

Luna County Community Wildfire Protection Plan



Sponsored by:

Luna County Board of Commissioners
Luna County Fire Districts
Luna County Fire Departments
New Mexico Energy, Minerals & Natural Resources Department, Forestry Division

Additional support from:

BLM — Las Cruces District

Funded by:

New Mexico Association of Counties in partnership with Bureau of Land Management, Las Cruces District

Front Cover Photograph:

**Thunderstorm with the Florida Mountains in the background.
Photo taken by: Ronderick Byrne**

TABLE OF CONTENTS

	Page
• COVER	• 1
• TABLE OF CONTENTS	• 3
• LIST OF TABLES	• 5
• LIST OF FIGURES	• 5
• LIST OF MAPS	• 5
• SIGNATURE PAGES	• 6
• PURPOSE	• 8
• Introduction	• 8
• Communities and The Wildland-Urban Interface	• 9
• Benefits to Communities	• 9
• COLLABORATION	• 9
• Team Meetings	• 10
• Participating Fire Departments	• 10
• Core Team Members	• 11
• COUNTY OVERVIEW	• 12
• Communities	• 12
• Water Resources	• 12
• Fire Weather	• 12
• Land and Vegetation	• 13
• Land Ownership	• 15
• Fire History	• 16
• LUNA COUNTY WILDLAND URBAN INTERFACE	• 19
• Risk Assessment	• 19
• Wildland Urban Interface per Fire Department	• 22
• Community of Columbus	• 22
• US State Highway 9 – East	• 23
• US State Highway 9 – West	• 24
• US / Mexico International Border Fence	• 25
• Johnson Peak Communication Site	• 26
• US State Highway 180 and Railroad	• 27
• Cooks Peak	• 28
• Dairy Farms	• 29
• Nutt and Communication Site	• 30
• US State Highway 26	• 31
• Community of Florida Mountains	• 32
• Florida Mountains Communication Site	• 33
• Community of Savoy and El Paso Gas Plant	• 34
• Community of Red Mountain	• 35
• Community of Rattlesnake Lane	• 36
• El Paso Gas Monitoring Station	• 37
• Chance City Historical Site	• 38

- Victoria Peak Communication Site • 39
- Community of Sunshine • 40
- Interstate 10 and Railroad • 41
- State Highway 11 • 42
- **ACTION PLAN** • 43
- WUI areas • 43
- Implementation of Plan • 44
- Evacuations • 44
- Treatments • 44
- Prescribed Fire • 45
- Mowing • 45
- Public Outreach and Education • 45
- Open Burning Requirements • 45
- **FUELS REDUCTION PROJECTS** • 46
- Priority 1 - Transportation Infrastructure Corridor Fuel Reduction • 46
- Priority 2 - Defensible Space • 49
- Priority 3 - Fuel Breaks around WUI Boundaries • 52
- **TREATMENT OF STRUCTURAL IGNITABILITY** • 52
- ICC WUI Codes • 52
- Defensible Space and Firewise Annual Checklist • 52
- **IMPROVING FIREFIGHTER CAPACITY** • 53
- Fire Departments ISO Rating • 53
- Wildland Coordinator • 54
- Water Source Coordinator • 54
- Training • 54
- Enhanced 911 • 55
- Equipment • 55
- Communications • 55
- PPE- Personal Protective Equipment • 56
- Fire Apparatus • 56
- Community Firefighting Water Supplies • 57
- Recruitment and Retention of Volunteer Firefighters • 57
- Fire Department Funding Guidelines • 57
- Luna County Fire Department Needs • 58
- **CONCLUSIONS AND RECOMMENDATIONS** • 61
- **APPENDICIES** • 62
- APPENDIX A - Electronic Maps- WUI's • 62
- APPENDIX B - Electronic Maps- County • 62
- APPENDIX C - Communications Maps • 63
- APPENDIX D - Radio Communication Analysis • 64
- APPENDIX E - Fire Department Wildland Fire Training Program • 65
- APPENDIX F - Wildfire Hazard Home Assessment Form • 68
- APPENDIX G - Funding Sources • 70
- APPENDIX H - Homeowner's Guide • 73

LIST OF TABLES

Table 1.	Core Team Meeting Dates	11
Table 2.	Core Team Members	12
Table 3	Fire Occurrence in Luna County	17
Table 4.	WUI Community Wildfire Risk Assessment	21
Table 5.	Proposed Wildfire Hazard Mitigation for WUI's	45
Table 6.	Fire Department ISO Ratings	53
Table 7.	Fire Department Wildland Equipment Needs Assessment	58

LIST OF FIGURES

Forested Property showing the three fire defensible zones around a home or structure	50
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LIST OF MAPS

Map 1	Luna County Vegetation Map	16
Map 2	Luna County Ownership Map	16
Map 3	Luna County Fire History Map	19
Map 4	Luna County WUI Overview Map	22
Map 5	WUI Community of Columbus	23
Map 6	WUI US Highway 9 East	24
Map 7	WUI US Highway 9 West	25
Map 8	WUI US / Mexico International Border Fence	26
Map 9	WUI Johnson Peak Communication Site	27
Map 10	WUI US 180 & Railroad	28
Map 11	WUI Cooks Peak	29
Map 12	WUI Dairy Farms	30
Map 13	WUI Nutt and Communication Site	31
Map 14	WUIUS Highway 26	32
Map 15	WUI Community of Florida Mountains	33
Map 16	WUI Florida Mountains Communication Site	34
Map 17	WUI Community of Savoy & El Paso Gas Plant	35
Map 18	WUI Community of Red Mountain	36
Map 19	WUI Community of Rattlesnake Lane	37
Map 20	WUI El Paso Gas Monitoring Site	38
Map 21	WUI Chance City Historical Site	39
Map 22	WUI Victoria Peak Communication Site	40
Map 23	WUI Community of Sunrise	41
Map 24	WUI Interstate 10 & Railroad	42
Map 25	WUI State Highway 11	43
Map 26	WUI County Road / Fuel Reduction	48

**LUNA COUNTY
COMMUNITY WILDFIRE PROTECTION PLAN (CWPP)**

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We, the undersigned do hereby endorse and approve the Luna County Community Wildfire Protection Plan.

Cooks Peak Volunteer Fire Department

Luis Malina, Fire Chief

Date

Florida Volunteer Fire Department

, Fire Chief

Date

Sunshine Volunteer Fire Department

Roderick Byrne, Fire Chief

Date

Savoy Volunteer Fire Department

Sean Curtis, Fire Chief

Date

Columbus Volunteer Fire Department

Bob Wright, Fire Chief

Date

Luna County Board of Commissioners

Chairperson

Date

New Mexico EMNRD Forestry Division

Doug Boykin, District Forester
Socorro District

Date

LUNA COUNTY
COMMUNITY WILDFIRE PROTECTION PLAN (CWPP)



We the undersigned support the Luna County Community Wildfire Protection Plan.

COLLABORATING AGENCIES:

Bill Childress, District Manager
BLM Las Cruces District Office

COMMUNITY WILDFIRE PROTECTION PLAN

PURPOSE

TO ADDRESS THE WILDFIRE NEEDS OF LUNA COUNTY

Wildfires are a part of the natural process of life. Ecosystems are equipped for, and in fact thrive when fires are allowed to take their natural course. However, when human habitation and/or development mix with Wildland fuels, the Wildland Urban Interface is created. The Wildland Urban Interface or WUI, creates an environment where structures and infrastructure become “fuels” for Wildland fires. Developments in the WUI means both communities and individuals need to learn to identify wildfire hazards, prepare for wildfire events, and learn what can be done before a fire to reduce the negative impacts. This Community Wildfire Protection Plan attempts to do just that. This plan should be used as a guideline to property owners and fire departments interested in addressing the wildfire hazards in their communities. The recommendations made are very general and the focus is on the privately owned WUI areas identified by the Core Team.

INTRODUCTION TO COMMUNITY WILDFIRE PROTECTION PLANS

The idea for community-based forest planning and prioritization is neither novel nor new. However, the incentive for communities to engage in comprehensive forest planning and prioritization was given new and unprecedented impetus with the enactment of the Healthy Forests Restoration Act (HFRA) in 2003. This landmark legislation includes the first meaningful statutory incentives for The US Forest Service (USFS) and the Bureau of Land Management (BLM) to give consideration to the priorities of local communities as they develop and implement forest management and hazardous fuel reduction projects. In order for a community to take full advantage of this new opportunity, it must first prepare a Community Wildfire Protection Plan (CWPP). Based on the needs of Luna County, this Wildfire Protection Plan addresses the following issues;

- Wildfire hazards to the WUI and critical infrastructure,
- Public education and outreach,
- Hazard mitigation
- Fuels reduction projects
- Treatment of structural ignitability
- Improving firefighting capacity

The process of developing a CWPP can help a community clarify and refine its priorities for the protection of life, property, and critical infrastructure in the Wildland Urban Interface. It also can lead community members through valuable discussions regarding management options and implications for the surrounding watershed. The language in the HFRA provides maximum flexibility for communities to determine the substance and detail of their plans and the procedures they use to develop them.

COMMUNITIES AND THE WILDLAND–URBAN INTERFACE

The Wildland Urban Interface (WUI) is commonly described as the zone where structures and other human development meet and intermingle with undeveloped Wildland or vegetative fuels. This WUI zone poses tremendous risks to life, property, and infrastructure in associated communities and is one of the most dangerous and complicated situations firefighters face. Both the National Fire Plan and the Ten-Year Comprehensive Strategy for Reducing Wildland Fire Risks to Communities and the Environment place a priority on working collaboratively within communities in the WUI to reduce their risk from large-scale wildfire. The HFRA builds on existing efforts to restore healthy forest conditions near communities and essential community infrastructure by authorizing expedited environmental assessment, administrative appeals, and legal review for hazardous fuels projects on federal land. The Act emphasizes the need for federal agencies to work collaboratively with communities in developing hazardous fuel reduction projects, and it places priority on treatment areas identified by communities themselves in a CWPP.

BENEFITS TO COMMUNITIES

In the context of the HFRA, a CWPP offers a variety of benefits to communities at risk from Wildland fire. Among the benefits is the opportunity to establish a localized definition and boundary for the Wildland Urban Interface. In the absence of a CWPP, the HFRA limits the WUI to within ½ mile of a community's boundary or within 1½ miles when mitigating circumstances exist, such as sustained steep slopes or geographic features aiding in creating a fire break. Fuels treatments can occur along evacuation routes regardless of their distance from the community. At least 50 percent of all funds appropriated for projects under the HFRA must be used within the WUI as defined by either a CWPP or by the limited definition provided in the HFRA when no CWPP exists. In addition to giving communities the flexibility to define their own WUI, the HFRA also gives priority to projects and treatment areas identified in a CWPP by directing federal agencies to give specific consideration to fuel reduction projects that implement those plans. If a federal agency proposes a fuel treatment project in an area addressed by a community plan but identifies a different treatment method, the agency must also evaluate the community's recommendation as part of the project's environmental assessment process.

COLLABORATION

A core group of personnel from Luna County and New Mexico State Forestry, Socorro District was established to provide direction for the CWPP preparation.

Four public meetings were held on the afternoons and evenings though out Luna County, from May 2010, though September 2010. The purpose of these meetings was to encourage any group, organization, and/or persons to provide input and help with CWPP development. Specifically, meetings were held to establish a community base map, develop an initial CWPP outline, develop a community risk assessment, and establish community priorities and recommendations. Each meeting followed the same outline: present the purpose of the CWPP, provide an opportunity for questions and answers, and solicit group input. Input was also solicited from the BLM, Las Cruces District; New Mexico State Forestry, Socorro District; and Luna County Fire Departments; among others.

The following agencies were invited to attend the core team meeting:

- Luna County: Public Safety, Commissioners, and Road Department
- Bureau of Land Management
- US Border Patrol

CWPP Luna County Final Draft October, 2010

- New Mexico State Police
- Deming Soil and Water Conservation District
- NRCS
- EMNRD State Forestry Division, Socorro District
- NM-DOT
- NM Game and Fish
- City of Deming
- City of Columbus
- Cooks Peak VFD
- Florida Mountains VFD
- Sunshine VFD
- Columbus VFD
- Savoy VFD
- Tyrone VFD
- NM Department of Public Safety
- Private land owners

Table 1. Core Team meetings

DATE	LOCATION
May 14, 2010 1300hrs	Luna County Court House, Deming, NM
May 14, 2010 1800hrs	Luna County Court House, Deming, NM
September 14, 2010 1800 hrs	Columbus VFD, Columbus, NM
September 28 2010, 1800 hrs	Cooks Peak VFD, Deming, NM

The purpose of these meetings was to encourage any group, organization, and/or persons to have input and help with development of Luna County Community Wildfire Protection Plan. We welcomed any support and/or the possibility of joining the core group. The plan will encourage the following:

- Interested Parties and to Form a Core Team,
- Establish a Community Base Map,
- Develop an Initial CWPP Outline,
- Develop a Community Risk Assessment, and
- Establish Community Priorities and Recommendations.

Meetings were held during the day and in the evening to encourage and give residents that work shift work the opportunity attend meetings.

Participating Municipal and County Fire Departments:

Cooks Peak Volunteer Fire Department, Luna County
Florida Mountain Volunteer Fire Department, Luna County
Sunshine Volunteer Fire Department, Luna County
Savoy Volunteer Fire Department, Luna County
Columbus Volunteer Fire Department, Luna County
Tyrone Volunteer Fire Department, Grant County

Contact:

John Sutherland, Luna County Manager
P.O. Box 551, Deming, New Mexico 88030
575-546-0494

TABLE 2. Core Team Members

Organization	Name	Phone Cell	E-Mail	Address
Florida Mtn. VFD	Tony Anderson	575-544-3416	toni88030@yahoo.com	700 S Silver St. Deming NM 88030
Florida Mtn. VFD	Sean Blaine	505-469-0984	sblaine222@yahoo.com	4220 Cordova Rd SE Deming NM 88030
Sunshine VFD	Rod Byrne	575-544-7455	sunshinevfd@gmail.com	700 S Silver St. Deming NM 88030
Sunshine VFD	Lace Byrne	575-544-8084	mygroovzon71@yahoo.com.	700 S Silver St. Deming NM 88030
Savoy VFD	Sean Curtis	575-936-5240	Sean@savoyfiredept.com	14150 HWY 418 SW Deming NM 88030
Columbus VFD	Bob Wright	575-531-2225	bobwright@vtc.net	P.O. Box 308 Columbus NM 88029
Columbus VFD	Bill Pollock	575-531-2225	firedog224@vtc.net	P.O. Box 308 Columbus NM 88029
Cooks Peak VFD	Luis Malina	575-544-7457	luismalina@yahoo.com	700 S Silver St. Deming NM 88030
Tyrone VFD	Tom Nelson	575-436-2751	hachita@vtc.net	P.O. Box 151 Hachita NM 88040
NM State Forestry	Jack, Dickey		jack.dickey@state.nm.us	HC 32 Box 2 Socorro NM 87801
BLM-LC	Steve Bumgarner	(575) 525-4305	steve_bumgarner@blm.gov	1800 Marquess Las Cruces NM 88005
BLM-LC	Loretta Benavidez	(575) 525-4305	Loretta_Benavidez@blm.gov	1800 Marquess Las Cruces NM 88005
BLM-LC	Tom McKibbin	(575) 525-4305	thomas_mckibbin@blm.gov	1800 Marquess Las Cruces NM 88005
WxFireGraph LLC	Kenny, Rogers	(575) 894-1043 (575) 740-7468	Kenny@wxfiregraph.com	415 N Date T or C NM. 87901

COUNTY OVERVIEW

COMMUNITIES

Luna County has two municipalities: City of Deming and Village of Columbus and four rural community areas: Cooks Peak, Florida Mountains, Sunshine, and Savoy. In addition to the municipalities and communities, numerous remote ranches are located throughout the County. Essential infrastructure includes the Deming Airport, Port of Entry at Columbus NM; Interstate Highway 10, US and State highways, Southern Pacific Railroad, electric transmission lines, petroleum product pipelines; and radio communication sites on Nutt Peak, Victoria Peak, and Florida Mountains.

WATER RESOURCES

The Mimbres River in the northern part of the county is the only naturally occurring water source in Luna County. Water utilized for municipal consumption, agricultural irrigation, ranching, and firefighting is drawn from aquifers.

FIRE WEATHER

Weather plays a key role in wildfire. Lightning is often responsible for ignitions. Lightning ignites 25% of wildland fires across Luna County. The size and fire behavior is dependent upon a number of factors such as relative humidity, wind and temperature, and the moisture content of fuels. There is only one RAWS located near Luna County. The Hatchett RAWS is located within Hidalgo County at an elevation of 4,300 feet. The weather data for this RAWS, during the time frame of March 1 through July 11, for the years 1983-2009, was used to determine the Luna County historical weather below. Hidalgo County is the next county to the west of Luna County.

- **Relative Humidity and Temperature:** Relative humidity average lows during fire season are 6-12%. Average high temperatures are 83-112 degrees Fahrenheit during fire season. The low relative humidities and high temperature drive the fuel moistures down.
- **Fuel Moisture:** 1-hour fuel moistures average lows of 1- 2 % and average highs of 12-16%. 1-hour fuel moistures are a driving force for the spread of wildland fires within Luna County.
- **WINDS:** 20 foot winds average 12-25 miles per hour. Windstorms can produce wind gusts of greater than 50 mile per hour, which can contribute to large fire growth in a short period of time. Wind is a major factor in the spread of wildland fires within Luna County.

LAND and VEGETATION

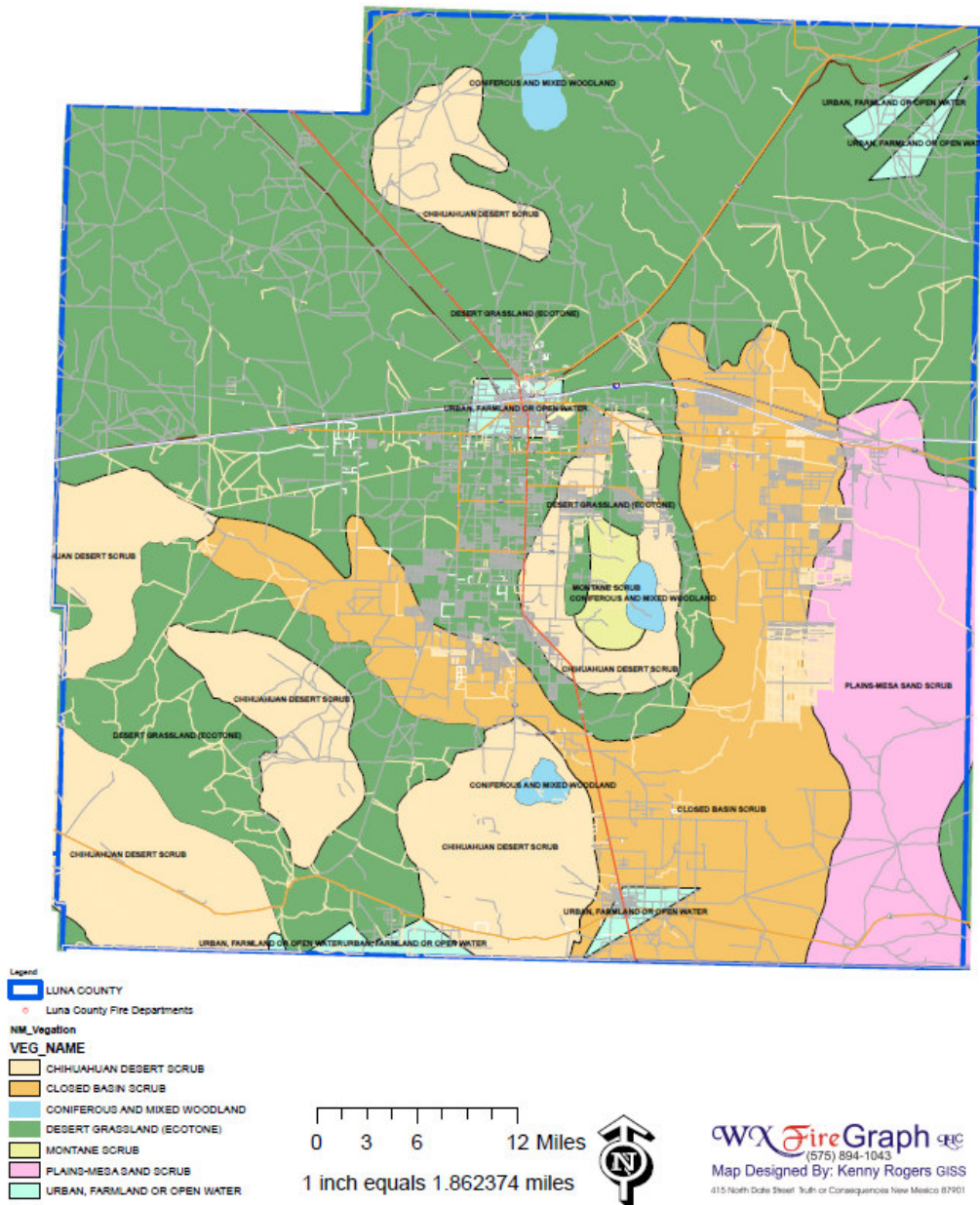
Vegetation types in the County include:

- Lakebed, Lower elevation, Upper elevation, High Desert, and Sacaton Grasslands;
- Grassland/riparian;
- Chaparral;
- Desert Shrub lands;
- Riparian, Piñon-juniper, Piñon-juniper/oak, Oak, and Pine-oak Woodlands; and
- Coniferous and mixed woodland forests.
-

Fire behavior fuel models represented in the County are:

- Fuel Model 1 Grass Group (1 foot deep grass, very little shrub or timber present);
- Fuel Model 2 Grass Group (1 foot deep grass, open shrub lands and pine or oak stands present);
- Fuel Model 4 Shrub Group (6 feet deep fuels, with grass, chaparral, and shrub);
- Fuel Model 6 Shrub Group (2.5 feet deep fuels, general shrub lands);
- Fuel Model 8 Timber Litter Group (0.2 foot deep fuels; short needle conifers and or oak stands; needles, leaves, twigs); and
- Fuel Model 9 Timber Litter Group (0.2 foot deep fuels; long needle conifer and hardwood stands).

