


*Loma Linda
Subdivision*

*Community Wildfire
Protection Plan*

*Archuleta County
Colorado
2016*

APPROVAL


The Durango District of the Colorado State Forest Service has reviewed the Loma Linda Community Wildfire Protection Plan and approves its content and certifies that it meets or exceeds CSFS Community Wildfire Protection Plan minimum standards.



Kent Grant, District Forester
Colorado State Forest Service


2/17/17
Date

The following entities have received a copy of the Loma Linda Community Wildfire Protection Plan and agree with and support its recommendations.



Randy Larson, Chief
Pagosa Fire Protection District

2/17/2017
Date



Mike Le Roux, Director
Archuleta County Office of Emergency Operations

3/3/2017
Date



Bill Trimarco, President
Loma Linda Homeowners Association

3/3/2017
Date

Table of Contents

| | |
|---|----|
| Signature page | 2 |
| Loma Linda Subdivision Community Wildfire Protection Plan. | 4 |
| FireWise History in Loma Linda. | 4 |
| The Loma Linda CWPP and Its Proposed Area. | 5 |
| Healthy Forest Restoration Act of 2003. | 5 |
| Archuleta County Annual Operating Plan. | 5 |
| USFS and BLM Land and Resource Management Plan/ Fire Management Plan. | 6 |
| The Wildland-Urban Interface (WUI). | 6 |
| Wildfire History. | 6 |
| Fire Policies and Programs. | 8 |
| Partners and Committees. | 8 |
| The Planning Process . | 8 |
| Description of Loma Linda. | 10 |
| Protection Capabilities. | 11 |
| Values at Risk. | 11 |
| Wildfire Risk Assessment. | 12 |
| Structural Vulnerability. | 12 |
| Seasonal Weather Patterns. | 13 |
| Mitigation and Implementation Plan. | 14 |
| Monitoring and Evaluation. | 16 |
| Appendices | 17 |
| Questionnaire . | 26 |

Loma Linda Subdivision Community Wildfire Protection Plan

The Loma Linda subdivision is located in Archuleta County, Colorado, approximately 5 miles south of the junction of US Highway 84 and US Highway 160, and 1 mile west on Eight Mile Mesa Road. The nearest town is Pagosa Springs, Colorado, 5 miles to the north. The coordinates from northwest to southeast are: 37° 10' 40"N 107° 00' 04.51"W to 37° 11' 33.07" N 106° 58' 02.88" W. The development ranges in altitude from a high of 7,574 feet to a low of 7,185 feet. It is bordered on the south and east by National Forest lands, on the west by Echo Canyon Ranch subdivision, and on the north by private lands.

Loma Linda was created in 1977 as a development for residential purposes. It consists of 198 lots ranging in size from 3 to 17.7 acres; about half of these lots have structures on them. The 995-acre community consists of timbered, partially timbered, and open lands. Those structures are mostly single-family residences, although many lots have additional sheds and separate garages. Five properties maintain horses or burros year-round and several others have shelter and fencing for grazing animals.

FireWise History in Loma Linda

Loma Linda became engaged in FireWise in June 2011, when they held their first meeting to discuss the needs for mitigation and an emergency evacuation route, and to introduce personnel from the local fire department, sheriff's office, Colorado State Forest Service (CSFS) and FireWise who would be partners in developing and implementing a Community Wildfire Protection Plan (CWPP). The meeting was attended by approximately 30 property owners from Loma Linda, neighboring Echo Canyon Ranch and agency partners.

As a result of this first meeting a small group of Loma Linda property owners formed a CWPP committee. This committee has worked with the FireWise committee from Echo Canyon Ranch, as well as with Pagosa Fire Protection District (PFPD), Colorado State Forest Service (CSFS) and Bureau of Land Management (BLM).

Since February 2012, the Loma Linda FireWise Ambassador has regularly attended the LLHOA Board's monthly meetings and presented a monthly FireWise bulletin that is published with the Board's minute and on the LLHOA web site (www.llhoapagosa.org). These bulletins advise property owners about current fire concerns, present educational materials related to FireWise, alert property owners to upcoming events such as chipping dates, meetings, and FireWise demonstrations, and generally endeavor to keep the community aware of the ongoing need for fire protection measures. Archived bulletins may be read on the LLHOA website by clicking "FireWise: Reports and Bulletins."

The FireWise Committee sent a survey to all property owners to gather information about their properties, share information, and provide information on Reverse 911 (See Appendix J). The Committee has also offered Home Ignition Zone Workshop and offered free property assessments by either the FireWise Coordinator or Pagosa Fire Dept. Six homes were assessed on April 19, 2014.

The FireWise Ambassador worked with Pagosa Fire to start an Adopt-a-Hydrant Program. Pagosa Fire helped identify fire hydrants that have visibility issues due to terrain and the Ambassador signed up residents to maintain the hydrant nearest their house. Residents are encouraged to keep fire hydrants

visible and accessible from the road and kept cleared of snow in the winter and vegetation obstructions year-round.

Many property owners have taken steps to mitigate their properties by removing ladder fuels such as Gambel oak, junipers and thinning and limbing ponderosa pine. The FireWise Ambassador and agency partners have offered guidance to insure that work is done to CSFS defensible space guidelines.

Loma Linda received Firewise Communities USA recognition in December 2014.

The Loma Linda CWPP and Its Proposed Areas

This CWPP covers all the private property within the Loma Linda subdivision, as well as the dedicated county roads included in the Loma Linda Metropolitan District. Its borders are indicated on the attached map. See Appendix A.

Healthy Forest Restoration Act of 2003

The Loma Linda CWPP has been developed in response to the Healthy Forest Restoration Act of 2003 (HFRA). This legislation established unprecedented incentives for communities to develop comprehensive wildfire protection plans in a collaborative, inclusive process. Furthermore, this legislation directs the Departments of Interior and Agriculture to address local community priorities in fuel reduction treatments, on both federal and non-federal lands.

HFRA emphasizes the need for federal agencies to collaborate with communities in developing hazardous fuel reduction projects and places priority on treatment areas identified by communities themselves through development of a CWPP. Priority areas include the wildland-urban interface (WUI), municipal watersheds, areas impacted by wind throw or insect or disease epidemics, and critical wildlife habitat that would be negatively impacted by a catastrophic wildfire. In compliance with HFRA, the CWPP requires agreement among the local government, the local fire departments, and the state agency responsible for forest management (in Colorado, the Colorado State Forest Service). The CWPP must also be developed in consultation with interested parties and the applicable federal agency managing the land surrounding the at-risk communities.

This CWPP tiers to the Archuleta County CWPP revised in 2008. The plan is consistent with the goals and strategies described in the Archuleta County CWPP, and provides further strategic and tactical direction specific to wildfire protection and mitigation for the community.

Archuleta County Annual Operating Plan

Archuleta County, federal land management agencies, the Colorado State Forest Service and Pagosa Fire Protection District in southwest Colorado operate under the Archuleta County Annual Operating Plan (AOP) for wildfire protection. This plan provides for mutual aid to assist with the management of wildfire incidents in SW Colorado. This plan for mutual aid provides significantly enhances initial and extended attack capabilities through the rapid convening of fire protection resources for managing a wildfire. The Archuleta County AOP outlines standard operating procedures and the level of participation and available resources of each party under the plan.

USFS & BLM Land and Resource/Fire Management Plans

The San Juan National Forest and BLM Southwest District Land and Resource Management Plans and associated Fire Management Plan describe the role of fire in the native ecosystems in SW Colorado. These plans outline the strategies that the USFS and BLM will utilize to manage wildland fire and fuels on these federal lands in SW Colorado. The San Juan National Forest and BLM Southwest District Fire Management Plan (2007) specifically describes objectives and strategies to manage fire and fuels on federal lands near communities within the wildland-urban interface.

The Wildland-Urban Interface (WUI)

The WUI (Appendix A) defined by the Loma Linda FireWise Committee, Archuleta County, and federal fire officials is bounded by:

- Trujillo Road (CR500) to the west;
- CR119, Reservoir Hill and US Highway 160 to the north;
- US 84 to the north;
- CR335 and the Rio Blanco community to the south.

The boundaries of the WUI were determined based on existing wildland fuels, the presence of natural barriers to fire spread and expected fire behavior during peak fire seasons in a dry summer. The WUI encompasses 21,103 acres of forested land, wetlands and grasslands. It includes the Echo Canyon Ranch subdivision to the west, San Juan National Forest to the east and south (6,720 acres), Southern Ute Indian Reservation to the west (350 acres) and county, city and private lands interspersed throughout (approximately 13,900 acres). It also includes 209 acres of property managed by Colorado Parks and Wildlife.

