

A photograph of a wildfire scene. In the foreground, a firefighter in a red helmet and brown jacket is walking through snow, carrying a red water bucket. In the background, another firefighter in a yellow jacket and white helmet is visible. The ground is covered in snow, and there are pine trees and some burning brush in the background.

TAOS COUNTY COMMUNITY WILDFIRE PROTECTION PLAN 2022

2022 Taos County CWPP Update

Table of Contents

i. Acknowledgements	1
ii. About the Title	1
 Chapter 1 - Executive Summary	 3
Taos County CWPP Core Team Vision	5
Taos County CWPP Mission Statement	5
Taos County CWPP Purpose	5
 Chapter 2 - CWPP Background	 6
What is a CWPP and Why Does it Matter?	6
CWPP Update Requirements	6
New Mexico's CWPP Update Process	9
CWPP Core Team History and Collaboration	9
Taos County CWPP Core Team	11
Taos County CWPP Stakeholders	11
Alignment with 2020 New Mexico Forest Action Plan	12
Alignment with Taos County Comprehensive Plan and Taos Regional Water Plan	13
Alignment with Community-Based CWPPs	13
 Chapter 3 - 2022 CWPP Update and Changes Since 2016	 15
2022 Taos County CWPP Update Timeline	15
Progress and Accomplishments since 2016	15
New Risks and Challenges	17
 Chapter 4 - Human Land Use, Fire Ecology and Fire History	 19
About Taos County	19
Fire History Trends in Taos County	23
Dominant Vegetation Types, Characteristic Fire Regimes and Treatment Strategies	24
Management Strategies	27
 Chapter 5 - WUI and Communities at Risk	 29
Wildland Urban Interface (WUI) Definition	29
Taos County Wildland Urban Interface (WUI) Challenges	29
CAR Assessment Process	31
Taos County Communities At Risk Ratings (CAR)	32
Utility Infrastructure	32

Recreation Infrastructure	33
Chapter 6 - Landscape-Scale Treatment Priorities	36
Summary	36
Forest Resilience, Watershed Protection and Fire as a Tool	36
Wilderness	37
Enchanted Circle Priority Landscape	40
Taos County Focal Areas and Collaborative Boundaries	41
Chapter 7 - Traditional Uses and Economic Development Opportunities	45
Summary	45
Traditional Forest Uses and Management in Taos County	45
Cultural Burning and Traditional Ecological Knowledge	46
Forest Industry Capacity and Workforce Development	46
Careers in Natural Resources	47
Small-Diameter Wood Utilization Strategies	47
Forest Workers Certification and Other Training Needs	48
Forest Mayordomo Model: A Case Study for empowering traditional communities	48
NMFIA Shared Stewardship Agreement: A Case Study for workforce development	49
Chapter 8 - Emergency Fire Response and Post-Fire Recovery	51
Fire Response Capacity	51
Federal Resources	51
State Resources	52
Local Fire Department Resources	52
Mobilization	53
Fire Response Capacity Summary	53
Chapter 9 - Preparing for Fire and Post-Fire Recovery	55
Fire Adapted Communities New Mexico Learning Network	55
Firewise Communities and Taos County Firewise Network	55
Ready, Set, Go!	57
Living with Fire Guide: New Mexico	58
Agency Resources for Homeowners	58
Codes and Standards	60
Post-Fire Recovery	61
Chapter 10 - Goals and Recommendations	62
CWPP Core Team Related	62

Public Education and Outreach	62
Improve Fire Response & Emergency Management Capability	62
Structural Ignitability	62
Treatment Priorities	66
Action Plan	69

Appendices

Appendix A: Approvals & Signatures	71
Appendix B: Taos County Land Use Regulations re: Defensible Space	72
Appendix C: Form NFPA 299/1144	81
Appendix D: Funding & Grant Opportunities	83
Appendix E: References	84

i. Acknowledgements

The 2022 Taos County CWPP Update “Resilient Forests, Resilient Communities” was coordinated and drafted by J.R. Logan of Del Medio Forestry, LLC, in partnership with the County of Taos, and with grant support from the New Mexico Association of Counties under its Wildfire Risk Reduction Program for Rural Communities. This 2022 update stands on the shoulders of the hard work and partnerships formed by the Taos County CWPP Core Team, which continues to serve as the bedrock for wildfire risk reduction and forest restoration work in Taos County. Many thanks to the members of the Taos County CWPP Core Team, and to the dozens of stakeholders who contribute their time, expertise and love of this place for the benefit of the entire community and to the landscape we all care so deeply about.

ii. About the Title

The 2009 and 2016 Taos County Community Wildfire Protection Plans are the foundation for this 2022 Update. The 2009 Plan wisely focused on increasing awareness and reducing risk in the Wildland-Urban Interface (WUI) - where wildland vegetation meets communities and infrastructure. Those key elements were incorporated in this 2016 Update and reflected the continuing importance of wildfire awareness and risk management strategies for the safety of our communities.

The 2016 Taos County Community Wildfire Protection Plan “Connecting Communities and Watersheds” emphasizes the primary objective to protect life, property, and critical infrastructure in our vulnerable WUI communities while taking into account a more expanded view of the risks to our well-being. The watershed topography of Taos County is considered as a component in our WUI descriptions, and landscape restoration strategies are introduced.

As landscape-scale fires have spread across the West, there is an increasing awareness of the importance of upland watersheds to downstream security. Water captured, stored, and slowly released to downstream communities and farmland by intact forests guarantees dependable well water supplies, consistent stream and acequia flow, stable mountain soils, healthy fisheries, and a host of other values that contribute directly to the quality of life where people live.

The 2022 Taos County CWPP Update, “Resilient Forests, Resilient Communities,” further underscores the innate connection between human communities and the forested ecosystems and watersheds upon which these communities rely. Our contemporary understanding of

wildfire, and the role that fire has historically played across our landscapes, undergirds the CWPP framework that is based on accepting wildfire as a natural and inevitable process, and embracing fire-adapted practices at the community and the landscape scale in order to improve our collective resiliency in the future.



Carson National Forest conducting a pile burn near San Cristobal

Chapter 1 — Executive Summary

Taos County has purposefully embraced a process of community based wildfire and watershed planning to meet our natural disaster challenges. This 2022 Community Wildfire Protection Plan (CWPP) Update “Connecting Communities and Watersheds,” represents a continuation of that commitment.

Taos County is blessed with natural beauty due to the predominance of national forests and wildlands that surround us. With this beauty comes the danger of catastrophic wildfires, a primary natural disaster concern in our region. Wildfires have been a natural part of this region since before recorded history. However, recent fires such as the 1996 Hondo Fire, the 2003 Encebado Fire, and the 2022 Calf Canyon/Hermits Peak Fires represent a shift in fire behavior and the corresponding destructive impacts.. Other catastrophic wildfires like those near Jemez and Ruidoso illustrate the profound impact on the character of the landscape and on the underlying economy that stabilizes these communities.

Taos County has a history of planning and preparing for wildfires. In 2003, our planning process was significantly enhanced with the passage of the Healthy Forest Restoration Act (HFRA). This legislation provided incentives for the primary land managers in our county, the United States Forest Service (USFS) and the Bureau of Land Management (BLM), to give consideration to the priorities of local communities when establishing forest and land management projects.

At the county level, it became a requirement to create a Community Wildfire Protection Plan (CWPP) in collaboration with community representatives as well as county, state and federal agencies, a group of stakeholders collectively identified as the CWPP Core Team. An initial grant that the New Mexico Association of Counties, awarded to Taos County, started the development process and the first CWPP Core Team was formed in 2008. Since that time, quarterly meetings of the CWPP Core Team have led to the development of community plans, notably the 2009 Taos County CWPP Update “Living with Wildfire,” and the 2016 Taos County CWPP Update, “Connecting Communities and Watersheds.”

Here in Taos County, wildfire protection has grown from a small conversation among professionals to a broader community-based dialog. Community outreach and collaboration are responsible for the continued growth of the CWPP Core Team, from the handful of people at the beginning, to the 40 plus stakeholders who now meet regularly. Included in the Team are federal, state, local and tribal forestry managers, local forestry contractors, fire responders, community members, local non-governmental organizations and Taos County representatives.

Through education, engagement, and this collaborative planning process, the Taos County CWPP Core Team mitigates the risk of wildfire.

The ongoing interaction of regular attendees has increased community awareness of the relationship between fire behaviors and the strategies used to manage forests and watersheds. Treatments such as fuel breaks in the forest are recognized as analogous to the levees that protect communities along flood and hurricane prone rivers. At meetings that are open to all interested parties, stakeholders are kept informed about advances in the science of forest and watershed management; opportunities for new partnerships, new funding sources and grant applications are discussed and evaluated; and priorities are adjusted based on current conditions and resources.

The guide for the CWPP Core Team's activities is the County's Community Wildfire Protection Plan. These plans are considered to be 'living documents', requiring periodic updates that are reviewed and approved by the New Mexico Fire Planning Task Force. Starting in early 2015, the CWPP Core Team began the update process, meeting on a regular basis throughout the year to revisit and assess the maps and data that inform the Core Team's goals and implementation strategies.

The 2009 Taos County CWPP Update "Living with Wildfire" was produced by the CWPP Core Team in conjunction with the Land and Water Clinic of Questa, NM. Using that document as a foundation, Ron Gardiner led and facilitated the update process with current members of the CWPP Core Team. Prevalent community values were confirmed, relevant Wildlands Urban Interface (WUI) maps were reviewed and analyzed, and updated Community at Risk (CAR) ratings were created. The goals of this update process were to identify the risks of fire, establish priority fuel reduction treatment areas, and develop the implementation plans and strategies to protect our communities and watersheds.

An updated Communities at Risk (CAR) Table showing the relative risk determination of hazardous conditions for each community can be found in Chapter 4. The 2022 update goes beyond a generalized "high," "medium" and "low" rating system by quantifying those risks using a standardized wildfire risk assessment form. By providing each community with a corresponding numerical risk value, the Taos County CWPP Core Team will be better able to identify and prioritize work in the highest-risk communities. It will also allow the Core Team to better track the effectiveness of programs and project work. Communities with high ratings in this CWPP update include: Tres Ritos, Apache Canyon, El Salto, Shady Brook,. Cabresto Canyon, Village of Taos Ski Valley, Pinabete Hills, Angostura, Gallina Canyon, Lama, Latir/El Rito, Cañon Heights, Deer Mesa, Sipapu, Turley Mill, El Valle, Upper Red River Valley, Two Peaks, Valle Escondido, Pot Creek, Three Peaks, Vallecitos, Picuris Pueblo.

In addition, the 2022 CWPP Update includes timelines and action items for NEPA Planning and on-the-ground treatments. The CWPP itself describes treatment areas within “Focal Areas” and “Project Areas.” It also includes links to tables showing specific locations for treatment activities over the next five years. Again, these activities are related to our updated communities at risk assessment, as well as new data provided by the 2020 New Mexico Forest Action Plan.

HFRA legislation created the demand for this CWPP document and collaborative process. Taos County has expanded the scope and purpose of this document in order to educate our citizens and provide public awareness of wildfire risks, along with preparedness recommendations. At-risk communities in the Wildland Urban Interface (WUI) areas can use the information in this document to plan for their own fire response strategies. Emergency management officials, first responders and suppression teams can use the fire risk maps detailing vegetation, infrastructure, water and roads to plan effective action.

For a full list of resources to increase your fire knowledge, see Resource List (Appendix E). Check <http://www.emnrd.state.nm.us/SFD/FireMgt/cwpps.html> to ensure you are reading the most current accepted Taos County CWPP.

Taos County CWPP Core Team Vision:

The Taos County CWPP Core Team seeks to build fire-resilient communities, forests and watersheds.

Taos County CWPP Core Team Mission Statement:

The Taos County CWPP Core Team promotes collaboration among key stakeholders, including government agencies and community representatives, in order to agree on, and implement priorities for on-the-ground treatments, as well as community education and outreach.

Taos County CWPP Core Team Purpose:

The primary purpose of the Taos County CWPP is to protect lives, property, infrastructure and natural resources in Taos County from catastrophic wildfires.

Chapter 2 — CWPP Background

What is a CWPP and Why Does It Matter?

In 2003, largely in response to extreme fire activity across the west, the Federal Government enacted the [Healthy Forest Restoration Act \(HFRA\)](#). This legislation provides meaningful statutory incentives for the U.S Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction projects across all jurisdictions. The Community Wildfire Protection Plan (CWPP) is the document that puts those goals into focus. Communities that have developed these plans and that have established hazardous fuel reduction priorities are given preferential consideration for funding and other support related to project implementation.

Recent research (Jakes & Sturtevant, 2013) has shown that the CWPP planning process can improve relationships among agencies, clarify responsibilities and improve communication systems, contributing to fire response efficiency and effectiveness. The same research has also shown that the CWPP process can result in greater community capacity to build resilience and increases adaptive capacity for future environmental changes and disasters.

CWPP Update Requirements

The minimum requirements for a CWPP as described in the HFRA are:

- Collaboration - A CWPP for at-risk communities must be collaboratively developed by local and state government representatives and fire departments in consultation with federal agencies responsible for forest management as well as other interested parties.
- Prioritized Fuel Reduction - A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- Reduce Structural Ignitability - A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures by wildfires throughout the area addressed by the plan.

Since the passage of the HFRA in 2003, community wildfire protection planning has been influenced by other federal and state initiatives, such as the development of the National Fire Strategy. Across the country, natural resources and fire managers are increasingly operating under the National Cohesive Wildland Fire Management Strategy. The stated goals of the HFRA and related initiative have been incorporated into New Mexico 2018 Community Wildfire Protection Plan Update Guidelines, developed by NM State Forestry Division in conjunction with the New Mexico Association of Counties. The purpose of these state-specific guidelines is to ensure that CWPPs are relevant to the unique landscape and demographics of New Mexico.

According to the [New Mexico 2021 Community Wildfire Protection Plan Update Guidelines](#), the State of New Mexico and collaborative stakeholders have made a concerted effort to identify areas throughout the state that are at risk for wildland fires. CWPPs have become the primary mechanism for evaluating risk due to their emphasis on community involvement and assessment of local resources. CWPPs are also an important planning document used by emergency responders and citizens to plan for and respond to wildfire emergencies.

Local leaders and governmental entities find CWPPs valuable for the purposes of identifying critical needs and prioritizing funding. The New Mexico State Forestry Division has used CWPPs to rank risk to communities for the annual Communities At Risk Report that is provided to the Governor and New Mexico legislature by December 15 of each year. Most of the wildfire risk areas in New Mexico are now included in a CWPP, but the work does not stop there. Resources and landscapes change over time and CWPPs must be revisited and refreshed regularly. Changes in risk ratings should be reflected upon completion of priority projects and new initiatives developed for the CWPP to remain viable. In addition, effective new strategies and wildland programs should be incorporated into CWPP planning efforts. For example, across the country, natural resources and fire managers are increasingly operating under the National Cohesive Wildland Fire Management Strategy which has these goals:

- Restore and maintain resilient landscapes,
- Create and sustain fire adapted communities, and
- Respond safely, effectively and efficiently to wildfire

Per the guidelines, CWPPs should be updated every five years to be most useful. Core teams should update priority projects and action items annually to encourage engagement and maintain momentum. These guidelines are designed to enhance a CWPP's effectiveness and were generated from actual experiences with mitigation and large wildfires, as well as community planning processes.

All CWPPs and CWPP updates must be reviewed and approved by the New Mexico Fire Planning Task Force (FPTF). The FPTF recommends that communities update their CWPP every five years. Minimum requirements for all new CWPPs and updates must address the following items:

1. Collaboration: A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties. This should be demonstrated through the inclusion of sign-in sheets from public meetings. If critical stakeholders choose not to engage, this should also be documented.

2. Prioritized fuel reduction: A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
3. Reduce structural ignitability: A CWPP should identify actions that homeowners, residents, and communities can take to reduce the ignitability of structures throughout the area.
4. Secure signatures:
 - a. The applicable local government (i.e., counties or cities);
 - b. The local fire department(s); and
 - c. The state entity responsible for forest management.

In addition, in New Mexico all CWPPs – including updates – must include the following criteria:

5. Describe progress made and list accomplishments since the CWPP was adopted: New Mexico has developed a database of fuel treatments at www.vegetationtreatments.org. CWPP developers should ensure that prior treatments are accurately reflected in the database as part of their CWPP update. CWPP developers can consult and create maps with the free tool available in the database.
6. Include a list of communities-at-risk and each individual community hazard risk rating: Risk must be rated as either high, medium, or low.
7. Identify any new risks that have developed: Note any changes in a community's hazard risk rating, by reflecting the previous rating and the new rating. Improvements in risk ratings attributable to projects completed under previous CWPPs can enhance future requests for funding by demonstrating success.
8. CWPP developers should ensure that community-level plans reflect and align the Wildland Urban Interface (WUI) objectives and goals of the overarching countywide plan and other neighboring CWPPs: Map the Wildland Urban Interface (WUI) areas, noting any updates or discrepancies within the CWPP boundaries with a high, medium, or low risk rating.
9. Include a spreadsheet or table of new prioritized projects: The list must reflect state, tribal and federal priorities including detail on specific objectives, responsible entities and timelines. Narrative should capture collaborative efforts and best practices within your landscape.
10. Core teams should commit to meet no less than annually and should develop a 1-2 year Action Plan that can be easily updated during the life of the CWPP in order to plan, implement, track, and report on progress made: Outside or in addition to a Core Team that develops a CWPP, there should be a community-based Action Plan team that carries the CWPP actions forward.”
11. New Mexico Forestry Division accepts CWPP updates either as a preface to a previously approved plan, or as a new document with the updates integrated into the existing approved plan.
12. Secure appropriate signatures (local government, local fire department(s), and New Mexico

Forestry Division District Forester)

13. Deliver paper, PDF, and digital WUI boundary files to New Mexico Forestry Division's Resource Protection Bureau. Digital files must be shapefiles. WUI boundary files must have the high, medium, or low risk rating delineated. These files should be sent to your New Mexico Forestry District Forester.

New Mexico's CWPP Update Process

1. Review existing CWPP.
2. Engage stakeholders including federal and state agencies; political subdivisions; tribes, pueblos, and nations; or other stakeholders that have a vested interest in the plan
3. Host collaborative meetings.
4. Gather plans and information developed since the last CWPP update. (See number 8 on page 3)
5. Update maps.
6. Reflect changes in risk ratings due to completed projects or changes in landscape.
7. Develop updated community wildfire risk reduction priorities (fuel treatments, restoration projects, outreach and education, etc.).
8. Distribute CWPP update drafts to key stakeholders (including local, state, tribal and federal partners) for review and input before the final approval.
9. Submit the final document to your local government body, local fire department(s) and New Mexico Forestry Division District Forester for required signatures and endorsement.
10. Once signed and endorsed by your local governing parties, submit all documentation to New Mexico Forestry Division no later than September 1 for final approval by the New Mexico Fire Planning Task Force.

Taos County CWPP Core Team History and Collaboration

The Taos County CWPP Core Team began convening in 2008 to address community-based wildfire planning in Taos County. Through a series of six quarterly meetings from 2008 to 2009, the 2009 Taos County CWPP Update "Living with Fire" was developed. The initial group of collaborators included representatives from federal, state, local and tribal forestry agencies and managers, Taos County representatives, local forestry contractors, Non- Governmental Organizations (NGOs), as well as other interested groups and individuals.

Regular quarterly meetings of the Core Team continued from 2009 forward, growing from a handful of people to the 40 plus stakeholders who now meet regularly. Taos County and New Mexico Forestry Division have been the lead administrative partners, establishing and maintaining the Core Team momentum. The Taos County CWPP Core Team has achieved considerable success both in terms of 2009 and 2016 recommendations that have been accomplished and in the ongoing collaboration that encourages responsive and effective

action. Planning integration is particularly important for our primary land managers and landowners in Taos County, which include the Carson National Forest, the Bureau of Land Management, Picuris Pueblo, Taos Pueblo, the State Land Office and the Rio Costilla Cooperative Livestock Association, among many others. Starting in early 2015, the CWPP Core Team focused their efforts on updating the existing CWPP. Using the 2009 Taos County CWPP Update “Living with Wildfire” as its foundation, the Land and Water Clinic of Questa facilitated the update process. Led by Ron Gardiner, the CWPP Core Team confirmed prevalent community values, reviewed and analyzed relevant Wildlands Urban Interface (WUI) maps, and updated the Community at Risk (CAR) ratings. The Core Team focused on identifying the risks of fire, establishing priority fuel reduction treatment areas, and developing the implementation plans and strategies to protect our communities and watersheds. Final submission of the 2016 Taos County CWPP Update to the New Mexico Fire Planning Task Force included new county-wide risk assessment data that was made available subsequent to the initial round of collaborative meetings and document development.

For this 2022 update, the Core Team has committed to improving and refining the process for determining risk ratings for communities at risk; more clearly articulating the need to improve opportunities for traditional forest users; quantifying the economic development and workforce development potential in the forest and watershed restoration industry, and developing the collaborative infrastructure to accomplish joint long-term planning and implementation efforts across jurisdictions on forested lands countywide.

This update effort was collaborative and as with the 2009 and 2016 update processes, relevant land and forestry management agencies, local government and other stakeholders were represented. Broader community outreach, education and stakeholder participation are responsible for the continued growth of the Core Team, from the handful of people in 2009, to the 40 plus stakeholders who now meet regularly.

The benefits of regularly scheduled Taos County CWPP Core Team meetings are significant. The Taos Soil and Water Conservation District has been an essential partner in the deployment of collaborative treatment grants. Rocky Mountain Youth Corps have facilitated treatment projects within our at-risk communities on private lands while promoting youth development and workforce skills training. The two principal land managers in Taos County, the Carson National Forest and the Taos Office of the BLM have been cornerstones of collaborative process, maintaining steady attendance and active participation. Concerned property owners are actively represented by the 11 active Firewise communities countywide. Along with community representatives there has also been consistent participation from local forestry contractors, the village of Questa, village of Taos Ski Valley, town of Taos and Taos Pueblo. The momentum of the Core Team has created opportunities for new partnerships and funding

sources, most notably the recent designation of the Enchanted Circle Priority Landscape, which is described in more detail in Chapter 6.

Taos County CWPP Core Team and Stakeholders

The CWPP Core Team has become a vigorous organization consisting of individuals, interest groups, businesses, non-profit organizations, federal and state agencies, and local governments who are collaborating to address the urgent need to protect lives, reduce hazardous fuel loads, and improve forest resiliency in the Wildland-Urban Interface and in the watersheds of Taos County.