Luna County Vegetation Map



Map 1. Luna County Vegetation Map.

Electronic Maps Disk:

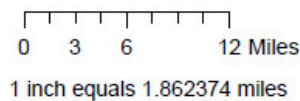
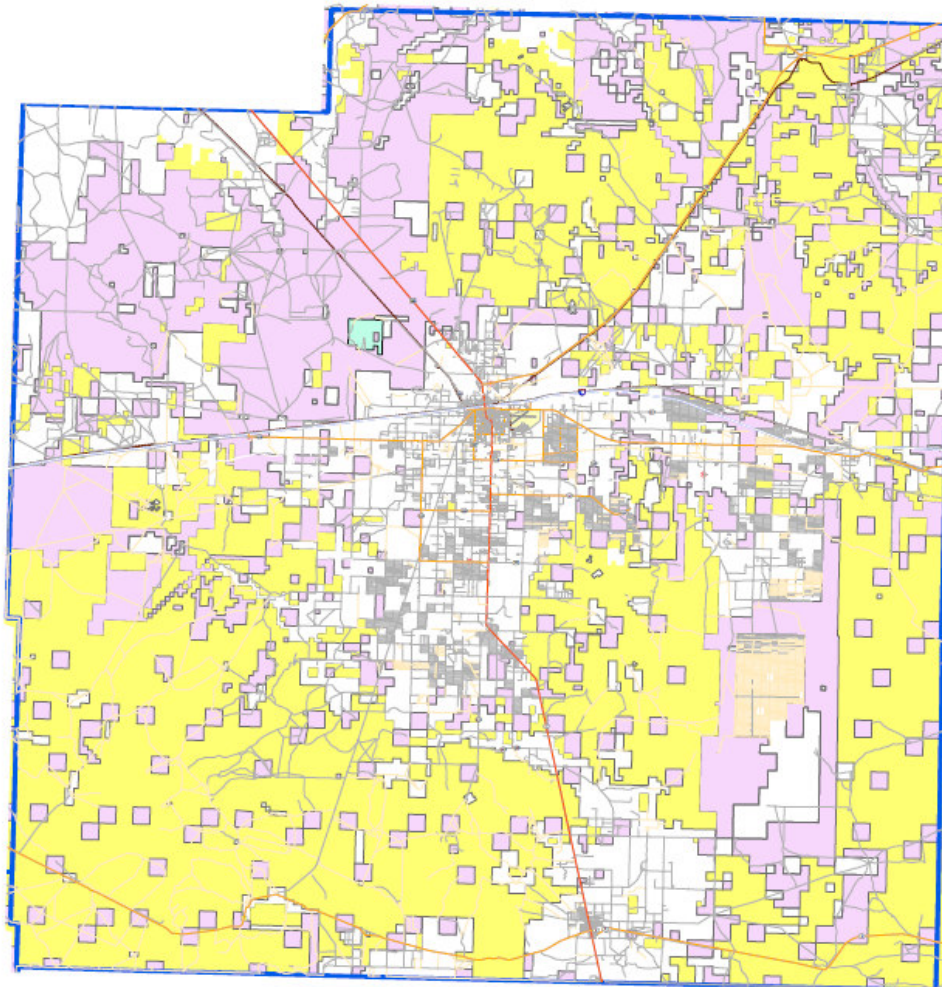
[CWPP Luna Appendix B County Maps/CWPLLuna Vegetation 8x11 Nad27UTM13N.pdf](#)

Land Ownership

Landownership in Luna County consists of a mix of private, State trust, and BLM. The largest concentration of private land is located along Interstate 10, and State Highways 26, 180, 11, and 9. Trust and BLM lands are distributed across the County.

Map 1 shows the distribution of landownership in the County

Luna County Ownership Map



CWX FireGraph LLC
(575) 894-1043
Map Designed By: Kenny Rogers GIS
415 North State Street, Suite 101, Corrales, New Mexico 87901

Map 2. Luna County Ownership Map.

Electronic Maps Disk:

Fire History

Most fires in Luna County occur during late spring and early summer, and are usually less than 100 acres. Effective initial attack by local fire departments contributes to keeping wildland fires relatively small. Additionally, grazing by livestock reduces fine fuels, which causes most fires not to burn well. In those years following a strong monsoon season, grass production is higher which usually results in more and larger fires, with lightning as the major cause. Where included in fire management plans, many natural ignitions (lightning) on BLM lands are managed to achieve resource objectives. Otherwise fires started by lightning and all human caused fires are suppressed. Prescribed fires make up a majority of acres that are burned on BLM lands in Luna County. Most prescribed burning is done to maintain and/or restore grasslands, and piñon/juniper stands. BLM has completed prescribed (RX) burns in Luna County. In 1998, 2000 acres were burned in and around Gap Draw just north of the Cedar Mountains. There was an RX on the Florida Mountains in 1992.

There are three areas in Luna County that the BLM can manage natural fires for resource benefit. They are the Cedar Mountains WSA, the Florida Mountains WSA, and the Cooke's Range WSA.

In the period from 1980 to date, 2010 wildland fires occurred in Luna County. Table 2 characterizes causes of wildland fires.

Human caused wildland fires account for 74.6% of wildland fires. In comparison, lightning ignites 25.4% of wildland fires across the County.

Fire history data is not able to be retrieved from NFERS reporting system by NMSF or BLM. NFERS is the fire reporting system that all VFD's have to report to and is located at the New Mexico State Fire Marshals Office. Fire history would be more complete if this could be corrected.

TABLE 3. Fire Occurrence in Luna County

**State of New Mexico - Energy, Minerals & Natural Resources Department
Forestry Division
Wildland Fire Statistics for Statistical 'X' Type Fires**

Location: In 3 - Socorro for Luna
Fire Danger: All

Date Range: State FY: 1/1/1990 6/30/2011
Agencies: All Agencies

Section I - Number of Fires and Acres Burned By Human and Natural Causes

Fire Cause	Total Number of Fires	Stastical Acres Burned	Total Acres Burned	Est. State Expenditure
Human Caused	53	2,398.83	2,413.83	\$16,043.00
Natural Caused	18	899.55	905.55	\$12,808.50
Total	71	3,298.38	3,319.38	\$28,851.50

Section II - Number of Fires and Acres Burned by Fire Cause

Fire Cause	Total Number of Fires	Statistical Acres Burned	Total Acres Burned	Est. State Expenditure
Campfire	1	1.00	1.00	\$0.00
Children	2	3.50	3.50	\$350.00
Debris Burning	7	25.65	25.65	\$918.00
Equipment use	13	101.08	101.08	\$3,027.50
Fireworks	2	73.70	73.70	\$1,101.00
Hot Ashes	1	0.25	0.25	\$0.00
Incendiary	2	11.00	11.00	\$661.50
Lightning	18	899.55	905.55	\$12,808.50
Powerline	3	40.50	40.50	\$547.00
Railroads	1	0.50	0.50	\$0.00
Smoking	13	2,042.35	2,042.35	\$4,884.00
Unknown	1	5.80	5.80	\$0.00
Miscellaneous	7	93.50	108.50	\$4,554.00
Total	71	3,298.38	3,319.38	\$28,851.50

Section III - Number of Fires and Acres Burned by Forest Type

Forest Type	Total Number of Fires	Statistical Acres Burned	Total Acres Burned	Est. State Expenditure
Commercial Forest	1	3.00	3.00	\$700.00
NonCommercial Forest	2	275.00	275.00	\$1,908.50
NonForest Watershed	68	3,020.38	3,041.38	\$26,243.00
Total	71	3,298.38	3,319.38	\$28,851.50

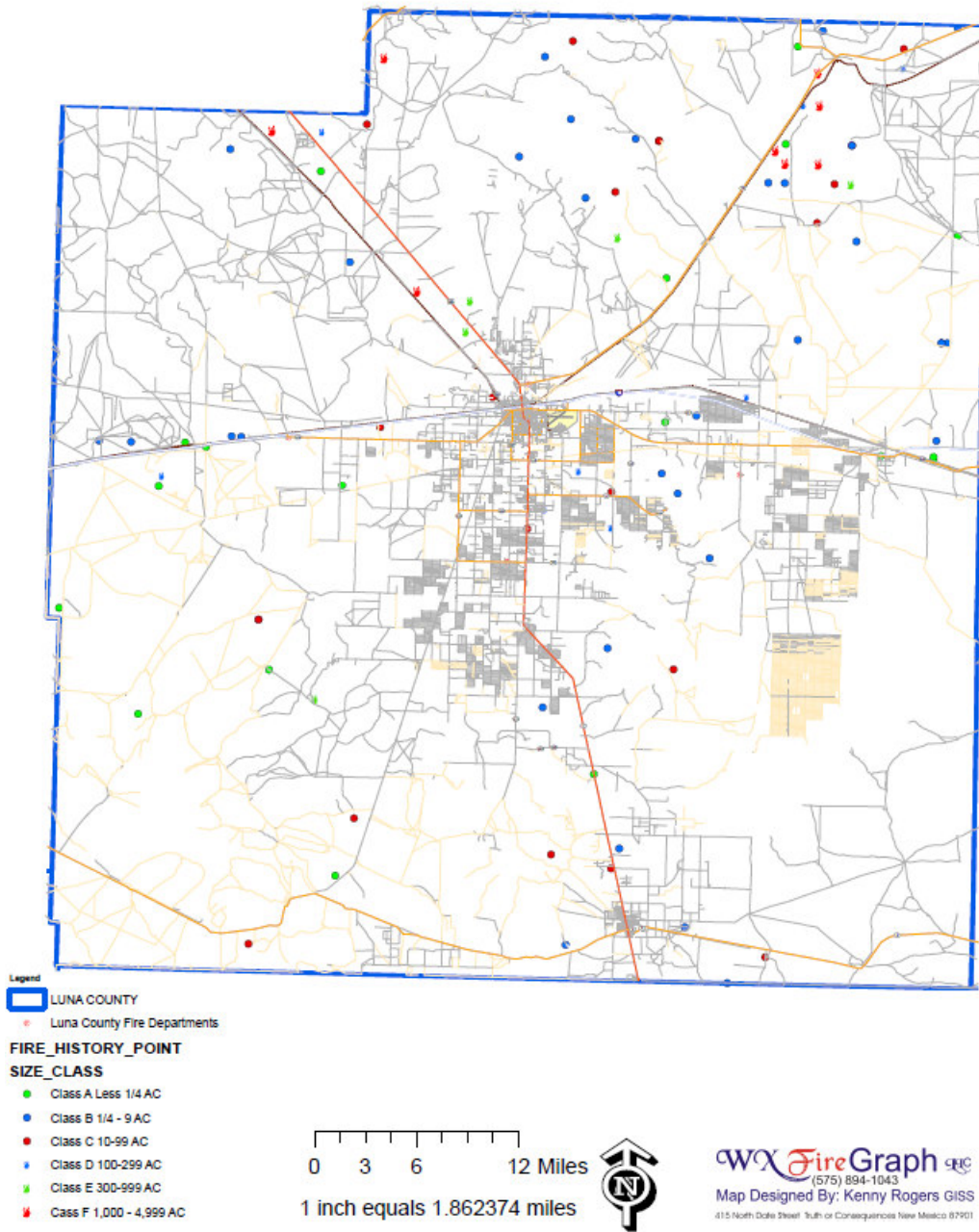
Section IV - Number of Fires and Acres Burned by Size Class

Size Class	Total Number of Fires	Statistical Acres Burned	Total Acres Burned	Est. State Expenditure
.25 Acre or less	10	1.73	1.73	\$950.00
.26 to 9.99 Acres	46	128.75	128.75	\$13,308.00
10 to 99.99 Acres	10	367.90	367.90	\$6,409.50
100 to 299.99 Acres	2	335.00	350.00	\$0.00
300 to 999.99 Acres	2	965.00	971.00	\$8,184.00
1000 to 4999.99 Acres	1	1,500.00	1,500.00	\$0.00
Total	71	3,298.38	3,319.38	\$28,851.50

Section V - Summary

	Number	Total Est. Expenditure
Total Number of Fires (Statistical/Total)	71 / 92	\$28,851.50 / \$36,447.50
Acres Burned (Statistical/Total)	3,032.38 / 5,237.48	\$28,851.50 / \$36,447.50
Total Number of Human-Caused Fires (Statistical/Total)	53 / 64	\$16,043.00 / \$17,448.00
Total Number of Non-Statistical Fires (Non-Reimbursable)	15	\$4,355.00
Structures Threatened	27	--N/A--
Total Number of Non-Statistical Fires (Reimbursable)	1	\$3,241.00
Total Number of False Alarms	5	\$0.00
Total Number of Prescribed Fires	0	\$0.00

Luna County Fire History Map 1980-2010



Map 2. Luna County Fire History Map.

Electronic Maps Disk:

[CWPP Luna Appendix B County Maps/CWPP FireHistory 8x11 Nad27UTM13N.pdf](#)

LUNA COUNTY WILDLAND URBAN INTERFACE

The Wildland Urban Interface (WUI) is commonly described as the zone where structures and other human development meet and intermingle with undeveloped Wildland or vegetative fuels. This WUI zone poses tremendous risks to life, property, and infrastructure in associated communities and is one of the most dangerous and complicated situations firefighters face. Both the National Fire Plan and the Ten-Year Comprehensive Strategy for Reducing Wildland Fire Risks to Communities and the Environment place a priority on working collaboratively within communities in the WUI to reduce their risk from large-scale wildfire. A Community Wildfire Protection Plan offers a variety of benefits to communities at risk from Wildland fire. Among those benefits is the opportunity to establish a localized definition and boundary for the Wildland Urban Interface. The Luna County Core Team defined the Luna County Wildland Urban Interface (WUI) by placing a WUI boundary around each of the communities in Luna County as listed in Table 4. Most WUI areas within Luna County have a threat of wildfire from within the boundary due to large amount and continuous light fuels growth inside the communities.

RISK ASSESSMENT

County WUI areas were evaluated and an average hazard rating was developed for each based on the following criteria:

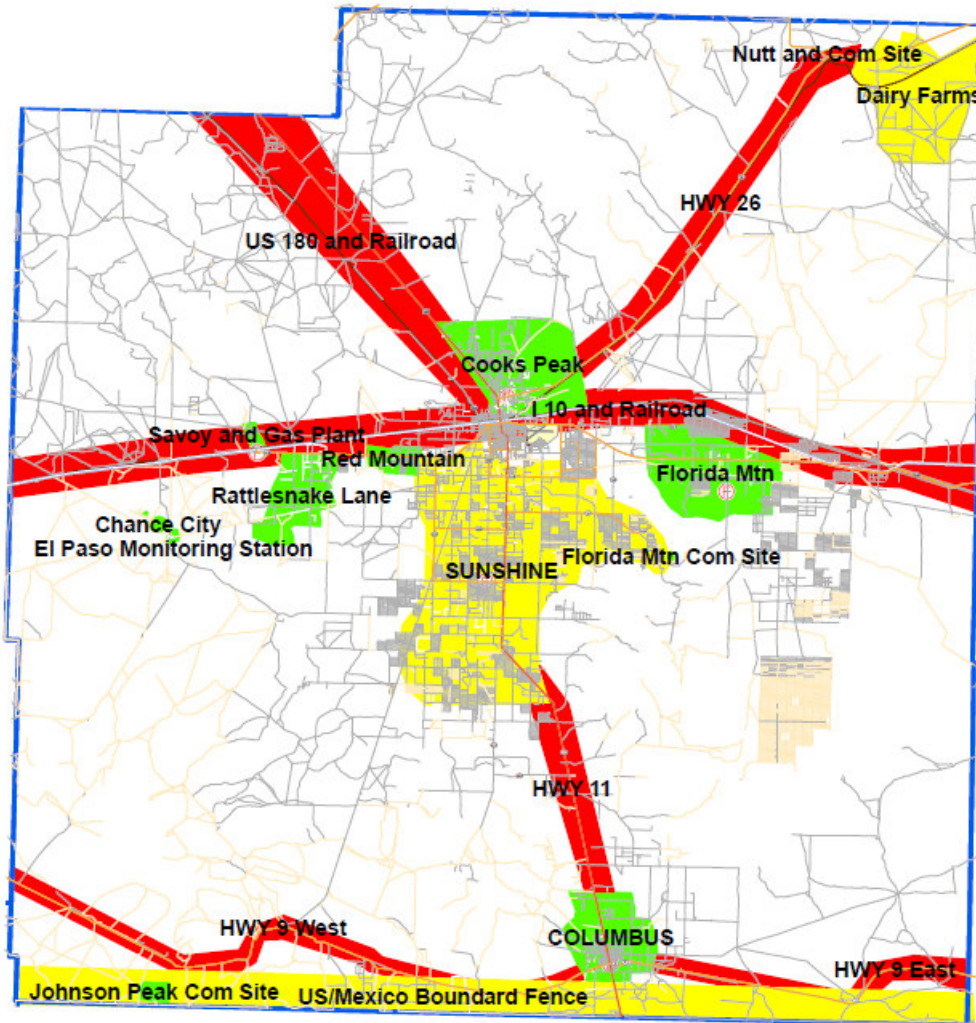
- Building construction materials;
- Infrastructure (roads, bridges, driveways and turnarounds);
- Water availability.
- Interface concerns (vegetation fuels, terrain, slope and aspect, number of lots, estimated structure density, and closest fire department).
- Weather, fuels, and fire behavior determined WUI boundary. There is no standard distance for WUI boundary.

Table 4. WUI Community Wildfire Risk Assessments

Number of Sites	WUI- Name	AVG Hazard	Total per WUI Acres
COLUMBUS VFD – ISO RATING 7			
1	Community of Columbus	Low	13,340
2	US State Highway 9 – East	High	13,397
3	US State Highway 9 – West	High	23,421
4	US / Mexico International Border Fence	Medium	65,332
4	Johnson Peak Communication Site	Low	1,136
COOKS PEAK VFD – ISO RATING 9			
6	US State Highway 180 and Railroad	High	46,269
7	Community of Cooks Peak	Low	14,528
8	Dairy Farms	Medium	24,475
9	Nutt and Communication Site	Low	119
10	US State Highway 26	High	24,050
FLORIDA MOUNTAIN VFD – ISO RATING 9			
11	Community of Florida Mountains	Low	19,247
12	Florida Mountain Communication Site	Low	69
SAVOY VFD – ISO RATING 10			
13	Community of Savoy and El Paso Gas Plant	Low	878
14	Community of Red Mountain	Low	2,548
15	Rattlesnake Lane	Low	9,748
16	El Paso Gas Monitoring Station	Low	256
17	Chance City Historical Site	Low	467
18	Victoria Peak Communication Site	Low	23
SUNSHINE VFD – ISO RATING 9			
19	Community of Sunshine	Medium	83,585
MUTUAL FIRE DEPARTMENT RESPONSE			
20	Interstate 10 and Railroad	High	75,931
21	State Highway 11	High	13,506
<i>Luna County Total Acreage Ratings</i>			
	Total Acres	High	196,574
	Total Acres	Medium	173,392
	Total Acres	Low	62,359

Hazard ratings of low, moderate, or high were assessed by fire history, fuels, topography, and nature of the WUI. Assessments for individual properties can be done using the assessment form included in Appendix 1 of this CWPP to determine an individual’s home or property Fire Hazard.

Luna County WUI Map Overview



Legend

- LUNA COUNTY
- Luna County Fire Departments
- Luna_WUI AVG_Hazard
 - High
 - Low
 - Medium

0 3 6 12 Miles
1 inch equals 1.862374 miles



WX FireGraph LLC
(575) 894-1043
Map Designed By: Kenny Rogers GISS
415 North Dole Street Truth or Consequences New Mexico 87901

Map 4. Luna County WUI Map.

