

Village of Angel Fire Community Wildfire Protection Plan 2016 Update



Village of Angel Fire Community Wildfire Protection Plan: 2016 Update

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Village of Angel Fire
Community Wildfire Protection Plan Update

We the undersigned approve the Village of Angel Fire Community Wildfire Protection Plan

Organization: Village of Angel Fire

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Name and Title: Ms. Barbara Cottom, Mayor

Organization: Village of Angel Fire Fire Department

Signature: _____ Date: _____
Name and Title: Mr. Andrew Bertges, Fire Chief

Organization: New Mexico Energy, Minerals and Natural Resources Department, Forestry
Division

Signature: _____ Date: _____
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Executive summary

The *Village of Angel Fire Community Wildfire Protection Plan: 2016 Update* identifies progress made towards wildfire risk reduction goals identified in the 2009 Community Wildfire Protection Plan (CWPP), changes in community hazard ratings and priority rankings, and new priority action items for making the Village of Angel Fire (Village) a more fire adapted community. The 2016 CWPP update was developed in collaboration with members of the CWPP core team, which included Village officials, adjacent land management agencies, New Mexico State Forestry, Village residents, and other stakeholders. The Village contracted with the Forest Stewards Guild, a non-profit organization based in Santa Fe, New Mexico to lead the 2016 CWPP update.

Since 2009, the Village has made significant progress towards making the community more fire adapted. Notable accomplishments include but are not limited to:

- The creation of a Village Wildfire Protection Committee, now referred to as the Firewise Committee reflecting a change in priorities to attain a Firewise designation for the Village.
- Defensible space thinning on private lots throughout the village funded by various grants awarded to the Village.
- The Village of Angel Fire Fire Department reduced their ISO rating from 7 to 5.
- The Village supported several fuels reduction projects on adjacent public lands including prescribed burns on nearby State Trust Land in 2013 and 2014.
- 144 acres of fuels reduction thinning along roadways within the Village.
- Increased capacity to dispose of green waste generated from defensible space and fuels reduction projects.

Many of the priority action items identified in the 2009 CWPP are ongoing and therefore still relevant for the 2016 CWPP update. For example, educating residents about forest health and fire prevention is a process that will continue to evolve as new residents arrive and methods of outreach change. New priority action items identified by the CWPP core team, residents, and other stakeholders include but are not limited to:

- Pursue Firewise designation for the Village of Angel Fire.
- Establish an association of neighborhoods for the Village of Angel Fire.
- Engage with neighborhood representatives on wildfire preparedness and fuels reduction projects.
- Conduct a lot-by-lot assessment of wildfire hazard within the Village.
- Work with neighborhood representatives to develop action items and priority treatments on the neighborhood level scale.
- Conduct an evacuation drill within the village.
- Work with neighboring communities (Black Lake, Guadalupita, etc.) to utilize green waste generated from fuels reduction projects, e.g. fire wood, wood chips, etc. at little or no cost to interested participants.



Introduction

In accordance with the Healthy Forests Restoration Act (HFRA) of 2003, the Village of Angel Fire (Village) completed a Community Wildfire Protection Plan (CWPP) in 2009. The 2009 CWPP addressed the three core requirements identified in the HFRA, 1) identifying and prioritizing fuels reduction opportunities across the landscape, 2) addressing structure ignitability, and 3) collaborating with stakeholders. The New Mexico Fire Planning Task Force recommends that CWPPs be updated every five years in order to assess new hazards and monitor progress made since the last CWPP update. Building community resilience to wildfire requires an adaptive approach that uses the lessons of the past to inform future management. In 2015, the Village was awarded a wildfire risk reduction grant from the New Mexico Association of Counties to fund the 2016 update. The Village contracted the Forest Stewards Guild, a non-profit organization based in Santa Fe, New Mexico to lead the update.

In 2015, the New Mexico Association of Counties (NMAC), in collaboration with the Forest Stewards Guild, developed guidelines for updating CWPPs. The guidelines outline the process for updating existing CWPPs as follows:

1. Review existing CWPP.
2. Host collaborative meetings.
3. Update maps.
4. Reflect changes in risk ratings due to complete projects or changes in landscape.
5. Develop updated priorities.
6. Distribute CWPP update drafts to key stakeholders (including local, state, tribal, and federal partners) for review and input before the final approval.
7. Submit the final document to your local government body, local fire department(s) and State Forestry for required signatures and endorsement.
8. Once signed and endorsed by your local governing parties, submit all documentation to NM State Forestry no later than September 1st for final approval by the New Mexico Fire Planning Task Force.

The 2015 CWPP update guidelines also recommend that updates include sections on planning for wildfire preparedness (during a wildfire) and post-fire recovery. Post-fire effects, such as flooding and erosion, can often be as bad or worse than the damage sustained during the fire itself. By planning ahead of time, communities can expedite the restoration process and take an active rather than reactionary role in post-fire recovery.

In addition the items listed above, CWPPs and updates must also include the following elements:

1. **Collaboration:** A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties
2. **Prioritized fuel reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
3. **Reduce structural ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan
4. **Secure signatures:**
 - a. The applicable local government (i.e., counties or cities);
 - b. The local fire department(s); and
 - c. The state entity responsible for forest management.



This update is divided into six sections that build on the 2009 CWPP. Section one provides an overview of accomplishments and progress made since the 2009 CWPP. Section two updates community hazard ratings based on changes that have or have not occurred in communities at risk. Section three identifies priority action items recommended by community members and village officials that will help make the Village of Angel Fire a more fire adapted community. Section four makes recommendations for ways to improve preparedness during a wildfire event. Section five outlines key elements necessary for planning for post-fire recovery proactively, rather than after a wildfire occurs. Section six summarizes the collaborative process that guided this document.

1| Accomplishments since 2009 CWPP

The Village of Angel Fire and adjacent land jurisdictions have made significant progress on many of the action items identified in the 2009 CWPP. This section will provide an overview of progress made towards each action item focus area identified in the 2009 CWPP. There are four focus areas (Public Information and Involvement, Reducing Structure Ignitability, Fuels Treatment, and Evacuation Planning), which are underlined headings below. Action items for each focus area are listed in italics.

Public Information and Involvement

- 1. Educate homeowners and potential contractors (home-building, forest thinning, etc.) about forest health and fire prevention.*
- 2. Coordinate with community groups and area Firewise organizations to promote fire prevention, fuels treatment and defensible space.*
- 3. Create a group to develop fire prevention and hazard reduction messages and methods to promote community awareness and minimize the effects of a wildfire on the economy and environment.*
- 4. Conduct fire prevention campaigns during times when fire danger is high. Use newspapers, radio messages and signs to alert visitors and residents alike.*

Several efforts have been successful in educating homeowners and other stakeholders about forest health and fire prevention in the Village. Prominent examples include:

- The appointment of a Wildfire Protection Committee in 2014. More information about the Wildfire Protection Committee is included in number 3 of this section.
- Public meetings ahead of and after the 2013 and 2014 Black Lake Prescribed fires, which were implemented six miles south of the Village on State Trust land. Residents had an opportunity to voice their concerns regarding the use of prescribed fire near their community. Residents also learned about how prescribed fire is used as a restoration and risk reduction tool to protect communities.
- Association of Angel Fire Property Owners meetings covered such topics as defensible space treatments and fuels reduction treatments in Village greenways.
- During fire season, the Village's marquee is used to alert residents of fire danger during fire season.



- Agreement reached with the Sangre de Cristo Chronicle for newspaper spot with public announcements.

The Colfax County Coalition of Firewise Communities (CCCFC) has been active in educating area residents about ways to reduce the risk of wildfire to their homes and communities. Members of the CCCFC were active participants in the core team for the 2016 Angel Fire CWPP update. Scott Jones, president of the CCCFC is also a member of the Village of Angel Fire Wildfire Committee (<http://www.angelfirenm.gov/departments/page/44/Wildfire-Protection-Committee/>). To date, there are 9 Firewise communities in Colfax County, which are listed below:

- Taos Pines Ranch
- Hidden Lake
- Elk Ridge
- Aspen Hill
- *Lakeview Pines
- Ute Park
- Idlewild
- Green Valley
- Vermejo Park

**Firewise designation achieved since 2009*

In addition to the communities listed above, CCCFC also has working relationships with Cimarron, the Philmont Scout Ranch, and the Taos Ski Valley. Cimarron's certification as a Firewise community is currently in progress. While they were previously recognized as Firewise, their certification lapsed and so they have begun the process to regain their status.

CCCFC has been instrumental in addressing one of the primary challenges related to fuels reduction and defensible space treatments: slash disposal. CCCFC coordinates chipper days throughout the year to help communities dispose of slash from fuels reduction treatments. CCCFC works with partner Firewise communities to coordinate their chipper days, including working with the Larry Osborn, the Colfax County Fire Marshal, to loan out the county chipper. Few communities have access to their own chipper so this coordination and sharing of resources sets an excellent example for other communities looking to dispose of slash.



Photo: Joe Stelling
Image 1 Hidden Lake Firewise Community chipper day

The community of Hidden Lake has plans to purchase an air curtain burner through a grant from the New Mexico Association of Counties, which will provide another method for slash disposal. Hidden Lake has agreed to loan the air curtain burner to other Firewise Communities for a small fee that will offset the costs of maintenance and transportation.



CCCFC has also worked to educate local residents on how to be better prepared in the event of a wildfire. CCCFC has coordinated “train the trainer” workshops on the Ready, Set, Go! Program (<http://www.wildlandfirersg.org/>). In May 2015, CCCFC posted an informational video on Youtube titled “Saving the Mountain, Saving Your Home” (<https://www.youtube.com/watch?v=SI8jvrPayT8>). The video provides an overview of why forests in the Southwest are in need of restoration, steps homeowners can take to reduce the risk of wildfire by implementing defensible space treatments, and the Ready, Set, Go! Program.

In July, 2014 Village Mayor Barbara Cottam and the Village Council appointed a Wildfire Protection Committee. The Committee was established to assist the Mayor, Council, and Staff to:

1. Develop policy and ordinances for wildfire protection
2. Develop implementation plans for the Wildfire Protection Program
3. Provide education and outreach for the Wildfire Protection Program

The committee meets regularly on the second Monday of the month at 1:00pm at Angel Fire Village Hall. Since 2009, the committee has changed its name to the Village Firewise Committee to reflect the goal of attaining Firewise designation for the Village. The Committee has made progress towards their goals in several ways. In the summer of 2014 and 2015, the Committee hosted open houses for residents to learn about the Village’s wildfire protection program. Attendees had an opportunity to ask questions of Village officials and other experts about steps they could take to reduce their risk. Each open house had about sixty attendees. The Firewise Committee has also been featured in articles written in the Sangre de Cristo Chronicle about wildfire preparedness, met with community leaders from the Rotary Club and Chamber of Commerce, and with local realtors who are in a unique position to educate potential homebuyers about the risks associated with living in a fire adapted ecosystem.

Several groups including the Angel Fire Fire Department, the Firewise Committee, and the CCCFC conduct outreach campaigns to alert residents during high fire danger times. The Angel Fire Fire Department (<https://www.facebook.com/groups/380148192364/>) and the CCCFC (<https://www.facebook.com/CCCFCWC/?fref=ts>) both maintain Facebook pages to share information about wildfire preparedness and important details about ongoing wildfire events. The Firewise Committee has several resources available on their webpage, <http://www.angelfirenm.gov/departments/page/44/Wildfire-Protection-Committee/>.

Reducing Structure Ignitability

1. *Expand the current Wildland Urban Interface provisions to existing structures. Develop construction standards to reduce the vulnerability of wooden decks, especially on slopes. Implement the provisions in the highest hazard and risk areas first. Thin vacant lots adjacent to existing structures where needed to provide adequate defensible space.*
2. *Pursue state and federal grants that can support defensible space projects on both public and private lands. Landowners and local government can provide cost share support.*
3. *Expand the slash disposal service to encourage homeowners to reduce wildland fuels on undeveloped lots and to install and maintain defensible space around structures. Implement incentives for slash fees to support thinning.*

In 2010, the Village Wildland Urban Interface (WUI) ordinance was updated to apply fuels reduction and defensible space provisions to existing structures as well as new construction. Since 2009, the Village has updated the building codes to conform to the International Fire Code.



Further updates to the ordinance were proposed in 2014, which included provisions for thinning around driveways, pruning heights, and thinning vacant lots adjacent to existing homes. Many community members in the Village rejected the 2014 update and as a result it has not been approved. Public sentiment against the WUI ordinance, as well as challenges with managing slash that would be generated from implementing it has resulted in the ordinance not being enforced.

The Village has received several grants aimed at reducing hazardous fuels around homes, along roadways, and in greenways. In 2010, the Village received a Wildland Urban Interface and Hazardous Fuels Reduction grant from the New Mexico State Forestry division to create defensible space around homes and to thin along roadways. A forester was contracted to educate homeowners and to provide assistance to the thinning contractor used for the project. Many residents took part in the cost-share program. The Village also received funding from the American Recovery and Reinvestment Act for thinning of hazardous fuels. New Mexico State Forestry also funded thinning near the boundaries of the Zia/Osha fire. The Village has also established a register of thinning contractors who have successfully implemented projects and can certify appropriate liability and workman's compensation insurance.

The Village has a slash removal program to help landowners dispose of slash from thinning projects. The program is funded by the wildfire protection fund, which assesses a fee from resident utility bills. Since 2009, the Village has purchased a grapple truck to help with the removal of larger material and has ordered a second grapple truck. In 2014, the Village received funding from a Collaborative Forest Restoration Program grant to purchase a cordwood boiler that uses woody debris to heat the transfer station.

The Village owns an air curtain burner, but refinements in the permitting process are still needed to take full advantage of this technology for green waste disposal. The air curtain burner was purchased in 2003 in part with funds from a grant from New Mexico State Forestry.