Taos County CWPP Core Team Agencies/Organizations Include:

Bureau of Land Management, Taos Field Office
Carson National Forest
Picuris Pueblo
NM Forestry Division
NM State Land Office
Taos County
Taos Pueblo
Taos Soil and Water Conservation District

Taos County CWPP Stakeholders Include:

Acequia del Sur de Cañon
Amigos Bravos
Arroyo Hondo Arriba Community Land Grant
Bureau of Land Management, Taos Field Office
Carson Firewise
Carson National Forest
Cerro Negro Forest Council
El Salto del Agua Land Association
El Salto Firewise
Enchanted Circle Regional Fire Protection Association
Forest Stewards Guild
Greater Gallina Canyon Firewise
Kit Carson Electric Cooperative, Inc.
Latir/El Rito Firewise
LOR Foundation
Natural Resource Conservation Service
NM Department of Game and Fish
NM Forest and Watershed Restoration Institute

NM State Forestry Division
NM Wildlife Federation
Pot Creek Firewise
Rio de las Trampas Forest Council
Rocky Mountain Youth Corps
San Cristobal Firewise
La Merced de Cristóbal de la Serna
La Merced de Santa Bárbara
Stagecoach Firewise (pending recognition)
Taos Canyon Firewise
Taos Community Foundation
Taos County
Taos Soil and Water Conservation District
Taos Pueblo Division of Natural Resources
Taos Ski Valley, Inc.
Taos Valley Acequia Association
The Nature Conservancy/Rio Grande Water Fund
Town of Taos
Trampas Land Grant
Trout Unlimited
Turley Mill Firewise
Valle Escondido Firewise
Village of Questa
Village of Red River
Village of Taos Ski Valley
Village of Taos Ski Valley Firewise

Alignment with 2020 New Mexico Forest Action Plan

The [2020 New Mexico Forest Action Plan](#) represents a collaborative approach to landscape resilience, and serves as the statewide roadmap for prioritization and implementation of treatments and other activities to improve community and forest resilience. In addition to identifying those watersheds at greatest risk to catastrophic wildfire (based on the threat to communities, water and biodiversity), the updated Forest Action Plan also provides eight themes and 10 specific strategies (with action items) for addressing wildfire hazard and improving forest health across all land management jurisdictions. Whenever possible, the 2022 Taos County CWPP Update aligns with the themes and strategies described above in order to improve synchrony with similar efforts at the state and federal level, while ensuring cohesion in project planning and implementation. For the same reasons, much of the data used

to assess wildfire risk and prioritize treatments comes from the 2020 New Mexico Forest Action Plan, including geospatial layers that identify existing wildfire risk and post-fire hazards.

Alignment with Taos County Comprehensive Plan and Taos Regional Water Plan

In addition to being guided by strong national and state directives, at a local level the [2016 Taos County Comprehensive Plan](#) outlines a progressive Land and Water Element that informs our planning process. The Comprehensive Plan, developed through extensive public meetings and adopted by the Taos County Commission, confirms the relationship between land and water, recognizing that land use decisions can significantly impact both the quantity and quality of local water supplies. The Land and Water Element promotes the use of recognized best practices regarding the establishment of fire safety buffers for at-risk communities, the protection of valuable soil, watershed and aquifer resources, and the adoption of restoration strategies and treatments that support biodiversity and the local economy. Similarly, the [2016 Taos Regional Water Plan](#) identifies “Forest Health and Watershed Restoration” as a key collaborative project to protect drinking water and the dozens of acequias within the county. Creation of a wood products cooperative for small-diameter materials would hasten the pace of sustainable forestry and restoration efforts while providing new jobs and income sources for Taos County’s traditional residents.

Alignment with Community-Based CWPPs in Taos County

In addition to this countywide CWPP, there are seven community-level CWPPs in Taos County. These local CWPPs include: Taos Canyon (2021); Gallina Canyon/San Cristobal (2021); Peñasco (2018); Village of Taos Ski Valley (2016); Taos Pueblo (2009); Village of Questa (2008); Enchanted Circle (2006). These and other approved CWPPs from across the state can be viewed and downloaded from the [New Mexico Forestry Division CWPP webpage](#). Each of these community-level CWPPs fall within the umbrella of the 2022 Taos County CWPP Update, which serves as a countywide guide for wildfire planning and hazard mitigation. Local CWPPs are intended to complement the goals and objectives of the countywide CWPP without conflicting with those efforts. The development of community-level CWPPs serves multiple purposes, including 1). addressing the considerable risk to life and property posed by catastrophic wildfire in high-risk areas; 2). encouraging proactive efforts by local residents to mitigate risks in their own communities and 3). Improving existing collaboration between community residents, local government and federal land managers in high-risk areas; and 4). planning and implementing specific short- and long-term opportunities for hazardous fuel reduction and forest restoration activities.



Taos County 2022 CWPP Update Field Trip

Chapter 3 - 2022 CWPP Update and Changes Since 2016

2022 Taos County CWPP Update Timeline

The 2022 Taos County CWPP Update included virtual meetings, in-person meetings and field visits. Meetings ranged from dozens of participants representing a variety of organizations and community groups to more focused, small-group meetings. Following is a list of events related to the 2022 Taos County CWPP Update process.

Aug. 12 — CWPP Kickoff Meeting

Sept. 15 — Meeting with Taos Valley Acequia Association Board re: traditional use opportunities

Oct. 27 — CWPP Stakeholder Field Trip (in coordination with Colfax County/Angel Fire CWPP teams)

Nov. 9 — Core Team Treatment Prioritization Meeting

Feb. 10 — Taos Soil & Water Conservation District Meeting: Forest Health Program and CWPP priorities

Feb. 17 — Joint Taos County, Colfax County, Angel Fire CWPP meeting

March 24 — CWPP Core Team Meeting re: WUI Boundary and Communities at Risk

April 7 — Enchanted Circle Landscape Collaborative and Coordination meeting in Taos

April 9 — Acequia Madre del Río Grande del Rancho meeting re: traditional use opportunities

April 10 — Río Fernando Acequias meeting re: traditional use opportunities

April 21 — Tres Rios Watershed Coalition Focal Area Treatment Prioritization Meeting in Peñasco

April 21 — Red River Focal Area Treatment Prioritization Meeting in Questa

June 24 — Enchanted Circle Landscape Collaborative and Coordination meeting in Eagle Nest

July 27 — Final stakeholder meeting to provide input and recommendations before plan adoption

Progress and Accomplishments since 2016

This update to the Taos County CWPP emphasizes increasing the coordination or project and activity planning in order to increase the pace and scale of cross-jurisdictional wildfire risk reduction efforts while also promoting traditional uses and economic development opportunities. Collaborative successes, most notably the Taos Valley Watershed Coalition, have attracted significant statewide and national attention, drawing new funding and additional capacity support for agency partners in Taos County and across northern New Mexico. These collaborative efforts, all of which trace their origin to the Taos County CWPP Core Team, have allowed for the development of novel solutions such as the forest mayordomo programs and innovative approaches such as the Taos County Good Neighbor Agreement and

New Mexico Forest Industry Association Stewardship Agreement. Specific treatments accomplished and planned, by focal area, can be found in Chapter 6.

Since 2016, the Taos County CWPP Core Team and Stakeholders have:

- Increased the number of recognized Firewise Communities from five to 10, with at least two other communities currently seeking formal recognition. These communities organize chipper days to help residents dispose of thinning slash, promote fuel reduction projects and other defensible space programs, and advocate for community needs and values as part of big-picture restoration plans countywide. These Firewise communities are also now part of the Taos County Firewise Network, which encourages peer-to-peer learning between communities to promote Firewise and fire-adaptive practices.
- Completed two community-level CWPPs in high-risk areas identified in 2016 (Taos Canyon and Gallina Canyon/San Cristobal in 2021).
- Created the [Taos County Wildfire Plaza Website](#) to serve as a landing page for all things wildfire and wildfire risk reduction in Taos County. When fully built out, this informational platform will help promote public awareness about efforts to increase community and wildfire resilience while offering multiple avenues for community and public participation.
- Successfully executed the Taos County Good Neighbor Agreement between the County of Taos and the Carson National Forest. This agreement gives Taos County a “seat at the table” when it comes to collaboratively planning and implementing projects on National Forest lands. The agreement is the mechanism by which collaborative groups, such as the Taos Valley Watershed Coalition and Tres Rios Watershed Coalition, can complete joint long-term planning and implementation that genuinely increase the pace and scale of forest restoration work that protects communities and watersheds from catastrophic wildfire.
- Tested an agreement between the New Mexico Forest Industry Association and Carson National Forest, which makes it possible for local contractors to consistently take on larger thinning projects on federal lands. The agreement provides local contractors with a steady supply of work, helping the local forest industry train competent and professional forest workers while building their businesses to match the growing demand for thinning and related restoration services.
- Improved relationships with traditional communities — namely tribes, land grants and acequias — to expand the benefits of thinning and restoration work through culturally relevant programs, and more opportunities for collaboration and co-management. Specifically,

programs such as the forest mayordomo model on Forest Service and State Trust Lands in Taos County have increased community stewardship of forested lands while improving access to fuelwood and creating new sources of revenue for residents in rural, land-based villages.

- Creation of the Taos Soil and Water Conservation District Student Monitoring Program, and improved relationships with educational institutions. The student monitoring program recruits high school students from across Taos County, as well as students studying natural resources at UNM-Taos and New Mexico Highland University, to learn about and practice forestry skills and feed the career pipeline for local professional opportunities in natural resources-related fields.
- Increased cross-county/cross-basin collaboration. The 2022 Taos County CWPP Update included one field trip and multiple joint planning meetings with members of the Colfax County and Angel Fire CWPP update teams. By coordinating long-term planning with other jurisdictions, all of these groups more effectively and efficiently accomplish our shared goals.

New Risks and Challenges

While members of the CWPP Core Team and CWPP Stakeholders have made many steps toward increasing resilience, there are many ways in which some risks have increased. These include:

- *Continued residential development in high-risk WUI areas.* While this new construction must conform to the Taos County Land Use regulations related to defensible space and combustion-resistant design and building materials, any new construction in areas of high wildfire risk necessarily increases the risk to life and property from wildfire.
- *Evidence of an increasingly warm and dry climate.* Data from the National Oceanic and Atmospheric Administration show the average mean temperature in Taos County increasing while average annual precipitation decreasing between 1991 and 2020. The increase in mean temperatures correlates with longer fire seasons, drier fuels and more extreme weather events. Changing climate can also affect ecosystem function, including forest structure and composition and corresponding fuel complexes.
- *Increased risk of wildfire caused by overhead utility lines and recreational activity.* Despite an aggressive tree-trimming effort along overhead transmission and distribution lines, Kit Carson Electric Cooperative has struggled to keep pace with removing hazard trees that threaten to impact overhead lines. These hazard trees are both within and outside of the co-op's 20-foot

right-of-way. Similarly, increases in recreational activity — especially on National Forest lands — increases the likelihood of human-caused ignition of wildfires.

- *Workforce capacity.* The impact of COVID-19 on the labor force has made it more challenging to find and keep staff, be it within government agencies or on forest restoration crews. This lack of being able to recruit and retain a capable workforce has limited the capacity to implement projects, and is likely to become a bottleneck as the Taos County Core Team attempts to ramp up the pace and scale of fuels and restoration treatments.

Chapter 4 - Human Land Use, Fire Ecology and Fire History

About Taos County

History: Taos County has a multi-cultural history that reaches back more than 1000 years. Taos is unique and distinct in the history of New Mexico and the United States. It is one of the longest continuously inhabited regions in the country. Pueblo Indians and their ancestors have made their homes here for at least two thousand years. In the sixteenth century, early Spanish settlers traveled north from what is now Mexico. At the end of the Mexican American War in 1848, waves of U.S. citizens started to venture into the territory, joining the trappers that had arrived earlier.

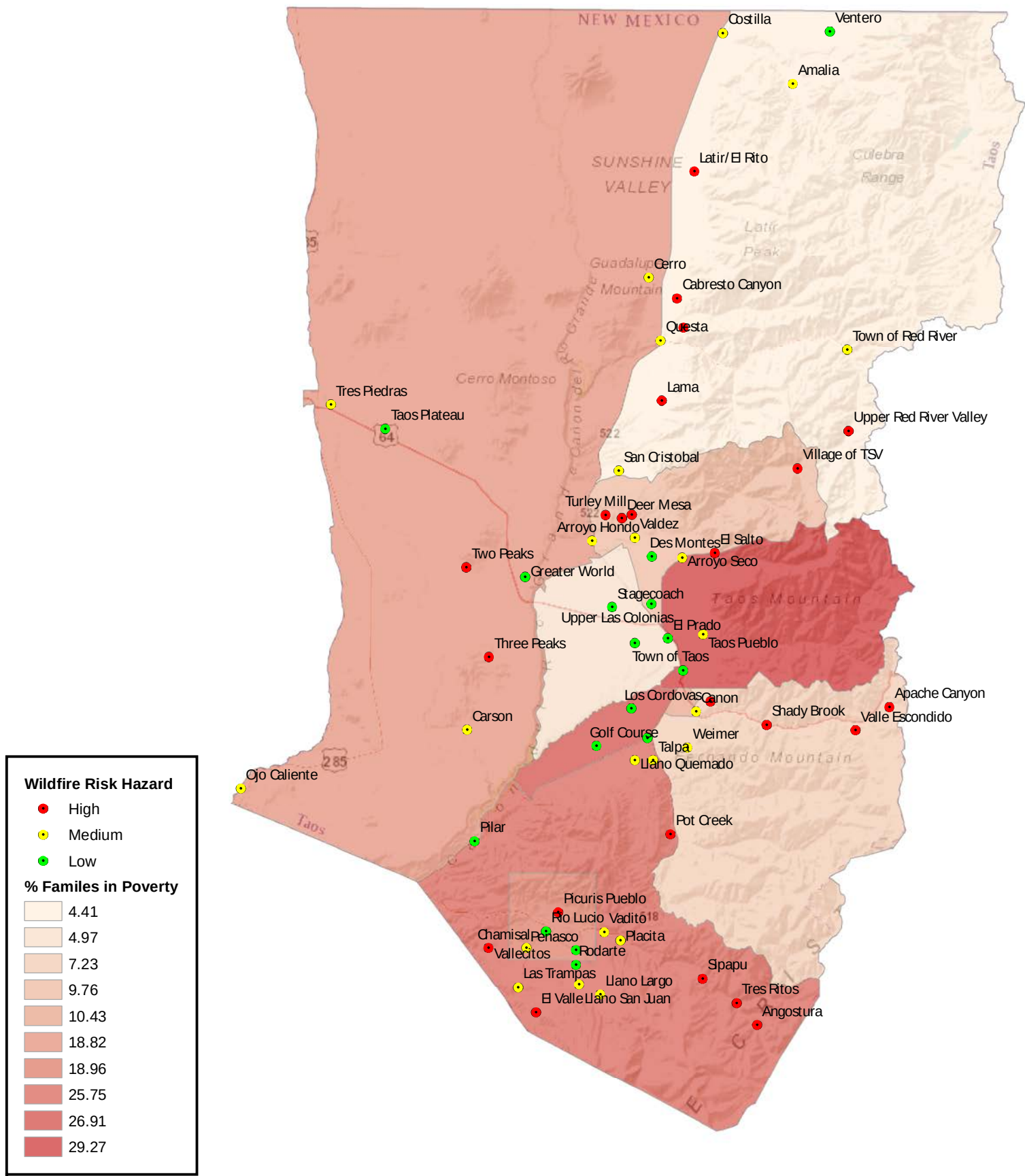
The People: According to [2021 U.S. Census Bureau estimates](#), approximately 34,623 people live in Taos County. Data show residents of Hispanic descent make up 56.5% of the population, residents of Anglo descent account for 35.8%, and residents of Native American descent make up 7.5% of the population. The same data show that 18.9% of persons in Taos County live below the poverty line — almost double the national average. A surge of in-migrants in recent years has significantly raised housing costs and the cost of living, causing a commensurate surge of out-migration of residents who have lived in the county for generations, but who have been forced to leave to find work and affordable housing. National and state policies are increasingly recognizing the importance of making investments in poor or otherwise underserved communities in order to address wildfire risks more equitably.

Land Ownership: Taos County includes about 1.4 million acres of land. Of that, about 18% is administered by the Bureau of Land Management, Taos Field Office; 37% is administered by the Carson National Forest; 8% is classified as tribal lands; 32% is private land; 4% is administered by the NM State Land Office; and 1% is administered by the NM Department of Game and Fish. Because of its unique history of centuries of permanent settlement by indigenous peoples, followed by invasion and occupation by Spanish and Mexican settlers, then the subsequent invasion and conquest by the United States government, questions about rightful land ownership and corresponding rights to natural resources are hotly contested, even to this day. Picuris Pueblo and Taos Pueblo are both located along major rivers and against steep, forested terrain. Hispano settlements tend to occupy the valley bottoms, with historic land grants authorized by the Spanish and Mexican governments extending from river bottoms into the high country. More recent arrivals to Taos County have contributed to sprawling residential development onto the sagebrush Plateau of central Taos County, as well as into more densely forested areas. New home construction in these high-risk, fire-prone areas include neighborhoods and subdivisions in the foothills east of the town of Taos, north and west of Arroyo Seco, at Taos Ski Valley and in the Kachina Basin, and along both sides of US Hwy 64 up Taos Canyon.

Land Use: Land use in Taos County has revolved around subsistence farming, ranching, hunting, and lumbering for hundreds of years. Equitable methods of sharing resources have been practiced by local cultures including “repartimiento” where acequia irrigators share the abundance and share the lack, and on tribal lands where the common lands are used equitably by tribal members. Cattle ranching and hay production have been predominant activities among local families, often supplemented by an additional job in Taos or Los Alamos. Many ranchers own grazing rights on forest allotments, as they have since the Forest Service took over ownership of the “mercedes,” or land grants, that were established in the early 1800’s. A recent study found that about 30% of Taos County households rely on firewood for their primary source of heat, with an estimated annual fuelwood demand of 12,314 cords/year. Many families still gather fuelwood in the forest, and there are several small mill operators who harvest larger trees for lumber. There is one medium-sized sawmill in Taos County at the moment, with many backyard mills operated as hobbies or as cottage industries. Today, traditional subsistence agriculture is still practiced, but less so than in the past, though there is still widespread support for the maintenance and practice of acequia traditions and culture. Many families depend on jobs in education, government, tourism and construction to prosper. Mining played a role in the county historically, with legacy mines scattered across the mountains of Taos County. In modern times, MolyCorp (later acquired by Chevron) operated a molybdenum mine that first started operating in Questa in 1923. That mine was an economic anchor for the region, though the impacts of mining operations to the Red River watershed are now the subject of a \$800-million remediation project. The mine officially closed in 2014, forcing former employees to find lower paying jobs in other sectors, or move away to find work elsewhere.

Topography and the Landscape: Taos County stretches north to the Colorado border and south to Rio Arriba County and the Rio Grande Gorge. It contains part of the most southern range of the Rocky Mountains. The Sangre de Cristo Mountains rise up from the near desert of the arid Rio Grande Valley (the Taos Plateau). The highest point in the county is the summit of Wheeler Peak at 13,161 feet. The county has the highest mean elevation of any U.S. county outside of Colorado and contains 17 of New Mexico's highest 25 peaks. Between the harsh high desert and looming mountain peaks lie a wide range of discrete ecological zones. Steep and narrow canyons are common, and vegetation types vary widely depending on elevation and aspect. Taos County has a total area of 2,204 square miles.

Watersheds and Water Suppliers: Taos County watersheds, primarily tributaries to the Rio Grande that flow off the western slope of the Sangre de Cristo range, supply the water for four municipal water utilities, 35 mutual domestic water associations, two water and sanitation districts, two Tribal communities, and 144 tribal and non-tribal acequias or ditch associations.



Taos County 2022 CWPP Update Communities at Risk and % Families in Poverty



0 4 8 16 Miles

All are legal subdivisions of government. Taos Valley is a vital headwaters region for the greater Rio Grande Basin and a vital source for all downstream water users.

Fire History Trends in Taos County

We face a great risk of devastating wildfires in Taos County, in part due to decades of a practical halt of most timber harvesting activities combined with a history of intensive livestock grazing and fire suppression policies. Our forests have been transformed during the past century due to land use, forest management practices, and climate. Today our forests are more vulnerable to insect and disease outbreaks, severe fires, and adversely affected biological, cultural and economic values. Fuel loads have grown progressively and our communities are at risk. The Hondo/Lama Wildfire in 1996 and the Taos Pueblo Encebado Wildfire in 2003 manifested the risk of unhealthy forest conditions that had direct impacts on our communities. The Hondo Fire ignited on May 5, 1996 in a trash barrel on private lands in San Cristobal. At the time it had the highest recorded rate of spread in the piñon/juniper forest type. The fire completely consumed approximately 7,500 forested acres within 36 hours of ignition. The fire took about a month to fully contain and cost more than \$3 million for suppression. It destroyed 22 homes and other structures in the community of Lama and seriously threatened the Village of Questa. The post burn conditions impacted the spring box water collection source at the Lama Foundation and compromised Lama's acequia system with siltation from post burn erosion.

On July 4, 2003, a single lightning strike ignited the Taos Pueblo Encebado Wildfire that burned for 11 days and consumed over 5,400 acres. Considerable post-burn efforts were made to stabilize mountain soils, including aerial seeding and contour falling (cutting trees to fall across the slope to catch debris flows and retain soil). Nonetheless, summer rainstorms filled the retention ponds that were constructed to catch the ash and debris flow and overflowed onto the eastern side of the Pueblo. Another local and more recent wildfire of note was the Osha Fire that started near the community of Sipapu on June 1, 2011 and burned a total of 720 acres. This fire started when a tree fell onto a power line.

The 2015 Carson National Forest Assessment Report of Ecological, Social, and Economic Conditions, Trends and Sustainability, developed as part of the Forest Plan Revision that was recently completed, can help us understand the current forest condition. "Throughout the southwestern U.S., 20th century fire exclusion, selective logging, and intensive unmanaged grazing have significantly altered species composition and stand structure in mixed conifer forests, with frequent fire. [Fires in ponderosa pine prior to 1850 ignited every 6-12 years and typically burned on the surface where they reduced the fuel load and risk of crown fire.] Many large ponderosa pines and Douglas-fir trees have been replaced by dense stands of young

trees. Patch size increased dramatically as large overstory trees were harvested, and mixed-severity fires no longer maintained heterogeneity.

Protecting the public from the dangers of catastrophic wildfire is our first concern, but there are associated hazards, risks and costs that occur post-fire and should be considered such as soil erosion, debris-flows and water source contamination. The cost of a catastrophic wildfire is far more than the suppression costs alone. The 2011 Las Conchas Fire forced both Albuquerque and Santa Fe to halt water withdrawals from the Rio Grande because the ash-laden waters were unfit for treatment by their water treatment facilities. The long term cost of the 156,000 acre Las Conchas Fire was estimated at \$246 million, with costs still accruing. A [2016 study commissioned by The Nature Conservancy](#) found that restoration and fuels reduction treatments had a monumental effect in reducing the overall cost of a high-severity wildfire in Taos County.

Dominant Vegetation Types, Characteristic Fire Regimes and Treatment Strategies

Wildland fuels are the most critical factor in determining fire risk and in prioritizing mitigation treatments. Federal, state and tribal land managers as well as private property owners all face the task of setting priorities and allocating resources to implement treatments. Due to the development of a Taos County CWPP Core Team and its collaborative process, there can be greater coordination among the stakeholders and a cooperative approach to restoration and fire mitigation projects. All can partner toward achieving the land and water goals of the Taos County Comprehensive Plan.

Listed below are the dominant fuels/vegetation types encountered in the Taos County WUI with associated treatment recommendations. Following that are sections on general treatment guidelines and a summary of suggested management practices directed toward restoration.

The following descriptions of fuels and vegetation types are organized beginning with the prevalent forest vegetation types that are found near the farms and villages in the lowest valleys, and then proceeding upslope in ascending elevation. Most categories include a canopy layer or overstory of the tallest trees and an understory made up of herbaceous plants, shrubs, and shorter trees.

Cottonwood Bosques: Many Taos County communities were historically established along streams for the purposes of irrigation diversion and proximity to water for domestic use and livestock. A bosque, the Spanish word for woodlands, can be found growing along the riparian flood plains of streams and rivers as well as along acequia corridors. Throughout Taos County, most bosques have not been managed, and are heavily overstocked with living vegetation intermixed with dead shrubs and trees. Siberian elms, Russian olives and Rocky Mountain

junipers all provide fuel ladders that can carry fire into overstory cottonwoods. The removal of dead wood is critical to reducing fire hazard. Further treatments involve the removal of much of the understory along with the judicious retention of diverse species that are randomly spaced.