The area within the WUI, including Loma Linda, is under the protective umbrella of the Archuleta County Sheriff's Department, the Archuleta County Office of Emergency Management and the Pagosa Fire Protection District (PFPD).

Wildfire History

Throughout the Loma Linda community there is evidence of fire in scorched stumps and snags, but there has only been one recorded wildfire within Loma Linda since local records have been kept. That incident involved a lightning strike in 2011 that was quickly extinguished without any acreage burned. However, local knowledge reports occasional lightning strikes and unattended campfires, particularly on Eight Mile Mesa to the south of the development, which have been extinguished with no measurable damage. In 2013, a lightning strike in neighboring Echo Canyon Ranch caused a small grass fire that burned less than an acre.

The San Juan National Forest has maintained fire records since 1970. These records show a total of 30 fires within two miles of Loma Linda since 1970. Most of the recorded fires were on National Forest System lands, as the fires on private land were not recorded until recently.

Over the past forty years, approximately 30% of the wildfires in Archuleta County were human-caused, with the remaining 70% started by lightning.

Two large fires have occurred further north in Archuleta County since 2010 – the 25,000-acre Little Sand Fire in 2012 and the 109,000-acre West Fork Complex in 2013.

Below and in Appendix B are tables listing fires within Archuleta County from 1970 -2010. The U.S. Forest Service provided the information in these tables.

| Archuleta County Fires by Ownership 1970 - 2010 | | |
|--|--------------------|--------------------|
| Ownership | Total Fires | Total Acres |
| Bureau of Land Management | 4 | 2.3 |
| Private | 160 | 363.2 |
| San Juan NF | 1076 | 3486.9 |
| Southern Ute Tribe | 16 | 11.5 |

Largest Fires In and Adjacent to Archuleta County (1970 – 2010)

| Fire Name | Year | Size |
|-------------------|-------------|-------------|
| Dipping Vat | 1996 | 16,456 |
| Snow Springs #2 | 1996 | 406 |
| Turkey Creek WFU | 1998 | 344 |
| Cabazon South | 2000 | 330 |
| Cabazon | 2000 | 796 |
| Quartz Meadows | 2000 | 30 |
| Second Box WFU | 2001 | 120 |
| Missionary Ridge | 2002 | 71,000 |
| Bolt | 2003 | 2,130 |
| Devil Creek | 2003 | 235 |
| Trail Creek | 2003 | 89 |
| Devil Mountain | 2004 | 60 |
| Rio Blanco WFU | 2005 | 1,182 |
| Snag WFU | 2008 | 23 |
| Sand Creek | 2010 | 20 |
| Little Sand Creek | 2012 | 24,930 |
| Coal Creek | 2012 | 130 |
| Cinnamon Bear | 2012 | 85 |
| West Fork Complex | 2013 | 109,615 |

WFU = Wildland Fire Use. Fires managed for resource benefit.

Fire Policies and Programs

The Loma Linda CWPP will be governed by the following policies, regulations, and plans:

- The Healthy Forest Restoration Act of 2003.
- The LLHOA Covenants and Regulations, which include requiring permission to burn slash, requiring permission to cut trees greater than three inches in diameters, and which impose no restrictions on building materials;
- The Archuleta County CWPP approved in 2008.

Partners and Committees

The Loma Linda CWPP was developed with the combined contributions of the following:

Core Planning Group:

- Peggy Beach, FireWise Neighborhood Ambassador, CWPP Committee Chairperson
- Carolyn Schwulst, CWPP Committee
- Judy Lechner, CWPP Committee
- Rena Gallant, CWPP Committee
- Bill Crouse, CWPP Committee, PFPD Firefighter
- Loma Linda Homeowners Association Board of Directors

Agency Collaborators:

- Bill Trimarco, FireWise of Southwest CO, Archuleta County Coordinator
- John Gilbert, PFPD Wildfire Coordinator
- David Hartman, PFPD Fire Marshal, formerly Wildfire Coordinator
- Christina Marquart, Archuleta County OEM, Assistant Manager
- Pam Wilson, FireWise of Southwest Colorado, Executive Director
- Chris Barth, BLM, Wildfire Mitigation Specialist
- Kent Grant, CSFS, District Forester
- Drew Peterson, former Archuleta County Emergency Manager
- Thad McCain, Archuleta County OEM, Emergency Manager
- Scott Wagner, USFS, Fuels Specialist

Community Collaborators:

- Dan MacVeigh, Fire Ready of Pagosa Springs
- Geraldine Macomber, FireWise Ambassador, Echo Canyon Ranch Association Board President, Echo Canyon Ranch CWPP Committee Chairperson
- Lynn Constan, Echo Canyon Ranch Manager

The Planning Process

In its initial stages, the Loma Linda CWPP committee worked closely with the neighboring community Echo Canyon Ranch (ECR) committee members to coordinate our plans, particularly as it relates to defining a common emergency evacuation plan, the WUI that incorporates both communities, and identifying governmental agencies that will be assisting us in the event of a wildfire.

In June 2011, the FireWise Ambassador for Loma Linda held an introductory meeting at her home. This was attended by property owners from Loma Linda, property owners from ECR, representatives from the Archuleta County Sheriff's office, the Pagosa Springs Fire Protection District, the Colorado State Forest Service, and the director of FireWise of Southwest Colorado to discuss the fire danger in our area, the need for mitigation, an emergency evacuation plan, and the value of a CWPP.

As a result of this initial meeting, work began between Loma Linda and Echo Canyon, with consultation from David Hartman from the PFPD, to establish an emergency evacuation route between our two communities. The first option considered was quickly rejected when it was determined that the route would lead residents of Echo Canyon directly up to and along a heavily forested area in Loma Linda. A second option is still under negotiation with private property owners.

Starting in February, 2012, CWPP meetings were held by the two original committee members to begin working on components of the Loma Linda CWPP. That year, subsequent meetings were held to work on the CWPP.

- February 23, 2012, with Tammy Tyner and the Loma Linda CWPP committee.
- April 5, 2012, attended by Craig Goodell, Kent Grant, David Hartman, Christina Marquart, Bill Trimarco, Peggy Beach, Carolyn Schwulst, Ron Halvorson, and Geraldine Maccomber, to discuss aspects of the CWPP such as mitigation, WUI, forest health, and emergency management issues.
- Meetings of the Loma Linda CWPP committee, now consisting of three members (Peggy Beach, Carolyn Schwulst, and Judy Lechner), were held in April, June, July, and December of 2012.

In February, 2012, a questionnaire was composed and sent out to all property owners to gather information about, among other things, numbers and types of structures, number of residents (part-time and full-time), persons with special needs in an emergency, and number of residents who signed up for reverse 911. The complete questionnaire is included as Appendix J.

In April, 2012, a joint meeting with the Loma Linda and Echo Canyon Ranch CWPP committees, Kent Grant, Craig Goodell, David Hartman, Christina Marquart, and Bill Trimarco, FireWise coordinator for Archuleta County, was held to define the WUI boundary for Loma Linda and Echo Canyon Ranch.

In December 2013, the committee convened to review materials and information gathered by the individual members and to begin organizing it into its final format. At that time, Rena Gallant joined the committee.

On January 15, 2014, the chair of the CWPP committee met with partners Chris Barth, Kent Grant, Bill Trimarco, and Loma Linda Board members Mike Leitch, Glenn Unrath, resident Doris Leitch, and property owner Bill Crouse, a new member of the CWPP committee and a local volunteer firefighter, attended as well. A number of recommendations resulted from that meeting including:

- Consider a shaded fuel break on the southern border between Loma Linda and the National Forest;
- Assess driveways for accessibility of emergency vehicles;
- Install reflective address signs at the entrance of driveways;
- Develop an evacuation plan for the community;
- Establish safe areas in case of evacuation.

The FireWise Ambassador attends monthly Archuleta County Ambassador meetings arranged by Bill Trimarco, Archuleta County FireWise Coordinator. These meetings are usually attended by 4-6 people and help keep the ambassadors updated on current fire situations, materials available for distribution, and information needed for our CWPPs.

Description of Loma Linda

The predominate vegetation types in Loma Linda Subdivision are ponderosa pine with Gambel oak and juniper understory on the hills and grasslands in the valleys. There is some Douglas-fir forest on the steeper north aspects along the southern edge of the subdivision. (See Appendix C)

The landform of the majority of the subdivision can be described as rolling hills and valleys. Slopes within the subdivision are generally less than 15% with a few steep slopes up to 60%. Loma Linda is surrounded by private land on the north, east and west, and National Forest lands on the south and east. The surrounding vegetation is similar to that within the subdivision, though more dense on the national forest due to lack of homes.