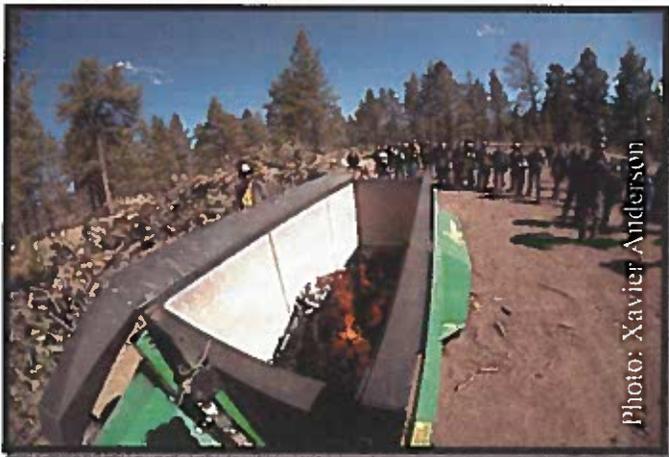


Image 2 Participants at a 2014 New Mexico Wildland Urban Interface Summit watch a demonstration of the Village's air curtain burner



Image 3 Cordwood boiler installed outside of transfer station

Fuels Treatment

1. *Expand the current Wildland Urban Interface provisions to existing undeveloped lots. Treat the highest hazard and risk areas first. Consider requirements that emphasize thinning along roadways and property lines and might not require thinning entire lots.*
2. *Conduct fuels reduction projects within or adjacent to the Village of Angel Fire based on the community hazard rating and fire behavior analysis sections of this plan.*
3. *Pursue state and federal grants that can support fuels reduction projects on both public and private lands within the Village. Landowners and local government can provide cost share support.*
4. *Work with the Association of Angel Fire Property Owners (AAFPO) Amenities Committee to conduct demonstration fuels reduction projects on the open space "green belt" trails throughout the Village that they maintain.*
5. *Continue to participate in the Taos Canyon Collaborative Forest Restoration Program (CFRP) Coalition as described in its Memorandum of Understanding between Taos Pueblo, the Village of Angel Fire, Rocky Mountain Youth Corps, National Renewable Energy LLC, H.R. Vigil Small products, Urban Interface Solutions, and Amigos del Bosque, LLC.*
6. *Actively participate in the planning, evaluation and monitoring of all federal, state, tribal and CFRP fuels treatment projects to assure agencies are working together to conduct high priority projects that are effective and benefit the Village.*
7. *Consider supporting the USDA-Forest Service, Carson National Forest prescribed burn and wildfire use programs, provided that community concerns for safety and smoke management are understood and followed.*
8. *Encourage the New Mexico Department of Game and Fish (NMDGF) to participate in the Angel Fire Community Wildfire Protection Plan implementation to provide a wildlife management perspective.*

As previously discussed, while updates to the WUI ordinance were approved in 2010 and proposed in 2014, challenges remain to address challenges related to slash management and public approval of the ordinance before enforcement is fully implemented.

Map 1 and map 2 show fuels reduction treatments that have occurred in and around the village since 2009. Defensible space treatments have been implemented by many landowners through a cost-share grant program the Village received from New Mexico State Forestry. Table 1 in section 2 of this document provides a brief overview of treatments that have occurred in each of the communities within the Village.

With funding from New Mexico State Forestry, thinning in the Village greenbelts has been completed and is depicted as NMSF fire treatments in map 1. However, maintenance thinning is needed in the future as vegetation regrows.

The Village has supported several forest restoration projects on State Trust and Forest Service land that have reduced the risk of wildfire for the Village. These include several Collaborative Forest Restoration Program (CFRP) Projects near Black Lake and New Mexico State Forestry



funded projects. Map 2 contains a map of nearby forest restoration treatments that have reduced the threat of wildfire to the Village.

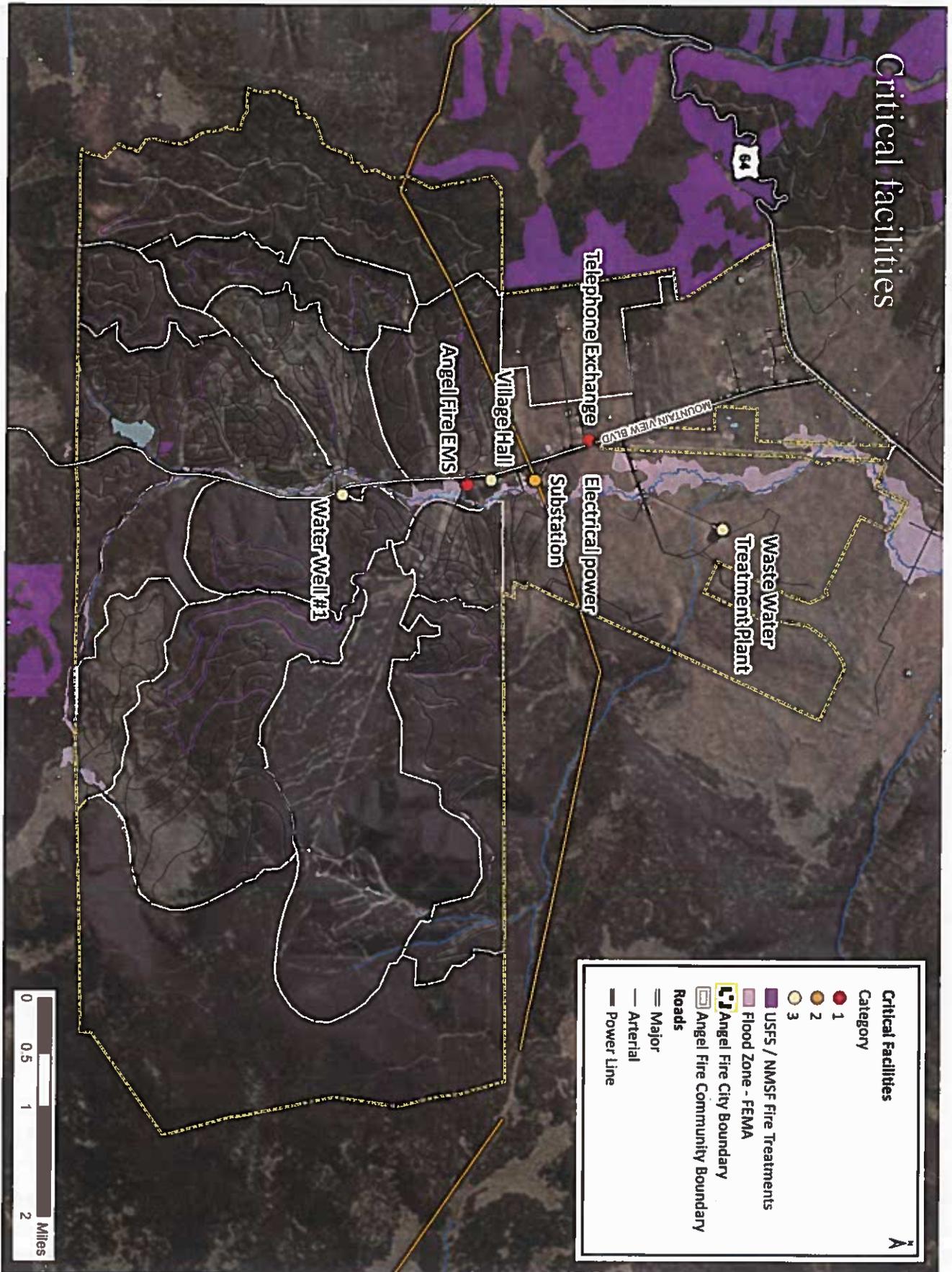
The Village worked successfully with the New Mexico State Land Office, the Forest Stewards Guild (Guild), The Nature Conservancy and other partners to implement prescribed burns in 2013 and 2014 near Black Lake on State Trust lands. Both prescribed burns were funded by a CFRP grant awarded to the Guild. There were pre and post burn public meetings where residents shared their concerns, which included smoke impacts, and learned about using fire as a forest restoration tool.

The Guild implemented several lessons learned from 2013 to alleviate resident concerns and improve communication. In 2014, the Guild utilized social media to share information about the burn more frequently and sent out a daily email summary to keep residents informed about burn operations. In 2014, the Guild and local partners went door-to-door to businesses in town to answer questions residents might have and to share information about burn operations.

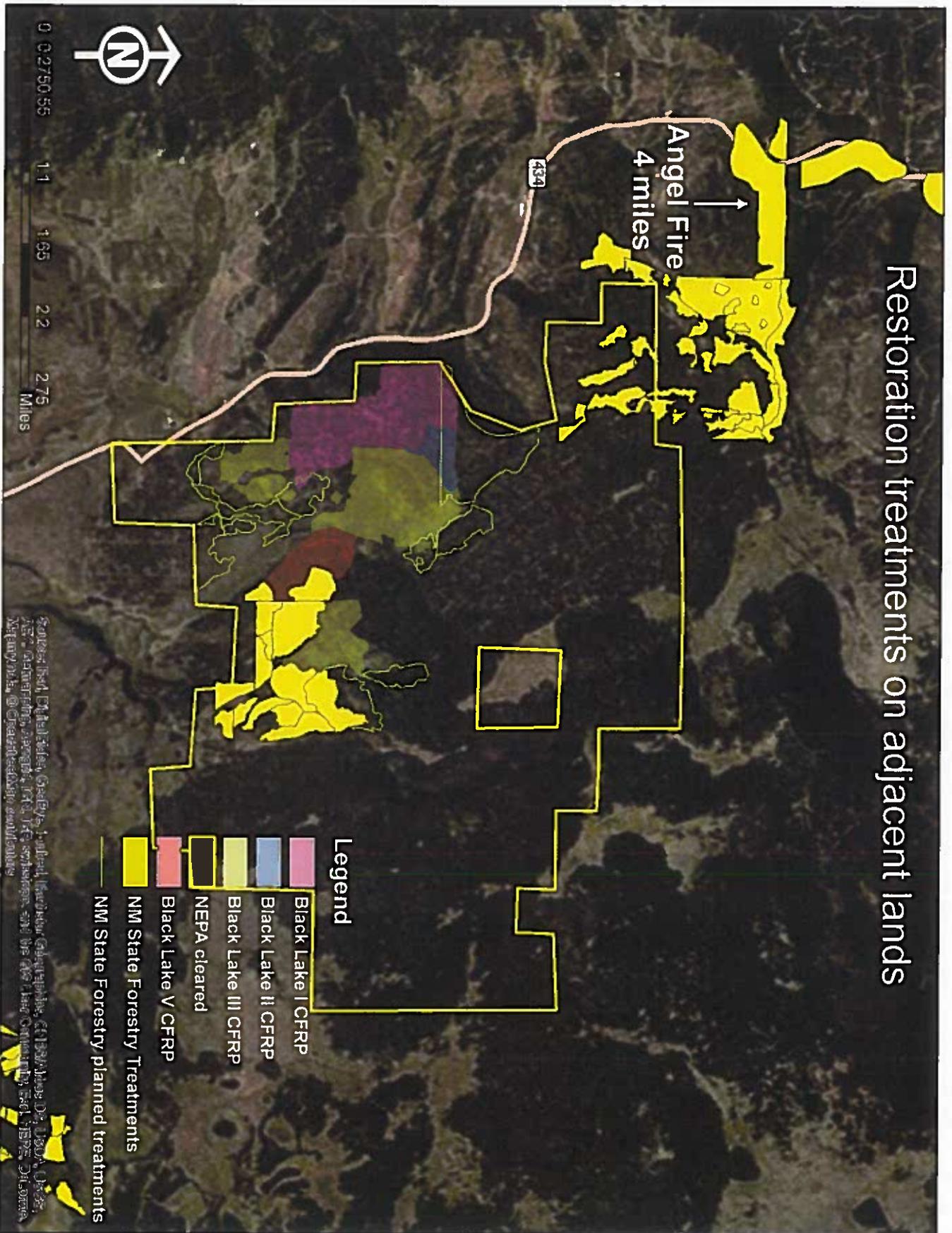


Image 1 A public notice about the 2014 Black Lake Prescribed burn at Lowes grocery store in Angel Fire.

Map 1 Critical facilities and fuels reduction treatments



Map 2 Restoration and fuels reduction treatments on adjacent lands



Evacuation Planning

1. *Establish signs identifying evacuation routes. Routes could be color coded to simplify instructions to the public.*
2. *Thin vegetation along roadways and at intersections where possible to create the greatest potential for visibility during a wildfire. Refer to the fuels treatment section of this Plan for more information.*
3. *Advise the public about evacuation routes and the pre-identified safety zones at the airport, community center and golf course.*
4. *Use radio stations to disseminate emergency information and advise the public of their importance as a primary source of information.*
5. *Ensure that area radio stations are aware of their importance as disseminators of emergency messages, and regularly review and update procedures for authorizing such messages.*
6. *Investigate the potential use of warning systems such as emergency sirens, mass notification systems (such as "Reverse 911), helicopter-mounted public address systems, etc.*
7. *Involve the Village Police Department, Colfax County Sherriff's Department, State Police, and other cooperators in reviewing current Emergency Operating Plans and conducting field exercises.*
8. *Create handouts or messages advising the public about how to prepare for an evacuation. Consider emphasizing that when getting ready to evacuate, people should remember the "5 P"s: Pictures, Pets, Papers, Pills and Phones."*

The fuels treatment section of this document provides an overview of fuels reduction grants the Village has received since 2009. In total, 144 acres have been thinned since 2009 along Village roadways, improving ingress and egress for emergency vehicles and residents. Roadways that have been thinned include: Agua Fria Circle, Agua Fria Drive, Back Basin Road, Buming Sky Drive, El Camino Real, Panorama Overlook, Panorama Way, Peralta Circle, Peralta Drive, Royal Avenue, Santo Domino Trail, South Vail Overlook, Spyglass Hill Road, Taos Drive, Trevino Circle, Vail Avenue North, Vail Avenue South, Vail Overlook, Valle Grande Trail North, Via del Rey, and Zia Road.

