

Elk Ridge One Subdivision Association
Colfax County, New Mexico
Community Wildfire Protection Plan (CWPP)



Photo retrieved from The Seattle Times February 27, 2018:

https://www.google.com/search?q=Wildfire+images&client=safari&hl=en-us&prmd=inv&source=lnms&tbn=isch&sa=X&ved=0ahUKEwjtw6XJrcbZAhVB2mMKHVVW0Bf8Q_AUIESgB&biw=1024&bih=723#imgrc=jQfqHLZK9wcnVM:

April 1, 2018

Previous Elk Ridge CWPPs:

October 13, 2014 and February 6, 2006

Elk Ridge One Subdivision – Community Wildfire Protection Plan (CWPP)

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Elk Ridge Community Wildfire Protection Plan (CWPP)

Introduction

Elk Ridge One Subdivision was originally purchased by Ocate Land Company on August 20, 1980, from Felipe Medina and Anita Medina, his wife. Mr. and Mrs. Medina were from Taos, New Mexico. The subdivision was developed in April 1982. The original covenants were filed with the County Clerk, Colfax County, Raton, New Mexico on May 12, 1982. These covenants were filed in Miscellaneous Book 105, page 68. Also see amendment in Real Estate Records Book 12, page 1894.

The Plat Map Document dated 10-25-1982, Miscellaneous Book 107, page 121, is signed by the Ocate Land Company, a New Mexico Partnership. Signatures include: Betty L. Fleissner, Partner; Rodney E. Unger, Partner; Dianna L. Shelander, Partner by Betty L. Fleissner, Attorney-in-Fact; William E. Shelander, Partner by Betty L. Fleissner, Attorney-in-Fact; David A. Millner, Partner by Betty L. Fleissner, Attorney-in-Fact; and signed by Rodney E. Unger, a single man.

The first improvements or buildings were done in about 1997.

Location

The Elk Ridge One Subdivision is located in southwest Colfax County, New Mexico. It is located approximately 13-1/2 miles southeast of Angel Fire, NM. The subdivision is immediately east of mile marker five on the south side of New Mexico State Highway 120.

The Plat of Survey for Elk Ridge One was recorded with the County Clerk, Colfax County Courthouse, Raton, NM, on April 5, 1982 in Book 8 of Plats page 203. On this Plat, a description states:

“A tract of land lying within section 30 Township 24 North, Range 17 east of the New Mexico principal meridian Colfax County, New Mexico, being more particularly described as follows: Commencing at the U.S.G.L.O. brass cap marking the N.W. corner of section 30, thence 500 degrees 08' 51" W, 422.9 feet to the point and place of beginning...”.

Description

There are 24 lots in Elk Ridge, with a total of 136.21 acres. The subdivision slopes from approximately 9,400 ft altitude at the north border to approximately 9,800 ft altitude at the south border. Most lots have a moderate to large amount of heavy dead and down woody material. The forest type includes mountain spruce, fir, bristlecone pine, limber pine, and aspen. This mixed conifer is a forest type with a high fuel loading and long fire return interval. See Table 1.1 History of Fires Near Elk Ridge One Subdivision, Colfax County, New Mexico.

There are eight homes in the subdivision which equals 1/3 of total lots. State land occupies the west and south borders of Elk Ridge. To the north of Elk Ridge One Subdivision is a small meadow. Otherwise, Elk Ridge is surrounded by wild land and heavy, dense forest. This is a beautiful place to share with wildlife, trees and vegetation. However; it has the potential for a catastrophic fire and this risk presents ongoing public safety concerns.

History of Fires Near Elk Ridge One Subdivision, Southwest Colfax County, New Mexico

Date	Location	Cause	Comments
Reported by AP on Monday, June 3, 2002	Spring Fire on Vermejo Park Ranch		2,000 - 3,000 acres before combining with southeast Colorado blaze
Reported by AP on Monday, June 3, 2002	Philmont Scout Ranch, complex of 3 fires has burned 6,500 acres as of Monday	Lightning storm	1. Metcalf Fire 500 acres 2. Middle Ponil 3,000 acres 3. Office 2,500-3,000 acres Colfax County July 30, 2008 CWPP page 29 reports that Ponil Creek Watershed wildfire burned 92,500 acres.
Reported by AP on Monday, June 3, 2002	Turkey Fire On the Vermejo Ranch in Cimarron Canyon, 4-5 miles northwest of Cimmaron		500 plus acres
June 2 - Jul 3, 2002	Cerro Pelado Fire, Naranjo area, Mora County. Off NM 120 near Ojo Feliz, FM-2415		3,500 acres
July 4, 2003	Encebado Fire, Blue Lake Wilderness Area, east of Taos Pueblo, Taos County	Lightning Strike	5,400 acre forest fire
March 1 - March 7, 2006	Casa Fire, Colfax County, near Miami, NM. Southeast of Cimarron near Philmont Boy Scout Ranch.	Downed power line	12,000 acres
April 12 - April 18, 2006	Ojo Feliz Fire, Mora County	Human cause	17,000 acre forest fire, 5 structures destroyed, 67.2 km ² area
April 28, 2010	Horseshoe Fire, Cimarron Canyon State Park	Wind blew power lines down	Burned 300 plus acres
June 30, 2011	Head Start Fire, Mora County, off Hwy 518 on top of Holman Hill around mile marker 36.	Fire sparked behind the Mora Head Start	20 plus acre wildfire
2011	Small fire on B-38 off of State Hwy 120 near Aspen Hill Fire Hall	Spark from chain saw	Small fire, easily contained with nearby resources
June 28 - July 1, 2017	Whitman Fire, Valle Vidal Unit, Questa Ranger District	Lightning caused	300 Plus acres

Table 1.1 History of Fires near Elk Ridge One Subdivision, Colfax County, NM. This list is not comprehensive - needs further research.

Ingress and Egress

Elk Ridge One Subdivision has one road that is used for both ingress and egress. This road is approached from New Mexico State Highway 120 and runs between Lot 1 and Lot 24. For egress, there are two additional emergency exits. Between Lots 8 and 9 there is a path that could be used to access highway 120. Highway 120 access could also be reached by utilizing Lot 7 driveway and continuing via a path to the meadow.

Roads

The roads of Elk Ridge One Subdivision consist of Elk Ridge Road, Bear Paw Road, and Bear Paw East and West. These roads are constructed of dirt, pit run and other gravel materials. There are three cul-de-sacs which are located on the northeast, southeast, and southwest corners of the roadway. These roads are wide enough for firetrucks, ambulances and other emergency vehicles to travel easily. The cul-de-sacs allow large vehicles to turn around without problem. Small firebreaks are provided by these subdivision roads.

The Elk Ridge One Subdivision roads are public roads. On the Plat of Survey for Elk Ridge One it states "Ocate Land Company, a New Mexico Partnership, **dedicates the land designated for public use** and as recorded in book 8, page 203, and on file in the office of the county recorder, Colfax County New Mexico. As subdivider, Ocate Land Company agrees to build the roads within the subdivision in full conformance with the requirements of the county subdivision regulations." [Signed Betty L. Fleissner]

In the Certificate of Platting and Dedication of Elk Ridge One Subdivision, Miscellaneous Book 107 Page 121, Filed for Record 10-25-82 at 3:20 P.M., Stella M. Lopez, Recorder; it states:

"...and that the said subdivision of said tract above described is made with the free consent and in accordance with the desire of the said owners and proprietors; and that we do hereby consent and agree to the **dedication to pulic [sic] use of the roads, streets, alleys and avenues** shown in said plat; and that we have consented and agreed and do hereby consent and agree to the filing of this instrument, together with said annexed plat, for record in the manner and form prescribed by law."

Although the Elk Ridge roads have been dedicated to Colfax County, New Mexico; they have not been accepted by the county for maintenance and/or repair.

Utilities

Elk Ridge residents drill individual private wells for their water. Lots 1, 4, 5, 6, 7, 10, 15, and 24 have operating wells for water supply. These lots also have frost-free faucets outdoors near their homes.

Electricity, land-line telephone, and fiber optic internet are buried underground along the easements of the subdivision roads. Utilities remain underground until approximately one-half mile west of Elk Ridge on highway 120 where they become above ground lines on electrical poles and on toward Black Lake, New Mexico.

Relationship to Colfax County, NM, CWPP

This plan is formulated to work in conjunction with the:

Community Wildfire Protection Plan ~CWPP~ Colfax County
at
<http://www.emrd.state.nm.us/SFD/FireMgt/documents/ColfaxCountyCWPP.pdf>.

This collaborated Community Wildfire Prevention Plan shall be implemented by the Elk Ridge One Subdivision community for the safety of residents, emergency responders, wildlife, and vegetation.

Step One of CWPP - Convene Decision Makers:

Elk Ridge One Subdivision Association (HOA) Members:

Lot 1	Ronnie and Libby Porter
Lot 2	Victor Barillas represented by Juan Barrera
Lot 3	Brenda Camp
Lot 4	Kenneth and Judy Edwards
Lot 5	Gary and Barbara Johnson
Lot 7	Randy and Kim Wright
Lot 9	Sidney Stockton
Lot 10	Randy and Ann Brackeen
Lot 11	Reggie and Katherine Rowe
Lot 12	Randy and Pat Smith
Lot 13	Kenneth E. Williamson and William B. Williamson
Lot 14	Kenneth E. Williamson and William B. Williamson
Lot 15	John Schaffer
Lot 16	Kyle Carrington
Lot 17	Thomas Ed Cole
Lot 19	Alex and Deborah Romero
Lot 20	Wade and Debra Carrington
Lot 21	Kenneth and Judy Edwards
Lot 22	Don and Shirly Bishop
Lot 24	Randy and Janice McLain

Other Elk Ridge Property Owners, not members of HOA:

Lot 6	Donny Atkins
Lot 8	John and Sally DeCaro
Lot 18	Luther Kent and Deborah Ruth Griffin
Lot 23	Hal Kirk and Rosalie McGowen

Wendy Mason
Wildfire Prevention & Communication Coordinator
New Mexico State Forestry Division
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Santa Fe, NM 87505
(505) 476-3209
Cell (505) 690-8210
Fax (505) 476-3220

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jesparsen@nmcountes.org

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New Mexico Association of Counties Executive Committee
District Two: Colfax, Harding, Mora, San Miguel, Taos and Union Counties
Taos County Commissioner
#105 Albright Street, Suite A
Taos, NM 87571
(575) 737-6300
commgabe@gmail.com

Sheriff Rick Sinclair
Colfax County, New Mexico
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rsinclair@co.colfax.nm.us

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Larry Osborn
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(575) 445-9661
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losborn@co.colfax.nm.us

Fire Departments	
<p>Bob Coss District 6 Fire Department Moreno Valley Fire Chief Angel Fire, NM 87710 Work (575) 737-9590 (575) 377-1046 Mobile (575) 595-1048</p>	<p>Eagle Nest Volunteer Fire Department 151 Willow Creek Drive Eagle Nest, NM 87718 (575) 377-2486 Fax: (575) 377-2487</p>
<p>Cindy Coss Moreno Valley Fire Department and EMS Angel Fire, NM 87710 Work (575) 737-9590 (575) 377-1046 Mobile (575) 595-1048</p>	<p>Ocate Ojo Feliz Fire Department Mora County Highway 120 P. O. Box 225 Ocate, NM 87734 (575) 666-2022</p>
<p>John Murtagh Chief of Fire and EMS Village of Angel Fire 11 North Angel Fire Road Angel Fire, NM 87710 P. O. Box 610 Angel Fire, NM 87710 (575) 377-3347 Fax (575) 377-6098 jmurtagh@angelfirenm.gov</p>	<p>Ute Park Fire Department Colfax County District #3 14 Hummingbird Lane Ute Park, NM 87749 (575) 376-2481</p>
<p>Black Lake Volunteer Fire Department Black Lake Station 13 Osha Road Black Lake, NM</p>	<p>Village of Cimarron Fire Department 356 East 9th Street/P. O. Box 654 Cimarron, NM 87714 (575) 376-2271</p>

Pueblo of Sandia (Has property approximately 2 miles southwest of Elk Ridge. Was also a major contributor toward the Aspen Hill Fire Hall.)