The north-facing aspect of Eight Mile Mesa on the San Juan National Forest, which adjoins Loma Linda and Echo Canyon Ranch is steep (slopes of 40% to 100% grade). The vegetation on the north-facing slope is Douglas-fir, ponderosa pine and mountain shrub types. There are significant amounts of standing dead and down Douglas-fir trees on the north aspects of Eight Mile Mesa as a result of recent Douglas-fir beetle activity.

The mesa top is level and the vegetation is mostly ponderosa pine/Gambel oak with areas of grassland and shrub land in old clear-cuts. The south-facing slope of Eight Mile Mesa and Turkey Mountain is less steep, although the south aspect facing Flaugh Canyon, and the southeast and southwest aspects toward the Blanco River are also steep. There are patches of piñon-juniper vegetation type on the steep south to southwest aspects of the mesa. (See Appendix D)

To the west of adjacent Echo Canyon Ranch is Alpine Cascade Ranch where the dominant vegetation type is ponderosa pine. Echo Canyon Ranch has a mix of ponderosa, Gambel oak and grassland. The majority of the vegetation to the north is grassland bordered by ponderosa and oak on the northern ridge of Echo Canyon Ranch. Vegetation to the east is ponderosa/Gambel oak and grassland. The area southeast of Loma Linda is called Turkey Mountain and is mostly National Forest System lands with some private land along Highway 84. Turkey Mountain has a mix of ponderosa pine, piñon-juniper and Douglas-fir vegetation types depending on the aspect and slope.

The US Forest Service conducted approximately 955 acres of fuels treatments on Eight Mile Mesa and Turkey Mountain in 2006. The primary treatment was an understory thinning and mastication of small trees and shrubs. Some areas along the Eight Mile Mesa road just southeast of Loma Linda were hand thinned with firewood removal followed by piling of slash. These remaining slash piles were burned the following winter.

Protection Capabilities

Loma Linda has only one road in and out of the development. If this road is inaccessible, there is one possible emergency evacuation route to the west through Echo Canyon Ranch.

Within the development, there are several small areas that could be designated as safety zones.

There are 9.2 miles of dedicated county roads in Loma Linda, which are maintained by the Loma Linda Metropolitan District. The roads are hard surfaced with 3/4" minus material and applications of magnesium chloride. All roads are at least 24-feet wide with cul-de-sacs of approximately 45-foot

diameters -- wide enough for large vehicles to turn around. The right-of-way extends 30 feet either side of the road centerline.

There are 35 fire hydrants in Loma Linda (Appendix H). They are the responsibility of the Pagosa Area Water and Sanitation District (PAWSD), and are fed from a storage tank located below Eight Mile Ridge at 2053 Loma Linda Drive. According to Art Holloman of PAWSD, this tank, which is also the domain of PAWSD, has a capacity of 220,000 gallons of water, but is kept at approximately 110,000 gallons. The availability of water from this tank can be regulated according to need.

The community of Loma Linda owns no firefighting equipment, although Loma Linda Metro District owns a road grader. Several property owners are current or former firefighters. Fire protection for the area is provided by the Pagosa Fire Protection District (PRPD). PFPD is comprised of seven stations, all of which store vehicles and equipment, but only one of which is manned around the clock. It is located on the west end of Pagosa Springs, 15 miles from Loma Linda. The closest fire station to Loma Linda is Station 3, located on US Highway 84, 1-1/2 miles from the entrance to Loma Linda. Response time from Station 3, which is unmanned, to Loma Linda is approximately 15 minutes.

District-wide, the firefighting equipment includes seven engines, five tenders (water trucks), one aerial truck with a 75-foot ladder, four brush trucks, a mobile command vehicle, a maintenance truck and other smaller vehicles. A 1,000-gallon Type 1 engine, an 1,800-gallon Type 3 support tender, and a Type 6 brush truck are housed at Station 3.

The PFPD has a mutual aid agreement with the US Forest Service and the Bureau of Land Management as well as Los Pinos and Upper Pine River Fire Departments.

The Archuleta County Office of Emergency Management maintains a Citizen Alert system that can send out a warning to the public on a conventional phone, cell phone, text device, or voice-over internet protocol (VOIP). Alerts can also be delivered by email. Local land-line numbers that appear in the phone book are automatically in the system. The procedure to register out-of-area land-line numbers, cell phones, and email addresses can be found at www.acemergency.org. All property owners have been provided information on how to register and have been encouraged to sign up for the Citizen Alert system.

Values at Risk

Loma Linda's population numbers are variable. Many of the homes are occupied seasonally or part time. Because of the seasonal nature of the population, it is impossible to determine how many people are in the development at any time. Only about 50 of the homes are inhabited year round. Of those, several residents would require special assistance during an evacuation. Currently, five residents maintain horses or burros on their properties year round, and many have house pets.

With the exception of the PAWSD water tank and the postal boxes and shed at the entrance of the development, there are no other facilities or structures that are not privately owned. Some utility lines are above ground and some underground. All telephone lines are buried, as is the PAWSD water system. There are no natural gas lines in Loma Linda, but many homes have propane tanks. Most tanks are above ground.

Loma Linda is home to a wide variety of wildlife, including mountain lions, bobcats, coyotes, badgers, mule deer, elk, prairie dogs, rabbits, and many smaller rodents such as squirrels, chipmunks, and voles. The bird population varies with the seasons, and includes a resident population of wild turkeys.

Although there are no springs or running water within the development, there are several seasonal ponds scattered around Loma Linda that attract water fowl and provide drinking water for other wildlife.

Wildfire Risk Assessment

The fire hazard is high in the ponderosa pine type, classified within Fire Regime I—frequent (less than 35 years) low intensity understory fires. The ponderosa pine stands were logged 80 to 100 years ago and have not seen any widespread fire in over 100 years. The Douglas-fir type is classified in Fire Regime III—35 to 200 years frequency with mixed severity. The grasslands are in Fire Regime III—35 to 200-year stand replacement and low severity. These grasslands are composed of a mix of native and introduced species and most are perennial and recover quickly following fire, especially the native species. Scott Wagner, former Fuels and Prescribed Fire specialist with the San Juan National Forest, describes these areas within Loma Linda as follows:

Ponderosa forests: Condition Class 3 because they have missed several fire cycles and are at high risk of disturbance that could damage the ecosystem and impair recovery.

Douglas-fir forests: Condition Class 2 because a few fire cycles have been missed and are at moderate risk of disturbance that could damage the ecosystem and impair recovery.

Grassland vegetation: Condition Class 2 because many years of grazing have maintained a low fuel load and reduced the risk of damage by wildfire. The exception is in areas with cheatgrass which would be classified in Condition Class 3. Cheat grass is very volatile and frequently comes back with more cheatgrass following fire, reducing the ability of native grasses to recover.

Overall, the fire risk within Loma Linda ranges from low in the northeast to high in the south. All areas of the subdivision were designated as medium to high wildfire risk in the Archuleta County CWPP. The highest risk area for a major wildfire starting *within* the subdivision is along the south-southwest border adjoining the National Forest. (See Appendices E, F, and F1)

A fire originating on the adjacent National Forest lands to the southeast, south, southwest and west of Loma Linda poses the greatest threat to the subdivision. Steep slopes on the north side of Eight Mile Mesa, along with heavy fuels would increase fire behavior, restrict firefighter access and limit control options in this area. Fires occurring in the daytime could be driven towards the subdivision by typical up-canyon winds from the San Juan River combined with the normal gradient winds from the southwest to west. Another threat to the subdivision would be a fire originating to the southeast in the Turkey Mountain area with easterly outflow winds from thunderstorms.

Structural Vulnerability

Loma Linda is accessible by only one road, a wide unpaved county road (Eight Mile Mesa Road) that meets US 84 to the north. This road is shared by private homes and ranch land, and is a major access road to the San Juan National Forest and Eight Mile Mesa.

The Loma Linda Covenants and Regulations do not encourage or require the use of fire-resistant building materials or construction. Therefore, a wide variety of structural materials and designs can be found throughout the development. They include stucco over wood frame, wood on plywood, wood frame, prefabricated materials, log, log siding, and metal. Roofs are primarily constructed of HIP modular material, metal, composite shingles, and cedar shingles. Most decks are cedar boards, pine

lumber, or composite material. Open decks and porches, unenclosed vents, fascia, eaves and soffits are commonly found.

Although many homeowners have endeavored to mitigate around their homes to Zone 1, there is still a significant amount of flammable vegetation within 10 feet of many structures. This includes wood chips, low shrubs, grass, and larger trees.

Accessibility to many homes is a major concern, particularly where homes have been built on ridges and slopes. In some cases, the driveways are winding, narrow, and steep. Even on more level driveways, vegetation often overhangs and/or crowds up to the edge of the driveways.

