


SIERRA COUNTY

Community Wildfire Protection Plan



We, the undersigned do hereby approve the Sierra County Community Wildfire Protection Plan as prepared by the Sierra County Community Wildfire Protection Plan Team.

Energy, Minerals and Resources Department, Forestry Division, Socorro District

By:  Date: 8/20/19

Sierra County Board of Commissioners

By: James E. Payson Date: 8/20/19

Attested by: Shelby J. Trujillo Date: 8/20/2019

Sierra County Volunteer Fire Department Fire Chief's Association

By:  Date: 8/20/2019


Bureau of Land Management, Las Cruces District Office

By:  Date: 8/20/2019

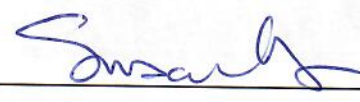
US Forest Service, Gila National Forest, Black Range District

By:  Date: 9/2/2019

Sierra County Office of Emergency Management

By:  Date: 8-20-2019

Jornada Resource Conservation & Development (RC&D) Council, Inc.

By:  Date: 8/20/2019

The Sierra County Community Wildfire Protection Plan [CWPP] was originally accepted in June of 2005. As a working document, it has had multiple updates and revisions over the last fourteen years.

With new information being added, technological advancements being incorporated, and additional edits being made in August of 2012 and again in 2019, this plan will continue to evolve over time to reflect the most current needs and changes within Sierra county.

It is the CWPP Teams' intention to continue to update and/or edit the information contained in this working document in order for it to be used by the community it represents and was created to protect.



CWPP Display for community events

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Elephant Butte Lake, Sierra County, New Mexico



1. INTRODUCTION

This Community Wildfire Protection Plan (CWPP) has been prepared in an effort to reduce the threat of wildfire to homes, structures, improvements and the general population of Sierra County. While its inception can be traced to the 20 Communities Initiative as agreed upon by the United States Forest Service and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division, many of the actions were initiated by resource professionals well before the 20 Communities initiative was officially started. In accordance with the requirements and guidelines set forth in the Healthy Forest Restoration Act (HFRA) of 2003, the land management agencies and entities in Sierra County have agreed to address the challenges of forest health and wildfire hazard risk reduction within the jurisdiction of the Sierra County CWPP Team.

EXECUTIVE SUMMARY

The Sierra County Community Wildfire Protection Plan Core Team was originally formed in 2003, two years after the May 2000 Cerro Grande Fire near Los Alamos, NM. NM State Forestry realized that there were a large number of communities in New Mexico that were currently at risk for a similar catastrophic wildfire. Each State Forestry District office began meeting with leaders within each of their jurisdictional boundaries to begin the process of preparing those communities for a possible wildfire. The initial meeting was held with just a few entities in attendance: Las Cruces BLM office, Black Range Ranger District Gila National Forestry, Sierra County and the Sierra Soil and Water Conservation District. From that initial group Sierra SWCD took the lead in facilitating getting folks together and served as the lead for this group for more than 12 years. Jornada Resource Conservation & Development (RC&D), a non-profit organization, has since taken over the role as lead agency.

The Sierra County CWPP team has been meeting consistently every month since 2003 with great support from our federal and state partners. In the sixteen years since our first meeting, the CWPP Core Team contributes some of their success to the facilitation of the team leader, who has been the same person since its inception. The BLM fire staff from Las Cruces, NM State Forestry from Socorro and the Gila National Forest Black Range staff have been very active as members of the Core Team and have provided leadership, training input and fire experience to members of the Sierra County Volunteer Fire Departments. There are seven (7) Volunteer Fire Departments involved with this effort, three (3) substations and two (2) municipal fire departments, along with representation from Sierra County Administration and Sheriff's Office. Other key members of the team include representation from the local electric cooperative along with inter-state electric transmission companies. This diverse group of members has provided the Core team with discussions that cover a large variety of wildfire concerns.

This team has accomplished a great deal since its inception to prepare community leaders and citizens for wildfires. Some of those projects include:

- Completed a community assessment in the community of Kingston, the most at-risk community in 2009. Input from that meeting called for improvements on roads from the county and the reduction of hazardous fuels. A second assessment was completed in 2018.
- Sierra SWCD applied for and received three grants from NM State Forestry for hazardous fuel reduction projects for the Kingston and poverty Creek communities, totaling more than \$300,000
- Sierra SWCD received two Collaborative Forest Restoration Program grants to reduce heavy fuel loads-one along the Continental divide in the Black Range Mountains and one along the Bosque area of the Rio Grande

- Sierra SWCD received more than \$400,000 in funds from the New Mexico Association of Counties for hazardous fuel reduction projects along the Rio Grande
- Working with the County in the utilization of Secure Rural Schools, Title III funding, the team was able to secure funds to purchase complete Wildland gear and water truck and brush tender truck equipment for all VFDs and members who had acquired their 130/190 classes
- Working with the County in the utilization of Secure Rural Schools, Title III funding, the County secured the services of a Wildland Coordinator for a period of one year. During that time the County adopted the 310-1 Program
- Sierra County CWPP Core Team developed their own Red Card program to provide certification for VFD members working towards their NM State Forestry red card program
- Developed a Wildland Fire Response Operating Guideline
- Developed a Wildland Fire Response flow chart of communication
- Developed a Sierra County CWPP Wildland fire communication plan
- Sierra SWCD received two grants from NM Association of Counties to purchase a display that is used at community events and fairs, along with a Wildland fire home simulator
- Provided a FIREWISE workshop to City of Truth or Consequences Commissioners and their Planning and Zoning Board, along with Sierra County Commissioners and their Planning and Zoning Board
- Have completed Community assessments for five communities within Sierra County, with assistance from State Forestry and USFS staff. All assessments had good attendance and letters of follow up were provided to Sierra County
- Provided outreach materials to VFDs and community groups, with materials provided by the BLM.



Black Range Vista

1.1. Healthy Forest Restoration Act (HFRA) of 2003

With direct respect to removing hazardous fuels, HFRA:

- Provides authority for expedited vegetation treatments on certain types of Forest Service and Bureau of Land Management lands that: (a) are at risk of Wildland fire, (b) have experienced windthrow, blowdown, or ice-storm damage, (c) are currently experiencing disease or insect epidemics, or (d) are at imminent risk of such epidemics because of conditions on adjacent land.
- Provides expedited environmental analysis of HFRA projects.
- Provides administrative review before decisions are issued on proposed HFRA projects on Forest Service lands.
- Contains requirements governing the maintenance and restoration of old-growth forest stands when the Forest Service and Bureau of Land Management carry out HFRA projects in such stands.
- Requires HFRA projects on Forest Service and Bureau of Land Management land to maximize retention of larger trees in areas other than old-growth stands, consistent with the objective of restoring fire-resilient stands and protecting 'at-risk' communities and Federal lands.
- Requires collaboration between Federal agencies and local communities, particularly when CWPPs are prepared.
- Requires using at least 50 percent of the dollars allocated to HFRA projects to protect areas adjacent to communities at risk of Wildland fire.
- Requires performance to be monitored when agencies conduct hazardous fuel reduction projects and encourages multiparty monitoring that includes communities and other diverse stakeholders (including interested citizens and Tribes).
- Encourages courts to expedite judicial review of legal challenges to HFRA projects.
- Directs that when courts consider a request for an injunction on an HFRA-authorized project, they balance the short and long-term environmental effects of undertaking the project against the effects of taking no action.

In addition, HFRA:

- Encourages biomass removal from public and private lands.
- Provides technical, educational, and financial assistance to improve water quality and address watershed issues on non-Federal lands.
- Authorizes large-scale silvicultural research.
- Authorizes the acquisition of Healthy Forest Reserves on private land to promote recovery of threatened and endangered species and improve biodiversity and carbon sequestration.
- Directs the establishment of monitoring and early warning systems for insect or disease outbreaks.

1.2. Sierra County CWPP Team

The Sierra County CWPP Team meets the second Monday of the month, or more often as needed, to discuss action items identified in the plan and for open discussion of any pertinent item brought before the team. The meetings are held at the offices of the US Forest Service, Gila National Forest, Black Range Ranger District. This team has been meeting since 2003, with meetings averaging two hours. The local news media has also published several articles through this period of time, focusing on accomplishments of the CWPP.

1.2.1. Core Team

The Sierra County CWPP Core Team membership includes representation from the following:

- New Mexico State Forestry, Socorro District Office
- Sierra County Office of Emergency Services Administrator
- Sierra County Volunteer Fire Department Fire Chief's Association
- Sierra Soil and Water Conservation District
- USDOJ, Bureau of Land Management, Las Cruces District Office
- USFS, Gila National Forest, Black Range Ranger District
- Jornada Resource Conservation & Development Council, Inc.

During the update process for the Sierra County CWPP, in addition to the regular monthly meetings, the Sierra County CWPP Core Team, along with the Jornada RC&D Council staff, has attended volunteer fire department meetings, Sierra County Board of Commissioner meetings, and other public events to gather local input relevant to the CWPP process.

1.2.2. Supporting Members

Listed below are other team members that participated in the preparation and/or update of the CWPP:

Arrey/Derry Volunteer Fire Department
Caballo Volunteer Fire Department
Cuchillo/Monticello Volunteer Fire Department
City of Elephant Butte Municipal Fire Department
City of Truth or Consequences Municipal Fire Department
El Paso Electric Company
Hillsboro Volunteer Fire Department
Las Palomas Volunteer Fire Department
Poverty Creek Volunteer Fire Department
Sierra County Local Emergency Planning Committee
Sierra County Sheriff's Office
Sierra Electric Cooperative
Winston/Chloride Volunteer Fire Department

2. WILDLAND-URBAN INTERFACE (WUI) FIRE SETTING

Elevation in Sierra County ranges from 4500 feet to over 7500 feet. Fuel types include desert scrub, salt cedar, riparian hardwoods, open grass lands, piñon/juniper woodlands, ponderosa pine and Douglas fir stands, thick shrub fields with oak and mountain mahogany, in addition to some wetland areas.

The west side of the County is bordered by the crest of the Black Range which presents difficult management options for fuel treatment and fire suppression. This area experiences a very high fire occurrence due to variable weather conditions, fuel densities, and topographic extremes. On the far south end of the County lies the small community of Kingston in the foothills of the Black Range. At the far northwest end of the County within the Black Range lies the community of Poverty Creek with several other rural communities scattered in between. There are three municipalities within the County: Truth or Consequences, Williamsburg and Elephant Butte. [Maps p 112]



Black Range Crest after Silver Fire of 2013

The Rio Grande lies in the middle of the County and is bordered on both sides by a heavy Salt Cedar fuel component. This fuel type exhibits very erratic and intense fire behavior. It is anticipated that within the next few years the salt cedar leaf beetle will have infested many acres of the salt cedar along this section of the Rio Grande. Due to the advent of this beetle, leaves on the plants will be defoliated which could increase the risk of Wildland fires in this area. There are several major drainages that run from the crest of the Black Range east into the Rio Grande: Percha, Animas, Palomas, Seco, Alamosa and Cuchillo Creeks. In or adjoining these drainages are several small communities. During the dry spring and summer months and periods of drought, these communities can be affected by erratic and intense fire behavior due to high fuel loads in the riparian corridors and unpredictable wind conditions. Elephant Butte and Caballo Lakes, as well as several small bodies of water within the County, have a high threat from wildfire because of a large number of non-native plant and tree species present along their shores. Numerous boat and RV storage areas are located in close proximity to these fuel loads and are considered a catastrophic risk due to the heavy non-native Wildland fuels occurring along the Rio Grande's edge.



Rio Grande flowing near City of Truth or Consequences 2018

Two large privately owned ranches are located in Sierra County: the Ladder Ranch, which includes 156,439 acres, and the Armendaris Ranch, encompassing 358,643 acres. Both of these ranches have fire management plans to address wildfire events. However, there are a number of small outlying ranches and secluded dwellings that are not associated with any fire protection response areas.

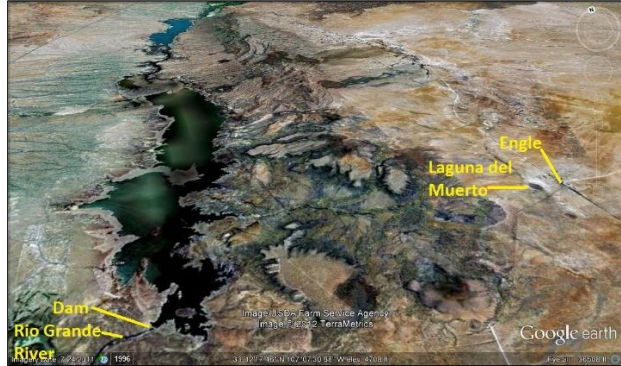
According to the U.S. Census Bureau, Sierra county consists of 4,236 square miles, of which 4,179 square miles are dry land and 57 square miles (1.4%) are under water. Created in 1884, Sierra County continues to support a variety of species due to its varied terrain and precipitation levels. A wide range of animal and plant species dominate different zones within the county and humans continue to populate both urban and Wildland areas within Sierra County. As of 2017, the U.S. Census tallied the county population at 11,254 or 2.7 people per square mile. This county has folks spread out and tucked into hard to reach fire prone communities. Many of these isolated home sites lack fire protection due to their location and limited resources to address fire mitigation systems.

Sierra County offers many amenities to folks choosing to relocate. With the addition of more residents into the landscape, more infrastructure is required to service their needs. Additional roadways, utility easements, storage tanks, and communication sites all increase the potential for fire to enter areas as these lines or storage sites allow fire to strike and/or move along these routes. Local power and utility lines crisscross Sierra County and can be a source of Wildland fire fuels if not kept trimmed or cleared of vegetation. Several large electric transmission lines also traverse the County carrying power to large communities in Arizona which also require vegetation management.



Numerous areas within Sierra County have minimal fire protection. One area of special concern is located on the east side of the Elephant Butte Dam. It is within the response zone of the Elephant Butte Volunteer Fire Department, however response times to this area can take over an hour to access. Similar situation exists in the subdivided Lake Valley area south west of town. No water sources exist for fire suppression.

The newly constructed Spaceport America has recently completed their own on-site fire department, acquired fire equipment and now have water storage facilities. However, the two small communities of Cutter and Engle, located near the Spaceport, lack adequate fire suppression support facilities.



Protecting critical infrastructure using personnel with insufficient Wildland fire qualifications makes for a dangerous situation during periods of high to extreme fire danger. That combined with high fuel loads, and challenging response times makes Sierra County at risk for a critical Wildland fire incident.



Silver Fire 2013

3. FIRE OCCURRENCE

Most Wildland fires in Sierra County are less than 100 acres (85%) and occur during March through July (73%), with June having the highest occurrence (30%). These percentages are based on material provided by NM State Forestry. Lightning strikes are the primary cause of these Wildland fires. Initial attack by rural volunteer fire departments has been effective and contributes to keeping Wildland fires relatively contained. However, when conditions include increased fuel loads and high winds, these fires can consume acres very quickly. Other factors that help mitigate acres affected by Wildland fires include grazing by wildlife and livestock. Consumption of these fine fuels by these animals helps reduce the fuel load and can decrease the impact and scale of these Wildland fires. Weather conditions vary annually and in years following a strong monsoon season, grass production is greater which usually results in more and larger fires the following fire season.



Fire whirl

In areas where fire management plans have been developed, many natural ignitions (lightning) on USFS and BLM lands are managed to achieve resource objectives. Natural ignitions on lands within the Ladder Ranch in the west portion of the county are managed under contain/confine strategies to allow fire to be re-established on the landscape for ecological benefits. Otherwise, fires started by lightning and all human caused fires are suppressed.

Prescribed fires are conducted on BLM and USFS lands in Sierra County. Prescribed burning is done to restore and maintain range and forest health, improve grazing, and restore and maintain wildlife habitat. Map #2 [p 116] shows the distribution of county Wildland fires based on fire size.



Prescribed burn crew

Based on EMNRD Forestry Division data, during the period from 1987 to June 30, 2019, 231 Wildland fires occurred in Sierra County. **Table 1** [p 15] characterizes causes of Wildland fires. **Table 2** [p 15] summarizes the sizes of Wildland fires. Human caused fires account for the majority of Wildland fires, but a lower percentage of acres burned. In comparison, lightning ignites a smaller percentage of Wildland fires, but consumes more acres within Sierra County.



Drip torch application



Prescribed burn crew

The following statistics only reflect data gathered on fires within Sierra County Volunteer Fire Department response zones.

TABLE 1 – Causes of Wildland fires in Sierra County

Lightning	83 fires or 39%
Miscellaneous	31 fires or 14%
Debris Burning	27 fires or 13%
Equipment Use	22 fires or 10%
Smoking	19 fires or 9%
Campfires	16 fires or 17%
Incendiary	10 fires or 5%
Powerline	3 fires or < 1%
Children	2 fire or < 1%
Fireworks	1 fire or < 1%

TABLE 2 – Sizes of Wildland fires in Sierra County

Less than 0.25 acres	67 or 30%
0.26 to 9.99 acres	86 or 37%
10 to 99.99 acres	52 or 23%
100 to 299.99 acres	5 or 2%
300 to 999.99 acres	13 or 6%
1,000 to 4,999.99 acres	5 or 2%
Greater than 5,000 acres	2 or <1%

4. WILDLAND-URBAN INTERFACE (WUI) DEFINITION

The team has specifically defined WUI in Sierra County as the following:

An area extending:

1/2 mile in grass or shrub vegetation types, 1 mile in piñon/juniper vegetation types, and/or 1 1/2 mile in ponderosa pine/mixed conifer forest types; from the boundary of an at-risk structure (singular or multi-structure), public or private infrastructure asset, or watershed with the following criteria:

- Has a sustained slope class that creates the potential for wildfire behavior that possess a threat to that structure or infrastructure asset,
- Has a geographic feature that can influence and support extreme wildfire behavior, making it a threat to a structure or infrastructure asset,
- Is in an area where vegetation condition and fuel loading will negatively influence wildfire behavior and limit suppression action options with regards to firefighter and public safety,

- Is in an area that is adjacent to an evacuation route from an at-risk structure or community infrastructure asset,
- Is in a critical watershed that is a supply for a downstream community's domestic or agricultural needs.

5. WUI RISK ASSESSMENT AND RANKING

5.1. WUI Community Hazard Rating

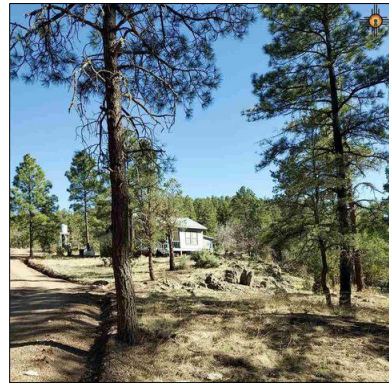
Each Sierra County fire department and some of the partner agencies prepared hazard ratings of WUI areas within their fire districts. Summary sheets of the hazard ratings are presented in Appendix A – Sierra County WUI Community Hazard Rating Sheets [p 62]

Additionally, WUI community assessments have been completed for several WUI areas that the team defined as being the most at risk. Those communities were:

- Poverty Creek (2 times)
- Winston-Chloride (2 times)
- Las Palomas
- Kingston (2 times)
- Caballo



Poverty Creek Pines



Poverty Pines home

These assessments utilized information through the FIREWISE program. Meetings were held with landowners at the local volunteer fire department (VFD) stations. Landowners completed a "community assessment"; making determinations on such things as roof construction, slope, terrain, vegetation, ingress and egress. After completion of the assessment, core team and VFD members completed individual triage assessments on many of the homes in the community. These assessments raised landowner awareness of defensible space and provided the opportunity to VFD members to determine if the home was a "Go" or "No Go" situation.

The Sierra County CWPP Core Team intends to conduct Community Assessments on a regular basis-one pre fire season and one post fire season. The Core Team will work with each VFD to determine location and dates of these bi-annual assessments.