In the event of an emergency such as a wildfire, the Village has signage that can be used to guide residents during an evacuation. To clarify the evacuation procedure for residents and to provide a single meeting place, safety zones identified in 2009 have been replaced with a single evacuation staging area for the 2016 CWPP update. In the event of an evacuation, residents will be directed to the area behind Village hall and fire station #1. Map 5 shows the location of the evacuation staging area and more information is included in the Wildfire preparedness section. The Village has a draft evacuation plan in development that will provide greater detail about evacuation procedures. Colfax County has an emergency notification system (reverse 911) that Village residents can use to receive notifications. To sign up for this program, residents can go to this website, <https://public.coderedweb.com/cne/en-US/6AF053DCB942> and enter their contact information.



Area Firewise communities, such as Taos Pines Ranch, have several resources available on their websites related to wildfire preparedness. The Village Wildfire Committee also has resources available for residents on their webpage <http://www.angelfirenm.gov/departments/page/44/Wildfire-Protection-Committee/>.

Fire Department Capacity [The items noted here are specific to wildland fire needs.]

1. *Improve the fire department's Insurance Services Organization (ISO) rating. Improved firefighter response, fire equipment such as a ladder truck, additional fire stations and additional water delivery and storage capacity should improve the fire department's Insurance Services Organization (ISO) rating. An improved ISO rating will increase annual fire department funding and reduce homeowner insurance rates.*
2. *Establish a position knowledgeable in forestry or natural resources to implement and enforce WUI ordinances, obtain and manage WUI and hazardous fuels reduction grants, coordinate fire prevention activities and public involvement such as the Firewise communities program, and coordinate cooperator actions (including Forest Service, NM State Land Office, Taos Pueblo, and local Colfax County groups).*
3. *Encourage the cross-training of area fire departments, local government officials and state and federal agencies using the Incident Command System (ICS) to manage an emergency incident.*
4. *Maintain the Enchanted Circle annual operating plan to coordinate area wildfire management. An annual operating plan has been prepared cooperatively with local, state, and federal government agencies.*
5. *Participate in interagency fire incidents to increase experience. Continue to participate in the New Mexico Resource Mobilization Plan to gain experience conducting wildfire suppression in wildland urban interface communities.*
6. *Conduct local, effective, and certified wildland fire trainings. Maintain wildland firefighter qualifications.*
7. *Consider developing a regional training center. Reach out to regional cooperators such as the Enchanted Circle, Raton Fire Department and Colfax and San Miguel County Fire Departments.*
8. *Continue to improve water storage and delivery systems. Complete development of one million gallon storage tank and connect the new storage into the existing water delivery system. Study how power outages or other problems during a wildland fire would affect water delivery.*

The Angel Fire Fire Department has increased its capacity in several ways since 2009, resulting in a reduced Insurance Services Office (ISO) rating from 7 to 5, which, in turn, can significantly reduce insurance rates for residents. Accomplishments include the completion of the new Fire Station number 2, and equipment purchases of a platform truck and Type 3 wildland urban interface engine. Village fire fighters have also gained experience on many wildfires including the White, Los Conchas, Wallow Canyon, Mayhill, Little Bear, Whitewater Baldy, Whites Peak,



and the Chalen Complex. Village fire fighters also participated in the 2013 and 2014 Black Lake prescribed fires.

During the White Peaks Fire near Ocate, the Village Fire Department and other area fire department including the Moreno Valley Fire Department worked together with the Colfax County Sherriff's office to alert residents of the possibility that they might need to evacuate. The wildfire provided a unique opportunity for area fire and emergency managers to train for an evacuation event during an ongoing incident.

As part of ongoing training efforts, Village fire fighters and members of the community participated in a training led by Krys Nystrom of the Wildfire Network, (www.wildfirenetwork.org) on Assessing Wildland Fire Risk in the Wildland Urban Interface in July 2016. The training included methods for assessing lot-by-lot risk, which will help Village firefighters and their community partners address action items identified in section 3 of this document. The training focused largely on assessing the risk of individual home sites, evaluating such site and construction features as driveway length, roof material, detached structures, and topography. Home assessments educate both fire fighters and homeowners about wildfire risk and mitigation steps homeowners can take that are easy to implement and do not involve cutting any trees. For example, moving woodpiles out from under a deck or keeping pine needles from accumulating on roof tops.

Image 5 Wood piles near propane tanks and other structures increases fire risk



Image 4 Krys Nystrom of Wildfire Network leads a homesite assessment training for the Village



2| Community hazard ratings and priority rankings

Community hazard ratings for the 2016 CWPP update were re-assessed in collaboration with members of the CWPP core team and through input from members of the public. The 2009 community hazard ratings (CHR) were developed using the Wildfire Hazard Rating System model, which “combines physical infrastructure such as structure density and roads, and fire behavior components like fuels and topography, with the field experience and knowledge of wildland fire experts” (Angel Fire CWPP, 2009). In order to conform to New Mexico State Forestry’s statewide CHR system, CHR for the Village of Angel Fire of High, Medium, and Low were used in place of the 2009 ratings of Extreme, Very High, High, Moderate, and Low. It



should be noted that this change in rating does not necessarily reflect improvement or a reduction in risk.

Many of the factors that went into the 2009 CHR are relatively static and not subject to change such as topography. The reassessment for the 2016 update focused on dynamic factors of the CHR including fuels, community involvement, and road improvements to determine whether the improvement or degradation of any of these factors warrants a change to the CHR. Core team members and members of the public provided input and comment on the updated 2016 CHR. Core team members were asked the following questions related to CHR for each community in the Village of Angel Fire:

1. Have any access roads been added or taken away from the community?
2. Have there been any positive or negative changes to road conditions?
3. Have there been any fuels reduction projects in the community?
 - a. Are they older than 10 years?
 - b. Defensible space zone 1 treatments?
 - c. Fuel break?
 - d. Open space thinning?
4. Have there been any changes to community involvement, such as the creation or dissolution of a firewise community?

Priority rankings help to guide fuels reduction and other efforts to reduce the risk of wildfire faced by each community in the Village of Angel Fire. While reducing wildfire risk is important in all communities within the Village, residents and Village officials may find it helpful to have guidance for where to focus their efforts using limited resources. After discussion with core team members and members of the public, priority rankings for communities largely remained the same with two exceptions. First, due to a greater amount of fuels reduction projects in the Vail Loop neighborhood, it was reduced to the second priority ranking. Second, taking into consideration factors including a high concentration of wooden structures, and the presence of youth during fire season, the Girl Scout priority ranking was increased to number 8. Table 1 displays the priority rankings and CHR for 2009 and 2016 and also includes notes on progress made since 2009. Map 3 shows each of the communities with their associated CHR.

Table 1 Community hazard ratings and priority rankings

Community Name	2009 Priority Ranking	2016 Priority Ranking	2009 Hazard Rating	2016 Hazard Rating	Changes since 2009
Back Basin	2	1	Very High	High	<ul style="list-style-type: none"> • Public Improvement District added some new roads. Existing roads have experienced some deterioration. • Some defensible space zone 1 treatments and open space thinning.
Vail Loop	1	2	Very High	High	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments. • Thinning on major egress from community. • Increased community involvement, informal Firewise group established.



El Camino Real	3	3	Very High	High	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments. • Increased community involvement. • Some thinning along roadways.
Taos Drive	4	4	High	High	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments. • Thinning around primary egress routes. • Increased community involvement.
South Village	5	5	High	High	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments.
Valle Grande North	7	6	High	High	<ul style="list-style-type: none"> • Some open space thinning. • Road conditions have deteriorated as they have been converted back to gravel. • Increased community involvement.
South East Village	6	7	High	High	<ul style="list-style-type: none"> • Improved access with the Valley of the Utes development. • Some defensible space zone 1 treatments.
Girl Scout Camp	13	8	Moderate	Medium	<ul style="list-style-type: none"> • Forest service side of girl scout camp, thinning, piles etc. Some thinning on Girl Scout camp property. Priority ranking raised due to presence of youth during fire season, density of wooden structures, and potential ignition sources (campfires).
The Aspens	8	9	Moderate	Medium	<ul style="list-style-type: none"> • Some thinning on private land (3-8 acres). • New road created through Public Improvement District.
North Via del Rey	9	10	Moderate	Medium	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments. • Increased community involvement.
Country Club	10	11	Moderate	Medium	<ul style="list-style-type: none"> • Some thinning on individual lots. • Increased community involvement.
The Chalet	11	12	Moderate	Medium	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments.
Valley of the Utes	12	13	Moderate	Medium	<ul style="list-style-type: none"> • Some defensible space zone 1 treatments. • Some new roads improve access.



Areas of special interest

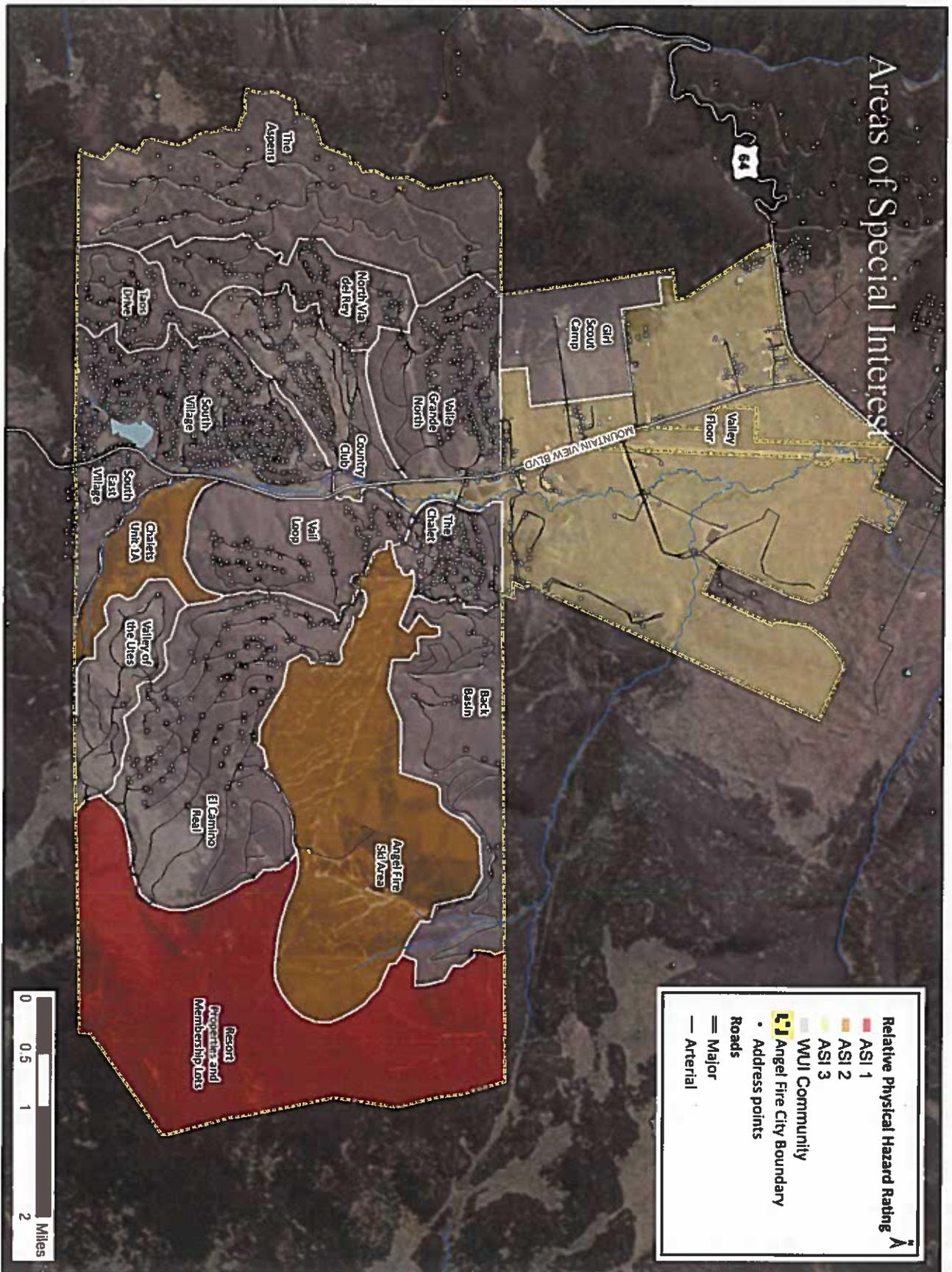
The 2009 Angel Fire CWPP (2009) also identified four special interest areas and assigned each of them a relative physical hazard rating (Angel Fire CWPP, 2009), which are different from community hazard ratings. The relative physical hazard rating (RPH) has three categories; low, moderate, and high. RPH combines the mean fireline intensity and “other fire behavior indicators such as rate of spread, flame length, and heat per unit area” and models (Angel Fire CWPP, 2009). Table 2 below lists each of the areas of special interest and their associated relative physical hazard rating. To date, no fuels reduction treatments have been conducted in any of the special interest areas since 2009. As such, the 2009 ratings remain the same. Map 4 shows the areas of special interest and their RPH.