Shrublands and Grasslands: Various species of herbaceous and woody plants are the dominant vegetation types across the majority of the Taos Plateau, as well as being adjacent to and intermixed with the Bosque, Pinon, and Ponderosa Forest Types. The grasslands of the area have economic significance for ranchers. Certain grazing practices, along with historic fire suppression policies, are the main factors influencing the increase of Sagebrush and the encroachment of Pinon/Juniper into the grassland community. Historically, frequent fires carried by grasses kept Sagebrush densities low and promoted cool - season bunch grasses.

Grassland management with mowing equipment or periodic grazing is an essential component of fire safety around structures and communities. Ignitions in grasslands, particularly during drought conditions, threaten homes and act as a fuse to ignite nearby overstocked forests. Land managers must balance safety and take into consideration the continuity of fuels when considering prescribed burns. Grassland restoration treatment strategies are often very challenging to develop and implement, with multiple factors to be considered.

Piñon-Juniper: The piñon-juniper (PJ) woodland is among the most heavily overstocked and highest risk areas in the county due to elevated stand densities combined with the concentration of homes in surrounding areas. Pinon-juniper is the dominant fuel type associated with residential portions of Taos County, thereby representing a high risk to life and property.

Treatment efforts are directed toward establishing a relatively open savannah landscape, with the goal of creating between 10 and 20 feet of open space between tree canopies. Trimming the lower branches of these trees can reduce their fuel ladder potential. More aggressive trimming and removal strategies are called for in the creation of “defensible space” around residential structures and the fortification of fuel breaks along existing roads.

Ponderosa Pine: Ponderosa Pine forests are a dominant feature of the Sangre de Cristo Mountains. The composition of this type of forest will vary based on elevation and available soil moisture. In lower elevations, ponderosa pines will typically have pinyon-juniper and oak species in their understory. These particular habitats are very important for wildlife, including, wild turkey, black bear, and passerine birds. Historically, these forests would have had open canopies with a dense grass dominated herbaceous layer, maintained by more frequent fires and the natural fire resilience of the ponderosa pines. Treatment strategies that open the

canopy, eliminate fuel ladders, and re-introduce more frequent fires can move these forests toward health and resilience.

Mixed Conifer: With increases in elevation, Ponderosa Pine forests transition into Mixed Conifer forests. The species composition is variable, influenced by elevation, topographic position, and slope exposure. Relatively dry stands are generally dominated by a mix of ponderosa pine, Douglas-fir, white fir, and quaking aspen. At higher elevations these stands can be found on ridge tops and south and west slope exposures. There is a mixed severity fire regime for these forests, with some evidence of frequent low-severity fires and smaller areas of infrequent, high-severity crown fires.

Treatments in mixed conifer stands will depend on management objectives. Historically, significant timber was harvested from the mixed conifer regions in Taos County. Present day timber production has been demonstrated to improve with thinning. The risk of extreme fire is reduced if hazardous fuel loads are removed, and adequate spacing between trees is established. Treatments are recommended around buildings and along roads to protect human structures.

Spruce-Fir: This type of forest is typically located in more remote and steep-sloped areas that rise up to timberline and that can be found on all the higher elevations in Taos County. Stand composition is dominated by Engelmann or blue spruce, often with subalpine or corkbark fir and some quaking aspen. Due to average annual precipitation approaching 40 inches, the trees exist in contiguous stands that predispose this forest type to high-severity stand replacement fires that are believed to have occurred every one to three centuries. In general, treatments may be recommended to protect settlements and essential watersheds. Heavy thinning that would include mature timber removal (and usage) may have to be done in stages since spruce and fir are susceptible to wind-throw (sudden canopy opening may result in trees being blown over).

Quaking Aspen: Stands of aspen often occur in small to large patches where crown fire has burned a mixed conifer forest, or where other stand-replacing disturbances have occurred. Aspen forest structure depends on successional age and stand-initiating disturbances. Aspen stands are less flammable than a similar mixed conifer counterpart with lower fire frequency and severity. For this reason, it is beneficial to promote the health of existing aspen stands by reducing conifer incursion through clearing, opening up the stand to light. This strategy can help recreate a forest mosaic that is less contiguous and therefore less likely to carry crown fire over large regions.

Management Strategies

High levels of fuel loading (a combination of stand density and basal area) in forest stands of all types contribute to vertical and horizontal hazardous fuels continuity. Dense understories consisting of smaller trees and low branches provide ladders that enable crown fires, and continuous dense canopies create conditions for rapidly spreading and difficult-to-control crown fires, especially on steep slopes.

Potential treatments are expected to influence the four primary structural attributes related to woody vegetation: basal area, tree stem density, species mixture (composition) and canopy cover. All of the Taos County CWPP defined treatments may be used in either a restoration or fuels-reduction sustainable management framework.

Treatments should include thinning dense forest stands followed by prescribed burns and when possible, selecting mature timber harvesting combined with stewardship thinning to achieve lower fuel levels and better forest health conditions.

Treatments should be first directed to protect high value resources, reducing risk to communities, thoroughfares, infrastructure, and watersheds. Efforts should first be directed to fire breaks and shaded fuel breaks that protect those resources from potential and likely fire flow, and then applied to landscape scale treatments that reduce fuel loads and foster resiliency in contiguous forest regions.

Prescriptions would best be based on professional evaluation of actual stand conditions. Typically the most vigorous trees with the best structure are retained. It is important to retain a wide diversity of tree species with special emphasis directed to the retention of fire-tolerant species.

Reestablishing forest health, optimum water storage capacity, wood product productivity, and resilience in the forests of Taos County will likely require an ensemble of treatments and practices that include:

- Hazardous fuels reduction by way of tree and brush thinning, employing both manual and mechanical methods.
- Erosion control with emphasis on both soil retention and soil accumulation, by establishing check dams in ephemeral gullies, and by contour falling and grounding of thinned trees on slopes.
- Introduction of diversity to balance the traits of fire sensitive and fire resistant species. Use selective thinning to remove fire sensitive species (juniper and white fir) from the understory and retain uneven aged fire dependent species that are tolerant of surface fire (ponderosa

pine and Douglas fir). Provide for the inter-planting of fire tolerant tree species where they are under-represented within thinned units and in under-stocked areas of the existing forest.

- The re-creation, expansion and maintenance of large and small meadows populated by native grasses and forbs throughout the forest mosaic.
- The introduction of managed fire, including pile burns, jackpot burns and broadcast burns, and gradually, the return of the frequent fire regime.



Treated ponderosa pine forest near Las Trampas

Chapter 5 - WUI and Communities at Risk

Wildland-Urban Interface (WUI) Definition

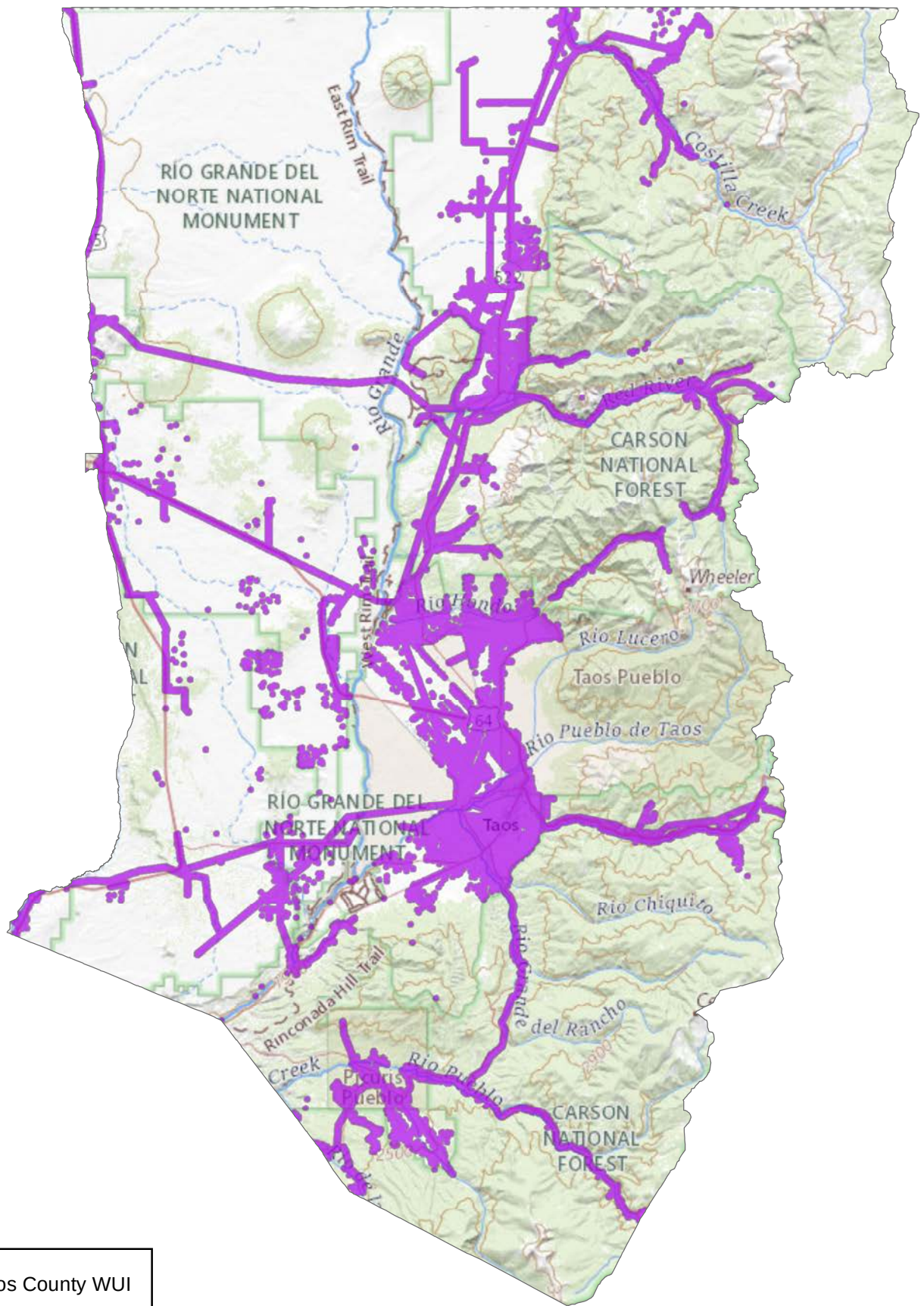
The WUI is defined as any area where human infrastructure intersects with wildland fuels that cause a fire hazard (Radeloff et al., 2005). A clearly defined WUI boundary helps focus hazardous fuel treatments and prioritize fire mitigation work in Taos County. Under this definition, “human infrastructure” includes any structure, including homes and outbuildings, as well as recreational infrastructure (e.g. ski lifts), communications towers and overhead powerlines.

The updated 2022 Taos County WUI area considers a 0.2 mile buffer around all known structures, overhead distribution and transmission lines, and communications towers. This approach is similar to WUI processes from elsewhere in the United States, and it mirrors the steps taken by Colfax County when updating its WUI layer, and provides consistency across county jurisdictions in terms of defining and delineating WUI boundaries. Because wildfire risk goes beyond woodlands and forested lands, and can all include agricultural fields and bosque (river corridors), this more inclusive WUI layer provides a more complete picture of the threat that wildfire may potentially pose to any human infrastructure in Taos County. Individual communities, land management agencies and local government planners should cross-reference this WUI layer with CWPP data related to annual wildfire hazard and Communities at Risk ratings to more precisely define risks to individual neighborhoods and properties. In all, the 2022 Taos County WUI Boundary captures 197,700 acres, or about 7.1 percent of lands in Taos County.

Taos County Wildland-Urban Interface (WUI) Challenges

Many Taos County Communities are surrounded or bordered by wildlands, whether Carson National Forest lands or BLM managed properties. Many structures are at the edge of the fields and the forests. A hazardous fuel load can exist both on private and federal lands bordering the community. Firefighting resources, and homeowners who may be attempting to evacuate, are often faced with daunting single access challenges, with ingress and egress through limited roads in narrow mountain canyons with limited turnaround areas.

These beautiful mountain canyons entice builders to develop homes and communities in risky WUI zones. A tremendous wildfire danger exists when homes, structures and supporting infrastructure blend together with the grasses, shrubs, woodpiles, overhanging trees and other fuels typical of a WUI area. Fire suppression strategies typical of the last century have interrupted the natural cycle of wildfires, contributing to a dangerous build-up of old vegetation and increasing the available fuel loads. This trend increases the inherent danger to at-risk communities.



Taos County 2022 CWPP Update Wildland-Urban Interface



0 5 10 20 Miles

Fuel management is a key defense strategy in response to this danger. Forest managers, government officials and residents living in WUI areas share in this responsibility. This requires a comprehensive effort to reduce fuels in and around at-risk communities. Homeowners must do their part to create defensible space and mitigate flammable situations. Landscape restoration treatment strategies that incorporate the best science available should be adapted to fit local ecological circumstances.

The Taos County CWPP Core Team identifies and rates the risk to all 61 named Taos County communities, primarily by prioritizing fuel loads to be reduced (see the Communities at Risk, Chapter 4). This effort has been enhanced by advances in Geological Information Systems (GIS) mapping abilities and services. Other community values such as economic and cultural importance can impact these risk assessments.

Communities within Taos County WUI areas are advised to develop their own specific Community Wildfire Protection Plans to address fire prevention and fire response strategies unique to their neighborhoods, and to justify specific risk ratings. This has become particularly important as home insurance providers have taken a more critical approach to providing fire insurance coverage in neighborhoods in the Wildland-Urban Interface.

Fire risk impacts all communities within Taos County whether they are located in WUI areas or in more agricultural or urban zones. Grassland fires can travel extremely fast. Fire embers can travel long distances based on weather conditions, and the most damage to structure caused by wildfires generally occurs because of remote ignition from flying embers rather than direct contact with the fires. This information points to the urgent need for all communities to acknowledge and take responsibility for wildfire risk, implementing appropriate actions and improving fire resilience in Taos County.

CAR Assessment Process

The 2022 CWPP Update has attempted to more accurately and quantitatively describe the risk to individual communities and neighborhoods. The Core Team refined the number of named and ranked communities from the 65 that were included in the 2016 update to the 62 that are listed in this document. A detailed explanation for the refinement of each community is listed in the Communities at Risk Ratings Table below.

The 2022 risk assessment process started using the original Community at Risk (CAR) ratings from the 2009 and 2016 CWPPs. The original ratings used maps drafted from the Forest Guild ERA collaborative with Northern Arizona University, professional forestry map inputs and consultations, as well as community knowledge and updates.

The 2016 CAR Communities at Risk ratings were reviewed through a series of Core Team meetings during 2015. The CWPP Core Team reviewed the 65 communities from the original CAR ratings and determined if changes were required. During discussions, input from state forestry professionals was considered and it was agreed that NM State ratings would drive the process, reflecting current knowledge of fuel loads on both private and federal lands. The Village of Taos Ski Valley made a compelling case for the ratings to reflect the economic impact of fire in that community.

For the 2022 update, a subcommittee of the Core Team consisting of Taos County WUI Coordinator J.R. Logan, Carson National Forest East Zone Fire Management Office Raymundo Corral, and NFPA Certified Wildland Fire Mitigation Specialist Chris Coté completed NFPA Form 299/1044 for each of the 61 communities, arriving at a numerical hazard rating for each community. These numerical ratings were then categorized to define “High” (equal to or greater than 70), “Medium” (between 60 and 70) and “Low” (less than or equal to 59) community risk. This process resulted in a similar distribution of hazard ratings compared to the 2016 CWPP Update. For example, there were 20 high-risk communities in 2016, compared to 23 high-risk communities in 2022.

There are two primary advantages for providing a numerical rating to each community while also documenting the risk assessment for each community based on industry standard criteria. First, a numerical ranking provides far more objective detail for the CWPP Core Team in determining which communities are at the highest risk to wildfire. This detail makes it possible to identify those characteristics of a community that the CWPP Core Team is able to address in order to reduce that risk rating (fuel reduction, improved ingress/egress, building design, etc...). Second, the numerical ranking makes it possible to track and provide evidence for progress in wildfire risk mitigation efforts, even if a community does not necessarily move from a “high” hazard to a “moderate” hazard categorization.

Taos County Communities At Risk Ratings (CAR)

The table below shows the communities included in the 2016 CWPP Update and the corresponding risk rating; as well as the communities included in the 2022 CWPP Update, the numerical hazard rating and corresponding risk rating. A spreadsheet that includes this table, as well as tabs showing the individual risk rating forms for each of the 62 communities in this update can be [viewed and downloaded at this link](#).

Utility Infrastructure

Overhead power lines are among the leading causes of wildfire nationwide. Lines coming into contact with tree limbs and other vegetation have caused some of the largest and most

destructive fires in state history. These fires are also an enormous liability to the utilities that own and operate the lines. Shifting climatic conditions and narrow utility rights of way have culminated in an extremely dangerous situation in which the tree trimming operations of small, rural utilities have been unable to keep pace with the amount of hazard trees that threaten power lines and poles. Similarly, fire that may not be caused by overhead lines, but which causes damage to these lines, can threaten the reliability of the electric grid as well as internet service providers who use these same lines. A wildfire that destroys several miles of line could leave thousands without electricity and internet service for weeks, not to mention the immediate potential impact to emergency service communications during a disaster event. Kit Carson Electric Cooperative is the rural electric cooperative that provides electricity to all of Taos County, and beyond. The co-op is a member of the CWPP Core Team, and in collaboration with other partners, such as the Forest Service and Taos County, the co-op has taken an aggressive approach to trimming trees in the highest risk area in recent years. However, additional support and funding is needed to make meaningful progress in reducing the likelihood of wildfire being caused by overhead power lines, while also protecting grid infrastructure from the impacts of a wildfire. Opportunities also appear to exist with New Mexico Forestry Division, which specifically included “accelerated management” of utility rights of way as one of the priority strategies in the 2020 New Mexico Forest Action Plan.

Recreation Infrastructure

Taos County is home to three downhill ski and snowboard areas (Taos Ski Valley, Red River Ski & Summer Area, and Sipapu Ski & Summer Resort) and one cross-country ski area (Enchanted Forest Cross Country Ski Area). Combined, these recreational facilities are major attractions, and serve as economic anchors for the entire region, especially as direct and indirect employers in the tourism and service industries. These facilities are also located in high-risk wildfire areas, and are under increasing threat to destructive wildfire. Additionally, these resorts also attract expensive residential development in forests that are prone to high-severity, stand-replacing wildfire.

2022 Taos County CWPP — Communities at Risk Ratings					
2016 Community Name	2022 Community Name	2016 Risk Rating	2022 NFPA Score	2022 Risk Rating*	Explanation of Risk Rating Change (if applicable)
El Salto	El Salto	High	122	High	
Shady Brook/Taos Canyon	Shady Brook	High	120	High	
Cabresto Canyon	Cabresto Canyon	High	116	High	
Village of Taos Ski Valley	Village of Taos Ski Valley	High	116	High	
Pinabete Hills	Pinabete Hills	High	109	High	
Gallina Canyon	Gallina Canyon	High	98	High	
La Lama	Lama	High	97	High	
Latir	Latir/El Rito	Medium	94	High	Increased Structure Density; Woodland Enchoachment
(Not Rated)	Apache Canyon	High	93	High	
(Not Rated)	Cañon Heights	(Not Rated)	93	High	
(Not Rated)	Deer Mesa	High	90	High	
(Not Rated)	Turley Mill	High	86	High	
El Valle	El Valle	Medium	83	High	Increasing Fuel Loads; Limited Ingress/Egress
Upper Red River Valley	Upper Red River Valley	Medium	82	High	Increasing Fuel Loads; Limited Ingress/Egress
Tres Ritos/Angostora	Tres Ritos	High	80	High	
Two Peaks	Two Peaks	Medium	80	High	Increasing Structure Density; Limited Ingress/Egress
Valle Escondito	Valle Escondido	High	80	High	
Pot Creek	Pot Creek	High	77	High	
(Not Rated)	Angostura	High	76	High	
Three Peaks	Three Peaks	Medium	76	High	Increasing Structure Density; Limited Ingress/Egress
Sipapu	Sipapu	(Not Rated)	72	High	
Vallecitos	Vallecitos	Medium	71	High	Increasing Fuel Loads; Limited Ingress/Egress
Picuris Pueblo	Picuris Pueblo	High	70	High	
Carson	Carson	High	68	Medium	Minor Road Improvements for Ingress/Egress
Tres Piedras	Tres Piedras	Medium	68	Medium	
Cañon	Cañon	Medium	68	Medium	
Ojo Caliente	Ojo Caliente	Low	68	Medium	Increasing Fuel Loads
Llano San Juan	Llano San Juan	Medium	68	Medium	
Taos Pueblo	Taos Pueblo	High	67	Medium	Decreased Fuel Loads in Bosque and Fire Response
Valdez	Valdez	Medium	66	Medium	
Amalia	Amalia	Medium	66	Medium	
Talpa	Talpa	Medium	66	Medium	
Town of Red River	Town of Red River	High	66	Medium	Reevaluation of Ingress/Egress and Fire Response
Arroyo Seco	Arroyo Seco	Medium	65	Medium	
Cerro	Cerro	Low	65	Medium	Increasing Fuel Loads
Costilla	Costilla	Medium	64	Medium	
Vadito	Vadito	Medium	64	Medium	
Placita	Placita	Low	64	Medium	Reevaluation of Ingress/Egress and Fuel Loads
Arroyo Hondo	Arroyo Hondo	Medium	63	Medium	
Llano Largo	Llano Largo	High	63	Medium	Reevaluation of Ingress/Egress and Fuel Loads
San Cristobal	San Cristobal	Medium	62	Medium	
Weimer Heights	Weimer	Medium	62	Medium	
Chamisal	Chamisal	Medium	62	Medium	
Las Trampas	Las Trampas	Medium	60	Medium	
Llano Quemado	Llano Quemado	Medium	60	Medium	
Questa	Questa	High	60	Medium	Reevaluation of Ingress/Egress and Fire Response
North Los Cordovas	Los Cordovas	Low	58	Low	
Pilar	Pilar	Medium	58	Low	Reevaluation of Ingress/Egress and Fuel Loads
Rodarte	Rodarte	Medium	58	Low	Reevaluation of Ingress/Egress and Fire Response
Ranchos de Taos	Ranchos de Taos	Low	57	Low	
Lower Des Montes	Des Montes	Low	56	Low	
Upper Los Colonias	Upper Las Colonias	Low	56	Low	
El Prado	El Prado	Low	54	Low	
Penasco	Peñasco	Medium	54	Low	Reevaluation of Ingress/Egress and Fire Response
Lower Las Colonias/West Mesa	Lower Las Colonias	Low	53	Low	
Ventero	Ventero	Low	53	Low	
Rio Lucero	Rio Lucio	Low	51	Low	
Stagecoach	Stagecoach	Low	50	Low	
Town of Taos	Town of Taos	Low	49	Low	
Taos Mesa	Taos Plateau	Low	47	Low	
Lower Rio Pueblo/Golf Course	Golf Course	Low	43	Low	
Greater World/Star	Greater World	Low	40	Low	
Kiowa Village	(Not Rated)	High	(Not Rated)	(Not Rated)	Unoccupied
Ojo Sarco	(Not Rated)	Medium	(Not Rated)	(Not Rated)	Not located in Taos County
Versylvia	(Not Rated)	Medium	(Not Rated)	(Not Rated)	Part of Latir/El Rito

*High Hazard >69; Medium Hazard >59

Chapter 6 - Landscape-Scale Treatment Priorities

Summary

The increasing size and destructiveness of wildfires to communities and watersheds in New Mexico has underscored the urgency of the wildfire crisis, and the need to more efficiently plan and implement hazardous fuels reduction and restoration projects to reduce the threat of uncharacteristic catastrophic wildfire while restoring and preserving ecosystem function and services. Limited funding and bureaucratic hurdles mean land managers and community partners must take a landscape-scale approach in order to prioritize treatments in those places where forest work will provide the biggest “bang-for-the-buck,” and make it possible to control fire spread in the event of a high-intensity blaze. This also means strengthening relationships between landowners and land managers — including federal and state agencies, tribal governments, community-based organizations like land grants and acequias, as well as private entities and nonprofits — to effectively address cross-boundary risks. These place-based collaboratives should be of a scale that is large enough to have a meaningful and measurable benefit to the landscape without being so large that local and community-based stakeholders don’t feel a connection to the work and to the results. In Taos County, the Taos Valley Watershed Coalition (320,000 acres) has proven to be a successful model for designing collaboratives of the right scale and the right mix of partners to build trust, coordinate treatments and design projects that have ecological, economic and cultural benefits. This section of the CWPP proposes six collaborative landscapes on forested lands across Taos County in order to multiply and augment the success of the Taos Valley Watershed Coalition, and more effectively address the wildfire crisis for the benefit of everyone in Taos County.