Prior to the introduction of FireWise in Loma Linda, several homeowners had undertaken some mitigation of their properties. Since 2012, when FireWise became active in encouraging mitigation and offered assistance in chipping slash, it could be estimated that approximately 10% of the properties have been at least partially mitigated.

Seasonal Weather Patterns

The typical fire season in Archuleta County runs from April through October. However, in 2012 the fire season was extended by at least one month on both ends. June is generally the driest month of the year followed by May and October. August and February are typically the wettest months.

Three weather patterns affect fire danger—dry frontal systems approaching from the northwest, monsoonal moisture from the southwest, and ridges of high pressure. Cold fronts typically pass through the area in April through early June. Often these fronts are dry when the associated low pressure system is far to the north. These fronts are frequently preceded by high winds (up to 60 mph) out of the south-southwest. After the fronts pass, the winds shift to the northwest and can be as high as 25 mph. Relative humidity levels often drop below 10% ahead of these fronts. If fuel conditions are unusually dry, the National Weather Service will issue a Red Flag Warning ahead of the frontal passage. During 1996, 2002, 2012 and 2013 early snow melt, very dry spring weather, and numerous wind events associated with dry cold fronts were common.

The monsoonal pattern typically sets up in early to mid-July and goes through early September. The first thunderstorms are often dry and start numerous fires. The amount of moisture associated with the monsoon pattern varies from year to year but the typical pattern is for isolated to scattered showers early during the period interspersed with some dry periods. Typically in August there will be a period of several days with widespread heavy rains that often signal the end of our fire season (at least for lightning-caused fires). Outflow winds from large thunderstorms during the monsoon season can be very strong. These winds occur late in the afternoon and early evening and can blow in any direction.

High pressure systems often setup over southwest Colorado in the early part of summer. These systems are associated with hot and dry conditions and gusty breezes.

Weather patterns in southwest Colorado can be affected by El Niño Southern Oscillation. Typically, El Niño (warmer waters in the tropical Pacific Ocean) will lead to wetter conditions in southwest Colorado while a La Niña event will lead to drier conditions.

Mitigation and Implementation Plan

Since 2011, the FireWise Ambassador and Committee, the Loma Linda Board of Directors, and property owners have been actively involved in working toward the reduction of wildfire risk throughout Loma Linda through participation in ongoing education and mitigation projects.

The CWPP development process identified many areas of concern and established priorities for action, many of which have already been initiated.

Priorities:

1. Educate property owners about the wildfire risk and the need for mitigation on their property.
2. Establish means to encourage mitigation by individual owners.
3. Maintain visibility and access to fire hydrants.
4. Develop an evacuation plan for the community.
5. Establish safe areas within the community.
6. Develop an emergency egress route from the community in conjunction with adjacent Echo Canyon Ranch.
7. Assess driveways for accessibility by emergency vehicles.
8. Develop a shaded fuel break along the southern border with the National Forest and in the southwestern corner of the subdivision. (See Appendices H and I)
9. Install reflective address signs at all driveway entrances.

Implementation:

| Priority | Recommendation | Who | When |
|----------|---|---|---------|
| 1 | a) Continue to publish a monthly FireWise bulletin with the minutes of the LLHOA Board minutes and on the LLHOA web site (www.llhoapagosa.org). Bulletins alert property owners of fire alerts in the area, direct them to sources of FireWise information, encourage them to have an evacuation plan for their families and animals, recommend maintaining a “Grab-and-Go” bag, and inform them of mitigation activities in the development. b) Post FireWise brochures and other information on the bulletin board at the mailboxes. c) Invite guest speakers to speak at the annual summer picnic. d) Have FireWise Ambassador continue to present issues and recommendations at every monthly Board meeting and at the Christmas General Board meeting. e) Provide questionnaire to new property owners that gathers information about their properties and give sources of information on emergency evacuation preparations and the procedure for | FireWise Ambassador and/or FireWise Committee | ongoing |

| | | | |
|---|---|----------------------------|---|
| | <p>signing up for Reverse 911 services. See Appendix J.</p> <p>f) Continue to offer Home Ignition Zone and mitigation assessments to all property owners.</p> | | |
| 2 | <p>a) Continue to offer chipping days to assist property owners with slash removal</p> <p>b) Organize slash hauling days</p> <p>c) Search out available grant opportunities for mitigation work</p> <p>d) Continue to offer HIZ assessments</p> <p>e) Have Architectural Committee share information on fire-resistant building materials as homeowners remodel or new homes are built.</p> | FireWise Committee and HOA | Annually |
| 3 | Continue with Adopt-a-Hydrant program | FireWise Ambassador; PFPD | ongoing |
| 4 | <p>a) Develop an evacuation plan for Loma Linda in collaboration with PFPD and Archuleta County OEM.</p> <p>b) Add the plan to the CWPP and post on the website and community bulletin board.</p> | FireWise Committee | Fall 2015 |
| 5 | <p>a) Identify some possible safe areas and helicopter landing zones.</p> <p>b) Add results to the CWPP and post on the bulletin board and website.</p> | FireWise Committee | Fall 2015 |
| 6 | <p>a) Notify resident of the emergency-only egress route between Loma Linda and Echo Canyon Ranch that was identified in the ECR CWPP.</p> <p>b) Notify residents which members of each subdivision have been given a key.</p> | FireWise Committee; HOA | Annually |
| 7 | <p>a) Inspect driveways to determine which driveways need improvements to be accessible by emergency vehicles.</p> <p>b) Have the HOA and Architectural Control Committee review guideline changes on new building construction to insure adequate driveways are built in the future.</p> | FireWise Committee; PFPD | <p>a) completed</p> <p>b) in process</p> |
| 8 | <p>a) Identify areas along the southern boundary of the subdivision that require mitigation. Mitigate the southwest corner bordering USFS and Echo Canyon Ranch to Zone 3 guidelines.</p> <p>b) Secure homeowner approval to create a shaded fuel break along the entire southern boundary.</p> | | <p>a) completed July 17, 2015</p> <p>b) Spring 2016</p> |
| 9 | Research the feasibility of installing new, larger, reflective number signs at every lot at no expense to the lot owners. | HOA | Completed July 24, 2015 |

Monitoring and Evaluation

Monitoring:

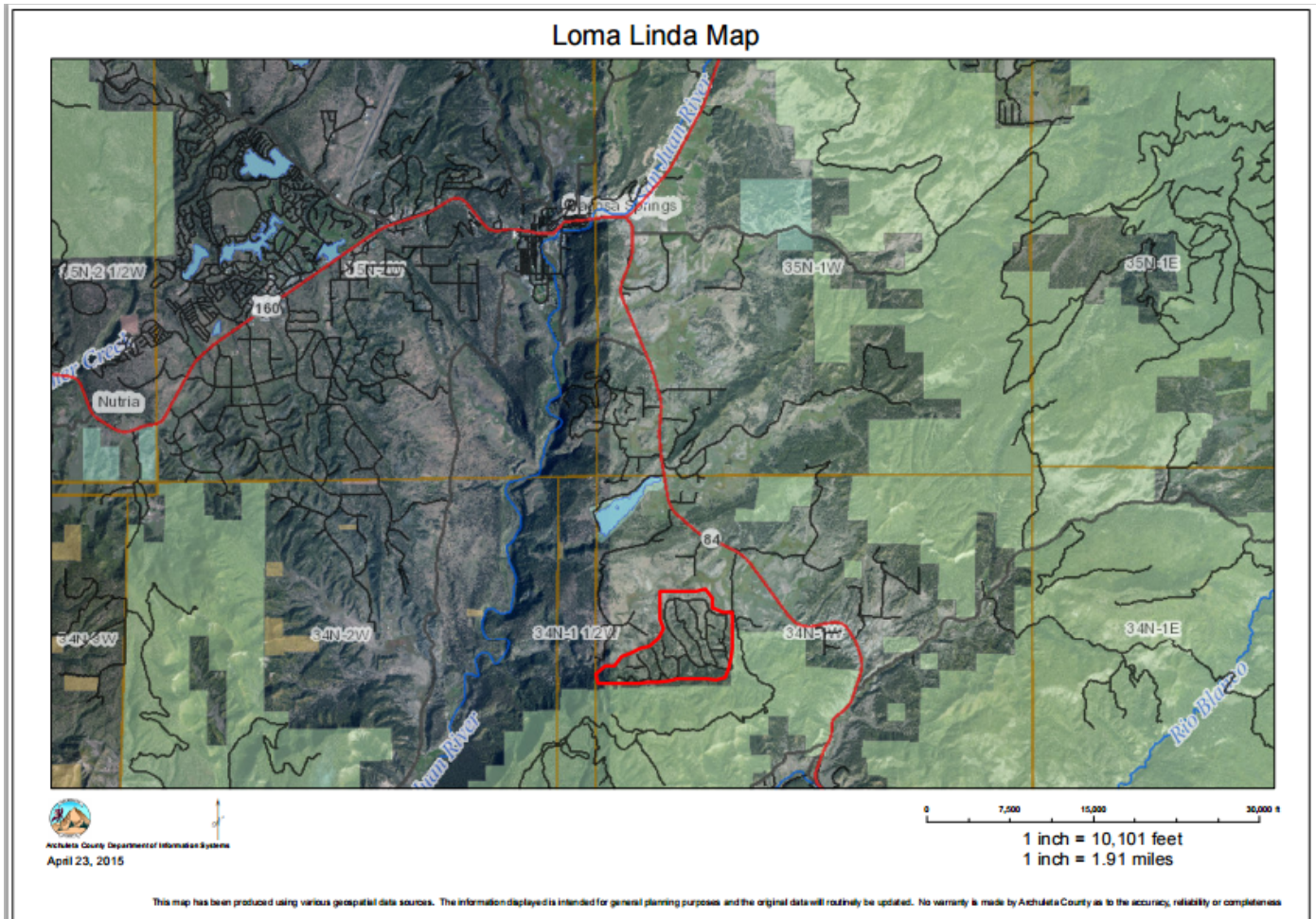
- The CWPP Committee will document and report the community's accomplishments prior to the association's annual meeting in December. The CWPP Committee will submit an annual report will be submitted by to the LLHOA Board, members of the community, FireWise of Southwest Colorado and the CSFS. The report will include project-specific information and "lessons learned" from fuels mitigation projects and activities over the preceding year.
- Any grant projects will be monitored by the appropriate agency.
- The CWPP Committee will track volunteer hours on community workdays and on individual lots and submit them on the FireWise volunteer hours database.