Table 2 Areas of special interest relative physical hazard ratings and priority rankings

Areas of Special interest	Priority ranking 2009	Priority ranking 2016	Relative physical hazard rating (2009)	Relative physical hazard rating (2016)
Angel Fire Ski Area	1	1	2	2
Chalets Unit 1A	2	2	2	2
Resort Properties and Membership Lots	3	3	1	1
Valley Floor	4	4	3	3



Map 4 Areas of special interest



3| Priorities for 2016 and beyond

Fire adapted communities and Firewise communities

The National Cohesive Wildland Fire Management Strategy, a “strategic push to work collaboratively among all stakeholders and across all landscapes” developed in 2014 lists creating fire adapted communities as one of three primary goals along with resilient landscapes, and safe and effective wildfire response. Fire adapted communities (FAC) is a conceptual framework for engaging community stakeholders at various scales from the individual homeowner to businesses to reduce wildfire risk. FAC concepts are useful for helping communities reframe how they think about wildfire. In the West, wildfire is a natural – and ecologically necessary – component of fire adapted ecosystems. Acknowledging this fact is an important component to becoming a more fire adapted community and a good starting point for education and outreach to community members. Figures 1 and 2 outline the various elements that make a community fire adapted.

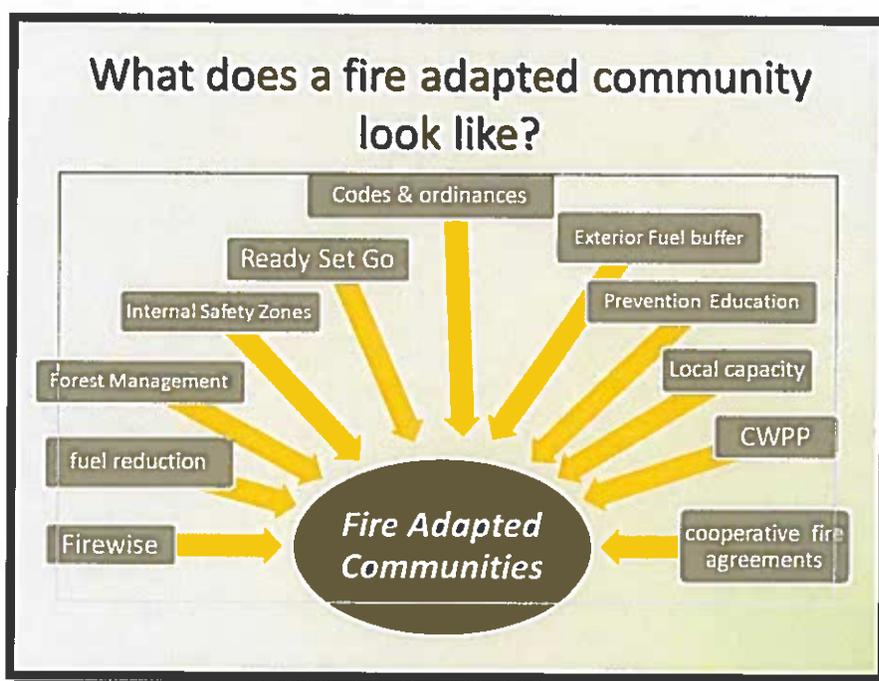


Figure 1 Elements of a fire adapted community

Firewise Communities is a recognition program administered by the National Fire Protection Association that began in 2002. Firewise emphasizes fuels reduction and steps homeowners can take to reduce their individual wildfire risk. For example, landscaping practices to reduce flammable materials close to the home and standards for pruning trees and bushes. Firewise.org contains several resources for homeowners, such as an online toolkit and checklist for steps to reduce wildfire risk. Firewise recognition is achieved after a community completes a 5-step process:

1. Obtain a wildfire risk assessment as a written document from your state forestry agency or fire department.
2. Form a board or committee, and create an action plan based on the assessment.
3. Conduct a “Firewise Day” event.
4. Invest a minimum of \$2 per capita in local Firewise actions for that year.

5. Submit an application to your Firewise liaison.

Firewise recognition is an important tool in the ongoing process to be fire adapted. Many communities working to be fire adapted begin by becoming recognized as a Firewise community. In summary, "Firewise is a designation, fire adapted is a lifestyle" (Nystrom, 2016).

CWPP implementation and action items

Many of the priority action items identified in the 2009 CWPP are ongoing and will be carried over to the 2016 update. Some action items have been amended slightly to reflect progress made since 2009. The CWPP core team, and members of the public, worked together to identify action items that have been accomplished and are no longer relevant, are ongoing, and also identified new actions that will help make Angel Fire a more fire adapted community.

Table 3 outlines the priority action items for 2016 and beyond using the same focus areas from the 2009 CWPP. The status of each action item is described as ongoing, amended, or new. Ongoing action items were in the 2009 CWPP and are still relevant to 2016 and beyond. Amended action items were included in the 2009 CWPP and contain new language for 2016 to reflect a change in conditions or progress made since 2009. Core team members and members of the public worked together to identify new action items throughout the CWPP update process. Table 3 also provides the original 2009 language for amended action items and greater detail for new action items.

The Village Firewise committee will lead the effort to implement the 2016 CWPP action items. In addition to regularly scheduled monthly meetings, the Firewise committee will prepare an annual CWPP implementation strategy, including prioritized action items, and a review of progress made to implement action items to the Village council. The Mayor and Council will approve the implementation strategy within 90 days of the approval of the 2016 CWPP update and ensure that CWPP implementation is successful.

Table 3 Priority action items for 2016 and beyond

Priority action items for 2016 and beyond	
Public information and involvement	
Status	Action item
Ongoing	Educate homeowners and potential contractors (home-building, forest thinning, etc.) about forest health and fire prevention.
Ongoing	Coordinate with community groups and area Firewise organizations to promote fire prevention, fuels treatment and defensible space.
Amended	2009 Create a group to develop fire prevention and hazard reduction messages and methods to promote community awareness and minimize the effects of a wildfire on the economy and environment.
Ongoing	2016 Maintain the Village Firewise Committee to develop fire prevention and hazard reduction messages and methods to promote community awareness, minimize the effects of a wildfire on the economy and environment, and to lead implementation of CWPP action items.
Ongoing	Conduct fire prevention campaigns during times when fire danger is high. Use newspapers, radio messages and signs to alert visitors and residents alike.
New	In addition to regularly scheduled monthly meetings, the Firewise committee will prepare an annual CWPP implementation strategy, including prioritized action items, and a review of progress made to implement action items to the Village council.
New	Detail An annual implementation strategy and review of progress will help ensure that CWPP action items are accomplished in a timely manner.
New	Pursue Firewise designation for the Village of Angel Fire.
New	Detail Attaining Firewise status for a community often provides the "spark" to engage community members in fuels reduction, wildfire preparedness, and other actions related to becoming a more fire adapted community.
New	Establish an association of neighborhoods for the Village of Angel Fire. Engage with neighborhood representatives on wildfire preparedness and fuels reduction projects.
New	Detail Becoming a more fire adapted community requires collaboration at various scales, the smallest of which is being the individual homeowner. Engaging and empowering neighborhood leaders to address their wildfire risk will increase the capacity of all scales of a fire adapted community (homeowners, neighborhoods, Village officials, etc.) to address wildfire risk.
New	Utilize social media to a greater extent to notify and engage with residents about wildfire incidents, preparedness, and mitigation efforts. Consider applying for a Nextdoor.com partnership to improve neighbor-neighbor communication and to better connect residents with village officials.
New	Detail Fire adapted communities utilize a variety of outreach and communication methods. Social media is one such method that is continually evolving. Nextdoor.com is one useful tool to help connect Village officials with residents and neighbors with neighbors in a private, useful format.
New	Create an education and outreach program and subcommittee within the Firewise Committee

	Detail	To provide more targeted and robust outreach to residents. Recruit and include volunteers outside of the current committee. Include information about actions residents can take to reduce wildfire risk, emergency preparedness, etc. seasonally in utility bills.
New	Detail	Utility bills are one method for conducting outreach to Village residents on steps they can take to reduce their personal wildfire risk.
New		Continue to host annual open house about wildfire preparedness and mitigation for Village residents with presentations by adjacent land managers, forestry and wildfire experts, and other Village officials.
New	Detail	Face to face meetings with residents, Village officials, and experts in forestry and wildfire will enhance collaboration among various stakeholders.
New		Use Village electronic bulletin board to promote wildfire preparedness and mitigation actions residents can take during wildfire season.
New	Detail	The electronic bulletin board provides another method of outreach for Village residents.
New		Include information about actions residents can take to reduce wildfire risk, emergency preparedness, etc. in the Sangre de Cristo Chronicle. Notices should be included seasonally as mitigation efforts can occur year round.
New	Detail	Reminding residents seasonally (including in the winter) is necessary if mitigation measures are to be accomplished at the necessary scale.
Reducing structural ignitability		
Ongoing		Expand the current Wildland Urban Interface provisions to existing structures. Develop construction standards to reduce the vulnerability of wooden decks, especially on slopes. Implement the provisions in the highest hazard and risk areas first. Thin vacant lots adjacent to existing structures where needed to provide adequate defensible space.
Ongoing		Pursue state and federal grants that can support defensible space projects on both public and private lands. Landowners and local government can provide cost share support.
Amended	2009	Expand the slash disposal service to encourage homeowners to reduce wildland fuels on undeveloped lots and to install and maintain defensible space around structures. Implement incentives for slash fees to support thinning.
	2016	Continue to expand green waste disposal capacity within the village to encourage homeowners to reduce wildland fuels on undeveloped lots and to install and maintain defensible space around structures. Maintain incentives for slash fees to support thinning.
New	Detail	Conduct a lot-by-lot assessment of wildfire hazard within the Village.
New		Lot-by-lot or home site assessments provide valuable information to Village firefighters about how to prioritize mitigation measures in communities. Assessments also help to educate homeowners about steps they can take to make their homes more resistant to embers showers and direct heat in the event of a wildfire. Homeowners should endeavor to make their homes resistant to wildfire without direct suppression efforts from fire fighting resources that may be committed elsewhere during a wildfire incident.
New		Develop a Geographic Information System Database (GIS) to store and utilize Village home site assessments for planning, response,

	and educational efforts.
	<p>Detail As more home sites are assessed, the Village will require a system to store and make use of those assessments. Work with neighboring communities (Black Lake, Guadalupe, etc.) to utilize green waste generated from fuels reduction projects, e.g. fire wood, wood chips, etc. at little or no cost to interested participants.</p>
New	<p>Detail Managing green waste from fuels reduction projects is often resolved by connecting those with green waste (firewood, wood chips etc.) with those in need of those materials. Utilizing green waste, rather than disposing of it (burning etc.) provides several benefits to Village residents as well as neighborhood communities.</p>
	Finalize air curtain burner permitting process.
New	<p>Detail To take full advantage of one method of disposing of green waste, the Village should finalize and/or update air curtain burning permits with the appropriate regulatory authorities.</p>
Fuels treatment	
Ongoing	Expand the current Wildland Urban Interface provisions to existing undeveloped lots. Treat the highest hazard and risk areas first. Consider requirements that emphasize thinning along roadways and property lines and might not require thinning entire lots.
Ongoing	Conduct fuels reduction projects within or adjacent to the Village of Angel Fire based on the community hazard rating and fire behavior analysis sections of this plan.
Ongoing	Pursue state and federal grants that can support fuels reduction projects on both public and private lands within the Village. Landowners and local government can provide cost share support.
Amended	<p>2009 Work with the Association of Angel Fire Property Owners (AAFPO) Amenities Committee to conduct demonstration fuels reduction projects on the open space "green belt" trails throughout the Village that they maintain.</p>
2016	Work with the Association of Angel Fire Property Owners (AAFPO) Amenities Committee to conduct and maintain demonstration fuels reduction projects on the open space "green belt" trails throughout the Village that they maintain.
Ongoing	Actively participate in the planning, evaluation and monitoring of all federal, state, tribal and CFRP fuels treatment projects to assure agencies are working together to conduct high priority projects that are effective and benefit the Village.
Amended	<p>2009 Consider supporting the USDA-Forest Service, Carson National Forest prescribed burn and wildfire use programs, provided that community concerns for safety and smoke management are understood and followed.</p>
2016	Continue to support the USDA-Forest Service, Carson National Forest prescribed burn and wildfire use programs, provided that community concerns for safety and smoke management continue to be understood and followed.
Ongoing	Encourage the New Mexico Department of Game and Fish (NMDGF) to participate in the Angel Fire Community Wildfire Protection Plan implementation to provide a wildlife management perspective.
	Work with neighborhood representatives to develop action items and priority treatments on the neighborhood level scale.
New	<p>Detail Addressing wildfire risk at the neighborhood level provides a starting point for mitigation measures in a more manageable scale and will be guided by priority rankings. By implementing a neighborhood level approach, residents and Village officials can take a methodical approach to reducing wildfire risk.</p>

