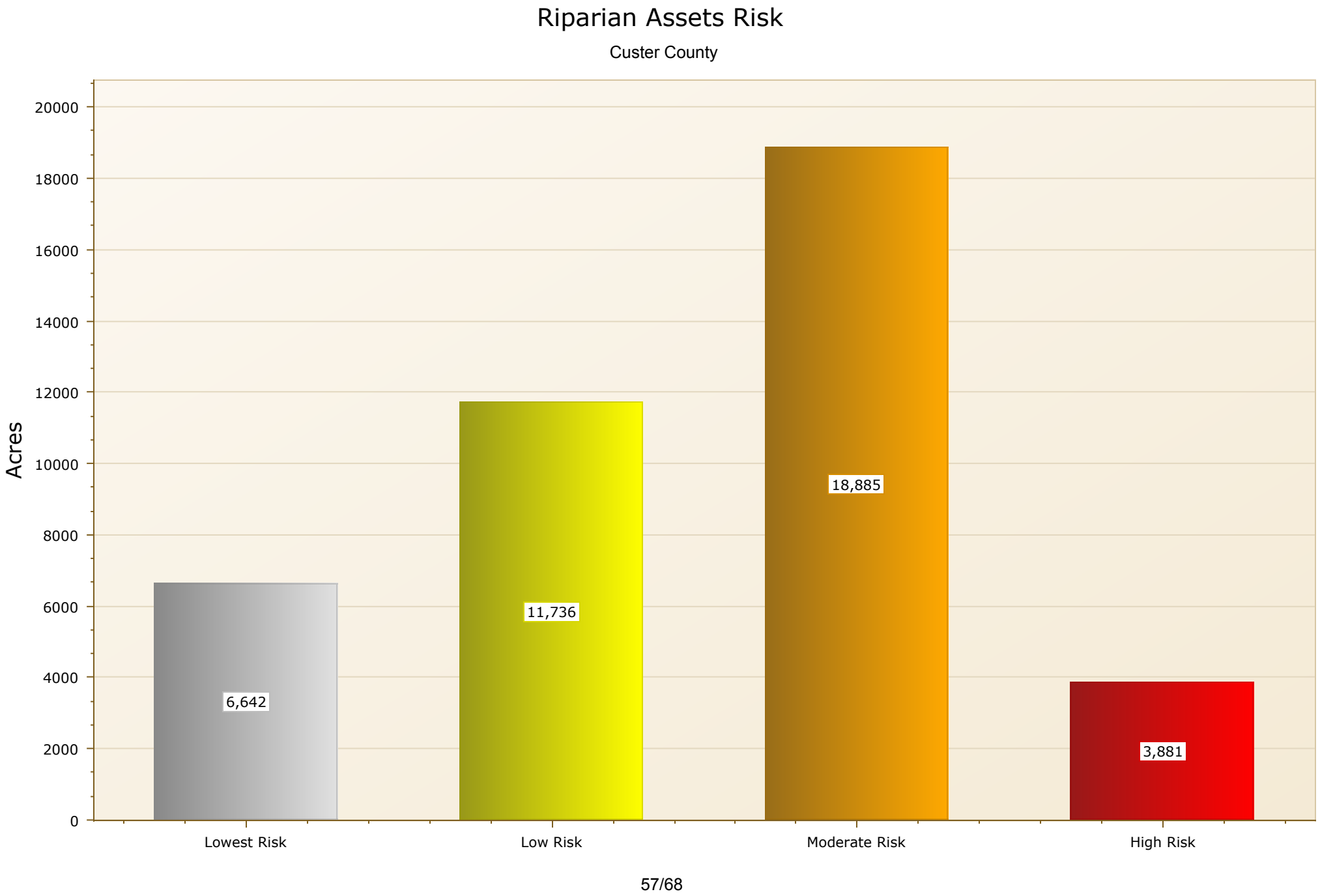
Riparian Assets Risk

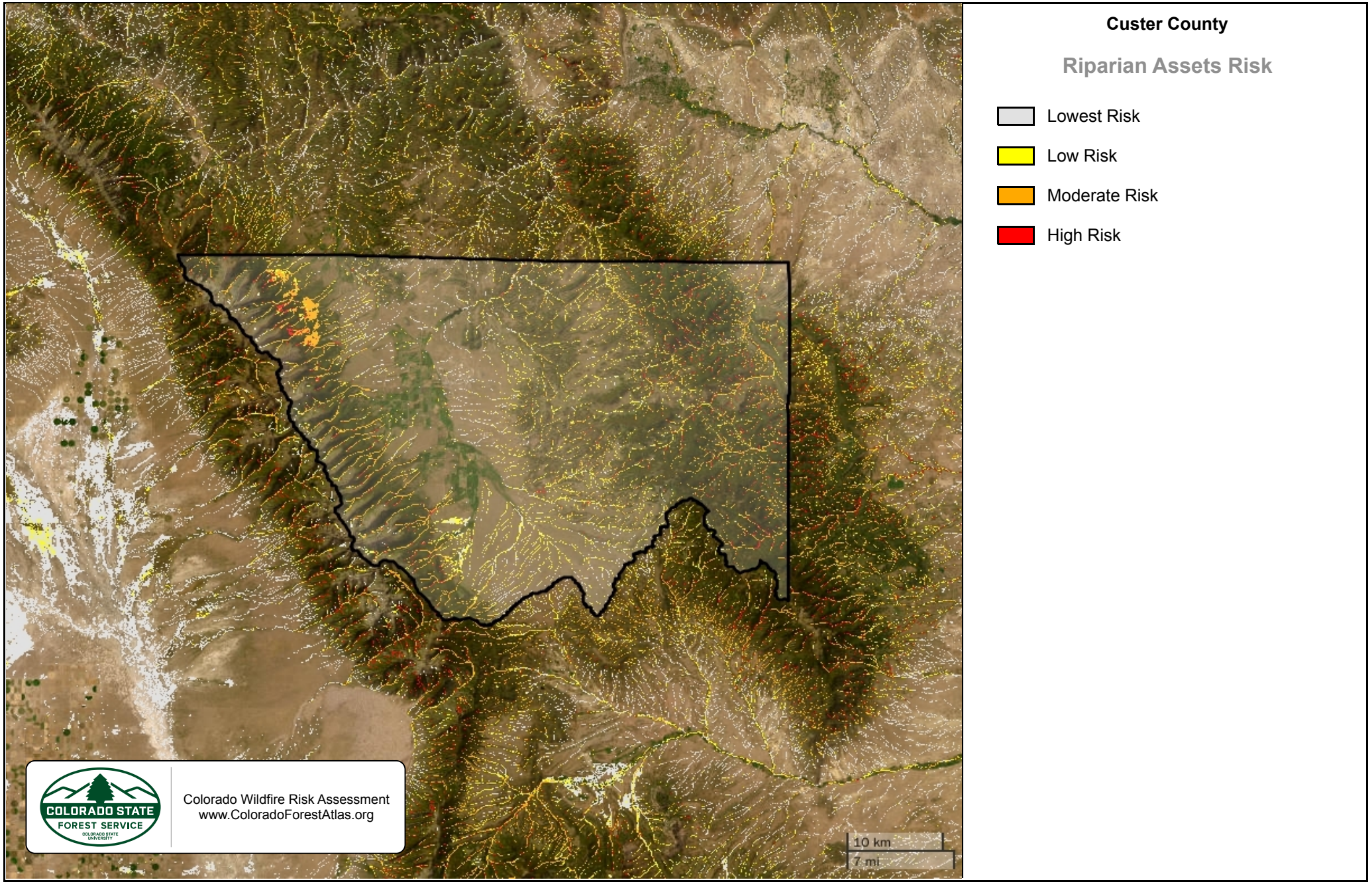
A measure of the risk to riparian areas based on the potential negative impacts from wildfire.

The risk index has been calculated by combining the Riparian Assets data with a measure of fire intensity using a Response Function approach. Those areas with the highest negative impact (-9) represent areas with high potential fire intensity and high importance for ecosystem services. Those areas with the lowest negative impact (-1) represent those areas with low potential fire intensity and a low importance for ecosystem services. The response function outputs were combined into 5 qualitative classes.

This risk output is intended to supplement the Watershed Protection Risk Index by identifying wildfire risk within the more detailed riparian areas.

Riparian Assets Risk		Acres	Percent
	Lowest Risk	6,642	16.1%
	Low Risk	11,736	28.5%
	Moderate Risk	18,885	45.9%
	High Risk	3,881	9.4%
Total		**41,145**	**100%**


Riparian Assets Risk
Custer County
Acres
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
6,642
11,736
18,885
3,881
Lowest Risk
Low Risk
Moderate Risk
High Risk


Custer County
Riparian Assets Risk
Lowest Risk
Low Risk
Moderate Risk
High Risk
COLORADO STATE
FOREST SERVICE
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

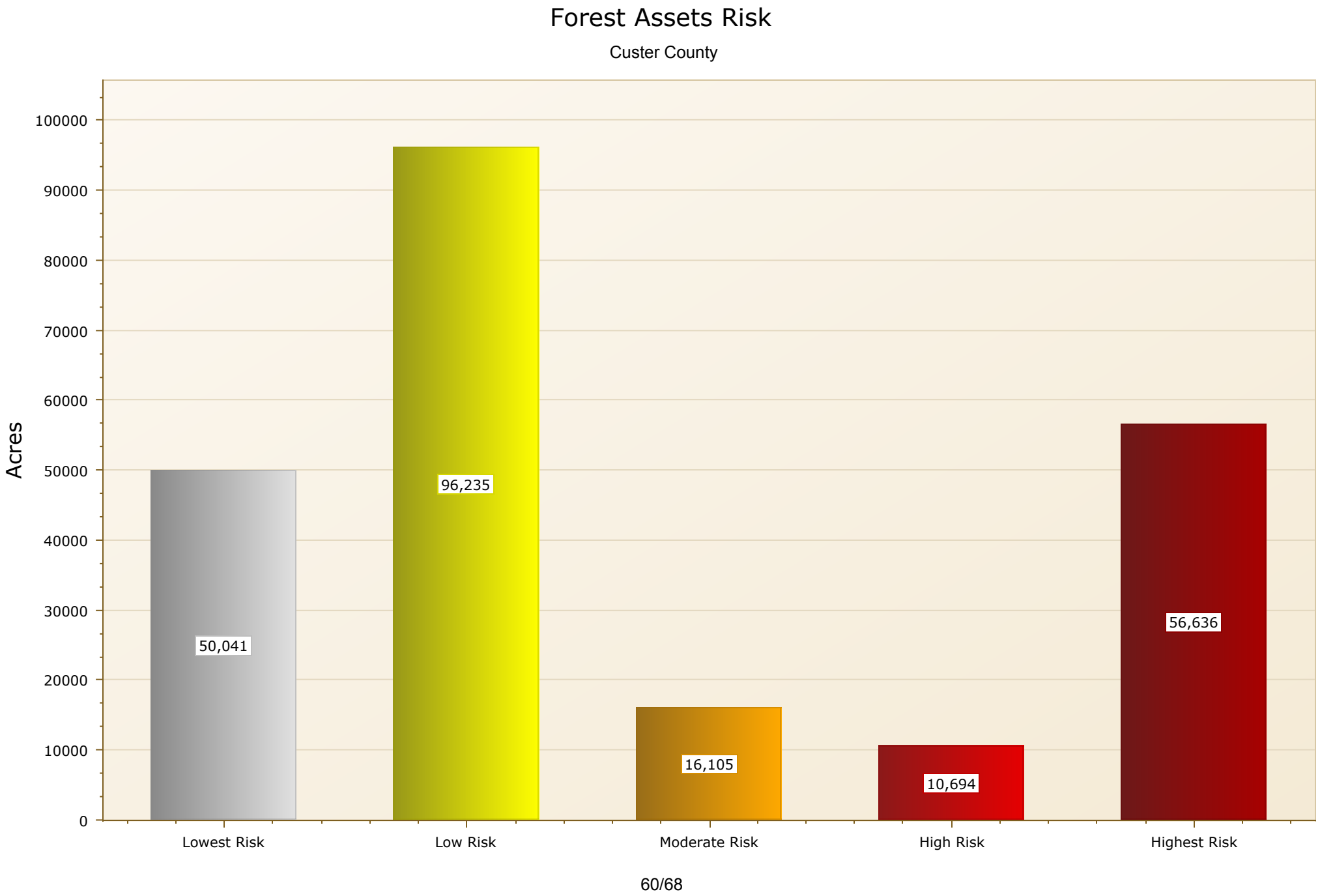
Forest Assets Risk

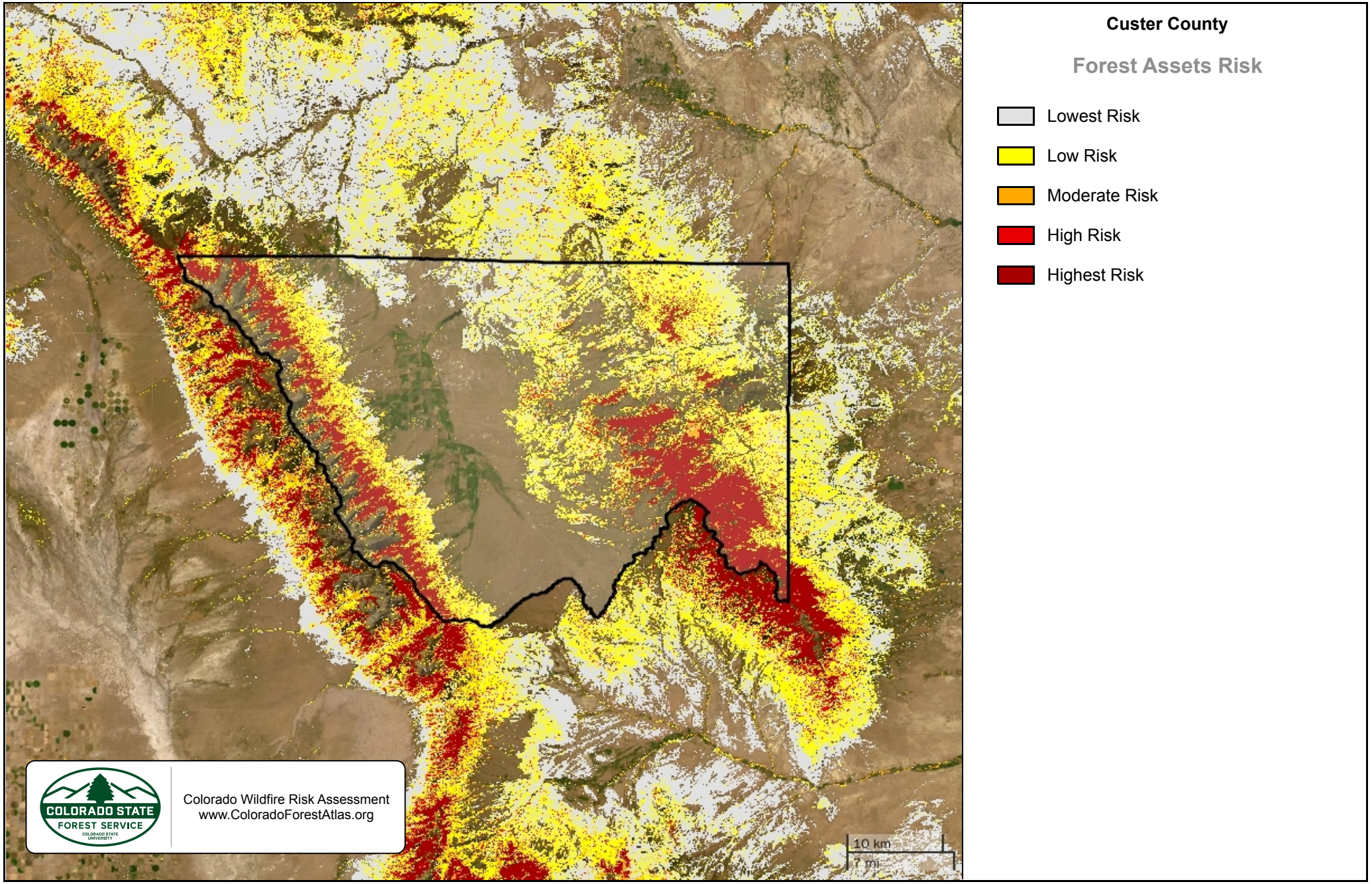
A measure of the risk to forested areas based on the potential negative impacts from wildfire.
This layer identifies those forested areas with the greatest potential for adverse effects from wildfire.This layer identifies those forested areas with the greatest potential for adverse effects from wildfire.

The risk index has been calculated by combining the Forest Assets data with a measure of fire intensity using a Response Function approach. Those areas with the highest negative impact (-9) represent areas with high potential fire intensity and low resilience or adaptability to fire. Those areas with the lowest negative impact (-1) represent those areas with low potential fire intensity and high resilience or adaptability to fire. The response function outputs were combined into 5 qualitative classes.

This risk output is intended to provide an overall forest index for potential impact from wildfire. This can be applied to consider aesthetic values, ecosystem services, or economic values of forested lands.

Forest Assets Risk	Acres	Percent
Lowest Risk	50,041	21.8%
Low Risk	96,235	41.9%
Moderate Risk	16,105	7%
High Risk	10,694	4.6%
Highest Risk	56,636	24.6%
Total	**229,711**	**100%**


Forest Assets Risk
Custer County
Acres
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
50,041
96,235
16,105
10,694
56,636
Lowest Risk
Low Risk
Moderate Risk
High Risk
Highest Risk


Custer County
Forest Assets Risk
Lowest Risk
Low Risk
Moderate Risk
High Risk
Highest Risk
COLORADO STATE
FOREST SERVICE
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Building Damage Potential

This metric estimates the potential for building loss and was derived using proprietary data from Technosylva Inc. on building damages that was created by analyzing 13 years of building damage data from state agency inspections after large fires.