Forest Resilience, Watershed Protection and Fire As A Tool

More than a century of fire suppression, human development and other human impacts to forested lands in Taos County have severely altered natural disturbance regimes that otherwise provided ecosystem balance and maintained ecosystem services like water retention, wildlife habitat and areas for recreation. The “resilience” of a forest ecosystem is defined by its ability to withstand and recover from natural disturbances like wildfire, insect infestation and blowdown. In fact, these disturbances are known to create the kind of “mosaics” on the landscape — with patches of different plant species and different age classes — that increase plant and animal biodiversity while making the overall system more resilient. However, human-caused changes are resulting in disturbances that are of a far greater magnitude (especially in terms of size and intensity) than these ecosystems are able to withstand. When these uncharacteristic disturbances hit, the systems are destabilized, and human communities often lose the ecosystem services upon which they rely. In arid northern New Mexico and Taos County, the ability of forests to capture, hold and release water for the benefit of human

communities is perhaps the most important ecosystem service that these lands provide. To lose this service threatens the viability of communities long after the fire event itself.

The Taos County CWPP Core Team recognizes that it is impossible to undo all of the human impacts that created these augmented disturbances by physically treating every acre of forest with a chainsaw, or even with prescribed fire. As a tactic, members of the CWPP Core Team agree that priority treatments should be located in areas where reduced fuels make it possible to contain and control fire. Evidence from recent fires shows that well-placed treatments can convert a high-intensity, stand-replacing crown fire into a medium- or even low-intensity burn. Such shifts in fire behavior make it more likely to prevent uncontrolled fire from spreading into communities and watersheds. In addition, mixed-severity fire helps to reestablish the “mosaic” of plant types and ages across the landscape, improving the overall resilience of these ecosystems and the services they provide.

The CWPP Core Team also recognizes that an almost instinctual fear of fire of any type is common among residents. Cases where prescribed fires become wildfires, such as the destructive 2022 Calf Canyon/Hermits Peak Fire, for instance, erode public trust in the use of fire as a tool for restoration. While that recent wildfire underscored the need to use caution and improve processes for putting fire on the ground, the CWPP Core Team remains an advocate for the use of prescribed fire, and for the management of natural fire ignitions under the right conditions, to help improve the overall resilience of our forests, watersheds and communities.

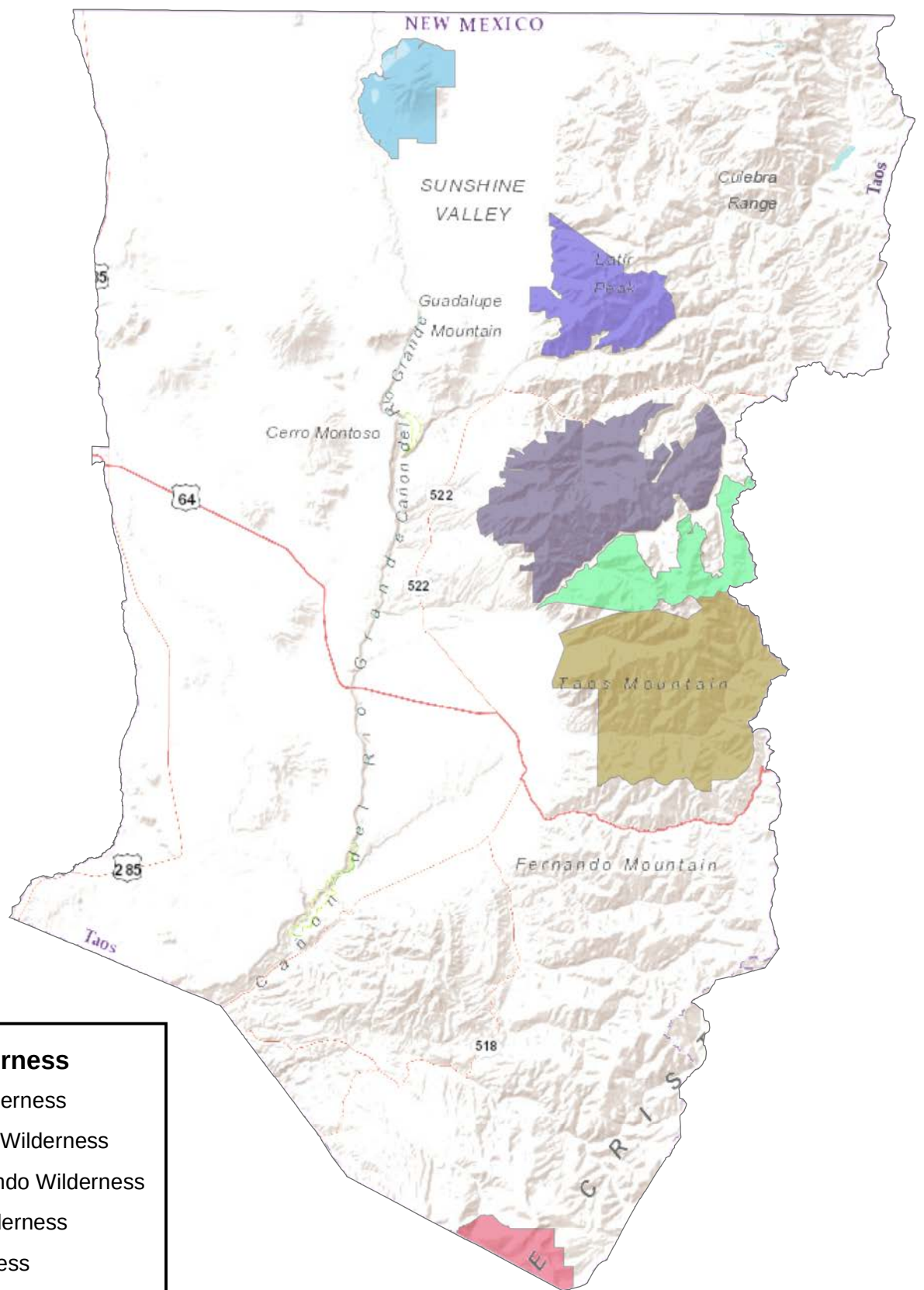
Wilderness

There are six designated federal wilderness areas in Taos County. These include the Pecos, Wheeler Peak, Columbine/Hondo, and Latir Peak wilderness areas on the Carson National Forest; the Cerro del Yuta Wilderness Area administered by the Bureau of Land Management; and the Blue Lake Wilderness on Taos Pueblo lands. Combined, these wilderness areas total 159,571 acres.

Under the 1964 Wilderness Act, motorized and mechanical vehicles and equipment are not authorized for use in designated wilderness areas, except under very limited circumstances. Proponents of wilderness assert that such designations protect natural areas from commercial and industrial development, and provide areas of unique recreational opportunity because of their inherent remoteness and general solitude.

While wilderness designations have generally been supported by residents of Taos County, these designations have also sparked controversy. Some Hispano residents have been especially resistant to recent proposals to expand the Pecos Wilderness boundary in southern Taos County, in part because they view wilderness as a prohibition on active land management and cultural practices, especially fuelwood harvesting.

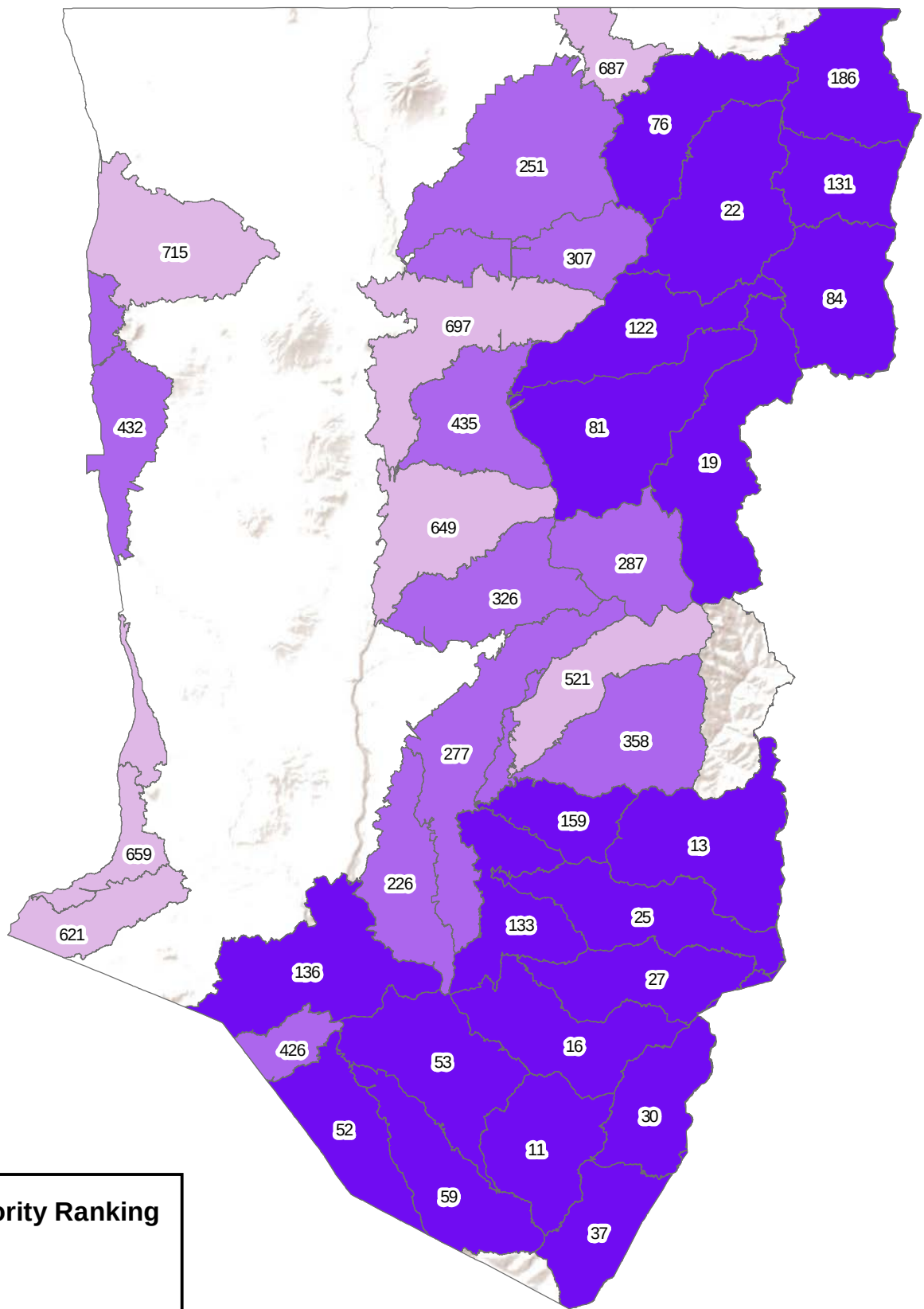
For the purposes of this CWPP Update, limitations on management within wilderness areas presents a challenging scenario. Much of the area now designated as wilderness was created



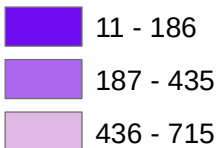
Taos County 2022 CWPP Update Designated Wilderness Areas



0 4 8 16 Miles

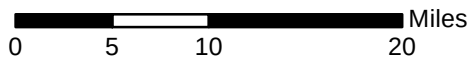


Statewide Priority Ranking



Taos County 2022 CWPP Update

Priority Watersheds Per 2020 NM Forest Action Plan



decades ago, when the threat of catastrophic wildfire was not a major concern. In addition, our collective understanding of forest ecology — especially the importance of frequent, low-severity wildfires in ponderosa pine and dry-mixed conifer — was limited. Today, wilderness that covers these forest types presents a dilemma in that the designations and prohibitions on mechanized management were put in place after humans had already implemented aggressive fire suppression and grazing practices in these areas, resulting in increased fuel loads and changes in forest structure and composition that significantly increase the likelihood of uncharacteristic, stand-replacing wildfire in these zones.

Enchanted Circle Priority Landscape

The 2020 New Mexico Forest Action Plan identifies 10 “priority landscapes” within the state where cross-jurisdictional planning and treatment would have the greatest benefits for protecting communities, water and biodiversity. Among those areas is the “[Enchanted Circle Priority Landscape](#),” which captures most of the northern Sangre de Cristo Range, including the eastern half of Taos County and partitions of Colfax and Mora counties.

In April 2022, the U.S. Forest Service identified the Enchanted Circle Priority Landscape as one of [10 areas across the nation](#) that would serve as a “pilot project” for augmented investment in restoration and wildfire risk reduction efforts. These Initial Landscape Investments were selected based on the following criteria: (1) have projects that are at scale or can be built out to scale, (2) are outcome driven, (3) are collaboratively developed with communities and ready for implementation, (4) allow for investment in underserved communities, (5) could leverage current partner investments, and (6) could maximize use of existing authorities.

Beginning in the spring of 2022, members of the CWPP Core Team began a series of public meetings meant to explain the purpose of the Enchanted Circle landscape, describe the opportunities the pilot presents for local communities, and solicit input on the needs — both the location of activities and ancillary needs such as collaborative support and forest industry capacity — in order to ramp up work while maximizing the benefits for Taos County residents. These meetings were organized based on a taxonomy created by the New Mexico Shared Stewardship Portal, which classifies and organizes geographic areas and treatment boundaries that become progressively smaller and more detailed. The Shared Stewardship initiative (memorialized in a [2019 agreement](#)) is a partnership between the U.S. Forest Service and the State of New Mexico that promotes collaboration across jurisdictions when it comes to planning and implementing treatments. The organizational structure described below improves our collective ability to identify big picture priorities, build collaborative capacity and local community involvement, and coordinate treatments across jurisdictional boundaries. For the purposes of this CWPP, relevant terms are defined as follows:

- **Priority Landscape:** Areas within New Mexico where long-term, strategic planning, investment and implementation will improve the value and condition of the natural resource, reduce the threat to the

resource, and where there is an urgency and an immediate opportunity to act. Priority Landscapes align with HUC (Hydrologic Unit Code) 12 watershed boundaries, which were ranked from 1 to 500 in the 2020 Forest Action Plan as a way to prioritize treatments in the areas of greatest need.

- Focal Area: A landscape scale (approximately 100,000 to 300,000 acres) geography within which collaborative groups can effectively coordinate across jurisdictional boundaries, and effectively plan and implement treatments. As with Priority Landscapes, Focal Areas should align HUC 12 watershed boundaries in order to prioritize and justify treatments located in the watersheds of highest need.

- Project Area: A geography that is typical of an Environmental Assessment/NEPA Analysis (approximately 10,000 to 100,000 acres) within which treatments can be coordinated in sufficient detail to adequately assess and describe existing forest conditions, and propose treatments that can be implemented within a 5- to 10-year timeframe.

- Activity Area: The smallest geographic area (approximately 100 to 1,000 acres) in which site-specific treatment prescriptions, timelines and budgets are planned and implemented. These activities can include hand-thinning, mechanical treatments, and/or prescribed burning.

Taos County Focal Areas and Collaborative Boundaries

For this CWPP Update, forested lands in Taos County have been divided into six Focal Areas. A brief description of each Focal Area is below.

- Lower Rio Pueblo: Approximately 55,000 acres in southwestern Taos County that captures the lower Rio Pueblo to its confluence with the Rio Grande. HUC 12 watersheds include: Arroyo del Alamo-Rio Pueblo de Taos and Arroyo Hondo-Rio Grande. Major land managers include the Bureau of Land Management, Carson National Forest, Picuris Pueblo, State Land Office, Taos Pueblo and the Town of Taos.

- Red River: Approximately 154,000 acres located in north-central Taos County that includes the greater Red River watershed. HUC 12 watersheds include: Upper Red River, Cabresto Creek, Middle Red River, Lower Red River and Rito Primero-Rio Grande. Major land managers include the Bureau of Land Management, Carson National Forest, Chevron Corporation, town of Red River, the village of Questa,

- Rio Costilla: Approximately 205,000 acres located in northern Taos County that captures the greater Rio Costilla watershed. HUC 12 watersheds include: Comanche Creek, Allen Creek-Costilla Creek, Town of Garcia-Costilla Creek, Urraca Canyon, Latir Creek, Casias Creek-Costilla Creek, Latir Creek-Costilla Creek, Ute Creek-Costilla Creek. Major land managers include the Carson National Forest, New Mexico Department of Game and Fish, and the Rio Costilla Cooperative Livestock Association.

- Taos Plateau: Approximately 271,000 acres located in western Taos County that generally follow the Arroyo de la Petaca drainage. HUC 12 watersheds include Cerro Montoso, Town of Carson, Cerrito Negrito, Carson Reservoir-Arroyo Aguaje de la Petaca, Wilson Lake, Cerros de

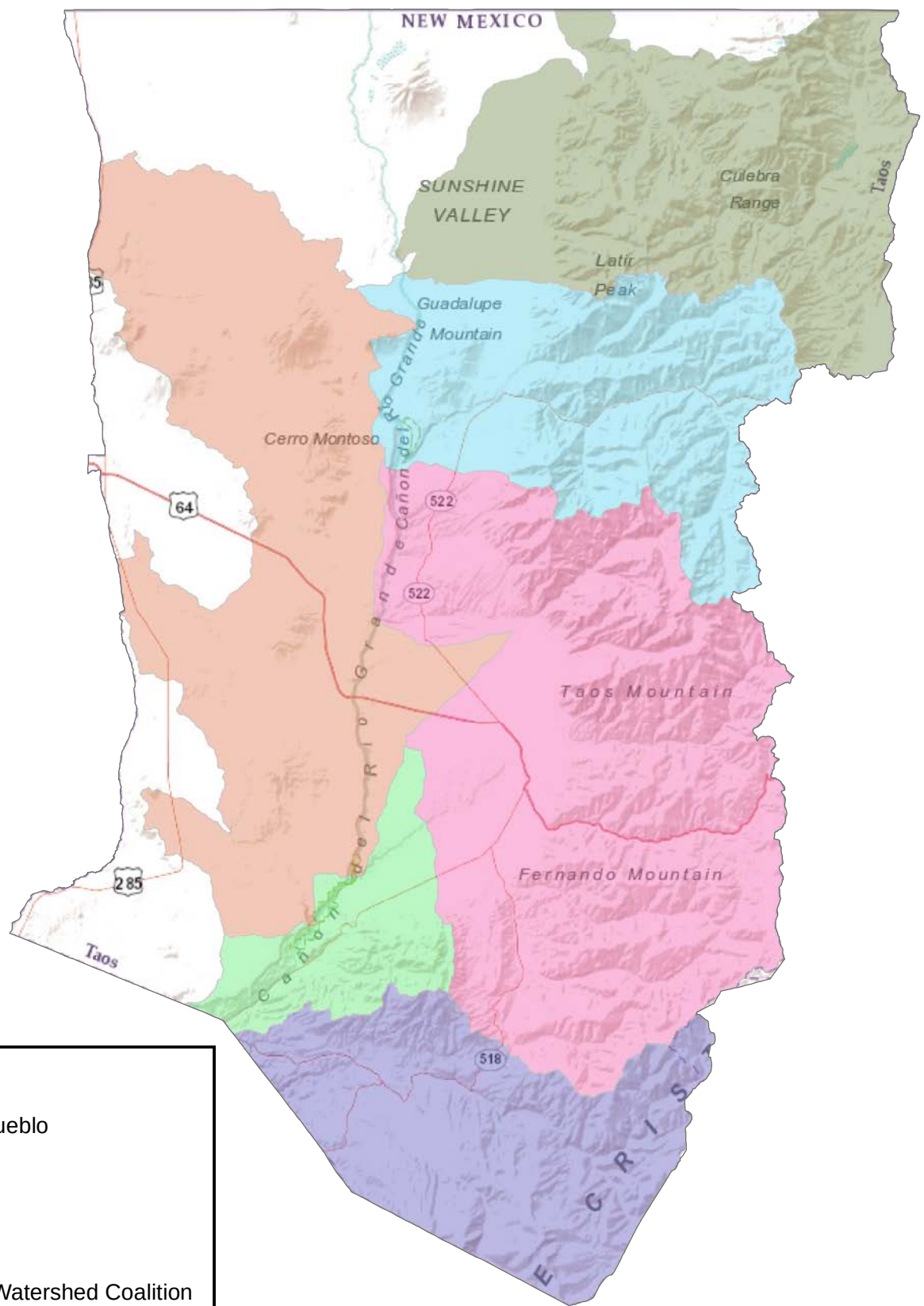
Taos Ranch, Scott Arroyo-Arroyo Aguaje de la Petaca, Rio Pueblo de Taos-Rio Grande, Manby Hot Springs-Rio Grande

Arroyo Punche. Major land managers include the Bureau of Land Management, Carson National Forest and New Mexico State Land Office.

- Taos Valley Watershed Coalition: Approximately 320,000 acres in east-central Taos County that captures all tributaries that feed into the greater Taos Valley/Rio Pueblo watershed. A collaborative group of the same name was convened in 2015 and developed a [landscape restoration strategy](#). HUC 12 watersheds include: Rito de la Olla Headwaters Rio Grande del Rancho, Rio Chiquito, Outlet Rio Grande del Rancho, Headwaters Rio Fernando de Taos, La Junta Creek-Rio Pueblo de Taos, Rio Lucero, Outlet Rio Fernando de Taos, Buffalo Grass Creek-Rio Pueblo de Taos, Headwaters Rio Hondo, Arroyo Seco-Rio Pueblo de Taos, Outlet Rio Hondo, San Cristobal Creek-Rio Grande. Major land managers include the Bureau of Land Management, Carson National Forest, El Salto del Agua Association, Taos Pueblo and the town of Taos.

- Tres Rios Watershed Coalition: Approximately 144,000 acres located in southern Taos County that captures the greater Rio Embudo watershed from the headwaters to the county line. A collaborative group of the same name was convened in 2019 and developed a [forest restoration strategy](#). HUC 12 watersheds include: Lower Embudo Creek, Rito la Presa, Rito Angostura-Rio Pueblo, Osha Canyon-Rio Pueblo, Middle Fork Rio Santa Barbara, Rio Santa Barbara, Indian Creek-Rio Pueblo and Upper Embudo Creek. Major land managers include the Bureau of Land Management, Carson National Forest, Picuris Pueblo and the State Land Office.