Evacuation planning		
Amended	2009 2016	Establish signs identifying evacuation routes. Routes could be color coded to simplify instructions to the public. Install signs identifying evacuation routes.
Amended	2009 2016	Thin vegetation along roadways and at intersections where possible to create the greatest potential for visibility during a wildfire. Refer to the fuels treatment section of this Plan for more information. Thin vegetation along roadways and at intersections and maintain previous treatments to create the greatest potential for visibility during a wildfire. Refer to the fuels treatment section of this Plan for more information.
Amended	2009 2016	Advise the public about evacuation routes and the pre-identified safety zones at the airport, community center and golf course. Advise the public about evacuation routes and the pre-identified evacuation staging area behind the Village hall and fire station #1.
Ongoing		Use radio stations to disseminate emergency information and advise the public of their importance as a primary source of information.
Ongoing		Ensure that area radio stations are aware of their importance as disseminators of emergency messages, and regularly review and update procedures for authorizing such messages.
Amended	2009 2016	Investigate the potential use of warning systems such as emergency sirens, mass notification systems (such as "Reverse 911), helicopter-mounted public address systems, etc. Investigate the potential use of warning systems such as emergency sirens, helicopter-mounted public address and other mass notification systems.
New		Conduct an evacuation drill within the village, including a test of the Colfax County reverse 911 "Code Red" system.
New	Detail	Establish an evacuation plan for the Village, which should include the location of evacuation shelters and procedures for evacuating pets and livestock. An evacuation plan addressing these issues will limit confusion during an event. The evacuation plan may be added as an appendix to the Village Hazard Mitigation Plan or Community Wildfire Protection Plan.
Ongoing		Involve the Village Police Department, Colfax County Sheriff's Department, State Police, and other cooperators in reviewing current Emergency Operating Plans and conducting field exercises.
Ongoing		Create handouts or messages advising the public about how to prepare for an evacuation. Consider emphasizing that when getting ready to evacuate, people should remember the "5 P's": Pictures, Pets, Papers, Pills and Phones."
Ongoing		Improve the fire department's Insurance Services Organization (ISO) rating. Improved firefighter response, fire equipment such as a ladder truck, additional fire stations and additional water delivery and storage capacity should improve the fire department's Insurance Services Organization (ISO) rating. An improved ISO rating will increase annual fire department funding and reduce homeowner

	insurance rates.	
Amended	2009	Establish a position knowledgeable in forestry or natural resources to implement and enforce WUI ordinances, obtain and manage WUI and hazardous fuels reduction grants, coordinate fire prevention activities and public involvement such as the Firewise communities program, and coordinate cooperator actions (including Forest Service, NM State Land Office, Taos Pueblo, and local Colfax County groups).
	2016	Establish a Wildland Urban Interface Specialist position within the Village of Angel Fire Fire Department to implement and enforce WUI ordinances, obtain and manage WUI and hazardous fuels reduction grants, coordinate fire prevention activities and public involvement such as the Firewise communities program, coordinate cooperator actions (including Forest Service, NM State Land Office, Taos Pueblo, and local Colfax County groups), and work with the Firewise Committee and Village staff to implement CWPP action items.
Ongoing		Encourage the cross-training of area fire departments, local government officials and state and federal agencies using the Incident Command System (ICS) to manage an emergency incident.
Ongoing		Maintain the Enchanted Circle annual operating plan to coordinate area wildfire management. An annual operating plan has been prepared cooperatively with local, state, and federal government agencies.
Ongoing		Participate in interagency fire incidents to increase experience. Continue to participate in the New Mexico Resource Mobilization Plan to gain experience conducting wildfire suppression in wildland urban interface communities.
Ongoing		Conduct local, effective, and certified wildland fire trainings. Maintain wildland firefighter qualifications.
Amended	2009	Consider developing a regional training center. Reach out to regional cooperators such as the Enchanted Circle, Raton Fire Department and Colfax and San Miguel County Fire Departments.
	2016	Continue to develop a regional training center. Reach out to regional cooperators such as the Enchanted Circle, Raton Fire Department and Colfax and San Miguel County Fire Departments.
Amended	2009	Continue to improve water storage and delivery systems. Complete development of one million gallon storage tank and connect the new storage into the existing water delivery system. Study how power outages or other problems during a wildland fire would affect water delivery.
	2016	Continue to improve water storage and delivery systems. Purchase backup generators in the event of a loss of power to continue water delivery.
New	Detail	Identify a community liaison that can relay relevant information between emergency personnel and residents in the event of a wildfire or other emergency.
		Identifying a community member to work with emergency personnel and residents is part of planning for during and after wildfires and other emergencies. A community liaison will help keep residents informed, providing a trusted and familiar voice to compliment more official channels.
New		Establish a Community Emergency Response Team for the Village of Angel Fire and support residents interested in earning the certification. https://www.fema.gov/community-emergency-response-teams

	Detail	Utilizing existing training and certification programs will help make residents and the Village as a whole more prepared to respond to wildfires and other emergencies.
		CWPP Implementation
New	Detail	<p>In addition to regularly scheduled monthly meetings, the Firewise committee will prepare an annual CWPP implementation strategy and a review of progress made to implement action items and present it to the Mayor and Village council. The first implementation strategy will be presented to the Mayor and council within 90 days of the approval of the 2016 CWPP update.</p> <p>An annual implementation strategy and review of progress will help ensure that CWPP action items are accomplished in a timely manner. The implementation strategy will include a prioritized list of action items, a schedule with completion deadlines, and will identify Village staff and Firewise committee members who are responsible for implementing action items. The Mayor and Village council will approve the implementation strategy and ensure that CWPP implementation is successful.</p>
Amended	2009	Create a group to develop fire prevention and hazard reduction messages and methods to promote community awareness and minimize the effects of a wildfire on the economy and environment.
	2016	Maintain the Village Firewise Committee to develop fire prevention and hazard reduction messages and methods to promote community awareness, minimize the effects of a wildfire on the economy and environment, and to lead implementation of CWPP action items.
	2009	Establish a position knowledgeable in forestry or natural resources to implement and enforce WUI ordinances, obtain and manage WUI and hazardous fuels reduction grants, coordinate fire prevention activities and public involvement such as the Firewise communities program, and coordinate cooperator actions (including Forest Service, NM State Land Office, Taos Pueblo, and local Colfax County groups).
Amended	2016	Establish a Wildland Urban Interface Specialist position within the Village of Angel Fire Fire Department to implement and enforce WUI ordinances, obtain and manage WUI and hazardous fuels reduction grants, coordinate fire prevention activities and public involvement such as the Firewise communities program, coordinate cooperator actions (including Forest Service, NM State Land Office, Taos Pueblo, and local Colfax County groups), and work with the Firewise Committee and Village staff to implement CWPP action items.



What does a fire adapted community look like?

Fire is a natural part of our environment. As we choose to live in areas where wildfire occurs, we must adapt the way we design, build and live which chose to prepare our communities for wildfires. A fire adapted community understands to take and take actions that minimize harm to residents, homes, businesses, parks, and other community assets. These collective actions empower all community members to be safer in their environment. To learn more about making your community fire adapted, visit www.fireadapted.com.



Figure 1 Fire adapted communities in infographic



4| Companion plan crosswalk

Hazard Mitigation Plan

The Village of Angel Fire Hazard Mitigation Plan updated in October 2015 is an important companion document and should be linked to the CWPP. In fact, the Hazard Mitigation Plan ranks wildfire as the hazard with the highest impact and the highest likelihood. The total risk score for wildfire is more than double the score for the next highest ranked hazard (drought). Future updates to the Hazard Mitigation Plan should include the risk from post-fire flooding. Table 4 below provides an overview of hazards and associated vulnerability scores.

Table 4 Hazard mitigation plan impact and vulnerability score for wildfire

Village of Angel Fire Hazard Mitigation Plan Impact and Vulnerability Score for Wildfire			
Parameter	Definition	Wildfire score	
Geographic Extent	Size of the affected area. Includes areas not damaged but strongly affected by the incidents. For example, areas backed up by a transportation accident.	5	Regional
Duration	How long does the acute crisis part of the disaster last?	5	30+ days
Environment	How damaging is the disaster for the natural environment?	5	Permanent loss of ecosystem
Health Effects	How dangerous is the disaster for the natural environment?	2	1-10 deaths and/or 1-100 injuries
Displacement	How likely is the hazard to negatively impact the exposed population in terms of displacement, personal property loss and increased indebtedness?	5	1000+ displaced people. More than 30% of population facing acute shortages of basic supplies and access to services
Economy	How does the hazard affect the local economy?	5	Physical losses equal to 10% to assess value. Loss of ability to generate revenue.
Built Environment	How does the hazard affect the ability of residents and workers to access the resources they need?	5	1000+ structures red tagged. At least two major utilities degraded at least 50%.
Transportation	How does the hazard affect the ability of residents and workers to access the resources they need?	4	Many critical services inaccessible. One major mode inoperable. One major corridor inoperable.
Critical Services	How likely is the hazard to reduce the ability of government and business to provide critical services? (Medical, Public Safety, Social, Financial, etc.)	4	Temporary degradation of most critical services. Long term degradation of multiple services.
Confidence in Government	Would public's confidence in government be shaken?	3	Somewhat
Cascading Effects	How severe and complex will the secondary effects be?	5	Secondary effects generated and rival or exceed primary hazard. Secondary impacts would definitely be disaster in their own right.
Total vulnerability score		43	



The Hazard Mitigation Plan divides the village into four areas though no map was provided in the plan:

- a. Area 1- heavily forested rugged mountainous terrain with few structures (6 total)
- b. Area 2 - heavily forested moderate mountainous terrain with single-family residential structures (1,200 structures)
- c. Area 3 - grassland meadows with business and multi-family condominium/hotel structures (190 structures)
- d. Area 4 - grassland meadows with business and a few single-family structures (above grade utilities and no fire hydrants) (200 structures).

The Village of Angel Fire has identified six facilities as critical and has placed these facilities in three operational categories: (1) must not lose operational capability, (2) must be operational within 24 hours, and (3) must be operational within 24 to 72 hours. Map 1 shows the location of each critical facility. Category 1 facilities are:

- Telephone Exchange (Q west) Mountain View Blvd.
- Village Fire Station 11 N. Angel Fire Road

Category 2:

- Electrical power Substation (Kit Carson) East of Hwy 434

Category 3:

- Waste Water Treatment Plant (Village) 67 Service Road
- Village Hall (Village) 3388 Mountain View Blvd.
- Water Well #1 (Village) 434 and Country Club Drive

The Hazard Mitigation Plan prioritizes 17 mitigation initiatives many of which would increase the Village's wildfire preparedness including:

- Priority 1 Additional Water Rights
- Priority 2 Hire Emergency Manager
- Priority 3 Fire Station 3
- Priority 5 Additional Fire Equipment
- Priority 7 Water Storage Tanks Repair or Replacement
- Priority 12 Adoption of current NFPA and Life Safety Codes
- Priority 14 Vegetation Management Program to thin forested areas creating defensible space within the Village to protect against wildfires and provide for forest health.

According to the Hazard Mitigation Plan, the Village Planning Committee prioritized the projects using social, economic, technological, administrative, political, legal, and environmental factors. The Hazard Mitigation Plan includes more detail on the estimated costs, benefits, funding, and timeline for each of these priorities.

Comprehensive plan

Like the Hazard Mitigation Plan, the Village of Angel Fire's 2008 Comprehensive Plan addresses some issues relevant to this CWPP. The Comprehensive Plan is a policy guide focused on the physical development of the community built from public meetings; interviews with Village staff, representatives from the Angel Fire Resort, and business people and students. In the Natural Resources section, the Comprehensive Plan recommends Angel Fire become a Firewise community. Other priorities related to wildfire mitigation in the Comprehensive Plan mirror those in the Hazard Mitigation Plan. Future updates to the Comprehensive Plan should include references to both the CWPP and the Hazard Mitigation Plan. For more information please see the Village of Angel Fire Comprehensive Plan at:

<http://www.angelfirenm.gov/assets/documents/2008ComprehensivePlan-e66efb18ea.pdf>



5| Wildfire preparedness

Ingress and egress

Ingress (access for wildfire suppression equipment and personnel) and egress (ways for residents and visitors to escape the wildfire) are crucial to wildfire preparedness. The 2009 Angel Fire CWPP (p 30) includes a discussion of treatments to maintain ingress and egress roads in safe condition as well as a map of the key ingress/egress roads (figure 8 page 31, 2009). Some areas, such as the Taos Drive area, are identified in the 2009 CWPP as having a single gravel road for ingress/egress and has multiple dead ends, which could present serious problems during an evacuation.

Smoke impacts

Wildfire smoke is not healthy and older adults, children, and people who have heart or lung diseases are most at risk from its adverse effects. Even wildfires miles away from the Village of Angel Fire may cloud the air with smoke and residents and the Center for Disease Control recommends the follow measures to decrease the impact of wildfire smoke:

- Check local air quality reports;
- Keep indoor air as clean as possible by keeping doors and windows shut;
- Avoid activities that increase indoor pollution such as smoking, burning candles, fireplaces, or gas stoves; and
- Seek shelter in a designated evacuation center or away from the affected area if necessary.

Communication

Communication is one of the best tools for reducing the impact of wildfires. Good communication allows firefighter to efficiently suppress wildfires, residents to evacuate if the need arises, and responders to help those in need. In order to ensure good communication during an incident, it is crucial to have communication before an incident. Emergency responders from Village, county, volunteer fire departments, state, and federal agencies need to be sure they understand each other's communications protocols and requirements. Pre-wildfire season meetings of key individuals are a worthwhile investment to ensure seamless communication during a wildfire. These meetings also serve to build the personal connections and trust that can be very important during an incident.

Communication is also important for families to ensure everyone is safe and accounted for. Often designating an out-of-area friend or relative as a point of contact works best. He or she can act as a single source of communication among family members in case of separation more efficiently when phone, cell, and internet systems are overloaded or limited during a wildfire.

Community Emergency Response Team

The Federal Emergency Management Agency (FEMA) has a program to help community members be part of the response to disasters called Community Emergency Response Team (CERT). The CERT program helps volunteers use training learned in the classroom and during exercises to assist others in their community after a disaster when professional responders are not immediately available to help.



Evacuation

Residents should be ready to leave as soon as evacuation is recommended by officials to avoid being caught in fire, smoke, or road congestion. Evacuating early helps firefighters keep roads clear of congestion and lets them move more freely to do their job.

The 2009 CWPP identified three safety zones for the Village: the airport, community center, and the golf course. A safety zone is an area without burnable fuel that is large enough so that the distance between the firefighters and flames is at least four times the maximum flame height. However, in the context of an evacuation order issued for the village in the event of a wildfire, an “evacuation staging area” more accurately describes the need and intent of previously named safety zones. In order to clarify for residents the procedure following an evacuation order, the area behind Fire Station #1 (11 N Angel Fire Road) and Village hall (3388 Mountain View Blvd) was identified as the single evacuation staging area for the 2016 CWPP update. Map 5 shows the location of the evacuation staging area. If an evacuation order is given for Village residents to leave their homes, they should convene at the evacuation staging area and await further instructions. Residents with livestock who may be towing trailers should also convene at the evacuation staging area.