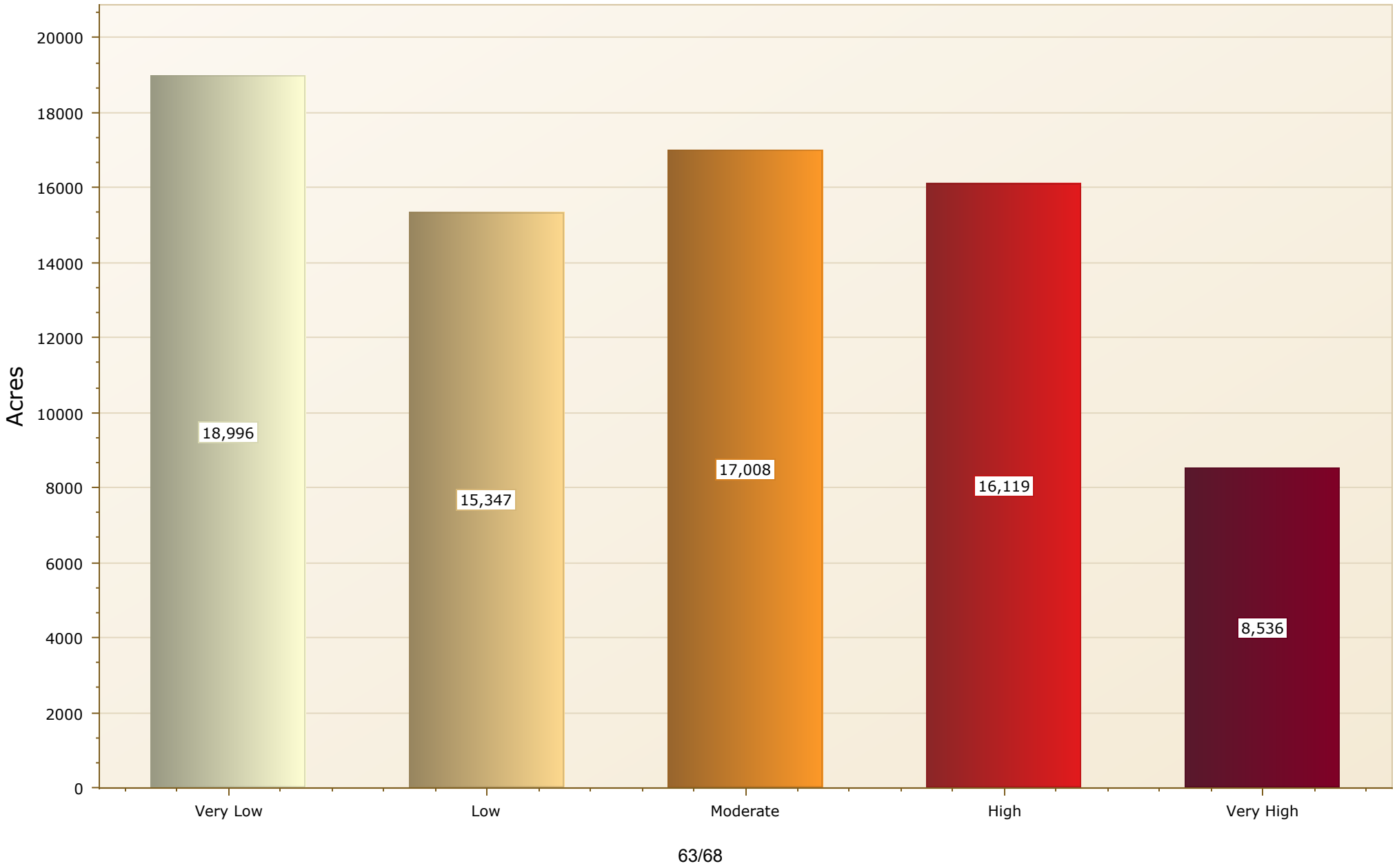
BDP is a spatially variable metric that is calculated on a building-by-building basis and aggregated to Uber H3 hexagons, providing a measure of the number of potential buildings lost based on the number of buildings threatened by fires in the specific area. BDP was calibrated using Machine Learning algorithms that identified the key factors that influenced building loss from historical damage inspection databases. The model has been calibrated using 13 years of damage inspection data and validated across multiple Western States with current wildfire data.

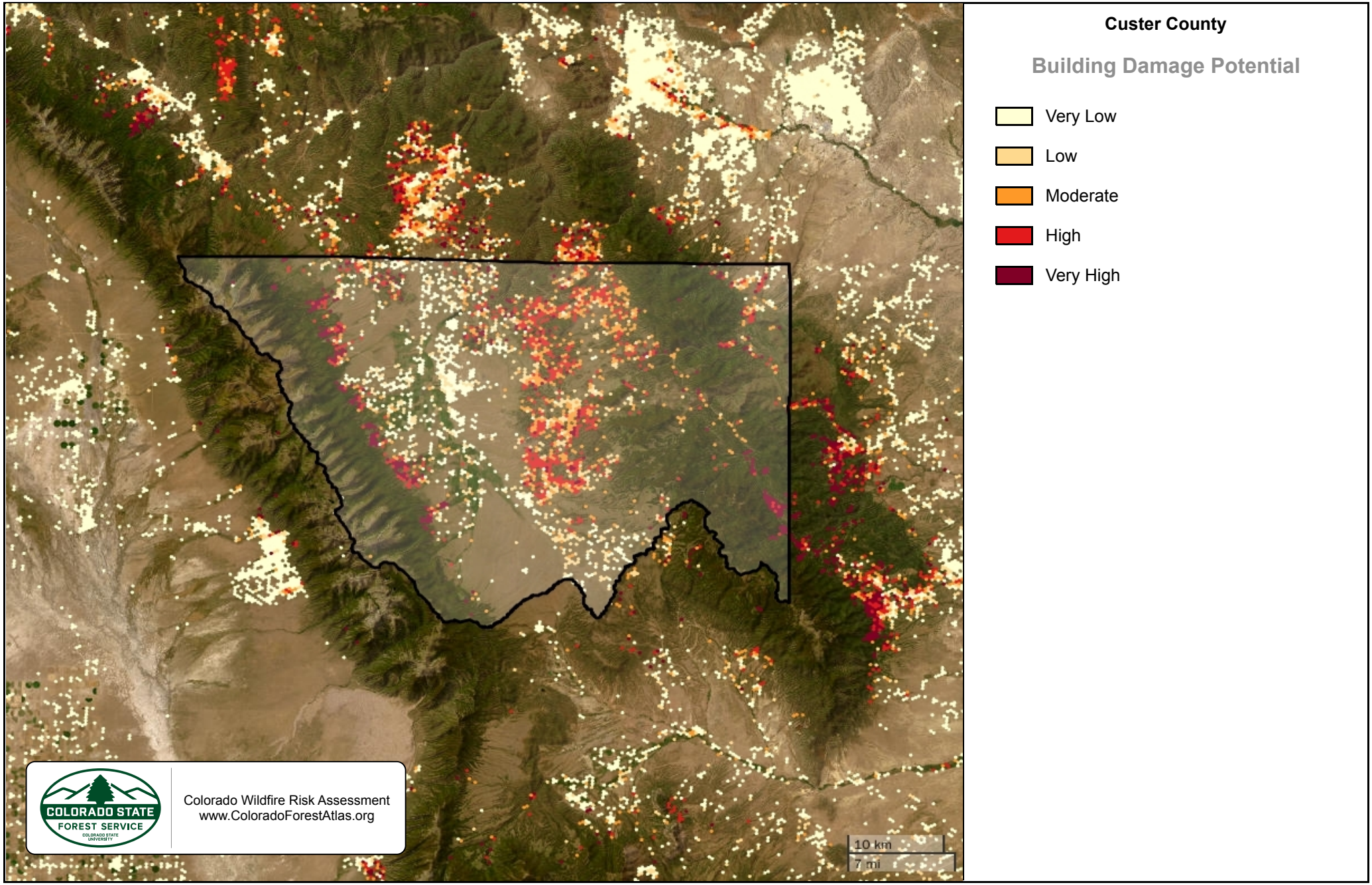
BDP is available as a static risk layer, although a key factor involved in the metric is conditional fire behavior. Conditional Flame Length derived in the fire behavior analysis conducted for the 2022 CO-WRA was used. However, the metric can also be used as a dynamic layer when modulated by the fire intensity of an active wildfire through conventional fire behavior analysis. Although applied as a static layer for the 2022 CO-WRA, the metric is used operationally in California by state agencies and private industry for risk forecasting

Building Damage Potential	Acres	Percent
Very Low	18,996	25%
Low	15,347	20.2%
Moderate	17,008	22.4%
High	16,119	21.2%
Very High	8,536	11.2%
Total	**76,004**	**100%**

Building Damage Potential

Custer County




Custer County
Building Damage Potential
Very Low
Low
Moderate
High
Very High
COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

Defensible Space Index

The defensible space in a Wildfire Urban Interface (WUI) analysis context refers to the space that surrounds a specific building and can be used to define the hazard, or the exposure, to a wildfire occurrence. In this area, natural and manmade fuels are treated, cleared or reduced to slow the spread of wildfire near structures.

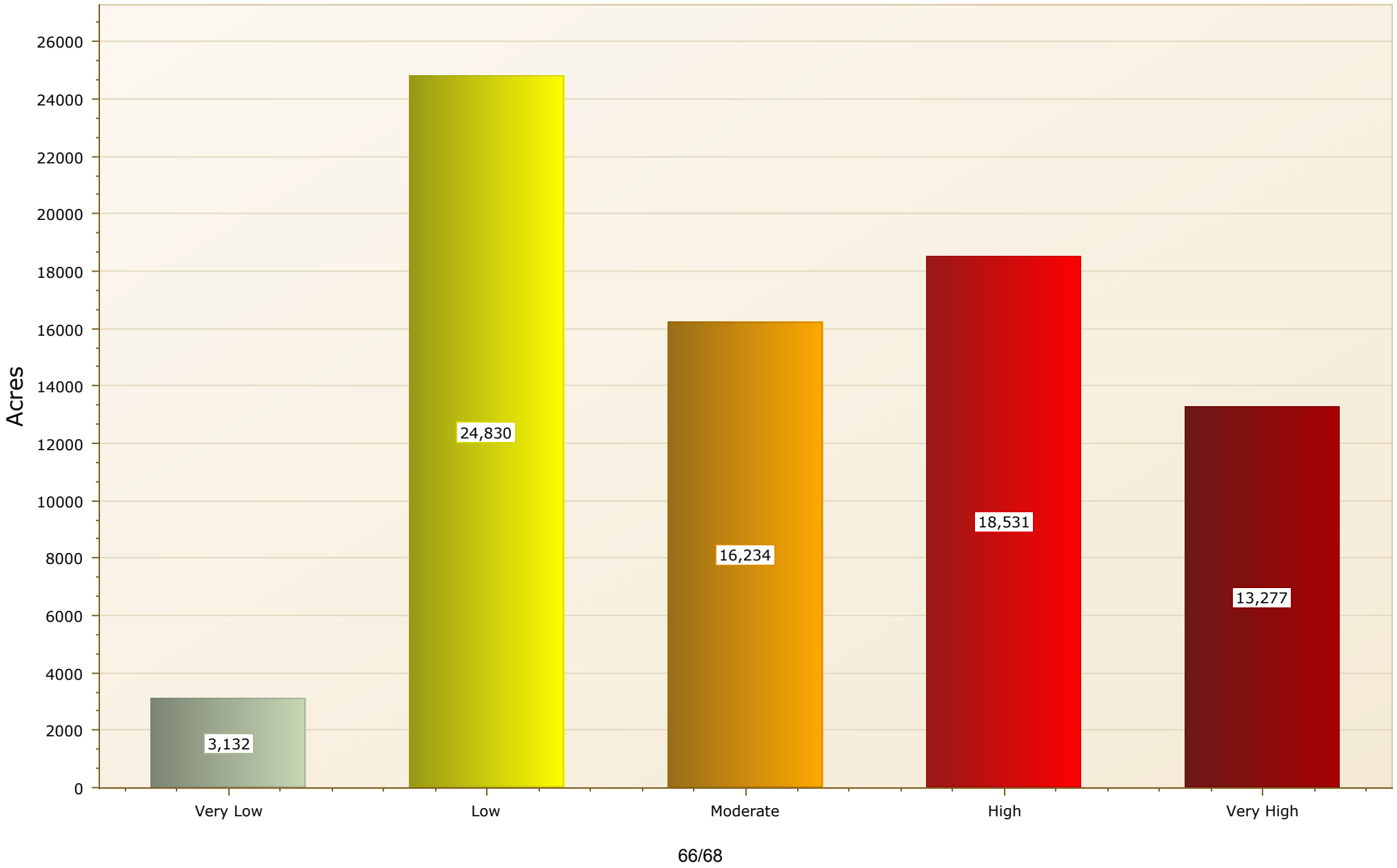
Individual building footprints were used to identify structure locations. Buildings were then grouped using Uber's hexagonal hierarchical spatial index. Within each hexagon, the building values were averaged and applied to the hexagon to remove building specific metrics. This provides a detailed measure of defensible space characteristics for small areas consistent with the accuracy of the structure locations and wildfire fuels and risk analysis data.

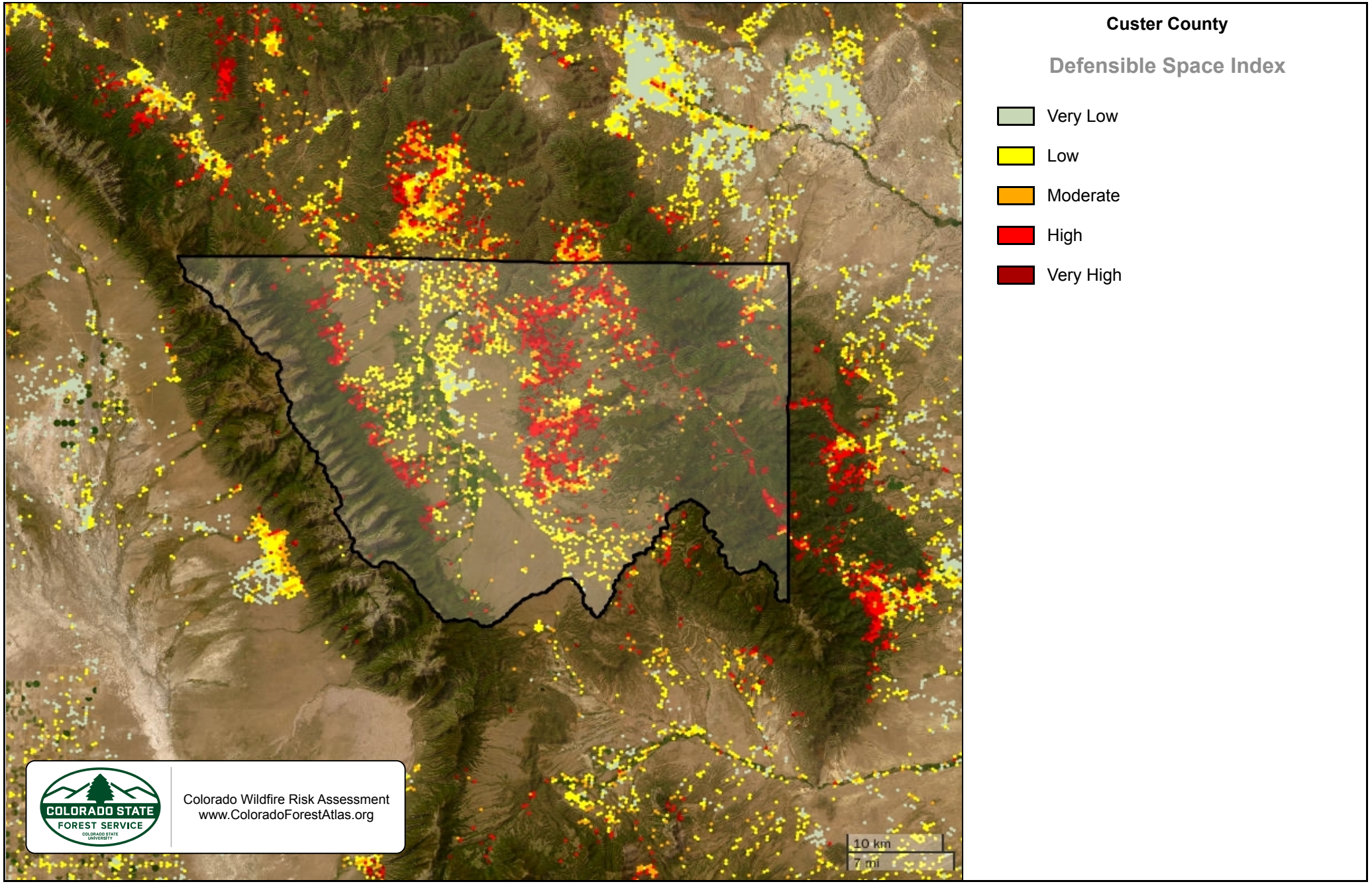
Each hexagon in the defensible space risk has a relative value from 0 to 1 that represents the average building hazard in that hexagon. This defensible space value is based on three spatial components/variables: 1) canopy cover, 2) slope, and 3) fuel models present within the buffer around the buildings analyzed.

Defensible Space Index	Acres	Percent
Very Low	3,132	4.1%
Low	24,830	32.7%
Moderate	16,234	21.4%
High	18,531	24.4%
Very High	13,277	17.5%
Total	**76,004**	**100%**

Defensible Space Index

Custer County




Custer County
Defensible Space Index
Very Low
Low
Moderate
High
Very High
COLORADO STATE
FOREST SERVICE
Colorado Wildfire Risk Assessment
www.ColoradoForestAtlas.org
10 km
7 mi

References

Anderson, H. E. (1982). Aids to determining fuel models for estimating fire behavior. USDA For. Serv. Gen. Tech. Rep. INT-122.

Colorado State Forest Service (August 2023). Colorado Wildfire Risk Assessment Final Report. A final report developed by CSFS and Technosylva Inc. (La Jolla, CA) documenting the technical methods and results for the Colorado wildfire risk assessment update project.

Colorado State Forest Service (June 2023). Fuels Calibration Final Report. A final report developed by CSFS and Technosylva Inc. (La Jolla, CA) documenting the technical methods and results for the Colorado fuels calibration project.

National Wildfire Coordinating Group (NWCG). (2008). Glossary of Wildland Fire Terminology. Publication Management System document PMS-205.