5.2. WUI Area Ranking

The WUI community hazard ratings were prepared by the VFDs and partner agencies using the following categories:

- Flammable hazards
- Population density
- Mobile Water Available
- Fire Department Response Time
- Fuel types
- Topographic hazard rating
- Ingress/Egress issues

The CWPP team prepared a WUI hazard assessment and ranking for Sierra County. Table 3 summarizes the overall WUI hazard assessment and provides a hazard ranking of WUI areas within Sierra County.

5.3. WUI Area Treatment Priorities

Sierra County CWPP Team has identified the following communities as their Five Year (5) WUI treatment priority list:

1. Poverty Creek Fuel break
2. Kingston Fuel break
3. Arrey Bosque Area (BOR tree farm)
4. Animas Creek flood debris
5. Forest Service inholdings
6. River Corridor including Mims Pond
7. Lake Valley area subdivisions
8. Percha watershed from Highway 152 south and east of the Black Range Crest

Team members are committed to working together to accomplish projects in an interagency manner on “both sides of the fence”.

6. CATEGORIES FOR IMPLEMENTATION AND ACTION ITEMS

The CWPP Team has developed the following categories for implementation and action items with regard to Sierra County WUI areas:

- Infrastructure Protection
- WUI Focus Projects
- Industry, Utilization, and Employment
- Public Information and Education
- Grants and Finance
- Watershed Restoration

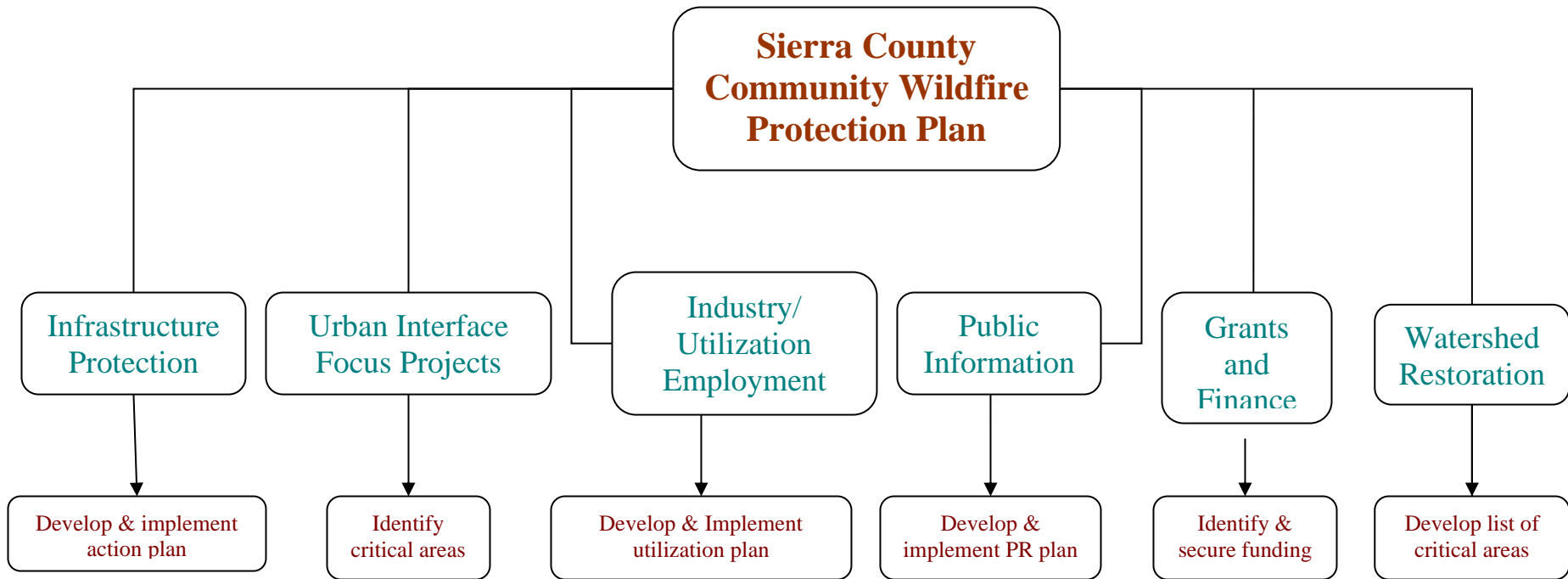


Winston landscape

TABLE 3 – SIERRA COUNTY WUI HAZARD ASSESSMENT AND RANKING

WUI Area	Flammable Hazards: Natural gas=1; propane=2; both=3	Population Density > 50% = 1 concentrated < 50% = 2 scattered	Mobile Water Available < 4500 gal = 1 > 4500 gal = 0	Fire Department Response Time >15 min = 1 <15 min = 0	Fuel Types Grass = 1 PJ = 2 PiPo = 3 Riparian fuels = 4 Bosque = 5	Topographical Rating flat = 1 hills = 2 steep = 3	Ingress/Egress for response >2 entries = 1 2 entries = 2 1 entry = 3	Total Score High ≥ 11 8 ≤ Med ≤ 10 Low ≤ 7
Animas Creek	3	2	0	0	4	2	3	14
Arrey/Derry	3	1	0	0	1	1	3	9
Arrey/Derry Bosque	3	2	1	0	5	1	3	15
Caballo	3	2	0	0	1	1	3	10
Caballo Lake Lease Lots	3	1	0	0	1	1	3	9
Chiz	2	2	1	1	2	1	3	12
Chloride	2	2	1	0	2	2	3	12
Cuchillo	2	1	1	1	1	2	1	9
Elephant Butte	3	1	0	0	1	2	1	8
Hermosa	2	2	0	1	3	3	3	14
Hillsboro	2	1	0	0	1	2	1	7
King Canyon	3	1	0	0	1	1	3	9
Kingston	2	1	0	0	4	3	3	13
Lake Valley	2	2	0	1	1	2	3	11
Lake Valley Historic District	2	2	1	1	1	2	3	12
Mims Pond	2	2	1	0	5	1	3	14

WUI Area	Flammable Hazards: Natural gas=1; propane=2; both=3	Population Density > 50% = 1 concentrated < 50% = 2 scattered	Mobile Water Available < 4500 gal = 1 > 4500 gal = 0	Fire Department Response Time >15 min = 1 <15 min = 0	Fuel Types Grass = 1 PJ = 2 PiPo = 3 Riparian fuels = 4 Bosque = 5	Topographical Rating flat = 1 hills = 2 steep = 3	Ingress/Egress for response >2 entries = 1 2 entries = 2 1 entry = 3	Total Score High ≥ 11 8 ≤ Med ≤ 10 Low ≤ 7
Monticello	2	1	1	1	4	3	2	14
Oasis	3	1	0	0	1	1	3	9
Palomas	2	2	1	0	1	2	2	10
Placitas	2	1	1	1	1	2	3	12
Poverty Creek	2	2	1	0	3	3	3	14
Rio Grande Corridor-Palomas	3	2	1	0	5	2	2	15
Seco Subdivision	3	1	0	0	4	1	3	12
Truth or Consequences	3	1	0	0	1	2	1	8
Winston	2	1	1	0	1	1	3	9



6.1. Infrastructure Protection

This category consists of communication sites; utility lines and improvements; and county, state, and federal highways. Coordinating this category will be the Sierra County Commission and the Sierra County Emergency Management Office.

6.1.1. Communications

6.1.1.1. Communication Sites

The objective is to mitigate the threat of wildfires impacting communications equipment on site. Various fuel types surround or are growing adjacent to these communication sites and consist of heavy brush, Piñon-juniper, ponderosa Pine and mixed conifer, depending upon the elevation.

Agencies with electronic equipment on the sites include:

- Sierra County Sheriff Department and EMS radio repeaters
- State of New Mexico Communications Bureau radio repeaters
- Dona Ana County
- U.S. Forest Service/Bureau of Land Management radio repeaters
- NM State Police
- Sierra County Volunteer Fire Departments
- US Border Patrol
- Sierra County Road Department
- Private Industry



TABLE 4 – COMMUNICATION SITES

Site	Latitude/ Longitude	Land Ownership	Propane Tank	Maintenance Responsibility	Fuel Treatment
Caballo Mountain	33° 00' 54.67" N 107° 13' 49.70" W	Public- BLM	Yes	BLM	Annual brush control
Winston-near transfer station	33° 21' 10.77" N 107° 38' 58.69" W	Public- County	Yes	County	Annual Brush control
Lookout Mountain	33° 21' 07.52" N 107°48' 14.95 W	Public- USFS	Yes	USFS	Annual brush control
Poverty Creek	33° 27' 37.70" 107° 49' 17.76" W	Private	Yes	VFD	Annual brush control
Monticello	33° 24" 03.13" N 107° 26' 20.61" W	Private	Yes	County	Annual brush control
T or C/Williamsburg - water tank hill	33° 07' 54.36" N 107° 15' 09.46" W	Public-City	Yes	City of T or C	Annual brush control
Hillsboro	32° 55' 19.05" N 107° 33" 58.63" W	Private	Yes	Hillsboro Community	Annual Brush control
Red Hill Repeater	33°36'3907" N 107°60'27.08" W	Public	No	County	Annual Brush Control

6.1.1.2. Communication Needs

The objective is to maximize the use of current infrastructure to improve communications between federal, state, county, and local fire management entities and mitigate inadequate and unsafe conditions. The Sierra County CWPP team developed the Sierra County Wildland Fire Communication Plan, see Appendix B [p 91].

6.1.2. Utilities

The CWPP team objectives are to:

- Open a clear and direct dialogue between the USDA-FS, BLM, and other entities and companies on all right-of-way responsibilities and procedures regarding the installation, maintenance, and responsibilities of all utilities that service areas in Sierra County.
- Create a feathered appearance from edge of right-of-way back into the adjoining fuels so that approaching crown fires would have the potential to become ground fires, which would result in reduced spread, less damage to utilities, and increased firefighter safety.
- Reduce fuels to minimize arcing of power lines during wildfire, prescribed fire and strong wind events. Transmission lines are very sensitive to smoke. The actual lines must be cleaned by hand.
- In some areas, especially on large interstate type transmission lines, the lines are very high due to canyon spans and typically not affected by Wildland fires.
- Approved herbicides and growth retardants would be beneficial in controlling vegetation.
- Amend and review all agreements with cooperators, as needed, to be sure that there are no issues or concerns that will hinder appropriate fire suppression actions.
- Update agreements to include language that addresses maintenance of the utility line to reduce the impact of a wildfire.
- Utility substations may need to be treated, including areas outside of chain link fences.
- Request that each entity provide an annually updated GIS database of the utility lines to the Sierra County Emergency Management Office.
- Develop a rapid response plan to address pre-planning and reactions to a wildfire that may threaten a major utility line.

6.1.2.1. Electric Transmission Lines

There are two types of electric transmission lines that cross Sierra county: inter-state transmission lines and local service.

El Paso Electric company has power lines that travel through the Black Range Ranger District, Gila National Forest from south of Wahoo Peak to Garcia Place and another one that travels through the Jornada Valley.

Tri-State Electric has transmission lines that travel over the top of Caballo Mountain from Elephant Butte Dam.

Sierra Electric Cooperative is the local service provider whose has services throughout Sierra County along with portions of the City of Truth or Consequences.

Spaceport America has its own utility system that will develop over time as the demands on site grow.

6.1.2.2. Telephone Lines

- Hillsboro/Kingston-Windstream; lines running on power poles intermittently
- Connection via Microwave from Hillsboro area to Caballo Mountain
- Poverty Creek-Western NM Communications; lines are underground
- Percha Creek South (below Caballo Dam) is Century Link Communication
- Century Link along County Road A013

6.1.2.3. Large Propane Storage

- Butte Propane, T or C
- Pinnacle Propane, T or C
- Cortez Gas, T or C
- Winston General Store, Winston
- Baquera' s General Store, Arrey
- Lakeview RV Park, Caballo
- Ziggy's Butane Co (Deming)
- Burns Butane (Hatch)

6.1.2.4. Petroleum Pipelines

- New Mexico Gas Company-Natural Gas
- Plains Petroleum Pipeline

6.1.2.5. Above Ground Fuel Storage Tanks

- Spaceport has a 35,000-gallon storage tank of aviation fuel
- Air Force surveillance station has two 2,000-gallon tanks
- Elephant Butte Lake State Park has four 3,000+ gallon tanks
- St. Cloud Mines near Winston has a 18,000-gallon propane tank
- City of Truth or Consequences Municipal Airport has 2 12,000 storage tanks of aviation fuel
- Winston General Store
- Elephant Butte and Caballo Lakes Marinas
- Baquera' s General Store in Arrey

6.1.3. Highway Right-of-Ways

Sierra County is in District 1 in the State Highway Department's organizational structure.

The major highways in Sierra County consist of:

- State Highway 152 (I-25 to Emory Pass)
- State Highway 52 (I-25 to Junction with Highway 59 (Beaverhead turnoff))
- State Highway 59 (Junction with #52 to Sierra County border)
- Highway 27 (Junction with Highway 152 (Hillsboro) to Junction with Highway 26 (Nutt)).
- Highway 187 – Arrey-Derry Exit to County Line
- State Highway 51 (from City of Truth or Consequences to Engle)
- State Highway 181 (North of T or C to I-25 Exit 89)
- State Highway Rd 1 (I-25 exit 92 North to County Line)
- State Highway Rd 52 (junction off this highway to Monticello which then becomes County Rd #33)

There are numerous secondary roads (County and Forest Service) and private (ranch) roads.

The primary objective is to develop a procedure where the rights-of-way along all major roads are managed so that tree densities allow motorist to see and avoid wildlife safely. Additionally, if these rights-of-way were thinned and maintained, they could be used as viable fuel breaks and pre-suppression lines by wildfire suppression resources.

The USDA Forest Service currently holds the right-of-way titles where the highway crosses National Forest lands. On BLM lands, some areas are dedicated highway rights-of-way and others are under special highway designation status. Where highways cross State Trust land, the State Land Office holds the title, with a lease being issued to the State Highway Department.

Prescriptions for recovery and thinning zones have been approved and implemented by the State Highway Department in other Districts. These prescriptions are to be considered for use and could be adapted for areas within Sierra County under a categorical exclusion procedure. Landowners have indicated that maintaining aesthetics and view-sheds is very important. A prescription for treatment of highway rights-of-way is detailed on page 94, in Appendix C.



Holding Lines Along Roadway

Table 5, found on page 47, presents a list of critical highway rights-of-way needing treatment as identified by the CWPP team.

6.1.4. Aviation Facilities

The objective is to maintain facilities for safe, effective flight operations for the public as well as governmental personnel. These facilities also serve as sites for emergency medical air operations in and out of Sierra County.

Aviation facilities in Sierra County include the following:

Facility	Location	Private/public
Truth or Consequences Municipal Airport	33°14'09" N 107°16'15" W	Public
Winston Landing	33°21'10" N 107°38'55" W	Private
USFS Beaverhead helipad	33°25'22" N 108°06'40" W	Public
USFS Beaverhead landing strip	32°25'10" N 108°08'22" W	Public
USFS Kingston Helipad	32°54'59" N 107°41'11" W	Public
USFS Emory Pass Helipad	32°54'47" N 107°45'58" W	Public
USFS Hillsboro Peak	32°57'09" N 107°46'45" W	Public
Poverty Creek helipad	32°27'59" N 107°48'38" W	Public
Spaceport America	32°59'25" N 106°58'29" W	Public

6.1.5. Accomplishments and Actions Needed

Tables 6 and 7, found on page 50 & 52, present summaries of infrastructure protection actions that have been completed and items needing attention.

6.2. WUI Focus Projects

This category identifies critical areas in Sierra County needing mitigation as identified and agreed upon by the CWPP Team. Many of areas have already had, or will have, hazardous fuels mitigation work completed. The CWPP team believes that these areas can be mitigated within the next 1-3 years, and with a yearly maintenance program established, impacts from wildfires can be reduced.



Controlled burn results

The Black Range Ranger District, Gila National Forest, Bureau of Land Management: Las Cruces Field office, NM State Forestry, NM State Land Office, Sierra Soil & Water Conservation District and the Jornada RC&D can coordinate this category.

6.2.1. Building Fire Department Capacity

6.2.1.1. Wildland Firefighter Training

Building fire department capacity and firefighter knowledge within the recognized fire departments in Sierra County, will allow them to assist the state and federal agencies in wildfire suppression and protection. These same fire departments can become a complimentary force in all wildfire management activities. Local fire departments can serve as the initial attack incident commander until State Forestry or the appropriate federal agency arrives.

The CWPP team, working cooperatively with the Sierra County Manager and Board of Commissioners has implemented a county specific incident qualification ("red") card program and standard operating guideline for response to Wildland fires. Descriptions of the qualification system and standard operating guideline are presented in Appendix D and E found on pages 97 & 99.

The following courses will be conducted locally on an annual basis:

- S-130 Firefighter Training
- S-190 Introduction to Wildland Fire Behavior
- I-100 Introduction to ICS
- L-180 Human Factors on the Fireline
- RT-130 Annual Fireline Refresher meeting NWCG Curriculum

After completion and certification of this selection of training, participants will be eligible to participate in the Sierra County Wildland fire fighter personal protective equipment (PPE) purchase program.



To support the continued growth of the Wildland firefighter's knowledge and fire department capacity the following courses will be conducted as needed/requested:

- S-110 Basic Wildland Fire Orientation
- S-130 Basic Firefighter Training
- S-131 Advanced Firefighter Training
- S-190 Introduction to Wildland Fire Behavior
- S-200 Initial Attack Incident Commander
- S-212 Wildfire Power Saws
- S-215 Fire Operations in the Wildland/Urban Interface
- S-230 Crew Boss (Single Resource)
- S-231 Engine Boss (Single Resource)
- S-234 Ignition Operations
- S-260 Interagency Incident Business Management
- S-270 Basic Air Operations
- S-290 Intermediate Wildland Fire Behavior
- I-200 Basic ICS
- I-300 Intermediate ICS
- L-280 Followership to Leadership
- L-380 Fireline Leadership
- RT-130 Refresher Advanced Firefighter Training
- RT-190 Refresher Wildland Fire Behavior

Sierra County VFD Wildland firefighting training accomplishments, see appendix H on page 110.

These classes will be offered locally as much as possible. Sources for qualified instructors include New Mexico State Forestry: Socorro District; US Forest Service: Gila National Forest; and Bureau of Land Management: Las Cruces Field Office.

6.2.1.2. Wildland Firefighting Equipment

Sierra County fire departments need adequate Wildland firefighting equipment and personal protective equipment (PPE) to improve their capacity to safely respond to and suppress Wildland fires.

The CWPP team, utilizing the Federal minimum standards, has adopted minimum equipment requirements for Wildland fire responses in Sierra County, see Appendix F on page 101.

6.2.2. Local Community Water Supplies

The objective of this focus project is to improve existing water systems and increase water supplies to ensure adequate water availability for local firefighting efforts. Locating additional water resources and implementing methods to utilize those resources when VFDs are in remote areas will be considered. Current systems include the following:

- Multiple Fire Hydrants in the Arrey/Derry area as well as northern Dona Ana County
- Caballo has a 53,000-gallon storage tank plus a dry hydrant
- Chloride has a private 36,000-gallon water tank plus a dry hydrant dedicated for the use by the VFD
- Cuchillo has a gravity fed 3,000-gallon tank and 2,700-gallon mobile available
- Elephant Butte has a water hydrant system available; if any VFD utilizes water from the system they must notify the City of Elephant Butte so that the City is aware of the remaining water available; has 7500 gallons on wheels
- Elephant Butte has a 5,000-gallon underground water storage at the former Lakeshore station
- The Garfield Municipal water system provides water for the area below Percha Dam; there are 24 hydrants as part of the system
- Hillsboro has a community water system with one 30,000-gallon storage tank and one 18,500-gallon storage tank



- Hillsboro can access water from an irrigation tank located at a private residence south of Hillsboro
- Hillsboro also has access to a 10,000-gallon livestock water storage tank also located south of Hillsboro
- Hillsboro has a 9,000-gallon storage tank at the fire station
- Kingston has a 25,000-gallon storage tank made available by a private landowner (agencies will need to provide pumping capability)
- Monticello has a gravity fed 3,000-gallon tank and 2,700-gallon mobile available
- Palomas has a 40,000-gallon water storage tank plus a dry hydrant system
- Poverty Creek has a 30,000-gallon water storage tank plus a dry hydrant
- City of Truth or Consequences has 7.2 million gallons of water available through 330 hydrants
- Winston-Chloride VFD has drilled a new well and has a 36,000-gallon water storage tank in operation plus a dry hydrant.
- Winston-Chloride VFD has two 17,500-gallon storage tanks in reserve.

