LEA COUNTY
COMMUNITY WILDFIRE PROTECTION PLAN

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

STATE OF NEW MEXICO
COUNTY OF LEA
RESOLUTION NO. 08-DEC-047R

A RESOLUTION ADOPTING THE
"LEA COUNTY COMMUNITY WILDFIRE PROTECTION PLAN",
A COLLABORATIVE EFFORT BY THE LEA COUNTY CORE TEAM MEMBERS IN COMPLIANCE WITH THE REQUIREMENTS SET FORTH IN THE HEALTHY FOREST RESTORATION ACT OF 2003 AND THE 2007 COMMUNITY WILDFIRE PROTECTION PLAN GRANT PROGRAM FOR THE PURPOSE OF FUNDING, PLANNING AND IMPLEMENTING COMMUNITY PROTECTION AND WILDFIRE HAZARD MITIGATION ACTIVITIES.

WHERAS, the Healthy Forest Restoration Act of 2003 makes funds available through programs to conduct community protection and wildfire hazard mitigation activities on federal and non-federal lands to qualifying agencies and entities; and

WHERAS, a mandatory qualification defined in the Healthy Forest Restoration Act of 2003 to access funding programs is to develop a plan called a "Community Wildfire Protection Plan " (CWPP) through local collaboration that prioritizes fuels reduction and addresses treatment of structural ignitability; and

WHERAS, Lea County has solicited public input and formed a CWPP Core Team of interested parties to address the fire prevention, protection, and suppression needs of Lea County as well as collaboratively working with other agencies, entities and citizens within Lea County; and

WHERAS, this collaboratively developed CWPP meets the requirements and is supported by New Mexico Energy Minerals and Natural Resources Department, State Forestry Division, Bureau of Land Management, United State Forest Service and each of the Eight fire chiefs;

NOW THEREFORE be it resolved by the Governing Body of Lea County that the attached Community Wildfire Protection Plan be and hereby is adopted.

PASSED, APPROVED AND ADOPTED this 23rd day of December, 2008.

LEA COUNTY BOARD OF COMMISSIONERS

Gary M. Schubert, Chairman

Randall McCormick, Vice Chairman

Resolution No. 08-DEC-047R
Page 1 of 2

Michael Whitehead, Member

Hector Ramirez, Member

Gregory H. Fulfer, Member

ATTEST: Melinda Hughes
Lea County Clerk

By: _____
Andie Behgen, Deputy

SEAL

Resolution No. 08-DEC-047R
Page 2 of 2

COMMUNITY WILDFIRE PROTECTION PLAN

PURPOSE

TO ADDRESS THE WILDFIRE NEEDS OF LEA 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 the 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 Lea 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 those 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 1 ½ 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.

LEA COUNTY COMPLIANCE TO HFRA

This Lea County Wildfire Protection Plan has been prepared in accordance with the requirements and guidelines set forth by Congress in the ***Healthy Forest Restoration Act*** **of 2003,** the County of Lea, Department of Public Safety, land management agencies and entities represented below, have agreed to address the challenges of wildfire hazard risk reduction within Lea County. This Community Wildfire Protection Plan (CWPP) represents a collaborative effort to address; responder safety, hazard mitigation, structure protection, and community preparedness. The following steps were followed in the preparation of this CWPP:

Step One: Convene Decision makers
• Form a core team made up of representatives from the appropriate local governments, local fire authority, and state agency responsible for forest management.
Step Two: Involve Federal Agencies
• Identify and engage local representatives of the USFS and BLM.
• Contact and involve other land management agencies as appropriate.
Step Three: Engage Interested Parties
• Contact and encourage active involvement in plan development from a broad range of interested organizations and stakeholders.
Step Four: Establish a Community Base Map
• Work with partners to establish a baseline map of the community that defines the community's WUI and displays inhabited areas at risk, forested areas that contain critical human infrastructure, and forest areas at risk for large-scale fire disturbance.
Step Five: Develop a Community Risk Assessment
• Work with partners to develop a community risk assessment that considers fuel hazards; risk of wildfire occurrence; homes, businesses, and essential infrastructure at risk; other community values at risk; and local preparedness capability.
• Rate the level of risk for each factor and incorporate into the base map as appropriate.
Step Six: Establish Community Priorities and Recommendations
• Use the base map and community risk assessment to facilitate a collaborative community discussion that leads to the identification of local priorities for fuel treatment, reducing structural ignitability, and other issues of interest, such as improving fire response capability.
• Clearly indicate whether priority projects are directly related to protection of communities and essential infrastructure or to reducing wildfire risks to other community values.
Step Seven: Develop an Action Plan and Assessment Strategy
• Consider developing a detailed implementation strategy to accompany the CWPP, as well as a monitoring plan that will ensure its long-term success.
Step Eight: Finalize Community Wildfire Protection Plan
• Finalize the CWPP and communicate the results to community and key partners.

Preparing a Community Wildfire Protection Plan, A Handbook for Wildland-Urban Interface Communities, March 2004 edition

COLLABORATION

Lea County's Department of Public Safety began to earnestly solicit public input in July 2008 by hosting periodic public meetings throughout the county. Members of the fire service, County government, State Forestry, Bureau of Land Management and interested property owners came together to form a Core Team. The Core Team would meet to identify and define the Lea County Wildland Urban Interface, improve community preparedness, propose prescriptions for hazardous fuels treatments to reduce fire danger and improve responder safety. Other topics considered by the Core Team members were fire training requirements. The following agencies were invited to attend the core team meeting:

- Lea County Public Safety, Commission and Road Department
- Bureau of Land Management
- US Fish and Wildlife Service
- Soil and Water Conservation District
- NRCS
- EMNRD State Forestry Division, Capitan District
- NM-DOT
- NM Game and Fish
- City of Tatum
- City of Lovington
- City Of Hobbs
- City of Eunice
- City of Jal
- Maljamar VFD
- Knowles VFD
- Monument VFD
- NM Department of Public Safety
- NMSU Extension Office
- Private land owners via newspaper, county fair, and public postings

Table 1. Core Team meetings

October 3, 2008	Carlsbad, NM	**13 attended**
November 6, 2008	Hobbs, NM	**10 attended**
November, 17, 2008	Lovington, NM	**7 attended**
November 18, 2008	Hobbs, NM	**7 attended**
November 19, 2008	Lovington, NM	**7 attended**
November 21, 2008	Hobbs, NM	**75 attended**

- Oct 3, 2008 meeting to discuss fuel loading in Lea County and fuel treatment options
- November 6, 2008 meeting with Lea County ranchers to discuss the CWPP, obtain suggestions from the group and gain their support for the plan
- November 17-19, 2008 core team meeting to put together the community wide presentation

- November 21 community wide presentation to Lea County residents. Meeting was to present the CWPP plan to the public and to receive input from the community. Suggestions were red flags that could be posted on red flag days, Smokey bear signs on the major highways, public education, an emergency phone number to call to report suspicious activity or hazardous situations, more meetings, the assessment of treatment areas and to identify where people should go when there was an evacuation.

CWPP CORE TEAM MEMBERS

Table 2. Core Team Members

Representative	Agency
Lorenzo Velasquez	Lea County Emergency Management
Phil Jones	Tatum VFD
James Williams	Lovington FD
Bill Gideon	Maljamar VFD
Michael Singleton	Knowles VFD
Manny Gomez	Hobbs FD
Justin Solomon	Monument VFD
Ron Grogan	Eunice FD
Ronnie Walls	Jal FD
Ty Bryson	BLM
Lynn Lovelace	NMSF
Nick Marinovich	Lea County Road Department
Dana Shoemaker	Lea County Environmental Committee

INTRODUCTION TO LEA COUNTY

LEA COUNTY
NATURAL CONDITIONS

Lea County is located in the South-Eastern part of New Mexico, and consists of 4,393 square miles. Our county is situated at an average elevation of 4,000 feet above sea level. Lea County is located near an area called the "Caprock," by local residents and is one of the largest unfractured geologic plates in the continental United States. This area makes up part of a larger geological feature known as the Permian Basin. The majority of the land is relatively flat grasslands, and is classified as slopes that are mostly flat to nearly flat and generally slope to the southeast. Relief in the form of parallel ridges occurring at approximately 1-mile intervals is characteristic of this area. These ridges form the basin divides that, in turn, define the streams or draws. There are no well-defined paths but low lying areas show soil and vegetation changes. Lea County is characterized as being rural and is largely undeveloped.