A detailed table showing priority activities/treatments for the next five years in each of the Focal Areas is included in Chapter 8. A table showing [activity-level treatments](#) serves as the master list for restoration and fuels reduction work countywide. This list is regularly vetted and updated by the CWPP Core Team and Stakeholders as part of the CWPP Core Team's quarterly meetings, and is also informed by meetings of the collaborative groups in each focal area.



Focal Area

- Lower Rio Pueblo
- Red River
- Rio Costilla
- Taos Plateau
- Taos Valley Watershed Coalition
- Tres Rios Watershed Coalition

Taos County 2022 CWPP Update Shared Stewardship Focal Areas



0 5 10 20 Miles

Wildfire and Forest

Restoration
Planning and
Implementation
In Taos County

**Taos County
Community Wildfire Protection Plan
(2022 Update)**

The county-level CWPP is the foundational document that guides community and watershed protection, it defines local values and assess risk, and provides response and post-fire guidance

Community-level CWPPs



*Focal Area
Collaboratives*

**Gallina Canyon/San
Cristobal CWPP (2021)**

Community level CWPPs provide detailed guidance for treatments, and education and outreach activities in especially high-risk areas

**Taos Canyon CWPP
(2021)**

**Village of Taos Ski
Valley CWPP (2016)**

Taos Pueblo (2009)

Peñasco CWPP (2018)

**Village of Questa
CWPP (2008)**

**Taos Valley Watershed
Coalition (2015)**

**Tres Rios Watershed
Coalition (2019)**

Watershed coalitions collaboratively plan, secure funding and implement projects and activities across jurisdictions and within “Focal Areas”

Chapter 7 - Traditional Uses and Economic Development Opportunities

Summary

Taos County has always struggled to diversify its modern economy beyond the tourism, service and construction industries. While its cultural richness, spectacular scenery, and plethora of recreational opportunities make it an attractive destination for visitors and retirees, its isolation and relatively small population have made it challenging to grow business activity and other economic sectors in ways that are typical of other regions. However, many residents of Taos County are very capable and accomplished woodsmen and women, and they maintain a land-based lifestyle that revolves around wood collecting, piñon nut harvesting, hunting and fishing. While cookie-cutter economic development initiatives have sputtered in northern New Mexico, projects and programs tailored to match local custom and culture could help develop the workforce capacity to meet the enormous restoration needs of the community while building greater economic and social capital, and broader support for wildfire risk reduction and watershed resilience. This section describes how traditional and cultural forest uses are already being leveraged to accomplish restoration objectives that also meet the immediate needs of the community. This section also describes how basic workforce development programs could train locals to become the labor force and natural resources professionals needed to implement and maintain fuels reduction and restoration work for generations.

Traditional Forest Uses and Management in Taos County

Nationally, Census data show that Taos County has one of the highest per-capita rates of firewood use. According to the data, more than 29% of households use wood as a primary source of heat, with an estimated annual firewood demand of more than 12,000 cords. The Carson National Forest sells an annual average of around 11,000 cords worth of fuelwood permits every year. Firewood harvesting within Taos County is almost entirely informal, and for personal use. Families typically purchase “dead and down” fuelwood permits from the National Forest or the Bureau and Land Management, and use their own vehicles and equipment to harvest between 1 to 5 cords per household per year, on average. Despite changing demographics, firewood harvesting, and the collection of aspen latillas and juniper (locally referred to as “cedar”) posts remains commonplace, and often an important family activity. Commercial firewood harvesting in the area is very limited. While some woodcutters (leñeros) prefer large-diameter trees from species such as ponderosa and Douglas-fir, there is plenty of evidence that locals are happy to cut small diameter piñon, juniper and white fir for their personal woodpiles.

The legacy of changes in land ownership, especially by the United States following the American invasion of the region in 1848, remains a sore spot for many residents. Former common lands on Mexican and Spanish land grants were historically used collectively by local residents for various subsistence activities, including harvesting forest products. However,

much of those lands were absorbed by the U.S. Forest Service, as well as lands used by Taos Pueblo, beginning in the early 1900s. Federal management of these lands came with regulations and fees that were foreign to local residents at the time. Many local forest users still feel the agency is prohibitive of forest uses and access to resources, and there is widespread frustration at what locals consider the federal government's "mismanagement" of forests that Hispano and Native American residents consider integral to their culture and traditions. More recently, the agencies and local residents who have long been at odds with one-another have slowly worked to build mutual trust and develop small programs (described below) to address these local grievances while also helping achieve agency management objectives for wildfire risk reduction and forest resilience.

Cultural Burning and Traditional Ecological Knowledge

Ample evidence exists that indigenous burning was a common practice in northern New Mexico for hundreds, and likely thousands of years. Native American tribes were known to intentionally light fires for a variety of purposes, including the creation of fresh forage for wildlife to improve hunting opportunities, and preventing high-severity wildfire by intentionally burning under moderate weather conditions. Only recently have academics and mainstream land managers begun to recognize not only the rich history and cultural value of burning practices, but also the applicability of those practices and other forms of Traditional Ecological Knowledge as part of management strategies to reduce hazardous fuels and restore ecological balance in certain forest systems. Since 2016, Taos Pueblo has begun developing a cultural burn plan to address hazardous fuels in the Blue Lake Wilderness in order to create a "mosaic" of fuel complexes in the Rio Pueblo de Taos watershed and headwaters that will increase resiliency against catastrophic, stand-replacing fire. The CWPP Core Team emphatically supports this effort, and encourages the understanding and adoption of cultural burning and other forms of Traditional Ecological Knowledge in the development of treatment strategies on and off tribal lands.

Forest Industry Capacity and Workforce Development

Currently, there are a handful of thinning contractors operating in Taos County. In the past, contractors have struggled to recruit, train and retain employees, in part because of the inconsistency of work (that is, not enough acres ready and available for treatment on a regular basis), and in part because of competition with other sectors — especially the construction industry — for employees. Wages in the construction industry are generally considered to be higher (\$25/hour entry level) compared to forestry work. In order to build the local workforce, local contractors agree there must be a reliable, consistent supply of year-round work. Per-acre prices for thinning and other treatments must also account for rising insurance and supplies costs, and contractors say they have to be able to pay wages that make forestry more competitive with construction. Because of the anticipated

increase in funding for treatments, the CWPP Core Team agrees that there should be a concerted effort to recruit, train and retain, more forestry employees. There should also be efforts to help stand up more thinning contractors to meet the anticipated demand, and ensure that local contractors are provided ample opportunity to take on large-acre units to keep crews busy for long periods of time.

Careers in Natural Resources

In addition to building a workforce of laborers in forestry and restoration, there is also an acknowledged need to create more opportunities for young people in Taos County who want to enter natural resource related professions. Both federal, state and local agencies struggle to recruit well-educated employees at all levels, especially those who understand the local culture and unique forest conditions in northern New Mexico. UNM-Taos' Climate Change Corps program, and the school's partnership with the forestry department at New Mexico Highlands University in Las Vegas, NM has proven to be a successful pipeline that allows local students to get an affordable education and step into professional agency positions, all without being more than a couple hours from home. The Taos Soil and Water Conservation District's student monitoring crew has been a nice complement to these educational institutions, providing high school students from across Taos County with paid, hands-on experience and connecting them to working natural resources professionals in the area.

Small-Diameter Wood Utilization Strategies

In contrast with other regions in the West, where the market for small-diameter wood material produced by thinning and restoration projects has to be created from scratch, the local demand for firewood and other building materials may make it much simpler to connect products to existing markets. At the moment, most useable wood created by thinning work is left in the woods to be harvested by the public (or on private lands, the landowner). In some instances, thinning contractors and their crews will haul the wood away and sell it as a supplement source of revenue. One local business — Olguins Sawmill and Firewood — regularly sell and deliver hundreds of cords per year. Much of the firewood sales within the county are “off-the-books” sales done out of the back of a pickup truck or advertised on social media. In order to maximize the value of wood products while meeting the local demand for fuelwood and other products, New Mexico Forestry Division and Taos County commissioned a [2020 feasibility study](#) and associated [2021 business plan](#) to assess the potential for creating a process by which wood from treatments is aggregated, processed and sold. The business plan found that such an operation could be profitable while also reducing net per-acre costs, but subsidization in the form of a grant to purchase necessary, small-scale equipment and provide operating capital would significantly increase the chances of success. The CWPP Core Team supports any coordinated efforts to secure grant funding or other resources to purchase

firewood hauling and processing equipment necessary to jump-start small-scale, small-diameter wood utilization.

Forest Workers Certification and Other Training Needs

In order to reduce Workers' compensation insurance rates for forestry contractors, the New Mexico Forest Industry Association provides periodic, on-demand forest worker safety training across the state. Several local contractors take advantage of this three-day initial training program, and well as the one-day annual recertifications. However, in recent years, a demand for a non-professional chainsaw safety course has emerged. Leñeros working on forest mayordomo programs (described below), for instance, have expressed an interest in a one-day or half-day training program that covers basic saw safety and cutting tactics, but no such course is available in the region. Similarly, landowners who own saw equipment and have shown interest in doing their own defensible space treatments at their properties have also said they would take part in such a course. In order to improve general chainsaw safety across Taos County and provide additional information on thinning techniques, the CWPP Core Team supports the development of an amateur chainsaw training program to support homeowners and amateur woodspeople.

Forest Mayordomo Model: A Case Study for empowering traditional communities

Beginning in 2018, traditional communities in Valdez and San Cristobal, in partnership with the Carson National Forest, started using an innovative model to promote healthy watersheds, improve forest health and boost the rural workforce by empowering local residents to thin forests near their villages. Much of the forest around both of these villages is dangerously overgrown, resulting in amplified fire behavior that has the potential to destroy watersheds and decimate these communities

The “forest mayordomo” model, pioneered by the [Cerro Negro Forest Council](#), relies on the labor of local adult woodcutters, known as leñeros, who already gather firewood and other forest materials and who have, for centuries, depended on these resources as a way of life. The leñeros are recruited and organized under the supervision of the forest council which has used grant funding from the Collaborative Forest Restoration Program (CFRP) to hire a mayordomo to oversee the day-to-day thinning work. The mayordomo concept was adopted from the acequia system, which has deep roots in these communities and is a well-understood and well-respected form of self-governance. The mayordomo position in particular is a cultural touchstone in northern New Mexico, representing the collectivist spirit that has long defined acequia culture in the region. The mutually respectful relationship between the leñeros and the mayordomo has been a key component of the success of this project — not just as a tool for accessing wood products and reducing wildfire hazards, but also to promote community cohesion and equity. Leñeros are allotted one-acre blocks in areas that have been prioritized for thinning work. Trees that are to remain (based on a Forest Service prescription) are marked

with paint by the mayordomo. Leñeros take all other trees at their leisure, and keep all harvested material for personal use and/or sale. Leñeros are also reimbursed on a per-acre basis (\$300 per acre) to cover reasonable expenses for equipment wear and supplies. Since early 2019, more than 150 leñeros working as part of the Cerro Negro project have completed 120 acres of thinning, with another 100 acres underway. An estimated 1,000 cords of wood — worth about \$350,000 when processed and seasoned — had been harvested as of summer 2022. The total cost to perform the work comes out to less than \$700 an acre — well below the rate for professional local contractors. Following the same mayordomo model, the Rio de Las Trampas Forest Council has formed and received a CFRP grant to treat more than 200 acres near the village of El Valle. The Santa Barbara Land Grant also started a forest mayordomo project west of Picuris Pueblo in the fall of 2020, and they are set to begin a second project area just south of Chamisal in 2022. Despite its many benefits, there are some limitations to this program. Leñeros tend to work more slowly than professional contractors, and they complete acres in a patchwork across the project area, meaning work is not finished contiguously. Also, leñeros prefer to work in flat or very moderately sloped areas that are within a few minutes driving distance of their homes.

NMFIA Shared Stewardship Agreement: A Case Study for workforce development

As described above, local forestry contractors have found it challenging to secure consistent work to maintain a revenue stream and keep employees working. Part of the reason has been that local contractors have not been able to compete in the federal contract bid system, which tends to favor larger, out-of-state operators. Until very recently, almost all Forest Service thinning work has gone to out-of-state companies that hire cheap labor and have the know-how to navigate the complexities of the federal bidding and contracting systems. This status quo approach has gotten work accomplished on the ground, but it's left capable locals sitting on the sidelines.

But in 2020, the New Mexico Forest Industry Association (NMFIA) and the Carson National Forest signed a Stewardship Agreement that makes it easier for locals to access work on Forest Service lands. The association is a nonprofit advocacy group that promotes forest health and community-based economic development across the state. It is focused on promoting professionalism, safety and best practices for forest restoration and sustainable timber harvesting to protect communities and watersheds. In the last two years, local contractors and crew have successfully completed more than 400 acres of hand thinning work, employing dozens of locals and keeping them busy for most of the year. In 2022, the agreement between the Carson National Forest and NMFIA was renewed, meaning there will likely be more acres available to local crews as thinning and related restoration work ramps up in the coming years.



A leñero with the Cerro Negro Forest Council project



Local woodcutters are eager to harvest products produced by forest thinning

Chapter 8 - Emergency Fire Response

Fire Response Capacity

Taos County government supports the 13 volunteer fire departments administratively. It also supports the communities and private property owners within the county by providing WUI outreach, information and planning. Taos County supports and partners with the four municipal Fire Departments in the County; Red River, Questa, Village of Taos Ski Valley, the Town of Taos, as well as neighboring counties. The county provides administrative support through the County Fire Chief position. This position is tasked with coordinating the various municipal and volunteer fire departments. Wildfire has no jurisdictional boundaries and collaboration benefits us all.

The Enchanted Circle Regional Fire Protection Association ([ECRFPA](#)) and the Local Emergency Planning Committee (LEPC) have taken the initiative to plan for and prepare the firefighting and regional Emergency Management Systems (EMS) for the events of wildland fire. This group holds regular monthly meetings.

The Taos County Office of Emergency employs an Emergency Management Director and Emergency Management Coordinator. The office has also completed an All Hazards Mitigation Plan (based on a checklist sent by Homeland Security), that will include all agencies and municipalities and must be approved by FEMA. Wildland Fire Emergency Response Capability and Planning covers topics such as first responder capabilities, OEM integration, and individual responsibilities. Evacuation plans, smoke shelters, livestock and pet sheltering are covered.

In coordination with the Taos County EMS director, the County utilizes the [Enchanted Circle Mobilization Guide](#) (ECMG). The ECMG is designed as a reference guide for regional dispatchers to deploy the appropriate and available resources for wildland fire events.

Federal Resources

Forest Service: Three ranger districts of the Carson National Forest lie within the Protection Zone; the Camino Real Ranger District, the Tres Piedras Ranger District and the Questa Ranger District. Each ranger district staffs a Type 6 Engine, and is capable of recruiting one or two Type 2 crews. In addition, the Forest Service hosts an Interagency Hotshot Crew (Carson Hotshots), and significant overhead qualifications exist on Forest Staff. During peak season, the Forest typically flies a daily aerial recon, but no Helitack or SEAT capability is routinely staffed locally. There are two staffed helibases in the Santa Fe area. The USFS stewards a major portion of the wildfire risk areas in Taos County and has a significant amount of experience and qualifications for managing fire.

Bureau of Indian Affairs: Taos Pueblo can typically field Type 6 Engines and a Type 2 handcrew. After the Encebado Fire in 1996, the Pueblo has put much work into a large fuel break at the toe of the slope on the tribal land. (See cover photo). Work on Tribal land will continue with grant money.

Bureau of Land Management: The Taos Field Office of the BLM maintains a Type 2 Initial Attack (IA) handcrew, several Type 6 Engines, and a Type 3 Engine. Significant overhead positions also exist within their staff, including Burn Bosses and Type 3 Incident Commanders. The Taos BLM has a very progressive prescription burn policy and treats many acres annually to return lands to a more natural fire regime.

State Resources

New Mexico State Forestry: The Cimarron District has primary responsibility for non-federal and non-municipal lands within the Protection Zone. They routinely staff two Type 6 Engines from the District Office in Ute Park (east of the Protection Zone). During peak fire season, they often have an aerial recon capability, may host a Type 2 or Type 3 Helicopter and helitack crew, and utilize contract engines for patrol and initial attack. They often utilize local fire department resources through joint powers agreements to meet their initial attack mission. The Chama District is responsible for private lands on the west side of the Rio Grande River within Taos County and also routinely staffs 2 Type 6 engines.

Local Resources

Local Volunteer Fire Department Resources: Some, but not all local volunteer fire departments train and qualify their personnel to National Wildfire Coordinating Group (NWCG) standards. Access to training courses by local firefighters is generally good. However, completion of task books in quality training assignments has been more problematic. This is due primarily to two factors. First, most of these local firefighters are volunteers with job and family obligations that limit their ability to accept two week training assignments. Second, there are only a limited number of personnel within the local fire departments who can function as qualified trainers/evaluators to sign off on task book experiences. As a result, many initial attack experiences go unevaluated and undocumented.

With time, this qualification bottleneck should resolve, but it has produced a logjam of personnel currently attempting to qualify at the single resource boss level. Overhead qualifications beyond the single resource boss level are severely limited within the ECRFPA, and this group relies heavily on its State and Federal partners to provide incident management and logistical functions.

Significant engine and water tender capacity exists within the member departments of Taos County and the ECRFPA. While engine capacity is strong in this group, it is recognized that

most areas within the Protection Zone are not accessible to engines. Therefore, additional resources have been developed that include a Type 2 IA hand crew.

In addition to its existing staff positions, Taos County now plans to develop its own wildland fire crew to improve response and initial attack on wildland fire incidents in the area. The crew will also be able to support training and certification for volunteer fire departments and their members.

Mobilization

Resources within the protection area are dispatched through either Taos Central Dispatch (County) or Taos Dispatch Center (Federal). The mobilization of these resources occurs through a formal dispatch protocol (Enchanted Circle Resource Mobilization Guide) that is updated annually. This protocol utilizes an escalating resource assignment scheme that is tied to Energy Release Component (ERC) and preparedness levels (one to five). This protocol has proven effective for initial attack, however it is recognized that it will probably be inadequate in an extended attack scenario.

For more detailed information, please follow this link to the Mobilization Guide:

http://ecrfpa.org/ECRFPA_MobGuide.htm

Fire Response Capacity Summary

Adequate initial attack fire response within the Protection Zone depends heavily on collaboration and coordination between federal, state, local, and private contractor resources. The current level of coordination and collaboration is reasonably good and improving. The ECRFPA annually hosts a Wildfire Coordination meeting with excellent attendance from many agencies and groups and plans to continue the event each spring to organize efforts for the upcoming season. Taos County also hosts quarterly Community Wildfire Protection Plan (CWPP) meetings with diverse community and agency attendance. These meetings serve to discuss ongoing projects and project priorities.

Engine resources are relatively plentiful and generally available across all agencies. However, terrain and large roadless areas significantly limit the utility of engine resources. Slow mobilization, unpredictable quality, and the need for extensive logistical support can limit the utility of typical Type 2 hand crews for initial attack. Several Type 2 IA hand crews have been developed in the area, and have proven productive. During most of the southwest fire season, Type 1 hotshot crews are relatively available. The development of quality initial attack capable hand crew resources in the area deserves continued emphasis. Call-When-Needed (CWN) ships are generally available, but the flight time from the Santa Fe area is quite long.

Most homes are saved or lost during initial attack and extended attack. Well qualified and experienced overhead personnel are critical to achieving good outcomes. There is a relative shortage of overhead personnel within the Protection Zone. Continued emphasis at the single resource level (ENGB, CRWB) and ICT4 is well justified. However, additional effort should be directed towards developing Strike Team/Task Force Leader, Burn Boss, Division Supervisor, ICT3, and SOF3 qualified personnel. This call for emphasis on developing these overhead positions should not be construed as advocating “fast tracking” the qualification process. Real position skill and confidence comes from well supervised quality training assignments, and rigorous qualification requirements.



The 2022 Hermits Peak/Calf Canyon Fire burning just south of Taos County

Chapter 9 - Preparing for Fire and Post-Fire Recovery

Fire Adapted Communities New Mexico Learning Network

Fire adapted communities depend on education and outreach to inform the public on how to be responsive to the threat of wildfire. The underlying premise is that everyone, no matter what their role, can play a part to reduce fire risk in our communities. Communities in wildfire prone areas can work together to be fully prepared for wildfire. Recommended actions address resident safety, homes, neighborhoods, businesses and infrastructure, forests, parks, open spaces and other community assets. Homeowners and communities, working as partners with firefighters, can effectively reduce losses caused by wildland fires. Learn more at the Fire Adapted New Mexico Learning Network website: www.facnm.org

Firewise Communities and Taos County Firewise Network

Neighbor to neighbor we are linked by our wildfire risk. If one home is adequately prepared, the risk level to the entire neighborhood is improved, and everyone is safer. And conversely, careless or inadequately prepared neighbors increase the risk to the whole neighborhood.

With the help of New Mexico State Forestry Division, Cimarron District Fire Management Officer and the Taos County WUI Coordinator, at least 11 communities are embracing the key principles associated with the Firewise Recognition Program. Using a five-step process, communities develop an action plan that guides their residential risk reduction activities, while engaging and encouraging their neighbors to become active participants in building a safer place to live.

Learn more about the Firewise Recognition Program:

www.firewise.org/usa-recognition-program

The Firewise Communities Program has been implemented across the United States since 2002. The Firewise Communities/USA Recognition Program has empowered neighbors to work together in reducing their wildfire risk. Join the growing network of more than 1,300 recognized Firewise communities from across the nation taking-action and ownership in preparing and protecting their homes against the threat of wildfire. Scientific research has shown the effectiveness and benefits of implementing wildfire mitigation concepts across individual property boundaries and throughout communities.

Using a five-step process, communities develop an action plan that guides their residential risk reduction activities, while engaging and encouraging their neighbors to become active participants in building a safer place to live. Neighborhoods throughout the United States are embracing the benefits of becoming a recognized Firewise Community – and you can too!

The following steps will get your community started and on their way to receiving their official Firewise Communities USA recognition status, and the honor of proudly displaying their own high-profile signage along with many other benefits. Firewise recognition for communities is confirmation that wildfire risk is taken seriously by its residents. The safety of the community is enhanced and that commitment is a consideration when treatment programs and other resources are allocated.

The five steps of Firewise recognition:

1. Obtain a wildfire risk assessment as a written document from your state forestry agency or fire department.
2. Form a board or committee, and create an action plan based on the assessment.
3. Conduct a “Firewise Day” event.
4. Invest a minimum of \$2 per capita in local Firewise actions for the year.
5. Submit an application to your State Firewise Liaison. The NM State Firewise Liaison is based out of the NM Forestry Division office in Santa Fe.

Risk Assessment: A critical component of the Firewise recognition process is the creation of a wildfire risk assessment report for the neighborhood. Individual home and property owners are encouraged to use the assessment process to determine structural ignitability, to create defensible space, and to identify other factors that can improve survivability. The planner that conducts the assessment follows National Fire Protection Association (NFPA) recommendations and uses Form Checklist NFPA 299 / 1144 to develop these risk assessments.

Defensible Space: Increase the chances of your home’s survival by making the right decisions now about defensible space. Defensible space is a series of buffer zones that surround a structure. Different fire prevention treatments are appropriate for each zone. There is the Access Zone, the Defensible Space Zone, and the Build Zone.