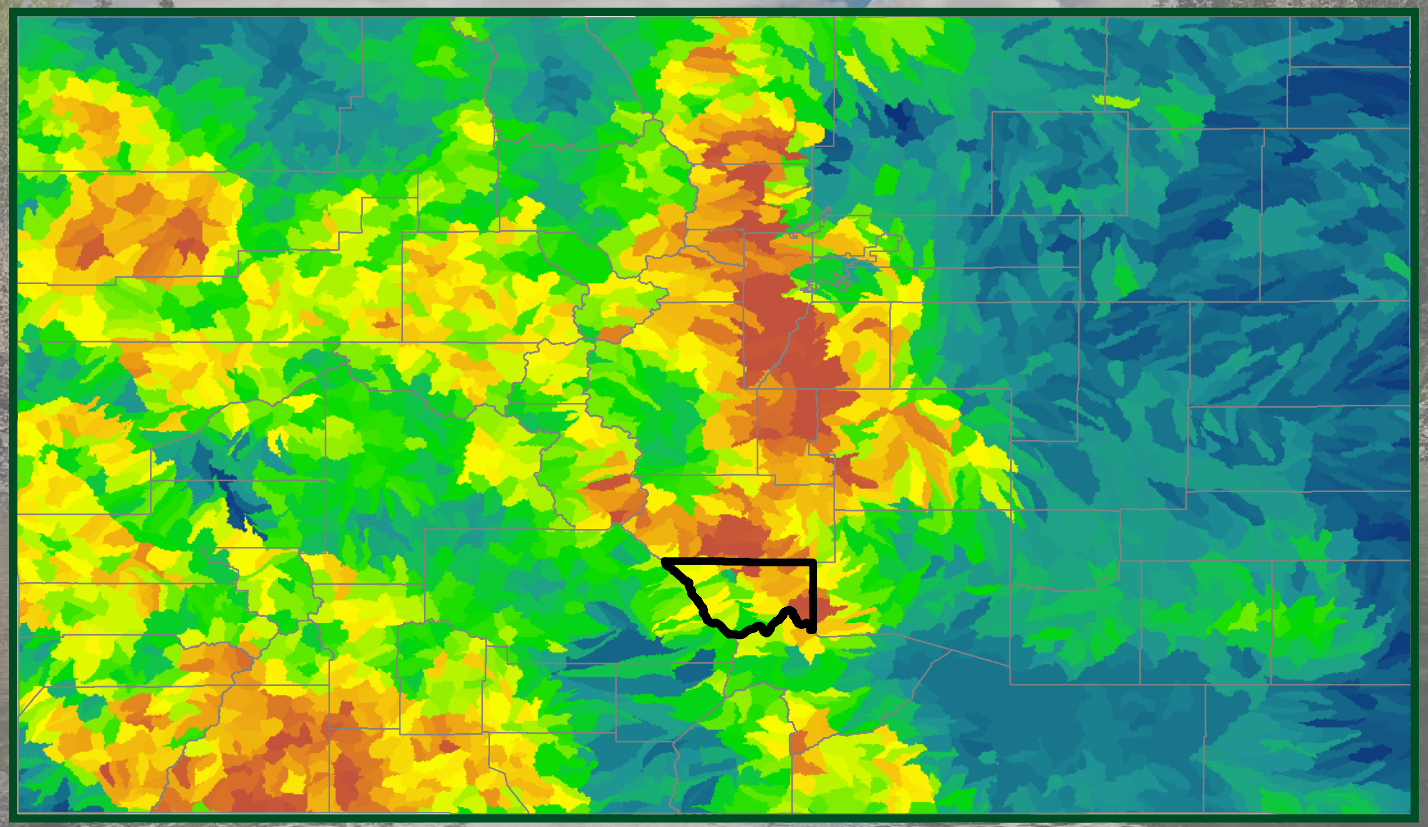
National Wildfire Coordinating Group (2004). Fireline Handbook. NWCG Handbook 3. PMS 410-1. NFES 0065. National Interagency Fire Center. Boise, Idaho 83705.

Scott, J. H., & Burgan, R. E. (2005). Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model. Ft. Collins, CO, Rocky Mountain Research Station: USDA Forest Service, Gen. Tech. Rpt. RMRS-GTR-153.

Scott, J. H., & Reinhardt, E. D. (2001). Assessing the Crown Fire Potential by Linking Models of Surface and Crown Fire Behavior. Ft. Collins, CO, Rocky Mountain Research Station: USDA Forest Service, Research Paper RMRS-RP-29.

Custer County

Mapbook



COLORADO STATE FOREST SERVICE
EST. 1955

Colorado Forest Action Plan

2020

The Colorado State Forest Service is a steward of the state's forestlands, committed to the challenge of creating and maintaining healthy, resilient forests for generations to come.

COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY

Composite Map

The CSFS action plan team consulted with external partners and stakeholders to determine forest stewardship goals that fall under the national priorities of CONSERVE, PROTECT, and ENHANCE.

National Action Plan Priorities

CONSERVE working forestland

PROTECT forests from harm

ENHANCE public benefits from trees and forests

The high-priority areas identified in the action plan composite map are sub-watersheds where goals from the forest conditions, living with wildfire, and watershed protection themes can be achieved on the same management footprint by a project or activity.

The Composite Map was derived from a combination of the Forest Conditions, Living with Wildfire, and Watershed Protection Theme Priority Maps.

For more information, please visit:
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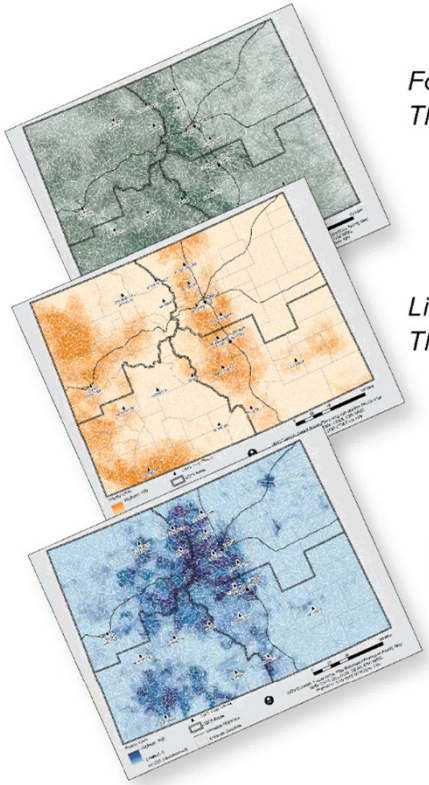
FIGURE I

PRIORITY MAP:
LAYER INCLUSIONS



Forest Conditions Theme Priority Map

+

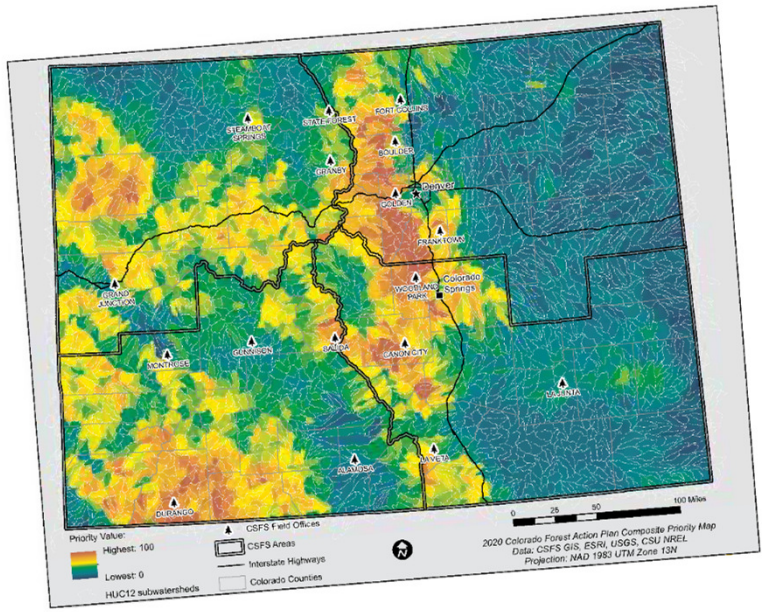
Living with Wildfire Theme Priority Map

+

Watershed Protection Theme Priority Map

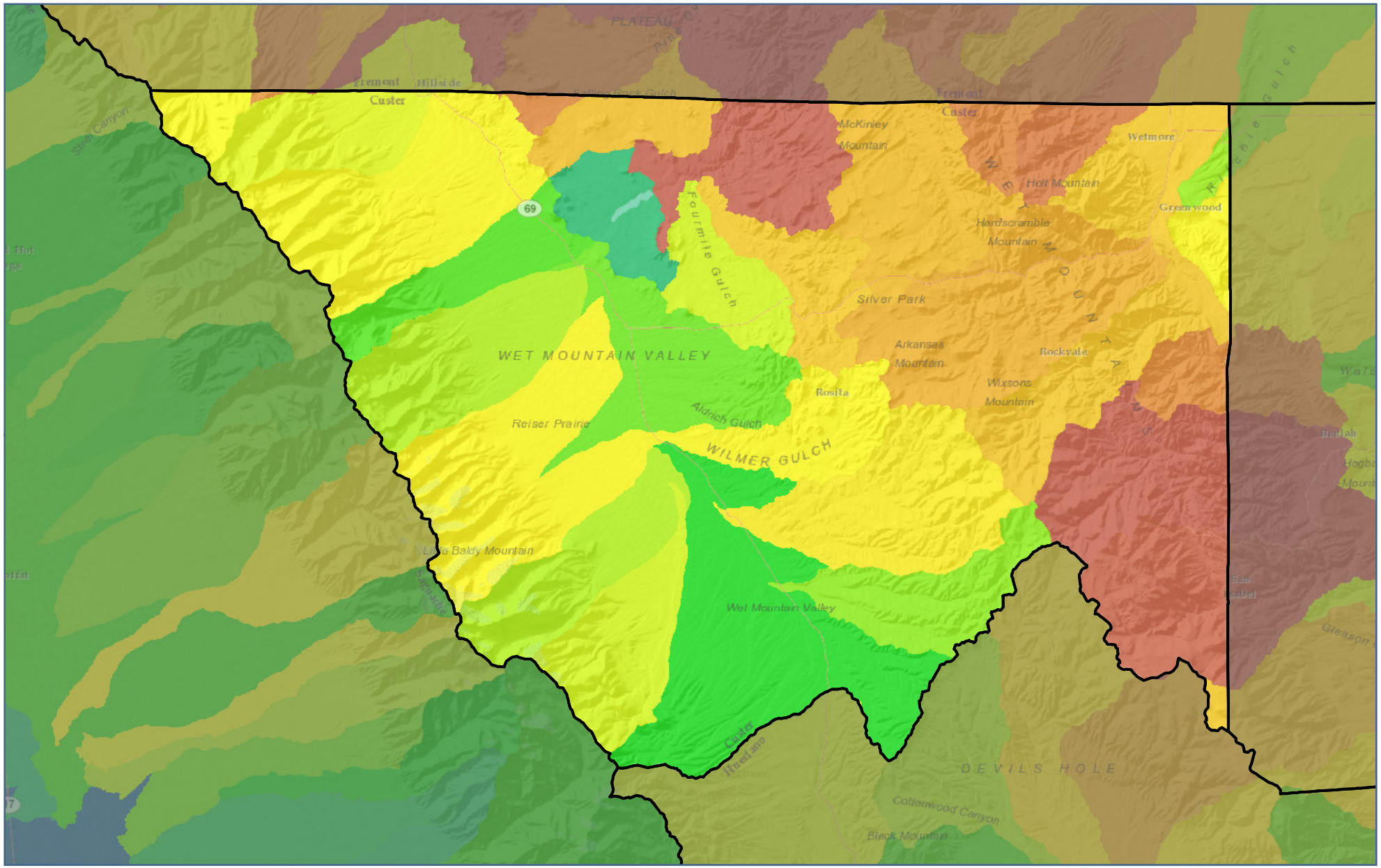
=

Priority Composite Map



Composite Map

Custer County



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Relative Priority Value

Lowest — Highest

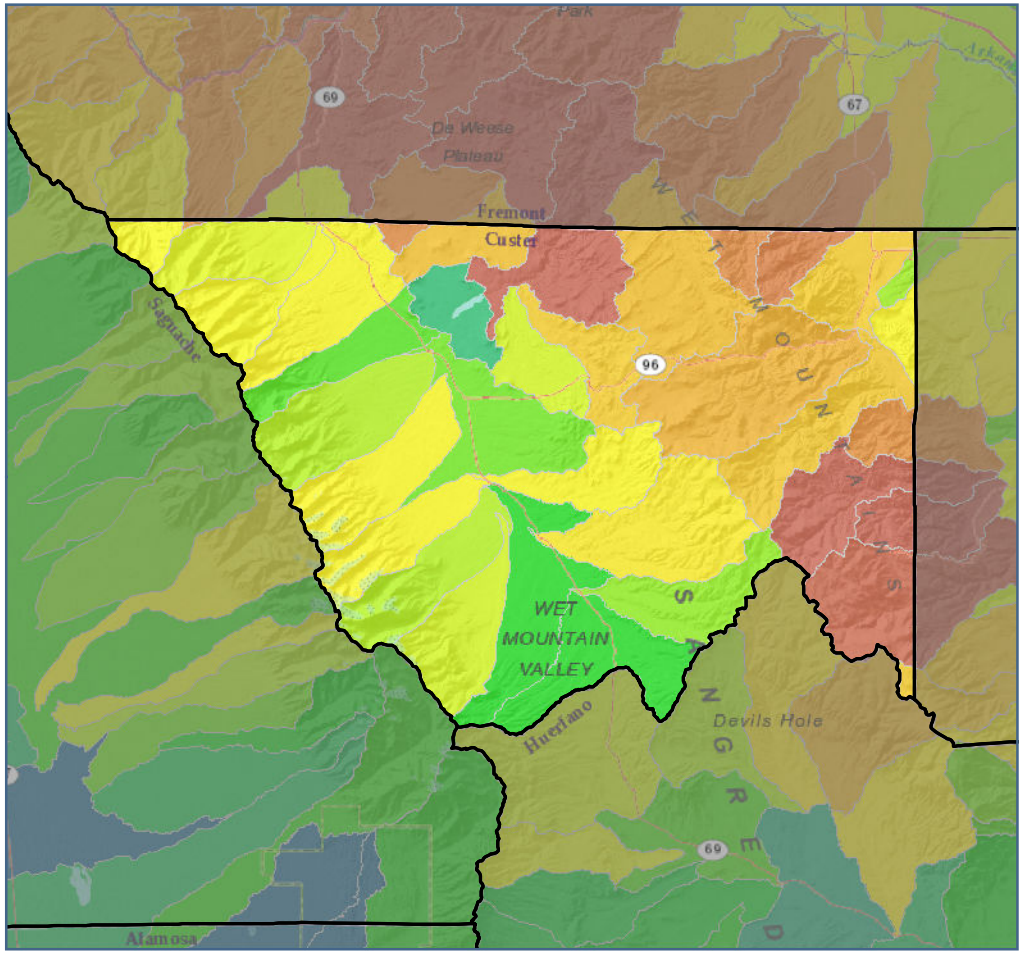
N W E S

0 3 6 12

Miles

Composite Map

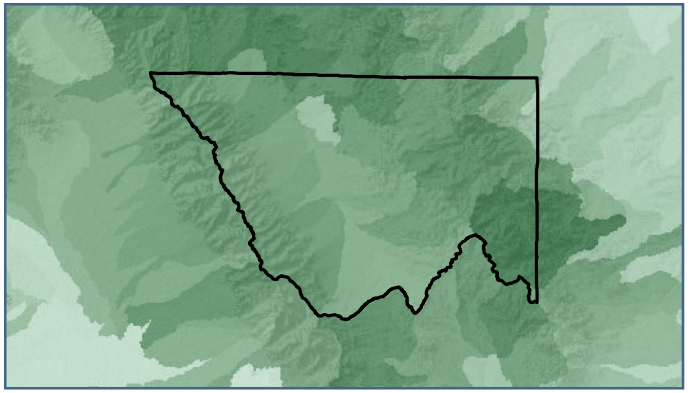
Custer County



Relative Priority Value

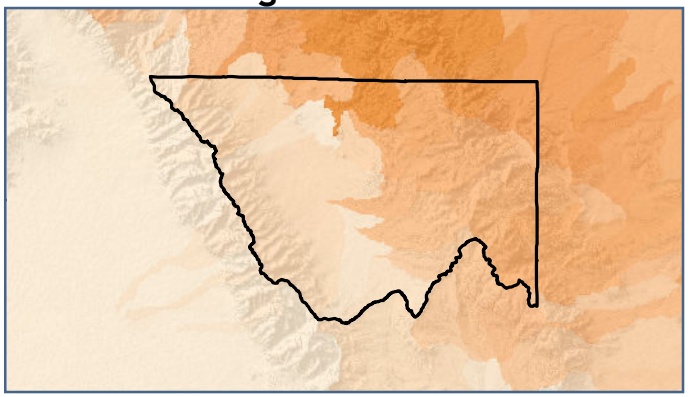
Lowest Highest

Forest Conditions



2x

Living with Wildfire



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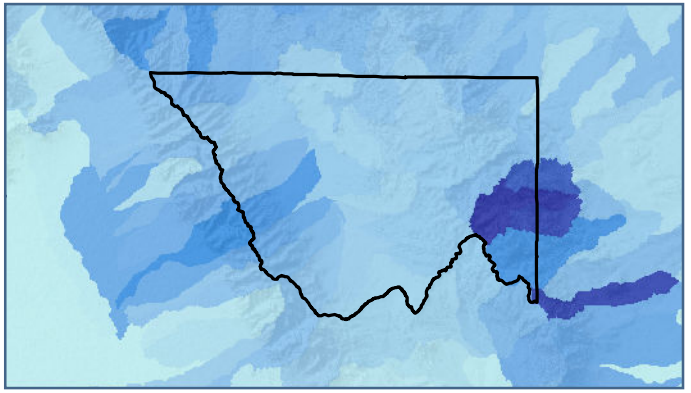
Watershed Protection



1x

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N W E S

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COLORADO STATE UNIVERSITY

Forest Conditions

Goal 1: Keep Forests as Forests

CONSERVE working forestland

PROTECT forests from harm

Goal 2: Improve Forest Productivity

PROTECT forests from harm

ENHANCE public benefits from trees and forests

Goal 3: Promote Adaptive Management

CONSERVE working forestland

ENHANCE public benefits from trees and forests

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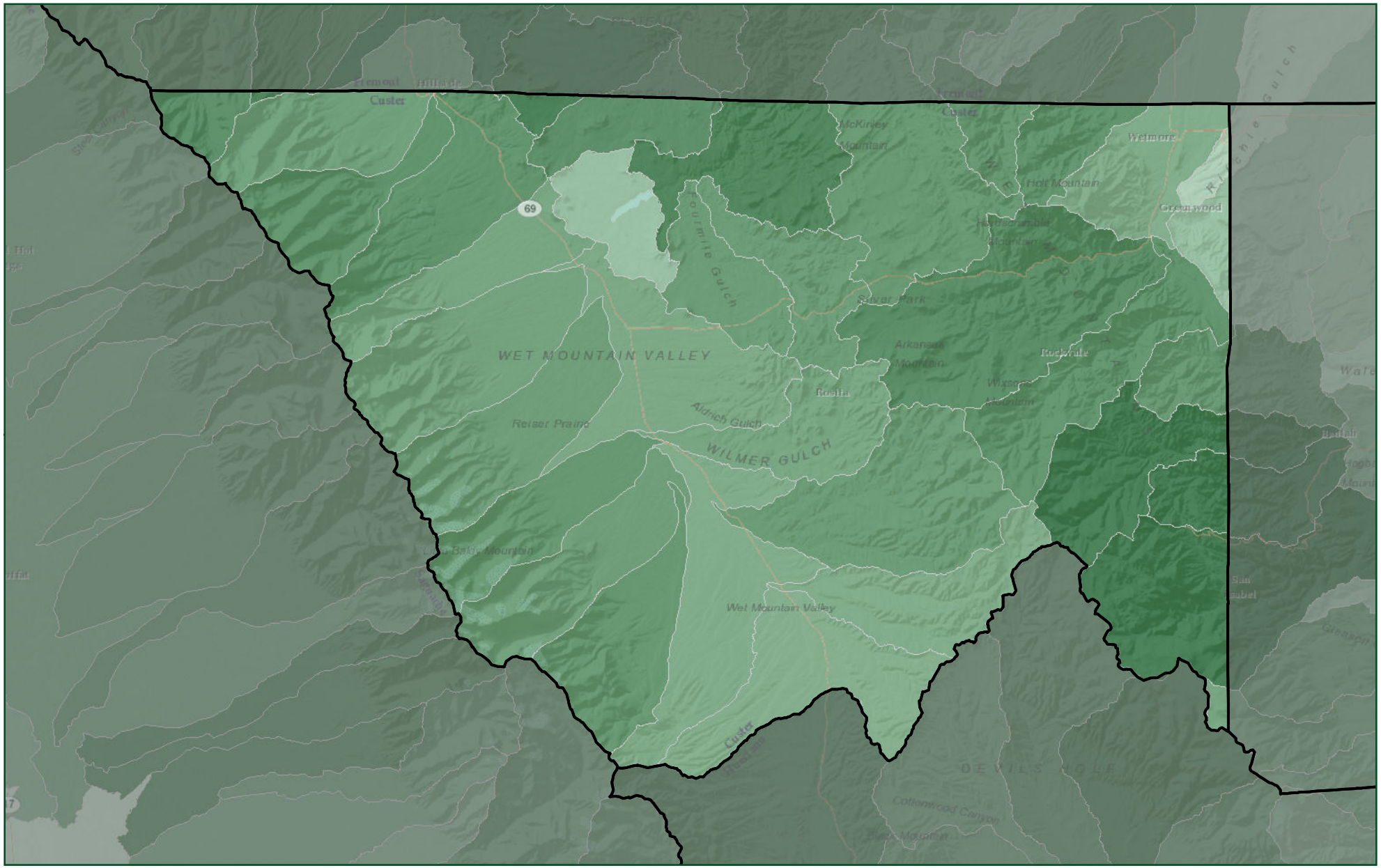
Forest Conditions