Lands Department
481 Sandia Loop
Bernalillo, NM 87004
(505) 867-3317, option #8

Taos Pueblo
120 Veterans Highway
Taos, NM 87571
(575) 758-1028

Mark Meyers
Forester, Field Operations
The New Mexico State Land Office

310 Old Santa Fe Trail
Santa Fe, NM 87501
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Santa Fe, NM 87504
(505) 827-5760
Fax (505) 827-5766
mkmeyers@slo.state.nm.us

Chris Romo
Fire Management Officer
Colfax County Wildland Urban Interface (WUI) Specialist
Cimarron District Regional Coordinator for Firewise Communities
P. O. Box 5
Ute Park, NM 87749
(575) 376-2204
Fax: (575) 376-2384

New Mexico Department of Public Safety
4491 Cerrillos Road
Santa Fe, NM 87507
(505) 827-9000
Post Office Box 1628
Santa Fe, NM 87504-1628

Step Two of CWPP - Involve Federal Agencies:

Randy Velasquez, Soil Conservationist
United States Department of Agriculture (USDA)
Natural Resources Conservation Service
New Mexico
Raton Service Center
245 Park Avenue, Room 206
Raton, NM 87740-3800
(575) 445-9571 ext 3
Fax (855) 538-5999

Carson National Forest
United States Forest Service
208 Cruz Alta Road
Taos, NM 87571
(575) 758-6200

Amy Lueders
Southwest Regional Director
United States Fish and Wildlife Service
United States Department of the Interior
P. O. Box 1306
Albuquerque, NM 87103-1306
(505) 248-6911

Bureau of Land Management (BLM)
United States Department of the Interior
Taos Field Office

226 Cruz Alta Road
Taos, NM 87571-5983
(575) 758-8851
Fax (575) 758-1620

Step Three of CWPP - Engage Interested Parties

Landon Newton
Colfax County Commissioner District 3
(575) 445-9661
jlnewton@co.colfax.nm.us

Hidden Lake Property Owners Association
P. O. Box 1135
Angel Fire, NM 87710

Elk Ridge One Subdivision Neighbors:

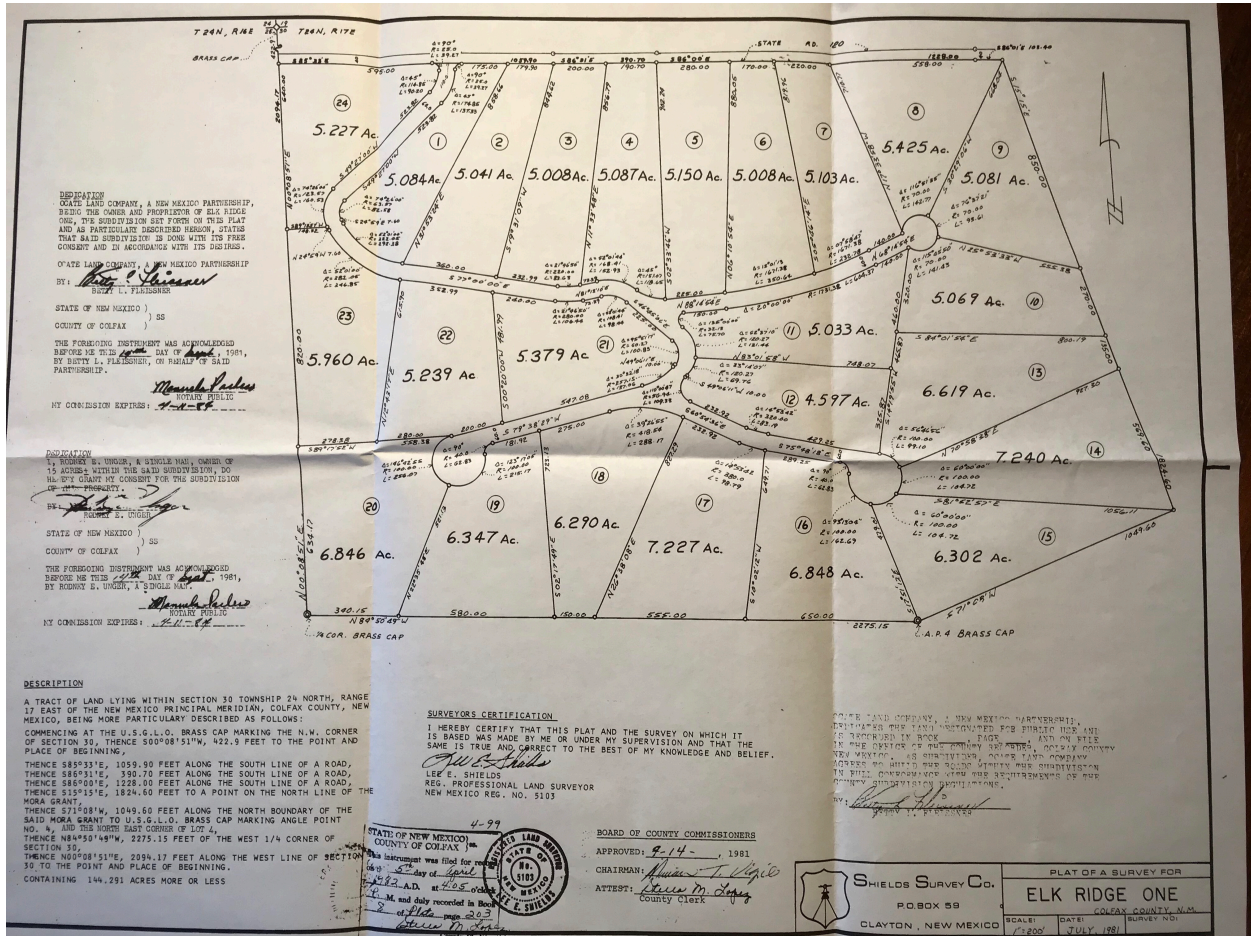
To the east: Manuel S. Montoya, Jr.
Thomas C. Germscheid

To the west: William and Melaine Galloway

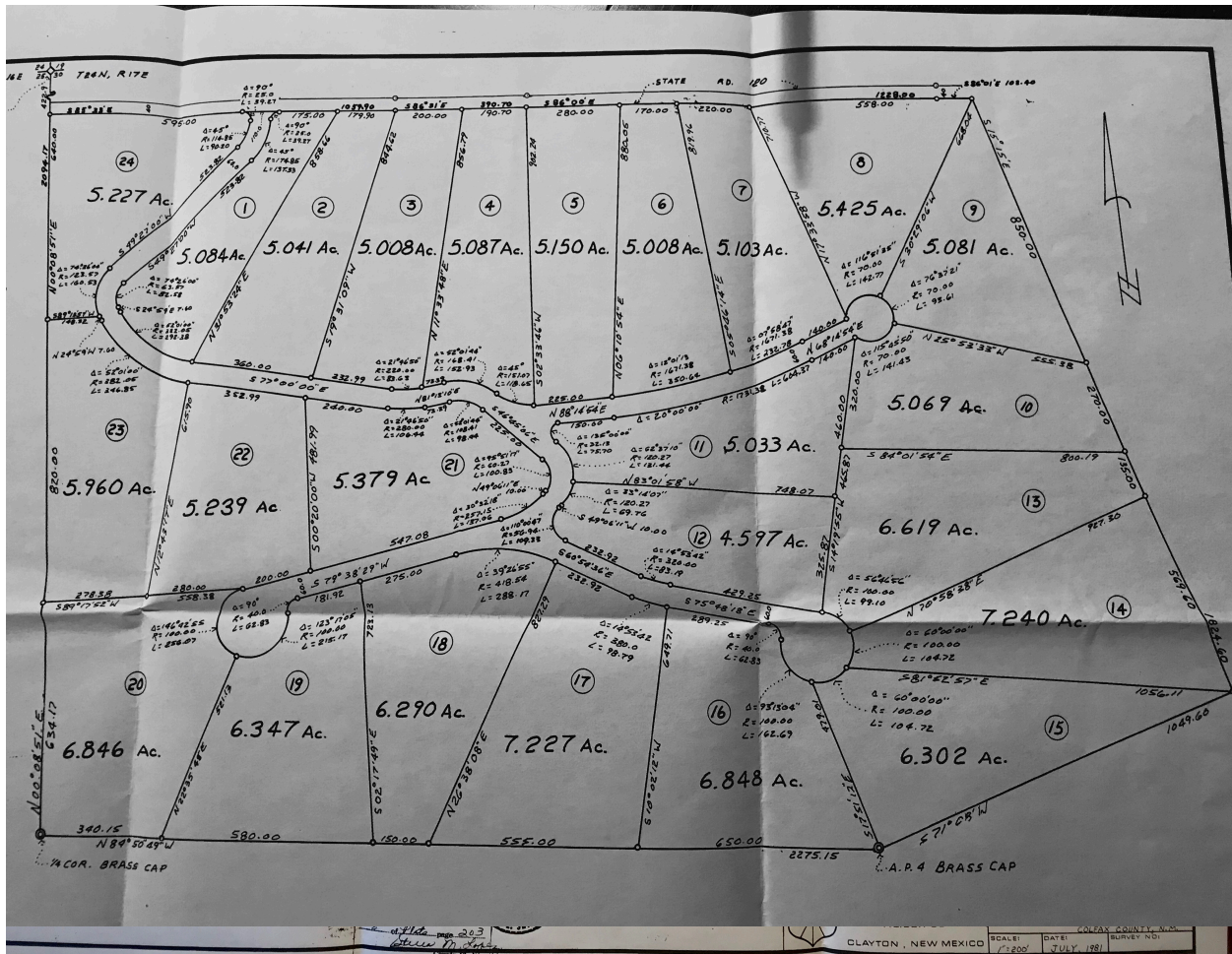
To the south: Hidden Lake Property Owners Association