The climate of Lea County, like most of New Mexico is dry, receiving an average annual rainfall of 15.5 inches, with warm summers and mild winters. Summer moves into a wet phase that delivers the most important rain of the year. Rather frequent showers and thunderstorms from June through September account for over half of the annual precipitation. Storm clouds that build up from the heat of the day overspread the sky on many afternoons, retarding a further rise in temperature. At the same time, relative humidity shows moderation, ranging from about 70 percent in the early morning to 30 percent in the mid-afternoon. Temperatures are quite warm on most summer days with readings of 100 degrees or higher occurring on 10 days in an average year.

Rainfall tapers off markedly in the fall with the decline in storm activity. This leaves usually agreeable conditions because of low wind movement and mostly clear skies. Frosty nights alternate with warm days. Relative humidity reaches rather low levels in autumn; but dryness is not as rigorous as in the spring.

In winter, subfreezing temperatures at night are tempered by considerable warming during the day. Zero or lower temperatures occur on only one day in an average winter. Subzero cold spells are of short duration. Winter is the season of least duration. However, ice storms have cause major power outages in the County over the last few decades.

Spring ushers in the driest season of the year with respect to relative humidity. Wind movement shows a large increase, especially from the plateau areas of the west. Most of the 60 days per year with winds in excess of 25 mph or more occur from February to May. Destructive storms occasionally strike the County. Rain is most erratic in spring, ranging from none of consequence to excessive amounts in others.

POPULATION

According to the 2000 United States Census, Lea County's population was 55,511. Due to the oil "boom or bust" phenomenon, the population of Lea County has had a roller coaster effect. In the mid 1980's it is estimated that the population of Lea County was approximately 67,000. In recent years, the population of Lea County has remained relatively stable, primarily due to attempts to broaden and diversify the economic base of the County. With the development of Zia Park and Black Gold Casino north of Hobbs and the construction of Louisiana Energy Services Uranium Enrichment Plant east of Eunice, our county has experienced a significant increase in our transient population. The following table provides a representation of the population centers in Lea County.

Estimates as of July 1, 2007

Location	Population	Percentage
Hobbs	29,603	52%
Lovington	9,793	17%
Eunice	2,654	5%
Jal	2,062	4%
Tatum	722	1%
County*	12,478	21%

*County area includes Knowles, Monument, Maljamar, and areas throughout the county not tied to a municipality.

WATER RESOURCES

Lea County is barren of any naturally occurring water sources, such as lakes, rivers, or streams. Water utilized for municipal consumption, agricultural irrigation, ranching, and firefighting is draw from the Ogallala Aquifer. The Ogallala Formation in Texas and Southeastern New Mexico is the southernmost extension of the major water bearing unit underlying the physiographic province of North America. This formation begins in southern South Dakota, with the western edges found in the east sides of Wyoming, Colorado, and New Mexico. The eastern edges run through Nebraska, Kansas, Oklahoma and Texas. The average depth to water throughout Lea County is 140 feet.

VEGETATION

For the purposes of this CWPP vegetation will be referred to a fuel types. There is several fuel types typically found in Southeastern New Mexico Lea County, they include:

- Grassland – the most abundant fuel type found in Lea County. Within Lea County, unaltered grassland is short-grass prairie type. Although farming and ranching have reduced this vegetation type, it still dominates the landscape. The dominant grasses are blue grama and buffalo grass.
- Shrubs – Although Lea County is dominated by grassland, many shrubs species do thrive. Examples of shrub types include turpentine brush, broom snakeweed, and creosote bush.
- Broad Leaf Trees – Though sparse through the majority of the county, Lea County does have several native trees. Examples include desert willows, elms, and trees belonging to the mesquite family. Other trees not native to our area do tolerate the weather and soil conditions, and are often found within municipalities and homes and are used for landscaping purposes.

- Wildflowers – Many species of wildflowers are found throughout the county. These include asters, buttercups, mallows, mustard, and primrose.
- Agaves and Cacti – In the low lying and open range land of Lea County, many yucca and species of cacti are native to the area.

LAND STATUS

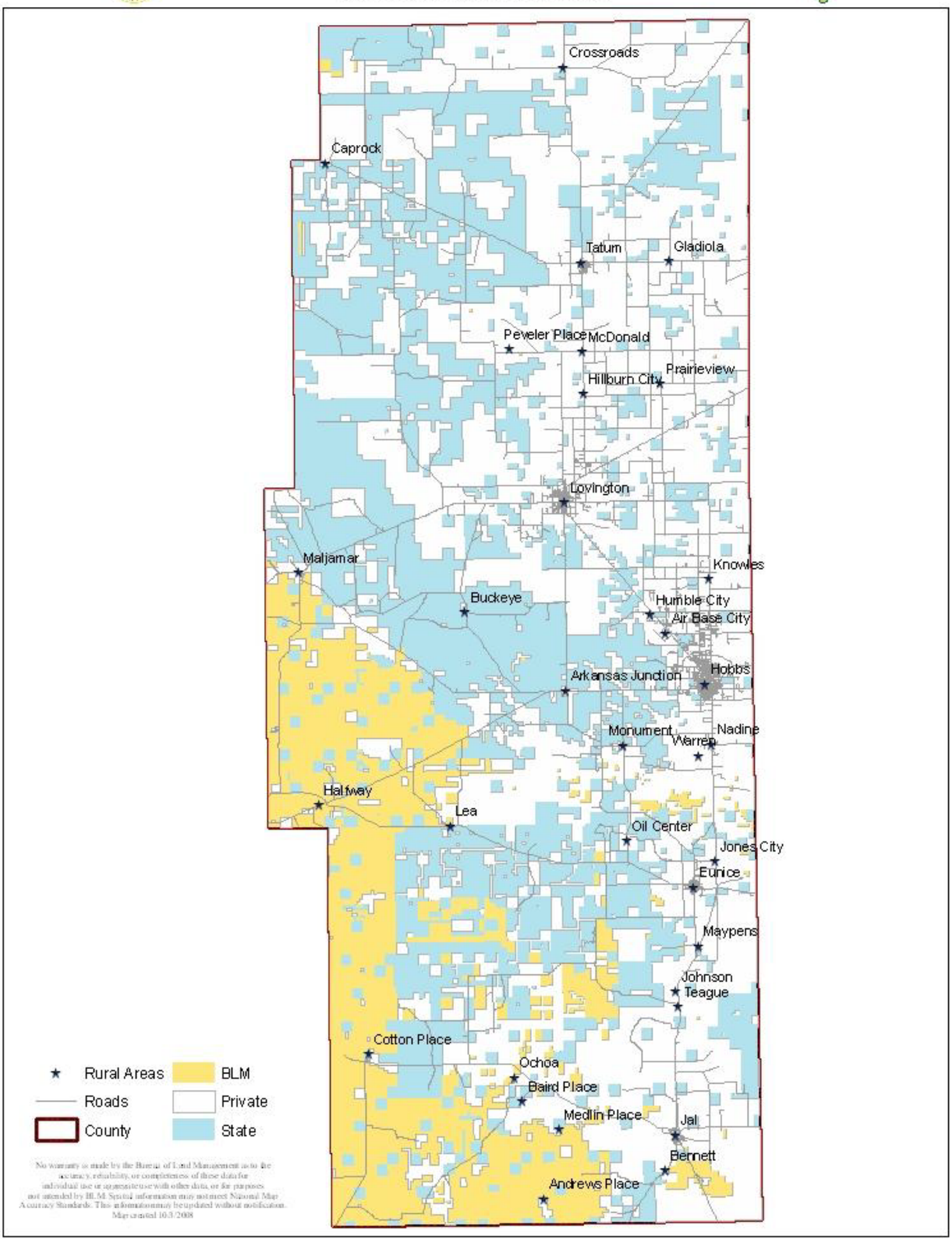
Of Lea County's total 2,811,722 acres, publicly managed lands consist of:

State Land Office:	940,175 acres
Bureau of Land Management	422,657 acres
TOTAL PUBLIC LANDS	1,362,832 acres

(Source: Bureau of Land Management Pecos District Office)

Publicly managed lands occupy 48.5 percent of the county. The remaining 1,448,890 acres of private land constitute 51.5 percent of the total county area. State lands are scattered throughout the county with the majority of BLM lands in the southwestern part of the county. They are surrounded by private land outside the Wildland Urban Interface. The Carlsbad Field Office of the BLM has implemented brush control projects to reduce mesquite and other brush species. The wildfire risk on BLM lands is moderate.