6.2.3. Wildfire Evacuation Responsibilities and Procedures

The CWPP team objective for this focus project is to facilitate the development of evacuation plans and structure protection plans by which urban/interface areas in Sierra County can be safely and timely evacuated and protected in the event of a wildfire disaster. In addition, the plans will:

- Provide guidelines to assist in a safe and orderly evacuation.
- Identify special concerns that will assist agencies and responding units; including persons requiring extraordinary care; livestock; and other property requiring specialized handling.



6.2.3.1. Authority

- Authority for ordering an evacuation during a wildfire incident in the County rests with the Chairman of the Sierra County Commission or the Sheriff of Sierra County. This authority is based on State Statues: The State Civil Emergency Preparedness Act, the Emergency Management Act, State Executive Order and existing multi-agency Joint Powers Agreements, and local Memorandums of

Understanding (MOU). This would usually occur with evacuation Stage 1 or Stage 2.

- The Incident Commander of a wildfire incident is authorized to order an evacuation if conditions immediately threaten the health, safety, or welfare of citizens and the Emergency Operations Center is not operational or the County Commission members are not available. This would usually occur with evacuation Stage 3.
- Responsibility for planning, implementing, and managing an evacuation rests with the Sierra County Sheriff's Office and Sierra County Commission.

6.2.3.2. Evacuation Stages

Stage 1: Notification and briefings of persons within the affected areas. This stage will be implemented when fire has a high potential of reaching structures in the area within 24 to 36 hours.

Stage 2: Warnings of potential evacuation will be announced if there is a good probability of a need to evacuate. Warnings will include the recommended movement of persons requiring special needs or care, livestock and large mobile property. This stage will be implemented when fire has a high potential of reaching structures within the area in 16 hours.

Stage 3: Evacuation Requested/Ordered when the fire has a high potential of reaching structures. Next burning period. Residents will be asked to leave within a specified time period by an announced route and assemble at pre-designated locations.

6.2.3.3. Perimeter Roadblocks and Patrols

Once an evacuation has been ordered, perimeter roadblocks will be set up and maintained; and the evacuated area patrolled 24 hours a day. Regular status briefings will be provided to evacuees at the pre-designated assembly locations and shelters established by the American Red Cross.

6.2.3.4. Return of Residents to Their Homes

Once the incident is declared under control and safe for entry by the Sierra County Sheriff's Office or Chairman of the Sierra County Commission, evacuees will be allowed to return. Evacuation teams will re-contact residents to evaluate hardships and special needs.

6.2.3.5. Implementation Procedures

- 1) In the event that an evacuation is requested or ordered by the jurisdiction affected and given to the Incident Commander for

implementation, the State Police will coordinate the evacuation through officer(s) assigned to the Emergency Operations Center.

- 2) In the event of non-compliance by residents ordered to evacuate the Sierra County Sheriff's Office will coordinate all efforts to re-contact the person(s) and stress the immediacy of the threats and the need for evacuation.
- 3) Evacuation routes and roadblock locations will be determined by the Incident Commander or local authority who has jurisdictional authority or designee specific to each incident. He will provide this information to the Sierra County Sheriff's Office and the Emergency Operations Center staff.
- 4) Residents should report to their local volunteer fire department station, if it is safe to do so or to the next nearest VFD station to receive the most current information and further instruction.
- 5) Evacuation Issues:

Ingress & Egress issues and/or limited access to the following WUI communities:

- Animas Creek
- Arrey/Derry
- Arrey/Derry Bosque
- Caballo
- Caballo Lease Lots
- Chloride
- King Canyon
- Kingston
- Lake Valley
- Mims Pond
- Percha Creek Road
- Oasis Community
- Poverty Creek
- Winston



Kingston access road

6.2.3.6. Anticipated Resources

- Personnel with vehicles and radios to warn residents and patrol evacuation area.
- Personnel at roadblocks and patrolling evacuation routes to ensure traffic flow and accountability of personnel and residents.

- Personnel at Assembly locations to direct evacuee processing and assist with sheltering and information dissemination needs. These personnel will work under the direction of the American Red Cross.

6.2.4. Treatment of Structure Ignitability

The CWPP team objective for this focus project is to develop a county wide message that will assist homeowners in planning for reducing the threat of loss of property from a wildfire.

The team recommends the adoption of the *FIREWISE* program that has specific recommendations for the safe treatment of homes in our identified WUI areas. The *FIREWISE* program is a group of complementary programs aimed at informing the community about the concept of *FIREWISE* living. Program components include the following:



FIREWISE website (www.firewise.org): represents a successful partnership of private and governmental agencies.



FIREWISE USA™
Residents reducing wildfire risks

Homeowners and landowners can implement and practice being *FIREWISE* with some very simple steps. For home construction some basic things to do would include:

- Construct home using materials such as Class A asphalt shingles, slate or clay tile, metal, cement and concrete products.
- On exterior wall facing: fire resistive stucco or masonry.
- Install non-flammable shutters on windows and skylights.
- To prevent sparks from entering your home through vents, cover exterior attic and under floor vents with wire screening no larger than 1/8" mesh.
- Tempered and double-pane glass windows can make a home more resistant to wildfire heat and flames.

Around the home a homeowner can take some very simple steps:

- Don't stack firewood near your propane or butane tank.
- Keep the roof, gutters and eaves clear of leaves and other debris

- Make sure under-eave and soffit vents are as close as possible to the roof line.
- Box in eaves but be sure to provide adequate ventilation to prevent condensation and mildew.
- Rake potentially flammable materials such as leaves, pine needles, pinecones, etc., away from your home to at least a distance of 30 feet.
- Selectively prune and thin all plants and remove highly flammable vegetation.
- Prune large trees so that the lowest branches are at least 6 to 10 feet high to prevent a fire on the ground from spreading to the treetops.

If you have a wooden porch:

- Don't keep your grill on your porch.
- Don't stack firewood on your porch.
- Don't keep combustible material on or under your porch.

Additional resources are available through the *Ready, Set, Go!* (RSG) program that has been initiated by National Fire Protection Association (NFPA). The *Ready, Set, Go!* Program utilizes firefighters to teach individuals



who live-in high-risk wildfire areas and the WUI how to best prepare themselves and their properties against fire threats. *Ready, Set, Go!* works in a complimentary and collaborative fashion with *FIREWISE* and other existing Wildland fire public education efforts. It amplifies their messages to individuals to better achieve the common goal we all share of fire-adapted communities.

The RSG Program provides the implementation guidance; background knowledge; and presentation tools to assist fire departments in delivering the program message. The RSG website (www.Wildlandfirersg.org) can provide excellent tools.

With the increase in large scale wildfires impacting rural and urban communities, additional information will be provided to residents regarding new studies on the effects of "Ember Wash" related to wildfires that could be as far as three to five miles away.

Residents will be referred to informational sites such as:

YouTube: Dr. Jack Cohen, Fire Scientist

Insurance Institute for Business and Residential Safety

Additional information will be provided to residents, communities and local governmental entities on the health issues related to extended exposure to smoke from Wildland fires. Such information will include information on developing a “clean” air room with the use of a HEPPA filtration system; recommendations not to use a gas appliance when there is a lot of smoke in the air; not to use a swamp cooler, how smoke is heaviest in the morning and late evening. The CWPP Team will work with the County for a better Smoke Alert system, such as utilizing the Code Red program for notifications.

Communication: tools such as publications and videos can be distributed. Utilization of *FIREWISE* concepts on landscaping, building materials, firefighter safety and other topics are available online & as handouts.

Workshops, training sessions and demonstration events: these activities are focused on reducing fire risk to property and lives through better community design and wildfire preparedness planning.

Technical assistance: the *FIREWISE* program organizers and other partners within the Sierra County CWPP can provide planning assistance.

Beyond the *FIREWISE* concepts, the County of Sierra needs to develop building codes, subdivision standards and ordinances that have guidelines to mitigate fire hazards and response. Development in the WUI areas should adhere to proven building materials, landscaping, roads, readily accessible water supplies and other critical influences such as defensible space concepts.

During 2012 the Sierra County Planning and Zoning Committee adopted new county subdivision regulations, with a portion of those regulations dedicated to fire protection. New subdivisions will be required to provide an adequate water supply for fire suppression, including water storage up to 30,000 gallons.



6.2.5. Accomplishments and Actions Needed

Since 2003, the members of the Sierra County CWPP team have treated more than 122,528 acres related to WUI areas across public and private lands; greatly reducing the risk of impact to homes and property from wildfires.

Acres treated by agencies in Sierra County since 2012, including wildfire, prescribed fire and treatment fires:

The following acres reflect the historical fire data within Sierra County for prescribed fires, wildland fires, and hazardous fuel reduction projects by agency:

- USFS: Gila National Forest, Black Range Ranger District: 147,354 acres
- USDI: Bureau of Land Management, Las Cruces Field Office: 12,312 acres
- NM State Forestry, Socorro District Office: 211 acres

These acres include wildfires, prescribed fires, and treatment acres.



Table 8 and Table 9, found on page 55 & 59, present summaries of the WUI focus project actions that have been completed and items needing attention.

6.3. Industry, Utilization, and Employment

This category deals with creating, developing, and improving the forest-based industry and employment opportunities in Sierra County that will play a major part in removing and utilizing large amounts of bio-mass and wood products that will become available when projects are initiated.

The CWPP team objective is to improve the economy of Sierra County by implementing forest restoration and health initiatives as outlined in the National Fire Plan:

- Small Wood Utilization: To encourage the development of small wood utilization business that will facilitate the removal of woody biomass from forest restoration and hazardous fuel load reduction projects.
- Economic Development: To encourage local business development in the forest and fuel wood industries that will increase employment levels within Sierra County.
- Critical Wildlife Habitat: To improve designated areas of critical wildlife habitat through forest restoration which will increase species diversity, including listed Threatened and Endangered Species. A listing of the federal endangered, threatened, proposed, and experimental for the Gila National Forest is included in Appendix G on page 107.



Timber Harvests

6.4. Public Information and Education

This category identifies the correct message to effectively communicate the Healthy Forest Restoration Act to the general public, individual landowners, county officials, regional organizations and interested persons.

The USDA-FS-Gila National Forest, BLM-Las Cruces Field Office and NM State Forestry-Socorro District Office and the Jornada Resource Conservation & Development Council will coordinate these efforts.

The CWPP team objective is to increase public awareness and knowledge of forest health issues with emphasis on wildfire safety. All agencies and entities, which engage in Wildland firefighting activities, will utilize the following media and events for dissemination of pertinent education materials:

- Newspapers
- Publications
- Sierra County Fair
- FIREWISE and Ready, Set, Go! workshops
- Public information meetings during major fire events
- Defensible space workshops
- Regularly scheduled school programs

Tables 10 and 11, found on page 59 & 60, present summaries of the public information and education actions that have been completed and items needing attention.

6.5. Community Assessments & Educational Outreach

A CWPP is designed to identify areas that need vegetative fuels removed to reduce the risk of wildfire, propose methods to reduce structural ignitability, and evaluate a community's firefighting abilities. This planning process helps tie communities together by identifying their wildfire risks, their community values, and their critical infrastructure. The residents' concerns need to be prioritized and a list created that identifies vulnerable areas needing attention, as well as potential treatment options.

CWPPs provide communities with opportunities to influence where and how federal agencies implement fuel reduction projects on federal lands, and the distribution of federal funds for projects on non-federal lands. Many funding options and grants require a jurisdiction to be included in a current and approved CWPP.

Four (4) communities within Sierra County, Kingston, Caballo, Winston, and Poverty Creek, came together on different dates to identify their risk of wildfire, consider how their structural ignitability could be reduced, and evaluated their fire-fighting capabilities. Landowners within these communities were contacted by letters in addition to follow up letters after the meeting presentations were completed. Handout materials were provided at each community's assessment meeting, including; "Ready Set Go" and FIREWISE informational brochures. Attendees also learned about a new term-ember wash- which many home ignition specialists believe is the cause of the loss of many homes in communities several miles away from an ongoing wildfire.

The CWPP team along with the Gila National Forrest Supervisor's Office staff and Black Range Ranger District staff and NM State Forestry staff all contributed to a successful exchange of what each area's wildfire risks were and what actions could be implemented to mitigate same in each community. Landowner's were encouraged by the exchange of ideas and the ability of the CWPP team to answer their questions. Educating residents/landowners appears to have the greatest impact on creating change. Concerns brought forth from each meeting that could be addressed by improvement actions by Sierra County were forwarded to the Sierra County Commission with good response from their appropriate departments.

In addition to organizing the community assessment meetings, the CWPP Team also attended the Hillsboro VFD, Caballo VFD, and Monticello-Cuchillo VFD business meetings. Private landowners also met with CWPP team members to address VFD ingress/egress issues. A display providing information regarding FireWise and Ready Set Go materials is utilized during community events such as the Sierra County Fair. Presentations by the CWPP team were made to the local Rotary Club and the Chamiza Cow-Belles. Informational brochures were provided to the City of Truth or Consequences City Commission and were mailed to members of the Sierra County Farm Bureau.

Other outreach activities completed regularly by members of the CWPP team include participation in:

- T or C annual Fiesta Parade
- Winston Community annual Parade
- National Night Out event
- Career Days at the local middle and high school
- Sierra County Fair
- Elephant Butte Days
- Elephant Butte Balloon Regatta
- Various school presentations and on the ground outreach/education



Winston Community Assessment 2019

6.7. Grants and Finance

This category concerns securing and tracking various grants to accomplish the identified goals and objectives. The CWPP team objective for this category is to continue to work as a group in searching for funding availability and to disseminate information to the communities. The clearinghouse for all information will be the Jornada RC&D who will disseminate grant opportunities to cooperators as they are received.

The rural and municipal volunteer fire departments in Sierra County must utilize their funding from the State Fire Marshal's Office, State Fire Protection Fund, primarily to maintain and improve their structure fire response capabilities. With prior approval from the State Fire Marshal's Office, departments may use State Fire Protection Funds for Wildland fire response needs.

Other sources of funding to improve and maintain Wildland fire response capabilities available to Sierra County rural and municipal fire departments may include the following:

- Federal Secure Rural Schools Title III Program,
- FEMA Assistance to Firefighters Grant Program,
- USDA Forest Service Volunteer Fire Assistance (VFA) Grants (administered by EMNRD Forestry Division),
- USDOJ Bureau of Land Management Rural Fire Assistance (RFA) Grants (administered by EMNRD Forestry Division),
- New Mexico Governor's Office grant programs (administered by EMNRD Forestry Division),
- New Mexico legislative capital outlay grants, and
- Reimbursements for Wildland fire responses provided by ENMRD Forestry Division (mutual aid and New Mexico Resource Mobilization Plan).

With all governmental agencies experiencing budget reductions, Sierra County rural and municipal fire departments will need to be creative and aggressive in their efforts to obtain funding to maintain and improve their Wildland fire responses capabilities.



6.8. Watershed Restoration

Watershed restoration impacts every resident in Sierra County. This category will deal with watershed restoration activities that citizens in Sierra County depend on, along with individual private and public lands and improvements outside the defined WUI boundary areas.

The USDA-FS-Gila National Forest, BLM-Las Cruces Field Office, State Land Office and NM State Forestry-Socorro District Office will coordinate this category with assistance and input from the Sierra Soil & Water Conservation District and the Jornada Resource Conservation & Development Council.

While the current Healthy Forest Restoration Act strategy focuses on areas identified as 'urban interface' being a priority, it is understood that other areas beyond this zone will need to be treated to protect watersheds, infrastructure, customs, and cultures within Sierra County. These projects will require increased cooperation between all cooperators, public, private and special interest. While it is not the intent of this plan to identify projects at this time; once the WUI conditions are improved these projects will be identified that will have a long-lasting effect on larger ecosystems. These projects will be multi-agency, multi-jurisdictional and complex in nature.

The CWPP team supports a collaborative approach to watershed ecosystem-based projects that returns natural fire regimes on a landscape scale, regardless of ownership.



View over Emory Pass

TABLES

TABLE 5 – HIGHWAY TREATMENT PRIORITIES

HIGHWAY	LOCATION	NEEDS / Vegetation Types	OWNERSHIP	PRIORITY
State Highway 152	Hillsboro/Emory Pass	Riparian areas, Piñon/Juniper/oak/Mountain mahogany, ponderosa pine and mixed conifer depending on elevation. 1. Highest Priority: mile marker 40 at Kingston campground to mile marker 37; parts of the Kingston WUI area have been treated. This area poses the highest threat to the town and with work will provide the best area of defense. 2. High priority: mile marker 37 to mile marker 36. When this area is completed it will add to the work done lower on the highway and aid the Kingston WUI project goals. It will also add protection to the upper portions of the South Percha watershed. 3. High Priority: mile maker 36 to Emory Pass. This area will also add to the protection of Kingston and the South Percha watershed.	Hillsboro to Kingston – private, Kingston to Emory Pass - USDA-FS	1
State Highway 27	Hillsboro to Nutt	Grasslands, Piñon/Juniper/oak woodlands with small stretches of riparian areas.	Private/State	2
State Highway 52	I-25 Junction to Junction with 59	Creosote shrublands, grasslands, Piñon /Juniper/oak shrublands, small amount of riparian areas above Winston.	Private, BLM, State Trust Land (2 Sections)	3
State Highway 59	Junction of 52 to Sierra County Line	Grasslands, Piñon/Juniper/oak woodlands to riparian areas, ponderosa pine depending on elevation. 1. Moderate Priority: between mile markers 7 to 10 through Poverty Creek, thinning the highway right of way will have little or no effect acting as a fuel break due to minimal ground fuel; sparse timber and open grass along the highway. The area of concern will be the private landowner property and fuels reduction in these areas. 2. Low priority: mile marker 6 to 8; no urban interface. The dominant fuels are Piñon/Juniper with ponderosa pine intermixed. Livestock grazing occurs along this stretch of	Private, USDA-FS	4

HIGHWAY	LOCATION	NEEDS / Vegetation Types	OWNERSHIP	PRIORITY
State Highway 59 continued	Junction of 52 to Sierra county line continued	<p>the highway, minimizing future fire activity due to minimal ground fuels.</p> <p>3. Low priority: mile marker 2 to forest boundary to mile marker 6; no urban interface; the dominant fuel model is Piñon-juniper. Livestock grazing occurs along this stretch of the highway, minimizing future fire activity due to minimal ground fuels.</p> <p>4. Low priority: mile marker 14 to Forest Road 521; open grass with moderately spaced timber. A prescribed fire was completed in 2010 (Area 74)</p> <p>5. Low priority: forest road 521 to forest road 677: open grass with moderately spaced timber. A fuel break along Highway 59 can be treated by prescribed fire to incorporate the Castle and Water fire use files of 2002. The Adobe Ranch previous fire use fire will minimize any impact of a large Wildland fire to the area. A prescribed fire was completed 2010 (Area 74)</p> <p>6. Low priority; forest road 677 to Beaverhead Work Center; the Indian Peaks Prescribed fire has treated the west side of Highway 59 from forest road 677 to the Beaverhead Work Center. This has decreased fuel loadings and will decrease future fire intensities. Completed prescribed fires on both sides of the highway in 2009, 2010, & 2011 (Titanic, Indian Peak & Area 74)</p>	Private, USDA-FS continued	4 continued
State Highway 187	I-25 Arrey/Derry exit to County Line	Willow and salt cedar along approaches to bridge, natural gas lines, water lines, and other improvements.		5
County Road B038	River Bridge	Willow and salt cedar along approaches to bridge.	EBID/BOR Lands	7
State Highway 51	City limits of T or C to Engle	Grasslands; needs mowing.	Private/BLM, State	6