Before wildfire season starts residents should develop a plan for evacuation. Family members should have an established emergency meeting location outside the hazard area and a plan for pets and large animals such as horses and other livestock. An easy way to remember what to prepare for an evacuation is the 6 Ps:

- People and pets
- Papers, phones numbers, and important documents
- Prescriptions
- Photos and pictures (irreplaceable memorabilia)
- Personal computer harddrives
- Plastic: credit cards, ATM cards, and cash

Knowing where all these things are when a wildfire starts can make evacuation less stressful.

The Home Evacuation Checklist from www.ReadyForWildfire.org gives a good list of how to prepare for evacuation:

Inside the House

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades, curtains and close metal shutters.
- Remove lightweight curtains.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter; turn off pilot lights.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning.

Outside

- Gather up flammable items from the exterior of the house and bring them inside (patio furniture, children's toys, door mats, trash cans, etc.) or place them in your pool.
- Turn off propane tanks.
- Move propane BBQ appliances away from structures.
- Connect garden hoses to outside water valves or spigots for use by firefighters. Fill water buckets and place them around the house.
- Don't leave sprinklers on or water running, they can affect critical water pressure.
- Leave exterior lights on so your home is visible to firefighters in the smoke or darkness of night.
- Put your Emergency Supply Kit in your vehicle.
- Back your car into the driveway with vehicle loaded and all doors and windows closed. Carry your car keys with you.
- Have a ladder available and place it at the corner of the house for firefighters to quickly access your roof.
- Seal attic and ground vents with pre-cut plywood or commercial seals.
- Patrol your property and monitor the fire situation. Don't wait for an evacuation order if you feel threatened.
- Check on neighbors and make sure they are preparing to leave.

Animals

- Locate your pets and keep them nearby.
- Prepare farm animals for transport and think about moving them to a safe location early.



5| Planning for post-fire recovery

Because of the significant probability of a wildfire eventually occurring in or around Angel Fire, it is important to plan for how the community will recover after a wildfire. New Mexico State Forestry provides an excellent resource for thinking about post-fire recovery called *After Wildfire* (www.afterwildfirenm.org). In addition, many elements of post-wildfire recovery are similar to recovery from other disasters and are covered in the Village of Angel Fire Hazard Mitigation Plan.

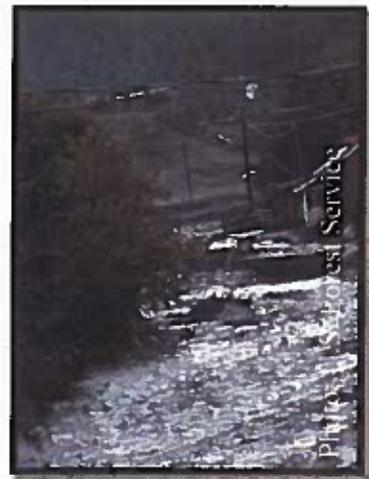
The first post-fire recovery concern is safety. After a wildfire it is important that residents stay away from their homes or businesses until officials determine it is safe to return. Because utility services can be disrupted by wildfire:

- do not drink or use water from the faucet until officials say it is okay;
- use extreme caution around trees, power poles and other tall objects that may have lost stability during the fire;
- if you have a propane tank or system, contact a propane supplier, turn off valves on the system, and leave valves closed until the supplier inspects your system; and
- Look for smoke or sparks that may still be burning.

Post fire flooding is a major concern. The heavy monsoon season rains common in New Mexico in the late summer and early fall can often bring flooding and debris flows after wildfire. These storms are typically very local, very intense, and of short duration, delivering a lot of rain in a short amount of time. When such storms develop over burned areas, the ground cannot absorb the rain, so it runs off the burned area, accumulates in streams, and produces flash floods.

FEMA produces flood risk maps that can help guide post-fire preparation for flooding (see Figure 2 below). Post-wildfire flooding preparation should also be included in the Angel Fire Hazard Mitigation Plan. Some homes and businesses may want to reevaluate their flood insurance coverage in light of the fact that post-wildfire floods are often more extensive than the flood risk before a wildfire might indicate.

Image 6 Post-fire flooding in Arizona



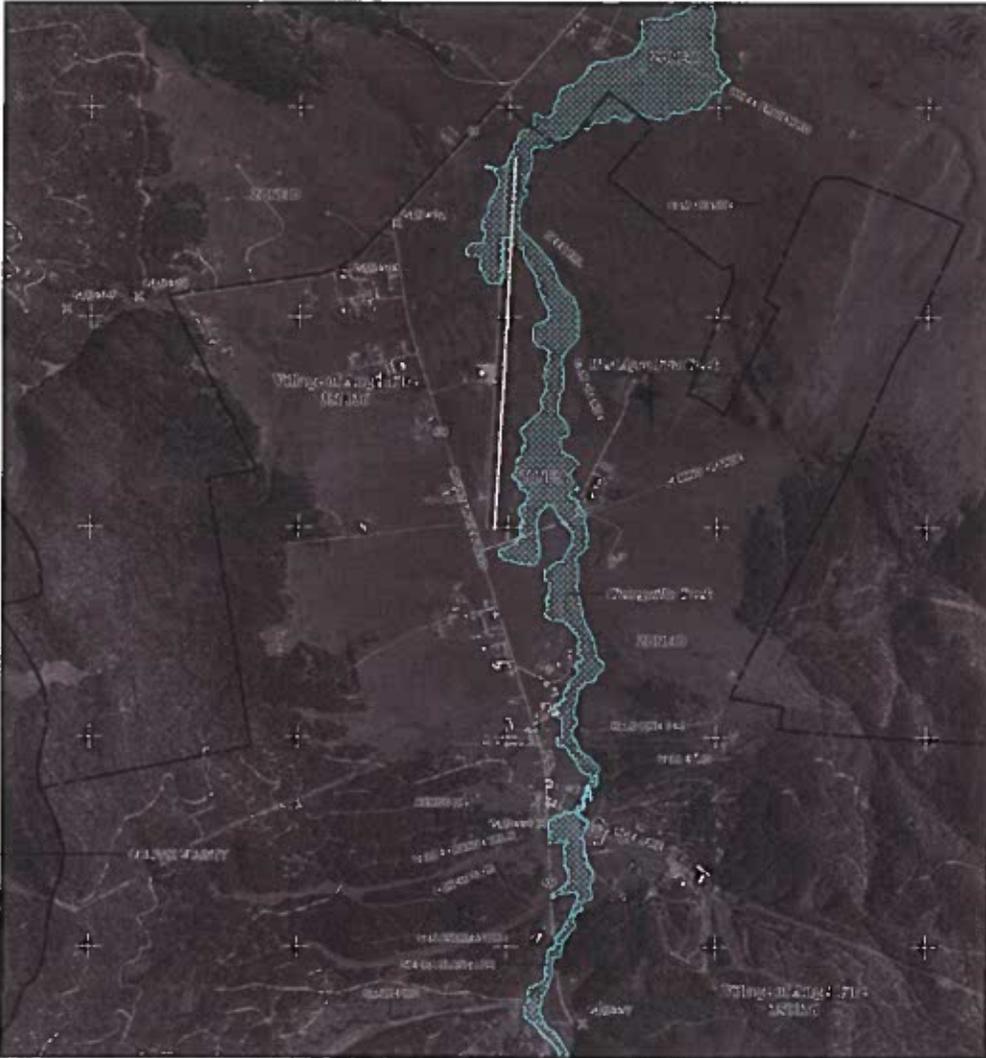


Figure 2 National Flood Insurance Map from FEMA (panel 1100D) showing special flood hazard areas subject to inundation by the 1% annual chance flood

The New Mexico's *After Wildfire* guide suggests communities designate a Post Fire Coordinator (or a few coordinators) to work directly with local, state or federal agencies, emergency response officials, volunteers, and other stakeholders to address needs and seek assistance. Post Fire Coordinators may be part of the Community Emergency Response Team (CERT) mentioned above in the Wildfire Preparedness section.

It may be appropriate to implement post-wildfire treatments in the forest such as erosion control or planting, but first communities should be sure to identify values at risk post-wildfire and focus on treatment that reduce the threat to those values. The *After Wildfire* guide has a catalogue of potential treatments that include:

- Seeding and mulch to reduce erosion;
- Contour log felling and other erosion barriers;
- Check dams and other channel treatments; and
- Culvert modifications and other road treatments.





Image 8 Spreading mulch to reduce erosion



Image 7 A checkdam stabilizes soil behind it

6) Collaboration and public participation

The 2016 CWPP update was developed collaboratively with members of the CWPP core team, Village residents, and other stakeholders. A project website was established (www.forestguild.org/angelfirecwpp) to announce meetings and share drafts of the 2016 update. The CWPP core team led the collaborative effort and was comprised of village officials, adjacent land management agencies, residents, and other stakeholders. Table 5 below lists members of the core team who were invited to core team meetings. It should be noted that not all members of the core team were able to meet in person. Residents and other stakeholders were also provided with options other than meetings to provide input to the CWPP update.

Table 5 2016 CWPP core team

Name	Position	Affiliation
Jimmy Linton	Tourism manager	Angel Fire Convention & Visitors Bureau
Bubba Davis	Board of directors	Angel Fire Property Owners Association
Dan Rakes	General Counsel	Angel Fire Resort
Andy Whitacre	Asst. Mountain Operations Manger	Angel Fire Resort
Kyle Sahd	Fire management specialist	Bureau of Land Management, Taos Field Office
Ray Corral	Zone Fire Management Officer	Carson National Forest
Tom Vigil	Emergency manager	Colfax County
Larry Osborne	Fire Marshall	Colfax County
Scott Jones	President	Colfax County Coalition of Firewise Communities
Michael Dean	Caretaker	Elliot Barker Girl Scout Camp
Joe Stehling	Firewise and Fire Adapted Communities Coordinator	Hidden Lake Firewise Community
Bob Coss	Fire Chief	Moreno Valley Fire Department
Ernie Lopez	District Forester	New Mexico State Forestry, Cimarron District
Arnie Friedt	Timber management officer	New Mexico State Forestry, Cimarron District
Mark Meyers	Forester	New Mexico State Land Office
Ron Burnham	Fire Chief	Red River Fire Department
Brinn Colenda	Councilor	Village of Angel Fire
Terry Cordova	Assistant Village manager	Village of Angel Fire



Amos Torres	Public works director	Village of Angel Fire
Barbara Cottom	Mayor	Village of Angel Fire
Rick Tafoya	Public Works Director	Village of Angel Fire
Christine Breault	Director, Community Development Department	Village of Angel Fire
Tracy Orr	Grants administrator	Village of Angel Fire
Andy Bertges	Fire Chief	Village of Angel Fire
Fabian Mascarena	Grants management	Village of Angel Fire
Kevin Pool	Captain	Village of Angel Fire Fire Department
David Hartson	Member	Village of Angel Fire Firewise Committee
John Goodson	Member	Village of Angel Fire Firewise Committee
Marcos Rivera	Member	Village of Angel Fire Firewise Committee
Rick Sprott	President	Village of Angel Fire Firewise Committee
Don Clark	Member	Village of Angel Fire Firewise Committee

The core team convened several meetings to discuss progress since the 2009 CWPP, identify priority action items for the 2016 update, and to review drafts of the final document. Table 6 below provides an overview of all core team and public meetings convened for the 2016 CWPP update.

Image 9 Participants at the June public meeting



Table 6 2016 CWPP update meetings

Date	Meeting	# of Participants	Representation
2/29/16	Core team	13	Forest Stewards Guild, Village of Angel Fire, Village of Angel Fire Fire Department, NM State Land Office, NM State Forestry, Moreno Valley Fire Department, Association of Angel Fire Property Owners, US Forest Service, Bureau of Land Management
3/29/16	Public meeting	26	Forest Stewards Guild, Village of Angel Fire, Village of Angel Fire Fire Department, NM State Forestry, Moreno Valley Fire Department, Association of Angel Fire Property Owners, US Forest Service, Bureau of Land Management, Angel Fire Resort
6/27/16	Core team meeting	12	Forest Stewards Guild, Village of Angel Fire, Village of Angel Fire Fire Department, NM State Land Office, NM State Forestry, Moreno Valley Fire Department, US Forest Service, Bureau of Land Management



6/29/16	Public meeting	14	Forest Stewards Guild, Village of Angel Fire, Village of Angel Fire Fire Department, NM State Forestry, Association of Angel Fire Property Owners
7/28/16	Core team meeting	5	Forest Stewards Guild, Village of Angel Fire, Village of Angel Fire Firewise Committee, NM State Forestry

In addition to meetings, core team members and members of the public were invited to complete a survey that helped inform priorities and action items for the 2016 update. A similar survey was used in the 2009 CWPP. Many questions were repeated in 2016 to track changes in resident involvement in wildfire preparedness and perceptions regarding various fuel management practices. A paper and digital version of the survey were made available to residents. Paper copies of the survey were distributed at the March and June public meetings. The survey was posted online using Google forms. A link to the online survey was provided on the project website and the Village website. Survey questions and results are included in appendix A.