Lea County Land Ownership



FIRE HISTORY

New Mexico State Forestry and Lea County have joint jurisdiction for fire suppression on state and private lands within Lea County. Wildland fires should be reported to New Mexico State Forestry, Capitan District within 24 hours of the incident. From 1998 to 2008, 669 Wildland fires were reported to New Mexico State Forestry in Lea County. Over 43% of the fires were reported as miscellaneous caused. Human caused ignitions, including smoking, debris burning, equipment use, incendiary and children accounted for 19.6% of the fires. The following tables break down the fire statistics by cause, fuel type and size.

Table 3. Lea County 10 years Wildland Fire History

Cause of Fire	# of fires	percent
Lightning	67	10 %
Miscellaneous	293	43.8 %
Smoking	36	5.4 %
Railroad	9	1.4 %
Debris Burning	33	4.9 %
Equipment Use	123	18.4 %
Unknown	5	.7 %
Non-designated	3	.5 %
Incendiary	27	4 %
Children	12	1.8 %
Power line	56	8.4 %
Flares/oil/gas	2	.3 %
Hot ashes	1	.1 %
Spontaneous Combustion	2	.3 %
TOTAL	669	100 %

As reported to NMSF – Capitan District Source: FMS Fire Report
September 19, 1998 through June 6, 2008

Table 4. Lea County Wildland Fires by Fuel Type

Fuel Type	# of fires	percent
Non Forest Watershed	669	100%
TOTAL	669	100 %

As reported to NMSF – Capitan District Source: FMS Fire Report
September 19, 1998 through June 6, 2008

Table 5. Lea County fires by size

Size Class	# of Fires	Percent
0.25 acres or less	111	16.6 %
.26 – 9.99 acres	301	44.9 %
10 – 99.99 acres	130	19.5 %
100 – 299.99 acres	37	5.6 %
300 – 999.99 acres	44	6.6 %
1000 – 4999.99 acres	27	4 %
5000 acres or more	19	2.8 %
TOTAL	669	100 %

As reported to NMSF – Capitan District Source: FMS Fire Report
September 19, 1998 through June 6, 2008

There were 27 fires over 1000 acres reported from 1998 to 2008. Lea County is frequently subject to high wind events during the months of April through July. Two Hundred and Ninety

Three were reported as miscellaneous ignitions. The railroad caused nine with smoking listing 36 and debris burning 33. Sixty Two percent of the reported fires in Lea County were less than nine acres in size.

Lea County is frequently subject to high wind events during the months of April through July. Fires occurring during those wind events generally grow large quickly. From 1998 to 2008 there were forty-six fires that burned over one thousand acres. Most of the fires are caused by miscellaneous causes (those that don't fit in one of the other categories), equipment use (which includes vehicles), lightning, power lines, smoking and debris burning. A little less than sixty-two percent of the fires reported in Lea County were less than ten acres with almost seven percent of the fires over one thousand acres.

FIRE WEATHER

Weather plays a key role in wildfire. Weather is often responsible for ignitions. The size that a wildfire becomes is dependent upon a number of factors such as relative humidity, wind and temperature, and the moisture content of fuels. The following charts illustrate the climate trends in humidity, precipitation, temperature and wind speeds experienced in Lea County, NM.