Custer County



For more information, please visit:
csfs.colostate.edu/forest-action-plan

Relative Priority Value

Lowest — Highest

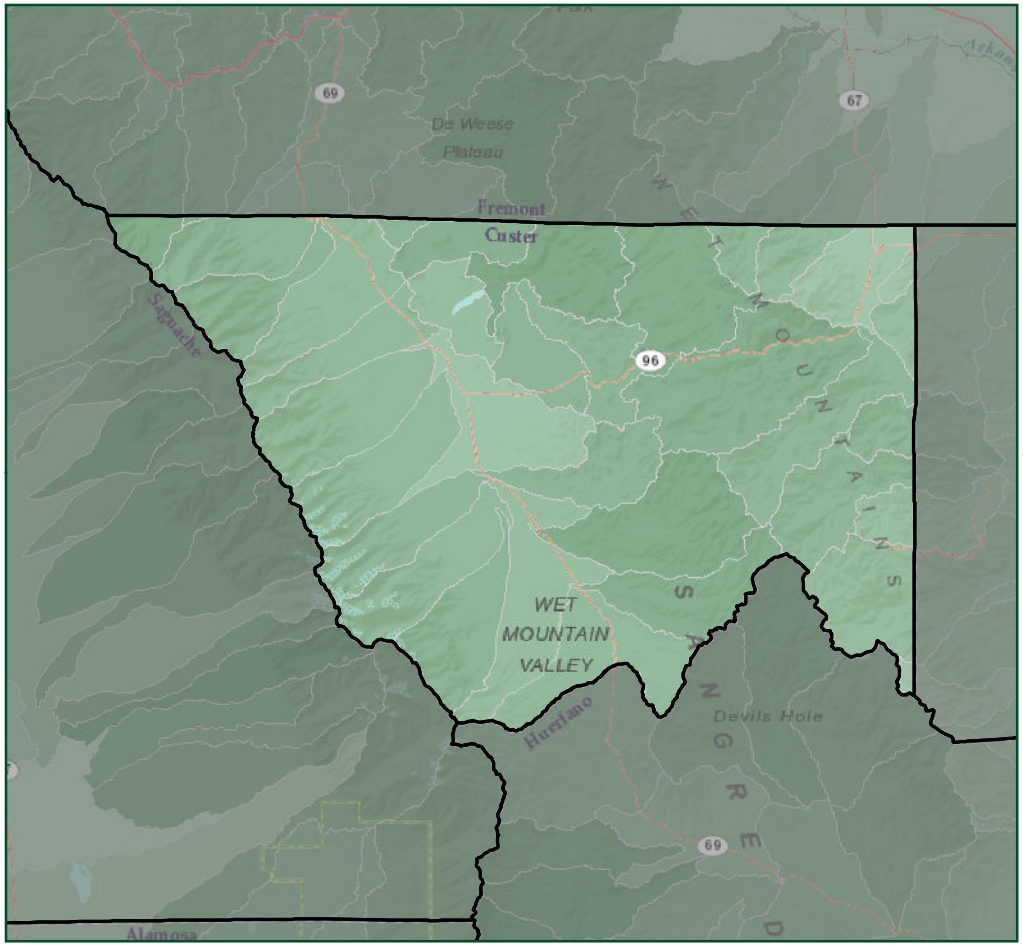
N W E S

0 3 6 12

Miles

Forest Conditions

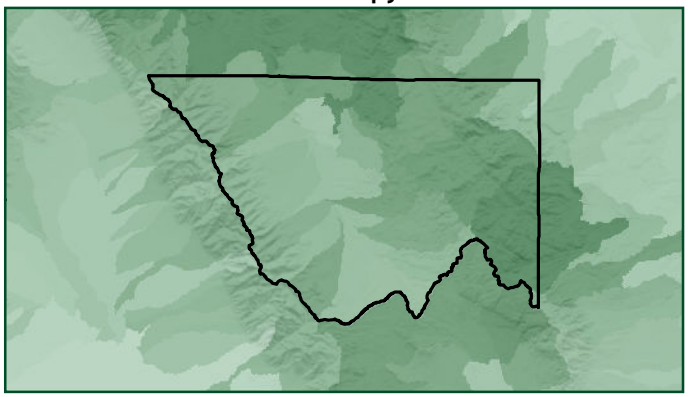
Custer County



Relative Priority Value

Lowest — Highest

Potential for Canopy Fire in 2017



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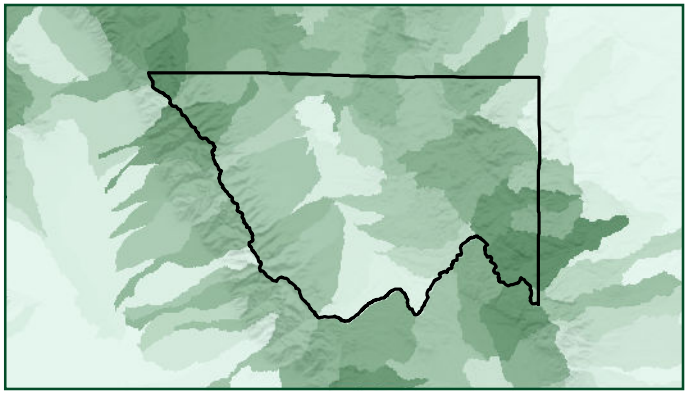
Basal Area (Density) Loss Projected Based on Potential Insect & Disease Disturbance Through 2027



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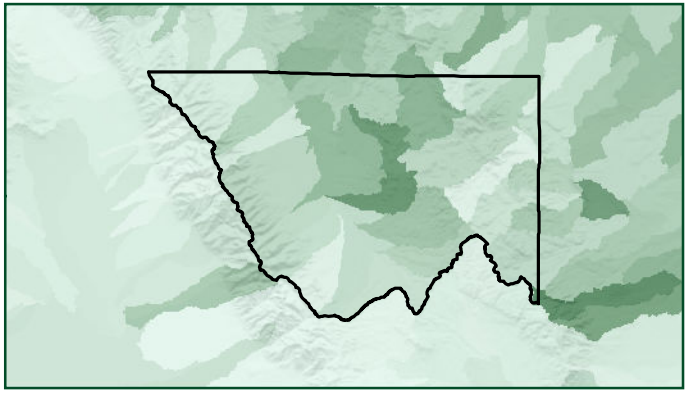
Wildland Urban Interface Projected to 2040



1x

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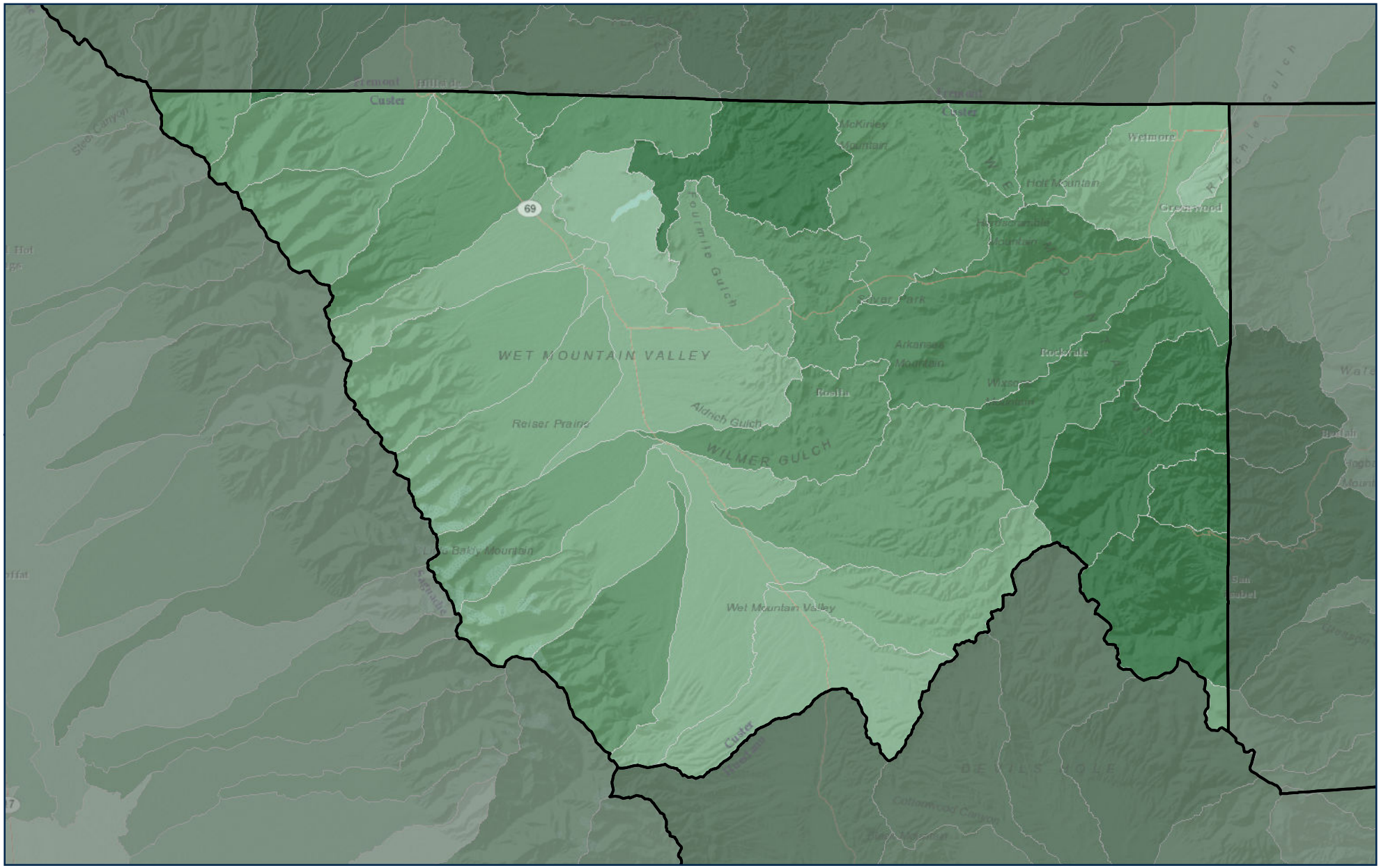
N W E S

Forest Conditions

Potential for Canopy Fire in 2017

Custer County



COLORADO STATE FOREST SERVICE

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Relative Priority Value

Lowest — Highest

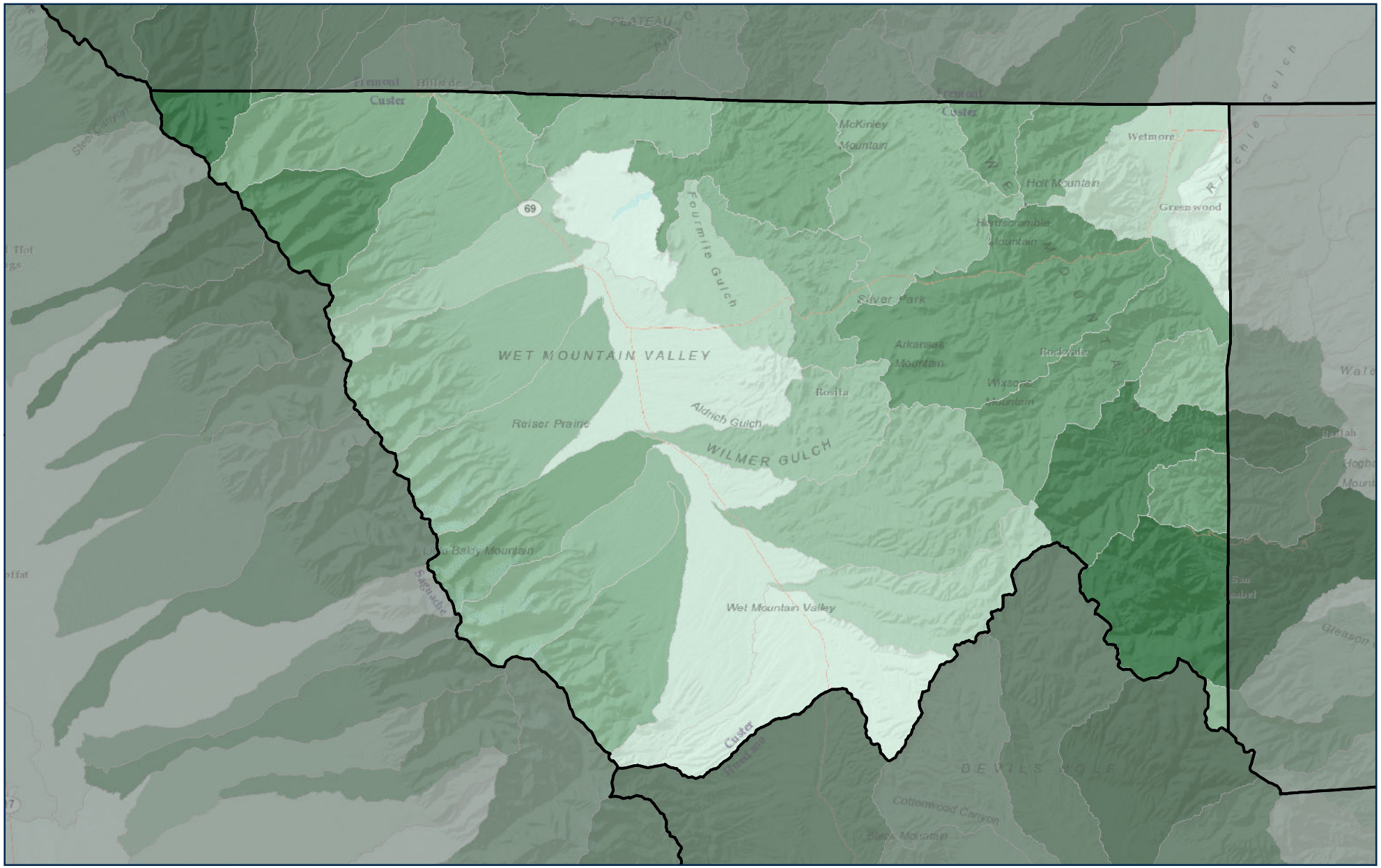
N W E S

0 3 6 12

Miles

Basal Area (Density) Loss Projected Based on Potential Insect & Disease Disturbance Through 2027