The greatest danger to a home exists from direct contact with wildfire but structures are also vulnerable to ignition from traveling embers that can ignite common items found on structures and around Structural Ignitability

A human built structure can be considered a type of fuel. How a building is constructed and the adjacent fuels can determine whether the structure will ignite or not. If one structure ignites, it can burn with enough intensity to ignite adjacent structures. Most homes ignite either by direct flame impingement or by firebrand ignition. A “Fire Hardened” home can prevent this fate.

Direct Flame Impingement: Depending on the intensity of the fire and the building construction, direct contact with flame and heat can result in ignition. Reducing hazardous fuels around a structure can prevent ignition from flame impingement. Separation of the structure from other human created fuels (sheds, woodpiles, wood fences, etc.) can make a difference. “If it’s attached to the house, then it is a part of the house,” states Jack Cohen, Research Physical Fire Scientist with the USDA Forest Service Missoula Fire Sciences Laboratory.

Firebrand Ignition: Most wind driven fires, especially crown fires, will have firebrands (flaming embers) preceding the flame front. These firebrands emulate snow in a blizzard and accumulate in, on and around structures. Susceptibilities include flammable roofs, roof gutters loaded with leaves and needles, open gable-end vents, flammable decks and porches with ignitable items on them (furniture, wood piles, etc.); anyplace where firebrands can drift, settle and pile up. Any fuel beds within several feet of the structure, which are receptive to firebrands, could also ignite and spread to susceptible parts of the structure. Learn how simple landscaping and home construction techniques can improve your chances of your home surviving a wildfire encounter.

Ready, Set, Go!

The [Ready, Set, Go! New Mexico Program](#) seeks to develop and improve the dialogue between fire departments and the residents they serve. Launched nationally in March 2011, the program helps fire departments to teach individuals who live in high risk wildfire areas – and the wildland- urban interface – how to best prepare themselves and their properties against fire threats. The following descriptions of the Ready, Set, Go! steps come directly from the New Mexico program:

READY: Being “Ready” for wildfire starts with maintaining an adequate defensible space around your home. Clear dry brush and vegetation away from the outside of your home starting in the 5-foot zone and working your way out to the 100- to 200-foot zone. Without this buffer, the fire will quickly spread through surrounding vegetation to your home. Consider fire resistant landscaping and hardening your home with fire-resistant building materials. Flying embers from a wildfire can destroy homes up to a mile away.

SET: Prepare yourself and your home for the possibility of evacuation BEFORE wildfire arrives. Follow these simple steps to get “Set”:

- Create a Wildfire Action Plan that includes evacuation planning for your home, family and pets
- Assemble an Emergency Supply Kit for each person in your household

- Fill out a Family Communication Plan that includes important evacuation and contact information
- Stay informed by following local media, local fire alerts, and county emergency notifications.

GO: If there is an active wildfire in your area, be prepared before it's time to Go!

If time allows, review your Wildfire Action Plan and complete the Pre-Evacuation Preparation Steps in the RSG guide. Load your emergency supply kit and evacuation bags (including pet kits) into your vehicle and park facing the road for a quick exit. You don't need to wait for an evacuation order. If you feel threatened, then evacuate early. When an evacuation order is issued, there is no time to waste. Ensure your bags and kit are in your vehicle, locate and load your pets, wear clothing that will protect you against heat and flying embers, and GO!

Living with Fire Guide: New Mexico

The 2018 Living with Fire Guide New Mexico provides recommendations and resources to homeowners, educators, community groups, and firefighting professionals to prepare for wildfire and reduce wildfire threats to homes and communities. LWF is a collaborative effort among federal, state, local firefighting agencies, and resource management agencies in New Mexico and across the nation. The LWF program is managed by the University of Nevada Reno, Extension, an EEO/AA institution.

The 2018 guide itself is available for download in [English](#), as is the [2005 Spanish version](#).

Agency Resources for Homeowners

In addition to the resources and literature described above, state and local government agencies are available to answer homeowner questions and point them to additional technical resources. These agencies also have expertise in securing funding to complete thinning and restoration treatments.

New Mexico State Forestry Division: The New Mexico State Forestry Division (NMFD) under the Energy, Minerals and Natural Resources Department (EMNRD) is a state and federal funded agency. The Cimarron District is responsible for private Taos County lands east of the Rio Grande. The Chama District is responsible for all private Taos County lands west of the Rio Grande. The Division's priorities include the treatments in the Wildland-Urban Interface, protection of watershed and timber resources, as well as maintaining healthy and productive forests. The Forestry Division also has statutory suppression responsibility for all wildfires that are burning on private and state lands within the state.

Division staff collaborate with other agencies and municipalities to implement fuels treatment projects to mitigate the threat of catastrophic wildfire. They also provide technical assistance

to partner organizations and private landowners, and proudly work with communities to improve urban forests through the Re-Leaf Program.

Forest Division also participates in several nationally-recognized programs that guide home and landowners with wildfire prevention and preparation. District liaisons work with communities in their area to develop individual wildland fire prevention and preparedness plans. Interagency programs — such as Ready, Set, Go!, Smokey Bear, Living with Fire, Fire Adapted Communities, and Firewise USA — allow communities to tailor programs to fit their population size and local landscape.

To find out more about Forestry Division, visit: <http://www.emnrd.state.nm.us/SFD>

Taos Soil and Water Conservation District: The Taos Soil and Water Conservation District is a taxpayer funded resource that provides technical and financial assistance to local landowners to develop defensible space areas around homes and structures located in the wildland urban interface. Utilizing a professional forestry consultant, the District implements fire prevention strategies as well as overall improvement of forest health in critical areas of Taos County. The District provides for professional terrain risk assessment and private landowners can apply for Fire Prevention Program grants that provide cost share assistance for up to three acres of defensible space work. The District is also called on to assist in the deployment of Non-Federal Land Grants (NFL) that may be available for properties adjacent to Carson National Forest. For more information about the Taos Soil and Water Conservation District: <http://tswcd.org>

Taos County:

Taos County government plays a significant role in coordinating local, state, and federal efforts for emergency response to fires and for fuel reduction and mitigation projects. The County's WUI Coordinator is the focal point for education and outreach efforts, for fire response readiness, and for risk assessments and other Firewise related activities. Taos County Long Range Planning is responsible for integrating CWPP recommendations into the Taos County Comprehensive Plan and Emergency Management and Hazard Mitigation Plans.

The Taos County CWPP Core Team is the primary point of contact to discover resources and funding that may be available to help private property owners and at-risk communities. Grant opportunities exist for the implementation of hazardous fuel reduction projects, education, NEPA clearances, volunteer fire department resources, and CWPP development. See Appendix C for a comprehensive list. Most grant opportunities require coordination among the agencies and stakeholders of the CWPP Core Team and NM State Forestry funding requires Core Team approval.

Codes and Standards

The 2019 Taos County Land Use Regulations include a process for determining the wildfire risk for any sites where development is proposed. The regulations also include development standards that require property owners in designated high-risk WUI areas to adhere to building materials, techniques and vegetation control that all reduce the risk of structural ignitability. Those standards, based on national standards and guidance from the National Fire Protection Association and other entities, define three “zones” around homes and other structures and prescribe mitigation efforts within each zone to reduce the risk of ignitability. Zones include:

Zone 1: Non-Combustible Zone — Area immediately surrounding the home (0’ to 5’ radius) where construction materials should be resistant to ignition, and where building methods should reduce the likelihood of embers igniting a fire.

Zone 2: Lean, Clean and Green Zone — Area close to the structure (5’ to 30’) where continuous fuels should be removed and needle litter and any other flammable material should be kept clean to prevent the spread of fire within this zone.

Zone 3: Wildland Fuel Reduction Zone — Area beyond the immediate envelope of the structure (30’ to 100’) where “ladder fuels” (small trees and shrubs under larger, more mature trees) should be removed to prevent fire from moving into tall tree canopies.

The 2019 Taos County Land Use Regulations require that landowners seeking a building permit in potential Wildland-Urban Interface zones undergo a risk assessment, performed by the Taos County WUI Coordinator, to determine whether the property is at “high risk” to wildfire. Properties deemed to be within a high-risk zone must meet the following requirements:

Building Material Requirements

- Any residential structures must have metal roofing
- The underside of all eaves and soffits of any residential structures must be protected with a minimum 1-hour fire-resistance-rated construction materials.
- Fascias of any residential structures must be protected on the backside by materials approved for 1-hour fire-resistance construction, or 2-inch nominal dimension lumber.
- Gutters and downspouts of any residential structures must be constructed of noncombustible materials.
- All residential structures shall have all under-floor areas enclosed to the ground with exterior walls built, at minimum, of 1-hour fire-resistance-rated materials.

- All unenclosed accessory structures attached to a building with habitable spaces and projections such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction, or approved non-combustible materials.
- All exterior windows, window walls, and glazed doors, windows within exterior doors and skylights on residential structures shall be multi-layered glazed panels, glass block, or have a fire protection rating of not less than 20 minutes.
- Exterior doors shall be approved, noncombustible construction, solid core wood not less than 1 ¾ inches thick (45mm), or meet a 1-hour fire protection standard.
- Attic ventilation openings, foundation or under-floor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed ¼ inch.
- Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least ten (10) feet from property lines. Under-floor ventilation openings shall be located as close to grade as practicable.

Vegetation Control Requirements

- All non fire-resistant vegetation within 30' of the residential building envelope must be removed.
- Vegetation within 100' radius of the building envelope must be thinned to eliminate fuel continuity and ladder fuels, as directed and verified by the Taos County WUI Coordinator.

Post-Fire Recovery

Experiencing a destructive wildfire can be devastating. NM Forestry Division, USDA Forest Service and numerous additional stakeholders have compiled an excellent guide for New Mexico communities seeking to recover after a wildfire has struck. It includes information on how to mobilize your community, a list of resources available to communities and individuals for assistance, and a technical guide with information about post-fire treatments to address the catastrophic effects of a wildfire on the land and to prepare for potential flooding. Reading this guide before a wildfire occurs can help community members plan ahead.

The guide, available online, includes information about immediate post-fire safety, mobilizing your community, list of resources, post-fire treatments, financial tips, flood information and other resources. For more information, visit: www.afterwildfirenm.org

Chapter 10 - Goals and Recommendations

CWPP Core Team

In order to maintain the momentum that's been created in Taos County since 2009, the Taos County CWPP Core Team commits to meet at least quarterly to review the updated action plan, share progress on action items, collaborate on funding and project implementation, and recruit new partners to be part of wildfire risk reduction efforts countywide.

In addition, CWPP Core Team members should consider helping to establish collaborative groups in those focal areas where such groups don't yet exist (Lower Rio Pueblo, Rio Costilla, Taos Plateau, Red River). Where collaboratives already exist and are active (Taos Valley Watershed Coalition and Tres Rios Watershed Coalition) CWPP Core Team members and CWPP Core Team Stakeholders should be stay involved in the quarterly meetings to ensure alignment with the CWPP and bring relevant information and ideas back to the CWPP Core Team.

Public Education and Outreach

A complete table of Public Education and Outreach goals is included below. The intent of these goals is to expand public awareness of the risk posed by catastrophic wildfire to communities and watersheds, and encourage public participation in risk reduction efforts.

Improve Fire Response & Emergency Management Capability

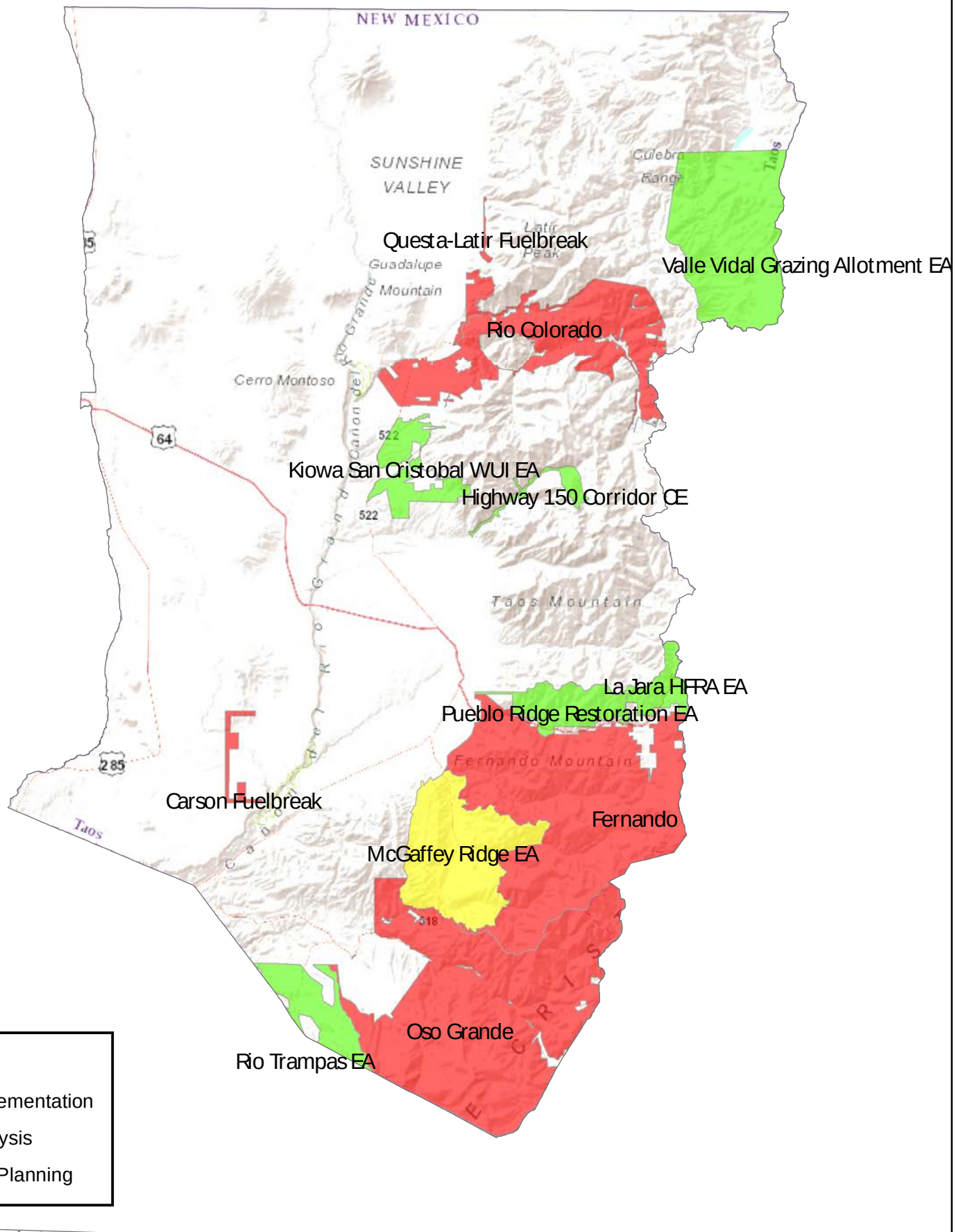
Over the next five years, the CWPP Core Team commits to coordinating fire response planning, training and mutual support between local, state and federal agencies. Taos County is also taking steps to field a wildland fire and fuels crews to improve initial attack on wildland fire, and provide additional support to volunteer fire departments with respect to equipment inspections, training and certifications.

Structural Ignitability

Taos County and members of the CWPP Core Team commit to a thorough review of the existing Taos County Land Use Regulations to ensure that the code adheres to the most current recommendations for creating defensible space, utilizing ignition-resistant materials and promoting building design and layout to minimize the likelihood of structure ignitions, especially in high-risk zones. The CWPP Core Team also commits to sharing information about structural ignitability and regulatory steps available to local governments with all incorporated municipalities within Taos County.

Taos County 2022 CWPP Education, Outreach and Capacity Building Priorities			
Activity	Priority Level	Benefits	Partners
Updated Taos County Wildfire Plaza website	High	Provides a "landing page" for all things wildfire related in Taos County. Provides updates on treatments, meeting dates and ways for the public to get involved with existing projects and programs	Taos County, Focal Area Collaboratives, Firewise Communities
Create short video aimed at property owners to help describe different forest types, different fuel reduction treatments in each forest type	High	Help landowners understand the specific ecology and fire behavior where they live, and recognize the need to use different treatment in different areas	Taos Soil and Water Conservation District, Taos County
Provide reliable funding for collaborative group creation and facilitation	High	Help stand up new collaborative groups and ensure consistency in collaborative organization, planning, project management within all Taos County Focal Areas	Forest Service, Taos County
Encourage county and municipal governments to establish stand alone wildfire risk reduction and watershed protection funds to provided necessary match for grants and post-fire recovery efforts	High	Ensures that local governments have resources to leverage federal and state fundign sources, and provides a "rainy day fund" to cover match costs associatied with post-fire recovery efforts	Taos County, local municipalities
Support community-level chipper days to ensure that this service is provided consistently in neighborhoods/Firewise communities	High	Provides incentives for residents to do thinning and slash clearing themselves while ensuring that these fuels are removed from high-risk areas safely and in a timely manner	Taos County, Kit Carson Electric Cooperative, Firewise communities
Stand up county-level wildland fire crew to assist with initial attack, volunteer wildland fire training, and prescribed fire support	High	Purchase necessary equipment and supplies and hire dedicated crew to build local wildland fire training and response capabilities, and increase local suppoort for prescribed and managed fire activities	Taos County, New Mexico Forestry Division, Carson National Forest
Interactive online map showing current activities	Medium	Gives property owners access to up-to-date list of professional service providers, and helps property owners understand the costs associated with hiring crews to create defensible space	Taos County, Agency Partners, Focal Area Collaboratives, Firewise Communities
More robust resources for Firewise Communities, including updated list of active contractors, easy-to-access cost-share and grant programs, and regular meetings of the Taos County Firewise Network	Medium	Helps provide direction and inspiration to Firewise communities who want to be proactive about landowner engagement and action in their communities	Taos County, Taos Soil and Water Conservation District, Firewise Communities
Begin dialogue between local communities, land managers and wilderness advocates to explore options for limited treatments to protect communities and wilderness for catastrophic wildfire	Medium	Address hazardous fuels in dry forests that sit within designated wilderness boundaries on Forest Service, BLM and tribal lands	Focal Area Collaboratives, Taos Pueblo, Forest Service, BLM, Local Communities
Chainsaw training course for leñeros and homeowners	Medium	Increase safety and encourage more responsible chainsaw use to reduce hazardous fuels, especially on private lands	Taos County, Taos Soil and Water Conservation District; Rocky Mountain Youth Corps
Pursue options for workforce development to support local forest industry	Medium	Recruit, train and retain competent workforce to create jobs and meet the demand for restoration work	Rocky Mountain Youth Corps, UNM-Taos, Taos County, New Mexico Forest Industry Association, Private Contractors
Coordinate grant writing efforts between state and local governments (including county, municipal, and soil and water district) as well as NGOs to maximize fundraising and project managment efficiency and effectiveness	Medium	Improved coordination of grant/proposal submission will maximize fundraising and project management efficiency and effectiveness	Taos County, Taos Soil and Water Conservation District, New Mexico Forestry Division, tribal governments, Carson National Forest, local municipalities
Updated fire behavior modeling to inform treatment optimization and validate existing activity priorities	Low	Ensures alingment of project and activities within high-priority watersheds for the protection of communities and water sources	Forest Service, New Mexico Forestry Division, Taos County
Studies of piñon juniper fire dynamics	Low	Provide better information about forest dynamice in piñon-juniper woodlands, especially in WUI areas	Forest Service, U.S. Geological Survey, New Mexico Forestry Division
Regular speaker series and field trips to share information about ongoing projects, fire science and wildfire-related issues	Low	Expand the local conversation about wildfire risk, and bring in experts to help an interested public understand more about fire ecology and the wildfire crisis	Local Collaborative Groups

Taos County 2022 CWPP Areas of Necessary NEPA Analysis				
NEPA Planning Area	Priority Level	Total Acres	Treatments	Benefits
Rio Colorado	High	36,889	Hazardous Fuel Removal and Rx Burning in Dry Conifer Forest	Reduced Threat of Catastrophic Fire and Restored Ecological Function
Questa to Latir Fuel Break	High	2,581	Shaded Fuel Break in WUI between Private Lands and Latir Peak Wilderness Boundary	Reduce threat of fire spread from private lands into wilderness and vice-versa
Carson Fuel Break	Medium	2,126	Shaded Fuel Break in WUI between Carson National Forest and Private Lands	Reduced threat of fire spread from Forest Service to private lands
Fernando	Medium	95,972	Hazardous Fuel Removal and Rx Burning in Dry Conifer Forest	Reduced Threat of Catastrophic Fire and Restored Ecological Function
Oso Grande	Medium	88,738	Hazardous Fuel Removal and Rx Burning in Dry Conifer Forest	Reduced Threat of Catastrophic Fire and Restored Ecological Function



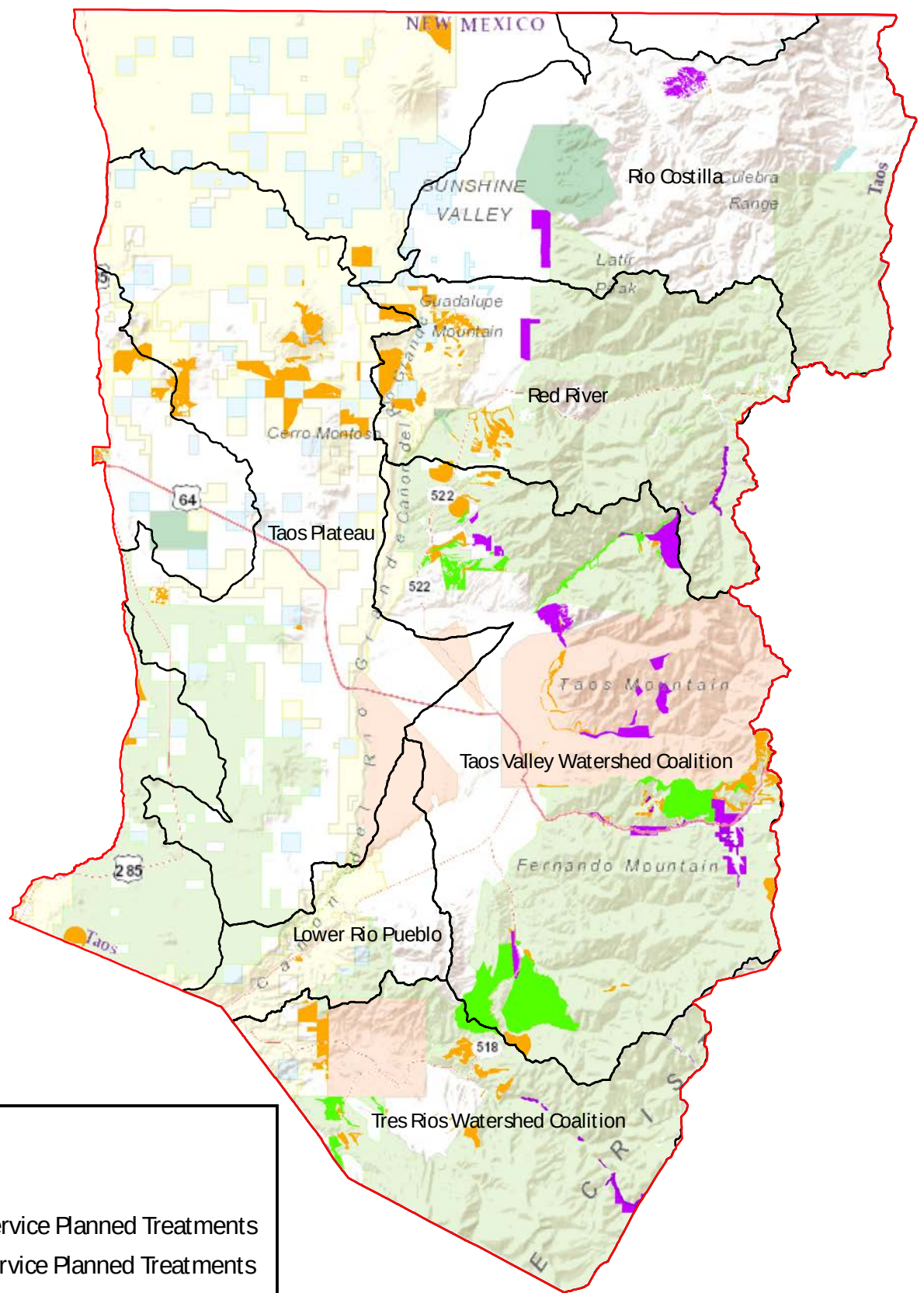
Taos County 2022 CWPP Update Current, Planned and Needed NEPA