Table 6. Annual Humidity Trends in Lea County

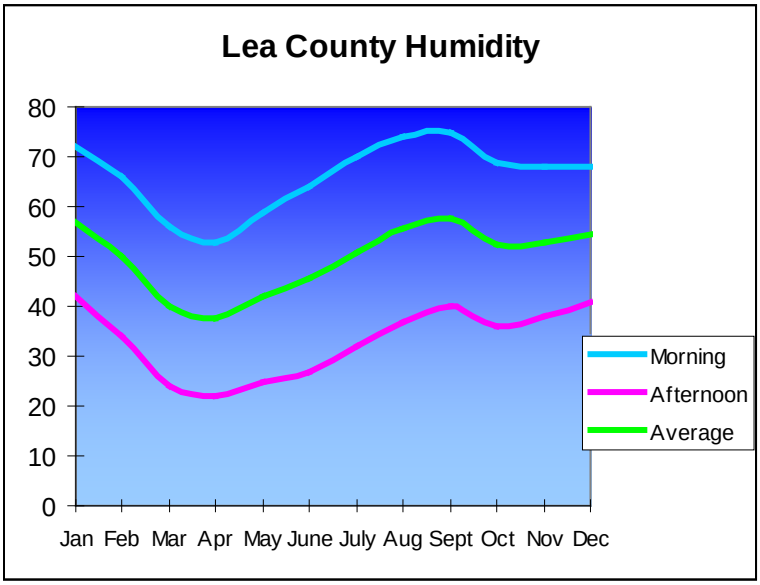


Table 7. Annual Average Precipitation in Lea County

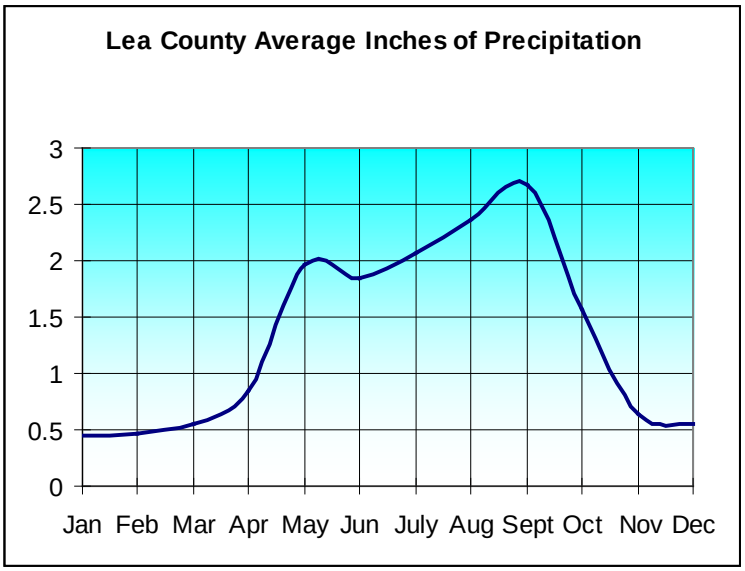


Table 8 Annual Average Temperature in Lea County

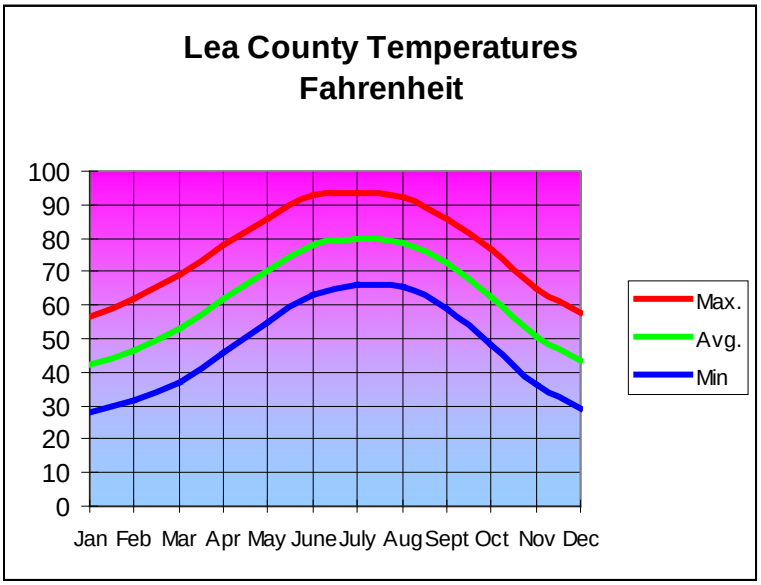
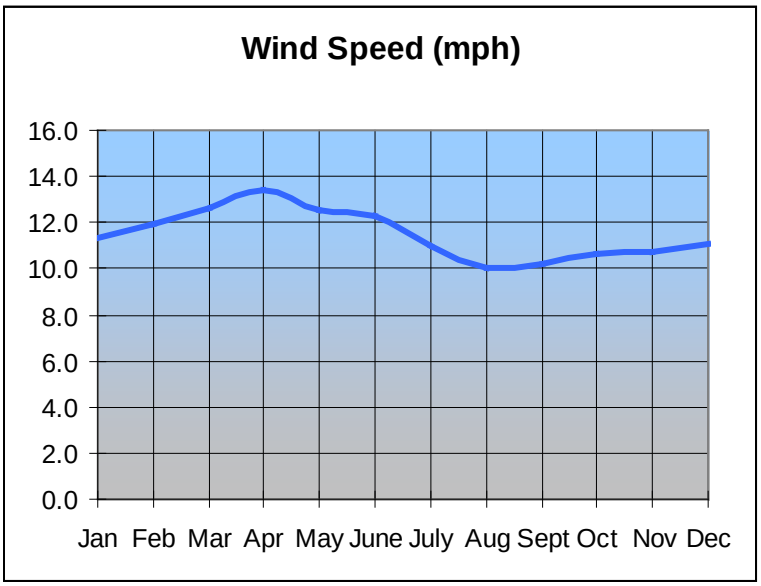


Table 9 Annual Average Wind Speeds in Lea County



WILDFIRE SCIENCE

TYPES OF WILDFIRE

In order to change potential wildfire conditions and impact the associated fuels, it is necessary to understand the various types of wildfire and the conditions in which they exist.

Fire scientists and managers recognize three general types of wild land fire, depending on the fuel stratum in which the fire is burning. The three wild land fire types are ground fires, surface fires and crown fires.

- A ground fire is one that burns in the ground fuels such as duff, organic soils, roots, rotten buried logs, and so forth. Ground fuels are characterized by higher bulk density than surface and canopy fuels. Ground fires burn with very low spread rates, but are sustainable at relatively high moisture contents. Fuel consumption through ground fire can be great, causing significant injury to trees and shrubs. Although ground fuels can be ignited directly, they are most commonly ignited by a passing surface fire.
- A surface fire is one that burns in the surface fuel layer, which lies immediately above the ground fuels but below the canopy, or aerial fuels. Surface fuels consist of needles, leaves, grass, and dead and down branch wood and logs, shrubs, low brush, and short trees. Surface fire behavior varies widely depending on the nature of the surface fuel complex.
- A crown fire is one that burns in the elevated canopy fuels. Canopy fuels normally consumed in crown fires consists of the live and dead foliage, lichen, and fine live and dead branch wood found in a forest canopy. They have higher moisture content and lower bulk density than surface fuels.

FUELBEDS

Fire behavior and severity depend on the properties of the various fuels (live and dead vegetation and detritus) strata and the continuity of those fuel strata horizontally and vertically. The fire hazard for any particular forest stand or landscape can be characterized by the potential for the fuels to cause specific types of fire behavior and effects. Understanding the

structure of fuel beds and their role in the initiation and propagation of fire is the key to developing effective fuel management strategies.

Fuel beds are classified in six strata:

- tree canopy
- shrubs/small tree
- low vegetation
- woody fuels
- moss, lichens, and litter
- Ground fuels (duff).

Each of these strata can be divided into separate categories based on physiognomic characteristics and relative abundance. Modification of any fuel stratum has implications for fire behavior, fire suppression, and fire severity.

SURFACE FUELS

Surface fuels consist of grasses, shrubs, litter, and woody material lying on, or in contact with the ground surface, crown fuels as those suspended above the ground in trees or vegetation (vines, mosses, needles, branches, and so forth). High surface fire intensity usually increases the likelihood for igniting over story canopy fuels, but surface fuel types with longer residence times can contribute to drying aerial fuels in a forest canopy, which also leads to torching (when a tree's or group of trees' foliage ignites carrying the fire into the canopy.

CROWN FUELS

Crown fuels are the biomass available for crown fire, which can be ignited from a surface fire via the understory shrubs and trees, or from crown to crown. The shrub/small tree stratum is also involved in crown fires by increasing surface fire line intensity and serving as "ladder fuels" that provide continuity from the surface fuels to canopy fuels, thereby facilitating crown fires. These essentially bridge the vertical gap between surface and crown strata. The size of this gap is critical to ignition of crown fire from a surface fire below.

Aerial fuels separated from surface fuels by large gaps are more difficult to ignite because of the distance above the surface fire, thus requiring higher intensity surface fires, surface fires of longer duration that dry the canopy before ignition, or mass ignition from spotting over a wide area. Once ignited, high density canopy fuels are more likely to result in a spreading crown fire (active crown fire) than low density canopies.[3] The nature of crown fires--- intense, fast moving, and destructive---suggests that potential for damage is great whenever a crown fire occurs. Assessing the hazard posed by crown fires is therefore a matter of assessing the potential for their occurrence—of identifying the physical situations that lead to crown fire occurrence.
The most effective strategy for reducing crown fire occurrence and severity is to:

- reduce surface fuels
- increase height to live crown
- reduce canopy bulk density
- Reduce continuity of the forest canopy

LEA 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 Lea County Core Team defined the Lea County Wildland Urban Interface (WUI) by placing a WUI boundary around each of the communities in Lea County as listed in Table 12.

Table 10. Community Wildfire Risk Assessments

WUI Community	WUI Boundary	Community Risk Rating
Tatum	1/2 mile North, South and West and 1 mile East from town center	H
Lovington	1 mile each direction from city center	H
Maljamar	1/2 mile each direction from fire department	H
Knowles	1/2 mile each direction from fire department	H
Hobbs	2 miles East, North and South and 3 miles West from city center	H
Monument	1/2 mile each direction from fire department	H
Eunice	1 mile each direction from the town center	H
Jal	½ mile South and West and 1 mile East and North from town center	H

Each community was assessed using the Community Wildfire Protection Plan handbook. The core team rated each community on:

- Fuel Hazards
- Risk of Wildfire Occurrence
- Homes, Businesses and Essential Infrastructure at Risk
- Firefighter Capacity

The points correspond to a fire hazard rating of, low, moderate, or high. 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.

LEA COUNTY WUIs

- **TATUM** has one volunteer fire department within the community and readily available draft sites and hydrants. There are scattered Ranch homes along the district where grazed pasture grass, mesquite and open ranges are found. The Core Team recommended the reduction of fuels along the city boundaries within the community.

- **LOVINGTON** has good road access, a fire station within the community and draft sites or hydrants. The hazard is found in the large tracts of grazed pasture land around Ranch homes on the outer edges of the community. The Core Team recommended creating fuel breaks around the outer edges of the community.

- **MALJAMAR** has good road access, heavy fuels, 5 hydrants and draft sites and hill type topography. There is one volunteer fire station within the community. Fire response times are therefore higher.