HIGHWAY	LOCATION	NEEDS / Vegetation Types	OWNERSHIP	PRIORITY
County Road A0-13	Engle to Spaceport	Grasslands; mowing and removal/thinning/cutting of mesquite overgrowth; issues with wildlife crossings.	Private/BLM/State	8
State Highway 52	Junction off this highway to Monticello when it becomes County Rd #33	Grasslands/desert shrubs; needs mowing.	BLM/State/Private	9
State Highway 181	North of T or C to I-25 exit 89	Grasslands/desert shrubs; needs mowing	BLM/State	10
State Highway Rd 1	I-25 exit 92 North to County Line	Grasslands/desert shrubs; needs mowing	State/County/BLM/Private	11

TABLE 6 – INFRASTRUCTURE PROTECTION: COMPLETED ACTION ITEMS

COMMUNICATION NEEDS		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Secure Caballo Mountain, need to complete NEPA and complete thinning	BLM	Completed-thinned and piled approx. 25 acres; completed pile burns in fall of 2005 & 2011.
Complete an all-hazards operational plan	Sierra County Local Emergency Planning Committee (LEPC)	March 2018
Develop a Wildfire Communication Plan- List location of repeaters sites; Determine future needs including additional repeaters; Proper protocol; Complete communication assessment; Identify needs of equipment	CWPP	February 2012

UTILITIES		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Get GIS data of all major utility lines through Sierra County	USFS, El Paso Electric, County, Tri-State, Sierra Electric Co-op	February 2012
Each federal/state/county entity work to ensure that each special use permit/ agreement includes a right-of-way maintenance clause; review existing agreements to see if this already in place	USFS, BLM, Sierra County	Completed

HIGHWAY RIGHT-OF-WAYS		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Right of way clearance-DOT working on Hwy 59-mm 22.3 to 34. 1 (11.8 Miles) and along Hwy 152- mm 22.3 to 28.1 (5.8 miles)	County, State Forestry	Spring 2010
Assessments to prioritize critical areas	Sierra County CWPP	February 2012

PROPANE/FUEL STORAGE		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Get GPS site of 17,000-gallon propane tank at St Cloud mine (located between Chloride & Winston);	Sierra County ESA/VFD	June 2019 GPS coordinates for item: N 33.29855 / W. -107.67222
Winston gas station & fuel storage at the Winston DOT yard.	Sierra County ESA/VFD	GPS coordinates for item: N. 33.345962 / W. -107.648727

TABLE 7 – INFRASTRUCTURE PROTECTION: ITEMS NEEDING ATTENTION

COMMUNICATION NEEDS		
Action Item	Who	Planned
License Agreements need to be reviewed	Sierra County ESA	On-going
sites that need to have site visits and wildfire control mitigation plans developed: <i>Lookout Mountain, Caballo Mountain, Hillsboro Peak & Emory Pass</i>	Sierra County Local Emergency Planning Committee (LEPC), VFDs, USFS, BLM	Completed annually
VFDs all need programmable radios to talk to USDA-FS and USDOJ-BLM	BLM, USFS, LEPC, VFD, State Forestry	Ongoing
Investigate possibility of locating VFD repeaters on USFS Lookout Mountain.	Sierra County ESA, USFS	Should be completed by 2020
Investigate possibility of re-locating Winston VFD repeater to previous location on Red Hill	Sierra County ESA office, BLM	Should be completed by 2022

UTILITIES		
Action Item	Who	Planned
Prepare a flyer for insertion in Sierra Electric Cooperative bills in relation to fire dangers	Jornada RC&D, USFS, SEC	Annually in March during wildfire preparedness month
Put news articles in SEC newsletter <i>Enchantment</i>	Jornada RC&D	Semi-annually
Develop a wildfire response plan in case a utility line is threatened & there is no cell coverage	Sierra County ESA	February 2021

TELEPHONE LINES		
<i>Action Item</i>	<i>Who</i>	<i>Planned</i>
Encourage telephone companies to complete a wildfire hazard assessment and development a maintenance plan accordingly	Sierra County ESA & phone companies	February 2013
Get map from phone companies of lines throughout County	Sierra County ESA & phone companies	February 2013
Minimize weeds around Hillsboro Microwave site	Sierra County ESA & phone companies	Annually
Minimize weeds around underground junction boxes	Sierra County ESA & phone companies	Annually
Maintain microwave site around Caballo Mountain	Sierra County ESA & phone companies Valor, Quest	Annually

PROPANE/FUEL STORAGE		
<i>Action Item</i>	<i>Who</i>	<i>Planned</i>
Provide the flyer that was developed to local propane companies and ask them to help with distribution to their customers	Sierra County ESA	February 2013
Identify GPS locations of all major distribution tanks within the County of Sierra and locate on a map	Sierra County ESA	February 2021
Acquire GIS data on all large fuel depots such as the Naval surveillance station, Space Port America, Engle vineyard	Sierra County ESA	February 2021
Work with Willing propane companies to assist with wildfire preparedness distribution in their billing	Jornada RC&D	February 2021

HIGHWAY RIGHT-OF-WAYS		
<i>Action Item</i>	<i>Who</i>	<i>Planned</i>
Work with DOT & USFS to begin implementation of right-of-way clearance on Highway 152, mm 36 to Emory Pass	Sierra County, USFS, DOT	On going
Work with DOT to insure continued maintenance of right of way clearance projects	Sierra County, DOT	On going
Complete right of way clearance on the following Sierra County Roads: C: B038, A0-13	Sierra County	On going
Work with DOT to develop maintenance plan on the following NM State Highways: #27, #52, #59, #187, #51, #181, Rd #1	Sierra County, DOT	On going



TABLE 8 – WUI FOCUS PROJECTS: COMPLETED ACTION ITEMS

LOCAL COMMUNITY WATER SUPPLIES		
Action Item	Who	Year Completed
Develop water supply for Poverty Creek area	VFD, County <i>1 ac. Ft. at Poverty Creek</i>	2011
Hook up new Winston well to tanks as soon as they are erected.	VFD	2010
Secure funding and assistance for Monticello / Placitas water tank as soon as possible	VFD	2010
Perform maintenance on the Chloride sub-station site.	VFD	2009
Hook up the Chloride sub-station well to the two water tanks.	VFD	2010
Acquire storage tank and dry hydrant for Poverty Creek VFD	VFD, Sierra County	Completed
Assess viability of establishing water availability for the communities of Caballo, Lake Valley & Las Palomas	Sierra County ESA	Completed

KINGSTON WUI		
Action Item	Who	Year Completed
Finish fuel break on all sides deemed necessary, based on existing vegetation Block E-41 acres; Block A-21 acres, Block B-66 acres, Block C-96 acres, Block D-43 acres, slash to be piled and burned.	USFS 193 acres cut USFS 141 rx fire USFS 70 acres cut	2010
Develop evacuation and structure protection plans.	VFD, NMFD	March 2005
Implement 03 Hazard Mitigation Grant for thinning on private lands.	SWCD, State Forestry	May 2004

KINGSTON WUI		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Continue applying for the State Fire Manager's funding for thinning on 340 acres of private land at Kingston	SWCD, Jornada RC&D	2009; SWCD has received two grants to implement defensible space treatment but only limited participation
Complete a community assessment	Hillsboro/Kingston VFD, Sierra SWCD, State Forestry, USFS	April 2009

WINSTON WUI		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Develop evacuation and structure protection plans	VFD, NMFD	March 2005
Implement 03 Hazard Mitigation Grant for thinning on private lands and complete assessment of the fuel loads on private, state and federal lands	SWCD, State Forestry	December 2008
Complete a community assessment	Winston VFD, Sierra SWCD, State Forestry, USFS	April 2010

CHLORIDE WUI		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Develop evacuation and structure protection plans	VFD, NMFD	March 2005
Implement 03 Hazard Mitigation Grant for thinning on private lands and complete assessment of the fuel loads on private, state and federal lands	SWCD, State Forestry	December 2008, limited participation

POVERTY CREEK WUI		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Complete evacuation and structure protection plans	NMFD, VFD	December 2010
Continue to apply for the State Fire Manager's funding for thinning on private land at Poverty Creek	SWCD, Jornada RC&D	December 2008
Finish fuelbreak on all sides where deemed necessary, based on existing vegetation. The USDA Forest Service estimates a total of 600 acres needing treatment, both public and private, has completed initial assessments. Prescription and field visits scheduled should be completed during the winter of 2002 and 2003 with actual work starting tentatively in 2003 by USDA-FS on federal land.	USFS acres cut 181 USFS acres rx fire 170	2010
Implement 03 Hazard Mitigation Grant for thinning on private lands and complete assessment of the fuel loads on private, state and federal land	SWCD, State Forestry	2008; 98% of landowners participated in this program

RIO GRANDE-NORTH WUI		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Monitoring of fuel loads and water quantity and quality during the grant cycle period	SWCD	2006
Implement Lower Rio Grande Salt Cedar Management Project- Aerial treatment Mechanical treatment	SWCD	2006 Aerial- 2500 acres; mechanical- 30 acres
Implement Collaborative Forest Restoration Program (CFRP) hazardous fuel loads reduction project along Rio Grande through T or C and Williamsburg	SWCD	Dec 04-treatment complete on 96.1 acres

RIO GRANDE BOSQUE-SOUTH WUI		
<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Initiate assessments of fuel loads on private/state/federal land	State Forestry, BLM	December 2004
Complete evacuation and structure protection plan	VFD, State Forestry	December 2004

COUNTY WIDE		
Action Item	Who	Planned
Secure funding to treat identified Bosque hazardous fuel load sites below Caballo Dam for Arrey community	Sierra SWCD	Completed
Complete community assessment on Animas Creek due to high number of riparian fuel loads	SWCD, State Forestry, BLM, USFS, VFD	Completed
Complete education outreach on fire danger issues within Kingston community	SWCD, State Forestry, BLM, USFS, VFD	Completed
Complete education outreach on fire danger issues within the subdivision located along Berrenda Creek	SWCD, State Forestry, BLM, USFS, VFD	Completed
Complete community assessment on Alamosa Creek	SWCD, State Forestry, BLM, USFS, VFD	Completed

TABLE 9 – WUI FOCUS PROJECTS: ITEMS NEEDING ATTENTION

LOCAL COMMUNITY WATER SUPPLIES		
<i>Action Item</i>	<i>Who</i>	<i>Planned</i>
Locate additional water sources; secure agreements with landowner	Sierra County ESA	On-going
Assess viability of a dry fire hydrant at McLaughlin Spring for the Kingston area- (North Percha – turn off to FR – 157	VFD, Sierra County	Ongoing
Identify VFDs that have their own wells available for use by the VFD	Sierra County ESA	Ongoing
Identify VFDs that have irrigation wells available	Sierra County ESA	ongoing
Work with VFDs to secure sufficient water availability to meet ISO standards	Sierra County ESA	Ongoing

TABLE 10 – PUBLIC INFORMATION AND EDUCATION: COMPLETED ACTION ITEMS

<i>Action Item</i>	<i>Who</i>	<i>Year Completed</i>
Develop cooperative agreement between USFS and SWCD	USFS, SWCD	2003
Conduct FIREWISE follow-up for County & City Commissioners, P&Z boards, VFD	USFS, SWCD, State Forestry	February 2005; very good attendance
Develop and train VFD members to be part of Fire Prevention Patrol	USFS, VFD	Summer 2004 more than 25 VFDs members signed up

TABLE 11 – PUBLIC INFORMATION AND EDUCATION: ITEMS NEEDING ATTENTION

Action Item	Who	Planned
Conduct FIREWISE and Ready, Set, Go workshops for County & City Commissioners, P&Z boards, VFD	USFS, Jornada RC&D, State Forestry, BLM	Every two years
Develop training schedule for VFDs	State Forestry/Jornada RC&D	Annually
Provide news articles regarding fire danger and power lines to Sierra Electric Cooperative	Jornada RC&D	Annually
Assess needs in the way of printed materials for distribution to the public by VFD	Jornada RC&D	On Going
Hold community meetings during "fire season" while the community is fully aware of the fire danger	CWPP team	On Going
Hold community meetings at the conclusion of "fire season" to review the actions of the community during "fire season" and how to improve upon those actions	CWPP team	On Going
Provide presentations to local municipalities to discuss fire preparedness	CWPP team	Annually
Provide training to VFD members utilizing "sand table fire module"	CWPP team	Annually
Provide workshops and community assessments to landowners within WUI focus areas on fire dangers	CWPP team	Annually prior to fire season
Distribute FIREWISE and Ready, Set, Go materials to high schools	Jornada RC&D	Semi-Annually
Provide information at local community events, such as Sierra County Fair, Festivals, etc.	CWPP team	Annually
Encourage subdivision developers modify or include covenant items that encourage defensible space	VFDS, Sierra County ESA	On-Going

APPENDICES

APPENDIX A SIERRA COUNTY WUI COMMUNITY HAZARD RATING SHEETS



Caballo Community Assessment 2019

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
ARREY FIRE DISTRICT

Name: Arrey

Legal: 32-52.8434 N 107-18.8102 W

Descriptive Location: 18 miles South of Williamsburg on old 85

Vegetative Fuels: Grasses, Desert Shrubs, Trees

Estimated Population: 680

Number of Lots: 370+

Total Acres: 6,400

Construction Materials: Adobe, Frame, Mobile Homes

Roofs: Shingle, Metal

Terrain: Wide Valley, Bosque, Farmland

Slope: 0-80

Aspect: N/A

Access: I-25, State Rd. 85

Roads: Paved, Dirt

Bridges: 6, Good Condition

Low water crossings: 2 paved

Driveways: 100+ unimproved

Water Availability: 3000 rolling stock draft from river, some areas have fire hydrants.

Closest Fire Station: North of Arrey 1 mile.

Average Fire Hazard: Medium through Heavily populated area High on Bosque

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
ARREY / DERRY FIRE DISTRICT

Community Name: Arrey/Derry Bosque

Legal: 32°49'24.98" N by 107°18'13.22" W

Descriptive Location: Highway 187 south of Arrey 5 miles

Vegetation Fuels (i.e.-salt cedar, P-J, grass): riparian

Estimated Density (population per sq. mile): 150

Number of lots mostly undeveloped land along Rio Grande

Total acres 50

Construction materials: Wood frame, metal/steel, adobe

Roofing: shingles, metal

Terrain: flat

Predominate slope: zero

Aspect: N/A

Access: one way in and out

Roads: mostly unpaved

Bridges: (how many and location): > 4

Driveway construction material: mostly unpaved

Water Availability- 3000 rolling stock; draft from river

Closest Fire Department (in miles) Greater than 5 miles

Average Hazard Rating - High

Low Water Crossings: > 10

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
BLM LANDS

Community Name-Lake Valley Historic District

Legal: Township 18 South, Range 7 West, Sections 21 & 28

Descriptive Location- Located on the east side of Highway 7, approximately 12.6 miles north of Nutt, NM.

Vegetation Fuels (i.e.-salt cedar, P-J, grass)-Mesquite and creosote with minor grass understory.

Estimated Density (population per sq. mile)-There are only volunteer historic site manager couple present.

Number of lots- Not applicable.

Total square miles- 1.04

Construction materials-Mostly wood frame covered with adobe.

Roofing- Mostly metal over wood or metal over asphalt shingles.

Terrain- Rolling.

Predominate slope- <30%

Aspect- South and southwest.

Access- Two access roads, north and south entrances via Schoolhouse Road @ approximately mm 12.6

Roads- Interior roads are gravel, frontage road (Hwy 27) is paved asphalt., County Rd #B005 is dirt

Bridges: (how many and location)-none

Driveway construction material- Gravel.

Water Availability- Minimal, ¾" faucet outlet at caretaker RV pad. Low flow rate and should not be depended on for firefighting activity.

Closest Fire Department (in miles)-Hillsboro VFD, 17 miles.

Average Hazard Rating-

LOW - The following factors played a significant role in rating this WUI location:

- No permanent residents other than a caretaker couple who work for BLM.
- Other than the museum/school the building is unoccupied and unused.
- The fine fuel loading immediately surrounding the general site location is sparse. It would be difficult for a grass/brush fire to encroach into the site.

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Caballo Proper Hwy 187)

Name	Caballo Proper Hwy 187					
Legal	Caballo					
Descriptive Location	Caballo 187 (Hwy 152 to Seco Rd)					
Vegetative Fuels	Trees, Grasses, Shrubs					
Estimated Population	50 Families					
Number of Lots	100					
Total Acres						
Construction Materials	Name it, Wood, Medal, Stucco, Brick					
Roofs	Metal, Shingles					
Terrain	Flat					
Slope	0					
Aspect	NA					
Access	Hwy 187	Hwy 187	Type 1 Engines	Paved	32.984016	-107.304801
	Woods Road		Type 6 Engines	Unpaved	32.975637	-107.308289
Roads	Palo Road		Type 1 Engines	Unpaved	32.972422	-107.309098
	Animas Creek Road	B050	Type 1 Engines	Paved	32.965399	-107.311653
Bridges	Hwy 187		Type 1 Engines	Paved	32.984294	-107.304692
	Hwy 187		Type 1 Engines	Paved	32.978517	-107.306759
	Hwy 187		Type 1 Engines	Paved	32.967471	-107.310751
Low Water Crossing	0					
Driveways	100+					
Water Availability	Caballo Fire Department	52,000+ gallons	Type 1 Engines	Paved	32.980825	-107.306355
Closest Fire Station	Caballo				32.980825	-107.306355
Average Fire Hazard	High					
Point of Interest/Hazards						

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT

Name	Caballo Fire Department					
Legal	Caballo Fire and Rescue					
Descriptive Location	Fire Station					
Vegetative Fuels						
Estimated Population	15 Members					
Number of Lots	1					
Total Acres	2					
Construction Materials	Metal					
Roofs	Metal					
Terrain	Flat					
Slope	0					
Aspect	0					
Access	1					
Roads	Hwy 187				32.980825	-107.306355
Bridges	0					
Low Water Crossing	0					
Driveways	1					
Water Availability	52,000 Gallon Storage Tank, Well, 4,000 Water on Wheels					
Closest Fire Station	Caballo				32.980825	-107.306355
Average Fire Hazard	Super Low					
Point of Interest/Hazards						

SIERRA COUNTY

WUI COMMUNITY HAZARD RATING SHEET

CABALLO FIRE DISTRICT (Seco Subdivision)

Name	Seco Subdivision					
Legal	Seco Subdivision					
Descriptive Location	Subdivision					
Vegetative Fuels	Trees, Grass, Shrubs					
Estimated Population	42 Families					
Number of Lots	50+					
Total Acres						
Construction Materials	Name it, Wood, Medal, Stucco, Brick					
Roofs	Metal, Shingles					
Terrain	Flat					
Slope	0					
Aspect	NA					
Access	Hwy 187		Type 1 Engines	Paved	32.987099	-107.304423
Roads	Upper Seco Road		Type 3 Engines	Upaved	32.986957	-107.304512
	No Name Road		Type 3 Engines	Unpaved	32.988274	-107.315258
	Seco Road		Type 1 Engines	Paved	32.985158	-107.304235
	Wild Sage Road		Type 1 Engines	Paved	32.984945	-107.300945
	Lake Front Drive		Type 1 Engines	Paved	32.984917	-107.299636
Bridges	Upper Seco Road		Type 3 Engines	Unpaved	32.988394	-107.314696
Low Water Crossing	Upper Seco Road		Type 3 Engines	Unpaved	32.988394	-107.314696
Driveways	50+					
Water Availability	Caballo Fire Department	52,000+ gallons	Type 1 Engines	Paved	32.980825	-107.306355
Closest Fire Station	Caballo				32.980825	-107.306355
Average Fire Hazard	High					
Point of Interest/Hazards						

SIERRA COUNTY

WUI COMMUNITY HAZARD RATING SHEET

CABALLO FIRE DISTRICT (King Canyon Subdivision)