Electronic Maps Disk:

[CWPP Luna Appendix B County Maps/CWPP WUI Overview 8x11 Nad27UTM13N.pdf](#)

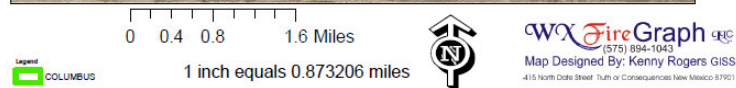
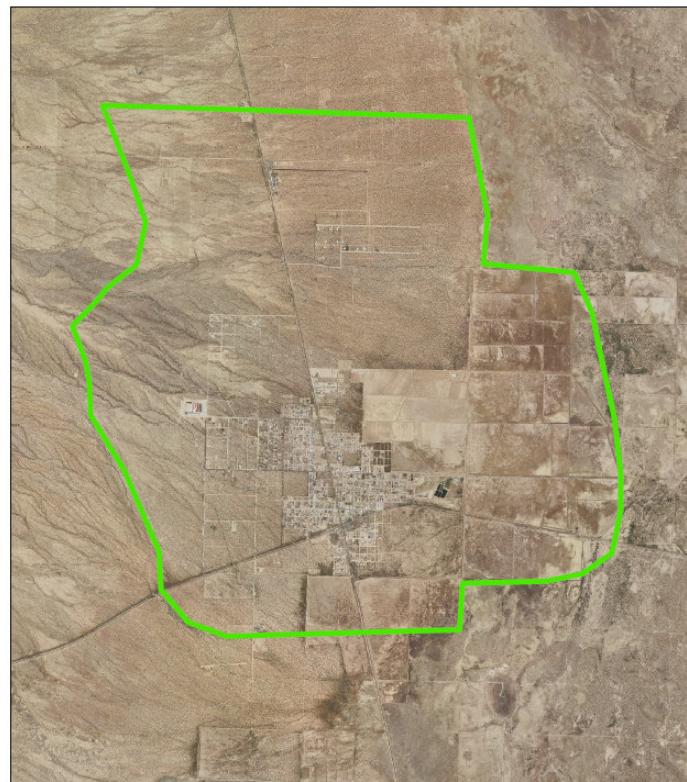
WILDLAND URBAN INTERFACE PER FIRE DEPARTMENT

Columbus Fire Department has a total of 5 WUI areas within its response district.

✓ **Community of Columbus**

The Community is located 1 mile north of the US / Mexico International Border on State Road 11. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Columbus Fire Department is located within this WUI. Water supply consists of a 500,000-gallon storage tank connected to a hydrant system throughout the community. Road system is paved and has good egress and regress. Vegetation, mostly Closed Basin Scrub Terrain, is mostly flat and less than 10% slope. The core team recommended the reduction of fuels along the town site boundaries and road systems within the community. Also recommended was to have Firewise workshops for residents within the community.

**Luna County WUI Map
Community of Columbus**



Map56. WUI-Columbus

Electronic Maps Disk:

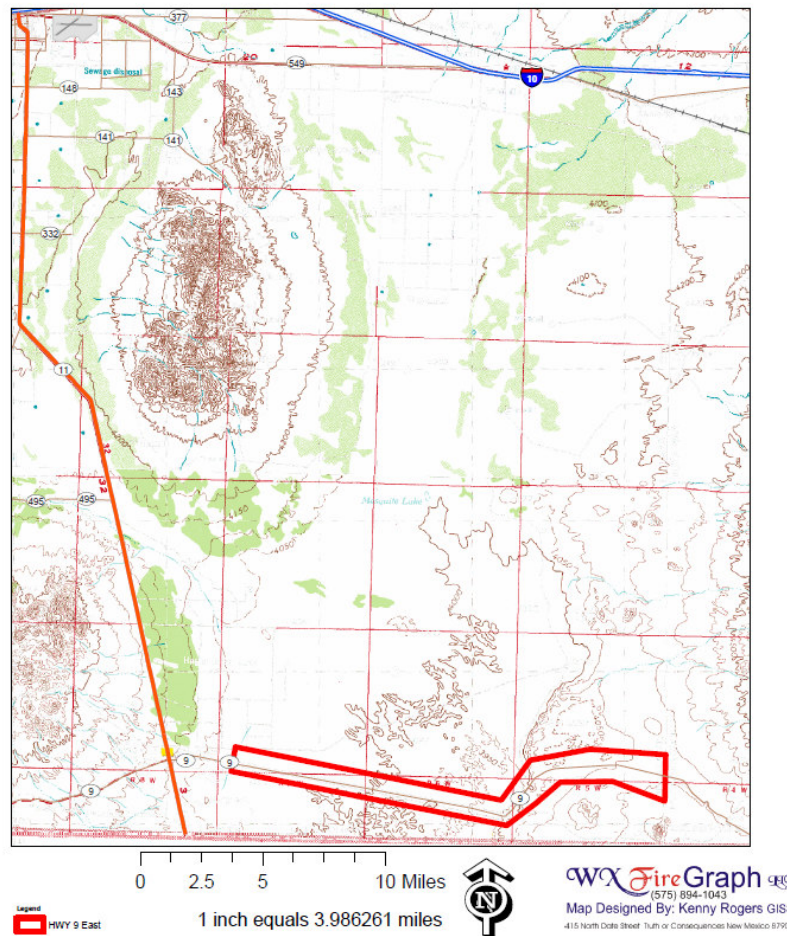
[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPLLuna_WUI_Columbus_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **US State Highway 9 East**

US state Highway 9 East runs from Village of Columbus east to the county line. Highway 9 runs parallel along the US / Mexico International Border. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Columbus Fire Department is the responding fire department. Water supply is supported by a water tender from Columbus Fire Department; there is no other water source in this WUI. Columbus Fire Department has the closest water tender to support fire suppression along the 2-lane paved road. Road system is paved and has good egress and regress. Vegetation is mostly Closed Basin Scrub along with Plains-Mesa Sand Scrub. Terrain is mostly flat and less than 10% slope. The core team recommended the reduction of fuels along Highway 9, moving 30 feet on both sides of Highway 9 would be a possible treatment.

**Luna County WUI Map
US Highway 9 East**



Map 6. WUI-US Highway 9 East

Electronic Maps Disk:

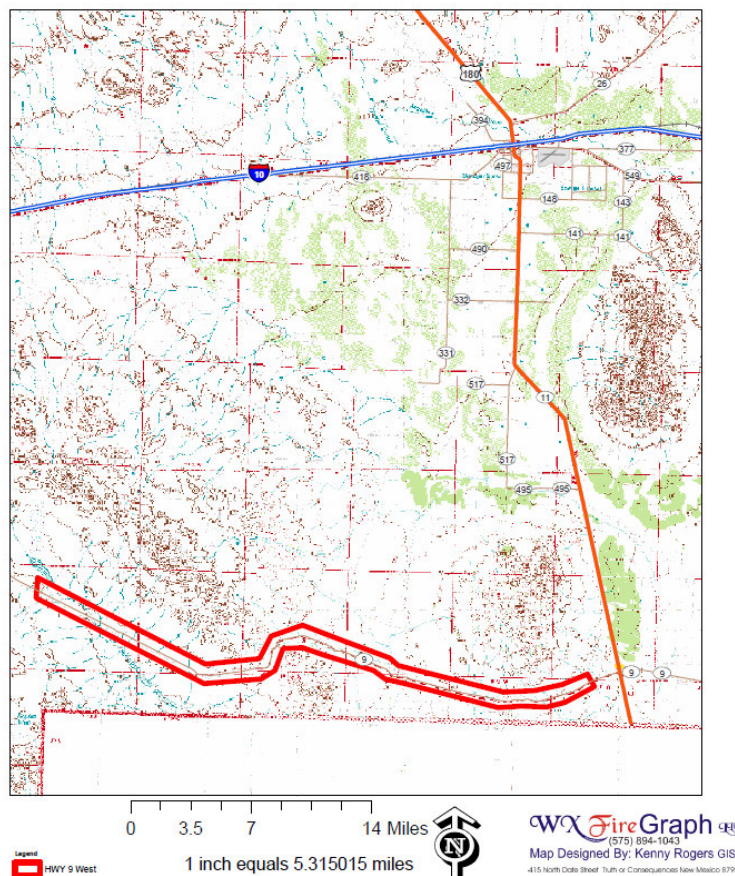
[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPP\Luna WUI Highway 9 East 8x11 Nad27UTM13N 06052009MDY.pdf](#)

✓ **US State Highway 9 West**

US state Highway 9 West runs from Village of Columbus west to the county line. Highway 9 runs parallel along the US / Mexico International Border. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Columbus Fire Department is the responding fire department. Water supply is supported by a water tender from Columbus Fire Department; there is no other water source in this WUI. Columbus Fire Department has the closest water tender to support fire suppression along the 2-lane paved road. Road system is paved and has good egress and regress. Vegetation is mostly Closed Basin Scrub along with Plains-Mesa Sand Scrub. Terrain is mostly flat and less than 10% slope. The core team recommended the reduction of fuels along Highway 9, moving 30 feet on both sides of Highway 9 would be a possible treatment.

**Luna County WUI Map
US Highway 9 West**



Map 7. WUI-US Highway 9 West

Electronic Maps Disk:

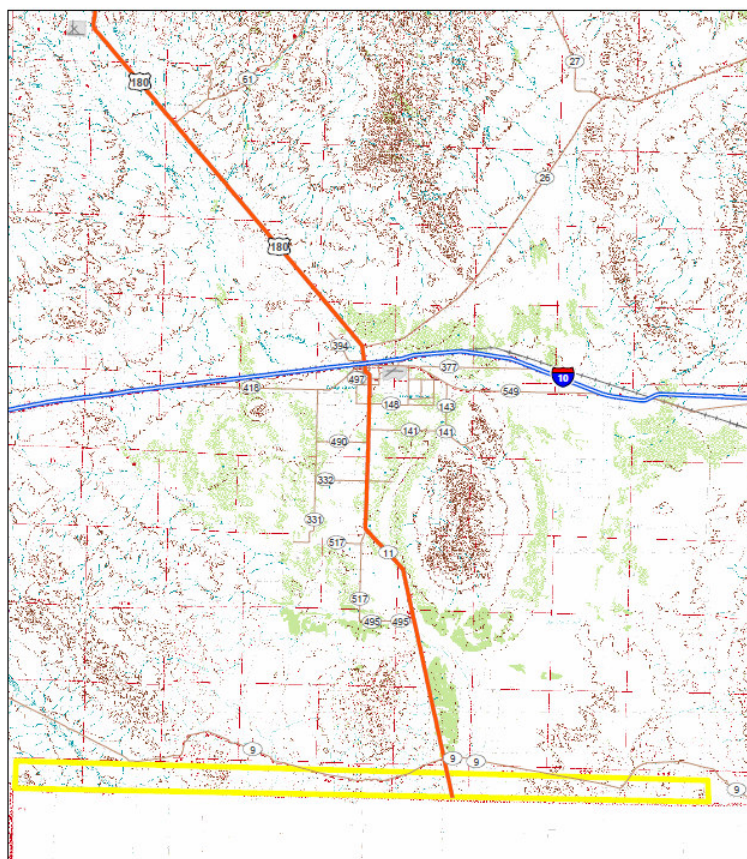
[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPLLuna WUI US Highway 9 West 8x11 Nad27UTM13N 06052009MDY.pdf](#)

✓ **US / Mexico International Border Fence**

Located on the US / Mexico International Border. Its WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply is supported by a water tender from Columbus Fire Department; there is no other water source in this WUI. Columbus Fire Department has the closest water tender to support fire suppression along a 2-lane paved road. Road system is dirt and paved and has good egress and regress. Vegetation is mostly Closed Basin Scrub, Plains-Mesa Sand Scrub, Desert Grasslands, and Chihuahuan Desert Scrub. Terrain is mostly flat and less than 10% slope. The core team recommended that the US Border Patrol maintains the 30-40 foot area along the Border Fence.

**Luna County WUI Map
US / Mexico International Border Fence**



Legend: US/Mexico Boundard Fence

1 inch equals 7.668533 miles

WX FireGraph LLC
(575) 894-1043
Map Designed By: Kenny Rogers GISS
415 North Dole Street, Turn of Consequences New Mexico 87901

Map 8 WUI-US / Mexico International Border Fence

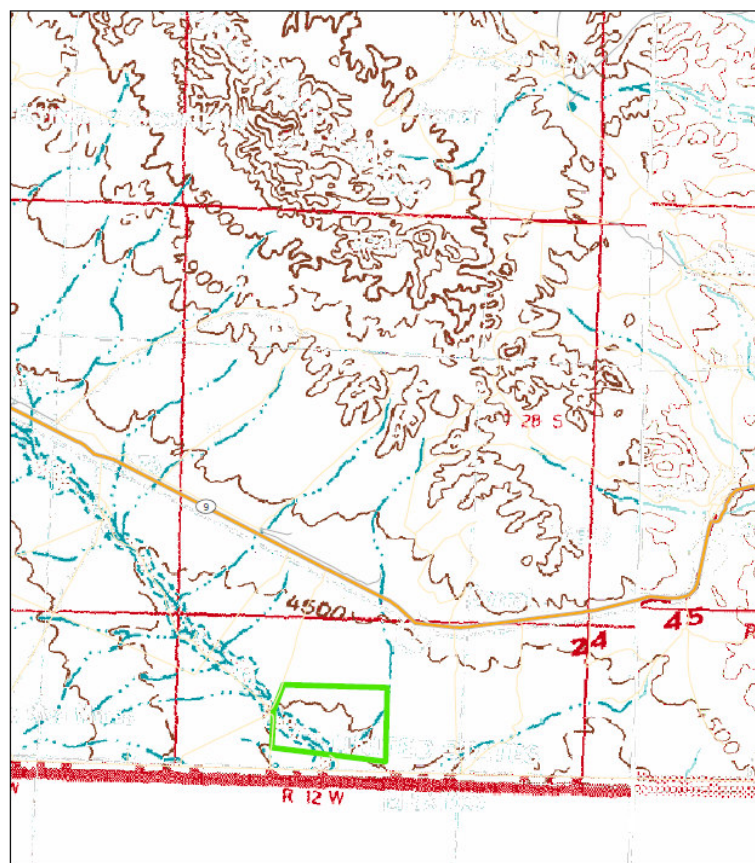
Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps /CWPP\Luna WUI US / Mexico International Border Fence_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **Johnson Peak Communication Site**

The site is located less than 1 mile north of the US / Mexico International Border. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply is supported by a water tender from Columbus Fire Department; there is no other water source in this WUI. Columbus Fire Department has the closest water tender to support fire suppression along a 2-lane paved road. Road system is dirt and paved and has good egress and regress. Vegetation is mostly Chihuahuan Desert Scrub. Terrain is mostly flat and less than 30% slope. The core team recommended fuels be maintained within 300 feet of the communication site.

**Luna County WUI Map
Johnson Peak Communication Site**



Legend: Johnson Peak Com Site

0 0.5 1 2 Miles
1 inch equals 1.471233 miles

WX FireGraph (575) 894-1043
Map Designed By: Kerry Rogers GISS
415 North Code Street, Truth or Consequences New Mexico 87901

Map 9. WUI-Windmill

Electronic Maps Disk:

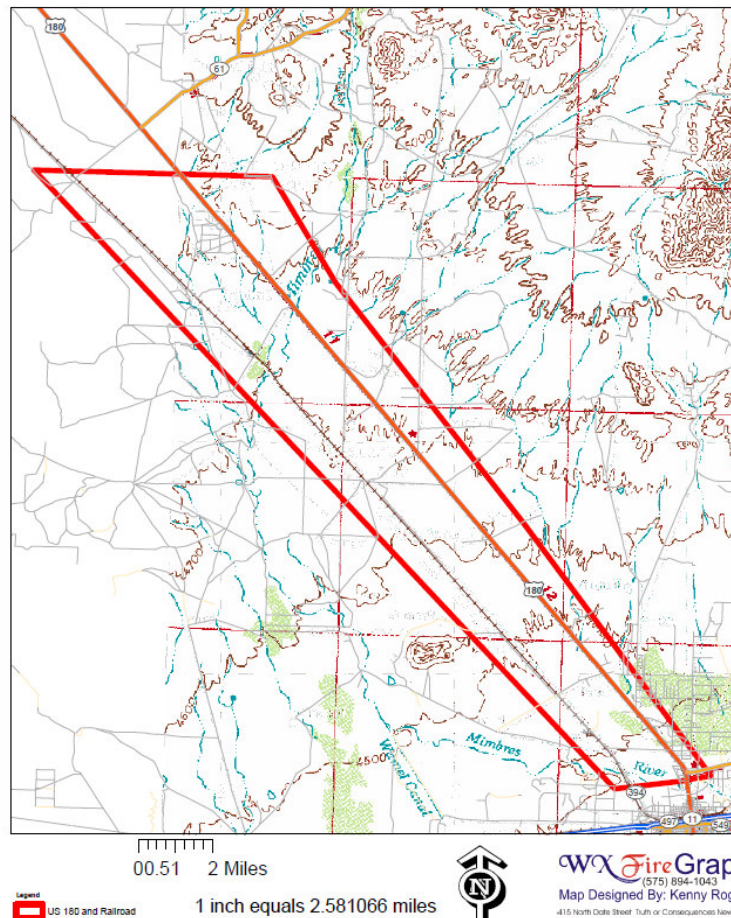
[CWPP Luna County\Appendix_A_WUI_Maps](#)
[/CWPP\Luna_WUI_Johnson_Peak_Communication_Site_8x11_Nad27UTM13N_06052009MDY.pdf](#)

Cooks Peak Fire Department has a total of 5 WUI areas within its response district.

✓ **US Highway 180 and Railroad**

Located North of Deming New Mexico. US Highway 180 is the main thoroughfare for traffic between Deming and Silver City, New Mexico. Railroad lines run parallel to US Highway 180. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply is supported by a type III water tender from Cooks Peak Fire Department, there is no other water source in this WUI. Cooks Peak Fire Department has the closest water tender to support fire suppression along a 2-lane paved road. Road system is paved and has good egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the Highway 180 and railroad.

**Luna County WUI Map
US 180 and Railroad**



Map 10. WUI-US 180 & Railroad

Electronic Maps Disk:

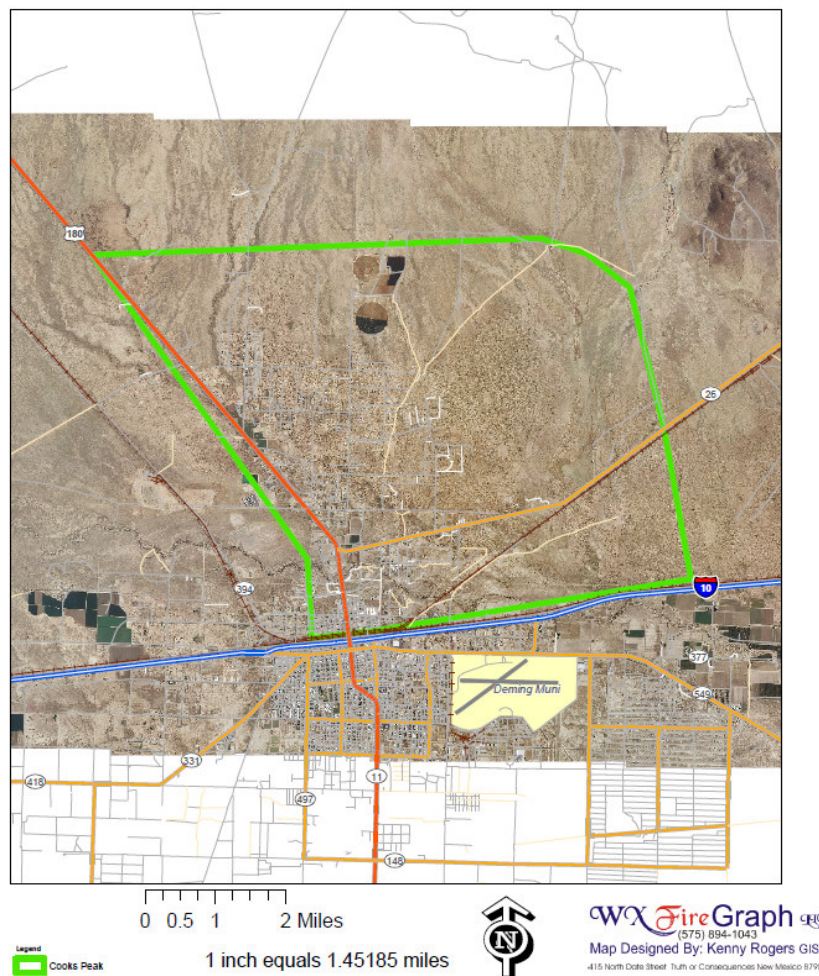
[CWPP_Luna County\Appendix_A_WUI Maps](#)

[/CWPP\Luna_WUI_US 180 & Railroad 8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **Community of Cooks Peak**

The Community is located north of Deming, New Mexico. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply is supported by a type III water tender from Cooks Peak Fire Department, there is no other water source in this WUI. Cooks Peak Fire Department has the closest water tender to support fire suppression along a 2-lane paved road. Road system is paved and has good egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of US Highway 26. Also recommended was to have Firewise workshops for residents within the community.