- **KNOWLES** has no hydrants throughout the community and one fire station in the community. There are large tracts of grazed pasture along with small communities within the district. This increases the wildfire risk to the community

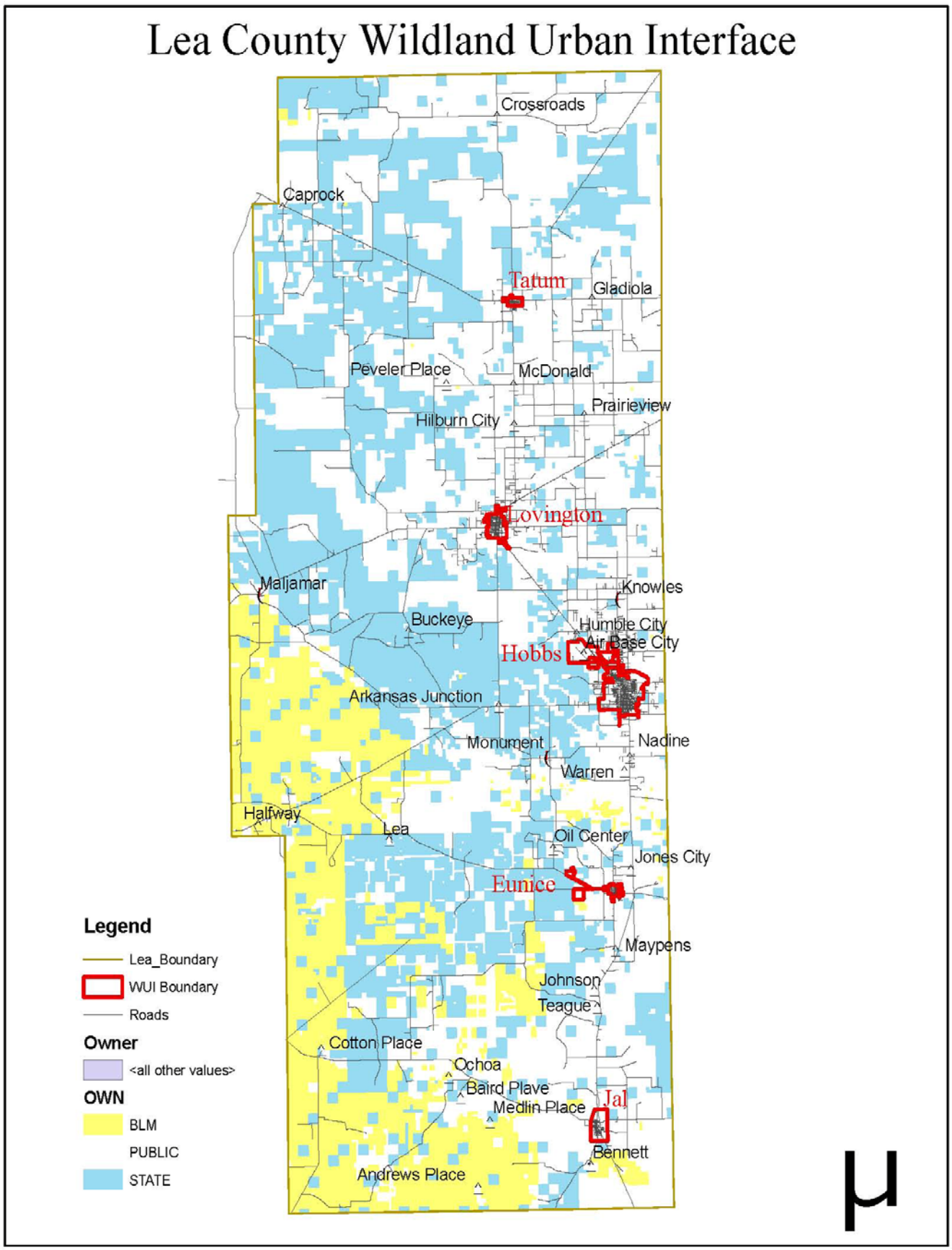
- **HOBBS** has good road access with three fire stations in the midst of the community, and draft sites. The topography is flat and the fuels are medium to heavy with some defensible space around the structures. The Core Team recommended building with noncombustible materials, creating defensible space and reducing fuel loads throughout the community.

- **MONUMENT** has lots that are generally larger than one acre, street signs throughout the community and a very moderate slope. There are two primary roads through the community that is narrow; there are medium fuels, no defensible space treatments around structures, one fire department within the community, new hydrants. The Core Team recommended that the property owners of Monument create defensible space.

- **EUNICE** has more than one primary road into and out of the community that are wide and smooth with street signs. The fuels in the community are light to medium and the topography generally mild. There are very little defensible space treatments around homes, one fire station in the community. The Core Team recommended that Eunice create defensible space.

- **JAL** has draft sites within the community or very close by. The topography is moderate. There are two primary roads into and out of the community. The fuels are medium with no defensible space treatments around residences. There is one fire station in the community. The Core Team recommended that the property owners of Jal create defensible space.

Lea County Wildland Urban Interface



CRITICAL INFRASTRUCTURE AT RISK

The Lea County Core Team worked with partners to establish a baseline map of the community that defines the community's WUI and displays inhabited areas at risk, the Lea County WUI map. The Team also created the Lea County Infrastructure Map which identifies communication sites within Lea County. Other sites that contain critical human infrastructure at risk of wildfire include:

- Cell towers
- Repeater sites
- Electrical transmission sites
- Gas plant lines
- CO_2 pipeline
- Large propane storage tanks