Name	King Canyon					
Legal	King Canyon Subdivision					
Descriptive Location	Subdivision					
Vegetative Fuels	Trees, Grass, Shrubs					
Estimated Population	73 Families					
Number of Lots	100+					
Total Acres						
Construction Materials	Name it, Wood, Medal, Stucco, Brick					
Roofs	Metal, Shingles					
Terrain	Flat					
Slope	0					
Aspect	NA					
Access	Hwy 187		Type 1 Engine	Paved	33.039215	-107.302728
Roads	Hwy 187		Type 1 Engine	Paved	33.039215	-107.302728
	Hidden Valley Road		Type 1 Engine	Paved	33.036053	-107.304151
	Queens Lane		Type 1 Engine	Unpaved	33.032162	-107.305823
	Midway Road		Type 1 Engine	Unpaved	33.036753	-107.307073
	Goff Road		Type 1 Engine	Paved	33.032271	-107.305551
	Gordon Avenue		Type 1 Engine	Paved	33.029448	-107.306801
	Armstead Road		Type 1 Engine	Paved	33.028291	-107.304041
	Chaparel Avenue		Type 1 Engine	Paved	33.029563	-107.303431
	Loco Weed Road		Type 1 Engine	Paved	33.029221	-107.301954
	Smith Ranch Road		Type 1 Engine	Paved	33.002086	-107.314638
Bridges	Hwy 187		Type 1 Engine	Paved	33.039215	-107.302728
	Hwy 187		Type 1 Engine	Paved	33.026211	-107.308345
Low Water Crossing	0					
Driveways	100+					
Water Availability	Caballo Fire Department	52,000+ gallons	Type 1 Engines	Paved	32.980825	-107.306355
Closest Fire Station	Caballo				32.980825	-107.306355
Average Fire Hazard	High					
Point of Interest/Hazards						

**SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Oasis) Part 1**

Name	Oasis Subdivision					
Legal	Caballo					
Descriptive Location	Oasis Area					
Vegetative Fuels	Tree, Grasses, Shrubs					
Estimated Population	125 Homes with Families, 80 RVs with Families					
Number of Lots	200+					
Total Acres						
Construction Materials	Name it, Wood, Medal, Stucco, Brick					
Roofs	Medal, Shingles					
Terrain	Flat					
Slope	0					
Aspect	NA					
Access	Hwy 187					
Roads	Hwy 187		Type 1 Engines	Paved		
	Snake Springs Road		Type 1 Engines	Paved	32.924724	-107.317516
	Carriage Drive		Type 1 Engines	Paved	32.924791	-107.319359
	County Road B046	Snake Springs Road	Type 1 Engines	Paved	32.924791	-107.319359
	County Road B047		Type 1 Engines	Unpaved	32.928223	-107.318479
	Harness Road		Type 1 Engines	Unpaved	32.928461	-107.319794
	County Road B048		Type 1 Engines	Unpaved	32.929458	-107.318167
	County Road B049		Type 1 Engines	Unpaved	32.930741	-107.317835
	Bridle Road		Type 1 Engines	Unpaved	32.933216	-107.317305
	County Road B045		Type 1 Engines	Unpaved	32.919933	-107.319313
	Liberty Way		Type 1 Engines	Unpaved	32.918085	-107.319472
Bridges	Mountain Bell Road		Type 1 Engines	Unpaved	32.918054	-107.320219
	Hwy 187		Type 1 Engine	Paved	32.930061	-107.316145
	Hwy 187		Type 1 Engine	Paved	32.922748	-107.317851
Low Water Crossing	Snake Prings Road		Type 1 Engine	Paved	32.924724	-107.318803
	Hwy 187		Type 1 Engine	Paved	32.939706	-107.313879

**SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Oasis) Part 2**

Driveways	200+					
Water Availability	Bridle Road	Stock Tank	Type 1 Engine	Unpavaed	32.933968	-107.322892
	County Road B049	Stock Tank	Type 1 Engine	Unpavaed	32.932114	-107.322285
Closest Fire Station	Caballo					
Average Fire Hazard						
Point of Interest/Hazards	Stored Used Fuels/Oil	Stroage	Type 1 Engine	Unpavaed	32.937215	-107.315351
	1-25 Underpass	1 Lane Road	Type 1 Engine	Paved	32.924721	-107.318781

**SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Hwy 152)**

Name	Highway 152					
Legal						
Descriptive Location	Highway					
Vegetative Fuels	Grasses and shrubs					
Estimated Population	19 Families					
Number of Lots	30					
Total Acres						
Construction Materials	Mobile Homes					
Roofs	Metal and Shingles					
Terrain	Flat					
Slope	0					
Aspect	NA					
Access	2					
Roads	Hwy 152		Type 1 Engines	Paved	32.953172	-107.312104
	I-25		Type 1 Engines	Paved	32.953614	-107.315479
	County Road B028	Alto Road	Type 6 Engines	Unpaved	32.972289	-107.391531
	County Road B050		Type 3 Engines	Unpaved	32.975078	-107.411578
	Ladder Ranch Road		Type 3 Engines	Unpaved	32.977838	-107.430938
Bridges	1				32.953656	-107.315378
Low Water Crossing	1				32.973467	-107.400243
Driveways	25					
Water Availability	4000 gallons on Wheels					
Closest Fire Station	Caballo					
Average Fire Hazard	Low					
Point of Interest/Hazards	Power Transfer Station				32.954008	-107.318828
	Propane Bulk Storage				32.953092	-107.312792
	Gas/Deasil Fuel Sales				32.952879	-107.312369
	Old Bombing Range				32.958859	-107.427989

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Animas) Part 1

Name	Animas Subdivision					
Legal	Caballo					
Descriptive Location	Subdivision in Canyon					
Vegetative Fuels	Trees, Shrubs, Grass					
Estimated Population	113 Families					
Number of Lots	150					
Total Acres						
Construction Materials	Metal, Wood					
Roofs	Metal, Shingles					
Terrain	Canyon					
Slope	Up to 30 degrees in places					
Aspect	NA					
Access	County Road B050	Animas Creek Road	Type 1 Engines	Paved	32.965393	-107.311569
	Woods Road (A)		Type 6 Engines	Unpaved	32.975625	-107.308084
	Hwy 152		Type 6 Engines	Paved	32.953157	-107.312032
Roads	County Road B050	Animas Creek Road	Type 1 Engines	Paved	32.965393	-107.311569
	County Road B063 (A)		Type 3 Engines	Unpaved	30.964339	-107.318425
	County Road B063(B)	Capaz Road	Type 3 Engines	Unpaved	32.966696	-107.329813
	County Road B062	Vaca Road	Type 3 Engines	Unpaved	32.968137	-107.332776
	Upton Road		Type 3 Engines	Unpaved	32.968305	-107.335925
	Clavo Road		Type 3 Engines	Unpaved	32.968339	-107.337081
	County Road B061		Type 3 Engines	Unpaved	32.968335	-107.339395
	Dogie Road		Type 3 Engines	Unpaved	32.968358	-107.343609
	County Road B059	Kokade Road	Type 3 Engines	Unpaved	32.968741	-107.345654
	Frio Road		Type 3 Engines	Unpaved	32.973147	-107.359158
	County Road B055	Vans Lane	Type 3 Engines	Unpaved	32.975421	-107.370135
	County Road B054	Bar H Box Road	Type 3 Engines	Unpaved	32.975396	-107.371503
	Cadena Road		Type 3 Engines	Unpaved	32.976102	-107.379191
	Woods Road (B)		Type 3 Engines	Unpaved	32.977514	-107.284336

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Animas) Part 2

Roads	County Road B028	Alto Road	Type 6 Engines	Unpaved	32.977541	-107.387698
	La Luz Road		Type 6 Engines	Unpaved	32.977863	-107.389014
	County Road B053	Animas Creek Road	Type 1 Engines	Unpaved	32.977951	-107.388998
	Salto Road		Type 6 Engines	Unpaved	32.979686	-107.389157
	County Road B026		Type 3 Engines	Unpaved	32.980581	-107.389341
Bridges	1	Overpass I-25	1 Lane Road	Paved	32.965679	-107.314891
Low Water Crossing	County Road B063 (A)		Animas Creek	Unpaved	32.966563	-107.318394
	County Road B063(B)	Capaz Road	Animas Creek	Unpaved	32.968149	-107.329281
	County Road B062	Vaca Road	Animas Creek	Unpaved	32.969271	-107.332786
	Clavo Road		Animas Creek	Unpaved	32.970127	-107.337125
	County Road B061		Animas Creek	Unpaved	32.969278	-107.339387
	Dogie Road		Animas Creek	Unpaved	32.968775	-107.343652
	County Road B059	Kokade Road	Animas Creek	Unpaved	32.969465	-107.345604
	Frio Road		Animas Creek	Unpaved	32.973616	-107.357466
	Privet Drive		Animas Creek	Unpaved	32.974236	-107.360143
	County Road B055	Vans Lane	Animas Creek	Unpaved	32.975574	-107.370117
	County Road B054	Bar H Box Road	Animas Creek	Unpaved	32.977122	-107.374521
	Woods Road (B)		Animas Creek	Unpaved	32.978484	-107.384394
	County Road B053	Animas Creek Road	Animas Creek	Unpaved	32.979423	-107.389175
Driveways	150					
Water Availability	Clavo Road	Stock Tank			32.969001	-107.336809
	County Road B061	Stock Tank			32.972076	-107.340867
	County Road B061	Stock Tank			32.972367	-107.340731
	Dogie Road	Stock Tank			32.972045	-107.343392
	Dogie Road	Stock Tank			32.972986	-107.345444
	County Road B059	Stock Tank			32.973331	-107.349082
	County Road B059	Stock Tank			32.974211	-107.351772
	County Road B050	Stock Tank			32.974202	-107.366853
Cadena Road	Stock Tank			32.976981	-107.379411	

SIERRA COUNTY

WUI COMMUNITY HAZARD RATING SHEET

CABALLO FIRE DISTRICT (Animas) Part 3

Water Availability	County Road B023	Stock Tank			32.980547	-107.397312
	County Road B023	Stock Tank			32.985818	-107.409521
Closest Fire Station	Caballo Fire Department				32.980825	-107.306355
Average Fire Hazard	High to Extreme	Over Groin				
Point of Interest/Hazards	Bridge	One Lane	Type 1 Engines	Paved	32.965679	-107.314891
	Small Bridge	One Lane	Type 6 Engines		32.969331	-107.341231
	Cattle Guard-Broken	9 Feet Wide	Type 6 Engines	Broken	32.978061	-107.393196
	Cattle Guard-Broken	10 Feet Wide	Type 6 Engines	Bad Shape	32.797686	-107.389157

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
CABALLO FIRE DISTRICT (Lease Lots)

Name	Lease Lots					
Legal	Caballo State Park Lease Lots					
Descriptive Location	Caballo Lake Subdivision					
Vegetative Fuels	Grass, Shrubs					
Estimated Population	44 Families					
Number of Lots	51					
Total Acres						
Construction Materials	Mobile Homes					
Roofs	Metal					
Terrain	Flat					
Slope	0					
Aspect	NA					
Access	Palimino Road		Type 1 Engines	Paved	32.907172	-107.311116
Roads	Palimino Road		Type 1 Engines	Paved	32.907172	-107.311116
	Arabian Road (Loop)		Type 1 Engines	Half/Half	32.907243	-107.310185
Bridges	0					
Low Water Crossing	0					
Driveways	51					
Water Availability	If Need Caballo Lake					
	4,000 gallons on wheels					
Closest Fire Station	Caballo				32.980825	-107.306355
Average Fire Hazard	Low					
Point of Interest/Hazards	0					

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
ELEPHANT BUTTE FIRE DISTRICT

Community Name- City of Elephant Butte

Legal: N 33° 10' 36.74" W 107° 13' 30.96"

Descriptive Location- Fire station located at 309 Rock Canyon Road

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- desert shrubs and grass

Estimated Density (population per sq. mile)- 477 per square mile

Number of lots- 1316

Total square miles- six

Construction materials- wood; mobile homes, stucco

Roofing- metal, asphalt, composition, shingle, tile, rubberized hot tar

Terrain- flat to rolling hills

Predominate slope- average of 0-40%

Aspect- all

Access- paved and some dirt

Roads- paved

Bridges: (how many and location)- 1 bridges, several culverts

Driveway construction material- mostly dirt with some paved

Water Availability- hydrants

Closest Fire Department (in miles)- center of population

Average Hazard Rating- low

Other Issues- countless board and RV storage sites

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
ELEPHANT BUTTE/CITY OF T OR C FIRE DISTRICT

Community Name: Mims Pond

Legal: 33° 09'06.60" N by 107° 13'02.22" w

Descriptive Location: Corner of State Highways 51 and 179

Vegetation Fuels (i.e.-salt cedar, P-J, grass): Riparian, wetlands

Estimated Density (population per sq. mile): 10

Number of lots: < 10

Total acres: 120

Construction materials: fiberglass, steel, aluminum, *[boat storage, fuel storage, propane tanks, hazmat issues, low water table hazards for heavy vehicles]

Roofing: Steel, tin, shingles

Terrain: flat, wet

Predominate slope: zero

Aspect: N/A

Access: one way

Roads: dirt

Bridges: (how many and location): One w/o a weight limit

Driveway construction material: dirt

Water Availability – rolling water available

Closest Fire Department (in miles) Greater than 5 miles

Average Fire Hazard Rating- high

Low Water Crossings: 0

Added concerns: Mims Pond is an old oxbow of the Rio Grande, with most of the surrounding area loaded with Salt Cedar, Salt Grass and cattails. Adjacent to the Pond is a boat storage area, with unknown quantities of fuel. Also adjacent is a mobile home park, one residence surrounded by Bosque fuels and two small home businesses. A major concern if a wildfire occurred would be the impact of the fuels and fiberglass into the Rio Grande system.

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
HILLSBORO FIRE DISTRICT

Community Name- Hillsboro

Legal: N 32° 55' 12.74 N 107° 34' 00.21"W

Descriptive Location- 17 miles west of Interstate 25

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass, desert shrubs, riparian species and some juniper

Estimated Density (population per sq. mile)- 45

Number of lots- 100

Total square miles- 4.5

Construction materials- brick, metal, wood, cinder block and adobe

Roofing- wood, shingles and metal

Terrain- wide valley, rolling hills

Predominate slope- average of 20%

Aspect- all

Access- State Highway 152 and State Highway 27

Roads- paved and dirt

Bridges: (how many and location)- 3 bridges on Percha Creek on Highway 152

Driveway construction material- dirt and paved

Water Availability- hydrants available through mutual water association

Closest Fire Department (in miles)- center of population

Average Hazard Rating- low

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
HILLSBORO/KINGSTON FIRE DISTRICT

Community Name-Kingston

Legal: N 32° 55" 00,71" W 107° 42' 31.38" W

Descriptive Location- 11 miles west of Hillsboro

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass, pinyon-juniper woodland, ponderosa Pine and Tree of Heaven

Estimated Density (population per sq. mile)- 80

Number of lots- 80

Total square miles- 2.5

Construction materials- brick, adobe, wood frame

Roofing- predominately metal with some shingles

Terrain- narrow canyon

Predominate slope- 40% to 70%

Aspect- east to west

Access- State Highway 180

Roads- paved and dirt

Bridges: (how many and location)- 1 bridge with unrated weight limits on Italian Street and 2 low water crossings; also, a bridge on the southern end of town on State Highway 152

Driveway construction material- dirt

Water Availability- 3200 gallons rolling stock

Closest Fire Department (in miles)- center of populated area

Average Hazard Rating- high

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
HILLSBORO/KINGSTON FIRE DISTRICT

Community Name-Lake Valley

Legal: 32° 42' 55.49" N 107° 34' 10.08" W

Descriptive Location- 15 miles south of Hillsboro on State Highway 27

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass, desert shrubs

Estimated Density (population per sq. mile)- 40

Number of lots- 100+

Total square miles- seven

Construction materials- adobe, frame, mobile homes

Roofing- asphalt, composition, metal

Terrain- rolling hills

Predominate slope- average 10-20%

Aspect- all

Access- State Highway 27, County Rd #B004

Roads- Highway 27 paved, Rd #B004 is dirt

Bridges: (how many and location)- none

Driveway construction material- dirt, gravel

Water Availability- none

Closest Fire Department (in miles)- 15 miles to the Hillsboro VFD

Average Hazard Rating- medium to high because there is no fire protection very close

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
LAS PALOMAS FIRE DISTRICT

Community Name: Las Palomas

Legal- N33 4.7506 W107 19.9649

Descriptive Location- 6 miles South of Truth or Consequences on I-25

Vegetation Fuels (i.e.-salt cedar, P-J, grass)-grasses, desert shrubs, trees

Estimated Density (population per sq. mile)- 560

Number of lots- 186

Total Acres/square miles- 6,400 acres

Construction materials- adobe, frame, mobile homes

Roofing- shingle, metal

Terrain- wide valley, Bosque

Predominate slope- 0-80%

Aspect- N/A

Access- I-25, State Rd 85, Las Palomas Canyon Rd, Old Ladder Ranch Rd

Roads- Paved, dirt

Bridges: (how many and location)- 3, good condition
Low Water crossings: 2 concrete and 4 unimproved

Driveway construction material- 100+ unimproved

Water Availability- 9,000 gallons rolling stock, multiple irrigation tanks

Closest Fire Department (in miles)- Las Palomas VFD located in center of populated area

Average Hazard Rating-medium through heavily populated area; high in Bosque area

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
MONTICELLO FIRE DISTRICT

Community Name- Cuchillo

Legal: N 33° 14' 00-07" W 107° 21' .01-38"

Descriptive Location-5.6 miles west on NM State Highway 52

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass, riparian plant species, desert shrubs and juniper

Estimated Density (population per sq. mile)- 100-150

Number of lots- + or more than 100

Total square miles- two

Construction materials- adobe, wood

Roofing- metal, shingle, composition

Terrain- Canyon valley

Predominate slope- average of 30%

Aspect- all

Access- NM State Highway 52

Roads- paved, dirt to fire station

Bridges: (how many and location)- one over Willow Springs, on Highway 52; one low water crossing

Driveway construction material- dirt, narrow

Water Availability- 5,000-gallon tank and 2 rolling 2400 gallons

Closest Fire Department (in miles)- center of community

Average Hazard Rating- low

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
MONTICELLO FIRE DISTRICT

Community Name- Monticello

Legal: 33° 23' 46.28" N 107° 26' 59.67" W

Descriptive Location- 14 miles west of Interstate 25 on state highway 142

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass, riparian plant species, desert shrubs and juniper

Estimated Density (population per sq. mile)- 100-150

Number of lots- + or - 100

Total square miles- ten

Construction materials- adobe, wood, mobile home

Roofing- metal, shingle, composition

Terrain- Canyon valley

Predominate slope- average of 30%

Aspect- all

Access- state highway 142

Roads- state highway 142 is paved, Red Rock County Rd #C034 is dirt

Bridges: (how many and location)- one over Alamosa Canyon on State Highway 142, 3 low water crossings

Driveway construction material- dirt

Water Availability- 5,000-gallon tank and 2 rolling 2400 gallons

Closest Fire Department (in miles)- center of community

Average Hazard Rating- low

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
POVERTY CREEK FIRE DISTRICT

Name- Poverty Creek

Legal- 33° 27' 41.38" N 107° 49' 18.19" W

Descriptive Location-10 miles west on Highway 59

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- P-J, ponderosa Pine, oak brush, Mtn mahogany, grass

Estimated Density (population per sq. mile)- 100- 150 folks

Number of lots- appx. 100

Total square miles- 10 sq. primary; 300 sq. response

Construction materials- various

Roofing- various

Terrain- rugged

Predominate slope- 0-60%

Aspect- North

Access- From Highway 52 to Highway 59, 8.5 miles

Roads- Highway 52 asphalt

Bridges: (how many and location)- none

Driveway construction material- driveways are all dirt and narrow; access is all one way in and one way out

Water Availability- 30,000-gallon water storage tank

Closest Fire Department (in miles)- Winston/Chloride VFD- Mile Marker 9, center of district

Average Hazard Rating- **highest in Sierra County**

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
WINSTON/CHLORIDE FIRE DISTRICT