**Luna County WUI Map
Cooks Peak**



Map 11. WUI-Cooks Peak

Electronic Maps Disk:

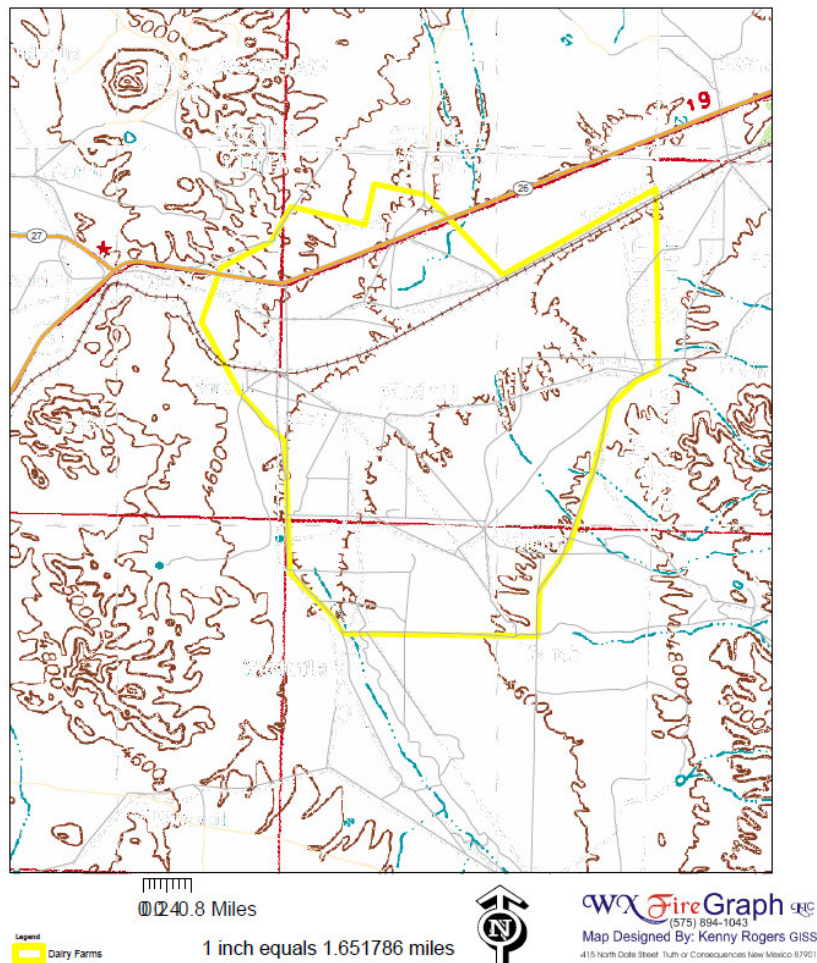
[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPP\Luna WUI Cooks Peak 8x11 Nad27UTM13N 06052009MDY.pdf](#)

✓ **Dairy Farms**

The Dairy Farms are located Northeast of Deming, New Mexico 32 miles along US Highway 26. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply is supported by a type III water tender from Cooks Peak Fire Department; there is no other water source in this WUI. Cooks Peak Fire Department has the closest water tender to support fire suppression with a distance of 30 miles along a 2-lane paved road. Road system is paved and dirt has good egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the US Highway 26. Also recommended was to have Firewise workshops for residents within the community.

**Luna County WUI Map
Dairy Farms**



Map 12. WUI-Dairy Farms

Electronic Maps Disk:

[CWPP_Luna County\Appendix_A_WUI Maps](#)

[/CWPP\Luna_WUI_Dairy Farms&_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **Nutt and Communication Site**

These areas are located northeast of Deming, New Mexico 29 miles along US Highway 26. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply is supported by a type III water tender from Cooks Peak Fire Department, there is no other water source in this WUI. Cooks Peak Fire Department has the closest water tender to support fire suppression along a 2-lane paved road. Road system is paved and dirt has good egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat and less than 20% slope. The core team recommended fuels be maintained within 30 feet on each side of the US Highway 26. Also recommended was that fuels be maintained within 300 feet of the communication site.

**Luna County WUI Map
Nutt and Communication Site**



Legend
Nutt and Com Site

0 0.125 0.25 0.5 Miles
1 inch equals 0.205778 miles



WX FireGraph LLC
(575) 894-1043
Map Designed By: Kenny Rogers GIS
415 North Data Street Truth or Consequences New Mexico 87901

Map 13. WUI-Nutt and Communication Site

Electronic Maps Disk:

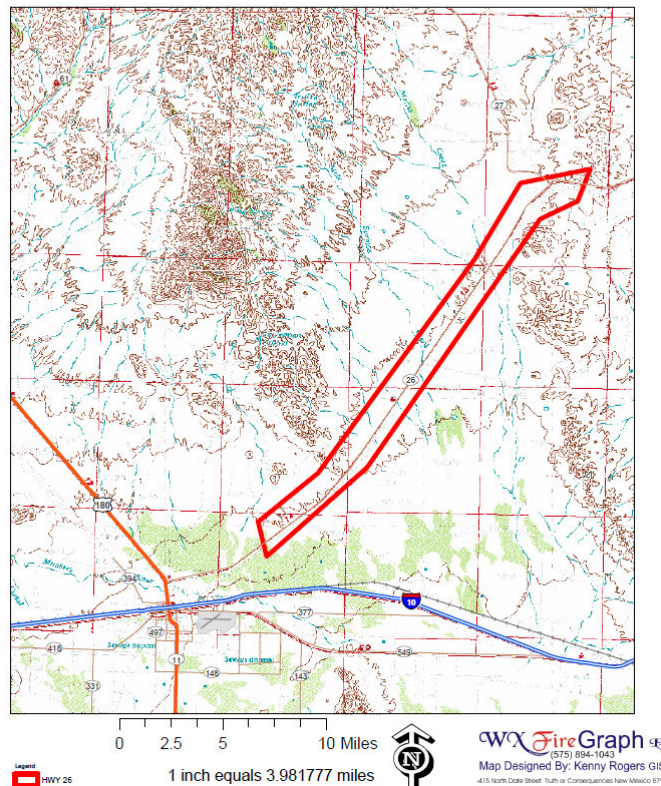
[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPLLuna_WUI_Nutt_and_Communication_Site_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **US State Highway 26**

Transportation Corridor State Highway 26 is located northeast of Deming and runs northeast to Hatch. Cooks Peak Fire Department responds to all 36 miles. This WUI has a large number of human caused fires in this area of the county. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply consists of no storage tanks or hydrants. The only water supply is the water from fire department engines. Cooks Peak Fire Department has one water tender to support fire suppression with a distance of 36 miles. Road system is paved US Highway with good egress and regress depending on weather conditions. Vegetation is mostly Desert Grasslands. Terrain is mostly flat with some hills of less than 10% slope. The core team recommended the reduction of fuels along US Highway 26. Set up a schedule for Highway Department to maintain the vegetation with in this WUI. Post public education signs along the roadways. This should help educate the large numbers of visitors though this area whom are unaware of the local fire risks.

**Luna County WUI Map
US Highway 26**



Map 14. WUI-US Highway 26

Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps](#)

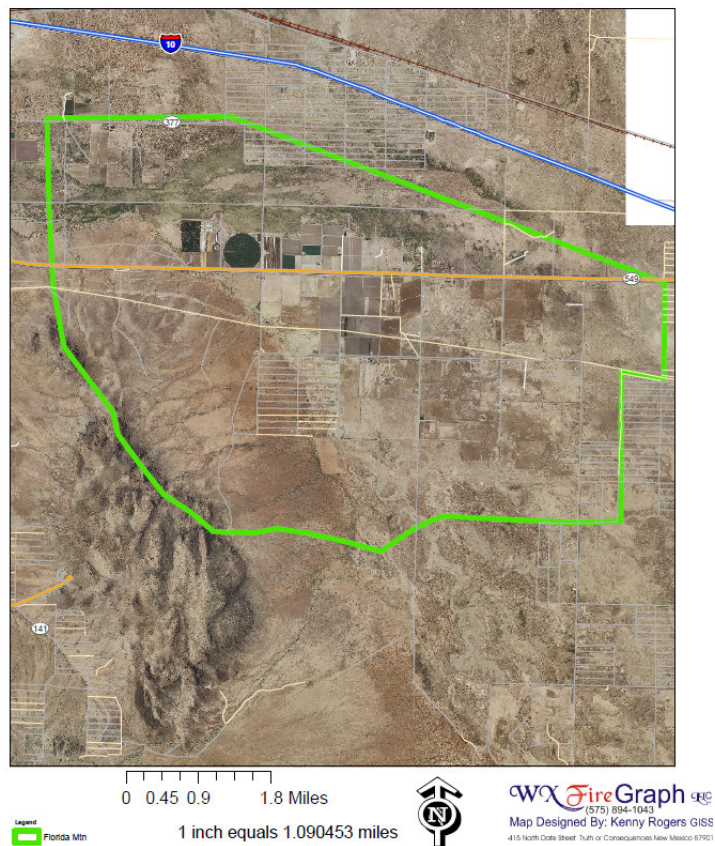
[/CWPLLuna WUI US Highway 26 8x11 Nad27UTM13N 06052009MDY.pdf](#)

Florida Mountain Fire Department has a total of 2 WUI areas within its response district.

✓ **Community of Florida Mountains**

The Community is located east of Deming, New Mexico 11 miles along US Highway 549. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Florida Fire Department is located within this WUI. There is no water supply within this WUI. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 24 miles along a 2-lane paved road. Road system is paved and dirt and has good egress and regress. Vegetation is mostly Closed Basin Scrub along with Desert Grasslands. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the US Highway 549. Also recommended was to have Firewise workshops for residents within the community.

**Luna County WUI Map
Community of Florida Mountains**



Map 15. WUI-Community of Florida Mountains

Electronic Maps Disk:

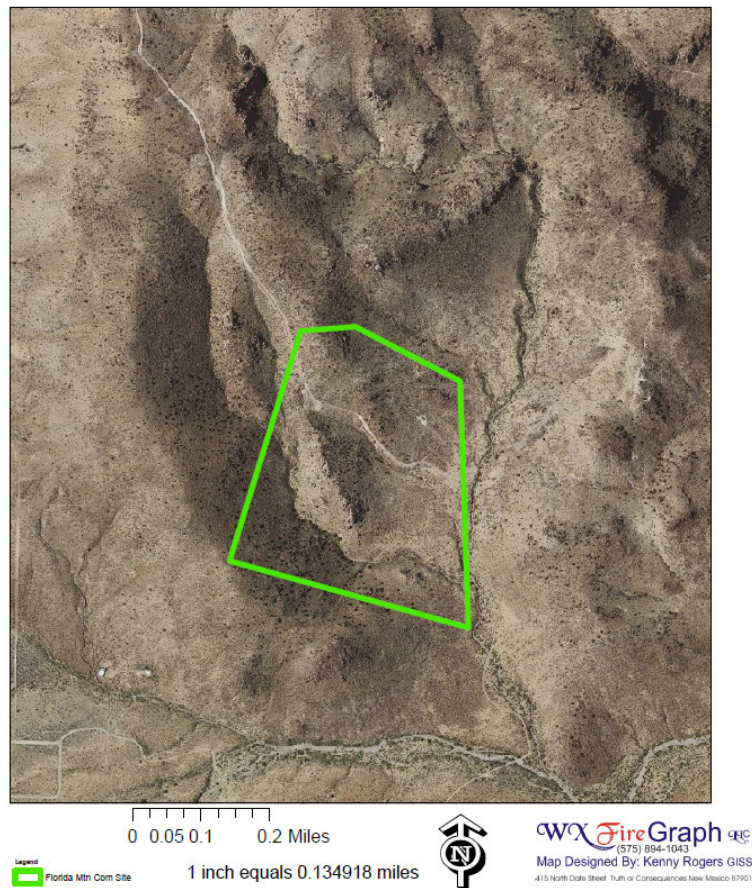
[CWPP_Luna County\Appendix_A_WUI Maps](#)

[/CWPP\Luna_WUI_Community of Florida Mountains_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **Florida Mountain Communication Site**

The site is located southeast of Deming, New Mexico. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Florida Fire Department responds to this WUI. There is no water supply within this WUI. Sunshine Peak Fire Department has the closest type III water tender to support fire suppression with a distance of 16 miles along a 2-lane paved road. Road system is dirt and has fair egress and regress for type VI engines. Vegetation is mostly Closed Basin Scrub along with Desert Grasslands. Terrain has an average of 30% slope. The core team recommended fuels be maintained within 300 feet the communication site.

**Luna County WUI Map
Florida Mountains Communication Site**



Map 16. WUI-Florida Mountains Communication Site

Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps
/CWPLLuna WUI Florida Mountains Communication
Site 8x11 Nad27UTM13N 06052009MDY.pdf](#)

Savoy Fire Department has a total of 6 WUI areas within its response district.

✓ **Community Savoy and El Paso Gas Plant**

These areas are located west of Deming, New Mexico 13 miles along Interstate 10. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Savoy Fire Department responds to this WUI. There is no water supply within this WUI and Savoy Fire Department has no water tenders. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 20 miles along a 2-lane paved road and dirt roads. Road system is paved and dirt and has good egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the roadways. Also recommended is the maintaining of a 150-foot fuel break around gas plant.



**Luna County WUI Map
Community of Savoy and El Paso Gas Plant**



Legend: Savoy and Gas Plant

0 0.1 0.2 0.4 Miles

1 inch equals 0.373234 miles

 
Map Designed By: Kenny Rogers GISS
415 North Dade Street Truth or Consequences New Mexico 87901

Map 17. WUI-Community of Savoy & El Paso Gas Plant

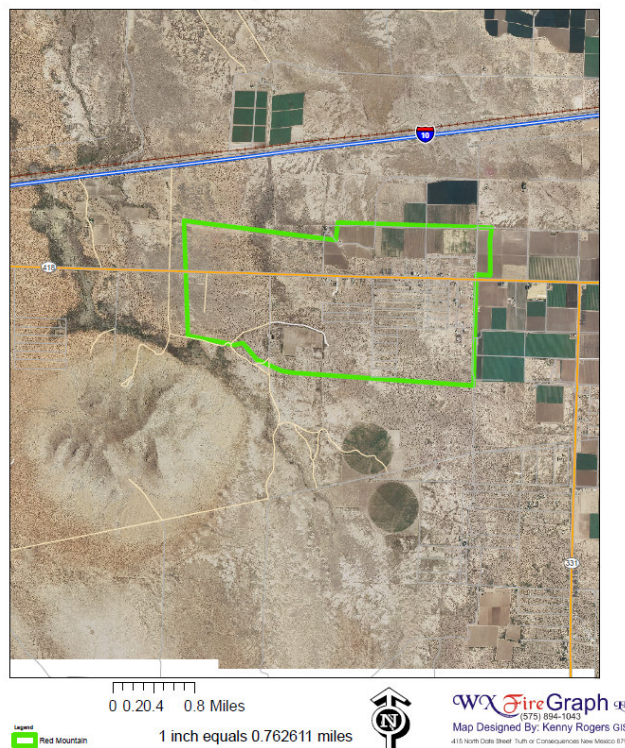
Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps](#)
[/CWPLLuna WUI Community of Savoy & El Paso Gas](#)
[Plant 8x11 Nad27UTM13N 06052009MDY.pdf](#)

✓ **Community of Red Mountain**

The Community is located east of Savoy, New Mexico 8 miles along US Highway 418. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Savoy Fire Department responds to this WUI. There is no water supply within this WUI and Savoy Fire Department has no water tenders. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 12 miles along a 2-lane paved road. Road system is paved and dirt and has good egress and regress. Vegetation is mostly Desert Grasslands along with Chihuahuan Desert Scrub. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the US Highway 418. Also recommended was to have Firewise workshops for residents within the community.

Luna County WUI Map
Community of Red Mountain



Map 18. WUI-Community of Red Mountain

Electronic Maps Disk:

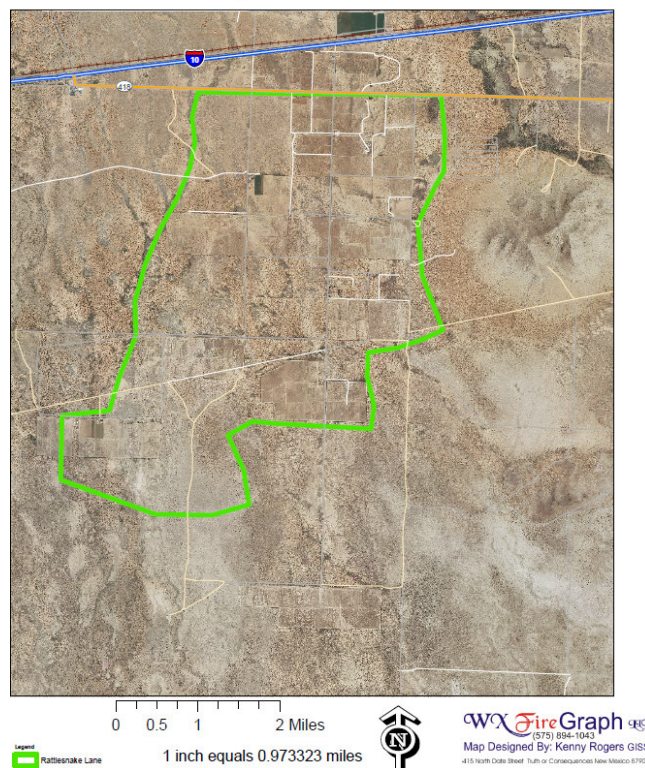
[CWPP_Luna County\Appendix_A_WUI Maps](#)

[/CWPP\Luna_WUI_Community Of Red Mountain_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **Community Rattlesnake Lane**

The Community is located southeast of Savoy, New Mexico 3 miles along US Highway 418. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Savoy Fire Department responds to this WUI. There is no water supply within this WUI and Savoy Fire Department has no water tenders. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 17 miles along a 2-lane paved road. Road system is paved and dirt and has good egress and regress. Vegetation is mostly Desert Grasslands along with Chihuahuan Desert Scrub. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the US Highway 418. Also recommended was to have Firewise workshops for residents within the community.

Luna County WUI Map
Community of Rattlesnake Lane



Map 19. WUI-Community of Rattlesnake Lane

Electronic Maps Disk:

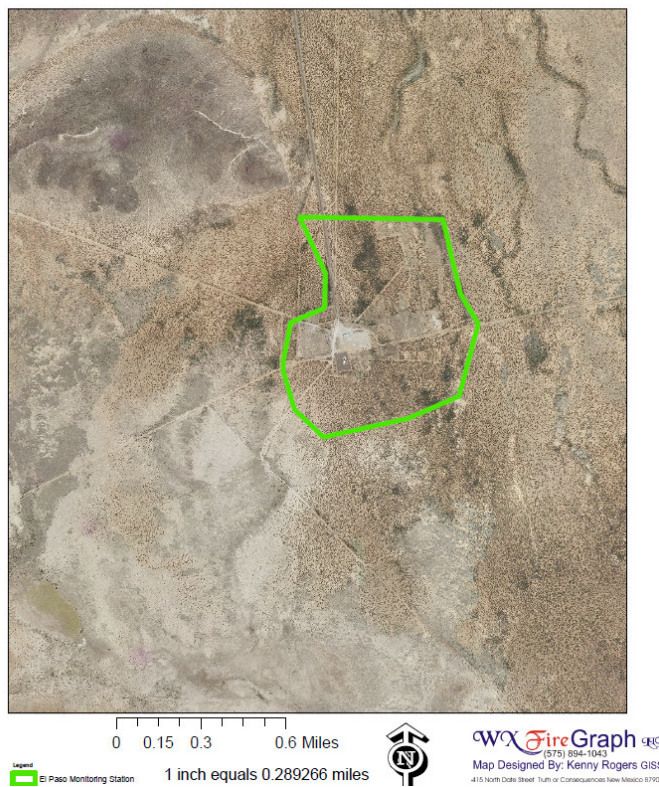
[CWPP_Luna County\Appendix_A_WUI Maps](#)

[/CWPLLuna_WUI_Community of Rattlesnake Lane_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **El Paso Gas Monitoring Station**

The Station is located southwest of Savoy, New Mexico 15 miles along US Highway 418 and dirt roads. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Savoy Fire Department responds to this WUI. There is no water supply within this WUI and Savoy Fire Department has no water tenders. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 35 miles along a 2-lane paved road and dirt roads. Road system is paved and dirt and has good egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat and less than 10% slope. The core team recommended fuels be maintained within 30 feet on each side of the roadways. Also recommended is the maintaining of a 150-foot fuel break around gas plant.

**Luna County WUI Map
El Paso Gas Monitoring Station**



Map 20. WUI-El Paso Gas Monitoring Station

Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPP\Luna WUI El Paso Gas Monitoring Station 8x11 Nad27UTM13N 06052009MDY.pdf](#)

✓ **Chance City Historical Site**

The Site is located southwest of Savoy, New Mexico 14 miles along US Highway 418 and dirt roads. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Savoy Fire Department responds to this WUI. There is no water supply within this WUI and Savoy Fire Department has no water tenders. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 34 miles along a 2-lane paved road and dirt roads. Road system is paved and dirt and has fair egress and regress. Vegetation is mostly Desert Grasslands. Terrain is mostly flat, with some hills and slope of 10-25%. The core team recommended fuels be maintained within 30 feet on each side of the roadways.