To the north: Jerry and Janelle Gold

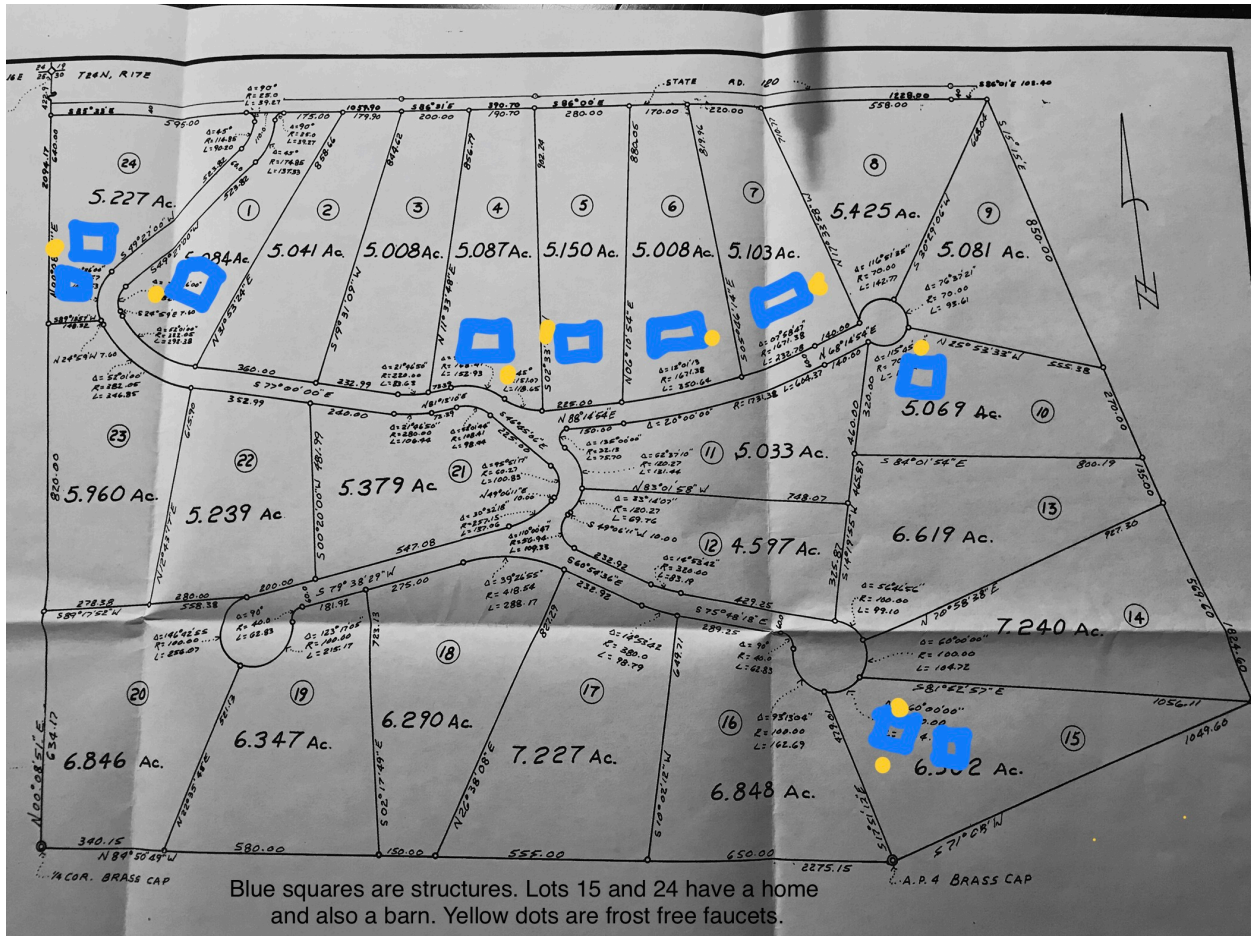
Step 4 of CWPP - Establish a Community Base Map



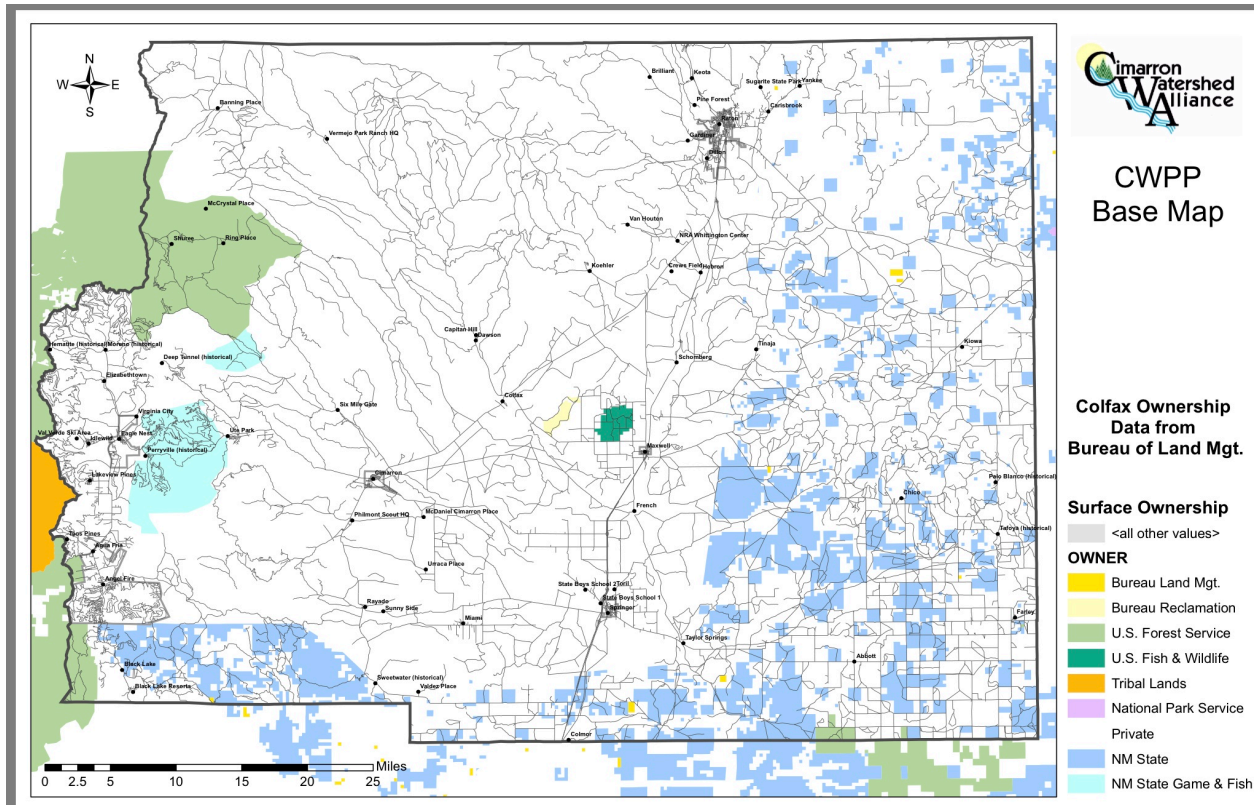
Map 1.1: Elk Ridge One plat map filed at Colfax County, County Clerk, Raton, New Mexico, April 5, 1982, Book 8 of Plats, page 203.



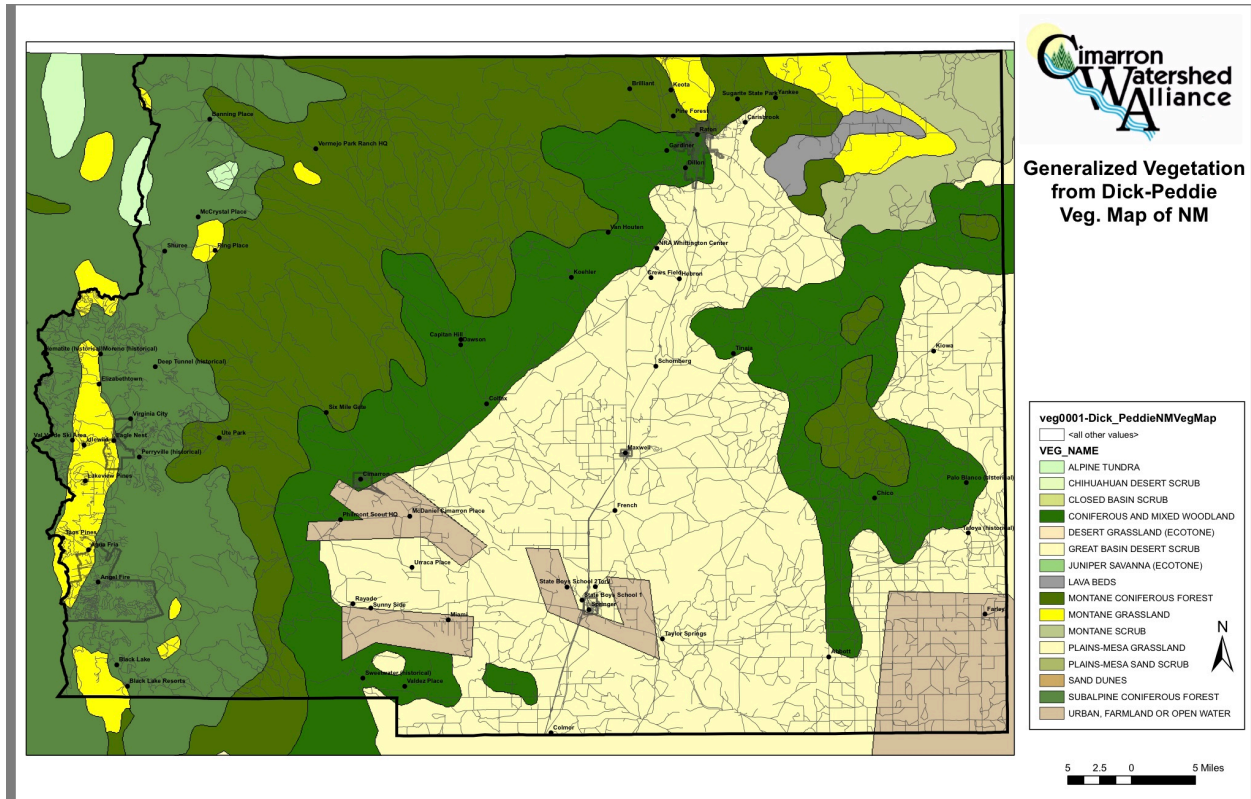
Map 1.2: Closer view of Elk Ridge One plat map filed at Colfax County, County Clerk, Raton, New Mexico, April 5, 1982, Book 8 of Plats, page 203.