Community Name: Chiz

Legal: 33° 16'20.13" N by 107°35'51.27" W

Descriptive Location: County Road C-001

Vegetation Fuels (i.e.-salt cedar, P-J, grass): grass

Estimated Density (population per sq. mile): 2

Number of lots - 4

Total acres 2 acres

Construction materials: Wood, metal, adobe

Roofing – shingle, metal

Terrain: flat / hills

Predominate slope

Aspect: N/A

Access: one way

Roads: dirt

Bridges: (how many and location): None

Driveway construction material: dirt

Water Availability- 4500 + on wheels / Winston

Closest Fire Department (in miles)-10 miles to Winston station

Average Hazard Rating - medium

Low Water Crossings: Five (5)

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
WINSTON/CHLORIDE FIRE DISTRICT

Community Name: Chloride

Legal: N 33' 20", 312 by W 107' 40", 525

Descriptive Location- 40 miles west of Truth or Consequences via Hwy 52 to Forest Rd 226

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass; brush plus scattered conifers

Estimated Density (population per sq. mile)- 100

Number of lots- 120

Total square miles- 80 acres

Construction materials- adobe, frame, rock, log, slab

Roofing- shingle, metal

Terrain- canyon with steep slopes

Predominate slope- 20 to 30 degrees

Aspect- South slope on N side; north slope on S side

Access- Forest Road 226 & Sierra County Rd #C06

Road- Forest Road 226 (dirt) and County Rd #C06 (dirt)

Bridges: (how many and location)- None

Driveway construction material-

Water Availability- 4000 gallons in private tank (dedicated to fire use only)

Closest Fire Department (in miles)- Winston-Chloride sub-station in center of town

Average Hazard Rating- medium

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
WINSTON/CHLORIDE FIRE DISTRICT

Community Name: Hermosa

Legal: 33° 09'19.99" N by 107° 43'40.71" W

Descriptive Location: Forest Service Road number 157, Sierra County Rd #C-003

Vegetation Fuels (i.e.-salt cedar, P-J, grass): grass, trees, PJ

Estimated Density (population per sq. mile): 2 - 5

Number of lots 2

Total acres 5 acres

Construction materials: Wood, metal, adobe

Roofing: tin, asphalt

Terrain: steep, grass, PJ

Predominate slope

Aspect: N/A

Access: one way in & out

Roads: dirt only

Bridges: (how many and location): None

Driveway construction material: dirt

Water Availability- 4500 + on wheels & 72,000 tanks

Closest Fire Department (in miles)- 18 miles to Chloride

Average Hazard Rating – medium to high

Low Water Crossings: Five plus (5+)

SIERRA COUNTY
WUI COMMUNITY HAZARD RATING SHEET
WINSTON/CHLORIDE FIRE DISTRICT

Name- Winston

Legal- N 33'20",775 by W 107'38", 807

Descriptive Location- 38 miles west of Truth or Consequences via Hwy 52

Vegetation Fuels (i.e.-salt cedar, P-J, grass)- grass

Estimated Density (population per sq. mile)- 100

Number of lots- 80

Total square miles- 40 acres

Construction materials- adobe, frame

Roofing- shingle, metal

Terrain- wide valley

Predominate slope- 0%

Aspect- N/A

Access- State Hwy 52, internal narrow streets

State and County Road No.- hard surface

Bridges: (how many and location)- None

Driveway construction material-

Water Availability- 34,000 gallons in two tanks at the Winston fire station

Closest Fire Department (in miles)- Winston fire station is located at the N end of town

Average Hazard Rating- medium

APPENDIX B

SIERRA COUNTY WILDLAND FIRE COMMUNICATIONS PLAN



Sierra County

Sierra County Wildland Fire Communications Plan

Revised: April 2nd, 2019 by Colten Moor, USFS

CHN L	DISPLAY/LABEL	Rx FREQ	TONE	Tx FREQ	TONE	BW	AGENCY	DESCRIPTION
1	TAC 1	167.55000		167.55000			NIFC	Tactical channel #1
2	TAC 2	168.67500		168.67500			NIFC	Tactical channel #2
3	TAC 3	168.77500		168.77500			NIFC	Tactical channel #3
4	STATE FIRE	154.3100		154.3100			NM Forestry	State mutual aid freq for FD's and cooperators.
5	SOA	168.2250		168.2250	192.8		BLM	Scene of Action (Primary tactical for BLM)
6	SOA2 RPT	172.5000		169.7750	192.8		BLM	Use with BLM portable repeater
7	JACKS	168.5750		166.8750	131.8		BLM	BLM area repeater for reaching Silver City Dispatch
8	CABALLO	168.5750		166.8750	103.5		BLM	BLM area repeater for reaching Silver City Dispatch
9	Gila South	169.1750		169.1750			USFS	USFS direct to Silver City Dispatch
10	Caballo RPT	169.90000		164.15000	127.3		USFS	USFS area repeater south and east side of district
11	Emory Pass RPT	169.90000		164.15000	123.0		USFS	USFS area repeater south and east side of district
12	Lookout Mtn RPT	169.90000		164.15000	131.8		USFS	USFS area repeater north and east side of district
13	FS Project	163.7125		163.7125			USFS	USFS car to car and/or communication to lookout towers
14	Gila NF A2G-89	167.70000	110.9	167.70000	110.9			Gila Zone Primary Air-to-Ground Operations
15								
16								

CHN L	DISPLAY/LABEL	Rx FREQ	TONE	Tx FREQ	TONE	BW	AGENCY	DESCRIPTION
1	TAC 1	167.55000		167.55000			NIFC	Tactical channel #1
2	TAC 2	168.67500		168.67500			NIFC	Tactical channel #2
3	County Fire	154.250	156.7	153.770	156.7		County	County Repeater for South End
4	STATE FIRE	154.3100		154.3100			NM Forestry	State mutual aid freq for FD's and cooperators.
5	SOA	168.2250		168.2250	192.8		BLM	Scene of Action (Primary tactical for BLM)
6	SOA2 RPT	172.5000		169.7750	192.8		BLM	Use with BLM portable repeater
7	JACKS	168.5750		166.8750	131.8		BLM	BLM area repeater for reaching Silver City Dispatch
8	CABALLO	168.5750		166.8750	103.5		BLM	BLM area repeater for reaching Silver City Dispatch
9	Winston RPT	154.250	156.7	153.770	167.9		County	Repeater for Winston/Hermosa Area
10	NM State Forestry	159.42000		159.42000			NM State Forestry	NM State Forestry Operations
11	Caballo RPT	169.90000		164.15000	127.3		USFS	USFS area repeater south and east side of district
12	Emory Pass RPT	169.90000		164.15000	123.0		USFS	USFS area repeater south and east side of district
13	Lookout Mtn RPT	169.90000		164.15000	131.8		USFS	USFS area repeater north and east side of district
14	Gila NF A2G-89	167.70000	110.9	167.70000	110.9			Gila Zone Primary Air-to-Ground Operations
15	V-MED 28	155.34000		155.34000	156.7		National	National Life Flight for Federal Responders
16	V-MED 29	155.34750		155.34750	156.7		National	National Life Flight for Federal Responders

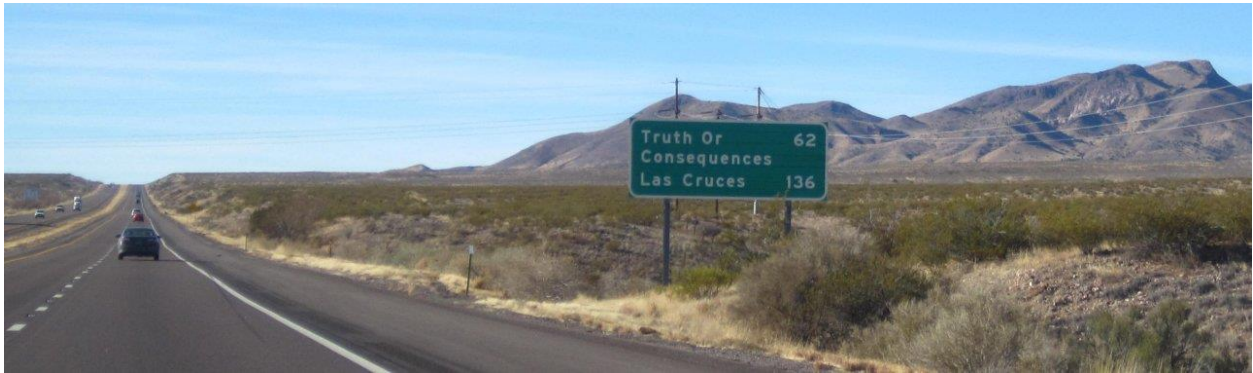
*This channel is obsolete due to the Gila's updated radio programming. Would recommend adding a VMED channel.

With three open channels recommendation to add VMED 28, VMED 29 and NM State Forestry frequencies. Below is an example of what that would look like. Added channels are in burgundy.

Another option would be to add a channel for federal responders to be able to communicate directly with Central Dispatch in Sierra County. This channel and frequencies were unavailable to me at this time.

APPENDIX C

SIERRA COUNTY NEW MEXICO HIGHWAY DEPARTMENT RIGHT-OF-WAY TREATMENT PRESCRIPTION



HIGHWAY RIGHT-OF-WAY WUI PRESCRIPTION

DEFINITIONS:

- ❖ Recovery zone: Those areas within 25 linear feet of the pavement edge on all straight-a-ways and expanded on curves to no more than 36 feet.
- ❖ Thinning zone: Extends from the edge of the recovery zone, where one occurs, to right-of-way fence.

1. Recovery Zone

a. Selection of Cut and Leave Trees

Cut all woody vegetation, trees and brush, within the recovery zone (25 feet from edge of payment) regardless of species or size, treat slash as specified below. This includes oak and mountain mahogany. Determination of trees within the recovery zone will be by measuring from the edge of pavement to tree stem. If the front of the tree (highway side) falls within the 25 feet, it will be removed, if the front (highway side) of the stem is 25 feet or more, it will be retained as is. All dead and downed trees and limbs greater than 4" in diameter will be removed.

b. Cutting Methods

1. *Stump Height*: Removal of Live Limbs. All cut trees and brush shall be cut below the lowest live limb, except when prevented by natural obstacles. All live limbs below the cutting point shall be cut from the stump. Trees shall be completely severed from the stump. Stump height shall not exceed 2 inches above ground level measured on the upslope side, or 2 inches above natural obstacles and shall have a flat, horizontal top surface.

2. *Felling*. Cut trees shall be felled away from area boundaries, roads, power lines, fences, live streams, and established survey monuments. Any trees falling on such areas shall be removed with the prior approval of the Inspector and coordination with the appropriate utility or agency.

2. Thinning Zone

a. Selection of Cut and Leave Trees

In all areas, Piñon and Juniper trees shall be thinned according to leave tree and spacing criteria specified below.

1). In Piñon and Juniper, cut all culls, damaged, diseased or dying trees

2). Leave trees shall have dominant or co-dominant crown classes within the understory crown canopy and shall have a crown ratio of 30 percent or greater (crown ratio is the percent of total tree height supporting live healthy foliage).

3). Leave trees should have the best form and branching characteristics. Piñon and juniper trees may have growth irregularities but preference for leave trees should be these species favor single trunk straight trees with minimal limbs below 5'.

4). The order of preference by species for leave trees is Piñon, then Juniper.

5). All non-native trees and shrubs will be removed, and stumps marked with blue paint so chemical treatment of stumps and sprouts can be done by NMDOT employees.

b. Required Spacing Between Leave Trees

1). Spacing for residual Piñon and Juniper shall average 45 feet by 45 feet (between trunks) for individual trees. Spacing may range from 40 feet to 50 feet to accomplish selection of best leave tree.

2). Trees to be left shall be spaced from other trees of all sizes and species.

3). Always select a tree that has a healthy crown, is not leaning, and is not damaged on the trunk. The first priority is to leave healthy trees that are upright and have the least number of limbs near the ground.

4). Trees less than six feet in height shall be left only when an opening larger than 1/4 acre would be created by removal of these trees.

5). If a conflict should arise between spacing and quality leave trees, the quality leave tree will take precedence over the spacing. Spacing is not to be reduced by more than 5 feet of the prescribed 40-foot spacing distance for piñon and juniper.

APPENDIX D

SIERRA COUNTY
INCIDENT QUALIFICATION
(RED) CARD PROGRAM

[SCRC]



SIERRA COUNTY RED CARD PROGRAM

The following qualifications would be eligible for the Sierra County Red Card (SCRC):

Incident Command V
Incident Command IV
Engine Boss
Firefighter I
Firefighter II
Engine Operator
Radio Operator
Logistics/Staging Area Manager
Support Tender Driver

Participants in this system could complete the process in three Phases in relation to the physical requirements:

Phase 1 (year one) light pack test- one mile, no weight in 16 minutes
Phase 2 (year two) moderate pack test- two miles, 25 pounds weight in 30 minutes
Phase 3 (year three) arduous pack test- three miles, 45 pounds weight in 45 minutes.

Participants would have to complete the classroom training for each of these qualifications, along with completion of these items in their task book.

These task books will not be backdated, HOWEVER, when a VFD member has experience behind the event signed off in task book, the person certifying the task book will complete a statement noting that person's years of experience prior to this event. A template will be developed for this process. Task book must be signed off by a qualified individual.

Red card committee:

When a VFD member is ready to get certified, an officer from that VFD will present that person's task book to the red card committee. The committee will be comprised of the VFD Chief's Association President, a representative from NM State Forestry and representatives from the USFS and/or the BLM. Only those folks will be in attendance, unless a subject matter expert is called to provide input. Regional dispatch will be an integral part of this process until a qualifications data based is developed. Regional Dispatch will house that information.

After the red card committee has approved the task book, the Chairman of the Sierra County Commission will sign as the agency certifier. If for some reason the Chairman refuses to sign, then ANY other member of the red card committee is authorized to sign off as the as the certifier.

APPENDIX E

STANDARD OPERATING GUIDELINE RESPONSE TO WILDLAND-URBAN INTERFACE FIRES



SIERRA COUNTY CWPP STANDARD OPERATING GUIDELINE RESPONSE TO WILDLAND URBAN INTERFACE FIRES

Sierra County will develop a methodology to improve their Wildland fire response capability. This effort will focus on developing responsibilities to manage, direct, and suppress all Wildland fires within Sierra County.

All fire departments are encouraged to join this development effort and take the required training. We ask that everyone work with this initiative in the best way possible. There is a job for everyone, regardless of age or physical ability. The red card system is required for all Wildland firefighters participating in this effort. All those who do not comply with the red card system will be assigned responsibilities as per their qualifications when they report to a Wildland fire event.

Since Sierra County has adopted the National Interagency Management System Incident Command System (ICS) and NWCG 310-1 through a Sierra County Resolution process, a red card system has been established and training requirements have been adopted. The standards as set above will aid Sierra County, the IC, Chiefs, and firefighters with liability issues. These guidelines will be adhered to on all Wildland fires. The incident commander will ensure that all personnel will be assigned duties according to their qualifications.

When a Wildland fire is called in to the VFD, 911, or central dispatch, the VFD in whose district the fire was reported will respond to begin initial attack but when a red-carded IC is on scene, all on scene personnel will be assigned responsibilities as per their qualifications. The IC will assess the wildfire and then will call central dispatch to order appropriate resources.



APPENDIX F

MINIMUM EQUIPMENT REQUIREMENTS FOR WILDLAND FIRE RESPONSES



MINIMUM EQUIPMENT REQUIREMENTS FOR WILDLAND FIRE RESPONSES

Water Tender Basic Requirements

CATEGORY	ITEM DESCRIPTION	NFES	WATER TENDER QUANTITY
HAND TOOLS	McLeod	0296	
	Combination Tool	1180	1
	Shovel	0171	1
	Pulaski	0146	
	Flapper		
	Backpack Pump	1149	
	Fuses	0105	
	Foam, concentrate, Class A		5 gal
	Chainsaw (and chaps)		
	Chainsaw Tool Kit	0342	
	Drip Torch	0241	
	Portable Pump		*
HOSE	Booster (on reel, with nozzle)		*
	Hard Suction		16' - 20'
	1" NPSH (SJRL)	0966	
	1 ½" NH (SJRL)	0967	100'
	¾" NH, garden (SJRL)	1016	
	Refill Fill Hose, 2-1/2"		50'
	Spare Gaskets for all hose		as needed
APPLIANCES	Nozzle, Adjustable, 3/4" NH	0136	
	Nozzle, Adjustable, 1", NPSH	0138	
	Nozzle, Adjustable, 1-1/2" NH	0137	1
	Nozzle, Foam (1" or 1-1/2")		
	Gated Wye, 2-Way, 1" NPSH	0259	
	Gated Wye, 2-Way, 1-1/2" NH	0231	
	Gated Wye, 2-Way, 3/4" NH	0739	
	Adaptor, 1" NH-F x 1" NPSH-M	0003	
Reducer/Adaptor, 1" NPSH-F x 3/4" NH-M	0733		
Reducer/Adaptor, 1-1/2" NH-F x 1" NPSH-M	0010		

	Reducer/Adaptor, 2-1/2" NH-F x 1-1/2" NH-M	2229	1
	Coupling, Double Female, 1" NPSH	0710	
	Coupling, Double Male, 1" NPSH	0916	
	Coupling, Double Female, 1-1/2" NH	0857	
	Coupling, Double Male, 1-1/2" NH	0856	
	Coupling, Double Female, 2-1/2" NH		1
	Coupling, Double Male, 2-1/2" NH		1
	Valve, Shut-Off, 1" NPSH	1201	
	Valve, Shut-Off, 1-1/2" NH	1207	
	Valve, Foot (with strainer), Hard Suction		1
	Spare Gaskets for all appliances		as needed
TOOLS	Wrench, Hydrant		1
	Wrench, Spanner, 1" to 1-1/2" Hose		2
	Wrench, Spanner, 1-1/2" to 2-1/2" Hose		2
	Basic Repair Tool Kit		1
	Tire Pressure Gauge		1
	Spare Vehicle & Pump Fuses		as needed
	Jumper Cables		1
	Hose Clamp		1
	Oil, Vehicle, Motor		1
	Oil, Pump, Motor		1
	Anti-Freeze, Gallon		1
SAFETY	Wheel Chocks		2
	Fire Extinguisher, 5 lb.		1
	Reflector set, Road Hazard		1
MEDICAL	First Aid Kit		1
GENERAL	Tow Chain / Strap		
	Fence Tool		
	Tape, Duct, Roll		
	Tape, Nylon Filament, Roll		
	Cutters, Bolt		
	Water, Drinking, Gallon (per person)		1
	Hose Reel Crank		
	Batteries (for radio & head lamps)		as needed
	Radio, Mobile, Field Programable		1

Radio, Handheld, Field Programable		Minimum 1
Radio, Programming Cable		
Fireline Handbook	0065	1
IRPG		1
Belt Weather Kit or Kestrel		
GPS Unit		
Binoculars		
Maps of the Area		as needed
Food, Non-Perishable, per person		as needed
Toilette Paper		as needed
Cooler (ice chest)		‡
Flagging, Yellow or White, Roll		‡
Flagging, Escape Route, Roll		
Flagging, Safety Zone, Roll		

* Optional

‡ Recommended but not required

Brush Truck Basic Requirements

CATEGORY	ITEM DESCRIPTION	NFES	BRUSH TRUCK QUANTITY
HAND TOOLS	McLeod	0296	1
	Combination Tool	1180	1
	Shovel	0171	1
	Pulaski	0146	1
	Flapper		1
	Backpack Pump	1149	1
	Fusees	0105	12
	Foam, concentrate, Class A		5 gal
	Chainsaw (and chaps)		*
	Chainsaw Tool Kit	0342	*
	Drip Torch	0241	*
	Portable Pump		*
HOSE	Booster (on reel, with nozzle)		100'
	Hard Suction		16' - 20'
	1" NPSH (SJRL)	0966	300'
	1 ½" NH (SJRL)	0967	300'
	¾" NH, garden (SJRL)	1016	300'
	Refill Fill Hose (pony section), 2-1/2"		15' - 25'

	Spare Gaskets for all hose		as needed
APPLIANCES	Nozzle, Adjustable, 3/4" NH	0136	2
	Nozzle, Adjustable, 1", NPSH	0138	1
	Nozzle, Adjustable, 1-1/2" NH	0137	1
	Nozzle, Foam (1" or 1-1/2")		1
	Gated Wye, 2-Way, 1" NPSH	0259	1
	Gated Wye, 2-Way, 1-1/2" NH	0231	1
	Gated Wye, 2-Way, 3/4" NH	0739	1
	Adaptor, 1" NH-F x 1" NPSH-M	0003	*
	Reducer/Adaptor, 1" NPSH-F x 3/4" NH-M	0733	2
	Reducer/Adaptor, 1-1/2" NH-F x 1" NPSH-M	0010	2
	Reducer/Adaptor, 2-1/2" NH-F x 1-1/2" NH-M	2229	1
	Coupling, Double Female, 1" NPSH	0710	1
	Coupling, Double Male, 1" NPSH	0916	1
	Coupling, Double Female, 1-1/2" NH	0857	1
	Coupling, Double Male, 1-1/2" NH	0856	1
	Coupling, Double Male, 2-1/2" NH		1
	Valve, Shut-Off, 1" NPSH	1201	1
	Valve, Shut-Off, 1-1/2" NH	1207	1
	Valve, Foot (with strainer), Hard Suction		1
	Spare Gaskets for all appliances		as needed
TOOLS	Wrench, Hydrant		1
	Wrench, Spanner, 1" to 1-1/2" Hose		2
	Wrench, Spanner, 1-1/2" to 2-1/2" Hose		2
	Basic Repair Tool Kit		1
	Tire Pressure Gauge		1
	Spare Vehicle & Pump Fuses		as needed
	Jumper Cables		1
	Hose Clamp		1
	Oil, Vehicle, Motor		1
	Oil, Pump, Motor		1
	Anti-Freeze, Gallon		1
SAFETY	Wheel Chocks		2
	Fire Extinguisher, 5 lb.		1
	Reflector set, Road Hazard		1

MEDICAL	First Aid Kit		1
GENERAL	Tow Chain / Strap		1
	Fence Tool		1
	Tape, Duct, Roll		1
	Tape, Nylon Filament, Roll		1
	Cutters, Bolt		1
	Water, Drinking, Gallon (per person)		1
	Hose Reel Crank		1
	Batteries (for radio & head lamps)		as needed
	Radio, Mobile, Field Programable		1
	Radio, Handheld, Field Programable		Minimum 1
	Radio, Programming Cable		‡
	Fireline Handbook	0065	1
	IRPG		1
	Belt Weather Kit or Kestrel		1
	GPS Unit		‡
	Binoculars		‡
	Maps of the Area		as needed
	Food, Non-Perishable, per person		as needed
	Toilette Paper		as needed
	Cooler (ice chest)		‡
	Flagging, Yellow or White, Roll		‡
	Flagging, Escape Route, Roll		2
	Flagging, Safety Zone, Roll		2

* Optional

‡ Recommended but not required

APPENDIX G

GILA NATIONAL FOREST FEDERALLY LISTED SPECIES



Empidonax traillii extimus

Federally listed threatened or endangered species listed for the four-county area (Catron, Grant, Hidalgo, and Sierra) of the Gila National Forest.