**Luna County WUI Map
Chance City Historical Site**



Map 21 WUI-Chance City Historical Site

Electronic Maps Disk:

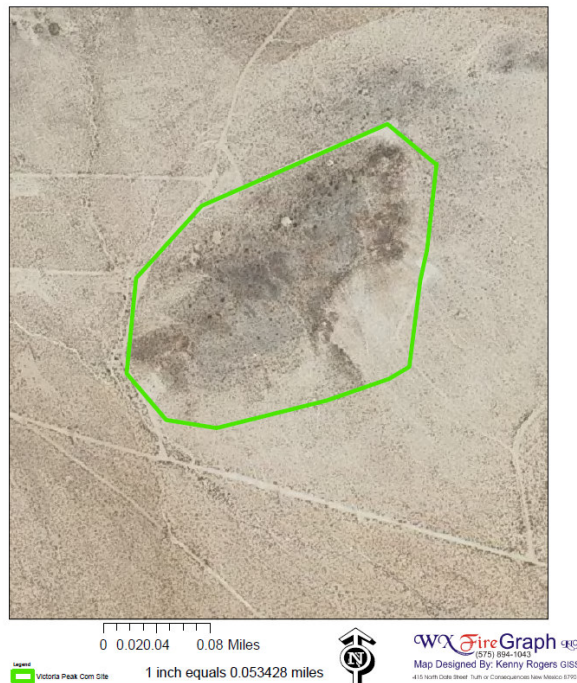
[CWPP Luna County\Appendix_A_WUI Maps](#)

[/CWPLLuna_WUI_Chance_City_Historical_Site_8x11_Nad27UTM13N_06052009MDY.pdf](#)

✓ **Victoria Peak Communication Site**

The Site is located southwest of Savoy, New Mexico 13 miles along US Highway 418 and dirt roads. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Savoy Fire Department responds to this WUI. There is no water supply within this WUI and Savoy Fire Department has no water tenders. Sunshine Fire Department has the closest type III water tender to support fire suppression with a distance of 34 miles along a 2-lane paved road and dirt roads. Road system is paved and dirt and has fair egress and regress. Vegetation is mostly Desert Grasslands and rock outcroppings. Terrain is mostly flat, with some hills and slope of 10-25%. The core team recommended fuels be maintained within 30 feet each side of the roadways. Also recommended is the maintaining of a 150-foot fuel break around communication site.

Luna County WUI Map
Victoria Peak Communication Site



Map 22. WUI-Victoria Peak Communication Site

Electronic Maps Disk:

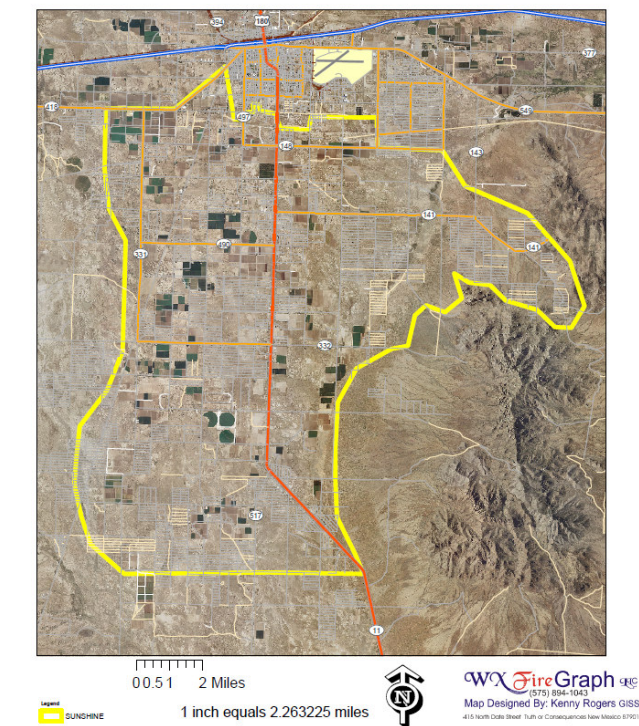
[CWPP Luna County\Appendix A WUI Maps](#)
[/CWPLLuna WUI Victoria Peak Communication](#)
[Site 8x11 Nad27UTM13N 06052009MDY.pdf](#)

Sunshine Fire Department has a total of 1 WUI areas within its response district.

✓ **Community of Sunshine**

The Community is located 1 mile south of Deming, New Mexico along US Highway 11. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Sunshine Fire Department responds to this WUI. There is no water supply within this WUI and Sunshine Fire Department has 1 type III water tender. Road system is paved and dirt has good egress and regress. Vegetation is mostly Desert Grasslands along with Chihuahuan Desert Scrub. Terrain is mostly flat, and slopes less than 10%. The core team recommended fuels be maintained within 30 feet each side of the roadways. Also recommended was to have Firewise workshops for residents within the community.

**Luna County WUI Map
Community of Sunshine**



Map 23. WUI-Community of Sunrise

Electronic Maps Disk:

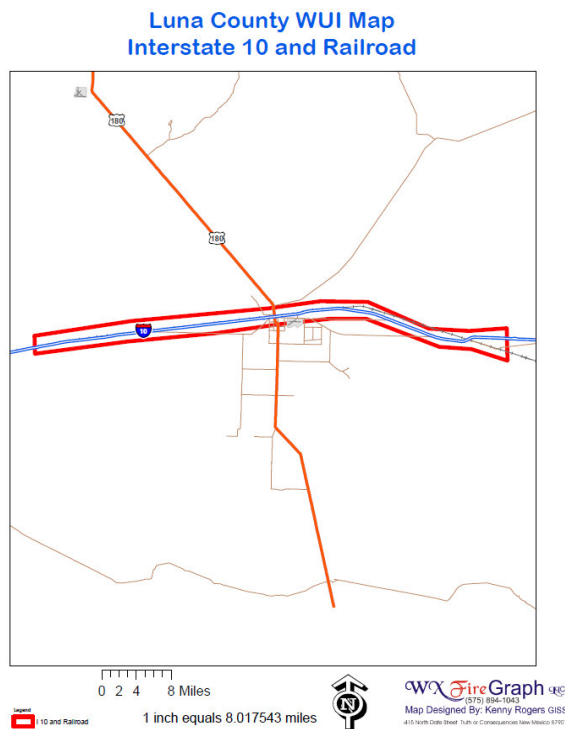
[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPP\Luna WUI Community of Sunrise 8x11 Nad27UTM13N 06052009MDY.pdf](#)

Mutual Fire Department has a total of 2 WUI areas within its response district.

✓ **Interstate 10 and Railroad**

Transportation Corridor (I-10, SP Railroad and various pipelines) is located in the north central part of the county, running east to west through the county. Savoy, Cooks Peak, and Florida fire department responds to all but 5 miles of the 56 mile Corridor. Deming Fire Department covers only within their city limits. This WUI has the largest number on human caused fires in the county. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply consists of no storage tanks or hydrants. The only water supply is the water on fire department engines. Cooks Peak has the only water tender of the three departments in this WUI. Sunshine Fire Department has the closest water tender to support fire suppression with a distance of 11 miles to interstate10 and Deming. Road system is paved interstate good egress and regress depending on weather conditions. Vegetation consists of mostly Desert Grasslands, along with a mix of Closed Basin Scrub and **Plains-Mesa Sand Scrubs**. Terrain is mostly flat with some hills less than 20% slope. The core team recommended the reduction of fuels along the interstate and railroad tracks and to set up a schedule for Highway Department and Railroad Company to maintain the vegetation with in this WUI. Also recommended was to post public education signs along the roadways. This should help educate the large numbers of visitors that pass through this area and are unaware of the local fire risks.



Map 24. WUI-Interstate 10 & Railroad

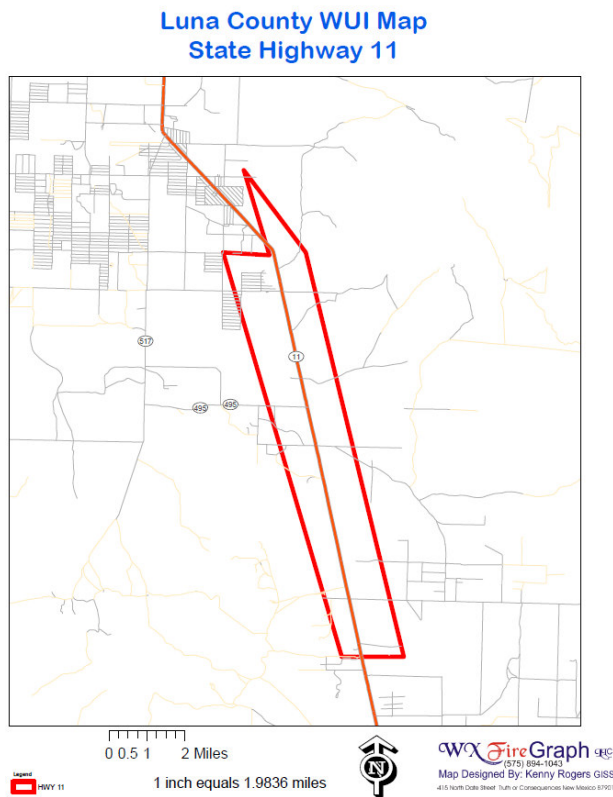
Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPLLuna WUI Interstate 10 & Railroad 8x11 Nad27UTM13N 06052009MDY.pdf](#)

✓ **State Highway 11**

Transportation Corridor State Highway 11 is located in the south of Deming, running south to Columbus and continues to the US / Mexico International Border. Sunshine and Columbus Fire Departments respond to all 35 miles. Deming Fire Department covers only within their city limits. This WUI has a large number on human caused fires within the county. WUI Boundary runs along areas that favor wildfire suppression due to fuels, topographic influences, weather, and natural and manmade barriers. Water supply consists of no storage tanks or hydrants. The only water supply is the water on fire department engines. Sunshine and Columbus Fire Departments each have one water tender to support fire suppression with a distance of 35 miles. Road system is paved US Highway good egress and regress depending on weather conditions. Vegetation is of mostly Desert Grasslands, along with a mix of Closed Basin Scrub and Chihuahuan Desert Scrubs Terrain is mostly flat with some hills less than 10% slope. The core team recommended the reduction of fuels along US Highway 11 as well as setting up a schedule for Highway Department to maintain the vegetation with in this WUI. Also recommended was to post public education signs along the roadways. This should help educate the large numbers of visitors passing through this area and are unaware of the local fire risks.



Map 25. WUI-State Highway 11

Electronic Maps Disk:

[CWPP_Luna County\Appendix_A_WUI Maps](#)

[/CWPP\Luna_WUI_State Highway 11_8x11_Nad27UTM13N_06052009MDY.pdf](#)

ACTION PLAN

WUI Areas

The risk assessment identified that the communities, historic/cultural areas, and communication sites in Luna County are at medium to low risk from wildland fire impacts. These ratings do not diminish the need for fuel reduction/management in these areas. Concurrent with efforts to improve and maintain firefighting capacity are fire prevention and public education programs. One method of fire prevention and public education is “defensible space” workshops.

There is increasing recognition that the ability to live more safely in the Wildland Urban Interface, fire-prone environment depends on “pre-fire activities.” Pre-fire activities are actions taken before wildfire occurs which improve the survivability of people and homes by providing for proper vegetation management around homes, (defensible space), use of fire resistant building materials, and appropriate subdivision design. Combustible roofs, narrow roads, limited access, lack of fire-resistant landscaping, and inadequate water supplies are some of the issues that should be addressed. “Defensible space” includes the following:

- ❖ *Defining the defensible space*, a buffer zone, and a minimum of 30-feet of noncombustible area.
- ❖ *Reducing flammable vegetation, trees and brush around the home*, choosing plants with loose branching, non-resinous woody material, and high moisture content.
- ❖ *Removing or pruning trees*, thinning overcrowded or weakened trees, pruning low hanging branches, and limbing-up “ladder fuels”.
- ❖ *Cutting grass and weeds* regularly, keeping vegetation well watered.
- ❖ *Relocating woodpiles and leftover building materials*; stacking all wood, building debris and other burnable materials at least 30 feet away from the home, and clearing flammable vegetation within ten feet of wood/debris piles.
- ❖ *Keeping both roof and yard clean* (especially the roof) by clearing pine needles, leaves and debris from roof, gutters and yard to eliminate ignition sources.
- ❖ *Signs, addresses, and access*. Easy-to-read road signs and address numbers that are visible from the road allow firefighters to find homes quickly. Safe and easy access includes two-way roads that can accommodate emergency vehicles and give them space to turn around.
- ❖ *Rating roofs*: The roof is the most vulnerable part of the house in a wildfire. If not already fire resistant, roofs should be replaced with approved fire resistant materials.
- ❖ *Recycling yard debris and branches*; check into alternative disposal methods like composting, recycling, or selling the material to small wood/biomass businesses.

Table 5. Proposed Wildfire Hazard Mitigation for Luna County WUI's

Wildland-Urban Interface and Infrastructure at Risk	Proposed Fuel Treatment, reduction of wildfire danger and improved Firefighter response	Responsible Party
Luna County Communities	<ul style="list-style-type: none"> • Public Outreach and Education • Defensible Space around homes • Fuel Breaks along pasture fences and property boundaries • Fuel break along WUI Boundary • Fuels reduction by mowing, grazing, prescribed burning • Increased water storage capacity • Maintain vegetation along road ways (Mowing) • Improved Radio Communications • Increased Training for firefighters 	<ul style="list-style-type: none"> • Luna County Fire Departments • Property Owners • Property Owners • Luna County Fire Departments • Luna County Fire Departments and Property Owners • Luna County Fire Departments and Luna County • State, County, and City Road Departments • Luna County Fire Departments and Luna county • Luna County Fire Departments and New Mexico State Forestry • Property Owners
Cell Towers & Repeater Sites	<ul style="list-style-type: none"> • Fuels reduction by mowing, grazing 	<ul style="list-style-type: none"> • Property Owners
Electrical transmission sites	<ul style="list-style-type: none"> • Fuels reduction by mowing, grazing 	<ul style="list-style-type: none"> • Property Owners
Gas Plant Line	<ul style="list-style-type: none"> • Fuels reduction by mowing, grazing 	<ul style="list-style-type: none"> • Property Owners
Highways and County Roads	<ul style="list-style-type: none"> • Regular Fuels reduction by mowing 	<ul style="list-style-type: none"> • NM-DOT and Luna County Road Department
Railroads	<ul style="list-style-type: none"> • Regular Fuels reduction by spraying. 	<ul style="list-style-type: none"> • Property Owners

IMPLEMENTATION of PLAN

Establish a committee to have annual reviews and update to the CWPP.
 Establish a county coordinator to oversee the progress of the CWPP.

EVACUATIONS

Development of an evacuation plan for WUI area within Luna County could be used for floods and fire incidents. Most areas have minimum evacuation needs.

TREATMENTS

Fire behavior responds to fuels, weather, and topography. Changes to fuels, for example from prescribed fire burning or thinning, are related to potential fire behavior at that site and have resulted in reduced severity of wildfires where fuel treatments have occurred. The two basic methods available for altering vegetative conditions are prescribed fire and mowing. The effectiveness of each of these methods in altering the structure of or reducing the amount of fuels is different. Each type of treatment has a different set of financial costs. The choice of which method to use, to achieve the best combination of risk reduction and environmental effects within the available budget, should be considered.

PRESCRIBED FIRE

Prescribed fire is generally used to remove ground fuels, under-story vegetation, and small trees, and sometimes to kill larger trees. Prescribed fire is often seen as more environmentally benign than other methods for modifying vegetation. Prescribed fire projects are done to enhance wildlife and watersheds through removal of old and decayed growth and thereby stimulating new and vigorous growth of forbs and grasses in those spaces. Chemical treatments remove the woody brush species (creosote and mesquite) and accomplish the same objectives as prescribed fires.

BLM is planning a landscape-scale broadcast burn in the Cooke's Range. The archaeological cultural survey is complete. The report of survey should be finished by mid-November and the Environmental Assessment should be done by March of 2011. The burn plan should be completed in the Spring of 2011 and implementation could begin as soon as April of 2011. Black lining and/or hand lining of cultural sites will occur before the main ignition begins. We plan on using a helicopter with an aerial firing device to put fire in places to reduce overgrown brush and accumulated fuels. As much as 5000 acres could be burned this year if conditions are right.

MOWING

Mowing is another option to help remove or reduce the grass in and around Luna County. (Right of ways, private lands, and public lands) There has to be communications with NM-DOT, Luna County Road Department and private landowners. At the present time the state mows the right-of-ways once or twice a year. The core group is looking at ways to increase the width of the mowed area and the frequency the areas are mowed.

PUBLIC OUTREACH AND EDUCATION

Community fire education is critical to assist in the prevention of fire. Most residents are unaware of potential fire hazards that exist. Other residents are aware of the potential of fire; however, they do not know how to minimize these fire hazards. Many of the residents in Luna County are in remote areas far from the limited fire fighting resources within the county. This makes it difficult for firefighting resources to respond to all fires in a timely manner. The goal of any fire education program should be to create an awareness of the potential hazards and effects of fire, with hopes to gain community support with hazard reduction efforts. It is imperative to adequately communicate the advantages of any fire hazard reduction program and to explain the alternatives available. It is also helpful to explore possible funding sources to aid in the implementation of such programs.

OPEN BURNING REQUIREMENTS

When determining which fuels treatment to utilize on your lands consider what will be done with the resulting materials. When doing a prescribed burn or burning slash piles, be aware that the NM Environment Department, Air Quality Bureau, Environmental Improvement Board has a statewide Open Burning Policy in place. Title 20 Environmental Protection, Chapter 2 Part 60 Open Burning states that effective December 31, 2003, open burning of vegetative material under this section shall meet the following requirements:

- For purposes of disposal of such material, burning of areas with non-piled vegetative material does not exceed ten acres per day, or burning of piled, vegetative material, including material gathered in a pit or open container, does not exceed one thousand cubic feet of pile volume per day. In determining daily burn area and daily burn pile volume, areas or piles that are within three hundred feet of each other shall be considered to constitute a single burn if the burning occurs on the same day and on property under ownership or possessory control of the same person

- Burning shall be conducted at least 300' from any occupied dwelling, workplace or place where people congregate, which is on property owned by or under possessory control of, another person;
- Burning shall begin no earlier than one hour after sunrise, and shall be extinguished no later than one hour before sunset
- Burning shall be attended at all times
- The appropriate local fire department or dispatch or firefighting authority shall be notified prior to burning
- For burns exceeding one acre per day or 100 cubic feet of pile volume per day, the burner shall provide prior notice of the date and location of the burn to all households within one quarter of a mile of the burn
- If the burn will be within one mile of other people, you must visually monitor the smoke from the burn. Watch the smoke and note the color of the smoke and the direction it goes.
- The burner shall consider alternatives to burning prior to igniting a burn
- Material to be burned shall be as dry as practicable
- Effective June 1, 2004, open burning of household waste, other than vegetative material is prohibited.

For more information please contact New Mexico Environment Department, Air Quality Bureau, Smoke Management Program, 2044 Galisteo Street, Santa Fe, NM 87505; 1-800-224-7009.

FUELS REDUCTION PROJECTS WITHIN LUNA COUNTY

PORIORITIZED FUEL REDUCTION PROJECT NEEDS

Input from community meetings indicates that support and funding of rural fire departments is the highest priority. Community members recognize that County volunteer firefighters are the first line of defense in any wildland fire situation. The fact that efforts to improve rural fire departments was identified as the highest priority does not reduce the value and need for fuel reduction projects that enhance firefighting efforts. The two outstanding needs indicated the requirement for a multi-faceted approach to mitigating wildland fire risk in the county. Priority ranking for fuels treatments and improving rural fire departments are presented below.

PRIORITY 1 – TRANSPORTATION INFRASTRUTURE CORRIDOR FUEL REDUCTION

The risk assessment identified that transportation infrastructure in the county is at high risk from wildland fire impacts and is the top priority for fuel reduction and risk mitigation. Transportation infrastructure includes the interstate highway; federal, state and county roads; the railroads; pipelines; and electric transmission lines. Human caused fires account for the largest number of wildland fires within the county. Reducing fuels within these corridors will help to reduce the occurrence and size of human caused fires in these areas. Smaller accumulations of fuels and shorter grass will reduce ignition potential, limit fire spread, and help to act as fuel breaks/suppression lines for approaching wildfires. The Luna County CWPP recommends that the County, working with the Department of Transportation, State Forestry, State Land Office, federal agencies, and private property/utility owners develop and implement a program for periodic transportation infrastructure corridor fuel reduction maintenance.

CWPP Luna County Final Draft October, 2010

- ✓ **Project one:** This project is to cut the right-of-ways along county roads to establish a firebreak. This will assist in removing fuels along the roads in preparation for fire season.
 - Acquire two Kubota model L28DT tractors with brush hogs
 - Acquire two Kubota model L28DT tractors with weed burners
 - Acquire an enclosed trailer to house control burn equipment
 - Purchase control burn equipment such as signs, firing equipment, safety equipment and public education materials.
 - Acquire assistance in purchasing fuel to operate this equipment
 - Purchase PPE for fire departments to wear during control burns

- ✓ **Project two:** Coordinate the frequency of fuel treatments of roadways with NM-DOT, Luna County Road Department, Federal Agencies, and Private land owners.
 - Prioritize identified road system in rank order of: high, moderate, or low.
 - Set up a frequency schedule of fuel treatments for each road system.
 - Have wildland coordinator tract results throughout the year.