Map 1.3. Structures in Elk Ridge One Subdivision indicated by blue square shapes. Yellow dots are frost-free faucets.

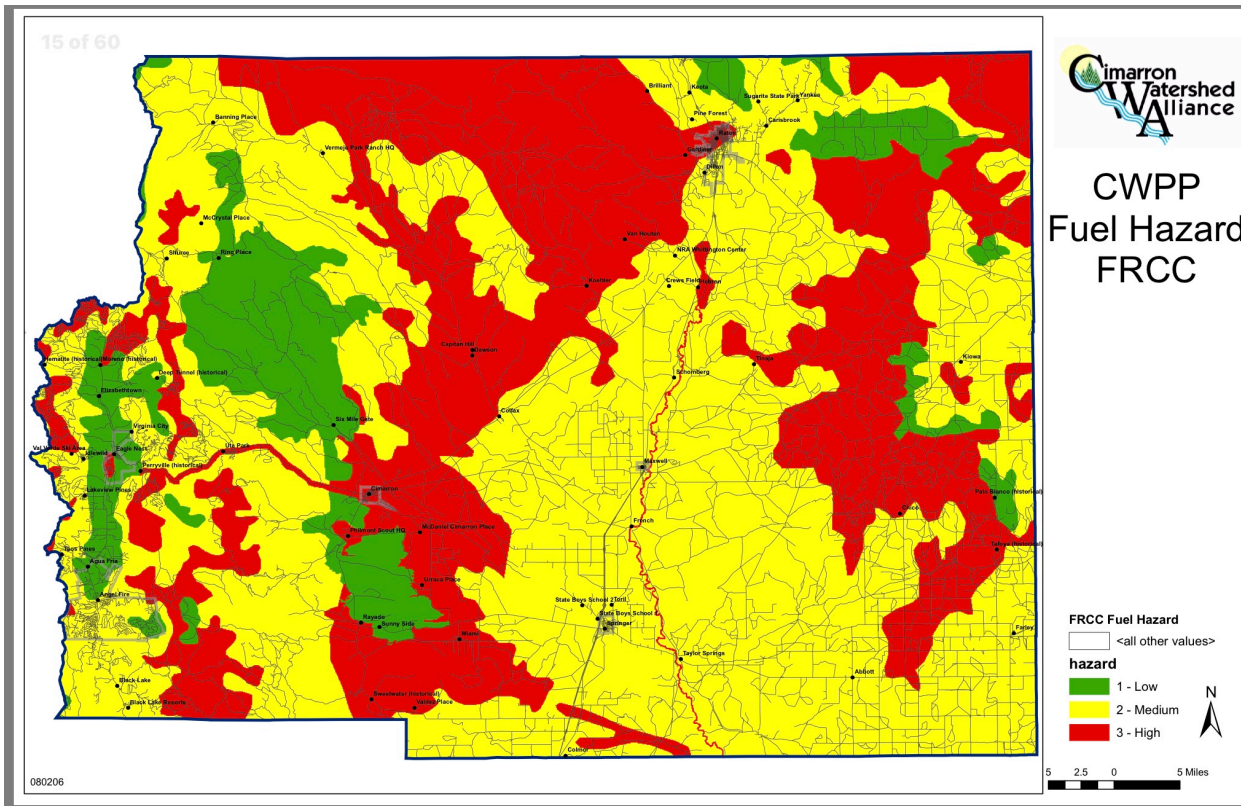


Map 1.4: Colfax County Community Wildfire Protection Plan (CWPP) Base Map obtained from Cimarron Watershed Alliance. Elk Ridge One Subdivision is in the far southwest corner of Colfax County, east of Black Lake.



Map 1.5: Colfax County Community Wildfire Protection Plan (CWPP) Generalized Vegetation from Dick-Peddie Veg. Map of NM, obtained from Cimarron Watershed Alliance. Elk Ridge One Subdivision is located in the far southwest corner of Colfax County, east of Black Lake.

Map 1.6: Colfax County Community Wildfire Protection Plan (CWPP) Fuel Hazard FRCC, obtained from



Cimarron Watershed Alliance. Elk Ridge One Subdivision is located in the far southwest corner of Colfax County, east of Black Lake.

Elk Ridge One Subdivision - Lots with Homes, Fuel Reduction and Water

Lot / acres	Property Owner	Home on Property	Full or Major Fuel Reduction	Significant Fuel Reduction	No fuel reduction at this time	Water Well Available	Generator for Water
1 5.084	Ronnie and Libby Porter	Yes	Yes (by self)			Yes	Yes
2 5.041	Victor Barillas represented by John Barreda				No reduction		
3 5.008	Brenda Camp				No reduction		
4 5.087	Kenneth and Judy Edwards	Yes	Yes (Grant 2013)			Yes	
5 5.150	Gary and Barb Johnson	Yes	Yes (by self)			Yes	Yes
6 5.008	Donny Atkins	Yes	Yes (by self)			Yes	Yes
7 5.103	Randy and Kim Wright	Yes	Yes (by self)			Yes	Yes
8 5.425	John and Sally DeCaro				No reduction		
9 5.081	Sidney Stockton	Camper Trailer			No reduction		
10 5.069	Randy and Ann Brackeen	Yes	Yes (by self)			Yes	
11 5.033	Reggie and Katherine Rowe		Yes (Grant 2013)				
12 4.597	Randy and Pat Smith		Yes (Grant 2013)				
13 6.619	Kenneth E. and William B. Williamson		Yes (by self)				
14 7.240	Kenneth E. and William B. Williamson		Yes (by self)				

Lot / acres	Property Owner	Home on Property	Full or Major Fuel Reduction	Significant Fuel Reduction	No fuel reduction at this time	Water Well Available	Generator for Water
15 6.302	John Schaffer	Yes	Yes (by self)			Yes	Yes
16 6.848	Kyle Carrington	Shed		Yes (by self)			
17 7.227	Thomas Ed Cole		Yes (by self)				
18 6.290	Luther Kent and Deborah Griffin		Yes (by self)				
19 6.347	Alex and Deborah Romero		Yes (by self)				
20 6.846	Wade and Debra Carrington			Yes (by self)			
21 5.379	Kenneth and Judy Edwards		Yes (Grant 2013)				
22 5.239	Don and Shirly Bishop				No reduction		
23 5.960	Hal Kirk and Rosalie McGowen				No reduction		
24 5.227	Randy and Janice McLain	Yes	Yes (by self)			Yes	Yes
136.2 1 acres		8 homes = 33.3%	16 lots = 66.7%	2 lots = 8.3%	6 lots = 25%	8 wells = 33.3%	6 generators. 25%

Table 1.2 - Elk Ridge One Subdivision Properties, Fuel Reduction and Water Availability per lot. Note: There are 4 lots that have applied for a USDA EQIP Grant, waiting selection 02.28.2018. The 'Grant 2013' refers to a New Mexico Association of Counties Grant.

Step Five of CWPP - Develop a Community Risk Assessment

A. Fuel Hazards

Fuels

The majority of the property contains the Engelmann Spruce-Corkbark Fir habitat type. The characteristic tree species found in this habitat type are Englemann Spruce (*Picea engelmannii*), Corkbark Fir (*Abies lasiocarpa*)(var. *arizonica* (Merriam) Lemm.), Bristlecone pine (*Pinus aristata*), Douglas-fir (*Pseudotsuga menziesii*), Limber Pine (*Pinus flexilis*), Quaking

Aspen (*Populus tremuloides*) and White fir (*Abies concolor*). Typical basal area is greater than 190 sq. ft. per acre with a large amount of undergrowth creating ladder fuels. The estimated average number of trees per acre is 631 with an average diameter at breast height of 7.5 inches.

Ground cover includes creeping juniper, Colorado Columbine (*Aquilegia*), Aspen Daisy (*Erigeron*), Osha plant, and wild grass.

Fuel hazards: The Elk Ridge One Subdivision surrounding area fuel hazard rating is best represented by the model number 10 and 7 in the United States Department of Agriculture Forest Service Aids to Determining Fuel Models for Fire Behavior, by Hal E. Anderson, April 1982.

Fuel Behavior Fuel Model 10

The fires burn in the surface and ground fuels with greater fire intensity than the other timber litter models. Dead-down fuels include greater quantities of 3-inch (7.6 cm) or larger limbwood resulting from overmaturity or natural events that create a large load of dead material on the forest floor. Crowning out, spotting, and torching of individual trees are more frequent in this fuel situation, leading to potential fire control difficulties. Any forest type may be considered if heavy down material is present; examples are insect- or disease-ridden stands, wind-thrown stands, overmature situations with deadfall, and aged light thinning or partial-cut slash.

Fuel Behavior Fuel Model 7

Fires burn through the surface and shrub strata with equal ease and can occur at higher dead fuel moisture contents because of the flammability of live foliage and other live material. Stands of shrubs are generally between 2 and 6 feet (0.6 and 1.8 m) high.

B. Risk of Wildfire Occurrence

Risk Occurrence: The risk of fire in this area is greater than the average would suggest. The dry seasons along with the high growth of materials in the last year have created a high fuel load that is tinder dry. Any weather or man-made incident may be the only igniter needed to cause a catastrophic incident.

According to Table 3 Community Wildfire Risk Rating, page 23, of Community Wildfire Protection Plan (CWPP), Colfax County, July 30, 2008, Elk Ridge is a Medium Hazard, High Risk, Threat Score 5, Risk of Wildfire Rating High. In this same document, CWPP Colfax County, July 30, 2008, Elk Ridge is rated as high risk of wildfire along with Angel Fire, Black Lake, Black Lake Resorts, Cimarron, Hidden Lake, Raton, Sugarite State Park, and Taos Pines. (Page 24).