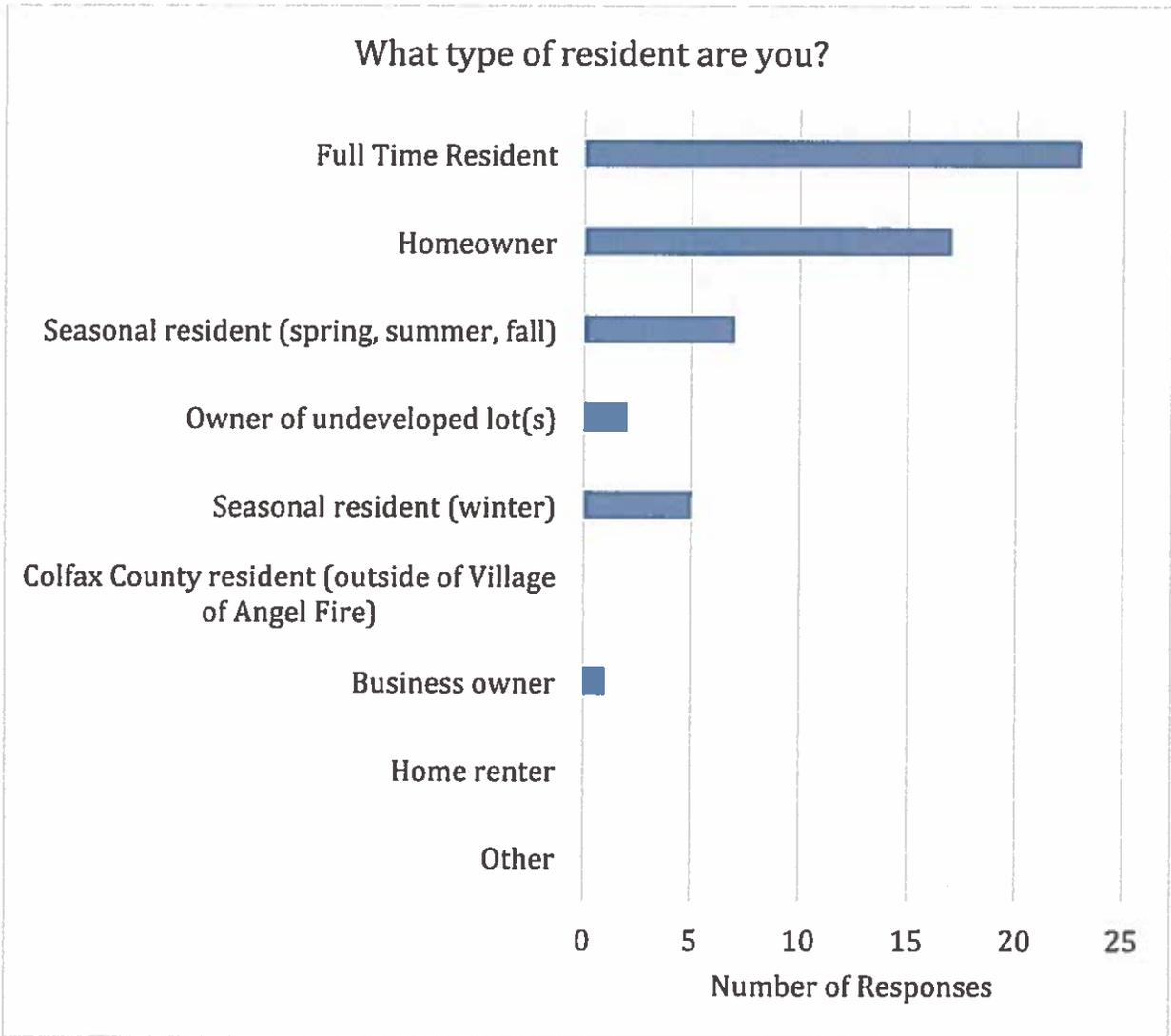
Image 10 URL to resident survey displayed on Village website



The 1st draft of the 2016 update was posted on the project website ahead of the June core team and public meetings to provide residents with an opportunity to recommend revisions and submit their comments and concerns.

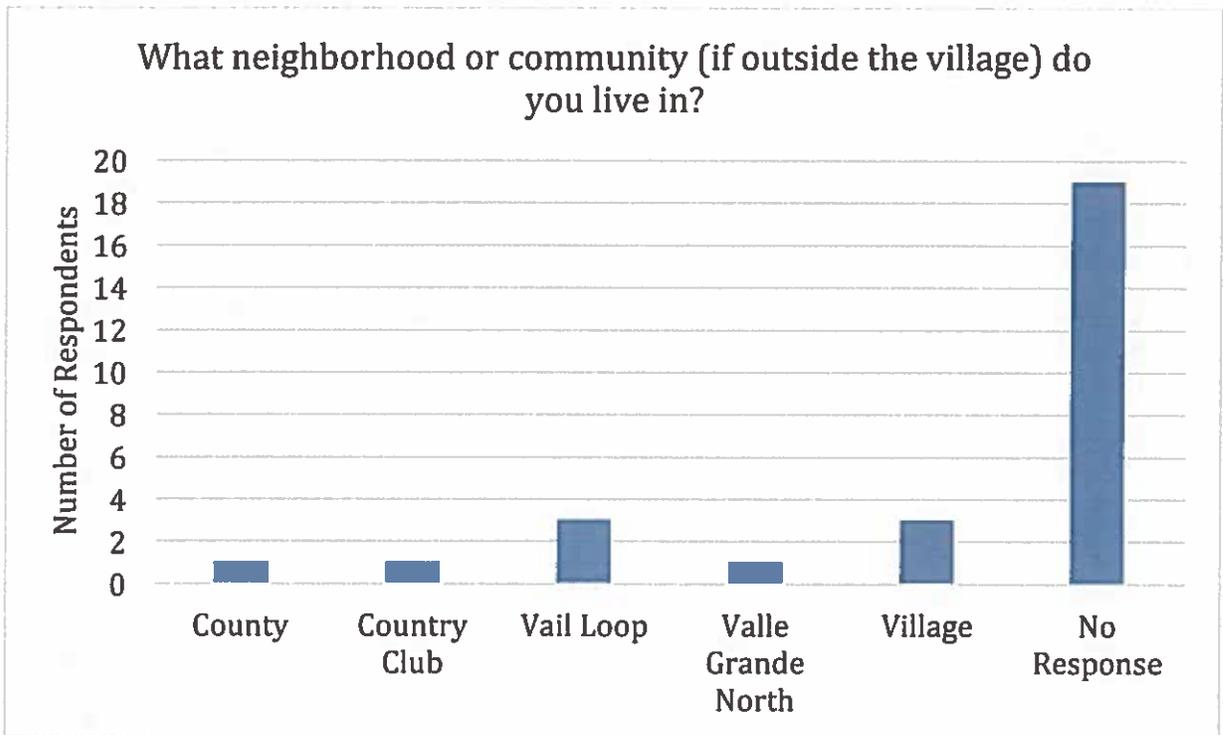


Appendix A: Resident survey responses



Number of respondents: 32

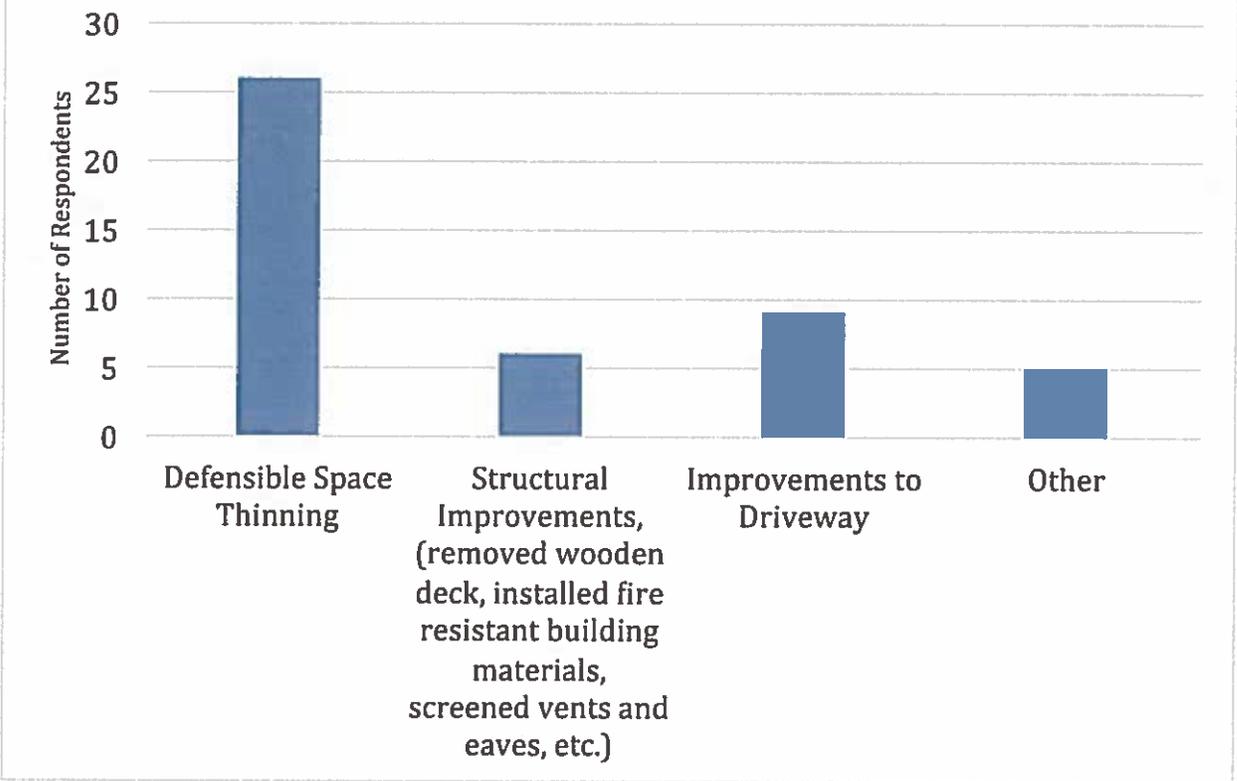




Number of respondents: 13



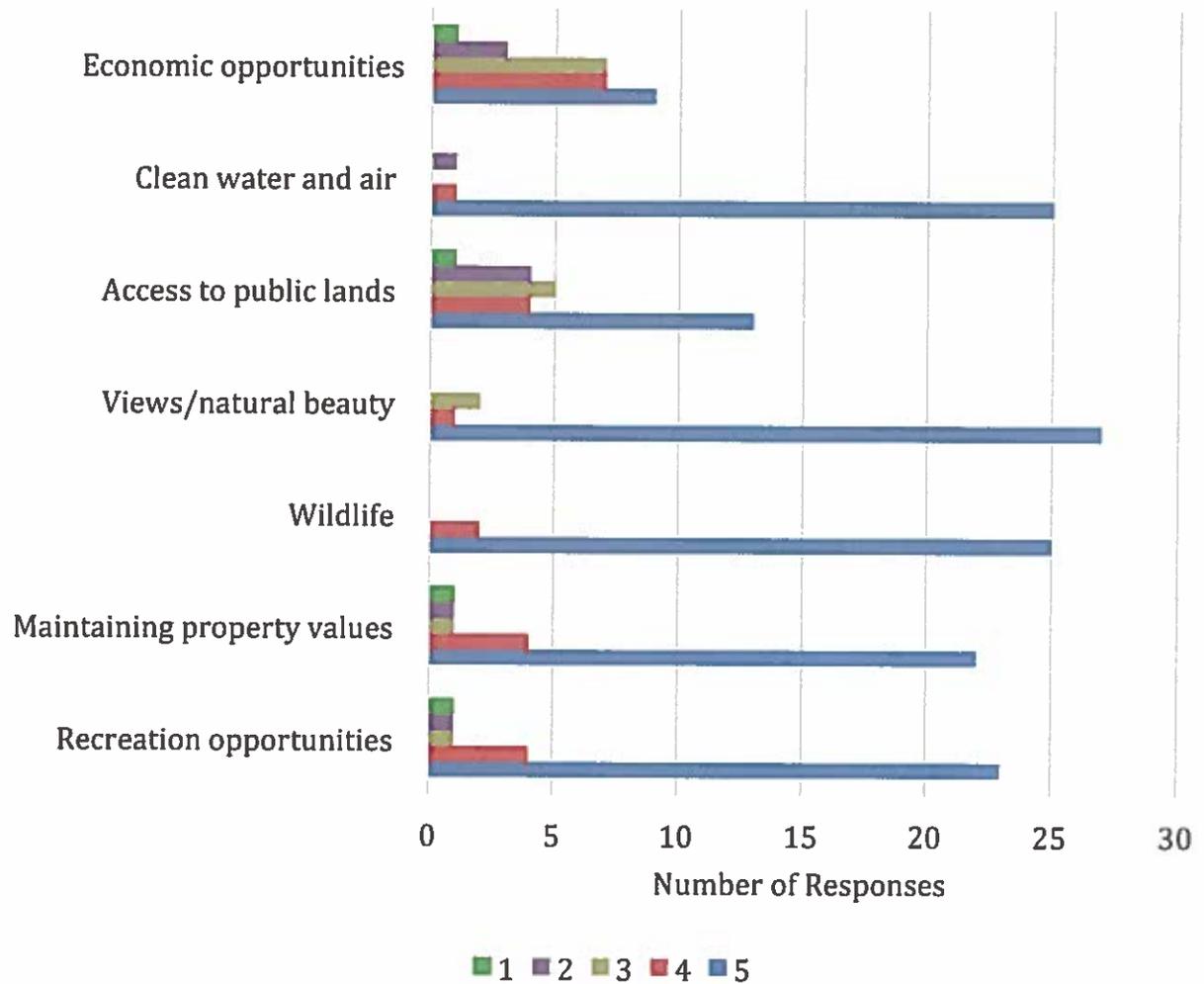
Since 2009 have you taken any of the following steps to reduce the wildfire risk to your home?