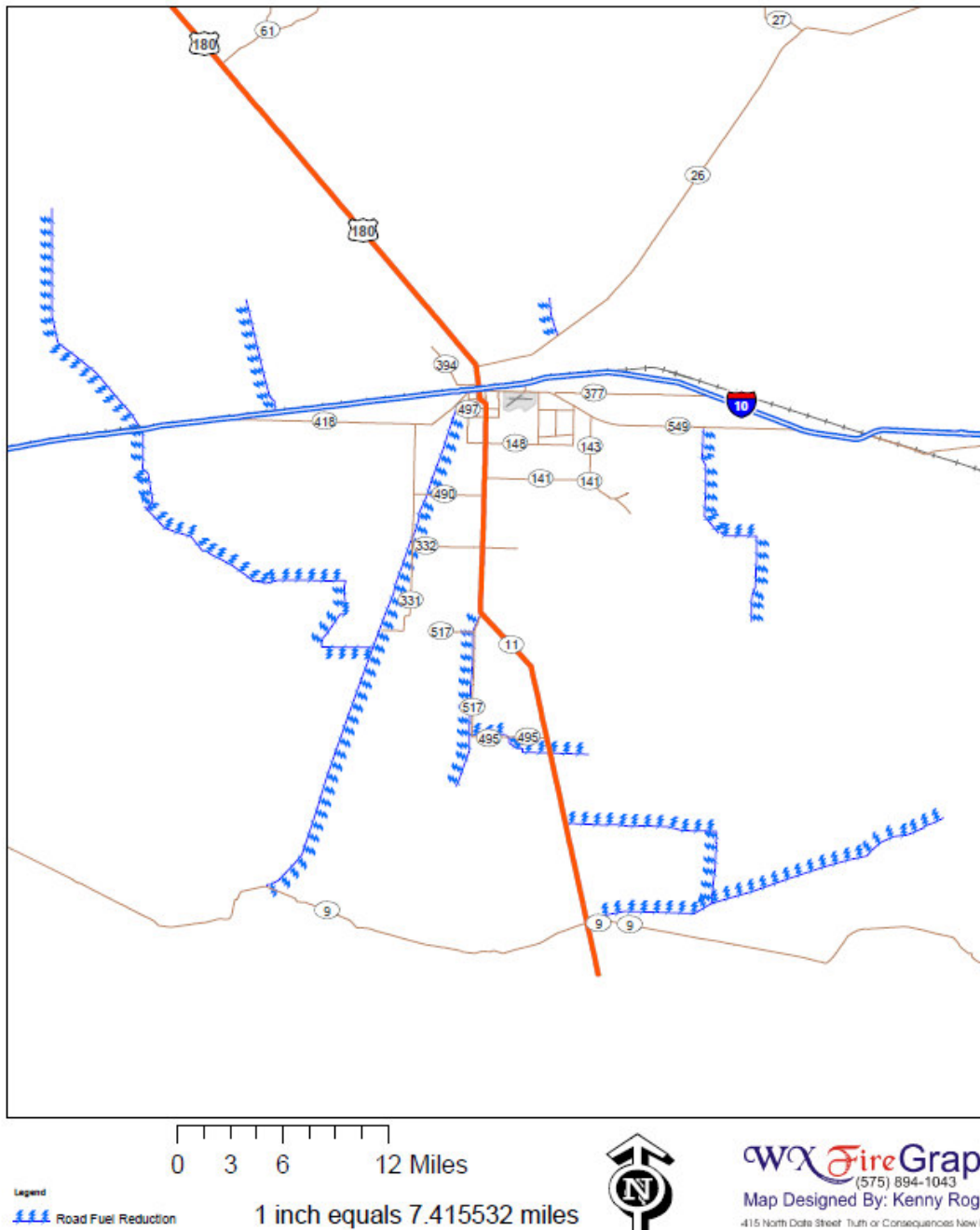
Federal/State transportation corridors needing periodic fuel reduction maintenance include:

- Interstate Highway 10
- US Highway 180
- State Road 9
- State Road 11
- State Road 26
- State Road 549
- State Road 418

County roads needing periodic fuel reduction maintenance include:

- County Road B005 San Diego
- County Road C015
- County Road Homestead
- County Road C010 Brazi
- County Road C018
- County Road C020
- County Road Clabber Top
- County Road A016
- County Road Marana
- County Road Rivera

Luna County WUI Map County Road / Fuel Reduction



Map 26. WUI-County Road / Fuel Reduction

Electronic Maps Disk:

[CWPP Luna County\Appendix A WUI Maps](#)

[/CWPLLuna WUI Reduction 8x11 Nad27UTM13N 06052009MDY.pdf](#)

Corridors along private ranch roads also need periodic fuel reduction as well.

- ✓ **Project three:** This project is to increase the public awareness of high fire danger periods within Luna County.
 - Purchase 60 fire danger signs to be placed along the roadways in Luna County
 - Purchase 50 red fire danger flags to be distributed to municipal schools, fire departments and government facilities to notify the public of the fire danger.

- ✓ **Project Four:** This project is to cut and spray the rights-of-way along railroads to establish a firebreak. This will assist in removing fuels along the railroads in preparation for fire season.
 - Railroad companies currently have a spray program and maintain the railroads.
 - This has had a decrease in fires along the railroad's corridors.
 - Maintain a schedule of spraying with the railroad companies.

A limited amount of fuel reduction maintenance work may be needed, on roads within BLM lands. Where fuel accumulations and topography are appropriate, fuel reduction work should be expanded beyond road corridors into BLM lands. Treatments to reduce fuels might include mowing in fire-adapted ecosystems: prescribed fire or natural ignition fire management to achieve resource objectives.

Pipelines and electric transmission lines crossing the county are generally located in areas of grass and brush fuel types. The light, flashy nature of the grass/brush fuel type does not pose a major threat to pipelines, electric transmission lines and their associated facilities. Should there be significant grass and brush growth additional maintenance of these corridors may be needed.

PRIORITY 2 - DEFENSIBLE SPACE

One of the priorities for Luna County is to reduce fuels and to create effective defensible space zones around homes that are at risk of being affected by wildfires. Defensible space is an area around a structure where fuels and vegetation are treated, cleared or reduced to slow the spread of wildfire towards the structure. It also reduces the chance of a structure fire moving from the building to the surrounding wildland. Defensible space provides room for the firefighters to do their jobs. Your house is more likely to withstand a wildfire if grasses, brush, trees and other common wildland fuels are managed to reduce a fire's intensity. Creating an effective defensible space involves developing a series of management zones in which different treatment techniques are used. Develop defensible space around each building on your property. Include detached garages, storage buildings, barns and other structures in your plan. The actual design and development of your defensible space depends on several factors:

- ◆ size and shape of buildings
- ◆ materials used in their construction
- ◆ slope of the ground on which structures are built
- ◆ surrounding topography
- ◆ sizes and types of vegetation on your property.

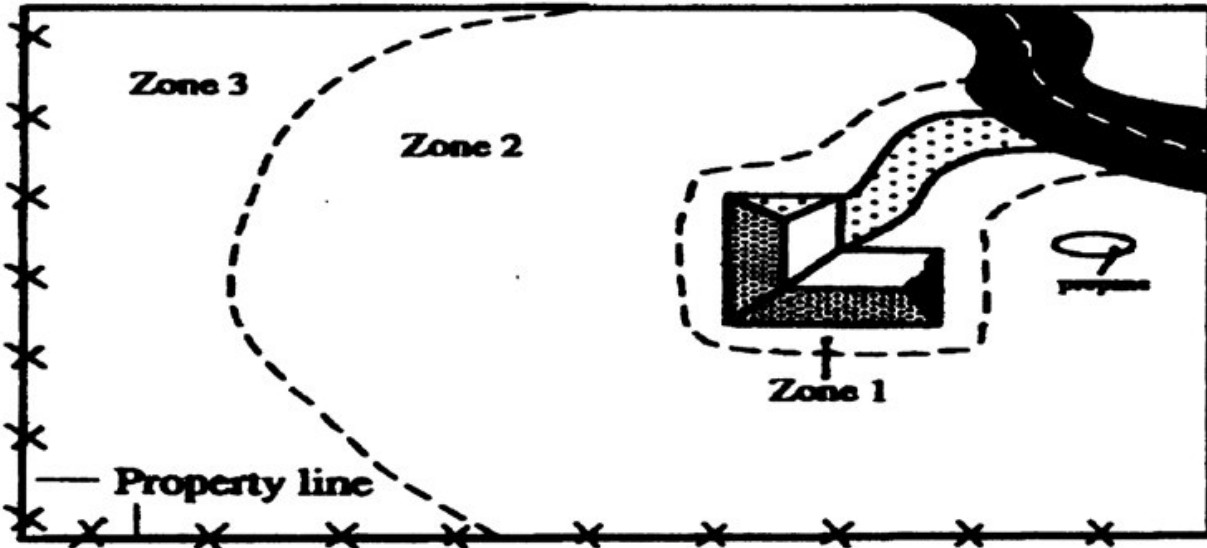


Figure 1: Forested property showing the three fire-defensible zones around a home or other structure.

Zone 1

The size of Zone 1 is 15 feet, measured from the edges of the structure. Within this zone, several specific treatments are recommended.

- Plant nothing within 3 to 5 feet of the structure, particularly if the siding is a flammable material
- Decorative rock creates an attractive, easily maintained nonflammable ground cover.
- If the house has noncombustible siding, widely spaced foundation plantings of low growing shrubs or other “fire wise” plants are acceptable.
- Do not plant directly beneath windows or next to foundation vents. Be sure there are no areas of continuous grass adjacent to plantings in this area.
- Frequently prune and maintain plants in this zone to ensure vigorous growth and low growth habit.
- Remove dead branches, stems and leaves.
- Do not store firewood or other combustible materials in this area.
- Enclose or screen decks with metal screening.
- Extend the gravel coverage under the decks.
- Do not use areas under decks for storage.
- Remove all trees from Zone 1 to reduce fire hazards. If you do keep one tree, consider it part of the structure and extend the distance of the entire defensible space accordingly. Isolate the tree crown from any other surrounding forest by at least 15 feet. Prune it to at least 15 feet above the ground. Remove any branches that overhang the roof or are within 10 feet of the chimney. Remove all “ladder fuels” from beneath the tree. Ladder fuels are small shrubs, trees, tree limbs and other materials that allow fire to climb into the tree crown –the branches and foliage.

Zone 2

- Selectively remove (thin) trees and large shrubs so there is at least 10 feet between crowns. Crown separation is measured from the furthest branch of one tree to the nearest branch on the next tree, not from tree trunk to tree trunk. On steep slopes, allow more space between tree crowns.
- Remove all ladder fuels (undergrowth) from these remaining trees.
- Carefully prune trees to a height of 10 feet.
- Thin the inner portion of Zone 2 more heavily than the outer portions. Gradually increase tree density as you approach Zone 3. As a rule of thumb, the recommended width of defensible space from the structure to the outer edge of Zone 2 will increase as slope percent increases.
- Isolated shrubs may remain, provided they are not under tree crowns.
- Prune and maintain these plants periodically to maintain vigorous growth.
- Remove dead stems from trees and shrubs annually.
- Limit the number of dead trees (snags) retained in this area. Wildlife needs only one or two snags per acre. Be sure any snags left for wildlife cannot fall onto the house or block access roads or driveways.
- Mow grasses (or remove them with a weed trimmer) as needed through the growing season to keep them low, a maximum of 6 or 8 inches. This is extremely critical in the fall when grasses dry out and cure or in the spring after the snow is gone but before plants green up.
- Stack firewood and woodpiles uphill or on the same elevation as the structure at least 30 feet away.
- Clear and keep away flammable vegetation within 10 feet of these woodpiles.
- Do not stack wood against your house or on or under your deck, even in winter. Many homes have burned from a woodpile that ignited as the fire passed. Wildfires can burn at any time of year in the southwest.
- Locate propane tanks at least 30 feet from any structures, preferably on the same elevation as the house. Clear and keep away flammable vegetation within 10 feet of these tanks.
- Do not screen propane tanks with shrubs or vegetation.
- Dispose of slash (limbs, branches and other woody debris) removed from your trees and shrubs by chipping, lop and scattering or by piling and burning.

Zone 3

Zone 3 is an area of management for landowner objectives and is of no particular size. It extends from the edge of Zone 2 to your property boundaries. In this area you are encouraged to manage your forests in a more traditional manner. Typical management objectives for areas surrounding home sites or subdivisions are:

- Provide optimal recreational opportunities
- Enhance aesthetics
- Maintain tree health and vigor
- Provide barriers from wind, noise, dust and visual intrusions
- Support limited production of firewood, fence posts and other forest commodities; or grow Christmas trees or trees for transplanting.
- Prune trees along trails and fire access roads.
- Any approved method of slash treatment is acceptable for this zone, including piling and burning, chipping or lop and scatter.

PRIORITY 3 - FUEL BREAKS AROUND WUI BOUNDARIES

Luna County will assist federal and state agencies to reduce fuels and to create fuel breaks adjacent to a community's outer perimeter of homes. A fuel break is a strategically located block or strip of land in which a cover of dense, heavy or flammable vegetation has been permanently changed to one of lower fuel volume and reduced flammability. A well-designed fuel break may provide an area in which firefighters can attempt to stop an oncoming fire. When planning for fuel break locations, the following factors should be considered:

- Fuel types and loading
- Topographical features
- Prevailing winds
- Access
- Proximity to homes
- Archaeological sites should be avoided
- Presence of threatened and endangered species

Acquire funding to assist federal and state agencies with fuel breaks. Fuel breaks may be beyond the scope of the County. In that case, the NM State Forestry may be consulted. Hazardous fuels monies are available from state and federal agencies. For more information visit the New Mexico State Forestry website, www.nmforestry.com, or the local NRCS Office, or the Funding Sources list in Appendix H of this CWPP.

TREATMENT OF STRUCTURAL IGNITABILITY

There is an increased interest to build subdivisions in undeveloped areas throughout Luna County. As such, the Luna County recognizes the need to provide guidelines to homeowners and communities to reduce the potential of structural ignitability. The recommendations include:

- The placement of water storage tanks anywhere those homes are going to be built.
- Public education and outreach.
- Implementing the guidelines made by the NM State Forestry Publication, *Living with Fire*.

The primary determinants of a home's ability to survive wildfire are its roofing material and the quality of the "defensible space" surrounding it.

ICC WUI Codes

For homes and communities that are already established the suggestions made in the Action Plan, Proposed Wildfire Hazard Mitigation for Luna County WUI's, address reducing structural ignitability. There are ICC WUI codes that may be adopted to assist Luna County. The core group discussed this, but at this time there were no need to implement the ICC codes within Luna County. Public education would serve Luna County citizens in a more proactive way.

DEFENSIBLE SPACE AND FIREWISE ANNUAL CHECKLIST

- Trees and shrubs are properly thinned and pruned within the defensible space.
- Slash from thinning is disposed of.
- Roof and gutters are clear of debris.
- Branches overhanging the roof and chimney are removed.
- Chimney screens are in place and in good condition
- Grass and weeds are mowed to a low height.

CWPP Luna County Final Draft October, 2010

- An outdoor water supply is available, complete with a hose and nozzle that can reach all parts of the house.
- Fire extinguishers are checked and in working order.
- The driveway is wide enough with clearance of trees and branches adequate for fire and emergency equipment. (Check with your local fire department.)
- Road signs and your name and house number are posted and easily visible.
- There is an easily accessible tool storage area with rakes, hoes, axes and shovels for use in case of fire.
- You have practiced family fire drills and your fire evacuation plan.
- Your escape routes, meeting points, and other details are known and understood by all family members.
- Attic, roof, eaves, and foundation vents are screened and in good condition.
- Stilt foundations and decks are enclosed, screened or walled up.
- Trash and debris accumulations are removed from the defensible space.

IMPROVING FIREFIGHTING CAPACITY

FIRE DEPARTMENTS

Luna County is served by two municipal fire departments: City of Deming Fire Department and Columbus Volunteer Fire Department and four rural volunteer fire departments: Cooks Peak, Florida Mountains, Sunshine, and Savoy. Table 1 lists the ISO insurance rating of each fire department.

Table 6. Fire Department ISO Ratings.

Fire Department	ISO Rating
Cooks Peak	9
Florida Mountains	9
Sunshine	9
Savoy	10
City of Deming	5
City of Columbus	7

WILDLAND COORDINATOR

The first recommendation for improving fire response and capabilities is for the county to hire an experienced wildland coordinator. The position could be funded directly by Luna County or

through a grant. A wildland coordinator could coordinate efforts to address many of the recommendations made in this CWPP. For example, a wildland coordinator could:

- Work with the Luna County Commission to improve firefighter safety,
- Create unification among the volunteer fire departments,
- Write grants to bring additional fire program money into Luna County,
- Initiate fire education and public outreach programs,
- Coordinate efforts to bring about fuel breaks and encourage landowners to incorporate defensible space around their structures and improvements.

This recommendation should be a priority for Luna County. A professional, experienced wildland coordinator could be a tremendous asset to Luna County and the fire service within the county.

WATER SOURCE COORDINATOR

Have a water source coordinator to secure agreements with private lands owners for use of water during fire operations.

- ✓ Storage tanks on private lands
- ✓ Wells on private lands
- ✓ Secure proper connections for fire apparatus.

TRAINING

- Seek instructors to provide certification training to a small number of students at a time (5 or less), due to the distance for volunteers to travel for training.
- Provide training that can be broken down into small units to provide the opportunity for those with shift-work schedules to attend training.
- Build capacity and knowledge of the recognized volunteer fire departments in Luna County so they not only assist the state and federal agencies in wildfire suppression and protection but can also be a complementary force to all wildland fire management activities. Members of volunteer fire departments would serve as the initial attack with an incident commander until state and/or federal agencies arrive.
- Seek funding and resources for training through NM State Forestry, BLM, USFS, Private Sector, and/or grants.

TRAINING EQUIPMENT NEEDED:

Various training videos and manuals, including:

- “Essentials in Firefighting” and
- “Wildland Fire Training” (videos)

Every firefighter in Luna County should have at least the introductory Wildland firefighter training courses. These courses provide training in the proper use of firefighting tools and apparatus, basic fire behavior, and weather. The minimum training recommendations include:

- S-130 Firefighting Training
- S-190 Introduction to Wildland Fire Behavior
- I-100 Introduction to Incident Command System
- L-180 Human Factors on the Fire line
- RT-130 The annual fire line safety refresher

Additional and encouraged Wildland firefighting training courses include:

- S-131 Firefighter Type 1
- S-133 Look Up, Look Down, Look Around
- S-211 Portable Pumps and Water Use
- S-215 Fire Operations in the Wildland/Urban Interface
- S-290 Intermediate Wildland Fire Behavior
- S-260 Interagency Incident Business Management

- L-280 Followership to Leadership

Training should be coordinated through the Socorro District Office of NM State Forestry. Training may be taken from any NWCG qualified instructor. Wildland firefighter training courses that are available in the southeastern portion of the state are posted on the Silver City Interagency Dispatch Center Website (<http://www.fs.fed.us/r3/gila/fire/>). Other training may be available to the fire departments through the local Bureau of Land Management office. Funding may be available through New Mexico State Forestry to pay for instructors to conduct Wildland courses at the fire departments.

APPENDIX F CONTAINS A COMPLETE TRAINING PROGRAM FOR LUNA FIREFIGHTERS. For more information on qualifications and required trainings go to www.NWCG.gov and select NWCG publications, then Qualifications, or call the Fire Management Officer at New Mexico State Forestry.

EQUIPMENT

Equipment needs include; a headlamp, goggles, water bottles, MREs, water, first aid kits, maps, compasses, global positioning systems, sleeping bags, and hand-held radios for every firefighter, as well as chainsaws, hand tools and bladder bags. Recommended hand tools include Pulaski, McLeods, shovels, and flappers. Because of the shortage of draft sites in the county, each fire department needs at least 1-type II water tender.

Each department should have at least one, preferably two, type VI wildland fire engine. The engine should be four-wheel drive and be equipped with a mobile radio, water tank and pump with draft capabilities, hose, hose adapters and valves, nozzles, spanner wrench, drafting equipment and foam capabilities. Each engine should also carry a pair bolt cutters.

Training, PPE, equipment and apparatus requirements are outlined in the New Mexico Resource Mobilization Plan and at the National Wildfire Coordinating Group website, www.NWCG.gov.

ENHANCED 911 (E911)

Not all areas of the county are covered by E911 emergency dispatch capability.

- Acquire funding to complete project.
- Hire a person for the oversight and completion of project.
- Acquire GIS.
- Assess ranch structures and improvements county wide (# of structures E-911 Data)

Communications

There is a shortage of mobile and hand-held radios in the county fire departments that are P-25 compliant and can be readily utilized on multi-agency incidents. Additionally, there are several areas in the county where radio and/or cell phone communications are not possible. VFD's have one frequencies to utilized though Luna County. They are not able to utilize the New Mexico State Fire tactical frequency that is communally utilized by other County Fire Departments throughout the state of New Mexico as a tactical frequency and to communicate with NMSF, USFS, and BLM on wildland fire. This is a serious safety issue and should be addressed as soon as possible. Please refer to Appendix E for an analysis of radio communication coverage.