0 4 8 16 Miles

Taos County 2022 CWPP Treatment Priorities			
Activity	Priority Level	Benefits	Partners
Continue Dry Mixed-Conifer Treatments in Pueblo Ridge Project Area	High	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Pueblo de Taos and Rio Fernando watersheds	Carson National Forest, Taos Valley Watershed Coalition, Taos Pueblo
Complete WUI Treatments in Pueblo Ridge Project Area	High	Reduce Hazardous Fuels to reduce threat of wildfire to life and property	Carson National Forest, Taos Valley Watershed Coalition
Complete Dry Mixed-Conifer Treatments in Rio Trampas Project Area	High	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Trampas watershed	Carson National Forest, Tres Rios Watershed Coalition
Begin WUI Treatments Treatments in Rio Trampas Project Area	High	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Las Trampas, El Valle, Chamisal, Peñasco and the surrounding communities	Carson National Forest, Tres Rios Watershed Coalition
Complete WUI Treatments in Hwy 150 Corridor Project Area	High	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Rio Hondo watershed and at Taos Ski Valley, El Salto and Des Montes	Carson National Forest, Taos Valley Watershed Coalition, village of Taos Ski Valley, Taos Ski Valley, Inc.
Complete Hazard Tree Removal along powerlines in high-risk wildfire zones	High	Reduce the likelihood of a powerline igniting a wildfire, and protect utility infrastructure against damage caused by wildfire	Carson National Forest, Kit Carson Electric Cooperative, Taos County, New Mexico Forestry Division
Complete WUI Treatments in Questa-Latir Project Area	High	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Questa, Pinabete Hills, Cabresto Canyon, Latir/El Rito	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Begin Dry Mixed-Conifer Treatments in Rio Costilla Cooperative Livestock Association lands	High	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Costilla watershed	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Complete initial phase of cultural burning on Taos Pueblo/Blue Lake Wilderness	High	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Pueblo de Taos and Rio Fernando watersheds	Taos Pueblo, Taos Valley Watershed Coalition
Complete WUI Treatments at Rio Costilla Cooperative Livestock Association property	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Amalia and Costilla	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Complete WUI Treatments in Kiowa-San Cristobal Project Area	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in San Cristobal, Gallina Canyon, Deer Mesa and Turley Mill	Carson National Forest, Taos Valley Watershed Coalition
Complete Ponderosa Pine Treatments in Kiowa-San Cristobal Project Area	Medium	Restore ecological health and function to dry conifer forest types to protect Rio Hondo and San Cristobal Creek watersheds	Carson National Forest, Taos Valley Watershed Coalition
Begin Dry Mixed-Conifer Treatments in McGaffey Ridge Project Area	Medium	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Grande del Rancho watershed	Carson National Forest, Taos Valley Watershed Coalition
Begin WUI Treatments Treatments in McGaffey Ridge Project Area	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Pot Creek	Carson National Forest, Taos Valley Watershed Coalition
Begin WUI Treatments in Oso Grande Project Area	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Tres Ritos, Angostura, Sipapu, Placita, Vadito Rio Lucio, Picuris Pueblo Peñasco and the surrounding communities	Carson National Forest, Tres Rios Watershed Coalition

Complete Dry Mixed-Conifer Treatments in Oso Grande Project Area	Medium	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Pueblo and Rio Santa Barbara watersheds	Carson National Forest, Tres Rios Watershed Coalition
Begin WUI Treatments in Fernando Project Area	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Talpa, Ranchos de Taos, Weimer, Cañon, Cañon Heights, Shady Brook, Valle Escondido, Apache Canyon and the surrounding communities	Carson National Forest, Taos Valley Watershed Coalition
Complete Dry Mixed-Conifer Treatments in Fernando Project Area	Medium	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Grande del Rancho, Pot Creek and Rio Fernando watersheds	Carson National Forest, Taos Valley Watershed Coalition
Begin Dry Mixed-Conifer Treatments in Rio Colorado Project Area	Medium	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Red River and Cabresto Creek watersheds	Carson National Forest, Red River Focal Area Collaborative Group
Begin WUI Treatments Treatments in Rio Colorado Project Area	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Questa, Cabresto Canyon, Lama, the town of Red River and the Upper Red River Valley	Carson National Forest, Red River Focal Area Collaborative Group, town of Red River, village of Questa
Complete WUI Treatments in Carson/Three Peak/Two Peak Project Area	Medium	Reduce Hazardous Fuels to reduce threat of wildfire to life and property in Carson, Three Peaks and Two Peaks	Carson National Forest, Taos Plateau Focal Area Collaborative Group
Complete broadcast burning in Valle Vidal unit	Low	Restore ecological health and function to dry conifer forest types; Reduce threat of catastrophic wildfire on Rio Costilla	Carson National Forest, Rio Costilla Focal Area Collaborative Group



Legend

- Taos County
- Off-Forest Service Planned Treatments
- On-Forest Service Planned Treatments
- Completed Treatments

Taos County 2022 CWPP Update Planned Treatments and Focal Areas



0 4 8 16 Miles

Taos County 2022 CWPP Action Plan Timeline			
Activity	Activity Type	Implementation Year	Lead Partners
Provide reliable funding for collaborative group creation and facilitation	Capacity Building	2023-24	Carson National Forest, Taos County
Encourage county and municipal governments to establish stand alone funds to provided necessary match for grants and post-fire recovery efforts	Capacity Building	2023-24	Taos County, local municipalities
Support community-level chipper days to ensure that this service is provided consistently in neighborhoods/Firewise communities	Capacity Building	2023-24	Taos County, Kit Carson Electric Cooperative, Firewise communities
Stand up county-level wildland fire crew to assist with initial attack, volunteer wildland fire training, and prescribed fire support	Capacity Building	2023-24	Taos County, New Mexico Forestry Division, Carson National Forest
Updated Taos County Wildfire Plaza website	Education and Outreach	2022-23	Taos County, Focal Area Collaboratives, Firewise Communities
Create short video aimed at property owners to help describe different forest types, different fuel reduction treatments in each forest type	Education and Outreach	2022-23	Taos Soil and Water Conservation District, Taos County
Interactive online map showing current activities	Education and Outreach	2023-24	Taos County, Agency Partners, Focal Area Collaboratives, Firewise Communities
More robust resources for Firewise Communities, including updated list of active contractors, easy-to-access cost-share and grant programs, and regular meetings of the Taos County Firewise Network	Education and Outreach	2023-24	Taos County, Taos Soil and Water Conservation District, Firewise Communities
Begin dialogue between local communities, land managers and wilderness advocates to explore options for limited treatments to protect communities and wilderness for catastrophic wildfire	Education and Outreach	2023-24	Focal Area Collaboratives, Taos Pueblo, Forest Service, BLM, Local Communities
Chainsaw training course for leñeros and homeowners	Education and Outreach	2024-25	Taos County, Taos Soil and Water Conservation District
Pursue options for workforce development to support local forest industry	Education and Outreach	2024-25	Rocky Mountain Youth Corps, UNM-Taos, Taos County, New Mexico Forest Industry Association, Private Contractors
Updated fire behavior modeling to inform treatment optimization and validate existing activity priorities	Education and Outreach	2025-26	Forest Service, New Mexico Forestry Division, Taos County
Studies of piñon juniper fire dynamics	Education and Outreach	2025-26	Forest Service, U.S. Geological Survey, New Mexico Forestry Division
Regular speaker series to share information about ongoing projects, fire science and wildfire-related issues	Education and Outreach	Ongoing	Local Collaborative Groups
Questa to Latir Fuel Break	Forest Service NEPA Planning	2022-23	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Rio Colorado	Forest Service NEPA Planning	2022-25	Carson National Forest, Red River Focal Area Collaborative Group
Carson Fuel Break	Forest Service NEPA Planning	2023-2024	Carson National Forest, Taos County, Carson Firewise

Oso Grande	Forest Service NEPA Planning	2024-26	Carson National Forest, Tres Rios Watershed Coalition
Fernando	Forest Service NEPA Planning	2025-27	Carson National Forest, Taos Valley Watershed Coalition
Complete WUI Treatments in Hwy 150 Corridor Project Area	Treatments	2022-2023	Carson National Forest, Taos Valley Watershed Coalition, village of Taos Ski Valley, Taos Ski Valley, Inc.
Complete WUI Treatments in Pueblo Ridge Project Area	Treatments	2022-2024	Carson National Forest, Taos Valley Watershed Coalition
Complete Hazard Tree Removal along powerlines in high-risk wildfire zones	Treatments	2022-2025	Carson National Forest, Kit Carson Electric Cooperative, Taos County, New Mexico Forestry Division
Complete broadcast burning in Valle Vidal unit	Treatments	2022-2026	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Continue Dry Mixed-Conifer Treatments in Pueblo Ridge Project Area	Treatments	2022-2027	Carson National Forest, Taos Valley Watershed Coalition, Taos Pueblo
Complete Dry Mixed-Conifer Treatments in Rio Trampas Project Area	Treatments	2022-2027	Carson National Forest, Tres Rios Watershed Coalition
Continue WUI Treatments Treatments in Rio Trampas Project Area	Treatments	2022-2027	Carson National Forest, Tres Rios Watershed Coalition
Complete WUI Treatments in Kiowa-San Cristobal Project Area	Treatments	2022-2027	Carson National Forest, Taos Valley Watershed Coalition
Complete Ponderosa Pine Treatments in Kiowa-San Cristobal Project Area	Treatments	2022-2027	Carson National Forest, Taos Valley Watershed Coalition
Begin Dry Mixed-Conifer Treatments in McGaffey Ridge Project Area	Treatments	2023-2027	Carson National Forest, Taos Valley Watershed Coalition
Begin WUI Treatments Treatments in McGaffey Ridge Project Area	Treatments	2023-2027	Carson National Forest, Taos Valley Watershed Coalition
Complete WUI Treatments in Questa-Latir Project Area	Treatments	2024-2025	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Complete WUI Treatments in Carson/Three Peak/Two Peak Project Area	Treatments	2024-2026	Carson National Forest, Taos Plateau Focal Area Collaborative Group
Begin Dry Mixed-Conifer Treatments in Rio Costilla Cooperative Livestock Association lands	Treatments	2024-2027	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Complete initial phase of cultural burning on Taos Pueblo/Blue Lake Wilderness	Treatments	2024-2027	Taos Pueblo, Taos Valley Watershed Coalition
Complete WUI Treatments at Rio Costilla Cooperative Livestock Association property	Treatments	2025-2027	Carson National Forest, Rio Costilla Focal Area Collaborative Group
Begin Dry Mixed-Conifer Treatments in Rio Colorado Project Area	Treatments	2025-2027	Carson National Forest, Red River Focal Area Collaborative Group
Begin WUI Treatments Treatments in Rio Colorado Project Area	Treatments	2025-2027	Carson National Forest, Red River Focal Area Collaborative Group, town of Red River, village of Questa
Begin WUI Treatments in Oso Grande Project Area	Treatments	2026-2027	Carson National Forest, Tres Rios Watershed Coalition
Complete Dry Mixed-Conifer Treatments in Oso Grande Project Area	Treatments	2026-2027	Carson National Forest, Tres Rios Watershed Coalition
Begin WUI Treatments in Fernando Project Area	Treatments	2027-	Carson National Forest, Taos Valley Watershed Coalition
Complete Dry Mixed-Conifer Treatments in Fernando Project Area	Treatments	2027-	Carson National Forest, Taos Valley Watershed Coalition

Appendices

Appendix A: Taos County CWPP Core Team Approvals & Signatures



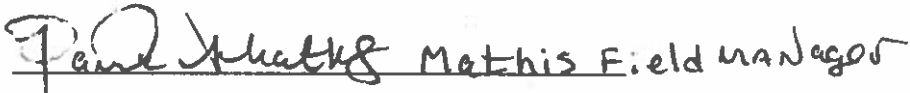
Arnie Friedt, Cimarron District Forester, New Mexico Forestry Division



Darlene Vigil, Taos County Commission Chair



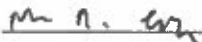
James Duran, Forest Supervisor, Carson National Forest



Pamela Mathis, Field Manager, Bureau of Land Management, Taos Field Office



Mary Steuver, Chama District Forester, New Mexico Forestry Division



Mike Cordova, Taos County Fire Chief



Peter Vigil, Manager, Taos Soil and Water Conservation District



Rene Romero, Interim DNR Director, Fuels Manager, Taos Pueblo Department of Natural Resources

TAOS COUNTY

ANNA MARTINEZ, CLERK

000431734

Book 992 Page 344

1 of 146

09/25/2018 10:08:01 AM

BY BLANCAL



**Taos County
Planning Department**

105 Albright Street, Suite H
Taos, NM 87571

Phone: (575) 737-6440

Fax: (575) 737-6449



**COUNTY OF TAOS,
NEW MEXICO**

Land Use Regulations

Ordinance: 2018-02

Adopted: September 4, 2018

An Ordinance Adopting Land Use Regulations for Taos
County and repealing certain existing Land Use Regulations

**APPENDIX 4
FIRE PROTECTION**

**SECTION 1
FIRE PROTECTION AND SUPPRESSION REGULATIONS**

TAOS COUNTY
ANNA MARTINEZ, CLERK
000431734
Book 992 Page 471
128 of 146
09/25/2018 10:08:01 AM
BY BLANCAL

A. Authority Having Jurisdiction. Taos County for the purposes of fire protection, suppression and code enforcement consistent with the authority of these regulations shall have jurisdiction. As such, the County may require or waive such levels of required prevention measures as are deemed appropriate to the development application, proposed site and conditions and consistent with the purposes of the regulations outlined in these regulations Appendix 4 Fire Regulations, the ICC Fire Code, ICC WUI Code and Taos County CWPP for the protection of public safety.

1. All commercial zoning clearance, administrative zoning clearance, special use zoning permit and major development zoning permit applications shall be reviewed by a Taos County official that is ICC certified to determine compliance with the most recent version of the International Code Council (ICC) International Fire Code adopted by the State of New Mexico, unless amended by adoption through ordinance by Taos County.
2. All development applications determined by the Planning Department to be within a county Wildland Urban Interface area (WUI) shall be reviewed by the Taos County WUI coordinator who shall upon determination that property is located in a High or Very High Community At Risk Rating (CAR) outlined within the Taos County CWPP as amended area perform an assessment per the Wild Fire Severity Form Checklist herein.
3. All development applications determined by the Planning Department to be within a county wildland urban interface area that have a (CAR) rating of High or Very High shall be reviewed by the Taos County Wildland Urban Interface (WUI) Coordinator for compliance with the Taos County Fire Protection Regulations here in and upon adoption by the county be consistent with the most recent version of the ICC Wildland-Urban Interface (WUI) Code by the State of New Mexico, unless amended by adoption through Ordinance by Taos County.

B. Requirements for All commercial Zoning Clearance, Administrative Zoning Clearance Special Use Zoning or Major Development Zoning permit Uses.

1. A statement of fire protection and suppression for the project shall be required, and shall include the number of units or lots each hydrated water tank can accommodate based on the design engineer's evaluation of construction type and materials and the square footage of each unit.
2. The construction of water storage tanks shall follow the requirements of the adopted ICC International Fire Code (IFC), or such code or standard as is referenced by the IFC.
3. In order to meet the minimum standard for grading of a water system, each system shall deliver two hundred and fifty (250) gallons of water per minute for two (2) hours. This means thirty thousand (30,000) gallons of stored water for fire protection above the daily peak demand for domestic use.
4. Swimming pools and ponds that may freeze during the winter months are not considered adequate for fire suppression.
5. No gray water, nor treated liquid waste, shall be used for fire suppression.
6. Unobstructed ingress and egress for fire vehicles, fire lanes, cul-de-sacs or hammerhead turns within the project shall be approved by the Taos County Fire Chief.
7. There shall be a fifty (50) foot turning circle, a right/left hand hammerhead turn or equivalent turnout every one thousand (1,000) feet along main access roads and a fifty (50) foot diameter cul-de-sac at the end of any dead end road or driveway longer than one hundred fifty (150) feet to accommodate fire apparatus and emergency vehicles. An all-weather road surface shall be applied with a surface material acceptable to Taos County that would allow passage of all emergency vehicles typically used to respond to that location.
8. The applicant shall provide to the county and local fire department, a letter containing the Fire Protection and Suppression Plan for the project according to the standards set forth in this appendix. The fire department shall have thirty (30) calendar days in which to respond to the Planning Department.
9. The applicant's Disclosure Statement shall include whether the project is in a moderate, high, or very high fire hazard area, as verified by the Taos County WUI Coordinator.
10. Any application for drilling of a water well or a water system made to the New Mexico Office of the State Engineer shall state that the well or system is intended to be used for water for fire protection and suppression, in addition to any other connected or planned uses.
11. The gradient for all fire apparatus access roads and driveways shall not exceed the maximum of 12%.
12. If, because of location or fire hazard danger, it is deemed necessary by the local fire district, and the Planning Department, the Planning Commission, or the Board of County Commissioners, the applicant shall provide

water storage tank(s) including a properly installed hydrant and hose fittings for fire suppression as required herein.

13. Should it be deemed necessary for the applicant to provide fire suppression water storage tank(s), hydrant and fire hose fittings, the applicant shall provide the Planning Department with a detailed Maintenance Agreement that outlines who is responsible for monitoring the level of the water storage tank(s), and conducting perpetual maintenance and periodic testing of all hydrants and fittings.
14. If the property should have to have water storage for fire suppression, the property owner must sign a document stating it is ok if Fire Districts utilize the system anytime while it is on the property for any type of fire suppression. Even if the fire is not on their property.
15. All other requirements deemed necessary by the reviewing/approving county entities for the preservation of the health, welfare and safety of the proposed development, local community and general public, consistent with the powers granted to New Mexico counties by public statute, shall be applicable.

C. Additional Requirements for All commercial Zoning Clearance, Administrative Zoning Clearance Special Use Zoning or Major Development Zoning permit applications with a CAR rating of High or Very in a Wildland-Urban Interface (WUI) Areas

I. Access:

All projects in High Fire Hazard Zones and WUI Areas, as determined by the U. S. Forest Service and Taos County, shall be provided with fire access roads. The minimum required design standards for access roads are as follows:

- a. All fire access roads shall be all-weather roads with a minimum driving surface width of twenty-two (22) feet and a clear height of thirteen and one-half (13 ½) feet from vegetation; shall be designed to accommodate the loads and turning radii for fire apparatus, consistent with the ICC International Fire Code; and have a gradient with a maximum of 12% that is negotiable by the fire apparatus normally used at that location.

2. Driveways: All driveways in the project shall meet the following standards:

- a. Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than one hundred fifty (150) feet from a fire apparatus access road. Driveways shall provide a minimum unobstructed driving width of eighteen (18) feet and a minimum unobstructed height clearance of thirteen and one-half (13 ½) feet. Driveways in excess of one hundred and fifty (150) feet in length shall have turnarounds at their end.
- b. A driveway serving three (3) or more dwellings shall be named as a private street with each dwelling numbered, and the road shall be constructed and maintained consistent with applicable county road requirements set forth in these regulations.
- c. Driveway turnarounds shall have an inside turning radii of not less than fifty (50) feet and an outside turning radii of not less than sixty (60) feet. Driveways that connect with a road or roads at more than one point may be considered as having a turnaround, if all changes of direction meet the radii requirements for driveway turnarounds.
- d. Driveway turnouts shall be an all-weather surface at least twelve (12) feet in driving width and forty (40) feet in length. Driveway turnouts shall be located as required by the AHJ.

3. Marking of access roads, driveways, fire protection equipment and fire hydrants is required as follows:

- a. Marking of roads with county-approved signs meeting standards of the Federal Highway Administration Manual on Uniform Traffic Control Devices (FHWA MUTCD) and/or Taos County Public Works approval shall be provided and maintained for access roads and driveways to identify such roads and driveways and prohibit the obstruction of both. All dead-end roads shall be marked at the entrance of the road.
- b. Fire protection equipment and fire hydrants shall be clearly marked and identified in a manner approved by the AHJ to prevent any obstruction.
- c. All buildings shall have permanently posted addresses which shall be placed at each driveway entrance and be visible from both directions of travel along the road. In all cases, the addresses shall be posted at the beginning of construction and shall be maintained free of obstruction thereafter, and shall be visible and legible from the road on which the address is located.
- d. Address signs along one-way roads shall be visible from the intended direction of travel as well as the opposite direction.
- e. Where multiple addresses are required at a single driveway, they shall be mounted on a single post, and additional signs shall be posted where driveways divide.

4. Defensible space is intended to clear flammable vegetation within a minimum of thirty (30) feet of a structure and limit its density within one hundred (100) feet, without disturbing the natural setting beyond. However, any vacant land, within the boundaries of the project, shall be maintained by the land owner in order to reduce the possibility of fire escalating to nearby homes and structures.
- a. In order to qualify as a conforming defensible space, fuel modification shall be provided within a distance from buildings or structures as specified in the Defensible Space Table below. For all other purposes, the fuels reduction distance shall not be less than ten (10) feet, or to the property line; whichever is less. Distances specified in the Defensible Space Table below may be increased by the County, or upon recommendation of the local fire district because of site- specific analysis based on local conditions and the fire protection plan.