Note: An asterisk (*) denotes federally listed species for the Gila NF. Species with no asterisk do not occur within the Gila NF and would not be impacted by management effects.

Common Name	Scientific Name	Federal Status	Critical Habitat on Gila NF
Amphibians and Reptiles			
Chiricahua leopard frog*	<i>Lithobates chiricahuensis</i>	Threatened	Yes
Narrow-headed garter snake*	<i>Thamnophis rufipunctatus</i>	Threatened	Proposed
New Mexican ridge-nosed rattlesnake	<i>Crotalus willardi obscurus</i>	Threatened	No
Northern Mexican garter snake*	<i>Thamnophis eques megalops</i>	Threatened	Proposed
Birds			
Leasttern	<i>Sterna antillarum</i>	Endangered	No
Mexican spotted owl*	<i>Strix occidentalis lucida</i>	Threatened	Yes
Northern Aplomado falcon	<i>Falco femoralis septentrionalis</i>	Experimental population, Non-essential	No
Southwestern willow flycatcher*	<i>Empidonax traillii extimus</i>	Endangered	Yes
Sprague's pipit	<i>Anthus spragueii</i>	Candidate	No
Western yellow-billed cuckoo*	<i>Coccyzus americanus occidentalis</i>	Threatened	Proposed
Fishes			
Beautiful shiner	<i>Cyprinella formosa</i>	Threatened	No
Chihuahua chub*	<i>Gila nigrescens</i>	Threatened	No
Gila chub*	<i>Gila intermedia</i>	Endangered	Yes
Gila topminnow	<i>Poeciliopsis occidentalis</i>	Endangered	No
Gila trout*	<i>Oncorhynchus gilae</i>	Threatened	No
Loach minnow*	<i>Tiaroga cobitis</i>	Endangered	Yes
Rio Grande silvery minnow	<i>Hybognathus amarus</i>	Endangered	No
Spikedace*	<i>Meda fulgida</i>	Endangered	Yes

Common Name	Scientific Name	Federal Status	Critical Habitat on Gila NF
Flowering Plants			
Todsen's pennyroyal	<i>Hedeoma todsenii</i>	Endangered	No
Zuni fleabane	<i>Erigeron rhizomatus</i>	Threatened	No
Mammals			
Mexican Gray wolf*	<i>Canis lupus baileyi</i>	Experimental, Non-Essential population	No
Jaguar	<i>Panthera onca</i>	Endangered	No
Mexican long-nosed bat	<i>Leptonycteris nivalis</i>	Endangered	No
New Mexican meadow jumping mouse*	<i>Zapus hudsonius luteus</i>	Endangered	No

Species and the Vegetation Types for Each Management Indicator Species [MIS]	
MIS	Vegetation Type
Mule deer	Desert Shrub
Mearn's Quail	Plains Grass/Mtn. Grass
Plain titmouse	Pinyon Juniper/ Shrub Oak Woodland
Mule deer	
Northern goshawk	Ponderosa Pine
Mexican Spotted Owl	Mixed conifer
Hairy woodpecker	Ponderosa Pine and Mixed conifer snag component
Black hawk	Low/Mid Riparian
Beaver	
Native trout (i.e., Rio Grande, Gila)	High Riparian
Beaver	
Long-tailed vole	Wet meadow/wetlands

APPENDIX H

SIERRA COUNTY VFD WILDLAND FIREFIGHTING TRAINING ACCOMPLISHMENTS

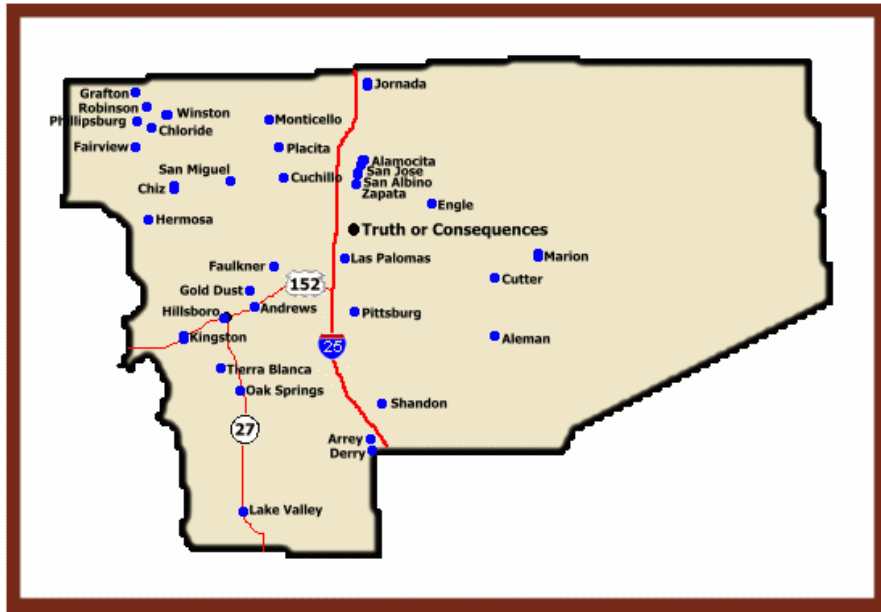


Sierra County VFD Wildland Firefighting Training Accomplishments

COURSE	Number of Certificates Issued							
	2012	2013	2014	2015	2016	2017	2018	2019
RT 130	33	33	29	34	36	54	26	10
RT 212			9					
RT 190								
130-190			9					
WEATHER			3	5	14			
S 290			2	2		2		
S 234			9	4				
S 131			12		3			
S 110			1					
S 230		16		3				
S 215	15							
S 231		16						