C. Homes, Businesses and Essential Infrastructure at Risk

Construction

The construction of the existing homes is mainly wood with double pane windows and metal roofs. Some porches are elevated and do have pockets that are potential hot ember catchments. Each property noted has adequate turn around space for small fire equipment and some have larger areas available. Debris has been moved from the homes under construction where possible with plans made to remove construction materials upon the completion of construction. The propane tanks of some of the properties are located on the incorrect axis for home safety and should be repositioned. However, most of the propane tanks noted were at an

adequate distance from the structures. Leech fields and septic tanks need to be clearly marked to keep heavy equipment off. Some of the out buildings are not defensibly spaced; however, this is in the process of being remedied.

Address treatments of structural ignitability:

Structural ignitability: The majority of the structures are built to or greater than Firewise construction standards. Most of the structures have defensible space. The log homes are defensibly spaced and the timber is treated to be fire resistant. All homes keep ignitables away from structures to improve the fire safety situation. A few of the lots not yet built on are in the process of fuel reduction projects. A large cross-section of homes has Aspen trees as the neighboring forest which works as a buffer from the evergreen forest areas.

There are 24 lots in Elk Ridge. Lots 1, 4, 5, 6, 7, 10, 11, 12, 13, 14, 15, 17, 18, 19, 21, and 24 have done major or complete clearing (16 = 66.7%). Lots 16 and 20 have started some significant clearing (2 = 8.3%). Lots 2, 3, 8, 9, 22, and 23 (6 = 25%) have not done clearing at this time.

D. Other Community Values at Risk

The community of Elk Ridge is a home for wildlife including bear, mountain lion, elk, deer, bobcat and other animals. Land to the north is used for grazing cattle. These animals depend on forested areas free from fire. Hidden Lake Subdivision is directly south and southwest of Elk Ridge. This subdivision and Hidden Lake have common goals for fuel reduction which benefit people, animals and native vegetation.

Manueles Canyon

The value of the canyon is high, and a wildfire within the canyon could drastically impact the transportation potential within the canyon. Many people from Ocate depend on Highway 120 in this canyon to go to their jobs in Angel Fire. Mud and rock flows, as an aftermath of catastrophic wildfire within the watershed, could destroy much of the beauty of the canyon as well as affect Manueles Creek and further to the east, Wheaton Creek and Ocate Creek.

Within Manueles Canyon is an 87 acre parcel of New Mexico Bureau of Land Management property (BLM). This property is two miles east of Elk Ridge in Manueles Canyon. There is also a large parcel of New Mexico State Land on the northeast side of Manueles Creek. Wildfire fuel mitigating projects are necessary within the canyon if a disaster is to be averted.

The historical value of Manueles Canyon and surrounding area is described in Marvin C. Overton III's "Twixt Angel Fire and Ocate; Life Thirty Years Before Angel Fire." Also "Museum of New Mexico; Office of Archaeological Studies, by Sarah H. Schlanger and Linda J. Goodman; Submitted by Timothy D. Maxwell, Principal Investigator, Archaeology Notes 95, 1993.

E. Local Preparedness and Firefighting Capability

Preparedness

Elk Ridge One Subdivision Association (HOA)

Elk Ridge One Subdivision Association (HOA), a non-profit New Mexico homeowners association, has been formed for the purpose of the following:

- (1) Assist in the application of fuel reduction grants.
- (2) To maintain subdivision roads to allow for ingress and egress for property owners and emergency vehicles. The roads also provide a fire break to help protect property owners, property and emergency responders.

(3) To promote communication among members and non-members with regard to meetings, educational opportunities, and priority concerns.

Twenty of the 24 property owners have joined this HOA. The remaining property owners are welcome to join at any time.



Firewise-USA

Property owners of Elk Ridge meet at least annually at a Firewise meeting conducted in September on the Labor Day weekend. We have used this opportunity for fire safety education. Property owners of Elk Ridge have collaborated via mail and email about fire safety issues, fuel reduction grants, and Firewise-USA.

Local Preparedness: Each homeowner has been informed of the fire risk and mitigation recommendations. The community has become a Firewise community and is aggressively educating the populace in the requirements for fire safety.

Structures at risk: The previous sub-division plat shows the structure locations and proximity to the forested areas. All structures are single family homes. The 911 data for the existing dwellings has been confirmed with Colfax County Police Department.

Elk Ridge has worked with the New Mexico Department of Transportation to improve signage for the subdivision and also the public roads within the subdivision.

Selected members of the subdivision have made improvements to the roads by adding top road material, filling pot holes, and clearing the side ditches to allow for water drainage. The goal of this treatment is to maintain the roads we have and to continue to provide access for property owners. This also provides adequate means for fire department and emergency equipment to travel. The roads also satisfy a safe means for evacuation (if needed).

Elk Ridge has participated in the Colfax County Coalition of Firewise Communities (CCCFC) since 2006. This organization serves as a venue to discuss and share methods of fuel reduction, address treatment of structural ignitability, educate the public about fire safety, and organize a fire response plan for the CCCFC area. See <https://www.facebook.com/CCCFC>.

Each individual has been encouraged to make a detailed plat of their property showing key features such as water well, power transformer, septic tank, and leach field to be distributed to the fire department for their use. This education is ongoing. Another priority is the education of the property owners to the Firewise program and its benefits. Along with Ute Park POA and Hidden Lake POA, Elk Ridge has attained Firewise community designation since 2006. The

status of being a designated Firewise community has required the commitment of our members to render their property defensible as soon as possible.

Communication

Wildland Fire Notification

Immediate notification of all wildland fires shall be made to Emergency – 911. This includes all wildland fires spotted by resource protection agencies, district fire departments or the general public.

The Colfax County, NM, E – 911 shall notify the district state forestry division of all reported wildland fires within Colfax County, NM, and fire district #6.

The Colfax County, Raton, New Mexico, Emergency Management Department provides a service, "CodeRed." This service provides a means for individuals "...to be notified by local emergency response team in the event of emergency situations or critical community alerts. Examples include: evacuation notices, bio-terrorism alerts, boil water notices, and missing child reports." Property owners have been notified of this emergency communication system and have been encouraged to log on to <https://public.coderedweb.com/cne/en-US/6AF053DCB942>.

Elk Ridge shall appoint members of the community to act as notification personnel in the event of an emergency situation. This system, along with "CodeRed" notification, is intended to be inclusive of all the residents of the community. The means of communication will be included in the annual community meeting minutes. The notification procedure will be updated frequently to insure accuracy of contact information. The first notification person on the list will call the next subsequent person. If there is no response, then the next person on the list will be called. Therefore, each person on the list (except for the last) will contact one other person. Elk Ridge representatives to be contacted in order are:

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Randy Wright (Lot 7) 575-377-6137; cell 806-681-1658

John Schaffer (Lot 15) cell 505-429-1023

Donny Atkins (Lot 6) 575-377-1197

Ronnie Porter (Lot 1) 806-202-1263; cell 806-202-1263

Kenneth Edwards (Lot 4) 575-377-6982, home 806-863-2880, cell 806-543-4866

Gary Johnson (Lot 5) 575-377-1385, home 806-244-5486, cell 806-717-9416

Randy Brackeen (Lot 10) 575-613-7332, home 806-792-4550, cell 806-438-7573

Randy McLain (Lot 24) 575-377-9916, home 806-435-5518, cell 806-202-0483

Sidney Stockton (Lot 9) 575-376-2676

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There are a number of ways that citizens will be informed about an emergency in our area. If a community member receives notice to evacuate, it is important to respond immediately. Waiting, or choosing not to evacuate when told to leave, can put the individual, their family, and emergency responders in danger.

Aspen Hill Fire Station

The local fire response is the Aspen Hill Fire Station, a division of Moreno Valley Fire Department. This fire station was built in 2011. Community volunteer members brought their own tools and equipment to construct the building. These individuals included:

Robert “Bob” Brown, Roy Weyker, Michael Turri, Shawn Agnew, Bruce Kelly, Scott Jones, Will Fox, Pat Steele, Brian Lindsey, Jim Griffin, Terrence Spenser, Randy Wright, Gary Johnson, Alvin “Johnny” Johnson, Ben Pigman, Randy Brackeen, and John Maples.

In addition, money earned from community fund-raising dinners; and major donations from individuals, the Pueblo of Sandia, and businesses were used to finance this project. When completed, ownership and responsibility was transferred to Colfax County. The Aspen Hill Fire Station is located at mile marker 4 of Highway 120, one (1) mile west of Elk Ridge One Subdivision. The response time to the Elk Ridge area is approximately five (5) minutes with limited on-board water.

The Black Lake Volunteer Fire Department is the second closest fire department to Elk Ridge. The response time to the Elk Ridge area is fifteen minutes with limited on-board water.



Photo: Aspen Hill Fire Department

Evacuation

Evacuation rally points are as follows:

Elk Ridge One Subdivision has one road that is used for both ingress and egress. This road is approached from New Mexico State Highway 120 and runs between Lot 1 and Lot 24. For egress, there are two additional emergency exits. Between Lots 8 and 9 there is a path that could be used to access highway 120. Highway 120 access could also be reached by utilizing Lot 7 driveway and continuing via a path to the meadow. (See Ingress and Egress page 6.)

Rally Point One: The western evacuation primary rally point will be seven (7) miles to the west of Elk Ridge at the Black Lake Fire Department (on Highway 434), 13 County Road B3, Angel Fire, NM 87710, 575-377-2700.

Rally Point Two: The eastern evacuation primary rally point will be twelve (12) miles to the east at the Ocate Community Center next to the Ocate Ojo Feliz Fire Department.

Equipment to take on Evacuation Notice

Preparing for Immediate Evacuation

As soon as you are alerted to an emergency in your area, follow these steps and be prepared to leave immediately:

- Back the car into the garage, roll the windows up, and leave the keys in the ignition.
- Close garage door and set it for manual operation.
- Load important documents, pets, valuables, evacuation kit, prescriptions into the car.
- Take only one vehicle – stay together.
- No boats or RVs
- Wear long pants, long sleeves, and sturdy shoes.

During Evacuation

Conditions during an evacuation can be very disconcerting. It is important to stay calm, think clearly, and to avoid panic. Evacuating early and away from the emergency is recommended; however, if you can not safely evacuate, follow these guidelines:

- If you become trapped by fire, seek refuge in structure.
- If you are trapped in your vehicle, park in clear area, close windows and vents, cover up with a blanket on the floor.
- If on foot, find clear area, lay down on the ground, protect airway.

If You Have Time

If you become aware of a developing emergency, but your area is not yet directly affected, you may have time to take some action to increase your home's survivability.

- Attach garden hoses to reach around the entire home.
- Fill sinks, tubs, etc.
- Place a ladder against house away from the fire.
- Close windows and doors.
- Turn lights on.
- Move furniture to the interior.