DEFENSIBLE SPACE TABLE

Wildland-Urban Interface Area	Required Fuel Reduction Distance (feet)
High Hazard	30 feet Clean Zone
Very High Hazard	50 feet Clean Zone

- b. Persons owning, leasing or renting buildings or structures requiring defensible space are responsible for modifying or removing vegetation that is not fire resistant on the property owned, leased or rented.
- c. Trees are allowed within the defensible space, provided the horizontal distance between crowns of adjacent trees and crowns of trees and structures, overhead electrical facilities or unmodified fuel is not less than ten (10) feet. Deadwood and litter shall regularly be removed from the ground surface and trees.
- d. Maintenance of defensible space shall include keeping non-fire resistant vegetation or growth, leaves, needles and other dead vegetative materials clear of any buildings or structures; tree crowns extending to within ten (10) feet of any buildings or structures pruned to maintain a minimum horizontal clearance of ten (10) feet; tree crowns pruned to remove limbs located less than six (6) feet above the ground surface adjacent to the trees in a manner so as to provide a clear area for fire suppression. Firewood in excess of a one-week supply is NOT to be placed adjacent to a residential structure, or underneath any type of attached decking, awning, porch, or the like.
- e. Chimneys serving fireplaces, incinerators, barbecues or decorative heating appliances in which solid or liquid fuel is used, shall be equipped with an approved spark arrester. Spark arresters shall be constructed of woven or welded wire screening of 12 USA standard gauge (0-1046 inch) having openings not exceeding one-half (1/2) inch.
5. Water Supply: All projects may be required to have an approved water source with an adequate water supply for the use of the fire suppression service to protect all buildings and structures from exterior fire sources, or to suppress structure fires within a wildland-urban interface area of Taos County. Adequate water supply shall be determined for purposes of initial attack and flame control.
6. Water Sources: The point at which a water source is available for use shall be located not more than one thousand (1,000) feet from the building or structure and shall be approved by the local fire district. The distance shall be measured along an unobstructed line of travel. Water sources shall comply with the following:
- a. Man-made water sources shall have the minimum usable water volume determined by water supply requirements herein. Swimming pools and ponds that may freeze during the winter months are not considered adequate for fire suppression. No gray water or treated liquid waste shall be used for fire suppression. The water supply shall be equipped with any approved dry hydrant(s) with the proper hose fittings. The water level of the water source shall be maintained by rainfall, water pumped from a well, water hauled by tanker, or by seasonal high water of a stream or river. The design, construction, location, water level maintenance, access, and access maintenance, of man-made water sources shall be approved by the local fire district.
- b. Natural water sources shall have a minimum water level or flow sufficient to meet water supply needs identified herein. This water level or flow shall not be approved, if rendered unusable because of freezing. The site of the water source must be approved, as well as dry hydrant(s) and hose fittings by Taos County fire chief. Adequate water flow and rights for access to the water source shall be ensured by a form acceptable to Taos County.
- c. Connections to all dry hydrants shall be determined by the local fire district with jurisdiction.

7. **Vegetation Control:**

- a. Taos County is authorized to require vegetation control, as in the removal of brush and non-fire-resistant vegetative growth, from areas within ten (10) feet of each side of fire apparatus access roads and driveways, and the removal of brush and non-fire-resistant vegetative growth from areas of electrical transmission or distribution lines, poles or towers to provide a combustible-free space consisting of a clearing not less than ten (10) feet in each direction from the outer circumference of such pole or tower.
- b. Water storage and pumping facilities shall be provided with a defensible space not less than a fifty (50) foot semicircular radius that is clear of non-fire-resistant vegetation or growth around and adjacent to such facilities.
- c. Persons owning, leasing or renting water storage or water pumping facilities are responsible for clearing and removing non-fire-resistant vegetation, and maintaining the defensible space on the property.

8. **Ignition-Resistant Construction:** Buildings and structures hereafter constructed, modified or relocated into or within wildland-urban interface areas shall meet certain construction requirements. All building and structures within high or extreme fire hazard areas shall be constructed of ignition-resistant rated materials, with particular attention paid to roofs, eaves, fascias, exterior walls, unenclosed under-floor areas, and attached, unenclosed accessory structures, such as decks, doors, windows, vents, and skylights.

- a. Roofs shall be constructed with Class 1 or 2 ignition-resistant materials either metal or composite roof material approved by the certified official.
- b. Eaves and soffits shall be protected on the exposed underside by materials approved for a minimum of 1-hour fire-resistance-rated construction. Fascias are required and shall be protected on the backside by materials approved for a minimum of 1-hour fire-resistance-rated construction or 2-inch (51mm) nominal dimension lumber.
- c. Gutters and downspouts shall be constructed of noncombustible material.
- d. Buildings or structures shall have all under-floor areas enclosed to the ground with exterior walls built, at minimum, of 1-hour fire-resistance-rated materials.
- e. Unenclosed accessory structures attached to a building with habitable spaces and projections such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction, or approved noncombustible materials.
- f. Exterior windows, window walls, and glazed doors, windows within exterior doors and skylights, shall be multi-layered glazed panels, glass block, or have a fire protection rating of not less than twenty (20) minutes.
- g. Exterior doors shall be approved, noncombustible construction, solid core wood not less than 1 ¾ inches thick (45mm), or meet a 1-hour fire protection standard.
- h. Attic ventilation openings, foundation or under-floor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed ¼ inch.

Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least ten (10) feet from property lines. Under-floor ventilation openings shall be located as close to grade as practicable.

- 1) Detached accessory structures located less than fifty (50) feet from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction, heavy timber, log wall construction or be constructed with approved noncombustible materials on the exterior side.
 - 2) When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all under-floor areas enclosed to within 6 inches of the ground, with exterior wall construction of approved minimum 1-hour fire-resistance-rated materials.
9. If manufactured homes are planned as part of the proposed development, the distance from any part of the manufactured homes to the property line shall be no less than twenty-five (25) feet. The minimum distance from any manufactured home to any other structure (including accessory structures and storage shed) shall be no less than twenty-five (25) feet. Any manufactured home shall be skirted with fire-resistant materials with at least a 1-hour fire rating.

TAOS COUNTY
ANNA MARTINEZ, CLERK
000431734
Book 992 Page 475
132 of 146
09/25/2018 10:08:01 AM
BY BLANCA

10. Fire Protection Plan: All projects within wildland-urban interface areas with a High or Very High rating shall submit a fire protection plan to include a defensible space to the county and the local fire district thirty (30) calendar days before the public hearing on preliminary plat approval.
 - a. The plan shall be based upon a site-specific, wildfire risk assessment by the County, US Forest Service, BLM and/or local fire district and shall include considerations of location, topography, flammable vegetation, climatic conditions, and fire history. The plan shall address defensible space, vegetation management, water supply, access, building ignition, fire-resistance factors, and fire protection systems and equipment.
 - b. The cost of the fire protection plan preparation shall be the responsibility of the applicant.

SECTION 2

Fire Protection and Suppression Requirements for Single Family Residences requiring a Residential Zoning Clearance with a High Impact Rating or Very High Impact Rating within a Wildland Urban Interface Area

A. Fire protection and suppression requirements.

1. A fire protection and suppression plan for dwelling within the Wildland Urban Interface Area, including a defensible space plan, shall be included with the permit application submitted to the Taos County Planning Department.
2. The applicant's permit application shall include a statement of whether the dwelling is in a low, moderate, high, or extreme fire hazard area, as determined by the County WUI map(s). If the project area is ranked as a high or very high fire danger, the applicant shall consult with the Taos County WUI Coordinator for applicable defensible space regulations, depending on the dwelling location.
3. Any application for the drilling of a water well made to the New Mexico Office of the State Engineer shall state that the well is intended to be used for water for fire protection and suppression.
4. For purposes of public safety, due to location, lack of water supply, or fire hazard danger, the applicant may be required to provide a water storage tank including a properly installed hydrant and hose fittings for fire suppression as required herein. Upon review of the proposed development, this requirement may be imposed by the AHJ in conjunction with the Taos County Planning Department, or as a condition of approval.
5. All other requirements deemed necessary by the reviewing/approving county entities for the preservation of the health, welfare and safety of the proposed development, wildlife, public lands, local community and general public, consistent with the powers granted to New Mexico counties by statute shall be applicable.
6. Fire prevention, preservation, watershed or environmental agreements by MOU's, grant agreements, inter-jurisdictional service agreement, etc. local, state or federal agencies and partners may prohibit the granting of variances to required fire prevention standards within certain high hazard, high risk or sensitive areas.

B. Requirements for Single Family Residences with a High Impact CAR Rating or Very High Impact CAR Fire Rating within a Wildland-Urban Interface Areas.

1. Development within a high fire hazard zone or Extreme Hazard Wildland-Urban interface areas are strongly discouraged. Development within these zones on steep slopes greater than a 20% grade and roads of greater than 12% grade are expressly prohibited unless all required fire prevention standards of the WUI, IFC and CWPP are met.
2. Due to the high risk to public health and safety the County may impose such additional conditions as deemed appropriate, including thinning, fire breaks, dry stations, sprinklers, hardened electrical and water systems, turnouts, water storage tanks, multiple accesses and special road designs.
3. If a development application does not meet the required minimum fire prevention measures for these zones, as specified above, the Planning Director shall deem the application incomplete.
4. The County may deny any application for development within these zones based upon public health and safety concerns as to the risk to firefighters, adjacent property owners and public lands, inaccessibility or proximity to water supplies that may be contaminated by post-fire erosion.
5. Defensible space is intended to clear flammable vegetation within a minimum of thirty (30) feet of a structure and limit its density within one hundred (100) feet, without disturbing the natural setting beyond. However, any vacant land, within the boundaries of the project, shall be maintained by the land owner in order to reduce the possibility of fire escalating to nearby homes and structures.
6.
 - a. In order to qualify as a conforming defensible space, fuel modification shall be provided within a distance from buildings or structures as specified in the Defensible Space Table below. For all other purposes, the fuels reduction distance shall not be less than ten (10) feet, or to the property line; whichever is less. Distances specified in the Defensible Space Table below may be increased by the County, or upon recommendation of the local fire district because of site- specific analysis based on local conditions and the fire protection plan.

DEFENSIBLE SPACE TABLE

Wildland-Urban Interface Area	Required Fuel Reduction Distance (feet)
High Hazard	30 feet Clean Zone
Very High Hazard	50 feet Clean Zone

7. The Taos County WUI Coordinator in his assessment as being high or very high per NFPA 299/1144 Wild Fire Severity Form Checklist outlined within the Taos County CWPP as amended may require one or more of the following requirements.

8. **Vegetation Control:**

- a. The AHJ is authorized to require vegetation control, as in the removal of brush and non-fire-resistant vegetative growth, from areas within ten (10) feet of each side of fire apparatus access roads and driveways, and the removal of brush and non-fire-resistant vegetative growth from areas of electrical transmission or distribution lines, poles or towers to provide a combustible-free space consisting of a clearing not less than ten (10) feet in each direction from the outer circumference of such pole or tower.
- b. Water storage and pumping facilities shall be provided with a defensible space not less than a fifty (50) foot semicircular radius that that is clear of non-fire-resistant vegetation or growth around and adjacent to such facilities.
- d. Persons owning, leasing or renting water storage or water pumping facilities are responsible for clearing and removing non-fire-resistant vegetation, and maintaining the defensible space on the property.

9. **Ignition-Resistant Construction:** Buildings and structures hereafter constructed, modified or relocated into or within wildland-urban interface areas shall meet certain construction requirements. All building and structures within high or extreme fire hazard areas shall be constructed of ignition-resistant rated materials, with particular attention paid to roofs, eaves, fascia's, exterior walls, unenclosed under-floor areas, and attached, unenclosed accessory structures, such as decks, doors, windows, vents, and skylights.

- a. Roofs shall be constructed with Class 1 or 2 ignition-resistant materials approved by the AHJ.
- b. Eaves and soffits shall be protected on the exposed underside by materials approved for a minimum of 1-hour fire-resistance-rated construction. Fascias are required and shall be protected on the backside by materials approved for a minimum of 1-hour fire-resistance-rated construction or 2-inch (51mm) nominal dimension lumber.
- c. Gutters and downspouts shall be constructed of noncombustible material.
- d. Buildings or structures shall have all under-floor areas enclosed to the ground with exterior walls built, at minimum, of 1-hour fire-resistance-rated materials.
- e. Unenclosed accessory structures attached to a building with habitable spaces and projections such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction, or approved noncombustible materials.
- f. Exterior windows, window walls, and glazed doors, windows within exterior doors and skylights, shall be multi-layered glazed panels, glass block, or have a fire protection rating of not less than twenty (20) minutes.
- g. Exterior doors shall be approved, noncombustible construction, solid core wood not less than 1 ¾ inches thick (45mm), or meet a 1-hour fire protection standard.
- h. Attic ventilation openings, foundation or under-floor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed ¼ inch.

Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least ten (10) feet from property lines. Under-floor ventilation openings shall be located as close to grade as practicable.

TAOS COUNTY
 ANNA MARTINEZ, CLERK
 000431734
 Book 992 Page 476
 133 of 146
 09/25/2018 10:08:01 AM
 BY BLANCH

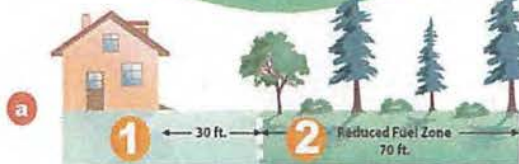
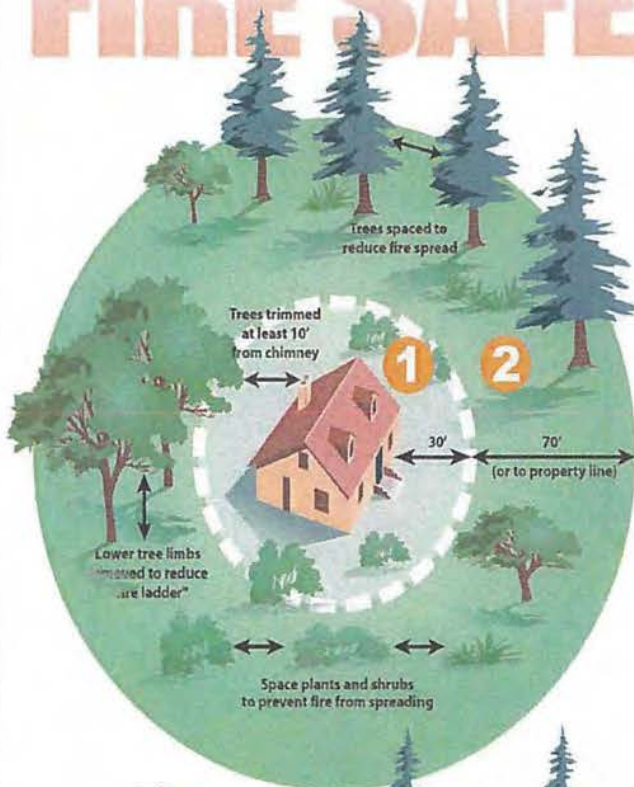
- 1) Detached accessory structures located less than fifty (50) feet from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction, heavy timber, log wall construction or be constructed with approved noncombustible materials on the exterior side.
 - 2) When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all under-floor areas enclosed to within 6 inches of the ground, with exterior wall construction of approved minimum 1-hour fire-resistance-rated materials.
10. If manufactured homes are planned as part of the proposed development, the distance from any part of the manufactured homes to the property line shall be no less than twenty-five (25) feet. The minimum distance from any manufactured home to any other structure (including accessory structures and storage shed) shall be no less than twenty-five (25) feet. Any manufactured home shall be skirted with fire-resistant materials with at least a 1-hour fire rating.

TAOS COUNTY
ANNA MARTINEZ, CLERK
000431734
Book 992 Page 477
134 of 146
09/25/2018 10:08:01 AM
BY BLANCAL

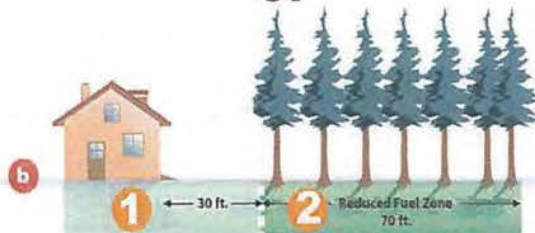
11. **Defensible Space Sample Site Plan Schematic is as follows:**

TAOS COUNTY
ANNA MARTINEZ, CLERK
000431734
Book 992 Page 478
135 of 146
09/25/2018 10:08:01 AM
BY BLANCA

100' DEFENSIBLE SPACE Make Your Home FIRE SAFE



or



Why 100 Feet?

Following these simple steps can dramatically increase the chance of your home surviving a wildfire!

A Defensible Space of 100 feet around your home is recommended by Firewise. The goal is to protect your home while providing a safe area for firefighters.

1. Clean Zone

Clearing an area of 30 feet immediately surrounding your home is critical. This area requires the greatest reduction in flammable vegetation.

2. Reduced Fuel Zone

The fuel reduction zone in the remaining 70 feet (or to property line) will depend on the steepness of your property and the vegetation. Spacing between plants improves the chance of stopping a wildfire before it destroys your home.

You have two options in this area:

- Create horizontal and vertical spacing between plants. The amount of space will depend on how steep the slope is and the size of the plants.
- Large trees do not have to be cut and removed as long as all of the plants beneath them are removed. This eliminates a vertical "fire ladder." When clearing vegetation, use care when operating equipment such as lawnmowers. One small spark may start a fire; a string trimmer is much safer. Remove all build-up of needles and leaves from your roof and gutters. Keep tree limbs trimmed at least 10 feet from any chimneys and remove dead limbs that hang over your home or garage.



Interested in making your community more fire safe? Do you and your neighbors want to be better prepared in case of wildfire? Become a recognized Firewise Community! Visit www.firewise.org or talk to your local volunteer fire department for more information.



TAOS COUNTY WANTS YOUR FAMILY TO BE SAFE FROM WILDFIRES

Call us to find out how we can help you or your neighborhood association (575) 737-6440 or visit www.taoscounty.org

Form NFPA 299/1144

TAOS COUNTY
ANNA MARTINEZ, CLERK
000431734
Book 992 Page 479
136 of 146
09/25/2018 10:08:01 AM
BY BLANCAL

Wildfire Hazard Severity Form Checklist

Wildfire Hazard Severity Form Checklist NFPA 299 / 1144				
This form may be used for individual houses or larger areas like developments or other types of applications.				
Name of area or address receiving assessment				
A. Subdivision Design	Points	Risk	Reduction	Notes
1. Ingress and egress (Main Road)				
Two or more roads in/out	0			
One road in/out	7			
2. Road width (Main Road)				
Greater than 24 feet	0			
Between 20 and 24 feet	2			
Less than 20 feet wide	4			
3. All-season road condition (Main Road)				
Surfaced, grade < 5%	0			
Surfaced, grade > 5%	2			
Non-surfaced, grade < 5%	2			
Non-surfaced, grade > 5%	5			
Other than all-season	7			
4. Fire service access (Driveway)				
< = 300ft, with turnaround	0			
> = 300ft, with turnaround	2			
< = 300ft, no turnaround	4			
> = 300ft, no turnaround	5			
5. Street signs (Main Road, ie; address, deadend)				
Present (4 in. in size and reflectorized)	0			
Not present	5			
B. Vegetation (Fuel Models, 300' and beyond)				
1. Predominant vegetation				
Light (grasses, forbs)	5			
Medium (light brush and small trees)	10			
Heavy (dense brush, timber, and hardwoods)	20			
Slash (timber harvest residue)	25			
2. Defensible space (0 to 300')				
More than 100 ft of treatment from buildings	1			
More than 71 -100 ft of treatment from buildings	3			
30-70 ft of treatment from buildings	10			
Less than 30 feet	25			
C. Topography				
1. Slope				
Less than 9%	1			
Between 10-20%	4			
Between 21-30%	7			
Between 31-40%	8			
Greater than 41%	10			
Totals for this page		0	0	

D. Additional Rating Factors	Points	Risk	Reduction	Notes
1. Topography that adversely affects wildland fire behavior	0 - 5			
2. Area with history of higher fire occurrence	0 - 5			
3. Areas of unusually severe fire weather and winds	0 - 5			
4. Separation of adjacent structures	0 - 5			
E. Roofing Materials				
1. Construction material				
Class A roof (metal, tile)	0			
Class B roof (composite)	3			
Class C roof (wood shingle)	15			
Non-rated	25			
F. Existing Building Construction				
1. Materials (predominant)				
Noncombustible siding/ deck	0			
Noncombustible siding/ wood deck	5			
Combustible siding and deck	10			
2. Setback from slopes > 30%				
More than 30 feet to slope	1			
Less than 30 feet to slope	5			
Not applicable	0			
G. Available Fire Protection				
1. Water source availability (on site)				
500 gpm pressurized hydrants < 1000ft apart	0			
250 gpm pressurized hydrants < 1000ft apart	1			
More than 250 gpm non-pressurized, 2 hours	3			
Less than 250 gpm non-pressurized, 2 hours	5			
No hydrants available	10			
2. Organized response resources				
Station within 5 miles of structure	1			
Station greater than 5 miles	3			
3. Fixed fire protection (interior, some exception to outside)				
Sprinkler system (NFPA 13, 13R, 13D)	0			
None	5			
H. Utilities (Gas and Electric)				
1. Placement				
All underground utilities	0			
One underground, one aboveground	3			
All aboveground	5			
Totals for this page		0	0	
I. Totals for Risk Assessments				
Totals for page 1 and 2		0	0	
1. Low Hazard: < 39 points				
2. Moderate Hazard: 40-69 points				
3. High Hazard: 70-112 points				
4. Extreme Hazard: 113 > points				
Census Data				
Track number				
Block group number				
Block number (s)				

TAOS COUNTY
ANNA MARTINEZ, CLERK
000431734
Book 992 Page 480
137 of 146
09/25/2018 10:08:01 AM
BY BLANCAL

Appendix D: Funding & Grant Resources

- **Collaborative Forest Restoration Program**: Up to \$360,000 in federal funding for planning, implementation or utilization projects on federal, tribal or local government lands. Requires 20% match.
- **Joint Chiefs Landscape Restoration Partnership**: Competitive funding administered by U.S. Forest Service and Natural Resources Conservation Service (NRCS). Appropriates funding for projects on Forest Service lands, and makes special funding available to NRCS for work on private lands within a specific geography
- **New Mexico Forest and Watershed Restoration Act**: Annual appropriation of \$2 million available for watershed and forest health projects. Proposals must go through New Mexico Forestry Division offices. Funding may be applied on all lands in the state.
- **Rio Grande Water Fund**: Private program focused on forest and riparian restoration administered by The Nature Conservancy in New Mexico. Funding periodically available through a competitive application process. Funds may be used on private, federal and/or tribal lands.
- **Non-Federal Lands Hazardous Fuels Grant**: Annual program administered by New Mexico Forestry Division. Up to \$300,000 in funding available to local governments for fuel reduction on non-federal lands. Projects should include joint planning and implementation with the U.S. Forest Service. No match required.
- **Landscape Scale Forest Restoration Program**: Funding available to local government, tribes and non-profits for work on all lands *except* federal lands. Competitive program to reduce the risk of uncharacteristic wildfire. One-to-one match required.
- **Wildland-Urban Interface Hazardous Fuels Grant**: Annual program open to local governments and tribes for reduction of hazardous fuels in WUI zones. Funds may be used for treatments, planning and/or education and outreach activities. Connection to a current CWPP is recommended. One-to-one match required.
- **Taos Soil and Water Conservation District**: Cost-share program available to Taos County property owners who live outside the town of Taos limits. Ideal for small projects (funding limited to \$4,500 per project). Applications accepted year round.

Appendix E: References

[2016 Taos Regional Water Plan](#)

[2017 Taos County Comprehensive Plan](#)

[2019 Agreement for Shared Stewardship Between the State of New Mexico and U.S. Forest Service](#)

[2020 New Mexico Forest Action Plan](#)

[2021 Community Wildfire Protection Plan \(CWPP\) Update Guidelines](#)

[Confronting The Wildfire Crisis: Initial Landscape Investments to Protect Communities and Improve Resilience in America's Forests](#)

[Healthy Forests Restoration Act](#)

[Jakes, Pamela J.; Sturtevant, Victoria. 2013. Trial by fire: Community Wildfire Protection Plans put to the test. International Journal of Wildland Fire. 22\(8\): 1134-1143.](#)

Radeloff, V. C., Hammer, R. B., Stewart, S. I., Fried, J. S., Holcomb, S. S., & McKeefry, J. F. (2005). THE WILDLAND-URBAN INTERFACE IN THE UNITED STATES. Ecological Applications, 15(3), 799-805.

[Taos County Return on Investment Study for the Rio Grande Water Fund](#)

[Tres Rios Watershed Coalition Forest Restoration Strategy](#)

[Taos Valley Watershed Coalition Landscape Restoration Strategy](#)