- Complete a study of the topography and locate the best places for repeaters and other communication equipment though out Luna County.
- Acquire funding and purchase hand-held P-25 compliant radios for each member of each fire department.

- Have a person in charge of communication in Luna County to coordinate with each fire chief.

Personal Protective Equipment (PPE)

Equipment needs include personnel protective equipment (PPE), tools, and apparatus. Wildland fire clothing, personnel protective equipment (PPE), is very different from the bunker gear used in structural firefighting. Every firefighter needs a full set of PPE that fits well and meets the minimum standards established by the National Fire Protection Association. PPE includes Nomex Wildland fire pants and shirt, leather gloves, an appropriate helmet, and a pair of high-topped leather boots with a vibram sole, no steel toe. Each firefighter also needs a fire shelter, which is to be carried on them at all times. Training in the proper deployment of the fire shelter is critical, and should be practiced periodically as a training exercise. Training shelters should be purchased, as they are reusable and provide a cost effective way, to provide periodic shelter deployment training.

The fire departments across the county are not able to consistently provide their volunteers with wildland personnel protective equipment (PPE). In some instances, fire department members either use structure firefighting PPE or street cloths.

- Funding – State (Volunteer Fire Assistance) and Federal (BLM - Rural Fire Assistance, FEMA Assistance to Firefighters Grant Program) grants are available to the county fire departments. However, the fire departments do not necessarily have the capacity to apply for the grants.
- Acquire funding for a grant writer.

FIRE APPARATUS

Several fire departments have been able to acquire new structure firefighting apparatus including engines and tenders. These do not necessarily lend themselves to the remote, rugged nature of many wildland fires that the departments are called to suppress. Most fire departments have to rely on brush trucks, type 6 engines, and converted military trucks that are nearing the end of their serviceable lives. Proposed apparatus acquisitions for each department include:

- One Wildland Urban Interface unit (NFPA 1906 standard).
- Two type 6 wildland units, 4X4.
- Type 2 Water Tender, 2,500 gallon with Water pumpkins (water supply containers)

COMMUNITY FIREFIGHTING WATER SUPPLIES

The rural fire departments can increase their firefighting capacity; improve their ISO ratings; and lower homeowner insurance premiums with the addition or upgrade of community firefighting water storage tanks and hydrants.

- Acquire funding for hydrants systems
- Acquire funding for water storage tanks.
- Acquire funding for water transportation systems.

RECRUITMENT and RETENTION of VOLUNTEER FIREFIGHTERS

Possible programs to recruit and retain volunteer firefighters include:

- Training – Offer local training, to small groups, in blocks scheduled around volunteer firefighter employment commitments. Training opportunities will build capacity and knowledge so that the fire departments in Luna County can, not only assist state and federal agencies in wildfire suppression and protection, but can also be a complementary

force to all wildland fire management activities including deployment to incidents outside of the county and New Mexico. A suggested training plan is included in Appendix E.

- Stipend – Ask the voters to approve a tax increase to provide the volunteers with a “nominal fee” to help offset the costs of being a volunteer (fuel, clothing, child care).

Insurance – Provide low cost health, disability, and life insurance to the volunteer firefighters.

FIRE DEPARTMENT FUNDING GUIDELINES

Currently fire funds are based on ISO rating which are based strictly on structural firefighting capabilities. Fire Departments in rural areas, like Luna County, receive more wildfire calls than structure fire calls annually. However, funding from the State Fire Fund cannot be used to purchase Wildland fire apparatus, equipment, or Personal Protection Equipment. Each department needs to be able to assess the needs of their department and purchase equipment according to their individual needs.

- Acquire funding from other agencies both state and Federal.
- Have a program for volunteer departments to acquire PPE from wildland agencies.

LUNA COUNTY FIRE DEPARTMENT NEEDS

Table 7. Fire Department Wildland Equipment Needs Assessment

Fire Dept.	Current Equipment	Additional Wildland Equipment Needs	Training Needs
Cooks Peak VFD	Engine Type I Engine Type IV Engine Type VI Water Tender Type III	Priority 1: Engine Type VI Priority 2: Priority 3: Wildland/urban interface unit NFPA 1906 Priority 4: Wildland Personal Protective Equipment PPE <ul style="list-style-type: none"> ➤ Wildland approved pants/coveralls ➤ Wild land approved head gear ➤ Wild land approved gloves ➤ Wild land approved boots Priority 5: Communications P25 Radio Mobile, Handheld and a repeater. Priority 6: Other equipment. <ul style="list-style-type: none"> ➤ Drip Torches ➤ Backpack pumps ➤ Fire shelters ➤ Weather kits/manual electronic weather stations. ➤ Wildland Hand Tools 	S-130/190, I-100 L-180 S-211 S-212 S-201 S-290 Annual Fire Safety Refresher
Florida Mountains VOL. FIRE DEPT.	Engine VI Engine Type II	Priority 1: Wildland/urban interface unit NFPA 1906 Priority 2: Two type 6 Wildland units Priority 3: Water Tender Type 2 Water Tender, 2,500 gal. with Water Pumpkins (water supply containers) and Front Spray Bar Priority 4: Wildland Personal Protective Equipment PPE <ul style="list-style-type: none"> ➤ Wildland approved pants/coveralls ➤ Wild land approved head gear ➤ Wild land approved gloves ➤ Wild land approved boots Priority 5: Communications Radio Mobile and Handheld P-25 Compatible Radios P-25 Repeaters and Towers Priority 6: Other equipment. <ul style="list-style-type: none"> ➤ Drip Torches ➤ Backpack pumps ➤ Fire shelters ➤ Weather kits/manual electronic weather stations. ➤ Wildland Hand Tools ➤ Drop Tanks 3,000 gallons ➤ 1 ½, 1, and ¾ inch Hose ➤ Fittings wyes, gates, reducer, and adapters. ➤ Chain Saws 2-24 inch Bar 40cc or Higher ➤ Handheld GPS units 	S-130/190, I-100 L-180 S-211 S-212 S-201 S-290 Annual Fire Safety Refresher
Sunshine VOL. FIRE DEPT.	Water Tender Type III Engine Type VI Engine Type I	Priority 1: Engine Type VI or III Priority 2: Water Tender Type 2 Water Tender, 2,500 gal. with Water Pumpkins (water supply containers) and Front Spray Bar Priority 3: Wildland/urban interface unit NFPA 1906 Priority 4: Wildland Personal Protective Equipment PPE <ul style="list-style-type: none"> ➤ Wildland approved pants/coveralls ➤ Wild land approved head gear ➤ Wild land approved gloves ➤ Wild land approved boots Priority 5: Communications P 25 Radio Mobile and Handheld	S-130/190, I-100 L-180 S-211 S-212 S-201 S-290 Annual

Savoy VOL FIRE DEPT.	Engine Type II	<p>Priority 6: Other equipment.</p> <ul style="list-style-type: none"> ➤ Drip Torches ➤ Backpack pumps ➤ Fire shelters ➤ Weather kits/manual electronic weather stations. ➤ Wildland Hand Tools 	Fire Safety Refresher
		<p>Priority 1: Wildland/urban interface unit NFPA 1906 Priority 2: Two type 6 Wildland units Priority 3: Water Tender Type 2 Water Tender, 2,500 gal. with Water Pumpkins (water supply containers) and Front Spray Bar Priority 4: Wildland Personal Protective Equipment PPE</p> <ul style="list-style-type: none"> ➤ Wildland approved pants/coveralls ➤ Wild land approved head gear ➤ Wild land approved gloves ➤ Wild land approved boots <p>Priority 5: Communications Radio Mobile and Handheld P-25 Compatible Radios P-25 Repeaters and Towers</p>	S-130/190, I-100, L-180, S-211, S-212, S-201, S-290, Annual Fire Safety Refresher
		<p>Priority 6: Other equipment.</p> <ul style="list-style-type: none"> ➤ Drip Torches ➤ Backpack pumps ➤ Fire shelters ➤ Weather kits/manual electronic weather stations. ➤ Wildland Hand Tools ➤ Drop Tanks 3,000 gallons ➤ 1 ½ , 1, and ¾ inch Hose ➤ Fittings wyes, gates, reducer, and adapters. ➤ Chain Saws 2-24 inch Bar 40cc or Higher ➤ Handheld GPS units 	
Columbus VOL FIRE DEPT.	<p>1 Engine Type 1 1 Tender Type Unrated Pump 1 Engine Type IV 1 Engine Type IV</p>	<p>Priority 1: Water Tender Type 2 Water Tender, 2,500 gal. with Water Pumpkins (water supply containers) and Front Spray Bar Priority 2: 300 Gallon Water Buffalo Priority 3: Heavy Brush Mower – Tractor Driven Priority 4: Wildland/urban interface unit NFPA 1906 Priority 5: Two type 6 Wildland units Priority 6: Wildland Personal Protective Equipment PPE</p> <ul style="list-style-type: none"> ➤ Wildland approved pants/coveralls ➤ Wild land approved head gear ➤ Wild land approved gloves ➤ Wild land approved boots <p>Priority 7: Communications Radio Mobile and Handheld P-25 Compatible Radios P-25 Repeaters and Towers</p> <p>Priority 8: Other equipment.</p> <ul style="list-style-type: none"> ➤ Drip Torches ➤ Backpack pumps ➤ Fire shelters ➤ Weather kits/manual electronic weather stations. ➤ Wildland Hand Tools ➤ Portable Cots ➤ Sleeping Bags ➤ Crew First aid Kits ➤ MRE's ➤ Drop Tanks 3,000 gallons ➤ Chain Saws 2-24 inch Bar 40cc or Higher ➤ 	S-130/190, I-100, L-180, S-211, S-212, S-201, S-290, Annual Fire Safety Refresher

**National Mobilization Minimum Engine and Water Tender Typing
October 2007**

Requirements	Engine Type						
	Structure		Wildland				
	1	2	3	4	5	6	7
Tank minimum capacity (gal)	300	300	500	750	400	150	50
Pump minimum flow (gpm)	1000	500	150	50	50	50	10
@ rated pressure (psi)	150	150	250	100	100	100	100
Hose 2½"	1200	1000	-	-	-	-	-
1½"	500	500	1000	300	300	300	-
1"	-	-	500	300	300	300	200
Ladders per NFPA 1901	Yes	Yes	-	-	-	-	-
Master stream 500 gpm min.	Yes	-	-	-	-	-	-
Pump and roll	-	-	Yes	Yes	Yes	Yes	Yes
Maximum GVWR (lbs)	-	-	-	-	26,000	19,500	14,000
Personnel (min)	4	3	3	2	2	2	2

Requirements	Water Tender Type				
	Support			Tactical	
	S1	S2	S3	T1	T2
Tank capacity (gal)	4000	2500	1000	2000	1000
Pump minimum flow (gpm)	300	200	200	250	250
@ rated pressure (psi)	50	50	50	150	150
Max. refill time (minutes)	30	20	15	-	-
Pump and roll	-	-	-	Yes	Yes
Personnel (min)	1	1	1	2	2

1. All types shall meet federal, state and agency requirements for motor vehicle safety standards, including all gross vehicle weight ratings when fully loaded.
2. Type 3 engines and tactical water tenders shall be equipped with a foam proportioner system.
3. All water tenders and engine types 3 through 6 shall be able to prime and pump water from a 10 foot lift.
4. Personnel shall meet the qualification requirements of *NWCG Wildland Fire Qualification System Guide*, PMS 310-1.

CONCLUSIONS AND RECOMMENDATIONS

To ensure this document remains a “LIVING DOCUMENT” and does not just reside on a shelf, several operational and monitoring tasks must be completed:

- Develop individual community CWPPs to address specific needs for each WUI area.
- Establish and fund a Luna County Wildland Fire Coordinator. This position will be a critical link between state and federal land management agencies and the Luna County Board of Commissioners.
- Hold quarterly review and follow up meetings to keep plan implementation on track, to outline priorities and projects, and celebrate accomplishments.
- Conduct annual reviews and document updated amendments or accomplishments.
- Track accomplishments on a simple document or spreadsheet and forward to members of the core group.
- Keep community leaders engaged in the prioritization, accomplishments, and long term planning needed to make this plan and its implementation a long-term success. Implementation of these recommendations is critical to long-term success of the Luna County Community Wildfire Protection Plan.

It should be noted that this community wildfire protection plan does not provide specifics as to work needed in Luna County to protect its communities, infrastructure, and watersheds from catastrophic wildfire or to restore forest and rangelands to a more healthy state. It also does not attempt to develop treatment prescriptions, management actions, or on-the-ground management options. The plan simply identifies areas, issues and concerns of community members and government officials as called for in the Healthy Forest Restoration Act. It is agreed that areas of concern presented in this plan will become the focal point for collaborative risk mitigation and forest and rangeland restoration activities for the Bureau of Land Management, New Mexico State Land Office, Natural Resources Conservation Service, New Mexico Forestry Division, Deming Soil and Water Conservation District and others.

All of the issues presented are of great importance to the citizens of Luna County and cannot be isolated from the overall goal of safety and fire mitigation.

APPENDICIES

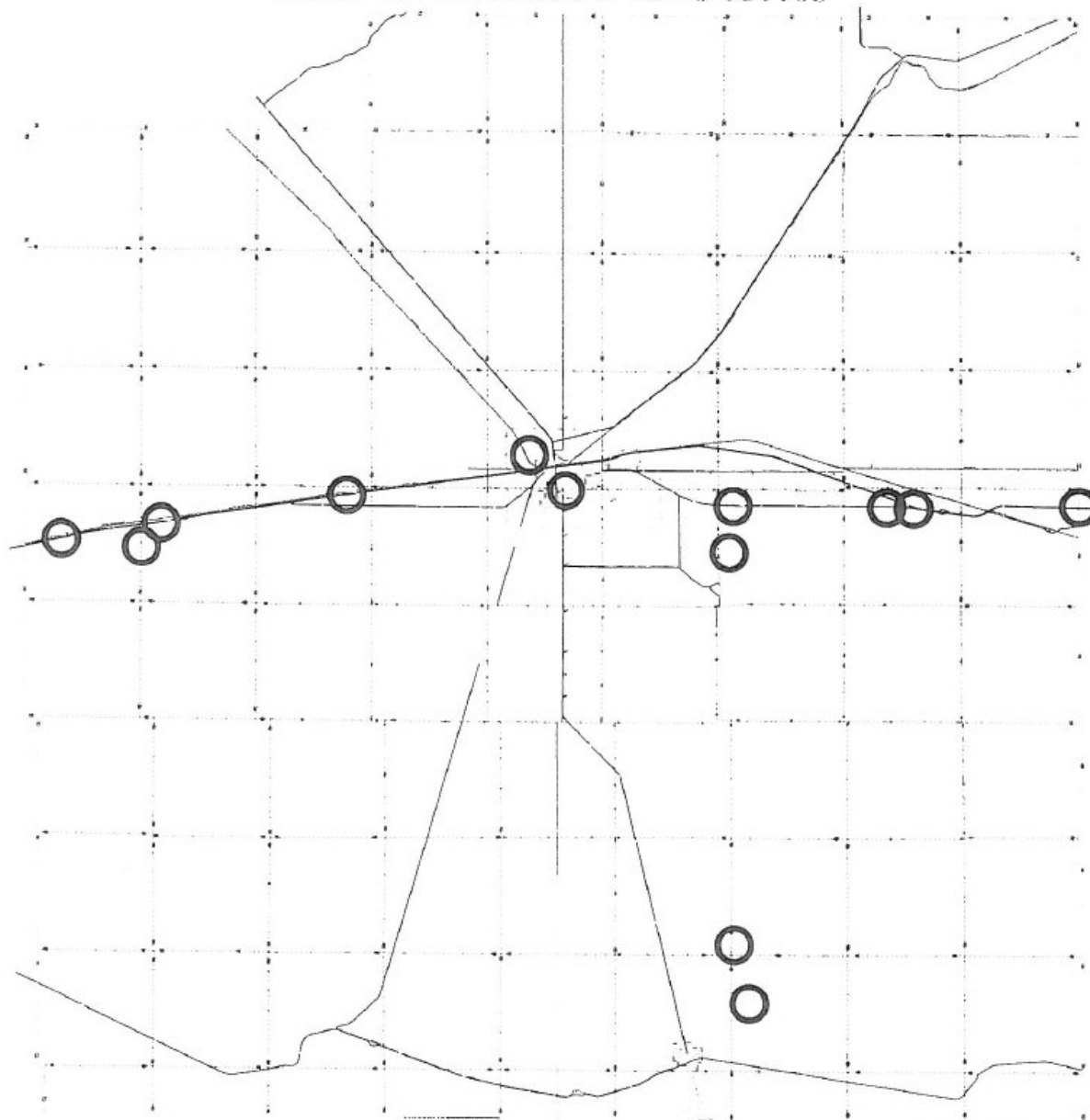
APPENDIX A - Electronic Maps- WUI62
APPENDIX B - Electronic Maps- County62
APPENDIX C - Communication Map63
APPENDIX D - Radio Communication Analysis64
APPENDIX E - Fire Department Wildland Fire Training Program.....65
APPENDIX F - Wildfire Hazard Home Assessment Form.....67
APPENDIX G - Funding Sources70
APPENDIX H - Homeowner’s Guide73

Appendix A –WUI Maps Electronic Maps- WUI’s

Appendix B- County Maps Electronic Maps- County

Appendix C-Communication Maps

CELL TOWER LOCATIONS 081105



APPENDIX D

RADIO COMMUNICATION ANALYSIS

1. Communication Sites

Objective

The objective is to mitigate the threat of an intense wildfire that could threaten the communications equipment at the site. Luna County has very limited communications - communication is poor or non-existent in most parts of the county. The maps of communication converge below will help identify the problem areas. A plan needs to be developed to resolve the communication areas. The plan should include time frames and funding sources.

2. Communication Needs

Objective

The objective is to improve communications between federal, state, county and local entities to maximize the use of current communications infrastructure and improve communications where they are currently inadequate and unsafe. Work Completed and Work Scheduled are itemized in the Action Plan.

Objective

The purpose of this plan is to describe how Luna County will handle emergency situations and/or disasters within its jurisdiction. It assigns responsibilities for emergency preparedness and planning and for coordinating Emergency response activities before, during and after any type of emergency or disaster.

4. Communication Sites in surrounding Counties

APPENDIX E **FIRE DEPARTMENT** **WILDLAND FIRE** **TRAINING PROGRAM**

IRE DEPARTMENT WILDLAND FIRE TRAINING

Objective

- To seek instructors to provide certification training to a small number of students at a time (5 or less), due to the distance for volunteers to travel for training.
- Provide training that can be broken down into small units to provide the opportunity for the shift works schedules to attend training.
- To build capacity and knowledge so that the recognized volunteer fire departments in Luna County can not only assist the state and federal agencies in wildfire suppression and protection but can also be a complementary force to all wildland fire management activities. Members of Volunteer Fire Departments would serve as the Initial Attack with an Incident Commander until state and federal agencies arrive.
- Seek funding and resource for training though NM State, BLM, USFS, Private Sector and/or grants.

Required Training to meet the minimum standards of the National Wildfire Coordinating Group (NWCG)

(Reference - Wildland Fire Qualification System Guide, PMS 310-1, May 2008)

The following Introduction Courses are Required to be qualify in the positions of Firefighter Type 2 and Firefighter Type 1. These need to be offered on an annual basis.

- Introduction to ICS (I-100) 4 Hours
- Human Factors in the Wildland Fire Service (L-180) 4 Hours
- Annual Fireline Safety Refresher (RT-130)
- Firefighting Training (S-130) 30 – 35 ½ Hours
- Firefighter Type 1 (S-131) 8 Hours
- Look up, Look Down, Look Around (S-133) 4 Hours
- Introduction to Wildland Fire Behavior (S-190) 6-8 Hours

Required NIMS training for all firefighters NIMS ICS 700

FIREFIGHTER TYPE 2 (FFT2)

- **REQUIRED TRAINING**
 - ✓ Introduction to ICS (I-100) 4 Hours
 - ✓ Human Factors in the Wildland Fire Service (L-180) 4 Hours
 - ✓ Introduction to Wildland Fire Behavior (S-190) 6-8 Hours
 - ✓ Firefighting Training (S-130) 30 – 35 ½ Hours
 - ✓ Annual Fireline Safety Refresher (RT-130)

➤ **REQUIRED EXPERIENCE**

- ✓ None

FIREFIGHTER TYPE 1 (FFT1)

➤ **REQUIRED TRAINING**

- ✓ Firefighter Type 1 (S-131) 8 Hours
- ✓ Look Up, Look Down, Look Around (S-133)
- ✓ 4 Hours Annual Fireline Safety Refresher (RT-130)

➤ **REQUIRED EXPERIENCE**

- ✓ Satisfactory performance as a Firefighter Type 2 (FFT2)
plus
- ✓ Successful position performance as a Firefighter Type 1 (FFT1) on a wildland fire incident

INCIDENT COMMANDER TYPE 5 (ICT5)

➤ **REQUIRED TRAINING**

- ✓ Firefighter Type 1 (S-131) 8 Hours
- ✓ Look up, Look Down, Look Around (S-133) 4 Hours
- ✓ Annual Fireline Safety Refresher (RT-130)

➤ **REQUIRED EXPERIENCE**

- ✓ Satisfactory performance as a Firefighter Type 2 (FFT2)
plus
- ✓ Successful position performance as an Incident Commander Type 5 (ICT5) on a wildfire incident.