Pets and Livestock

In planning for an evacuation, don't forget to plan for your pets and livestock.

- Plan ahead. Each person should have a drop off location for their animals in the event of an evacuation. The initial centers are:
 1. Angel Fire Small Animal Hospital, Dr. Susan Gaffney, 3382 New Mexico 434, Angel Fire, NM 87710, phone 575-377-3165.
 2. Pet Pals Dog Boarding Kennels, HCR 71, Box 34, Eagle Nest, NM 87718, phone 575-37-6940. West of Highway 64 between Eagle Nest and Angel Fire.
- Make sure pets have ID tags or a microchip.
- Make arrangements in case you are not home.
- Don't turn animals loose.
- Take pet supplies to last at least 72 hours (3 days).

Emergency Kit – Plan for at Least 72 Hours

Following a disaster, emergency workers may not be able to respond to your needs right away. Officials recommend that families stock enough supplies to last at least three days.

The 72-Hour Emergency Kit should be individually tailored to meet the basic needs of your family for three days to a week. Take into consideration any special needs such as infants and elderly, persons with disabilities and pets. It is recommended that you store your emergency supplies in one location that is relatively safe, yet easily accessible and portable if evacuation is required. Rethink your kit and family needs at least once a year and replace items as needed.

Three (3) day pack containing water, food, medications, copies of necessary documents, change of clothes, and contact list. Create one pack per person and one pack for each animal.

For more information on preparing an Emergency Kit, see "Backpack Emergency Go Kit," under Public Education at the National Fire Protection Association (NFPA) website at <https://www.nfpa.org/-/media/Files/Public-Education/Campaigns/TakeAction/TakeActionBackPackGoKit.pdf>.

Step Six of CWPP - Establish Community Hazard Reduction Priorities and Recommendations to Reduce Structural Ignitability

Each property owner has been educated in the thinning of the forest on their properties and how to keep their properties more fire safe under the Firewise-USA guidelines. The County Fire Marshal and Forester are available by appointment to walk the property with any owner in the Elk Ridge One Subdivision who requests an individual assessment and mitigation plan.

Where applicable, National Fire Protection Association (NFPA) Fire Code 1, 2018 Edition, Chapter 17, Wildland Urban Interface, Pages 217-221 will apply to the unincorporated areas of the county. These standards are designed for the property owner to plan and implement a safer structure in the Wildland Urban Interface (See Addendum A).



Left: Randy Wright - Lot 7 collaborating with Gary Johnson - Lot 5 and Bob Brown - Lot 24 by working on a fuel reduction project in Elk Ridge.



Above: Lot 7 (Randy Wright on left) and Lot 24 (Robert Brown) collaborating on slash removal with use of chipper (have also used Colfax County chipper for large scale chipping).



Left: Lot 20 - Wade Carrington, Lot 15 - John Schaffer working together with slash removal.

A priority is protection from wildfires by the creation of a fuel reduction zone around the community. The New Mexico State Land Office has done clearing to the west of the Elk Ridge Subdivision in 2009. There is still an area of state land on the south border of Elk Ridge that needs fuel reduction.

Photo is State Land Office clearing west of Elk Ridge:



Firewise-USA

Firewise-USA has a wide range of educational material available for communities in the Wildland Urban Interface (WUI). Elk Ridge One Subdivision has had educational meetings here at the subdivision. The National Fire Protection Association (NFPA) - Firewise-USA has online learning opportunities on their website. Refer to <https://www.nfpa.org/Public-Educator/By-topic/Wildfire/Firewise-USA/Online-learning-opportunities>.

One of the recommendations from Firewise is that we make our property more defensible. At the Firewise site at <https://nfpa.org/Public-Education/By-topic/Wildfire/Firewise-USA/The-ember-threat-and-the-home-ignition-zone> it states that home survival in wildfires point to embers and small flames as the main way that the majority of homes ignite in wildfires. The NFPA Firewise information discusses Home Ignition Zones. The concept of these zones was developed by retired USDA Forest Service fire scientist Jack Cohen in the late 1990s. These zones and what homeowners can do to reduce the threat of wildfires are:

Immediate Zone - The home and the area 0-5' from the furthest attached exterior point of the home; defined as a non-combustible area. Science tells us this is the most important zone to take immediate action on as it is the most vulnerable to embers. START WITH THE HOUSE ITSELF then move into the landscaping section of the Immediate Zone.

- (1) Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers.
- (2) Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration.
- (3) Reduce embers that could pass through vents in the eaves by installing 1/8 inch metal mesh screening.
- (4) Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to reduce embers.
- (5) Repair or replace damaged or loose window screens and any broken windows. Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- (6) Move any flammable material away from wall exteriors - mulch, flammable plants, leaves and needles, firewood piles -- anything that can burn. Remove anything stored underneath decks or porches.

Intermediate Zone - 5-30' from the furthest exterior point of the home. Landscaping/hardscaping -- employing careful landscaping or creating breaks that can help influence and decrease fire behavior.

- (1) Clear vegetation from under large stationary propane tanks.
- (2) Create fuel breaks with driveways, walkways/paths, patios, and decks.
- (3) Keep lawns and native grasses mowed to a height of four inches.
- (4) Remove ladder fuels (vegetation under trees) so a surface fire cannot reach the crowns. Prune trees up to six to ten feet from the ground; for shorter trees do not exceed 1/3 of the overall tree height.
- (5) Space trees to have a minimum of eighteen feet between crowns with the distance increasing with the percentage of slope.
- (6) Tree placement should be planned to ensure the mature canopy is no closer than ten feet to the edge of the structure.
- (7) Tree and shrubs in this zone should be limited to small clusters of a few each to break up the continuity of the vegetation across the landscape.

Extended Zone - 30-100 feet, out to 200 feet. Landscaping - the goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground.

- (1) Dispose of heavy accumulations of ground litter/debris.

- (2) Remove dead plant and tree material.
- (3) Remove small conifers growing between mature trees.
- (4) Remove vegetation adjacent to storage sheds or other outbuildings within this area.
- (5) Trees 30 to 60 feet from the home should have at least 12 feet between canopy tops.*
- (6) Trees 60 to 100 feet from the home should have at least 6 feet between the canopy tops.*

**The distances listed for crown spacing are suggested based on NFPA 1144. However, the crown spacing needed to reduce/prevent crown fire potential could be significantly greater due to slope, the species of trees involved and other site specific conditions. Check with your local forestry professional to get advice on what is appropriate for your property.*

Note: When your home ignition zone extends into neighboring properties: You may find your home ignition zone overlaps into adjacent properties. To maximize the benefits of your work, it's extremely important to work collaboratively with neighbors to reduce your shared risk.

Note: On parcels of land larger than the 100' extended zone: Property owners with more than 100 feet of land that extends beyond the home should also consider additional actions up to 200 feet into the Extended Zone to provide additional benefits in protecting the home and outbuildings.

Specific Concerns for Elk Ridge One

A threat specific to Elk Ridge One Subdivision is vegetation known as creeping juniper. This low-lying native shrub is highly flammable. In one of their online courses, Firewise recommends that this shrub be removed from property. They also recommend that property owners utilize local professionals to determine if other plants in the landscape are also highly flammable. If so, these plants should be removed.

Elk Ridge One Subdivision may be threatened by wind-throw. This occurs when fuel reduction has been done on property, and the remaining trees are affected by wind. Colfax County, NM, Community Wildfire Protection Plan (CWPP) reports that:

The spruce-fir forest within the WUI areas react differently to thinning and prescribed fire than do the previously mentioned forest types, and require treatment tailored to each individual stand. Wind throw of the residual stand is a concern anytime trees are removed from the canopy, as well as the fire susceptibility of the spruce and true fir species. The plan recommends that each proposed project that includes spruce-fir forest type be subjected to independent review by a Society of American Foresters certified forester (www.safnet.org) or the New Mexico State Forestry Division (www.emnrd.state.nm.us). Treatment should proceed upon agreement between the land manager and the reviewer. See page 49 of Colfax County, NM, CWPP under 'Treatments.'

Elk Ridge One Subdivision Short Term Goals			
	Goal	Goal Met/ Not Met	Comments
1	Inform and educate property owners on the benefits afforded by actively participating in Firewise-USA standards to make Elk Ridge One Subdivision more defensible against wildfires. Share with property owners information and links that support Firewise and the National Fire Protection Association (NFPA).	Met	This is ongoing. Firewise recommendations have been shared with property owners. Links for online educational opportunities have been shared. The CodeRed emergency notification service has been shared with Elk Ridge. We now have a Facebook page for communication with Elk Ridge property owners and their families and friends.
2	Participate in the Colfax County Coalition of Firewise Communities (CCCFC).	Met	Elk Ridge One Subdivision has participated in CCCFC for many years. As of fall 2017, CCCFC will not be meeting until more people get involved in the organization.
3	Improve signage throughout the community.	Met	Signs were purchased from CCCFC and placed at the end of driveways. These signs with numbers reflect in the night and facilitate emergency vehicles to find specific properties.
4	Collaborate with property owners and others with regard to the Community Wildfire Protection Plan (CWPP) for 2018.	In process	The Elk Ridge One Subdivision CWPP for 2014 was shared with all property owners for their input. The present 2018 document will also be shared for review, corrections and additions.
5	Form a non-profit Elk Ridge One Subdivision Association. The purpose would be: (a) to maintain roads within the subdivision. This would allow ingress and egress for property owners, emergency vehicles and fire departments as needed. (b) The roads also serve as a fire break within Elk Ridge. (c) A non-profit HOA will also facilitate the application of fuel reduction grants. (d) Elk Ridge One Subdivision Association would promote communication and collaboration among its members.	Met	Twenty lots out of a total of 24 lots have joined the HOA. This represents an 83% involvement. The remaining four lots may join at any time.

Table 1.3 Elk Ridge One Subdivision Short Term Goals

Elk Ridge One Subdivision Long Term Goals			
	Goal	Goal Met/ Not Met	Comments
1	Communicate with the New Mexico State Land Office in Santa Fe, NM, about the possibility of having them perform fuel reduction measures on state land areas south and west of Elk Ridge One Subdivision.	Met - needs additional work	The New Mexico State Land Office performed some fuel reduction on the west side of Elk Ridge in 2009. Additional work needs to be done at this time.
2	Improve street maintenance for equipment accessibility. This will include grade, sub-base and road base.	Ongoing	The Elk Ridge One (HOA) has very limited funds at this time while we pay for organizing costs. Plans are to 'pull the ditches' so that water will run in the ditches instead of on top of the roads. Additional measures to be taken when funds are available.
3	Work with neighboring communities in the educational and development process to help with the creation of fire safe communities.	Met - ongoing	John Schaffer (Lot 15) has attended CCCFC meetings and brought back fire information and grant opportunities. Although CCCFC is 'on pause' at this time, we need to continue to communicate with neighboring communities and encourage parties to participate in fire safe measures.
4	Make a complete inspection, with the help of a local forester or county fire marshal, of each of the properties and list suggestions to make properties more defensible.	Not met	We need to pursue this with permission of individual property owners.
5	Review the Firewise Day for future meetings.	Not met	National Wildfire Community Preparedness Day will have its 5th anniversary on Saturday, May 5, 2018. Elk Ridge needs to see if property owners would be willing to participate in a project for that weekend.