MAPS



Historic Townsites of Sierra County



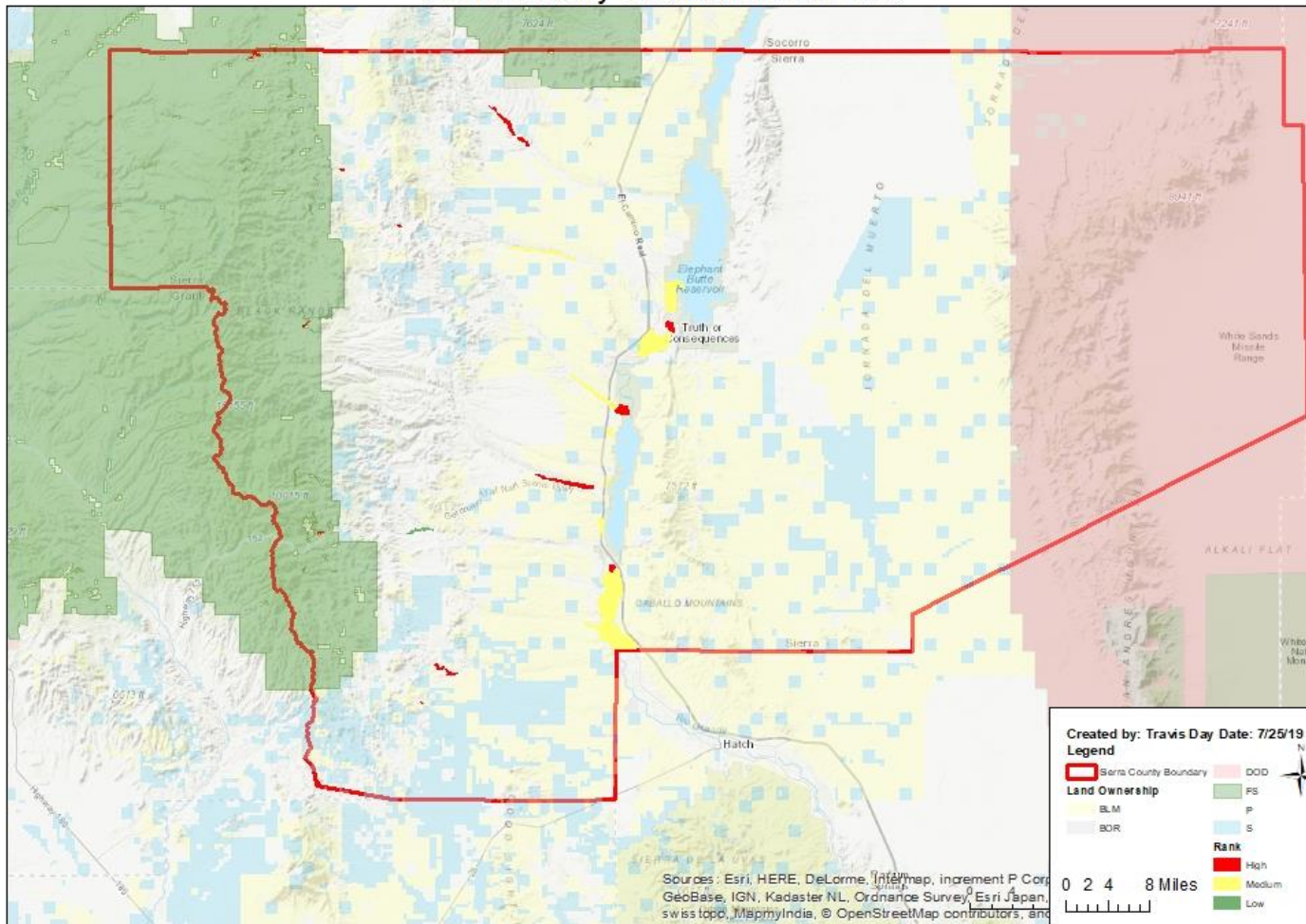
Sierra County, New Mexico

MAP 1

SIERRA COUNTY WILDLAND COMMUNITY WILDFIRE PROTECTION PLAN PRIORITY AREAS



Sierra County Communities at Risk

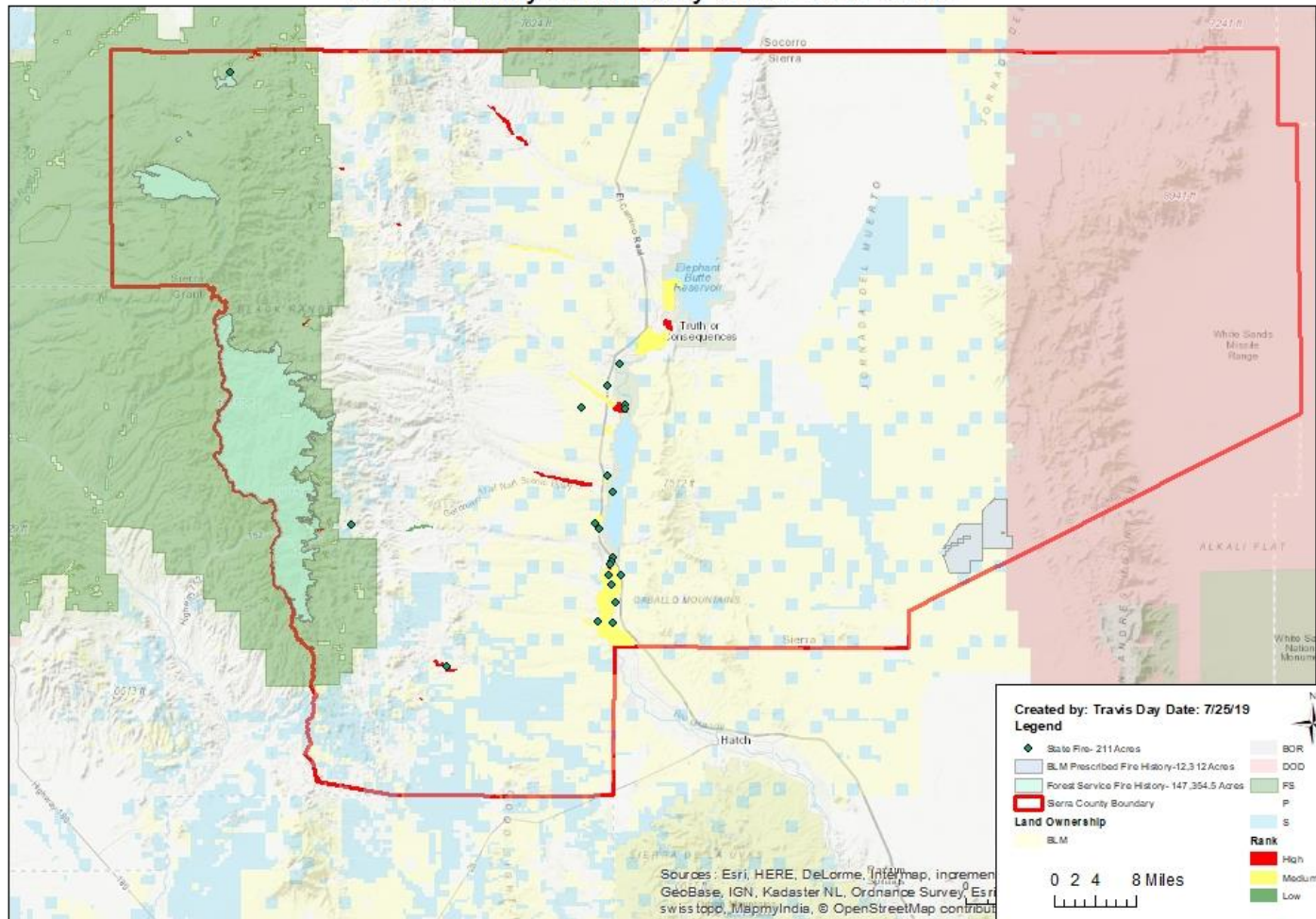


MAP 2

SIERRA COUNTY CWPP FIRE HISTORY AND WILDLAND URBAN INTERFACE TREATMENTS



Sierra County Fire History Since 2012 CWPP

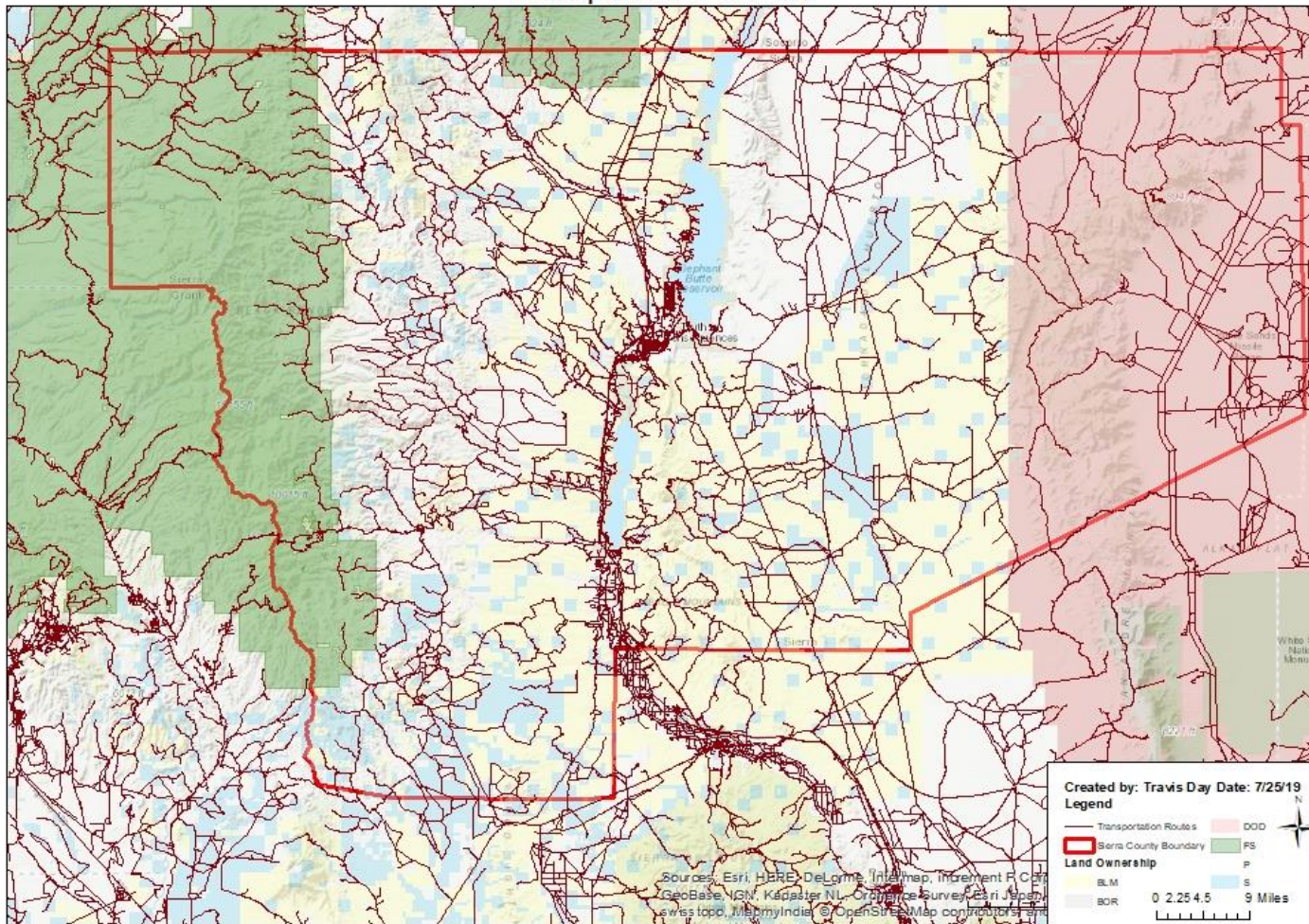


MAP 3

SIERRA COUNTY CWPP TRANSPORTATION ROUTES



Transportation Routes

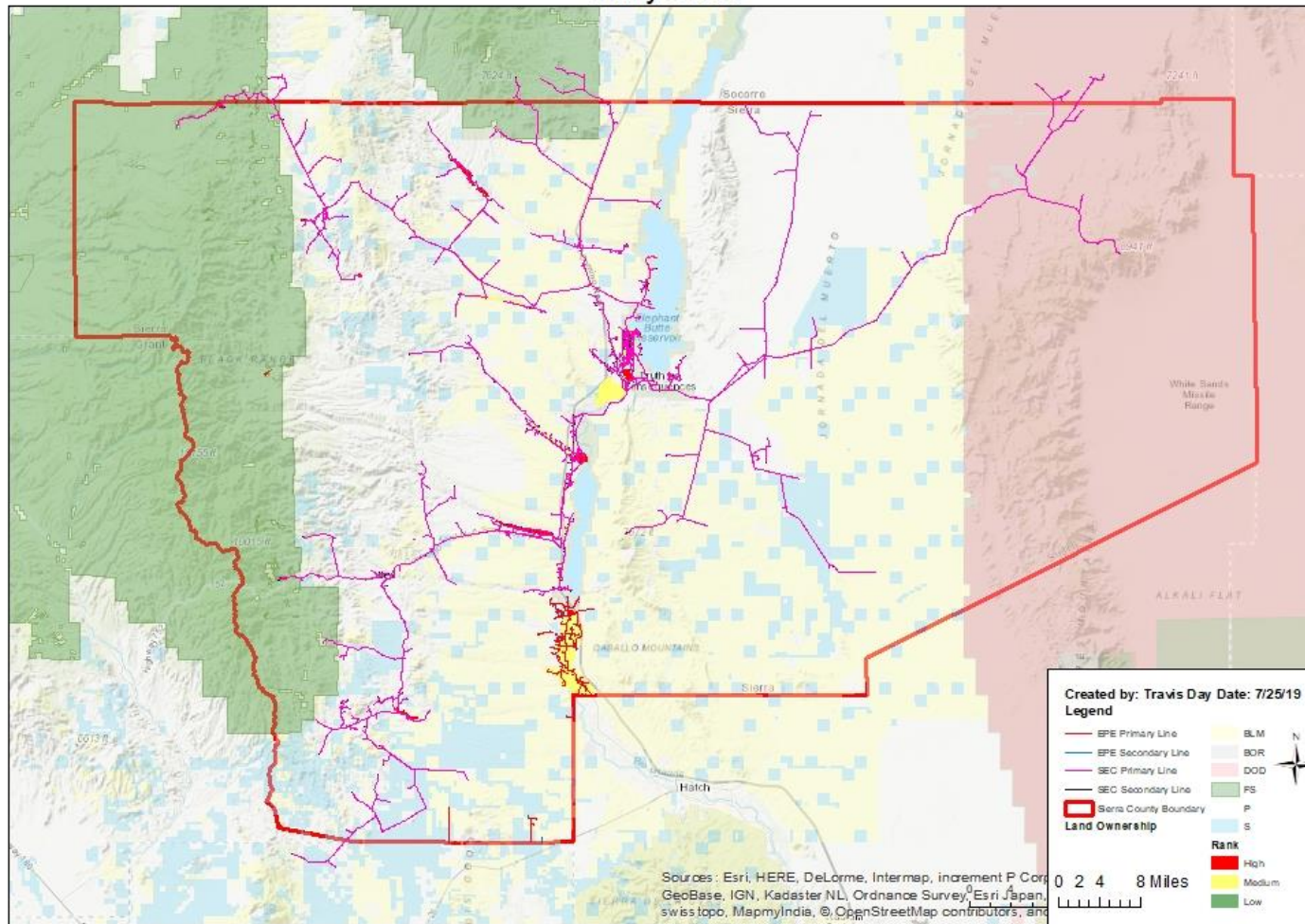


MAP 4

SIERRA COUNTY CWPP INFRASTRUCTURE & UTILITIES



Utility Lines

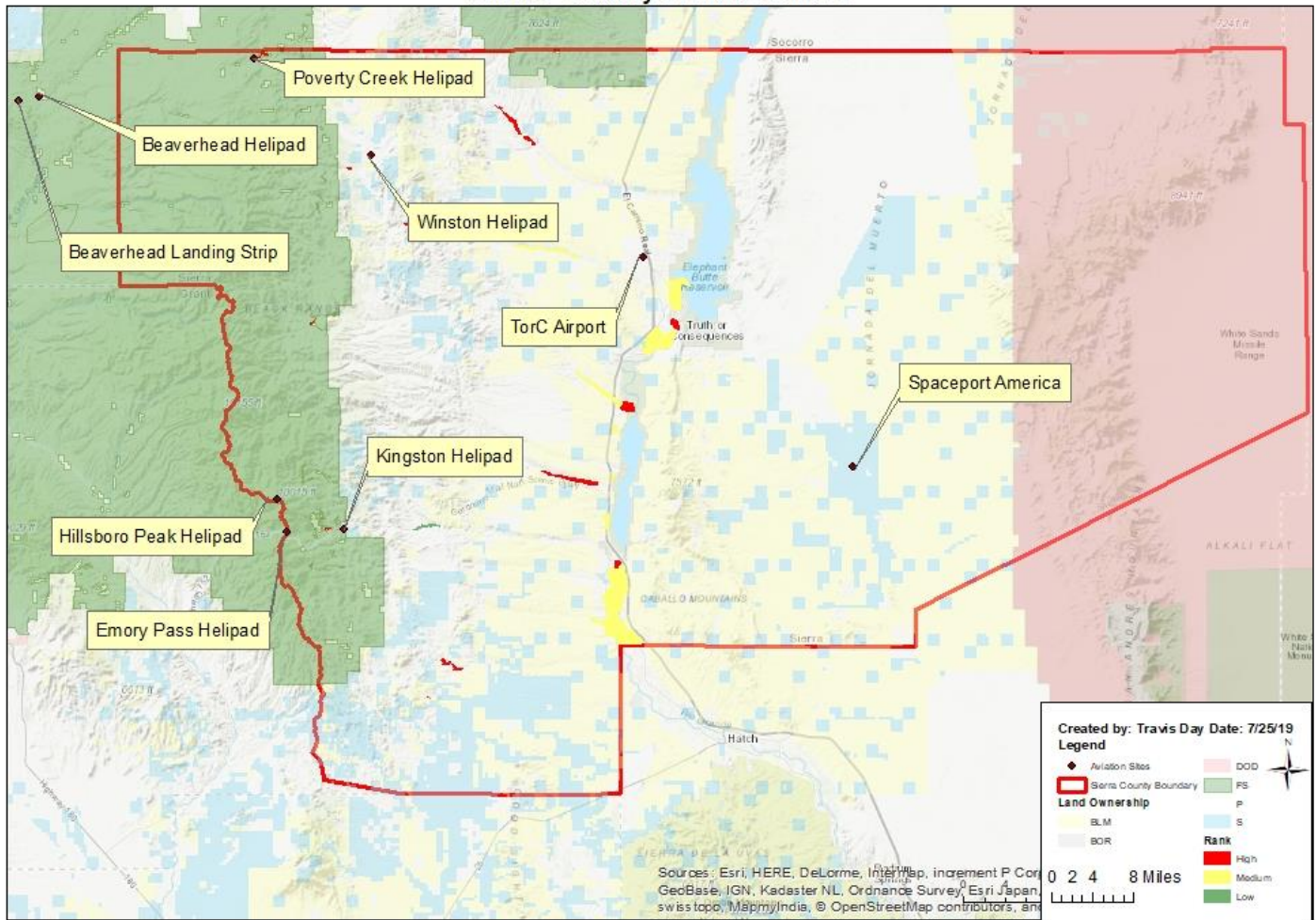


MAP 5

SIERRA COUNTY AVIATION SITES



Sierra County Aviation Sites

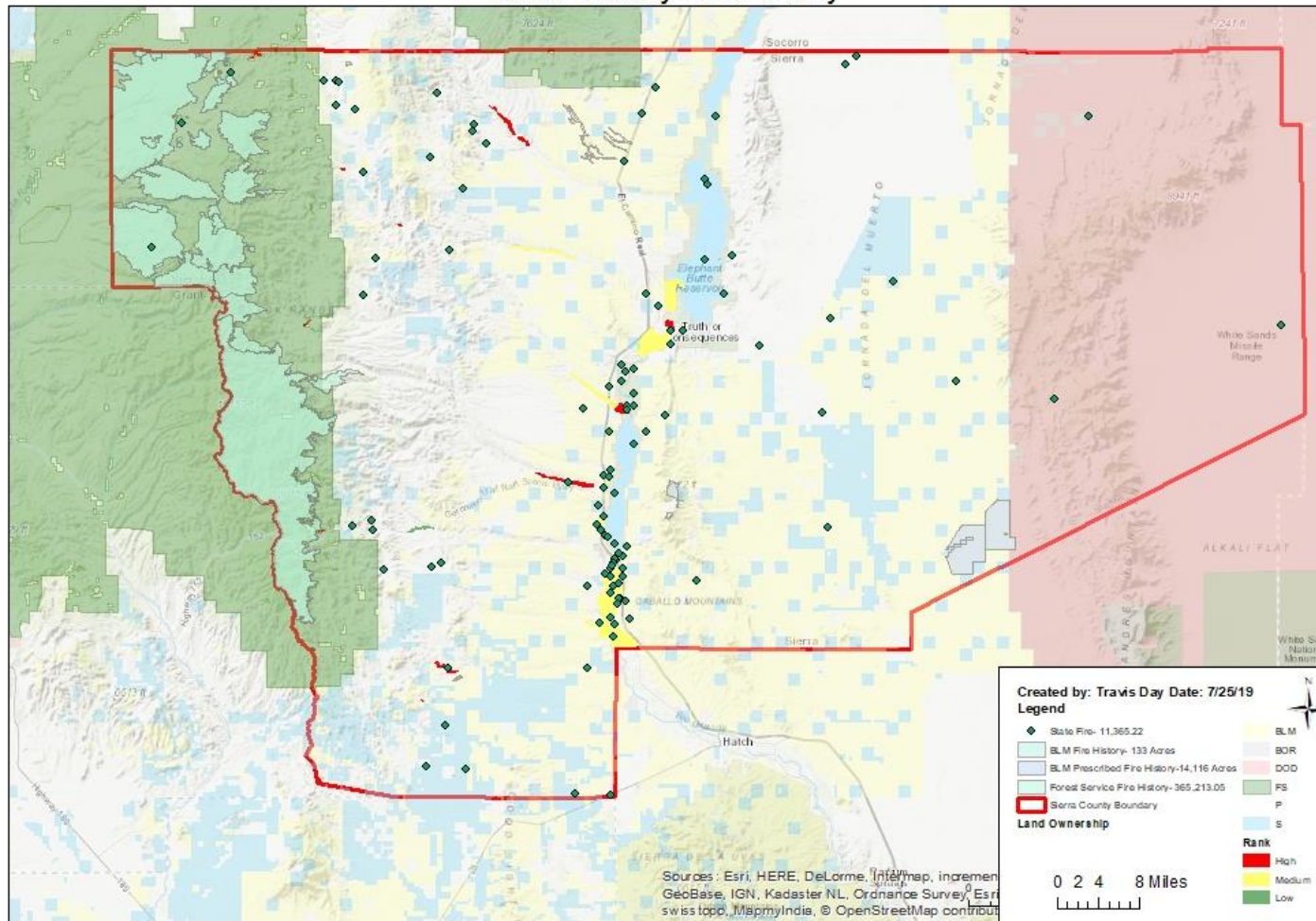


MAP 6

FIRE HISTORY
in
Sierra County



Sierra County Fire History

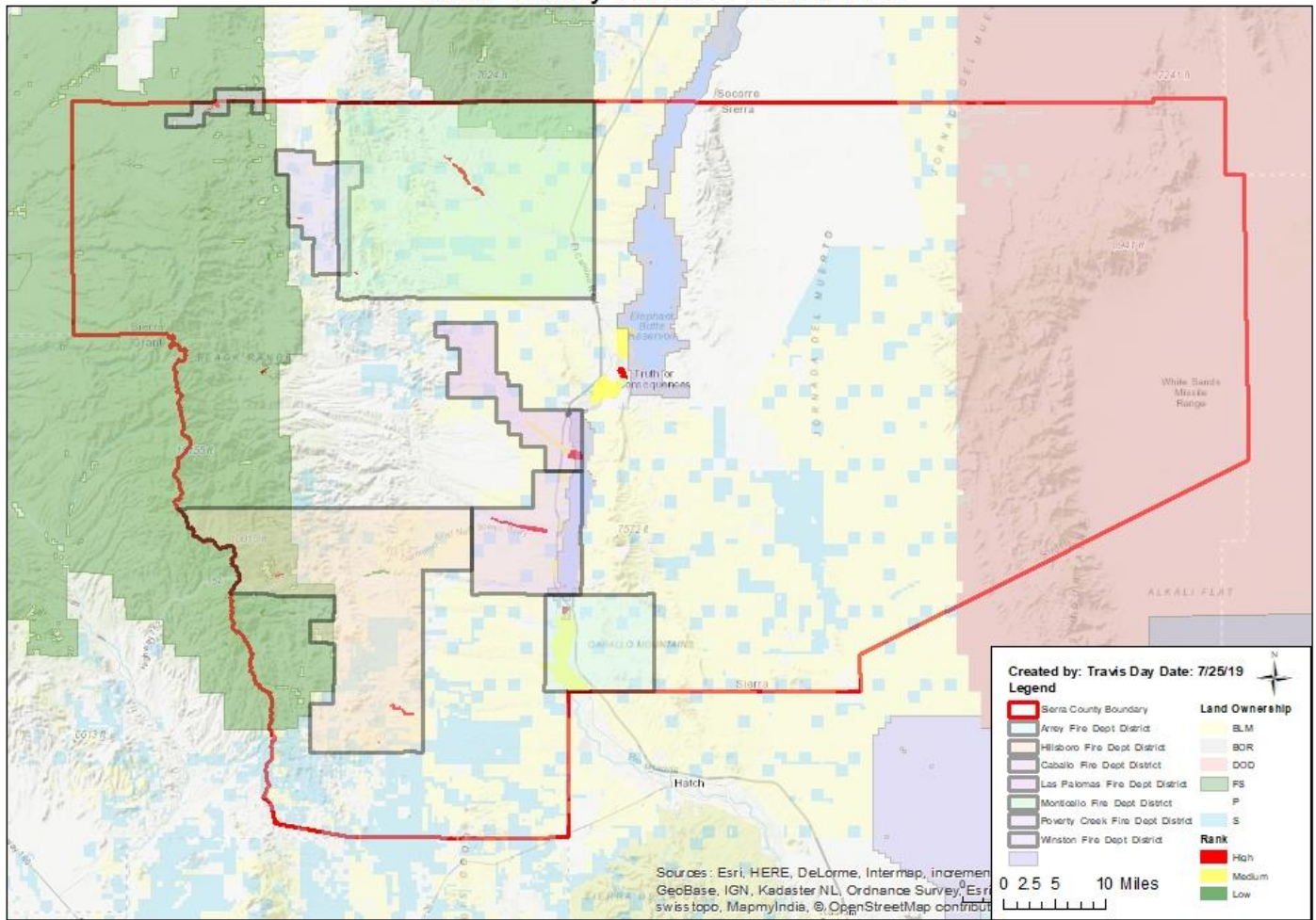


MAP 7

VFD
ISO BOUNDARIES



Sierra County VFD ISO Boundaries

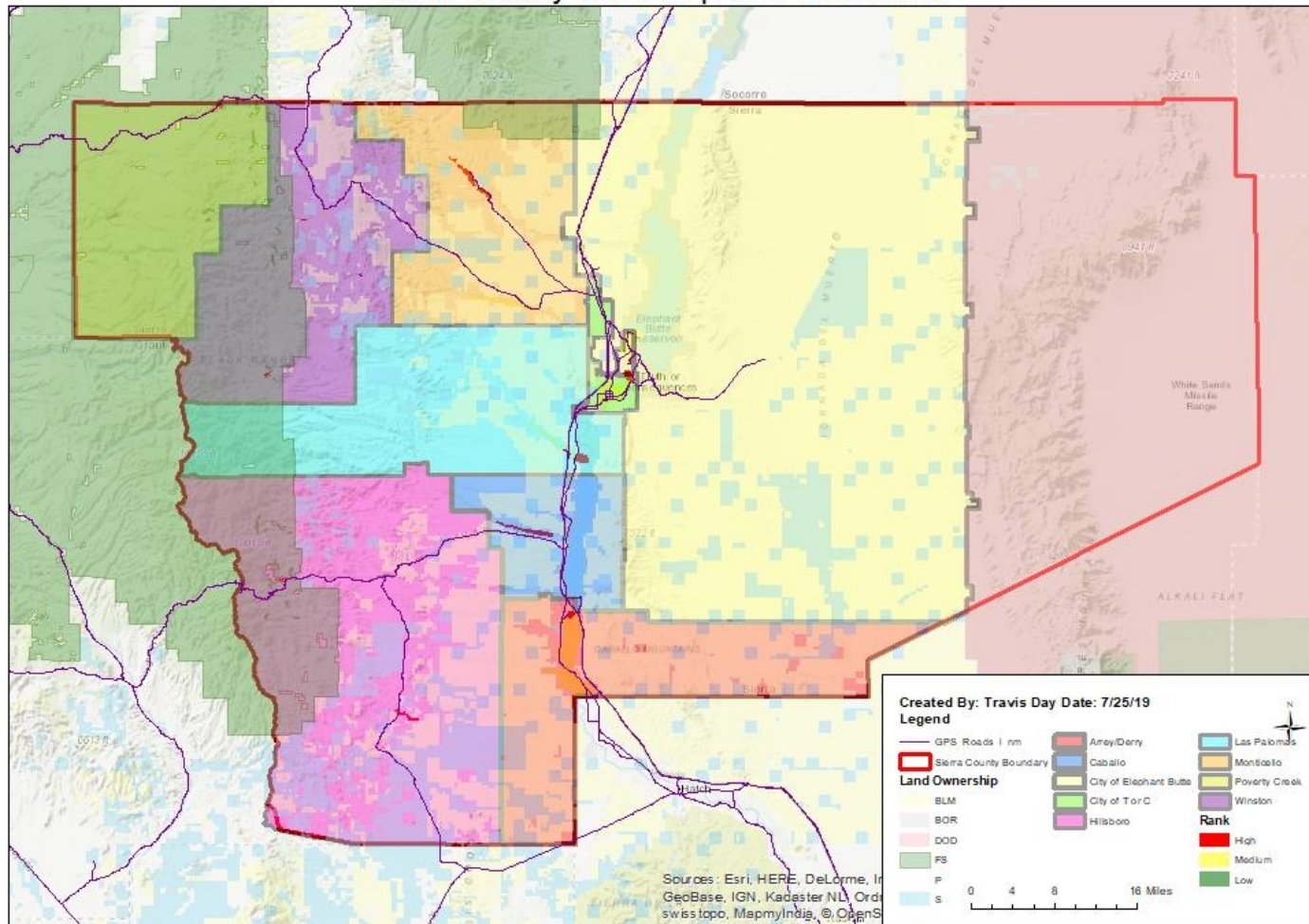


MAP 8
RESPONSE BOUNDARY
for
Sierra County

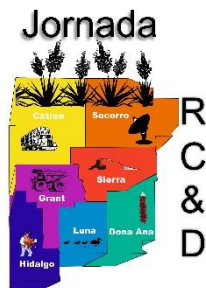


Helitanker Drop

Sierra County VFD Response Boundaries



Master Mutual Aid Agreement



Prepared by;

Blue Star Mom Enterprises, LLC.

Merry Jo Fahl & Kate Fauske Maynard

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