Evaluation:

- The CWPP Committee will conduct an annual review of the CWPP, measure progress by degree of accomplishment of the proposed actions, and make adjustments to the plan in the form of amendments. Any revisions will be forwarded to the Loma Linda HOA Board and agency partners.
- The CWPP Committee will prepare a formal update of the Loma Linda CWPP within five years of its being approved.

Appendices

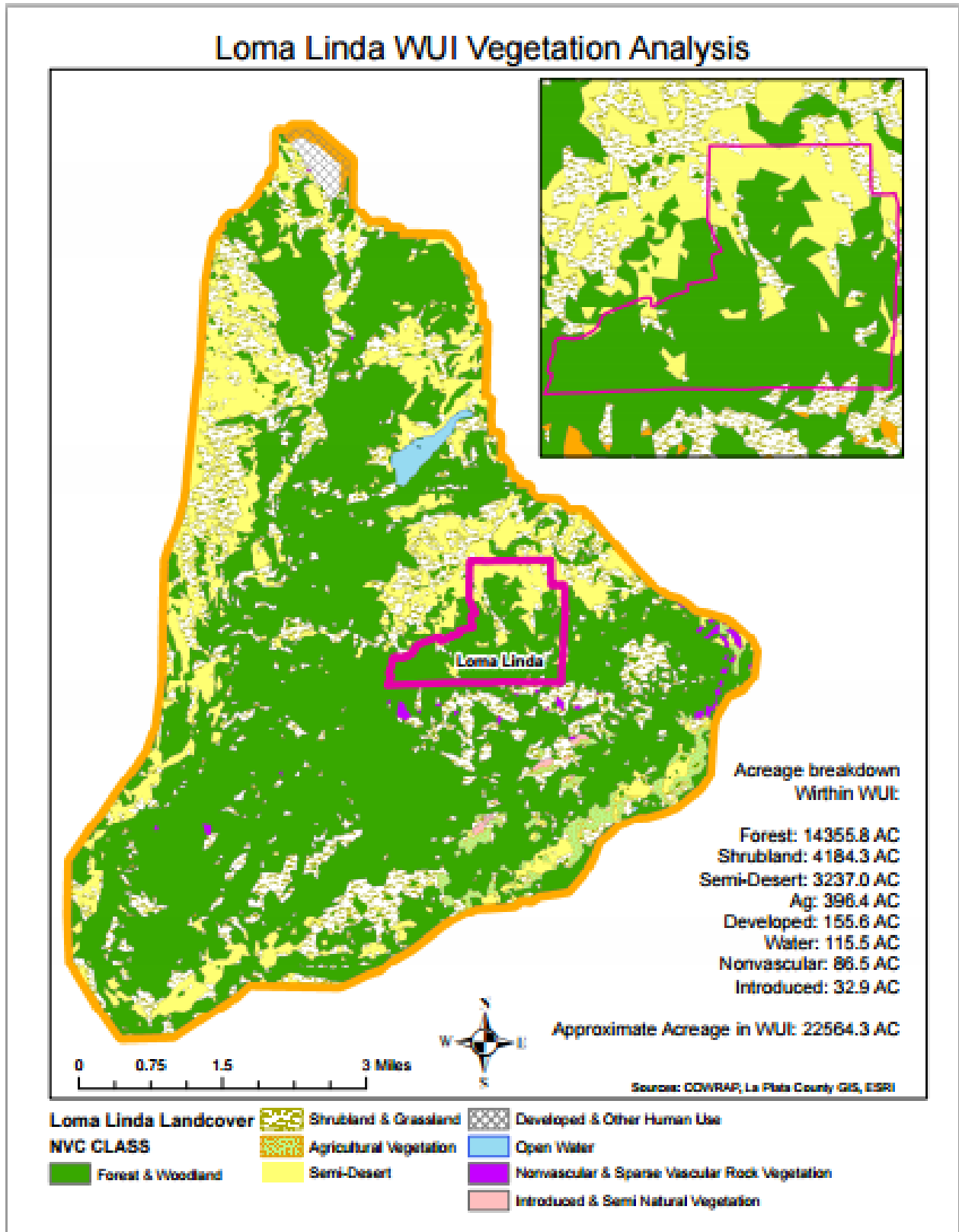
A. Loma Linda Vicinity Map



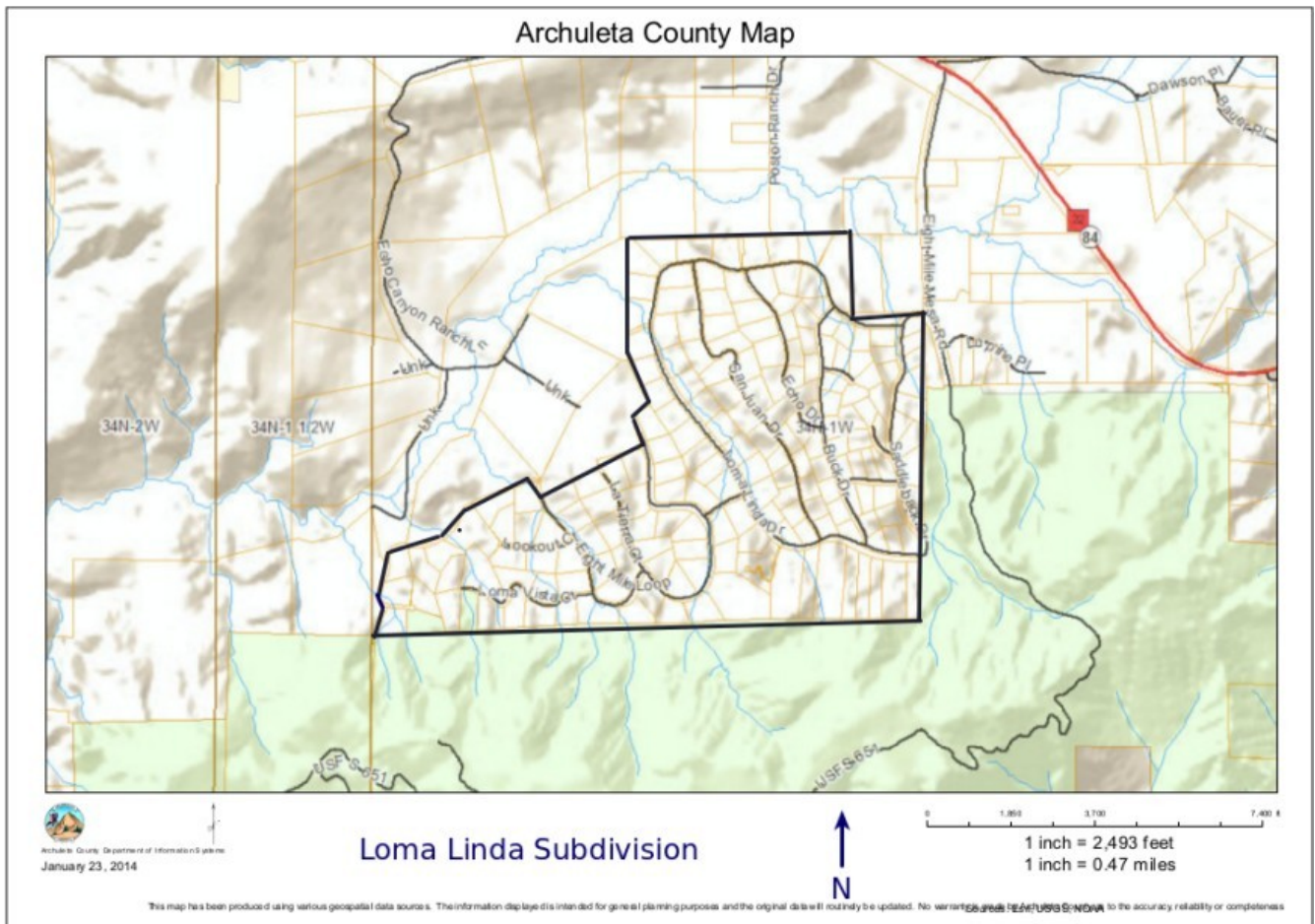
B. Archuleta County Wildfires

Archuleta County Wildfires, USFS, 1970 – 2010

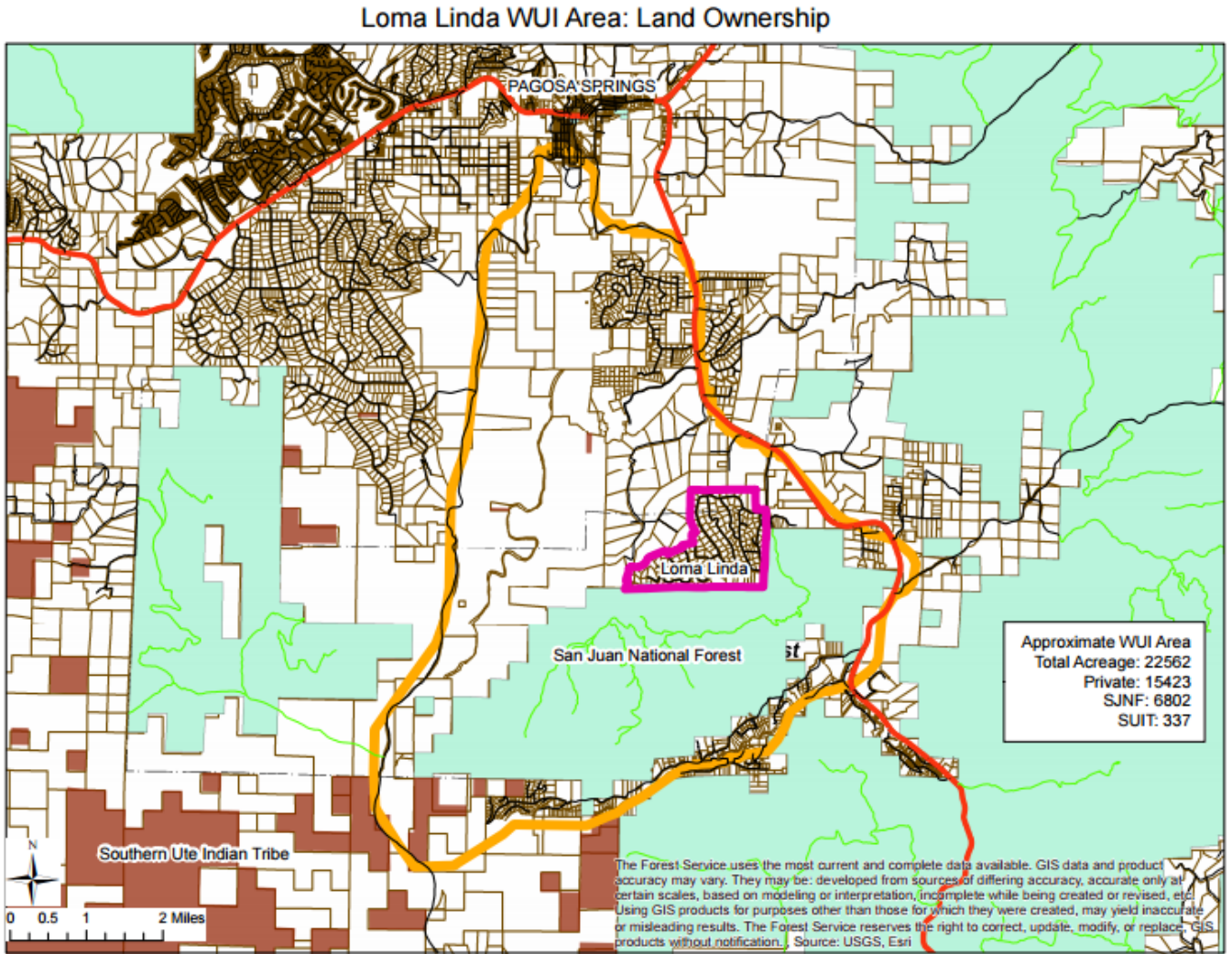
| YEAR | Total Number of Fires | Average Size (Acres) | Total Acres |
|------|-----------------------|----------------------|-------------|
| 1970 | 27 | 0.6 | 16.8 |
| 1971 | 55 | 0.5 | 25.6 |
| 1972 | 45 | 0.6 | 28.8 |
| 1973 | 16 | 0.9 | 14.2 |
| 1974 | 40 | 0.7 | 27.2 |
| 1975 | 26 | 0.5 | 12.1 |