Custer County



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Relative Priority Value

Lowest — Highest

N W E S

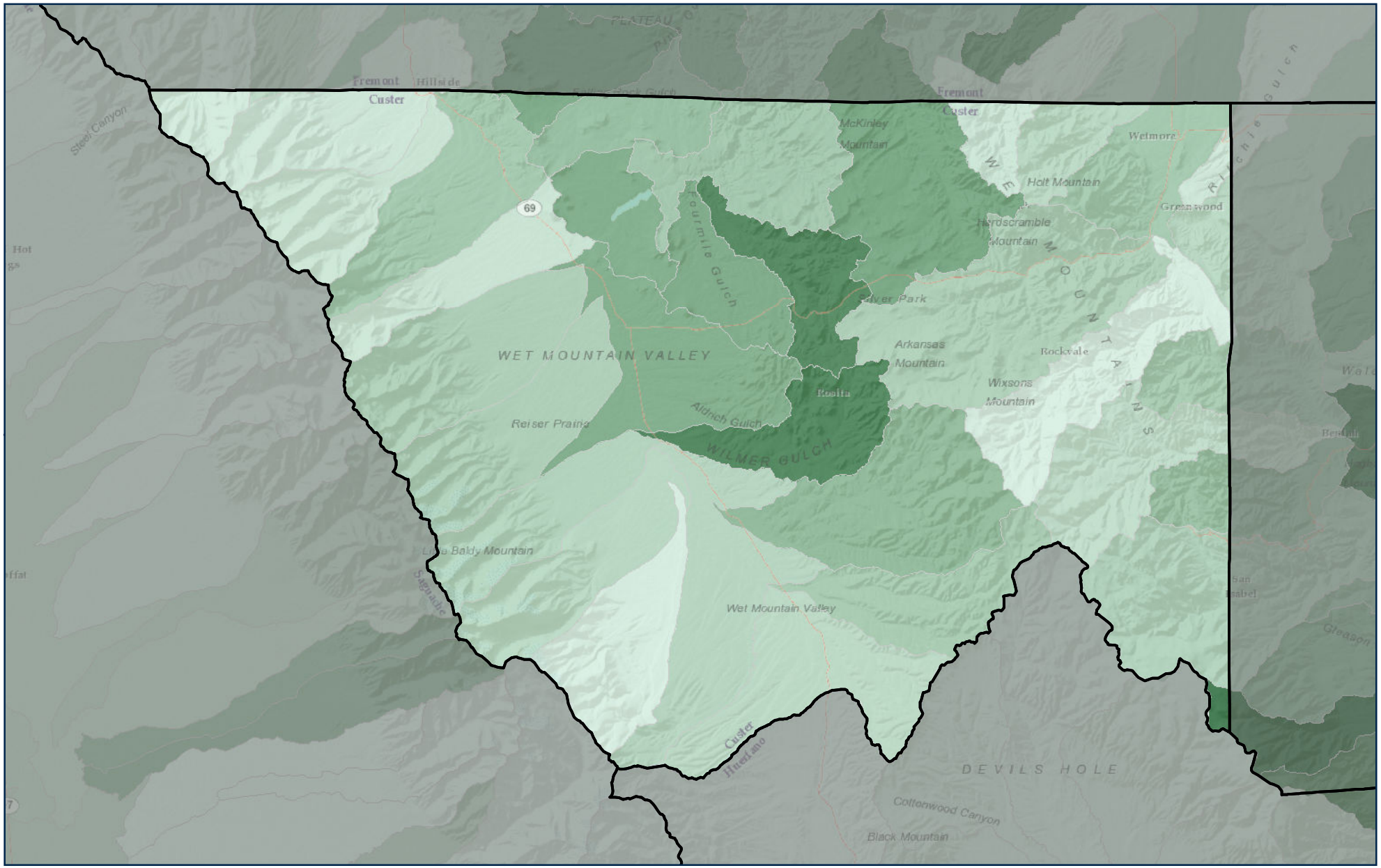
0 3 6 12

Miles

Forest Conditions

Wildland Urban Interface Projected to 2040

Custer County



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Relative Priority Value

Lowest — Highest

N W E S

0 3 6 12

Miles

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COLORADO STATE UNIVERSITY

Living with Wildfire

Goal 1: Promote Community Fire Adaptation

PROTECT forests from harm

ENHANCE public benefits from trees and forests

Goal 2: Reduce the Risk of Uncharacteristic Wildfire

CONSERVE working forestland

PROTECT forests from harm

ENHANCE public benefits from trees and forests

Goal 3: Promote the Role of Fire in Ecological Processes

ENHANCE public benefits from trees and forests

For more information, please visit:
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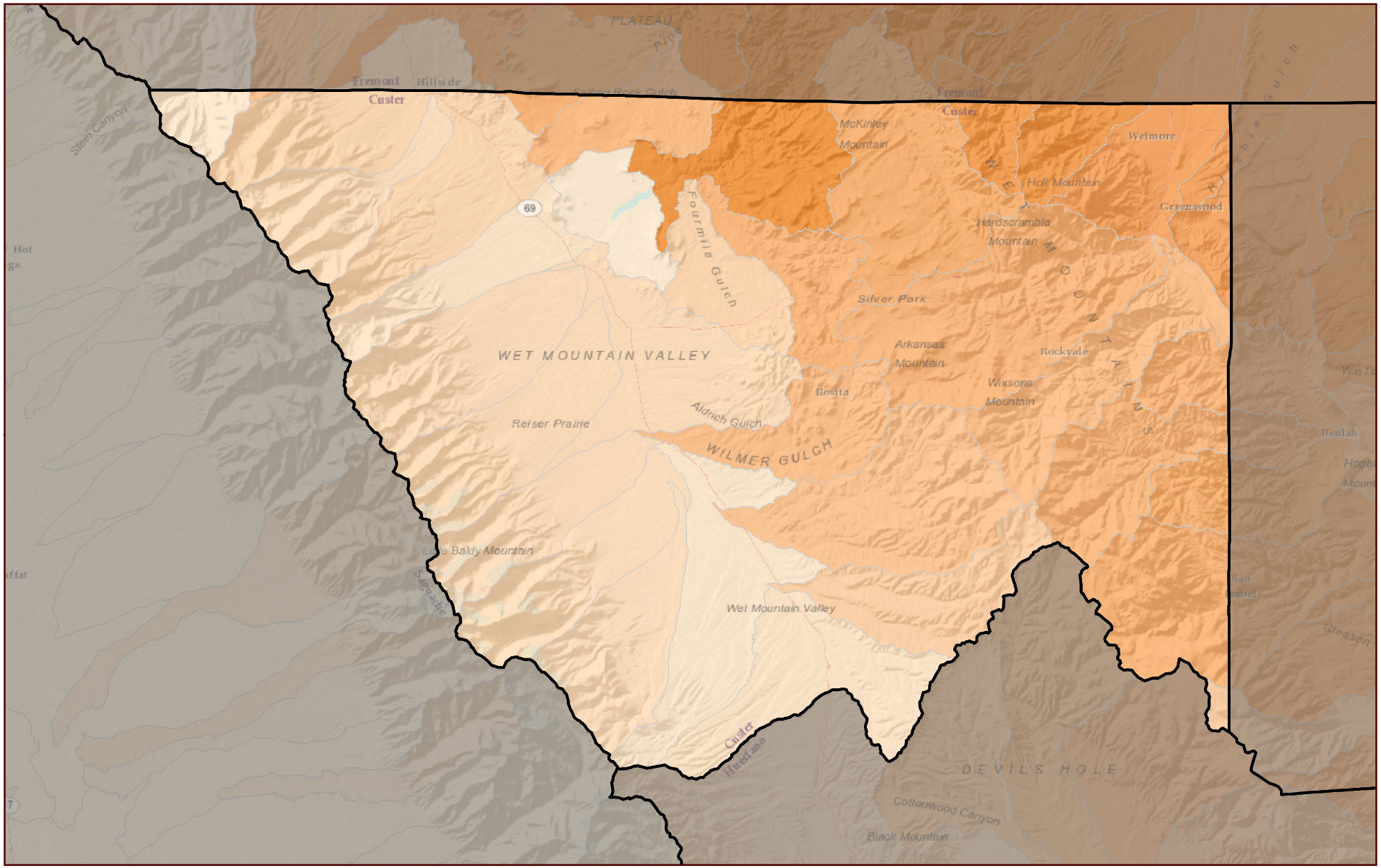
Living with Wildfire

Custer County



COLORADO STATE FOREST SERVICE

For more information, please visit:
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Relative Priority Value

Lowest Highest

N W E S

0 3 6 12

Miles

Watershed Protection

Goal 1: Improve and Maintain Water Quality and Quantity

CONSERVE working forestland

PROTECT forests from harm

ENHANCE public benefits from trees and forests

Goal 2: Improve Resiliency of Critical Water Infrastructure

Goal 3: Sustain or Restore Fundamental Ecological Functions for Watershed Health

PROTECT forests from harm

ENHANCE public benefits from trees and forests

For more information, please visit:
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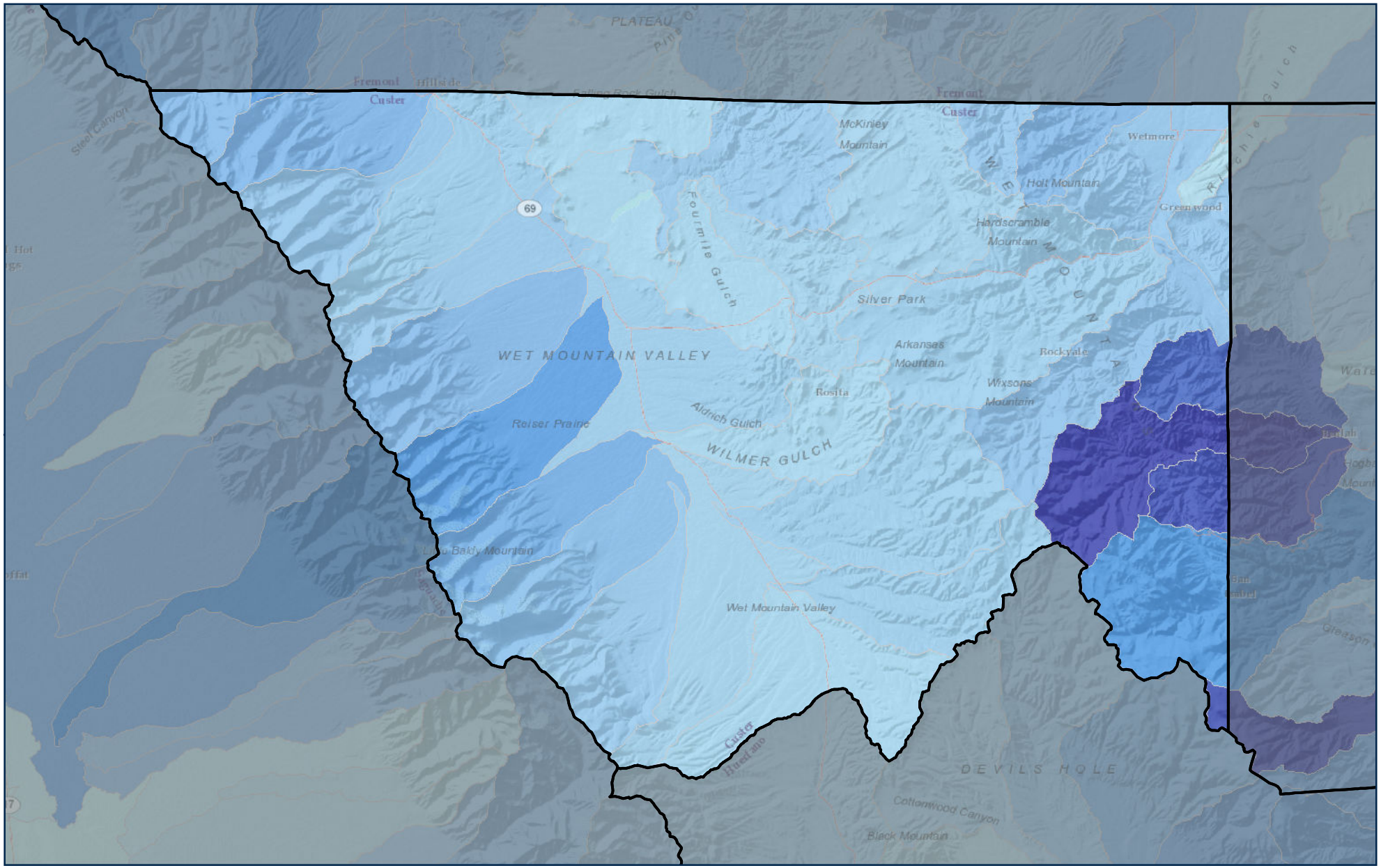
Watershed Protection

Custer County



COLORADO STATE FOREST SERVICE

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Relative Priority Value

Lowest Highest

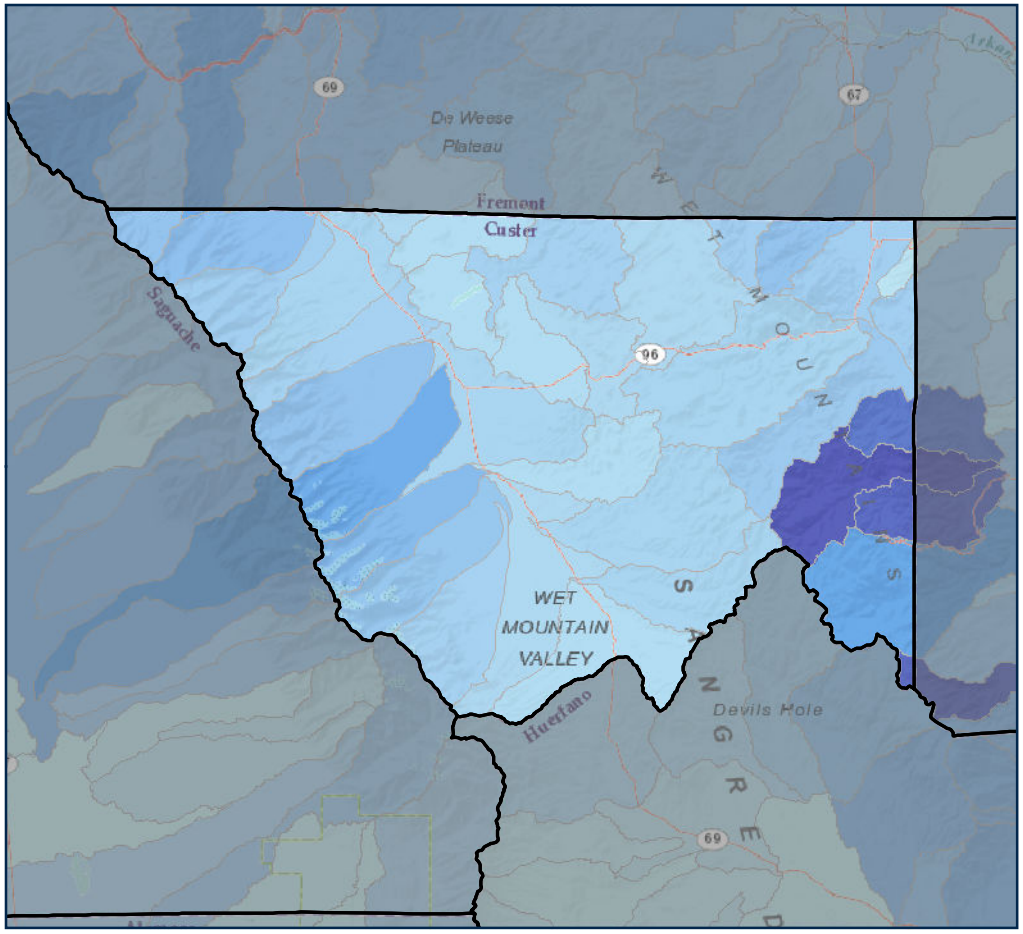
N W E S

0 2.25 4.5 9

Miles

Watershed Protection

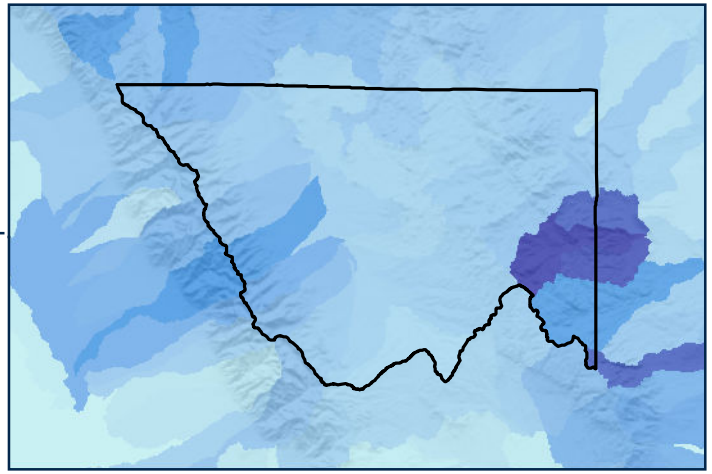
Custer County



Relative Priority Value

Lowest Highest

Improve & Maintain the Quality of Water



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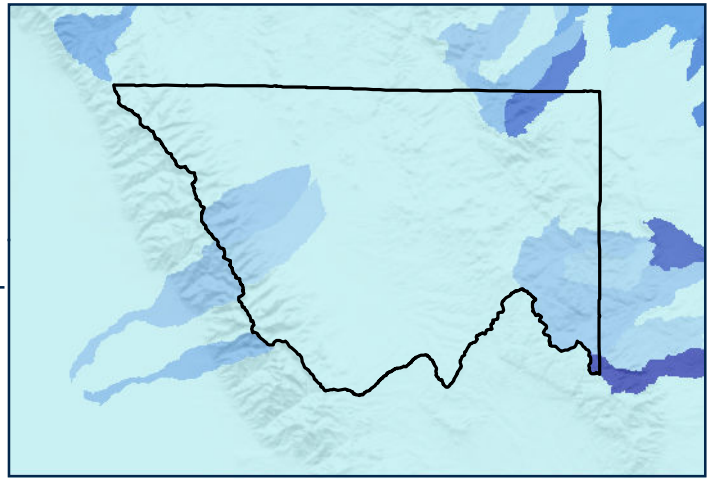
Protect Water Infrastructure



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For more information, please visit:
csfs.colostate.edu/forest-action-plan

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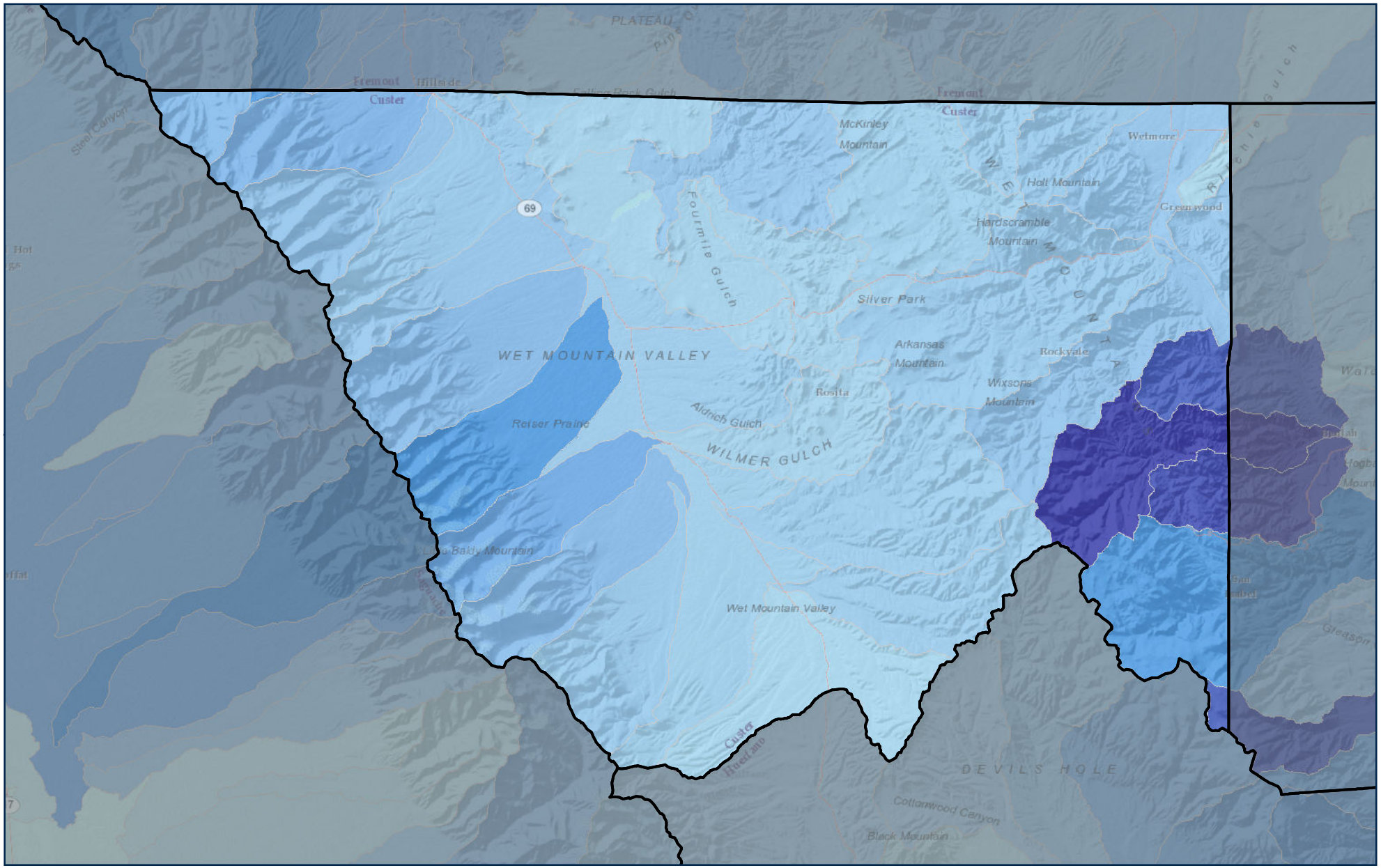
Watershed Protection