➤ **OTHER TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS**

- ✓ Wildland Fire Chain Saws (S-212)

The following Intermediate Courses are required to be qualified in the following positions and need to be offered on a biannual basis.

- Initial Attack Incident Commander (S-200) 16 Hours
- Crew Boss (Single Resource) (S-230) 24 Hours {S-290 is a prerequisite for S-230}
- Engine Boss (Single Resource) (S-231) 16 Hours {S-230 & S-290 is a prerequisite for S-230}
- Intermediate Wildland Fire Behavior (S-290) 32 Hours

ENGINE BOSS, SINGLE RESOURCE (ENGB)

➤ **REQUIRED TRAINING**

- ✓ Intermediate Wildland Fire Behavior (S-290) 32 Hours
- ✓ Crew Boss (Single Resource) (S-230) 24 Hours
- ✓ Annual Fireline Safety Refresher (RT-130)

➤ **REQUIRED EXPERIENCE**

- ✓ Satisfactory performance as a Firefighter Type 1 (FFT1)
- ✓ plus
- ✓ Successful position performance as an Engine Boss, Single Resource (ENGB) on a wildland fire incident

➤ **OTHER TRAINING WHICH SUPPORTS DEVELOPMENT OF KNOWLEDGE AND SKILLS**

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- ✓ Basic ICS (I-200) 16 Hours
- ✓ Followership to Leadership (L-280) 16 Hours
- ✓ Basic Air Operations (S-270) 16 Hours
- ✓ Interagency Incident Business Management (S-260) 16-20 Hours
- ✓ Ignition Operations (S-234) 32 Hours
- ✓ Engine Boss (Single Resource) (S-231) 12-16 Hours

INCIDENT COMMANDER TYPE 4 (ICT4)

➤ **REQUIRED TRAINING**

- ✓ Initial Attack Incident Commander (S-200) 16 Hours
- ✓ Annual Fireline Safety Refresher (RT-130)

➤ **REQUIRED EXPERIENCE**

- ✓ Satisfactory performance in any Single Resource Boss position (CRWB, DOZB, ENGB, FELB, FIRB, HMGB, TRPB)
plus
- ✓ Successful position performance as an Incident Commander Type 4 (ICT4) on a wildfire incident

The following Courses should be offered to improve firefighter skills.

- Basic ICS (I-200) 16 Hours
- Followership to Leadership (L-280) 16 Hours
- Portable Pumps and Water Use (S-211) 24 Hours
- Wildland Fire Chain Saws (S-212) 36 Hours
- Fire Operations in the Willand/Urban Interface (S-215) 28-32 Hours
- Engine Boss (Single Resource) (S-231) 12-16 Hours
- Ignition Operations (S-234) 32 Hours
- Interagency Incident Business Management (S-260) 16-20 Hours
- Basic Air Operations (S-270) 16 Hours

TRAINING EQUIPMENT NEEDED:

Various training videos and manuals, including:
“Essentials in Firefighting” and “Wildland Fire Training” (videos)

APPENDIX F

Wildfire Hazard Home Assessment Form

Community Name:	Points	My Points here
My fire protection provided by:		(choose the best one)
1. The Main road to my house is best described as:		
Two or more primary roads	1	
One road, primary route	3	
One way in and out	5	
2. The main road to my house is:		
20 feet wide or more	1	
Less than 20 feet	3	
3. The main road to my house is:		
Smooth road, grade <5%	1	
Rough road, grade >5%	3	
Other		
4. My Driveway is best described as:		
Loop Road, cul de sacs with Outside radius > 50 ft		
Loop Road, cul de sacs with Outside radius <50 ft	1	
OR		
Dead end driveway less than 200 ft to my house	3	
Dead end driveway longer than 200ft to my house	5	
5. My Lot Size is:		
More than 10 acres	1	
Between 1-10 acres	3	
Less than 1 acre	5	
6. Street signs in my community are:		
Present (4" in size & reflective)	1	
Not Present	5	
VEGETATION		
7. The vegetation or "fuels" around my home are:		
Light Fuels, grasses	1	
Medium Fuels, light brush, small trees	5	
Heavy Fuels, dense brush, timber	10	
Slash, down & dead fuels	10	
8. I have cleared the "fuels" around my house:		
More that 100ft of treatment around my house	1	
30-70 ft treatment from my home & bldgs	5	
No defensible space treatment, the fuels are right up to my house	10	
TOPOGRAPHY		
9. Slope around my house is best described as:		
Less than 9%	1	
Between 10-20%	4	
Between 21-30%	7	
Between 31-40%	8	
Greater than 41%	10	
ADDITIONAL RATING FACTORS		
10. Rough topography that contains steep canyons around or on the way to my house	2	
11. Areas with a history of higher fire occurrence than surrounding areas due to special situations such as heavy lightning, railroads, escaped debris burning, arson, etc around or near my home	3	
12. I live in an Area that is periodically exposed to unusually severe fire weather and strong winds	4	

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ROOFING MATERIALS

- 13. Construction Material of my roof
 - Class A roof: example non combustible tile or metal 1
 - Class B roof 3
 - Class C roof: ex. 5
 - Non- rated: ex. Wood shingles 10

MY HOUSE IS MADE MOSTLY OF:

- 14. Materials
 - Noncombustible siding & non combustible deck 1
 - Noncombustible siding with a wood deck 3
 - combustible siding and deck 10

AVAILABLE FIRE PROTECTION

- 15. Water Source Available (on site)
 - 500 gpm hydrants <1000 ft apart 1
 - Hydrants above or draft site 2
 - No hydrants or draft site 3
- 16. Water source Available (off-site)
 - Source within 20 min. round trip 1
 - Source within 21-45 min. round trip 5
 - Source > 46 min. round trip 10

UTILITIES (GAS, ELECTRIC)

- 17. Placement
 - All underground utilities 1
 - One underground, one above 3
 - All aboveground 5

ADD UP YOUR POINTS

- 1. Low Hazard <49 points
- 2. Moderate Hazard 49-68 points
- 3. High Hazard 69-83 points
- 4. Extreme Hazard 84+ points

APPENDIX G

FUNDING SOURCES

The following section provides information on federal, state, and private funding opportunities for conducting wildfire mitigation projects.

FEDERAL FUNDING

Source: Predisaster Mitigation Grant Program

Agency: Department of Homeland Security Federal Emergency Management Agency (DHS FEMA)

Website: <http://www.fema.gov/government/grant/pdm/index.shtm>

Description: The DHS includes FEMA and the U.S. Fire Administration. FEMA's Federal Mitigation and Insurance Administration is responsible for promoting predisaster activities that can reduce the likelihood or magnitude of loss of life and property from multiple hazards, including wildfire. The Disaster Mitigation Act of 2000 created a requirement for states and communities to develop predisaster mitigation plans and established funding to support the development of the plans and to implement actions identified in the plans. This competitive grant program, known as PDM, has funds available to state entities, tribes, and local governments to help develop multi hazard mitigation plans and to implement projects identified in those plans.

Source: Funding for Fire Departments and First Responders

Agency: DHS, U.S. Fire Administration

Website: <http://www.usfa.dhs.gov/fireservice/grants/>

Description: Includes grants and general information on financial assistance for fire departments and first responders. Programs include the Assistance to Firefighters Grant Program (AFGP), Reimbursement for Firefighting on Federal Property, State Fire Training Systems Grants, and National Fire Academy Training Assistance.

Source: Conservation Innovation Grants (CIG)

Agency: National Resource Conservation Service

Website: <http://www.nm.nrcs.usda.gov/programs/cig/cig.html>

Description: CIG State Component. CIG is a voluntary program intended to stimulate the development and adoption of innovative conservation approaches and technologies while leveraging federal investment in environmental enhancement and protection, in conjunction with agricultural production. Under CIG, Environmental Quality Incentives Program (EQIP) funds are used to award competitive grants to non-federal governmental or nongovernmental organizations, tribes, or individuals. CIG enables the Natural Resources Conservation Service (NRCS) to work with other public and private entities to accelerate technology transfer and adoption of promising technologies and approaches to address some of the nation's most pressing natural resource concerns. CIG will benefit agricultural producers by providing more options for environmental enhancement and compliance with federal, state, and local regulations. The NRCS administers the CIG program. The CIG requires a 50/50 match between the agency and the applicant. The CIG has two funding components: national and state. Funding sources are available for water resources, soil resources, atmospheric resources, and grazing land and forest health.

Source: Rural Fire Assistance

Agency: Department of the Interior

Description: DOI program focused on rural fire department training, and the purchase protective fire clothing and firefighting equipment and public education. Departments that serve a community of less than 10,000 people located near federal (BLM) land are eligible. The maximum award is \$20,000 and requires a 10% cost share which may include in-kind services. For more information contact the DOI at 202-606-3211

Source: Volunteer Fire Assistance

Agency: USDA Forest Service

Website: <http://www.fs.fed.us/fire/partners/vfa/>

Description: USDA Forest Service funding will provide assistance, through the states, to volunteer fire departments to improve communication capabilities, increase Wildland fire management training, and purchase protective fire clothing and firefighting equipment. This grant may also be used to fund a Wildland Coordinator Position in the County. The maximum grant amount is \$25,000 and is a 90%, 10 % cost share. For more information and an application, go to NMForestry.com

Source: State Fire Assistance Luna County

Agency: USDA Forest Service

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Description: USDA Forest Service program providing financial and technical support directly to state Wildland fire agencies to enhance firefighting capacity of state, local and rural organizations. The program also supports community based hazard mitigation and an expanded public service fire prevention program. Funds have been awarded for private lands defensible space thinning. For more info contact the USFS Regional Office at 505-842-3344

Source: Fire wise

Agency: Multiple

Website: <http://www.firewise.org>

Description: The Wildland/Urban Interface Working Team (WUIWT) of the National Wildfire Coordinating Group is a consortium of Wildland fire organizations and federal agencies responsible for Wildland fire management in the United States. The WUIWT includes the USDA Forest Service, USDI Bureau of Indian Affairs, USDI BLM, USDI Fish and Wildlife Service, USDI National Park Service, FEMA, U.S. Fire Administration, International Association of Fire Chiefs, National Association of State Fire Marshals, National Association of State Foresters, National Emergency Management Association, and National Fire Protection Association. There are many different Fire wise Communities activities that can help homes and whole neighborhoods become safer from wildfire without significant expense. Community cleanup days, awareness events, and other cooperative activities can often be successfully accomplished through partnerships among neighbors, local businesses, and local fire departments, at little or no cost. The Fire wise Communities recognition program page (<http://www.firewise.org/usa>) provides a number of excellent examples of these kinds of projects and programs. The kind of help you need will depend on who you are, where you are, and what you want to do. Among the different activities individuals and neighborhoods can undertake the following actions often benefit from some kind of seed funding or additional assistance from an outside source:

- Thinning/pruning/tree removal/clearing on private property—particularly on very large, densely wooded properties
- Retrofit of home roofing or siding to noncombustible materials
- Managing private forest
- Community slash pickup or chipping
- Creation or improvement of access/egress roads
- Improvement of water supply for firefighting
- Public education activities throughout the community or region

Some additional examples of what communities, counties, and states have done can be found in the National Database of State and Local Wildfire Hazard Mitigation Programs at <http://www.wildfireprograms.usda.gov>. You can search this database by keyword, state, jurisdiction, or program type to find information about wildfire mitigation education programs, grant programs, ordinances, and more. The database includes links to local websites and e-mail contacts.

Source: The National Fire Plan

Website: <http://www.forestsandrangelands.gov/>

Description: Many states are using funds from the NFP to provide funds through a cost-share with residents to help them reduce the wildfire risk to their private property. These actions are usually in the form of thinning or pruning trees, shrubs, and other vegetation and/or clearing the slash and debris from this kind of work. Opportunities are available for rural, state, and volunteer fire assistance.

Source: Staffing for Adequate Fire and Emergency Response (SAFER)

Agency: DHS

Website: <http://www.firegrantsupport.com/safer/>

Description: The purpose of SAFER grants is to help fire departments increase the number of frontline firefighters. The goal is for fire departments to increase their staffing and deployment capabilities and ultimately attain 24-hour staffing, thus ensuring that their communities have adequate protection from fire and fire-related hazards. The SAFER grants support two specific activities: (1) hiring of firefighters and (2) recruitment and retention of volunteer firefighters. The hiring of firefighters activity provides grants to pay for part of the salaries of newly hired firefighters over the five-year program. SAFER is part of the Assistance to Firefighters Grants and is under the purview of the Office of Grants and Training of the DHS.

Source: The Fire Prevention and Safety Grants (FP&S)

Agency: DHS

Website: <http://www.firegrantsupport.com/fps/>

Description: The FP&S are part of the Assistance to Firefighters Grants and are under the purview of the Office of Grants and Training in the DHS. FP&S grants support to projects that enhance the safety of the public and firefighters who may be

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exposed to fire and related hazards. The primary goal is to target high-risk populations and mitigate high incidences of death and injury. Examples of the types of projects supported by FP&S include fire-prevention and public-safety education campaigns, juvenile fire-setter interventions, media campaigns, and arson prevention and awareness programs. In fiscal year 2005, Congress reauthorized funding for FP&S and expanded the eligible uses of funds to include firefighter safety research and development.

STATE FUNDING

Source: State and Private Forestry Programs

Agency: National Association of State Foresters

Website: http://www.stateforesters.org/S&PF/coop_fire.html

Description: The National Association of State Foresters recommends that funds become available through a competitive grant process on Wildland-Urban Interface hazard mitigation projects. State fire managers see opportunities to use both the State Fire Assistance Program and the Volunteer Fire Assistance Program to improve the safety and effectiveness of firefighters in the interface, as well as in other Wildland fire situations. To ensure firefighter safety, minimize property and resource loss, and reduce suppression costs, land management agencies, property owners, local leaders, and fire protection agencies must work cooperatively to mitigate interface fire risks, as well as to ensure that Wildland firefighters receive the training, information, and equipment necessary to safely carry out their responsibilities. The 2007 Western WUI Grant Program is a specific grant available under the State Fire Assistance Program. It includes opportunities for hazardous-fuels reduction, education, and community and homeowner actions. An application and instructions can be found at: http://www.firesafecouncil.org/news/attachments/2007_CDF_application-process_final168.pdf

Source: New Mexico Association of Counties 2007–2008 Wildfire Risk Reduction Program

Agency: New Mexico Association of Counties

Website: <http://www.nmcounties.org/wildfire.html>

Description: This program targets at-risk communities by offering seed money to help defray the costs of community wildfire protection projects. During the past two years, the Wildfire Risk Reduction Grant Program has primarily funded projects for the development of Community Wildfire Protection Plans (CWPP), a prerequisite to all other activities. In 2007, priority was given to projects that requested funding for hazardous fuel reduction, wildfire prevention, and community outreach activities that were identified in completed Cwpp.

PRIVATE FUNDING

Source: The Urban Land Institute (ULI)

Website: <http://www.uli.org>

Description: ULI is a 501(c)(3) nonprofit research and education organization supported by its members. The institute has more than 22,000 members worldwide, representing the entire spectrum of land-use and real estate development disciplines, working in private enterprise and public service. The mission of the ULI is to provide responsible leadership in the use of land to enhance the total environment. ULI and the ULI Foundation have instituted Community Action Grants (http://www.uli.org/Content/NavigationMenu/MyCommunity/CommunityActionGrants/Community_Action_Gr.htm) that could be used for Fire wise Communities activities. Applicants must be ULI members or part of a ULI District Council. Contact actiongrants@uli.org or review the web page to find your District Council and the application information.

Source: Environmental Systems Research Institute (ESRI)

Website: <http://www.esri.com/grants>

Description: ESRI is a privately held firm and the world's largest research and development organization dedicated to geographic information systems. ESRI provides free software, hardware, and training bundles under ESRI-sponsored Grants that include such activities as conservation, education, and sustainable development, and posts related non-ESRI grant opportunities under such categories as agriculture, education, environment, fire, public safety, and more. You can register on the website to receive updates on grant opportunities.

APPENDIX H

A HOMEOWNER'S GUIDE

This reference guide is included to provide tips and recommendations to homeowner's on how to reduce structural ignitability and improve preparedness when it comes to wild land urban interface fires.

BEFORE THE FIRE

Reducing Structural Ignitability

Building Materials

- Roofs – the most vulnerable part of a home to ignition by falling embers. Metal roofs provide the best resistance to ignition. Slate, tile, Class an Asphalt shingles also provides fire resistance. Avoid wood and other combustible materials for roofs. Keep gutters clear of debris such as leaves.
- Siding, decks and fences – noncombustible materials are recommended, adobe, stucco, block, brick, noncombustible siding. Keep the area below the deck clear of leaves and debris, screen off the area leaving openings no larger that one-half inch. Do not stack firewood on or below deck or right up against the home. Keep other flammable materials, paint, oil, gasoline in approved containers away from the home and any ignition source.

Potential Ignition Sources

- Chimneys and Fireplaces – Inspect you chimney and damper at least twice a year. Clean the chimney before first use and periodically thereafter, depending on frequency of use. Have the spark arrestor inspected and confirm that it meets the latest safety code. Keep chimneys and stovepipes clear of leaves, limbs and debris.
- Ashes – Never place hot ashes in a nonmetal container or dump them on the ground. Place in a metal container and either soaks with water or covers and allows cooling for several days before disposing.
- Propane Tanks – should be at least 30 ft. from any structure. Keep flammable at least 10 ft. from tank. Learn how to turn the tank off and on. In case of fire, turn off the gas before evacuating *if* time and safety allow.
- Fireworks – never allow children to play with or ignite fireworks or other incendiaries unattended.
- Smoking – Never throw lit cigarettes, cigars, etc. into a fuel source such as dead leaves, dry grass, debris, etc. Always use an ashtray and make sure to fully extinguish.

Defensible Space

- Zone 1 – this is the area closest to the structure. This well-irrigated area encircles the structure for at least 30 ft. on all sides, providing space for fire suppression equipment in the event of an emergency. Plantings should be limited to carefully space low flammability species. If possible maintain a mowed green lawn. Remove dead vegetation and leaves, exposing mineral soil is recommended in a 2 ft. wide perimeter along the foundation of the structure. Focus on fuel breaks such as concrete patios, walkways, rock gardens, and irrigated grass or garden within this zone. Gravel is recommended over wood chips or pine needles.
- Zone 2 – Low flammability plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.
- Zone 3 – Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation low.
- Trees – all trees within the safety zones should have lower limbs removed to a height of 6-10 ft. Remove all branches within 15 ft. of your chimney or overhanging part of your roof.
- Ladder fuels – are short shrubs or trees growing under eaves of the house or into the tree canopy that can “carry” fire up. The removal of ladder fuels within about 100 ft. of the structure will help limit the risk of crown fire around the structure.

PUBLIC OUTREACH AND EDUCATION

Community fire education is critical to assist in the prevention of fire. Most residents are unaware of potential fire hazards, which exist. Other residents are aware of the potential of fire, however, they are not does not know how to minimize these fire hazards.

Many of the residents in Luna County are in remote areas far from the limited fire fighting resources within the county. This makes it difficult for firefighting resources to respond to all fires in a timely manner.

The goal of any fire education program should be to create an awareness of the potential hazards and effects of fire, with hopes to gain community support with hazard reduction efforts. It is imperative to adequately communicate the advantages of any fire hazard reduction program and to explain the alternatives available. It is also helpful to explore possible funding sources to aid in the implementation of such programs.

More information can be obtained at www.firewise.org, or by visiting your local NM State Forestry Office in Socorro.

Access

Limited access may prevent firefighters from reaching homes in the event of a WUI fire.

- In the event of a WUI fire, leave your gate open
- Keep driveway uncluttered and at least 12 ft. wide
- Slope of driveway should be less than 10 percent
- Trim overhanging branches to allow at least 13.5 ft. of overhead clearance
- Ensure overhead line are at least 14 ft. above ground
- Consider a turn around within your property at least 45 ft. wide especially if you driveway is more than 300 ft. in length.
- Bridges must be designed to hold the weight of a fire engine

DURING THE FIRE

When Fire Threatens – Before an evacuation is called

- Do not jeopardize your life
- Park your car facing the direction of escape with windows rolled up
- Place all valuable you want to take with you in the vehicle
- Open your Gate
- Close all windows, doors, vents in house
- Disconnect automatic garage openers
- Leave exterior doors unlocked
- Close all interior doors
- Move furniture away from windows and glass doors
- Remove lightweight curtains
- Close heavy curtains, drapes, and blinds
- Leave a light on in each room
- Turn off propane tank
- Move firewood and flammable patio furniture away from house
- Connect garden hoses to outdoor faucets
- Place a ladder against the side of home opposite the direction of the approaching fire

When Evacuation Is Ordered

- Leave immediately
- Check out at designated location, if one is set up
- Do not try to enter an area that is being evacuated

AFTER THE FIRE

- Do not attempt to return until it has been deemed safe to do so
- Check for hazards, such as gas or water leaks and electrical shorts
- Turn off damaged utilities