| 1976 | 30 | 1.7 | 51.1 |
| 1977 | 42 | 2.4 | 101.1 |
| 1978 | 25 | 1.1 | 26.4 |
| 1979 | 24 | 0.7 | 16.0 |
| 1980 | 18 | 1.0 | 17.1 |
| 1981 | 18 | 1.3 | 23.2 |
| 1982 | 13 | 0.5 | 6.9 |
| 1983 | 10 | 0.5 | 4.8 |
| 1984 | 8 | 0.1 | 0.8 |
| 1985 | 12 | 0.3 | 3.1 |
| 1986 | 12 | 0.6 | 6.7 |
| 1987 | 16 | 4.3 | 69.0 |
| 1988 | 25 | 2.7 | 66.9 |
| 1989 | 52 | 2.7 | 140.0 |
| 1990 | 28 | 1.5 | 41.3 |
| 1991 | 27 | 1.2 | 32.0 |
| 1992 | 22 | 0.7 | 14.3 |
| 1993 | 10 | 0.2 | 2.2 |
| 1994 | 36 | 1.7 | 61.3 |
| 1995 | 24 | 1.8 | 43.1 |
| 1996 | 65 | 8.0 | 520.2 |
| 1997 | 22 | 0.4 | 8.6 |
| 1998 | 26 | 14.8 | 384.5 |
| 1999 | 8 | 0.7 | 5.8 |
| 2000 | 78 | 1.7 | 131.6 |
| 2001 | 25 | 5.0 | 125.1 |
| 2002 | 46 | 1.0 | 46.6 |
| 2003 | 81 | 4.3 | 350.8 |
| 2004 | 38 | 2.1 | 81.4 |
| 2005 | 27 | 44.6 | 1,205.3 |
| 2006 | 41 | 0.3 | 13.1 |
| 2007 | 43 | 1.2 | 51.2 |
| 2008 | 40 | 1.0 | 41.9 |
| 2009 | 27 | 0.8 | 21.2 |
| 2010 | 28 | 0.9 | 24.6 |