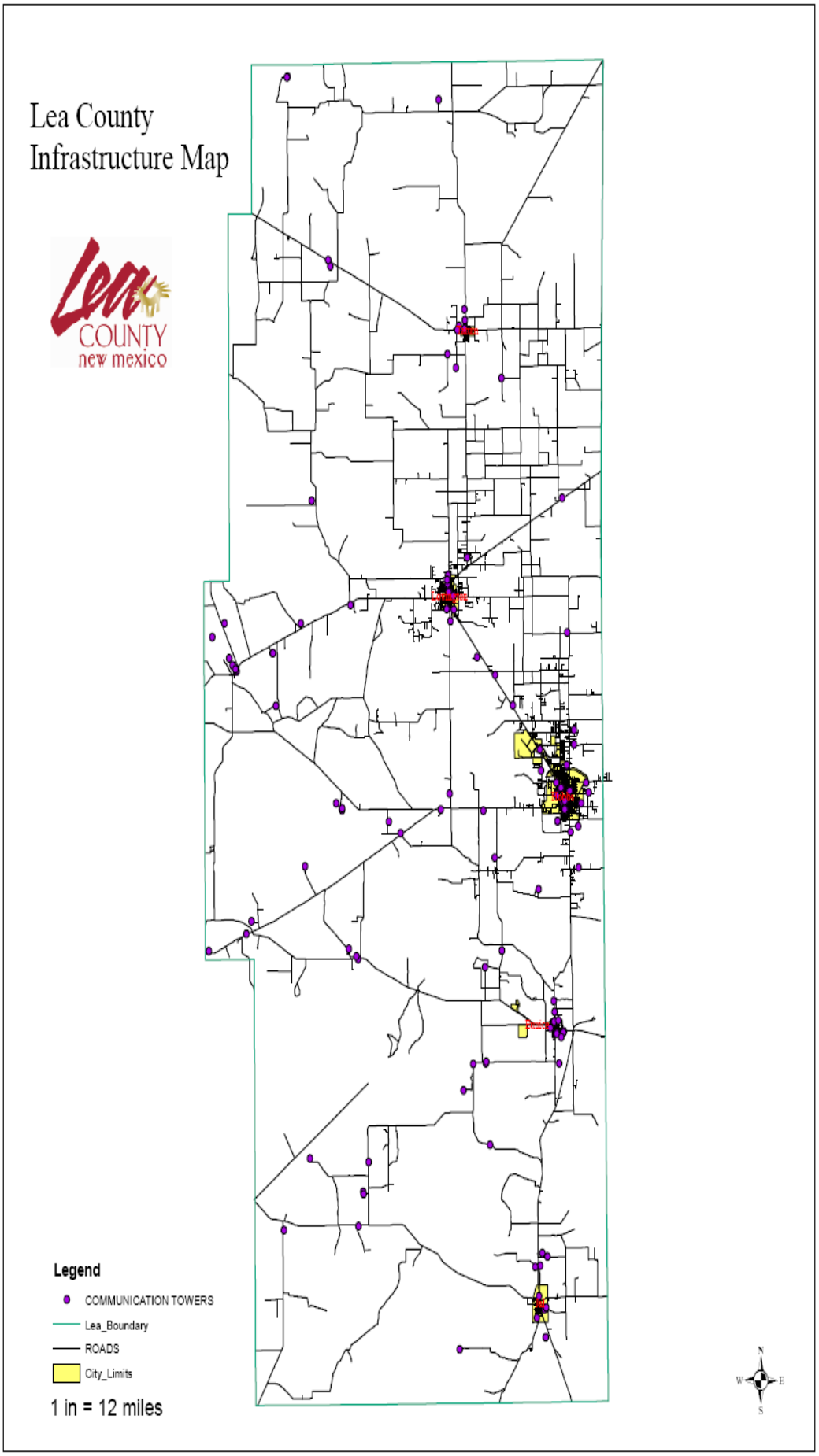
CROSS-COUNTRY PIPELINES

Multiple pipelines pass through Lea County that carries abundant quantities of refined and unrefined petroleum products. There is a right-of-way of 30 ft. on either side of the pipelines. If there is to be construction where large numbers of people will be concentrated (housing, for example), the minimum distance away from the pipeline for safety reasons should be 200 to 300 ft. on either side from the center of the pipeline. A standard often used is 220 ft, according to a spokesman for the State of New Mexico. With petroleum pipelines, a firebreak in the form of a berm or wall should be constructed for protection in case of fire.

Listed are several pipeline companies that have pipeline running through Lea County.

- Natural Gas- DCP Midstream, El Paso Natural Gas, Enterprise Field Services, Enterprise Products, Frontier Field Services, Markwest Pinnacle, Kinder Morgan Inc, Northern Natural Gas and Transwestern Pipeline.
- Crude Oil- Teppco Crude Pipeline, Plains Pipeline, Conoco Phillips Pipeline, Giant Pipeline Company, Holly Energy Partners and Centurian Pipeline.
- Carbon Dioxide (CO2)- Kinder Morgan CO2 Comp and Trinity CO2
- Hydrogen Sulfide (H2S)- Targa Midstream
- Natural Gas Liquids- Teppco Chapparal, Conoco Phillips Pipeline Comp. and Enterprise Products Operating.
- Liquid Petroleum- Southern Union Gas Services and Chevron Pipeline Company.

Holly Energy Partners Operating L.P. handles multiple petroleum products in pipelines inside Lea County- Crude Oil, Diesel Fuel, Gasoline, ISO Butane, Jet Fuel, Kerosene and Naphtha.


Lea County
Infrastructure Map
Lea
COUNTY
new mexico
Legend
COMMUNICATION TOWERS
Lea_Boundary
ROADS
City_Limits
1 in = 12 miles
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FIRE RESPONSE PROCEDURES

Within Lea County: (4393 SQ MILES) there are Eight Fire Districts:

1. The Tatum Fire District in the Northern portion of Lea County and within the City of Tatum and areas around Crossroads and Caprock. They cover 1209 square miles.

2. The Lovington Fire District covers the upper central Lea county, and within the City of Lovington and areas around McDonald, Prairieview and Buckeye. They cover 484 square miles.

3. The Knowles Fire District is responsible for the mid Eastern portion of Lea County between Hobbs and Lovington to include the community around Knowles. They cover 194 square miles.

4. The Maljamar Fire District which is responsible for the mid Western portion of Lea County to include the community around Maljamar. They cover 546 square miles.

5. The Hobbs Fire District is responsible for the lower mid Eastern portion of Lea County below Knowles Fire District to include the City of Hobbs and areas around Nadine and Humble City communities. They cover 167 square miles.

6. The Monument Fire District covers the lower mid portion of Lea County between Hobbs and Maljamar Fire Districts to include the community of Monument. They cover 364 square miles.

7. The Eunice Fire District covers a lower mid portion of Lea County between Monument and Jal Fire Districts to include the City Of Eunice and community around Oil center. They cover 659 square miles.

8. The Jal Fire District which is responsible for Southern portion of Lea County and within the City of Jal to include the community around Bennett. They cover 780 square miles. Jal also has a verbal mutual aid agreement with Kermit Texas and Andrews Texas

To report a fire, residents may call 911 from any phone within Lea County. When a 911 call is placed from a land line in Lea County, it is directed to the Lea County Sheriff's Department Dispatch Center in Lovington. When a 911 call is placed within the City of Hobbs and a five mile radius, it is directed to the Hobbs Police Department Dispatch Center. If you call from a cell phone you will be directed to the nearest 911 center.

Dispatch will page out the appropriate fire district via communications. Each Fire member has a pager or two way radio. Departments are paged out on their appropriate frequencies. There is the Lea County Fire Channel which after all mobile radios are installed will be the command channel for fire within the county, when other agencies such as NM State Forestry respond the State Forestry frequencies will be used.

Table 11. Lea County Fire Frequencies

Agency	Receive	Transmit	Tone
KFD Repeater (priority)	154.415	150.790	127.3
Knowles Fire Dept. Simplex	154.415	154.415	127.3
N.M. State Fire	154.310	154.310	127.3
Hobbs Fire Dept. Alert	154.130	154.445	100.0
Lovington Fire Dept. Repeater	154.220	153.770	141.3
Maljamar Fire Dept.	153.950	154.430	141.3
Monument Fire Dept.	154.355	153.890	141.3
Eunice Fire Dept.	154.205	159.000	127.3
Tatum Fire Dept.	154.010	154.010	141.3
Jal Fire Dept. (repeater)	153.785	155.760	127.3
Jal Fire Dept.	153.785	153.785	127.3
Hobbs Fire Department Ch.2	154.265	154.265	100.0

- An Incident Command Mobile unit will be available for set up during fires to relay and control radio traffic and requests.
- Mutual Aid Agreements are formalized between all Lea County Fire Departments.
- Agreements with Eddy, Chaves and Roosevelt Counties are also being formalized with written agreements.
- Resources from the cities of Tatum, Lovington, Hobbs, Eunice and Jal may also be requested.
- NM State Forestry, Capitan District Office may also provide assistance for wildfire suppression.
- Additional resources from other agencies may be requested for wildland fire suppression through NM State Forestry, Capitan District.

After hours the Capitan Duty Pager number can be called 505-939-4160, or the emergency radio number in Santa Fe 505-827-8080.

ACTION PLAN

The process of developing this CWPP helped Lea County clarify and redefine its priorities for the protection of life, property, and critical infrastructure in the Wildland–Urban Interface. It also led community members through valuable discussions regarding management options and implications for the surrounding human infrastructure.

Table 12. Proposed Wildfire Hazard Mitigation for Lea County WUI's

Wildland-Urban Interface and Infrastructure at Risk	Proposed Fuel Treatment, reduction of wildfire danger and improved FF response	Responsible Party
Lea County Communities	• 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 burn • Increased water storage capacity • Maintain road along railways • Improved Radio Communications • Increased Training for firefighters	• Lea County Fire Departments • Property Owners • Property Owners • Lea County Fire Departments • Lea County Fire Departments and Property Owners • Property Owners • Property Owners • Lea County Fire Departments • BNSF Railroad • Lea Co Fire Departments/ Lea County • Lea Co Fire Departments/NMSF
Cell Towers & Repeater Sites	• Fuels reduction by mowing, grazing	• Property Owners
Electrical transmission sites	• Fuels reduction by mowing, grazing	• Property Owners
Wind Towers	• Fuels reduction by mowing, grazing	• Property Owners
Gas Plant Line	• Fuels reduction by mowing, grazing	• Property Owners
Propane Storage Tanks	• Fuels reduction by mowing, grazing	• Property Owners; Advanced Energy, Conway Gas, Pendleton Oil and Gas
Highways	• Regular Fuels reduction by mowing	• NM-DOT

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, understory 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.