Improve & Maintain the Quality of Water

Custer County



COLORADO STATE FOREST SERVICE

For more information, please visit:
csfs.colostate.edu/forest-action-plan

Relative Priority Value

Lowest — Highest

N W E S

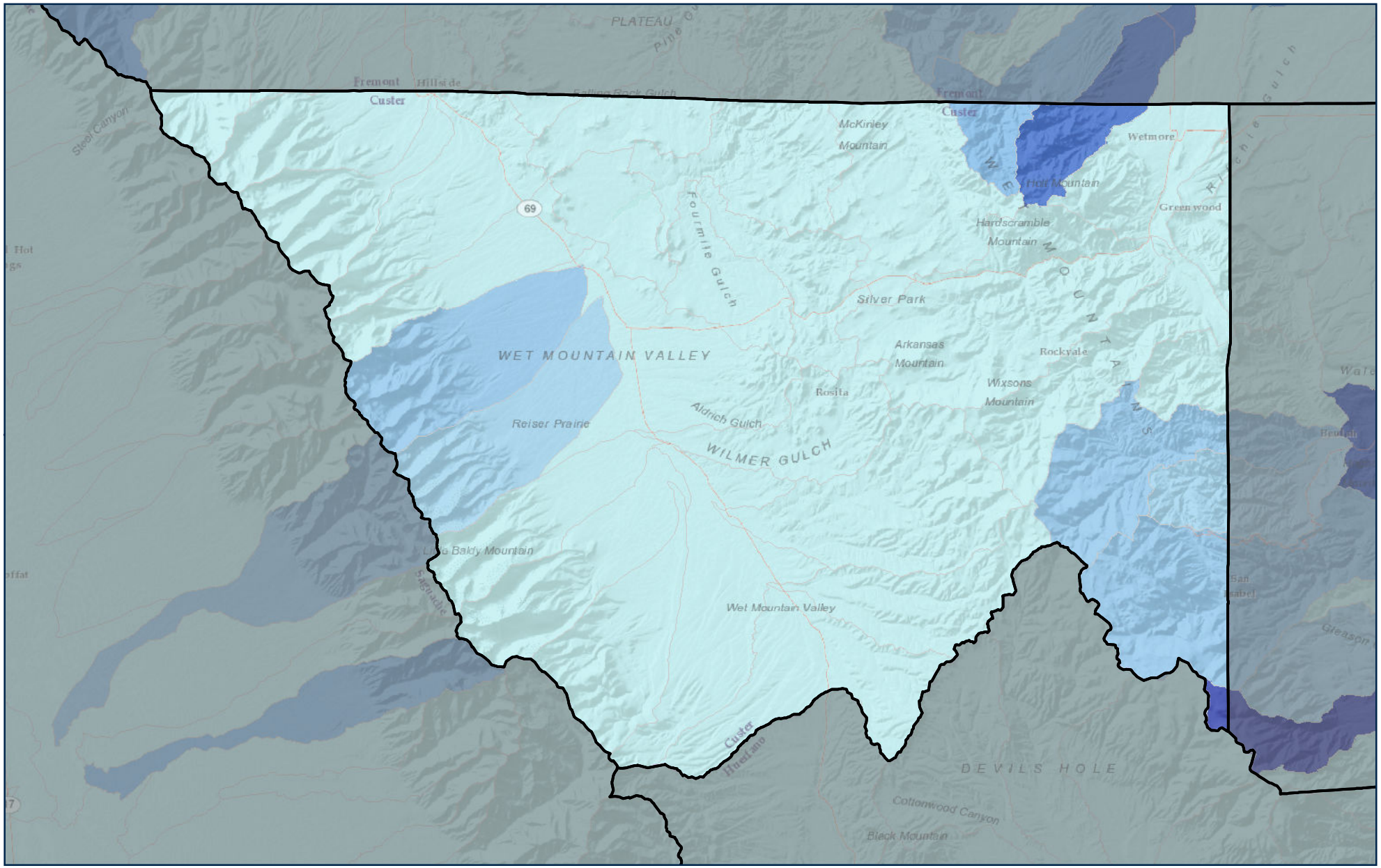
0 2.25 4.5 9

Miles

Watershed Protection

Protect Water Infrastructure

Custer County



COLORADO STATE FOREST SERVICE

For more information, please visit:
csfs.colostate.edu/forest-action-plan

Relative Priority Value

Lowest — Highest

N W E S

0 2.25 4.5 9

Miles

COLORADO STATE FOREST SERVICE
COLORADO STATE UNIVERSITY

Forest Wildlife

Goal 1: Conserve, Enhance, and Protect Critical Habitat

CONSERVE working forestland

PROTECT forests from harm

ENHANCE public benefits from trees and forests

Goal 2: Integrate Habitat Considerations into Forestry Activities

PROTECT forests from harm

ENHANCE public benefits from trees and forests

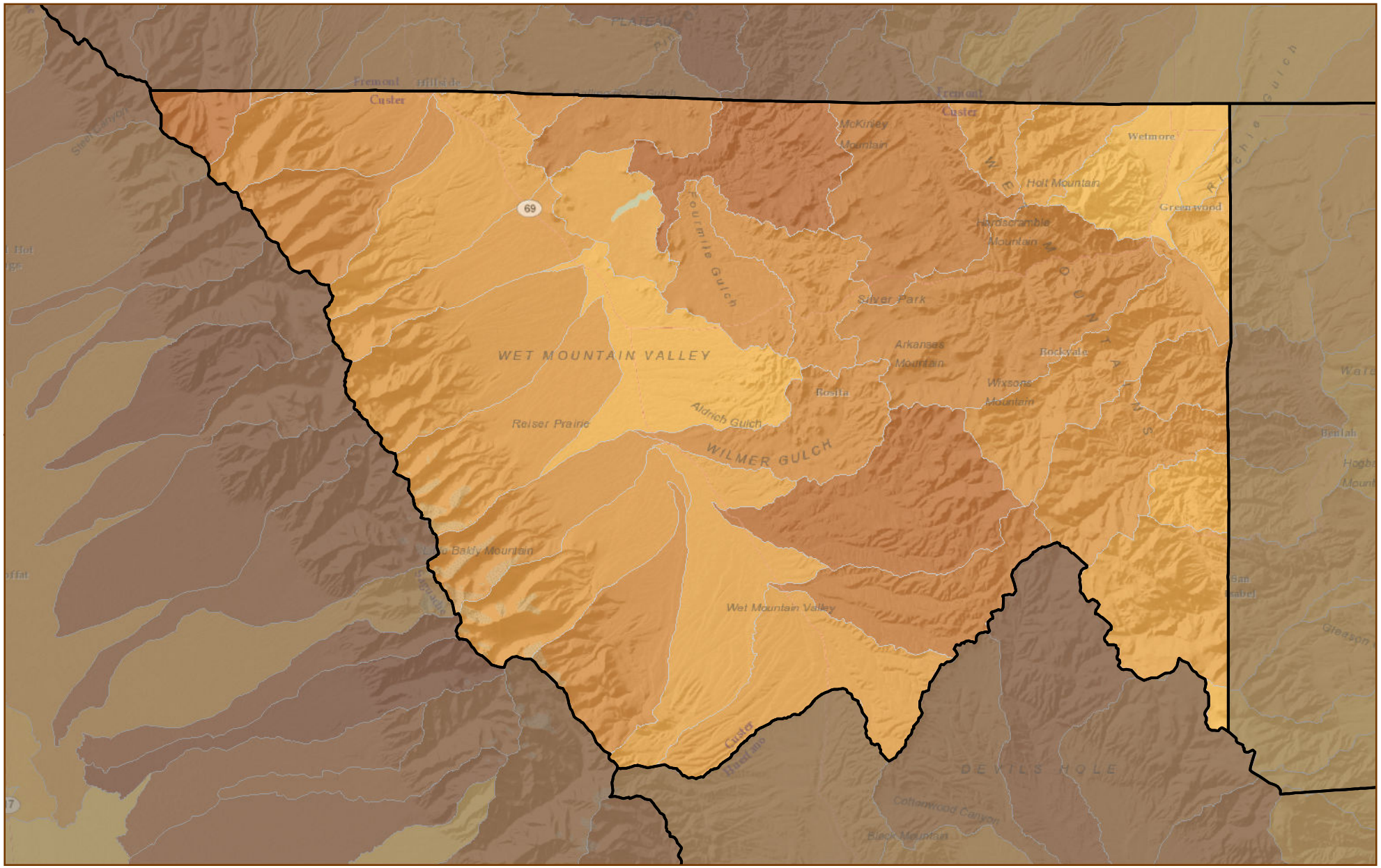
Goal 3: Increase Public Understanding of the Connections Between Forestry and Habitat

ENHANCE public benefits from trees and forests

For more information, please visit:
csfs.colostate.edu/forest-action-plan

Forest Wildlife

Custer County



For more information, please visit:
csfs.colostate.edu/forest-action-plan

Relative Priority Value

Lowest — Highest

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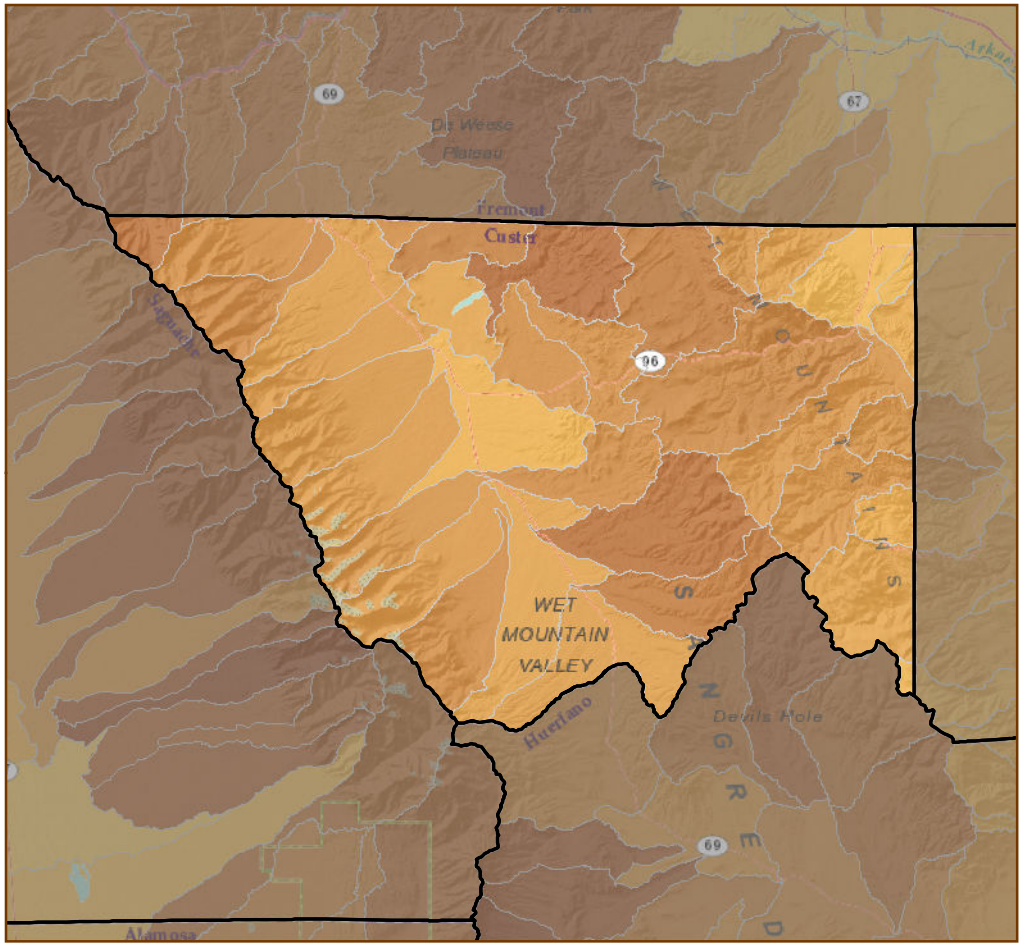
Forest Wildlife

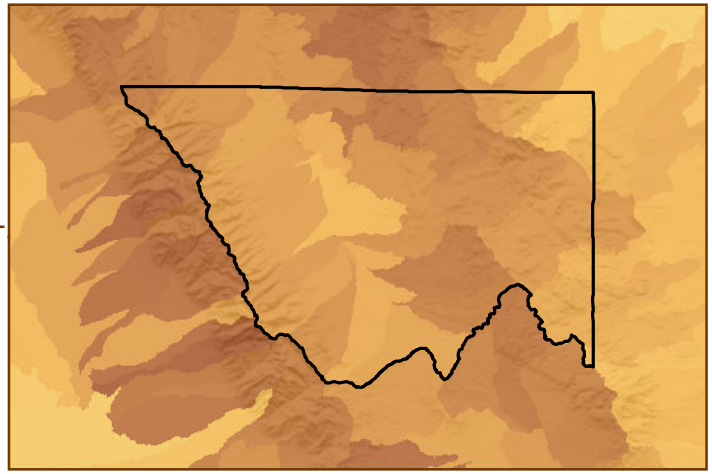
Custer County



Relative Priority Value

Lowest Highest

Habitat Quality and Connectivity



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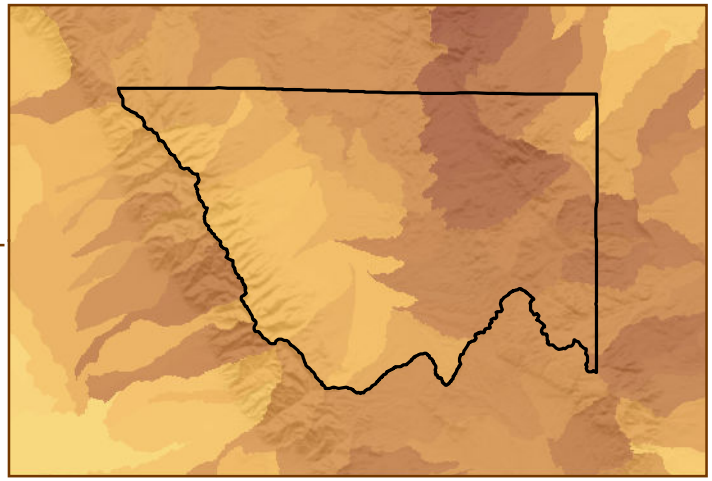
Wildlife Distribution



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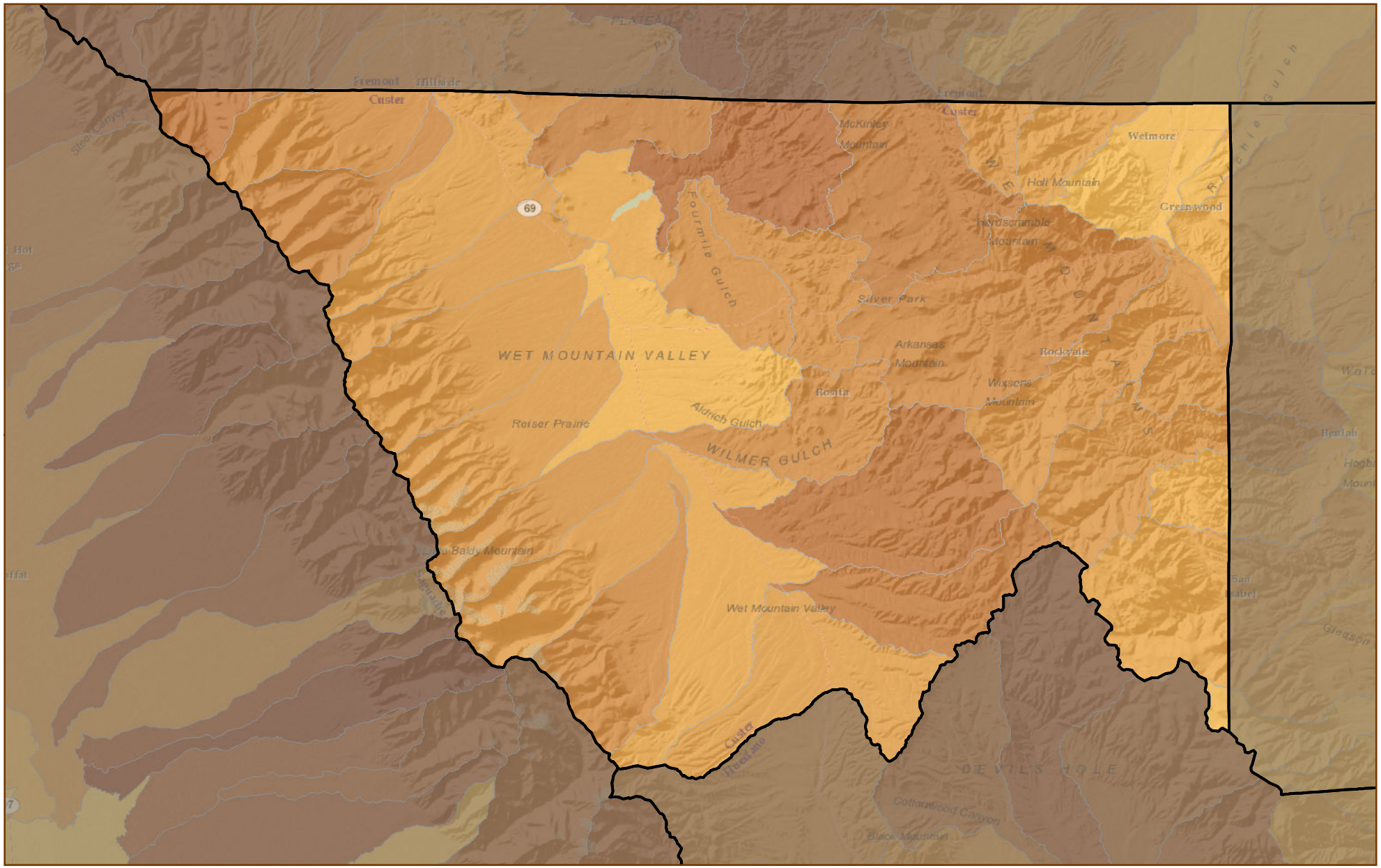
For more information, please visit:
csfs.colostate.edu/forest-action-plan