D. Topographical Map

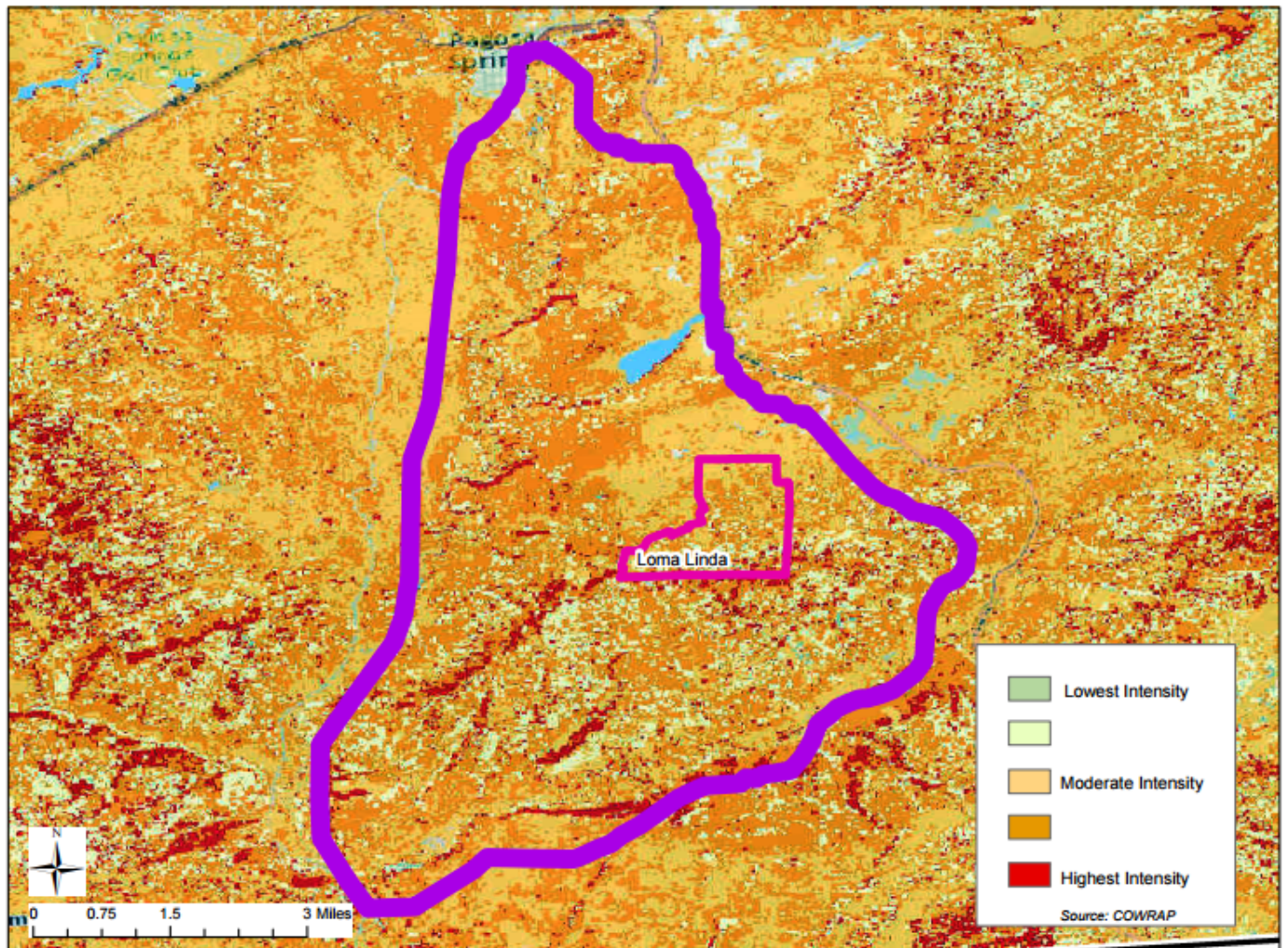


E. Loma Linda WUI Map

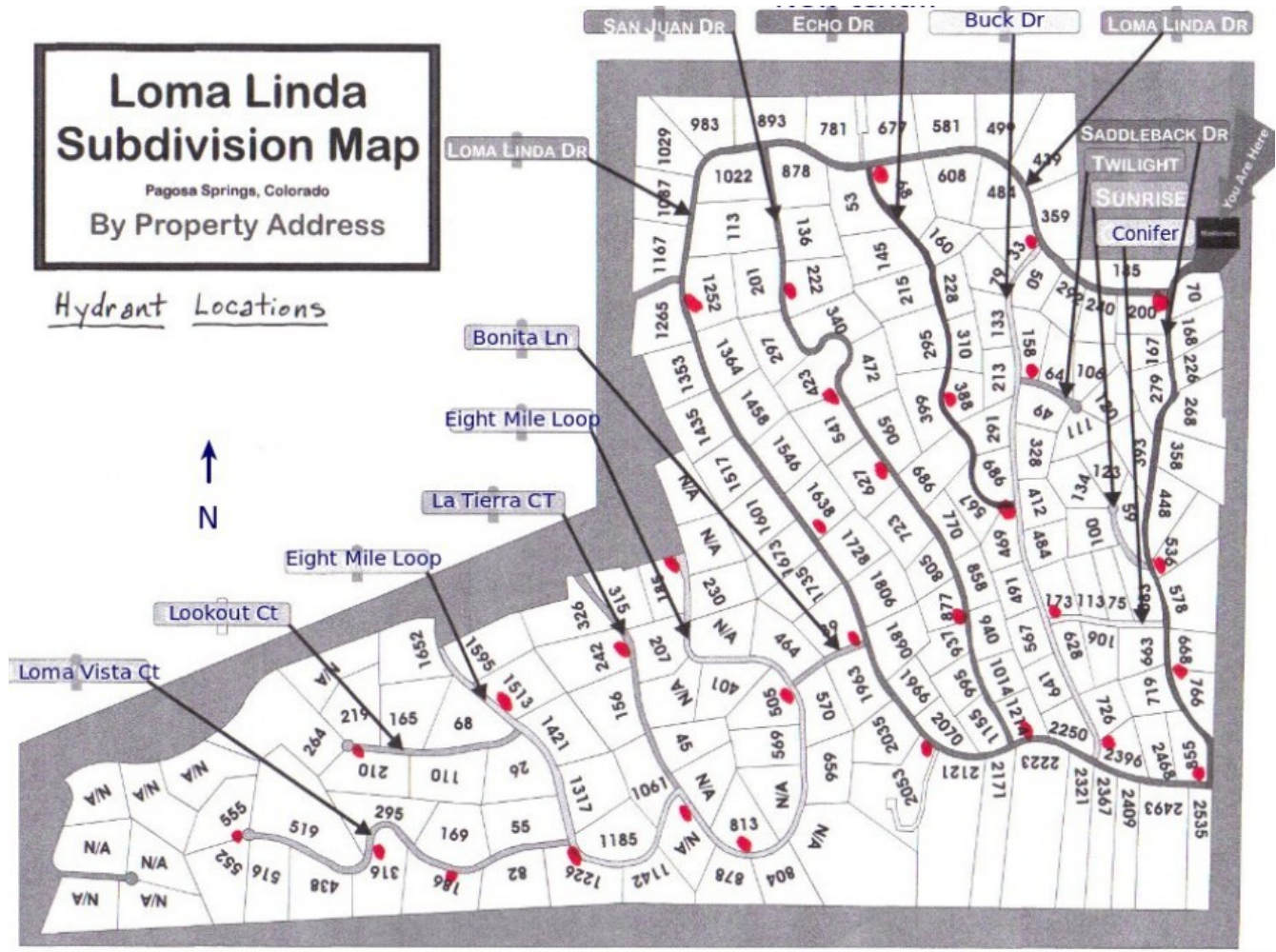


F. Loma Linda Wildfire Risk COWRAP

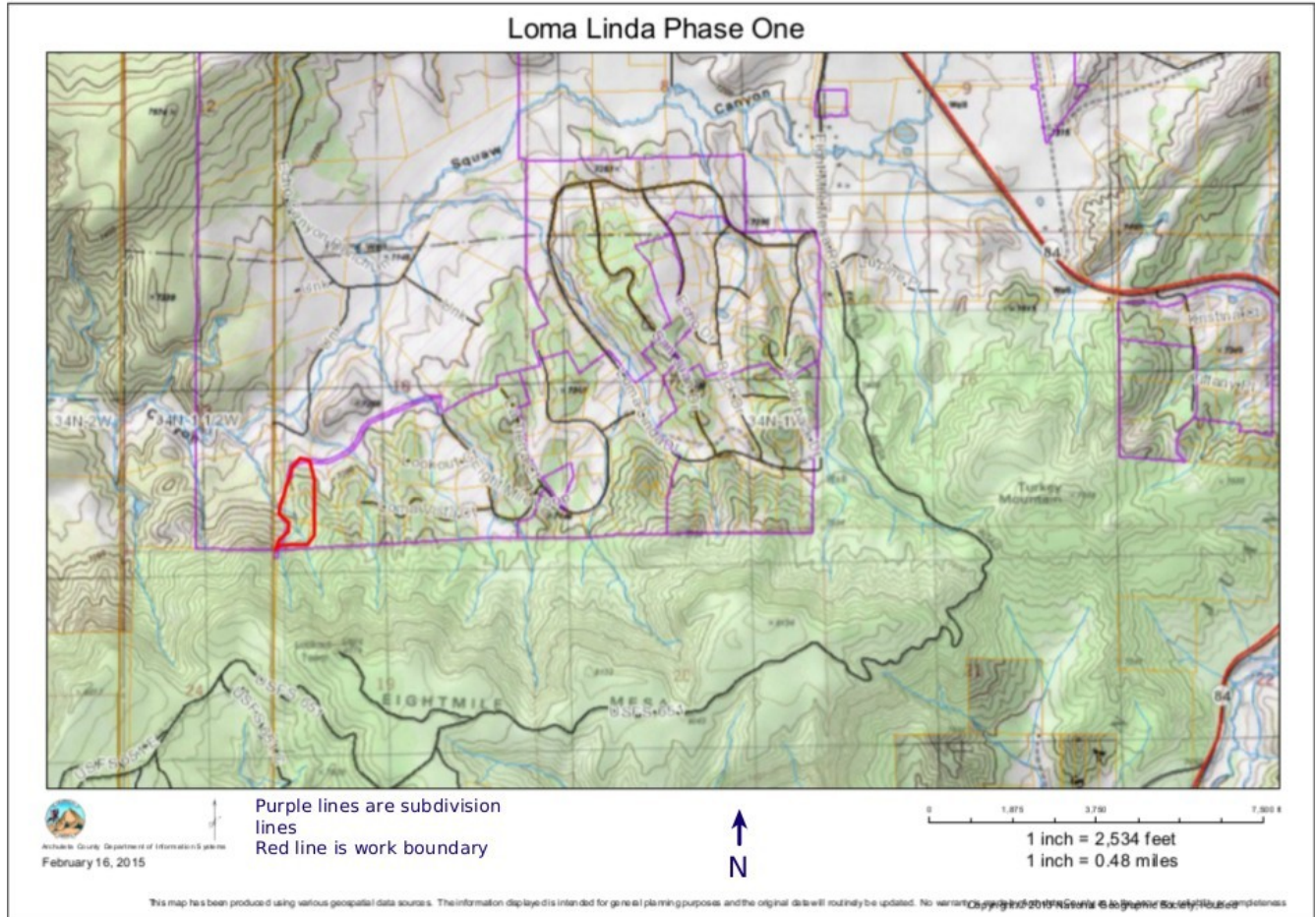
Loma Linda Wildfire Risk Theme: COWRAP Fire Intensity



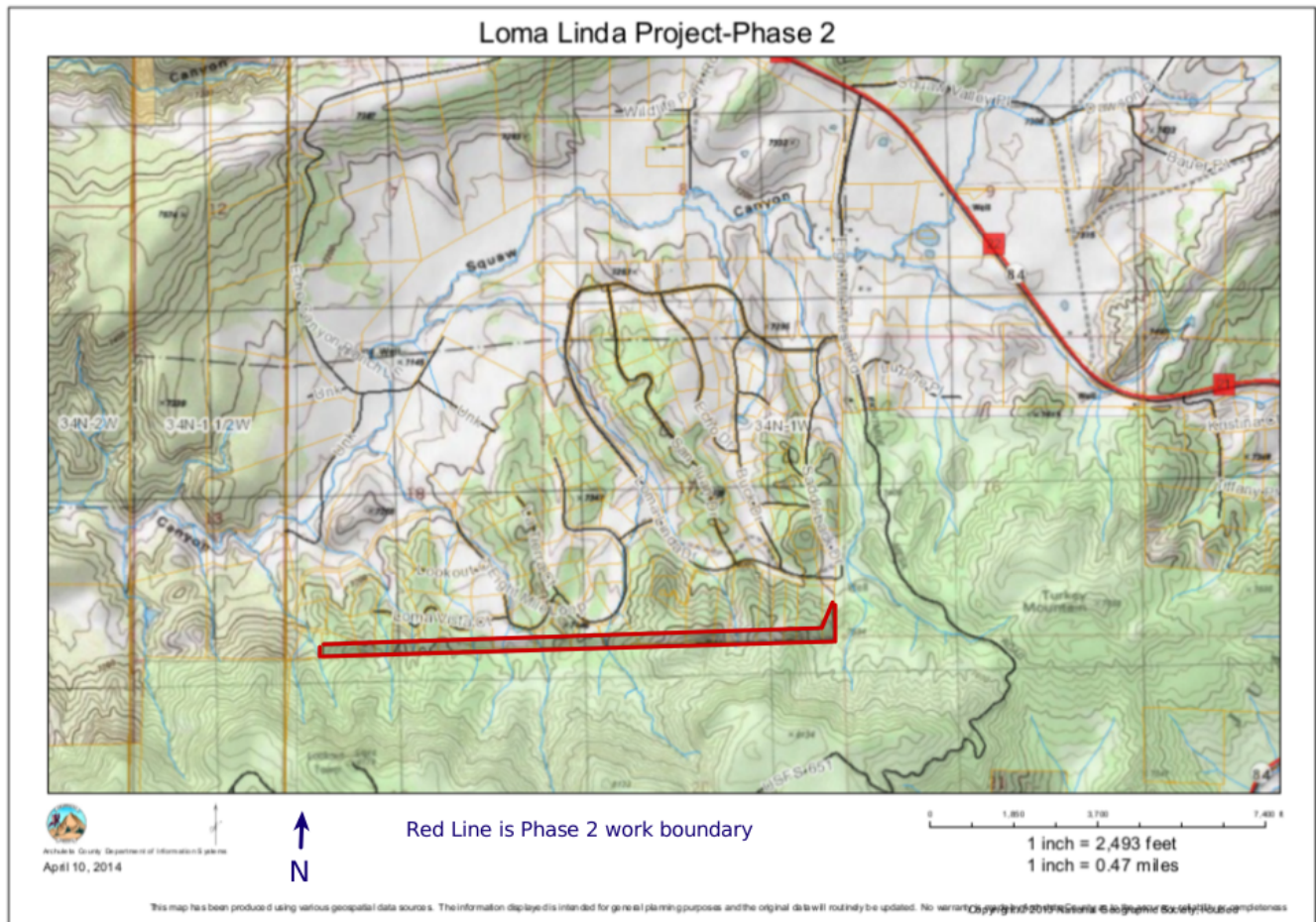
G. Fire Hydrant Locations Map



H. Loma Linda Community Mitigation, Phase 1



I. Loma Linda Community Mitigation, Phase 2



J. Home Owners' Questionnaire

Hello from your FireWise committee! In an effort to be as proactive as possible, during what could be an active wild fire season, we have created a questionnaire to help us and the Pagosa Fire Protection District should our neighborhood be at risk during a fire. As well, we are hoping to get you thinking about the potential for a wild fire and if you are ready. The latest wildfire at Lower North Fork reminds us that even a “planned” fire can turn deadly. Fires will happen....are we ready?

A) Demographics

- a. Property address:
- b. Property size:
- c. Number of structures on property
- d. Proximity of structures to each other
- e. Number of residents and animals on the property
- f. Number of months per year that property is occupied. If you are willing, please note which months you are there
- g. Do any residents need special help should an evacuation become necessary?

B) Structures and environment

- a. What type of siding or exterior does the main house have?
- b. What type of siding or exterior do the additional structures have?
- c. What is the roof material of all structures?
- d. Is your house on a slope or flat land?
- e. What is the proximity of flammable vegetation to the main house?