MOWING

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

SEEDING

An added fuel mitigation option is to change the type of vegetation along roadways, fence lines and under power lines. These areas could be seeded with seasonal vegetation that would create a green fire break.

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 Lea 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 land 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 that 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

FUELS REDUCTION WITHIN LEA COUNTY

DEFENSIBLE SPACE

One of the priorities for Lea 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

These factors all affect your design.

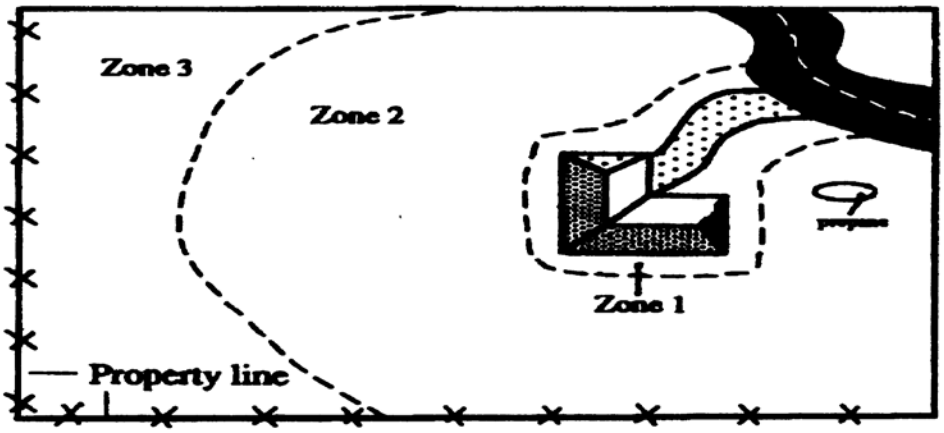

Figure 1: Forested property showing the three fire-defensible zones around a home or other structure.

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.

FUEL BREAKS AROUND WUI BOUNDARIES

Lea County will also work 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.

In the past the Fire Department would use a dozer to scrape "fuel breaks" around developments in areas of overgrown graze land. After a concern about violating the "anti-donation" clause the practice was terminated. Clarification needs to be made and if allowable, the practice should be continued.

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

Large 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 2 of this CWPP.

FIRE CHIEF'S MEETINGS

The County Fire Departments in conjunction with Lea County Emergency Management meet once a month and work on County wide projects together. One of the responsibilities of the Fire Chief's Meetings will be to monitor the projects identified in this plan and identify future projects. The Association will also be responsible for public outreach and education and updating this CWPP. The county wide fire departments will promote fire wise projects and activities throughout Lea County.

FUEL REDUCTION PRIORITIES

It is goal of this plan to reduce the likelihood and spread of wildfires in Lea County. The County of Lea is in an area of high probability for large and catastrophic wildland fire. A wildland fire in our county would result in major wildland loss, property loss in the form of structures, damage to critical infrastructure, and loss of life or injury to citizens and emergency responders.

Primary Focus Areas

- Hobbs
- Knowles
- Lovington
- Monument

These communities will be the first area for fuel reduction projects in Lea County.

Fuel mitigation includes mowing and control burning to reduce fuel loads on the side of State Highways and County Roads. Another critical aspect of this plan is public education, which will include the public, businesses, utility companies, railroads, and government agencies.

Hobbs area highways where mitigation projects will take place are State Road 483 from US 62/180 North to Lovington, from the intersection of state highway 483 and US 62/180 East to Hobbs, state highway 18 from Hobbs to Lovington and state highway 238 from state highway 529 to US 82. Mitigation projects will take place on the other county and state roads within in a 10 mile radius of Hobbs.

Knowles area highways where mitigation projects will take place are Catching road from state highway 18 to Stiles road and county roads on the West side of the Knowles that are within 6 miles of the fire department.

Lovington area highways where mitigation projects will take place are state road 483 from Lovington south to US 62/180, state highway 18 from Lovington to Hobbs, US 82 from Lovington to the intersection of state highway 238. Mitigation projects will take place on the other county and state roads within in a 10 mile radius of Lovington.

Monument area highways where mitigation projects will take place are Maddox road from US 62/180 to Tuffy Cooper road and state highway 8 from US 62/180 to Oil Center.

Secondary Focus Areas

- Tatum
- Eunice

- Jal
- Maljamar

The strategies incorporated to prepare and mitigate the spread of wildland fires listed in the Primary Focus Area will be incorporated for these communities as well.

Tatum area highways where mitigation projects will take place are US 380 from Tatum to Caprock and Four Lakes road from McDonald road North to the end of the road past US 380.

Eunice area highways where mitigation projects will take place are Weaver road from state road 176 to Delaware Basin road and American Legion road North from Delaware Basin road to Hill road.

Jal area highways where mitigation projects will take place are state road 18 South of Jal to the Texas state line, state road 205 from Jal South to the Texas state line and state road 128 from Jal West to Battle Axe road. Due to the fact that there are no North South roads on the West side of Jal fuel breaks on private land need to be pursued.

Maljamar area highways where mitigation projects will take place are state highways, county roads and US 82 within a 5 mile radius on the East, North and South sides of Maljamar and to the county line on the West side of Maljamar.

Fuel reduction in Lea County is paramount along wild land urban interface areas which have high potential for conflagration. The goal is the removal of dead vegetation along the public ways within the Lea County. A recommendation to land owners is to remove dead vegetation from the perimeters of their properties.

FUEL REDUCTION PROJECT NEEDS

The following has been identified by the core team as project needs to assist with fuel reduction and public outreach in Lea County.

Project one: This project is to cut and burn the right-of-ways along county roads to establish a fire break. 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.
- Assistance in purchasing fuel to operate this equipment
- Purchase PPE for fire departments to wear during control burns

Project two: This project is to be able to make the public aware of high fire danger periods within Lea County.

- Purchase 25 fire danger signs to be placed along the roadways in Lea 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 three: Fire departments along with County Emergency Manager will assist with public education and awareness throughout Lea County. This will include brochures, flyers, educational handbooks and videos/ DVD's.

- Purchase educational materials
- Purchase equipment to use for educational programs

Project four: This project is to establish a wildland coordinator for Lea County. The position will be to work with the county commission and the fire departments to determine wildland urban interface threats and mitigations. Duties of the coordinator will include:

- create unification along the volunteer fire departments, federal and state agencies
- write grants to bring additional fire program money into Lea County,
- initiate fire education and public outreach programs
- coordinate fuel mitigation projects with the municipalities, state and federal agencies within Lea County
- encourage landowners to incorporate defensible space.

Project five: The fifth project is to increase firefighting capacity within Lea County.

- Purchase two class four 4X4 wildland engines, with 1250 gallon tank capacity, 500 GPM pump on a two ton chassis. These two trucks will be used to replace two wildland engines currently being used by Knowles and Monument that are no longer fully operational for wildland fires.
- Purchase additional wildland fire equipment needed to suppress wildland fires within Lea County.

TREATMENT OF STRUCTURAL IGNITABILITY

There is an increased interest to build subdivisions in undeveloped areas throughout Lea County. As such, the Lea County Public Safety 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.

For homes and communities that are already established the suggestions made in the Action Plan, Proposed Wildfire Hazard Mitigation for Lea County WUI's, address reducing structural ignitability.

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.
- 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. Clearance of trees and branches is 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

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 Lea 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 County Commission to improve firefighter safety,
- create unification among the volunteer fire departments,
- write grants to bring additional fire program money into Lea County,
- initiate fire education and public outreach programs,
- Coordinate efforts to bring about fuel breaks and encourage landowners to incorporate defensible space.

This recommendation should be a priority for Lea County. A professional, experienced Wildland Coordinator could be a tremendous asset to Lea County and the Fire Service within the County.

TRAINING

Every firefighter in Lea 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 firefighting training courses that Wildland firefighters should be encouraged to take 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 Capitan District office of 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 Alamogordo Interagency Dispatch Center Website. http://www.fs.fed.us/r3/lincoln/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.