Table 1.4 Elk Ridge One Subdivision Long Term Goals

Elk Ridge One Subdivision Community Wildfire/Incident Plan Acceptance

Adopted this _____ day of _____, 2018.

Elk Ridge One Subdivision Association President, John Schaffer

Colfax County, NM, Fire Marshal

Colfax County Wildland Urban Interface (WUI) Specialist

New Mexico State Forestry

Bob Coss, Fire Chief, District 6 Fire Department

Bureau of Land Management

Taos Pueblo

USDA Forestry

New Mexico Department of Public Safety

Colfax County, NM, Sheriff

**Addendum A: National Fire Protection Association (NFPA)
Fire Code 1, 2018 Edition
Chapter 17, WUI
Pages 217-221**

*Note: AHJ = Authority Having Jurisdiction;
NFPA 1144 = Standard for Reducing Structure Ignition Hazards from Wildland Fire*

17.1 General	The planning, construction, maintenance, education, and management elements for the protection of life and property from wildfire shall meet the requirements of this chapter and and NFPA 1144.
17.1.1	In cases in which the local jurisdiction declares that an area within the jurisdiction is a Wildland Urban Interface as determined by an assessment tool based upon accepted fire services practices, or where new structures will be located in a wildland/urban interface or intermix area, the AHJ shall perform, or cause to be performed, a wildland fire hazard assessment of each structure ignition zone in the development to determine relative risk, the extent of wildland fire hazard, and applicable mitigation measures.
17.1.2	The structure assessment shall, at a minimum, include the following: (1) Identification and documentation of the wildland fire hazards in the ignition zone(s) for each structure within wildland fire hazard areas, according to the elements and conditions in 17.1.4 (2) Determination of mitigation measures for vegetation, other combustibles, and the structure, including the periodic maintenance associated with such measures. (3) Establishment of priorities relative to mitigating the risks from wildland fire (4) Evaluation of the site for conflagration hazards associated with the property to provide information for fire operations strategies should the site or surrounding properties become involved with fire. [1144:4.1.2]
17.1.3	The wildland fire hazard assessment shall be the basis for recommended mitigation measures relative to the vegetation, other combustibles, and structures on the site. [1144:4.1.3]
17.1.4 Structure Assessment Elements and Conditions	As a minimum, the structure assessment shall cover elements and conditions indicated in 17.1.5 through 17.1.9 [1144:4.2]
17.1.5 Overview of the Surrounding Environment	The structure assessment shall document the conditions of 17.1.5.1 through 17.1.5.5 in the assessment of the surrounding environment, as they will place the structure in the most risk from ignition by a wildland fire. [1144:4.2.1]

17.1.5.1	The structure assessment shall document the location of the structure in relation to predominant topographical features, such as flat open areas, ridges, saddles, steep slopes, natural chimneys like steep narrow draws, or small canyons, that will increase the ignition potential of the structure [1144:4.2.1.1]
17.1.5.2	The structure assessment shall document local weather conditions, including wind, relative humidity, temperature, and fine fuel moisture content. [1144:4.2.1.2]
17.1.5.3	The structure assessment shall document nearby structures using the same criteria as the primary structure. [1144:4.2.1.3]
17.1.5.4	The structure assessment shall document any neighboring properties that could impact the ignition zone of the property being assessed. [1144:4.2.1.4]
17.1.5.5	The structure assessment shall document the structure's location on the slope relative to the structure's potential exposure to heat from a wildland fire. [1144:4.2.1.5]
17.1.6 From Chimney to Eaves	The structure assessment shall document the conditions of 17.1.6.1 through 17.1.6.6 to observe construction and vegetation as they place the structure in the most risk from ignition by a wildland fire. [1144:4.2.2]
17.1.6.1	The structure assessment shall document the type and construction of roofing materials. [1144:4.2.2.1]
17.1.6.2	The structure assessment shall document the condition of roofing materials and assemblies. [1144:4.2.2.2]
17.1.6.3	The structure assessment shall document all skylights in roof assemblies. [1144:4.2.2.3]
17.1.6.4	The structure assessment shall document the potential of roof gutters and areas where exterior walls meet roof or deck surfaces to collect litter on surfaces or in crevices. [1144:4.2.2.4]
17.1.6.5	The structure assessment shall document the construction materials of gutters, downspouts, and connectors. [1144:4.2.2.5]
17.1.6.6	The structure assessment shall document the materials and construction used in eaves of roof overhangs. [1144:4.2.2.6]
17.1.7 From Top of Exterior Wall to Foundation	The structure assessment shall document the conditions of 17.1.7.1 through 17.1.7.6 to observe construction and vegetation as they place the structure in the most risk from ignition by a wildland fire. [1144:4.2.3]
17.1.7.1	The structure assessment shall document the materials and construction used in exterior walls and exterior siding. [1144:4.2.3.1]

17.1.7.2	The structure assessment shall document the materials used for gutter downspouts and connectors on exterior walls. [1144:4.2.3.2]
17.1.7.3	The structure assessment shall document the materials used in windows and other openings in vertical surfaces. [1144:4.2.3.3]
17.1.7.4	The structure assessment shall document the location, size, and screening of ventilation openings. [1144:4.2.3.4]
17.1.7.5	The structure assessment shall document all attached accessory structures as part of the primary structure. [1144:4.2.3.5]
17.1.7.6	The structure assessment shall document areas next to or under a structure where combustible materials that present a source of flame exposure to the structure might collect. [1144:4.2.4]
17.1.8 From Foundation to the Immediate Landscaped Area	The structure assessment shall document the conditions of 17.1.8.1 through 17.1.8.5 to observe construction and vegetation, as they place the structure in the most risk from ignition by a wildland fire. [1144:4.2.4]
17.1.8.1	The structure assessment shall document all vegetative fuels and other combustible materials adjacent to and within 30 ft (9 m) of the structure for their potential to contribute to the intensity and spread of wildland fire. [1144:4.2.4.1]
17.1.8.2	The structure assessment shall document the presence and location of all heat and flame sources within 30 ft (9 m) of the primary structure. [1144:4.2.4.2]
17.1.8.3	The structure assessment shall document all projections attached to the primary structure. [1144:4.2.4.3]
17.1.8.4	The structure assessment shall document detached structures within 30 ft (9 m) of the primary structure that might be ignited by flames, radiant heat, or firebrands from wildland fires. [1144:4.2.4.4]
17.1.8.5	The structure assessment shall document vehicle parking areas within 30 ft (9 m) of any surface of the structure. [1144:4.2.4.5]
17.1.9 From the Immediate Landscaped Area to the Extent of the Structure Ignition Zone	The structure assessment shall document the conditions of 17.1.9.1 through 17.1.9.8 to observe construction and vegetation, as they place the structure in the most risk from ignition by a wildland fire. [1144:4.2.5]
17.1.9.1	The structure assessment shall document vegetation within the area between the outer edge of the immediate landscaped area and the extent of the structure ignition zone as potential fuel that can convey the fire to the structure. [1144:4.2.5.1]

17.1.9.2	The structure assessment shall document the species and location of trees and the separation of tree crowns within the area between the outer edge of the immediate landscaped area and the extent of the structure ignition zone. [1144:4.2.5.2]
17.1.9.3	The structure assessment shall document presence and location of all heat and flame sources within the area between the outer edge of the immediate landscaped area and the extent of the structure ignition zone. [1144:4.2.5.3]
17.1.9.4	The structure assessment shall document detached structures within the area between the outer edge of the immediate landscaped area and the extent of the structure ignition zone that might be ignited by flames, radiant heat, or firebrands from wildland fires. [1144:4.2.5.4]
17.1.9.5	The structure assessment shall document vehicle parking areas within the area between the outer edges of the immediate landscaped area and the extent of the structure ignition zone. [1144:4.2.5.5]
17.1.9.6	The structure assessment shall document all projections attached to the primary structure that extend beyond the immediate landscaped area. [1144:4.2.5.6]
17.1.9.7	The structure assessment shall document all other factors that can affect the risk of ignition or the spread of wildland fire on improved property within the structure ignition zone, including the risk of structure fires spreading to vegetation. [1144:4.2.5.7]
17.1.9.8	Any structure that fails to comply with the requirements of Chapter 5 of NFPA 1144 shall be deemed to increase the risk of the spread of wildland fire to improved property and the risk of fires on improved property spreading to wildland fuels [1144:4.2.5.8]
17.1.10 Development of Wildland Fire Hazard Mitigation Plan	
17.1.10.1	From the information gathered in each structure assessment, the AHJ shall require or cause to be developed a wildland fire hazard mitigation plan and schedule to address the wildland fire hazards identified in the specific structure ignition zone assessment. [1144:4.3.1]
17.1.10.2	The AHJ shall work with applicable agencies and organizations to resolve any conflicts between recommended wildland fire hazard mitigation measures and mitigation measures or objectives of other hazards. [1144:4.3.2]

17.1.10.3	This plan shall include, but not be limited to, the following: (1) Specific mitigation recommendations based on the hazard assessment to reduce the ignition potential around and including the structure. (2) Construction modification or retrofit necessary to reduce the identified hazards as a minimum or to comply with the provisions of Chapter 5 of NFPA 1144. (3) Fuel modification recommendations as specified in Chapter 6 of NFPA 1144. (4) A hazard mitigation implementation and maintenance schedule approved by the AHJ. [1144:4.3.3]
17.1.10.4	The history of wildland fire in the area under assessment shall be considered in determining required hazard mitigation plan. (1144:4.3.4)
17.1.10.5	The AHJ shall approve the mitigation measures relative to access, water supply, and construction based upon the structure assessment established in 17.1.2. [1144:4.3.5]
17.1.10.6	From the information gathered in each structure assessment, the AHJ shall require or cause to be developed a wildland fire hazard severity map of each residential development area addressed. [1144:4.3.6]
17.1.10.7	The map shall include, but not be limited to, the following data elements: (1) Lot designations (2) Structure locations on each lot (3) Locations of wildland fire evacuation centers or safety zones (4) Hazard severity for each lot (5) Overlapping ignition zones (6) Location of fire hydrants, cisterns, or other water sources for fire fighting [1144:4.3.7]
17.1.11 Mitigation Implementation and Enforcement	
17.1.11.1	The AHJ shall require the property owner to develop and comply with the approved wildland fire hazard mitigation plan and schedule according to 17.1.10.1. [1144:4.4.1]
17.1.11.2	No permit associated with construction shall be issued if the provisions of this <i>Code</i> are not addressed. [1144:4.4.2]
17.1.11.3	No permit associated with occupancy shall be issued until the provisions of this <i>Code</i> are satisfied. [1144:4.4.3]
17.2 Plans	The plans for construction and development within the wildland urban interface shall be submitted to the AHJ for review and approval.
17.3 Wildland Fire - Prone Areas	