- f. What is the main type of tree on the property?
- g. Has any fire mitigation work been performed on the property either by the owner or by a professional? If so, please elaborate.
- h. Location of nearest fire hydrant in relation to your property.
- i. Describe your driveway accessibility for emergency equipment access.

C) Contact information

- a. In case of fire, what is the best contact phone number:
 - i. Cell phone:
 - ii. Land line:
 - iii. Work phone:
 - iv. Other:
- b. If you are away, is there another person who should be contacted regarding your property?
 - i. Name:
 - ii. Cell phone:
 - iii. Land line:
 - iv. Work phone:
 - v. Other:

D) Do you have an evacuation plan?

E) Have you signed up for the reverse 911 to be notified in case of fire in the area?

- a. To find out more or to sign up, go to the Archuleta County Emergency Notification System at <http://www.archuletacounty.org/list.aspx> and click on “Emergency Notification Registration” in the left hand column. It’s simple, it’s free, and it could save lives and property.

- F) Attached is a checklist to help you become as prepared as possible before a fire happens (note: for this document, there is no checklist attached)
- G) Should you want more detailed information regarding preparations for and prevention of a wild fire, please go to the following link:
 - a. <http://www.firewise.org/information/Who-is-this-for/Homeowners.aspx>
- H) Interested in volunteering for you FireWise Committee? Have questions about this questionnaire? Contact Carolyn Schwulst at carolynschwulst@gmail.com or Peggy Beach at peggybeach9@aol.com.

Thanks so much for your participation!

This questionnaire has been approved by the Loma Linda HOA.