Forest Wildlife

Habitat Quality and Connectivity

Custer County



COLORADO STATE FOREST SERVICE

For more information, please visit:
csfs.colostate.edu/forest-action-plan

Relative Priority Value

Lowest Highest

N W E S

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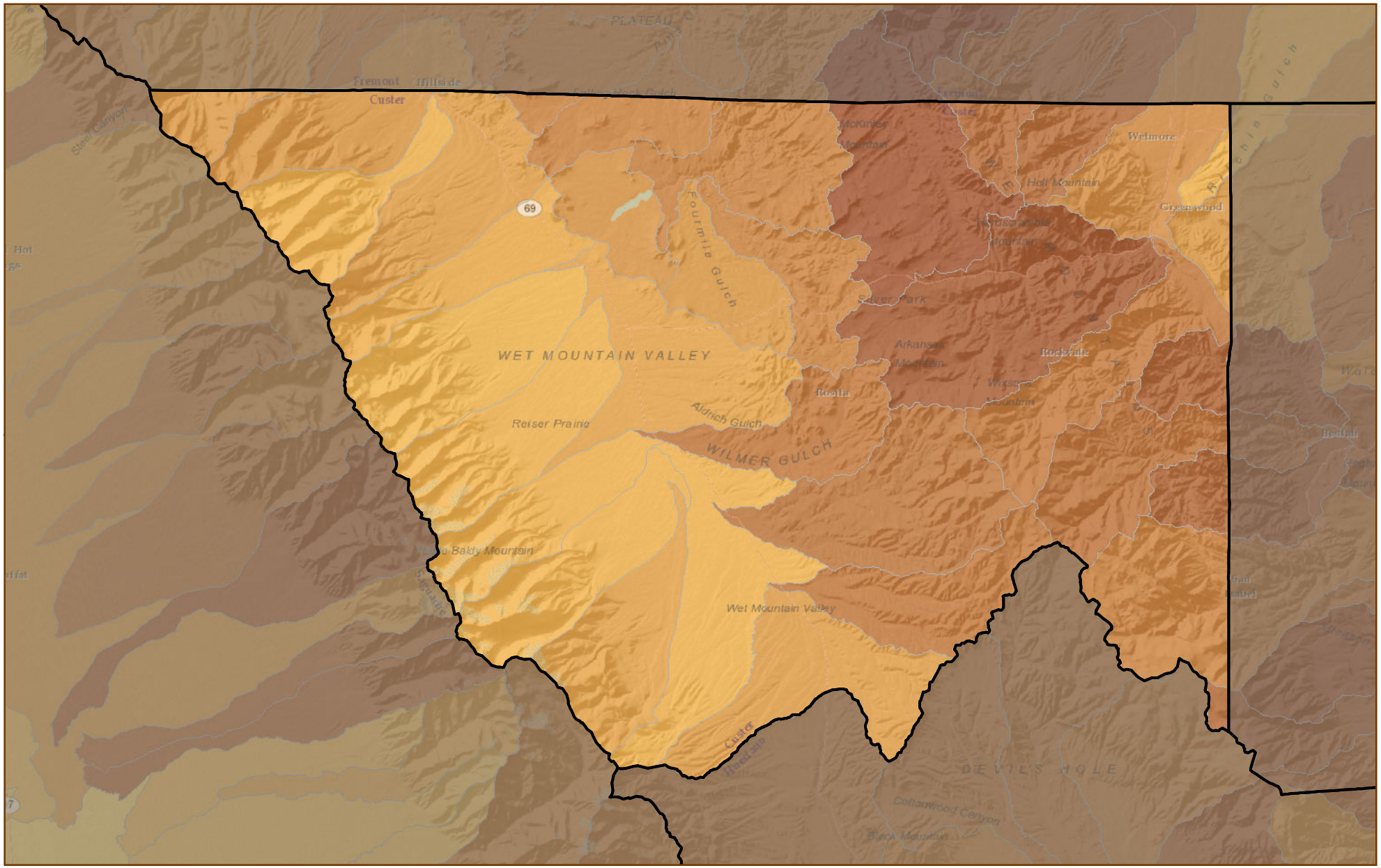
Miles

Forest Wildlife

Wildlife Distribution

Custer County



For more information, please visit:
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Relative Priority Value

Lowest — Highest

N W E S

0 2.25 4.5 9

Miles

Appendix C – Fire Restrictions & Open Burning Ordinances

Appendix C - Fire Restrictions & Open Burning Ordinances

Fire Restrictions on Private Lands:

Fire restrictions on private lands vary by county, municipality, and special district and are subject to change based on local conditions. In Custer County, Colorado, fire restrictions in the unincorporated areas—as well as within the incorporated Towns of Silver Cliff and Westcliffe—are governed by a county ordinance adopted by the Board of County Commissioners. Ordinance 20-01, recorded on February 21, 2020, repealed and replaced Ordinance 19-02 and establishes the framework for restricting open fires and open burning when conditions warrant. Because restrictions may be enacted, modified, or lifted as fire danger changes, residents and visitors are strongly encouraged to verify current fire restrictions with Custer County and applicable municipal authorities before conducting any activity involving fire.

The Custer County Fire Restrictions graphic is also included as a visual reference; however, users should always confirm current restrictions through official county, municipal, or land management agency sources before engaging in any fire-related activity.

Fire Restrictions on Public Lands:

Fire restrictions on public lands, including national forests and grasslands, are implemented by federal land management agencies and may differ from county or municipal restrictions. These restrictions are based on a combination of factors such as the potential for human-caused ignitions, availability of firefighting resources, current wildfire activity, drought conditions, forecasted weather, fuel moisture levels, and other fire danger indicators. Fire managers continuously evaluate these factors and coordinate with federal, state, and local partners when determining appropriate restriction levels.

Because public lands may fall under multiple jurisdictions within the same geographic area, it is critical to verify which agency manages the land you are on and to confirm the current restrictions specific to that jurisdiction. Conditions and restriction levels can change quickly, and restrictions may apply to some activities or locations while not others.

Valuable resources for determining whether federal lands in Custer County are subject to fire restrictions or area closures include:

- USDA Forest Service Pike–San Isabel National Forests & Cimarron and Comanche National Grasslands alerts page:
    - https://www.fs.usda.gov/r02/psicc/alerts (filter by Fire Restriction)
- USFS interactive fire restrictions map:
    - https://usfs.maps.arcgis.com/apps/MapSeries/index.html?appid=893541070a6746d98aa59615eb7a8067&folderid=68b4a2618b594ad09c8fa40fba211ab8 (Interactive Map)
- USFS PSICC Fire Restrictions Guide:
    - https://gacc.nifc.gov/rmcc/dispatch_centers/r2pbc/PSICC%20Restriction%20Guide.pdf (USFS PSICC Fire Restrictions Guide- 2021)

Custer County Fire Restrictions	Stage 1	Stage 2	Stage 3	Red Flag
Campfires	No	No	No	No
Campfire in Developed Area	Yes*	No	No	No
Trash Barrel	No	No	No	No
Open Fire in **undeveloped** area	No	No	No	No
Open fire in **developed** area	Yes	No	No	No
Agricultural Burn	Yes*	Yes*	Yes*	No
Slash Burn	No	No	No	No
In-door stoves (wood, coal, pellet) **with** spark arrestor	Yes	Yes	Yes	Yes
Welding, grinding, use of torches **without** water supply or fire extinguisher	No	No	No	No
Welding, grinding, use of torches **with** water supply or fire extinguisher	Yes*	Yes*	Yes*	Yes*
Charcoal Grill	No	No	No	No
Propane grill/fire and pellet grill in developed area **with water**	Yes*	Yes*	Yes*	Yes*
Smoking **inside** a vehicle, building, or on a hard surfaced area free of flammables	Yes	Yes	Yes	Yes
Smoking **outside** of a vehicle, building, or off of a hard surfaced area free of flammables	No	No	No	No

*** - Allowed, but not advised.**

Open Fire— Any outdoor fire, including, but not limited to, bonfires, campfires, warning fires, charcoal grill fires, fires in wood-burning stoves, the use of explosives, outdoor welding, or operating acetylene or other torch with open flame other than in an area cleared of flammable materials, fireworks, of all kinds of brands, burn barrels, the outdoor burning of trash and debris. No permit is required for open fires of these types

Open Burning— The intentional ignition of unwanted fuels, in place or collected, for the purpose of eliminating those fuels based on methods defined in the Open Burn Plan and permit process.

Agricultural Open Burning— The burning of cover vegetation for the purpose of preparing the soil for crop production, weed control, maintenance of water conveyance structures related to agricultural operations, and other agricultural cultivation purposes. The open burning of animal parts or carcasses is NOT agricultural open burning, nor is the open burning of household trash, wood, and yard debris on agricultural land.

Developed Area— a camping location (site) with a designated fixed/permanent structure such as a metal fire ring with grate for campfires and cooking or totally contained within a fireproof contained. Also a maintained cleared space around it away from tents vehicles and parking areas.

Red Flag—No person shall initiate or continue an open fire in all areas of Custer County on a day identified by the National Weather Service as a "Red Flag Warning" period. Stage II restrictions shall be in place during Red Flag Periods.

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Ordinance No. 20-01

THE BOARD OF COUNTY COMMISSIONERS OF CUSTER COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF COLORADO

AN ORDINANCE RESTRICTING OPEN FIRES AND OPEN BURNING IN THE UNINCORPORATED AREAS OF CUSTER COUNTYAND ALSO INCLUDING THE INCORPORATED TOWNS OF SILVER CLIFF AND WESTCLIFFE

WHEREAS, C.R.S. §30-11-107 et seq. and §30-15-401(1)(n.5) et seq., authorizes the Board of County Commissioners to adopt ordinances, resolutions, rules and other regulations as may be necessary for the control or licensing of those matters or purely local concern, and to do all acts which may be necessary or expedient to promote health, safety, and welfare of the citizens of Custer County; and

WHEREAS, pursuant to C.R.S. §30-15-401(1)(n.5), the Board has specific authority to adopt an ordinance banning open fires to a degree and in a manner that the board deems necessary to reduce the dangers of wildfires within those portions of the unincorporated areas of the County where danger of forest or grass fires is found to be high; and

WHEREAS, the Board of County Commissioners and the Wet Mountain Fire Protection District have entered into an Intergovernmental Agreement pursuant to §29-20-105.5, C.R.S., with respect to this Ordinance in recognition of the fact that wildfires are impervious to the territorial boundaries of political subdivisions and that the full cooperation of both political entities is necessary to protect the public from the dangers of forest fires and prairie fires; and

WHEREAS, the incorporated Towns of Silver Cliff and Westcliffe are included within the boundaries of the Wet Mountain Fire Protection District and are therefore subject to the restrictions and permit requirements imposed by this Ordinance, and any violations of said restrictions or permit requirements occurring in either town are punishable as set forth herein; and

WHEREAS, a Reciprocal Fire Protection Assistance Agreement exists between the Wet Mountain Fire Protection District with the following fire protection entities wherein these entities have agreed to provide equipment and personnel to assist the Wet Mountain Fire Protection District in fighting wildfires in portions of Custer County which are within the boundaries of the Wet Mountain Fire Protection District;

1) City of Salida
2) South Arkansas Fire Protection District
3) Howard Volunteer Fire Department
4) Wetmore Fire Department
5) Deer Mountain Fire Protection District
6) Tallahassee Volunteer Fire Protection District
7) Canon City Area Fire Protection District
8) Florence Fire Department
9) Western Fremont Fire Protection District
10) Rye Fire Protection District and

WHEREAS agreements also exist with the Deer Mountain Fire Protection District, the Wetmore Volunteer Fire Department, the Beulah Fire Department and the Florence Fire Department for said agencies to assist the Custer County Sheriff in wildfire suppression efforts in unincorporated areas of Custer County that do not lie within the boundaries of the Wet Mountain Fire Protection District; and

WHEREAS, the Board of County Commissioners finds that Custer County has a substantial forested area, and that an open burning permit system is needed; and

WHEREAS, consideration has been given to existing laws and processes regulating open burning in the State of Colorado, and the Board of County Commissioners finds this Ordinance is consistent with all such laws and processes; and

WHEREAS, the Sheriff of Custer County ("Sheriff") is authorized under provisions of C.R.S. §§ 30-10-512 and 30-10-513, to act as Fire Warden of the County in case of prairie or forest fires, and to assume charge thereof or to assist other governmental authorities in controlling or extinguishing forest or prairie fires; and

WHEREAS, the Board of County Commissioners finds this Ordinance is both desirable and necessary for the purpose of providing the Custer County Sheriff with a law enforcement protocol to prevent such fires from occurring and by providing appropriate punitive measures for those who fail to comply with the open fire and open burning restrictions set forth herein and also for those who engage in open burning without the required permit or in violation of the terms and conditions of a permit; and

WHEREAS, there has been full compliance with all statutory requirements concerning notice to the public of this proposed Ordinance and publication of said Ordinance, and the public has now been afforded full opportunity to be heard on this proposed Ordinance at a first reading and a second reading as required by §30-15-404 through §30-15-407, C.R.S.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF CUSTER AS FOLLOWS:

Section 1: Title

1.1 This Ordinance shall be known as the "Custer County Open Fire and Open Burning Restriction Ordinance" and may be cited and referenced as such.

Section 2: Purpose

2.1 The purpose of this Ordinance is to preserve and protect the public health, safety, and welfare of the citizens of Custer County, Colorado, by restricting open fires and open burning in Custer County at certain times in order to prevent forest and prairie fires given the high danger of such fires as a result of atmospheric conditions, including lack of moisture, and other local conditions as they exist in Custer County.

Section 3: Authority

3.1 Ordinance is authorized by inter alia, generally, part 1 of article 11 of title 30, and part 4 of article 15 of title 30, and specifically, part 4 of article 15 of title 30 at C.R.S. §401(1)(n.5).

Section 4: Restriction Stages

4.1 The Board of County Commissioners hereby declares there shall be three stages of fire restrictions which may be imposed for Custer County or portions thereof, and that each of these three stages creates restrictions on open fires and open burning during those periods of time when restrictions may be in effect.

Section 5: Application

5.1 This Ordinance shall apply throughout the unincorporated areas of Custer County, including public, private, and State lands, and shall also apply to the incorporated Towns of Silver Cliff and Westcliffe by virtue of their inclusion within the boundaries of the Wet Mountain Fire Protection District.

Section 6. Definitions

6.1 Open fire: For purposes of this Ordinance, open fires shall be defined as any outdoor fire, including, but not limited to, bonfires, campfires, warming fires, charcoal grill fires, fires in wood-burning stoves, the use of explosives, outdoor welding, or operating acetylene or other torch with open flame other than in an area cleared of all flammable materials, fireworks of all kinds or brands, burn barrels, the outdoor burning of trash and debris. No permit is required for open fires of these types.

6.2 Open Burning: The intentional ignition of unwanted fuels, in place or collected, for the purpose of eliminating those fuels based on methods defined in the Open Burn Plan and permit process . Open burning is further defined by Stage I, Stage II and Stage III restrictions as set forth in this Ordinance. An open burn permit is required for fires of these types.

6.3 Agricultural Open Burning: The burning of cover vegetation for the purpose of preparing the soil for crop production, weed control, maintenance of water conveyance structures related to agricultural operations, and other agricultural cultivation purposes. The open burning of animal parts or carcasses is not agricultural open burning, nor is the open burning of household trash, wood, and yard debris on agricultural land.

6.4 Burn manager: An individual who obtains a valid open burning permit in order to plan, build, control, extinguish, and otherwise supervise the open burning of slash.

6.5 Burn Boss: An individual who has completed the Colorado Department of Fire Prevention and Control or National Wildfire Coordinating Group (NWCG) Certified Burner course and is a registered Certified Prescribed Burn Boss in accordance with Senate Bill 13-083, ("Colorado Prescribed Burning Act").

6.6 Developed Area: for the purposes of this document will be defined as a camping location (site) with a designated fixed/permanent structure such as a metal fire ring with grate for campfires and cooking or totally contained within a fireproof container. Also a maintained cleared space around it away from tents vehicles and parking areas.

6.7 Fireworks: As defined in C.R.S. §12-28-101(3)(a), including any composition or device designed to produce visible or audible effect by combustion, deflagration, or detonation, and that meets the definition of articles pyrotechnic, permissible fireworks (per Section 12-28-101(8)(a), or display fireworks.

6.8 Open Burn Permit: A permit issued by the Wet Mountain Fire Protection District Office on a form furnished by them and completed by an applicant for such a permit.

6.9 Open Burn Management Policy: Refers to a unified plan adopted by the Board of County Commissioners for the management of open burns within the Wet Mountain Fire Protection District and also within the unincorporated areas of Custer County. A copy of this Open Burn Management Policy may be obtained from the Wet Mountain Protection District, the Sheriff's website custercoloradosheriff.com or on the Custer County website : http://www.custercountygov.com/index.php?pg=oem

6.10 Slash: Woody material less than six inches in diameter consisting of limbs, branches and stems that are free of dirt. "Slash" does not include tree stumps, roots, or any other material or trash. This material is often the result of fire mitigation cleanup efforts.

6.11 Incorporated areas of Custer County: Shall mean, for purposes of this Ordinance, the incorporated Towns of Silver Cliff and Westcliffe, which are included within the boundaries of the Wet Mountain Fire Protection District. It does not refer to the Wet Mountain Fire Protection District as an incorporated political entity.

Section 7. Fire Restriction Guidelines

7.1 That set of evaluations criteria currently in use by local Federal, State, and Local fire suppression/management agencies for monitoring fuel moisture, fire danger class, current impacts on suppression resources, current fire types, fire weather forecasts, and other indicators of predicted fire danger.

STAGE I RESTRICTIONS: Prohibit the following activities:

A. Open burning, building, maintaining, attending, or using a fire, or campfire, charcoal grills, pellet grills, and wood or coal burning stoves or fireplaces in undeveloped areas. Areas cleared of all flammable materials, and those within permanently constructed fire grates or developed campgrounds and picnic grounds are excepted as noted in Section 9 (Unlawful Acts).

B. Campfires and gas fire pits contained in constructed permanent fire pits or fire grates within a developed recreation area shall be allowed.

C. Grills using propane, pellets, and other bottled fuels shall be allowed, but only in areas free of flammable vegetation and other flammable materials, and such fires must be used and maintained in such a manner that no fire danger is presented to the surrounding area.

D. All open fires allowed by subparagraphs (B) and (C) above must be attended at all times, and an adequate water supply and/or a fire extinguisher shall be on site at all times while such an open fire is burning.

E. All burning of slash, trash, refuse or debris shall be temporarily suspended. This will include the exercise of any issued open burn permits and **No** open burn permits will be issued during a fire ban of any stage.

F. Smoking shall be temporarily suspended except within an enclosed vehicle, building, or outdoor smoking area that is hard-surfaced or barren or otherwise cleared of all flammable vegetation or material. Discarding smoking materials in a receptacle not designed for disposal of smoking materials, discarding smoking materials from a moving or stationary motor vehicle, and discarding smoking materials in any other outdoor location is expressly prohibited at all times regardless of fire ban status.

G. The use of explosive materials including fireworks, solid fuel rockets, blasting caps, or any other incendiary device which may result in the ignition of flammable materials shall be temporarily suspended.

H. Outdoor welding, grinding, or use of any type of torch in any area which presents the possibility of igniting vegetation or other combustible material shall be temporarily suspended unless there is an adequate water supply and/or fire extinguisher on site and within easy reach of the activity. A spotter shall accompany any welder to observe and extinguish any ignition of material in the welding project area.