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 personnel protective equipment, (PPE), tools and apparatus. Wildland fire clothing, 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.

Other equipment needs include; a headlamp, goggles, water bottles, MREs, water, first aid kits, maps, compasses, Global Positioning Systems, sleeping bags, hand held radios for every firefighter, 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 a Type II or III Water Tender.

Each department should have at least one, preferably two Type VI Wildland fire engines. 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 bolt cutter.

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.

FIRE DEPARTMENT FUNDING GUIDELINES

There is a need to change the way funding is allocated by the New Mexico State Fire Marshal's Office. Currently fire funds are based on ISO rating which are based strictly on structural firefighting capabilities. Fire Departments in rural areas, like Lea 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. Each department needs to be able to assess the needs of their department and purchase equipment according to their individual needs.

FIRE DEPARTMENT NEEDS

Table 13. Fire Department Wildland Equipment Needs Assessment

Fire Dept.	Current Equipment	Additional Wildland Equipment Needs	Training Needs
Hobbs FD	• Grass 1 – 2006 Type 3 • Grass 2 – 1994 Type 3 • Grass 3 - 2006 Type 3 • Grass 4 – 2006 Type 3 • Tanker 1 – 2003 Type 1 • Engine 1 – 1997 Type 1 • Engine 2 – 1997 Type 1 • Engine 3 – 1991 Type 1 • Engine 4 – 1993 Type 1 • Ladder 1 – 2008 Type 1 • Ladder 2 – 2007 Type 1 • Rescue 2 – 2008 Type 3 • Truck 1 – 1983 Type 1	• Wildland approved pants/coveralls • Drip Torches • Wild land approved head gear • Wild land approved gloves • Wild land approved boots • Backpack pumps • Fire shelters • Water pumpkins (water supply containers) • Additional handhelds • Weather kits/manual electronic weather stations. • Type 3- WUI pump and roll engine.	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher
Lovington FD	• Engine 1 – 1986 Type I Engine • Engine 2 – 2007 Type I Engine • Engine 8 – 1994 Type I Engine • Grass 5 – 1994 Type III Engine • Grass 12 – 2001 Type III Engine • Tender 1 – Type II Water Tender(unit is on order 9/29/08)	• New Type III Engine • New Type VI Engine • Additional Type II Water Tender • 21 Fire Shelters • 4 Training Shelters • 12 EDACS Handhelds	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher
Eunice FD	• 1988 Type I Water Tender • Type II Water Tender (on order) • 1980 Type I engine w/pump & roll • 1999 Type I engine w/o pump & roll • 2004 Type I engine w/o pump & roll • 2007 Type IV Engine • 1994Type IV engine • 2001 Type V engine • 1990 Type VI engine	• Wild land training • 5 Chain saws • 10 sets Wild land FF tools • New Type II Water tender • New Type VI Engine • 30 Fire Shelters • 2 Training Shelters • 15 EDACS Handhelds	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher
Tatum VFD	• Grass 1 2007 Type IV Engine • Grass 2 2007 Type IV Engine • Grass 3 1992 Type IV Engine • Tender 1 Type II water Tender • Tender 2 Type II water Tender • Engine 1 1993 Type 1 Engine	• 12 EDACS Handhelds • 12 sets Wildland and PPE • 12 Pr. Wildland boots	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher

Fire Dept.	Current Equipment	Additional Wildland Equipment Needs	Training Needs
Jal VFD	• J-1 1979 Type 2 Engine • J-2 1993 Type 4 Engine Pump/Roll • J-3 1983 Type 6 Engine Pump/Roll • J-4 1996 Type 6 Engine Pump/Roll • J-5 2003 Command Vehicle • J-6 1994 Type 2 Engine • J-8 1979 Type 1 Water Tender • J-9 1989 Type 6 Engine Pump/Roll	• 16 Sets Wildland PPE • 16 Pr. Wildland Boots • 16 Hot Shields (Face Mask) • 16 Pr. Wildland Goggles • 20 PPE Gear Bags • New Type 1 Water Tender • Replace J-3 with new Type 4 Engine Pump/Roll • Misc. Hand Tools	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher
Knowles VFD	• Tanker 5 -Type I Water Tender • Tanker 2-Type II Water Tender • Engine 3- Type I Engine • Engine 4- Type I Engine	• Type IV Engine • Type III Engine • 2 Training Shelters • 22 Fire Shelters • 7 EDACS Radios • Hand tools	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher
Monument VFD	• Unit 2 type 4 Engine • Unit 3 type 6 Engine • Unit 4 type 1 Engine • Unit 5 type 2 Tender • UNIT 6 Type 4 Brush	• Type 4 engine • Type 1 pumper • Type 2 Tender • Training Shelter	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher
Maljamar VFD	• Unit 2 type 6 Engine • Unit 3 type 6 Engine • Unit 4 type 2 Tender • Unit 5 type 1 Engine	• Type 1 Engine • Type 4 Engine • Chainsaws • Goggles	• S-130/190, I-100, L-180 • S-211 • S-212 • S-201 • S-290 • Annual Fire Safety Refresher

We do hereby endorse and support the Lea County Wildfire Protection Plan:

COUNTY OF LEA

County Commission, member _____ Date 11-24-08

I do hereby endorse and support the Lea County Wildfire Protection Plan:

LEA COUNTY MANAGER

Manager Mike Beverly 11-24-2008
Mike Beverly date

I do hereby endorse and support the Lea County Wildfire Protection Plan:

LEA COUNTY EMERGENCY MANAGEMENT

Coordinator 11-24-08
Lorenzo Velasquez date

I do hereby Endorse and support the Lea County Wildfire Protection Plan:

LEA COUNTY ROAD DEPARTMENT

Director Nick Marinovich 11-24-08
Nick Marinovich date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

CITY OF JAL

Mayor _____ 11-25-08
Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

CITY OF EUNICE

Mayor John F. White — June 28
John White — Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

CITY OF HOBBS

Mayor Sam Don Kleagan 11-25-08
Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

CITY OF LOVINGTON

Mayor Dixie Drummond 11-25-08
date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

CITY OF TATUM

Mayor Donald E. Mullins 11-25-08
Donald Mullins Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

Lea County Fire Chiefs

Tatum Fire Chief _____ 11-25-08
Phil Jones Date

Lovington Fire Chief _____ 11/25/08
James Williams date

Maljamar Fire Chief _____ 11/25/08
Bill Gideon date

Knowles Fire Chief _____ 11-25-08
Michael Singleton date

Hobbs Fire Chief _____ 11-26-08
Manuel Gomez date

Monument Fire Chief _____ 11-25-08
Justin Solomon date

Eunice Fire Chief _____
Ron Grogan date

Jal Fire Chief _____ 11/25/08
Ronnie Walls date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

NEW MEXICO STATE LAND OFFICE

Manager ~~Myra Harrison~~ 11-25-2008
District Resource

Myra Harrison Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

BUREAU OF LAND MANAGEMENT

Carlsbad Field Office Ty Bryson 12-02-08

Fire Management Officer Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

NEW MEXICO STATE FORESTRY DIVISION

Capitan District Forester _____ 12/1/2008
Date

We do hereby endorse and support the Lea County Wildfire Protection Plan:

LEA COUNTY EXTENSION AGENT

AGENT _____ 11-24-08

Wayne Cox Date

APPENDIX

1. COMMUNITY WILDFIRE ASSESSMENT FORM

2. FUNDING SOURCES

3. A GUIDE FOR THE HOMEOWNER

APPENDIX 1

Wildfire Hazard Home Assessment Form

A. Community Name: *My fire protection provided by:*	*Points*	*My Points here* *(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**
E. 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**
F. 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**
G. 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**
H. UTILITIES (GAS, ELECTRIC)	
17. Placement	
All underground utilities	**1**
One underground, one above	**3**
All aboveground	**5**
L. 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 2
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

Agency: USDA Forest Service
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 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-proccess_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 3
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-spaces 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.

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

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