17.3.1 Safeguards	Safeguards to prevent the occurrence of fires and to provide adequate fire protection and mitigation measures in hazardous fire areas shall be provided and maintained in accordance with Section 17.3
17.3.2 Permits and Approvals	Permits for use of hazardous areas shall not be issued when public safety would be at risk, as determined by the AHJ. (See <i>Section 1.12 for additional requirements for permits.</i>)
17.3.3 Restricted Entry	
17.3.3.1	The AHJ shall determine and publicly announce when hazardous fire areas shall be closed to entry, and when such areas shall again be opened to entry.
17.3.3.2	Unauthorized persons shall not be permitted to enter or remain in closed hazardous fire areas.
17.3.3.3 Signs	Approved signs prohibiting entry by unauthorized persons shall be placed on every closed area and access point.
17.3.4 Use of Flammable Materials and Procedures	
17.3.4.1 Smoking	Lighting, igniting, or otherwise setting fire to any smoking material shall be prohibited unless within structures or smoking areas approved by the AHJ. (See <i>Section 10.9 for additional requirements on smoking.</i>)
17.3.4.2 Tracer Bullets, Tracer Charges, Rockets, and Model Aircraft	
17.3.4.2.1	Tracer bullets and tracer charges shall not be possessed, fired, or caused to be fired into or across hazardous fire areas.
17.3.4.2.2	Rockets, model planes, gliders, and balloons powered with an engine, propellant, or other feature liable to start or cause fire shall not be fired or projected into or across hazardous fire areas.
17.3.4.3 Explosives and Blasting	Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported, or disposed of within hazardous fire areas except as permitted by the AHJ. (See <i>Chapter 65 for additional guidance.</i>)
17.3.4.4 Fireworks	Fireworks shall not be used or possessed in hazardous fire areas unless permitted by the AHJ. (See <i>Chapter 65 for additional guidance.</i>)
17.3.4.5 Apiaries	Lighted and smoldering material used in connection with smoking bees shall not be allowed in or upon hazardous fire areas except by permit by the AHJ.
17.3.5 Clearance of Brush and Vegetative Growth	

17.3.5.1 Electrical Transmission Lines		
17.3.5.1.1	Clearance of brush and vegetative growth from electrical transmission and distribution line(s) shall be provided and maintained in accordance with 17.3.5.1.	
17.3.5.1.2	A combustible-free space around poles and towers shall consist of a clearing of not less than 10 ft (3.05 m) in each direction from the outer circumference of the pole or tower during such periods of time as designated by the AHJ.	
17.3.5.1.3 Trimming Clearance		
17.3.5.1.3.1	At the time of trimming, clearances not less than those established by Table 17.3.5.1.3.1 shall be provided.	
17.3.5.1.3.2	The radial clearances in Table 17.3.5.1.3.1 are minimum clearances that shall be established at time of trimming between the vegetation and the energized conductors and associated live parts.	
17.3.5.1.4	Clearances not less than those established by Table 17.3.5.1.4 shall be maintained during such periods of time as designated by the AHJ.	
Table 17.3.5.1.3.1 Minimal Clearance Between Vegetation and Electrical Lines at Time of Trimming		Minimal Radial Clearance from Conductor
	Line Voltage	ft m
	2400 - 72,000	4 1.2
	72,001 - 110,000	6 1.8
	110,001 - 300,000	10 3.0
	300,001 or more	15 4.6
Table 17.3.5.1.4 Minimum Clearances Between Vegetation and Electrical Lines to Be Maintained		Minimum Clearance
	Line Voltage	in mm
	750 - 35,000	6 152
	35,001 - 60,000	12 305
	60,001 - 115,000	19 483
	115,001 - 230,000	30.5 775
	230,001 - 500,000	115 2920
17.3.5.1.4.1	The site-specific clearance achieved, at the time of pruning, shall vary based on species' growth rates, the utility company specific trim cycle, the potential line sway due to wind, line sway due to electrical loading and ambient temperature, and the tree's location in proximity to the high voltage lines.	

17.3.5.1.4.2	The AHJ shall establish minimum clearances different than those specified by Table 17.3.5.1.4 when evidence substantiating such other clearances is submitted to the AHJ and approved.
17.3.5.1.5 Electrical Power Line Emergencies	During emergencies, the utility company shall perform the required work to the extent necessary to clear the hazard.
17.3.5.2 Structures	
17.3.5.2.1	Persons owning, leasing, controlling, operating, or maintaining buildings or structures in, upon, or adjoining hazardous fire areas, and persons owning, leasing, or controlling land adjacent to such buildings or structures, shall maintain an effective defensible space in accordance with 17.3.5.2.1.1 through 17.3.5.2.1.11.5.
17.3.5.2.1.1	Ground fuels, including native vegetation and plants used for landscaping within the defined landscaping zones, shall be treated or removed. [1144:6.2.1]
17.3.5.2.1.2	Live vegetation within the fuel modification area shall have dead material removed and shall be thinned and pruned in conformance with the wildland fire mitigation plan, as approved by the AHJ. [1144:6.2.2]
17.3.5.2.1.3	Dead and downed fuels within 30 ft (9 m) of all buildings shall be removed or treated to maintain the fuel modification area in conformance with the wildland fire mitigation plan, as approved by the AHJ. [1144:6.2.3]
17.3.5.2.1.4	Vegetation under trees within the fuel modification area shall be maintained at a height that will preclude ground fire from spreading in the tree crown. [1144:6.2.4]
17.3.5.2.1.5	Tree crowns within the structure ignition zone shall be spaced to prevent structure ignition from radiant heat. [1144:6.2.5]
17.3.5.2.1.6	The fuel modification plan shall include a maintenance element identifying and defining the responsibility for continued and periodic maintenance. [1144:6.2.6]
17.3.5.2.1.7 Chimneys and Flues	
17.3.5.2.1.7.1	Every fireplace and wood stove chimney and flue shall be provided with an approved spark arrester constructed of a minimum 12-gauge welded wire or woven wire mesh, with openings not exceeding 1/2 in. (12.7 mm). [1144:5.8.1]
17.3.5.2.1.7.2	Vegetation shall not be allowed within 10 ft (3 m) of a chimney outlet. [1144:5.8.2]
17.3.5.2.1.8 Accessory Structures	Accessory structures shall be constructed to meet the requirements of Chapter 5 of NFPA 1144 or shall be separated from the main structure by a minimum of 30 ft (9 m). [1144:5.9]
17.3.5.2.1.9 Mobile and Manufactured Homes	

17.3.5.2.1.9.1	Permanently located mobile and manufactured homes with an open space beneath shall have a skirt of noncombustible materials, exterior fire-retardant-treated wood, or other ignition-resistant material. [1144:5.10.1]
17.3.5.2.1.9.2	Any enclosed space beneath the mobile or manufactured home shall be vented according to 5.2.2 of NFPA 1144. [1144:5.10.2]
17.3.5.2.1.10 Vehicle Parking Areas	Vehicle parking areas within the immediate landscaped zone shall be maintained free of dry grasses and fine fuels that could be ignited by hot exhaust systems or firebrands. [1144:5.11]
17.3.5.2.1.11 Exterior Exposure Hazards	
17.3.5.2.1.11.1	Heat and flame sources that are unprotected or unsupervised shall not be permitted within 30 ft (9 m) of the primary structure. [1144:5.12.1]
17.3.5.2.1.11.2	Incinerators, outdoor fireplaces, permanent barbecues, and grills shall not be built, installed, or maintained in hazardous fire areas without prior approval of the AHJ. [1144:5.12.2]
17.3.5.2.1.11.3	Openings in incinerators, outdoor fireplaces, permanent barbecues, and grills shall be provided with an approved spark arrester, screen, or door. [1144:5.12.3]
17.3.5.2.1.11.4	Propane tanks and other combustible liquids storage shall conform to NFPA 58 and the wildland fire hazard mitigation plan required in 17.1.10. [1144:5.12.4]
17.3.5.2.1.11.5	Other combustible materials within 30 ft (9 m) of any structure shall be removed or stored in conformance with the wildland fire hazard mitigation plan as approved by the AHJ. [1144:5.12.5]
17.3.5.2.2	Where required by the AHJ because of extra hazardous conditions, additional areas shall be maintained to include additional defensible space from buildings or structures, trees adjacent to or overhanging a building shall be maintained free of deadwood, and the roof of a structure shall be free of leaves, needles, or other dead vegetative growth.
17.3.5.3 Roadways	Areas within 10 ft (3 m) on each side of portions of highways and private streets shall be cleared of combustible vegetation and other combustible growth. Single specimens of trees, shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground covers, shall be permitted to be exempt provided that they do not form a means of readily transmitting fire.
17.3.6 Unusual Circumstances	The AHJ shall determine that difficult terrain, danger of erosion, or other unusual circumstances could require additional safeguards.
17.3.7 Fire Roads, Firebreaks, and Emergency Access	

17.3.7.1	The provisions of 17.3.7 and Section 18.2 shall be used to determine the design, clearances, and provisions for emergency access (ingress and egress).
17.3.7.2	Unauthorized vehicles shall not be driven upon fire roads or firebreaks. Vehicles shall not be parked in a manner that obstructs the entrance to a fire road or firebreak.
17.3.7.3	Radio and television aerials, guy wires, and other obstructions shall not be installed or maintained on fire roads or firebreaks unless the vertical clearance is sufficient to allow the movement of fire and emergency apparatus.
17.3.7.4	Motorcycles, motor scooters, and motor vehicles shall not be operated within hazardous fire areas, except upon clearly established public or private roads.
17.3.8 Tampering with Fire Safety Equipment.	See Section 10.7 for requirements on tampering with fire safety equipment.
17.3.9 Maintenance.	See 4.5.8 for requirements on maintenance.