I. Operating any outdoor equipment or machinery with an internal combustion engine in an undeveloped area shall be temporarily suspended unless said equipment or machinery is equipped with a spark arresting device properly installed, maintained, and in good working order.

J. The sale, possession and use of fireworks, including permissible fireworks as defined in C.R.S. §30-15-401(1) (n.7).

STAGE II RESTRICTIONS: Prohibit the following activities:

All the prohibited activities set forth in the Stage I Fire Ban shall be in effect and, in addition, the following restrictions shall also be in effect:

A. Building, maintaining, attending, or using a fire, campfire, coal-burning or wood- burning stove, charcoal-fueled or wood-fueled cooking, or other open fires of any type at any location shall be temporarily suspended.

B. Grills using propane, pellets, or other bottled fuels shall be allowed only in areas free of flammable vegetation and other flammable materials and must be used in a manner which presents no fire danger to the surrounding area. Portable stoves, gas grills, and propane gas devices are still permitted on forest land. Aka – propane fire pits with on/off values.

C. No grill in use shall be left unattended, and there shall be an adequate water supply and/or a fire extinguisher on site during such use.

D. Use of a coal-burning or wood-burning stove or fireplace in a private residence shall be allowed only if the flue pipe, chimney, or other exhaust structure is equipped with a properly installed NFPA-approved spark arrestor such as a chimney cap.

E. Off-road use or parking of a motor vehicle in an area which presents the possibility of sparks or exhaust heat igniting surrounding flammable vegetation shall be temporarily suspended during the period of time a Stage II Fire Ban is in effect.

STAGE III RESTRICTIONS: Prohibit the following activities:

All the restrictions set forth in the Stage I and Stage II Fire Bans shall be in effect, and all open burning of any kind shall be prohibited. In addition, the Board of County Commissioners shall have the

authority to temporarily close an area to entry or use.

Areas of public lands subject to a Stage III Fire Ban shall be closed to all entry except for individuals carrying written permits from the Custer County Sheriff, federal state and local officers, members of organized search and rescue or firefighting forces performing official duties, and resident landowners and lessees and their invitees and agents.

EXCEPTIONS TO STAGE ONE, TWO AND THREE RESTRICTIONS

The following shall be exceptions to the prohibited activities:

A. Agricultural burning by an agricultural producer on property owned by the agricultural producer unless there is a Red Flag Warning in effect as determined by the National Weather Service.

B. Fireworks displays properly permitted pursuant to §30-15-401, C.R.S.

C. Open fires or open burning by any federal, state or local officer or member of an organized fire protection district or department in the performance of official fire suppression, prevention, training function, or other duties.

SECTION 8. NO OPEN BURNING WHEN RED FLAG WARNING IS IN EFFECT

8.1 No person shall initiate or continue an open fire in all areas of Custer County on a day identified by the National Weather Service as a "Red Flag Warning" period. This includes areas any part of Custer County which is located both outside of, and within fire protection boundaries; any existing burn projects must be extinguished under "Red Flag Warning" restrictions. Stage 2 Restrictions shall be in place during Red Flag Warning periods and open fire and burning during a Red Flag Warning period shall be treated as a violation of Stage 2 burn restrictions as noted in Section 7.

SECTION 9. UNLAWFUL ACTS

9.1 It shall be unlawful for any person to build, maintain, attend or use an open fire or conduct an open burning activity in the unincorporated and incorporated areas of Custer County, including public, private, state and federal lands, when the same is prohibited by a Stage I, Stage II or Stage III fire ban being in effect.

9.2 It shall further be unlawful for any person to conduct open burning activities at any time without a valid permit issued by the Custer County Sheriff, or to conduct such open burning activities that do not conform to the terms and provisions of the specific permit issued.

9.3 It shall further be unlawful for any person to leave an open fire or open burning activity of any type unattended at any time, regardless of whether or not a fire ban is in effect and regardless of whether or not a permit was required for such open fire or open burning activity.

9.4 It shall further be unlawful for a burn manager to conduct any open burning activity without giving the required notice to individuals with respiratory conditions and to contiguous landowners as set forth in Section 10.3 below.

SECTION 10. PERMITTED OPEN BURNING

10.1 Any person who desires to use an open burning method to dispose of slash piles shall be required to obtain a permit from the Wet Mountain Fire Protection District prior to conducting any open burning method for such disposal. This includes agricultural burns of slash. Any open burning of slash piles shall strictly comply with all conditions imposed by the Wet Mountain Fire Protection District ~~Sheriff~~ as indicated in the permit issued.

10.2 All open burn permits issued by the Wet Mountain Fire Protection District shall be valid for a period of 12 months from the date of issuance, with the express condition that the burn manager shall notify FRECOM dispatch each time before conducting any open burning operations pursuant to the permit that such open burning is about to occur. With respect to the notice requirement set forth in part 3 below, it shall be sufficient for the burn manager to give the required notice to individuals with respiratory conditions and to all contiguous landowners one time that he/she has obtained a permit, the date the permit was issued, that the permit is valid for a period of 12 months, and that no further notice will be given prior to open burning operations being conducted. In addition to the posting requirements herein, a location exercising a valid Burn Permit must display a permanent approved address marker of the standard (reflective white on green) in use within Custer County.

10.3 C.R.S. §30-15-401 (n.5)(2)(F), requires the Board of County Commissioners to include a mechanism "to notify individuals with respiratory conditions, if requested by the individual, and contiguous landowners of the date, time, and location of slash pile burns." Therefore, the Custer County Public Health Department shall maintain a registry of any such individuals with respiratory conditions who have advised them in writing that they wish to be notified in advance of permitted slash pile burns. This registry shall be made available to all burn managers who apply for an open burning permit. It is the responsibility of the burn manager to review this registry and to identify any individuals who reside within a one-mile radius of the location where the open burning is to occur. Any individuals with respiratory conditions so identified shall be notified by the burn manager that an open burning permit has been issued. Such notice shall be accomplished in one of three ways: by speaking to the individual(s) with the respiratory condition(s) personally; by telephone call; by posting a written notice in a conspicuous location at the residence of the individual(s) if such individual(s) cannot be otherwise be contacted. Compliance with this Section by the burn manager shall be deemed sufficient if he/she certifies in writing or by verbal confirmation to the Wet Mountain Fire Protection District that the required notices have been given or will be given that an open burning permit has been issued. The permit application utilized by the Wet Mountain Fire Protection District shall include a specific certification provision and shall recognize that open burning permits may be issued to burn managers in person only during regular District hours.

10.4 When issuing open burning permits, the Wet Mountain Fire Protection District shall give due consideration to safe burning conditions at the burn location, shall impose appropriate permit limitations concerning the number of slash piles that may be burned at one time by the person who is managing the burn, the size of the slash piles, the temperature, humidity, snow cover, and wind conditions, the existence of any overhead lines or other utility facilities, fuel type and moisture content, slope, setbacks from physical structures, and a readily available and usable water source.

SECTION 11. PENALTIES

11.1 Any person who commits a violation of this Ordinance commits a class 2 petty offense under C.R.S. §30-15-402(1), and upon conviction or confession of guilt thereof, shall be punished by a fine

of not more than one-thousand dollars ($1,000) for each separate offense. In addition, persons convicted of a violation of this Ordinance shall be subject to a surcharge of ten dollars ($10) pursuant to C.R.S. §30-15-402(1).

11.2 Each violation of this Ordinance shall be deemed separate and distinct from any other violation of this ordinance or of any other Federal, state, or local law rule, order, or regulation.

11.3 The penalty assessment graduated fine schedule for such penalty assessment procedure shall be as follows;

a) Two hundred fifty dollars ($250) for the first offense;

b) Five hundred dollars ($500) for the second offense within sixty (60) days of the first offense;

c) Seven hundred fifty dollars ($750) for the third offense within sixty (60) days of the first offense;

d) One Thousand Dollars ($1,000) for each additional offense within sixty (60 days of the first offense.

e) In addition to the penalty prescribed in this Ordinance, persons convicted of a violation of this Ordinance are subject to a surcharge of ten dollars ($10).

f) A violation of this Ordinance may make you ineligible for a future Open Burn permit for a period of time determined by the District along with any penalty imposed.

11.4 The penalty assessment procedure set forth in §16-2-201, C.R.S., shall be followed by law enforcement officers charged with enforcement of this Ordinance.

11.5 All fines assessed for violations of this Ordinance shall be paid to the Treasurer of Custer County. All revenues generated through the payment of such fines shall be paid into the general fund and shall be allocated as follows: 20% to the Custer County Sheriff's Office, 60% to the Wet Mountain Fire Protection District, and 20% to the Custer County general fund.

SECTION 12. DECLARATION OF AN OPEN FIRE BAN

12.1 The Custer County Board of County Commissioners or the Custer County Sheriff, or his designee Deputy Fire Warden, shall have the authority to declare an open fire ban whenever the danger of forest and grass fires is found to be high, and without further proceedings or resolution. Any declaration of an open fire ban made pursuant to this section shall specify the Stage level restriction, the parameters of the ban and the duration of the ban as deemed necessary and appropriate, and shall be promptly published through a general press release to local radio, print media and the public notification sign at the Custer County School and at the entrances to the Custer County on the state highways, as well as posting on the Custer County internet websites and social media. Likewise, when conditions indicate a reduction or increase in restrictions, or the suspension or release of restrictions, the same notification to the public shall occur. Individual notifications shall be made to the Fire protection agencies as referenced in this document and the appropriate State and Federal agencies or designees. Also FRECOM will be notified. All notifications mentioned herein shall also be made when any such ban is lifted.

SECTION 13. ENFORCEMENT

13.1 This ordinance shall be enforced by the Sheriff, through his deputies in conjunction with fire code officials and upon receipt of a statement of probable cause, the Fire Chief or any fire protection district or their designee, the administering agencies of the state and federal lands located therein, or Fire Chief or his designee of any incorporated cite or town who adopts this Ordinance, and any peace officer in and for the State of Colorado as described in C.R.S. § 16-2.5-101, and they shall have authority to order any person to immediately cease any violation of this Ordinance. This authority shall include, but not be limited to, the right to issue a penalty assessment notice and the right to take such a person or persons into temporary custody.

SECTION 14. EFFECTIVE DATE

14.1 This Ordinance shall be effective immediately following adoption on second reading and shall apply to all open burning violations occurring or committed on or after said date.

SECTION 15: REPEAL OF PRIOR ORDINANCES

15.1 Upon the effective date of this Ordinance, all prior fire ban ordinances or fire restriction ordinances including, but not limited to, Ordinance No. 19-02, shall be deemed repealed and shall be of no further validity or effect.

INTRODUCED, READ, AND ADOPTED ON FIRST READING ON THE 15th DAY OF January 2020, AND ORDERED PUBLISHED IN THE WET MOUNTAIN TRIBUNE.

The Board of County Commissioners for Custer County, State of Colorado

Tommy G. Flower, Chairman

Jay D. Printz

William R. Canda

SEAL: ATTEST:

Kelley Camper, County Clerk and Record

237318
237318 2/21/2020 9:26 AM Kelley Camper
10 of 10 R$0 D$0 N$0 S$0 M$0 E$0 Custer County Clerk

ADOPTED ON SECOND AND FINAL READING ON THE 19th DAY OF February 2020, AND ORDERED PUBLISHED BY REFERENCE TO TITLE ONLY IN THE WET MOUNTAIN TRIBUNE.

The Board of County Commissioners for Custer County, State of Colorado

Tommy G. Flower, Chairman

Jay D. Printz

William R. Canda

SEAL; ATTEST:

~~Kelly~~ Kelley Camper, County Clerk and Recorder

Appendix D – Community & Subdivision Table

Appendix D: Communities List for Custer County

Westcliffe, Town
Silver Cliff, Town
Fairview
Greenwood
Querida
Rosita
San Isabel
Wetmore

Subdivision List for Custer County

Adams Addition (No. of Chloride Gulch/both sides of Adams Blvd.)
Adobe Creek Heights
Adobe Creek Ranch
Adobe Creek Tree Farm
Alpine Colony
Alpine Ranch Acres/Phantom Ranch
Alta Mira Estates
Antelope Haven
Antelope Valley
Aspen Acres
Aspen Creeks Ranch
Aspen Ridge
Atlasta Acres
Aured Verde (next to Wakefield Hills)
Balthorpe Tracts

Beckwith Mountain Ranch (Custer/Fremont Counties)
Bella Vista Ranches
Big Horn Ranch
Blumenau I & II
Blumenau III
Bob Lawrence Tracts (next to Brush Crk Est)
Brush Creek Estates
Bull Domingo Ranch
Caldwell Tracts
Capote Springs
Centennial Ranch/Aspen Mtn. Ranch (CAMRA)
Chubb Subdivision
Chockley Tracts (above Hat Crk Ranch)
Cliff Dwellings Condo Assoc
Cobble Crossing (below Kettle Crossing)
Coleman Subdivision (below Range View Pk)
Columbine Business Park
Conquistador
Conquistador Estates W-Subs 1-2
Conquistador Estates E-Subs 1-3; Sub 3
Cottonwood Springs Ranch
Cristo Vista # 1-5
Cristo Vista # 6; 6A&B
Cuerno Verde Pines # 1-6
Deer Meadows
Dilley Ranch #1-4
Dipert Tracts
Dora Mountain Vistas (inside BDR)
Double R Ranch
Dr. Clark Subdivision (next to Juniper Hills)

Eagle Springs Ranch #1-2
Eastcliffe #1-4
Elk Haven
Elk Hollow
Elk Ridge
Fox Parcels
Gameridge
God's Country Estates
Golden Arrow Valley
Greenwood Tracts
Hardscrabble Home Sites
Hat Creek Ranch
Ilse Camp
Juniper Hills North
Juniper Hills South
Kelling Tracts
Kettle Parcels
King Mountain Estates
Lake DeWeese (Sierra City)
Ley Subdivision
Lookout Ridge
Macey Creek Ranch I
Macey Creek Ranch II
Martin Parcels (inside BDR)
McKinley Mountain Ranch Estates
Meadowdale Ranch
Mission Plaza
Montgomery/Jagow Tracts (NW on map)
Mountain Cliffe
Mountain Springs Country Estates
Munson Tracts
Oak Creek Estates

One-o-Five (E of BDR)
Paradise Found
Petersen Ranch
Pines Village, The
Ponderosa Park Heights
Ponderosa Park
Priestly Robbins
Puma Canyon Ranch (Pearlman Parcels)
RangeView Park
Range View Sites
Red Creek Ranch (Red Cliff Acres on Map)
Robbers Roost
Rosita Hills #s 2-5
Sangre View Park
Sangre East
Schulze Ranch
SDL Holdings (ULA Prairie)
Shadow Ridge (No. of fair grounds to BLM)
Sheep Creek Ranch
Sierra Mojada North
Sierra Mojada South
Sierra Mojada West
Silver Circle
Silver Cliff, Town of
Silver Cliff Heights #s 1-19
Silver Cliff Ranch 1&2 Filings
Silver West
Spread Eagle
St Andrews Highlands
Stanton Tracts (above Hat Crk Ranch)
T.V. Hills I & II

Taylor Creek Highlands
Tanglewood Acres
Tara J Subdivision
Ten Acre Estates
Timber Ridge Ranch
Ute Mesa
Valley View Mobile & RV
Verde Creek Ranch
Victoria Heights
W.E. Smith
Wakefield Hills
Wapiti Creek
Westcliffe, Town of
Westcliffe Ranch
Wetmore, Town of
Wilderness Heights
Willow Creek Camp
Wilson Family Subdivision (next to Dipert Tracts)
Woods at Buck Mountain, Filings 1&2
Woods at Gem Mountain

Appendix E – County Demographics & Evacuation Planning

Appendix E: County Demographics & Evacuation Planning

Age/Distribution: In Colorado, the median age was approximately 38.5 years of age. In Custer County, the average age is **58.6 years (as of 2023-2024 est. data)**

Key Median Age Data Points for Custer County, CO

- 2023/2024: ~58.6 years (ACS estimates)
- 2020 Census: 58.3 years
- 2019 Estimate: 59.7 years (Census Tract 9701)

The people who are residents aged 65 and older, is the fastest-growing age group, increasing by 87% between 2010 and 2022. As of the 2020 census, 33.8% of residents were 65 years of age or older. Current ACS 2023 estimates are that the population could be 47% of the population age 60 and above.

Population: The data suggests that Custer County is one of the counties in Colorado with the oldest population.

The 2020 Census lists 4,074 people in Custer County. The estimated population in 2024 (Census ACS est) was over 5,000 (5.073) people. The population has been growing, increasing by over 24% between 2010 and 2022.

Race/Ethnicity: The population is predominantly White (Non-Hispanic), making up about 93.1% in 2023 estimates.

Housing: A significant portion of housing units are owner-occupied (82.4% in 2020), ***but nearly half (46.9%) were vacant, suggesting many are seasonal or second homes.***

Poverty: The poverty level indicates in the ACS 2023 estimates, that there are 500 people over age 60 that were living in poverty in

the last 12 months.

Disability: The number of people who have a disability at or over age 65 in the ACS 2023 estimates, that there are 232 people that reported they had a disability.

Evacuation Planning for Rural, Dispersed, Wildfire-Prone Mountain Towns

1. Map Structures by *Driveway Access*, Not Just Address

Dispersed homes often have:

- long private driveways
- unmarked or shared access
- locked gates
- vegetation close to the driveway

In wildfire conditions, responders need **driveway-level mapping** showing:

- structure location
- driveway length/width
- turnarounds for engines
- gates/bridges/culverts load limits

- occupancy probability (seasonal/long-term/unknown)

Use GIS layers + fire district field verification.

2. Use a “Vacant-Home Profile” to Prioritize Checking

Because nearly half may be unoccupied:

- Cross-reference utility data (power/water), mail holds, rental calendars, and caretaker lists.
- Tag structures as:
    - **Likely vacant**
    - **Likely occupied**
    - **Short-term rental (occupancy varies daily)**
- Direct limited resources first to *likely occupied or unknown* houses, especially those with only one egress path.

3. Establish Neighborhood Refuge/Protection Areas

Rural roads can become cut off by fire, fallen trees, or traffic jams. Create:

- small, defensible **neighborhood refuge areas** (ballfields, gravel pits, wide turnouts, community centers)

- clearly signed routes
- protocols for when residents must shelter in place because **evacuation is unsafe**

These are not full “fire shelters,” but they buy time for crews to clear roads or protect a pocket.

4. Strengthen Notification in Low-Cell Coverage Zones

Mountain towns often have patchy cellular service. Use **multiple overlapping systems**:

- Sirens or air-raid–style “hi-lo” tones from patrol vehicles
- Stationed runners or door-to-door teams assigned per zone
- Satellite-based alert texts (if available locally)
- NOAA radios with local programming
- Community radio networks or ham operators

Encourage residents and short-term renters to **opt into county alert systems** during the time they’re in town.