Number of respondents: 30



What do you value most about Angel Fire and the local area?
Rate each from low value = 1 to high value = 5

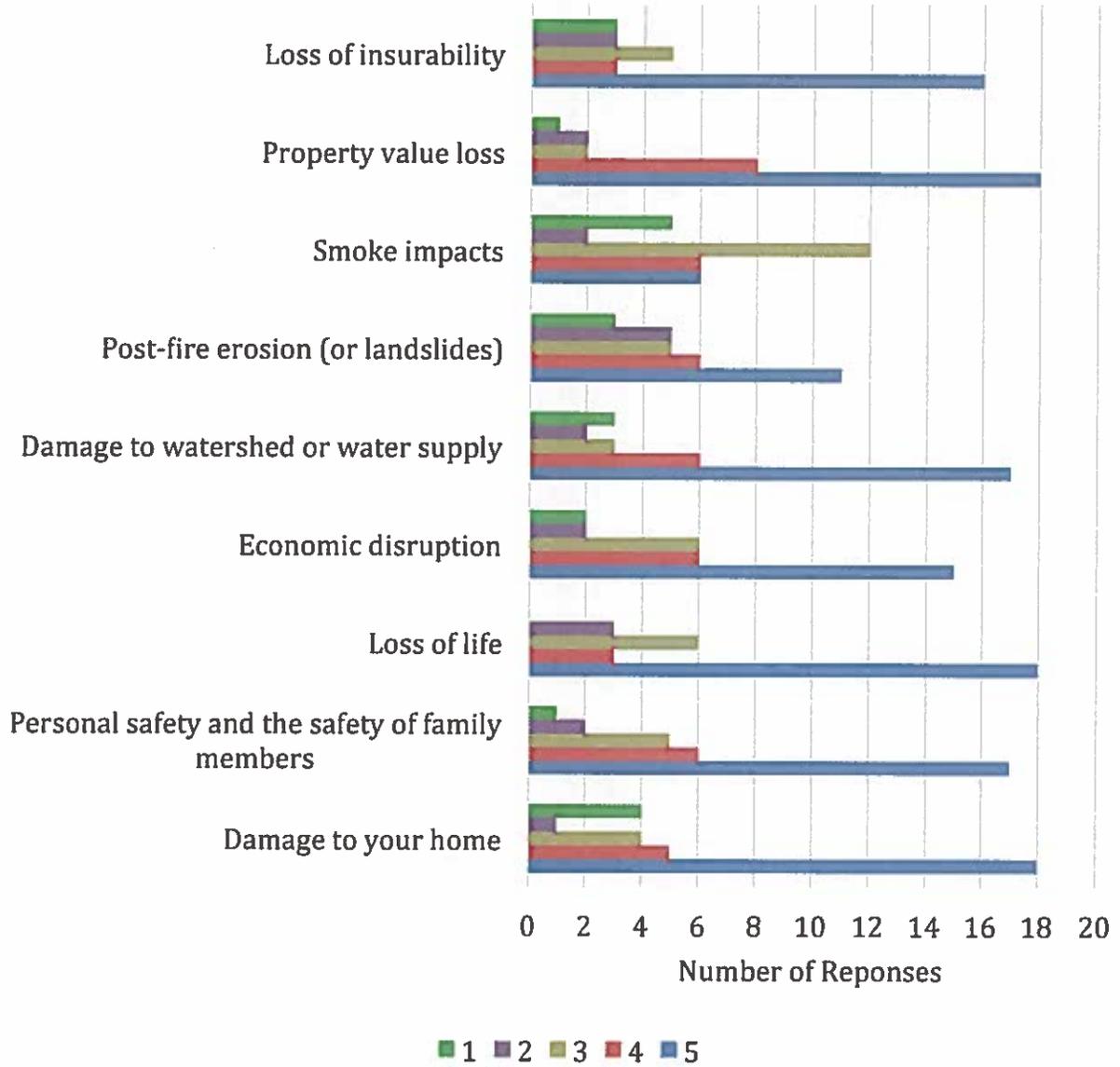


Number of respondents:

Recreation opportunities	30
Maintaining property values	29
Wildlife	27
Views/natural beauty	30
Access to public lands	27
Clean water and air	27
Economic opportunities	27



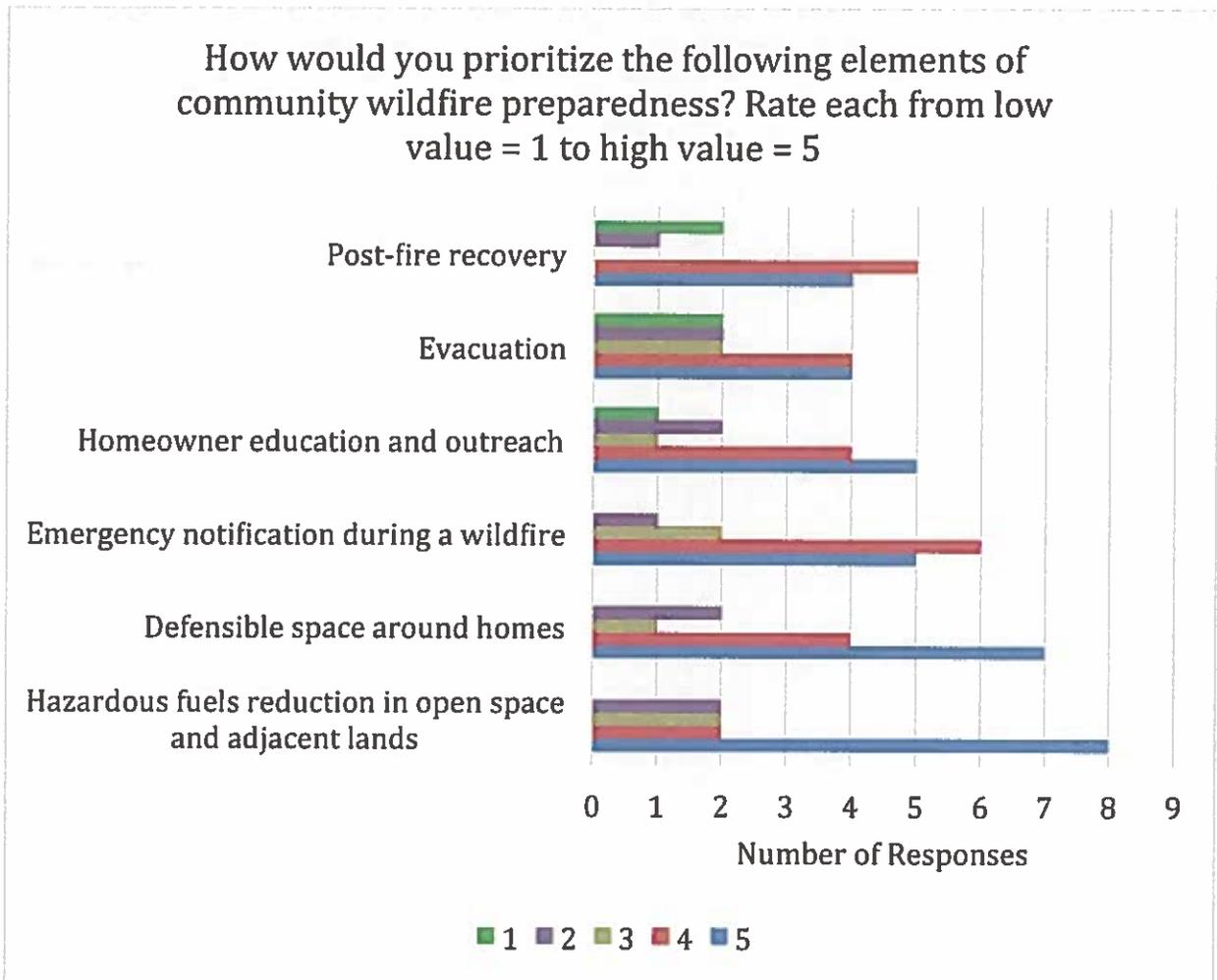
What are your concerns about fire threatening Angel Fire?
Rate from low = 5 to high = 1



Damage to your home	32
Personal safety and the safety of family members	31
Loss of life	30
Economic disruption	31
Damage to watershed or water	31

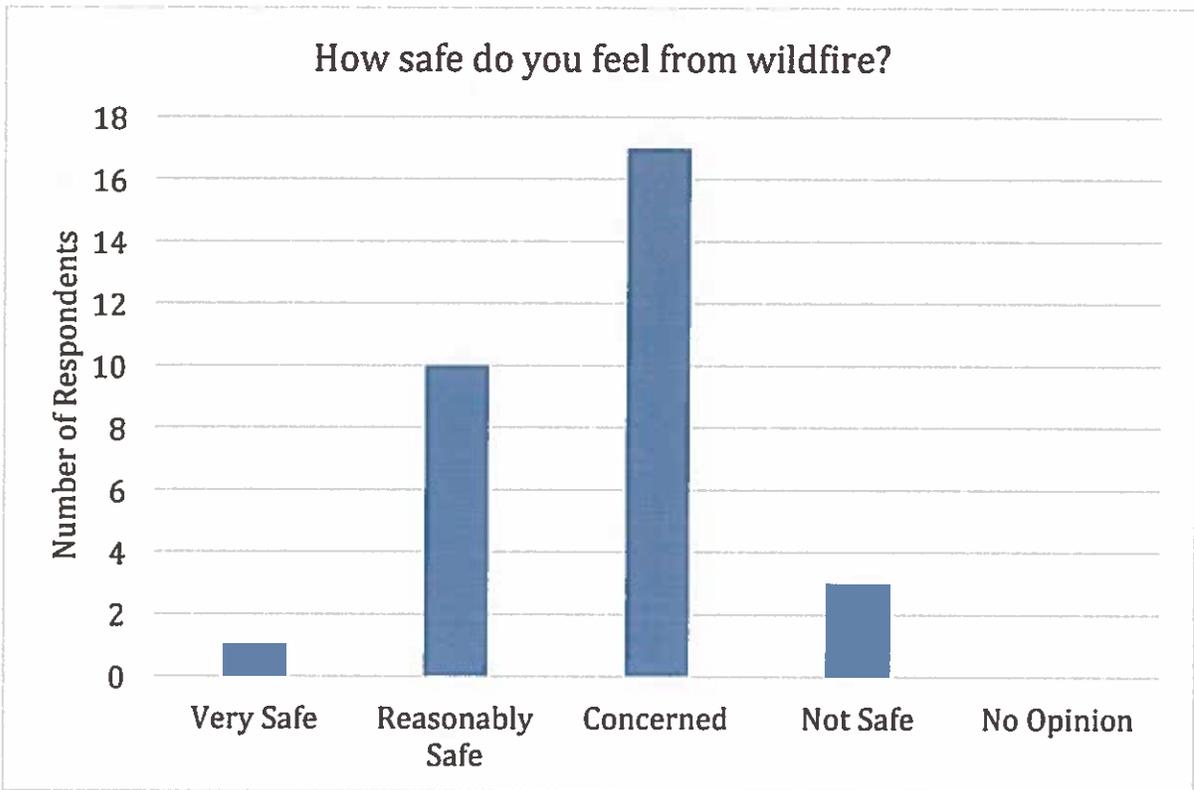


supply	
Post-fire erosion (or landslides)	30
Smoke impacts	31
Property value loss	31
Loss of insurability	30

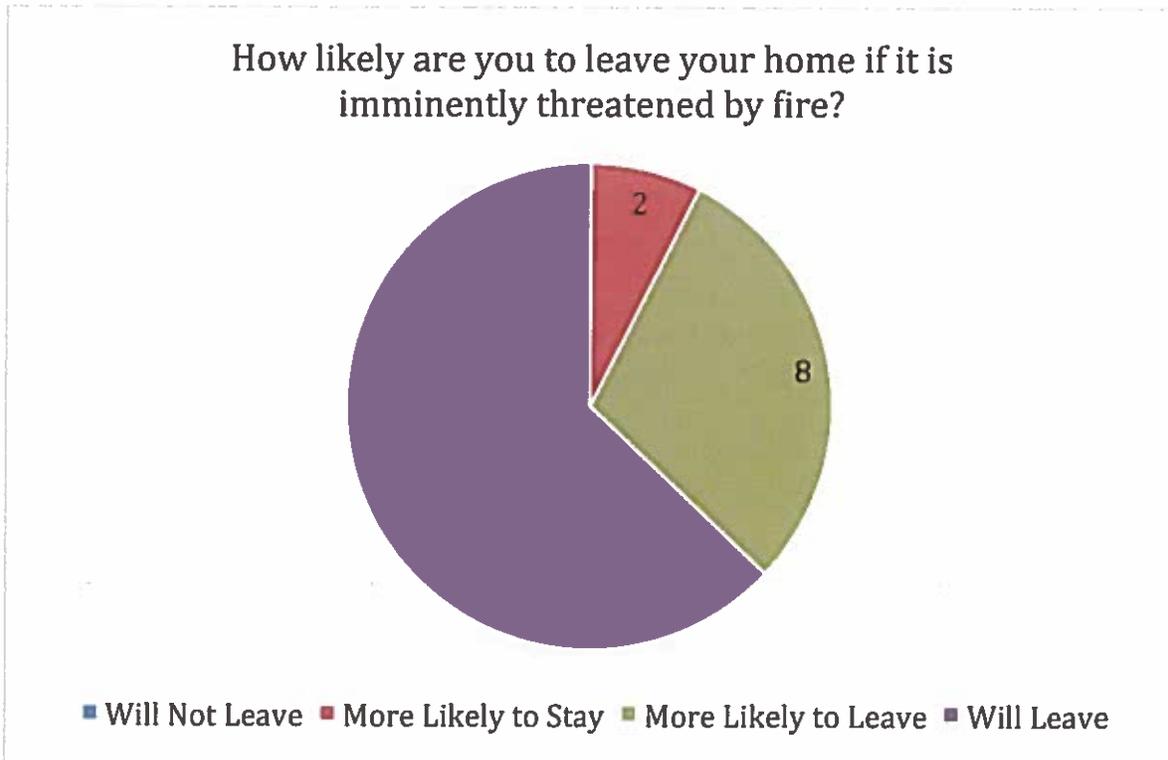


Hazardous fuels reduction in open space and adjacent lands	14
Defensible space around homes	14
Emergency notification during a wildfire	14
Homeowner education and outreach	13
Evacuation	14
Post-fire recovery	12





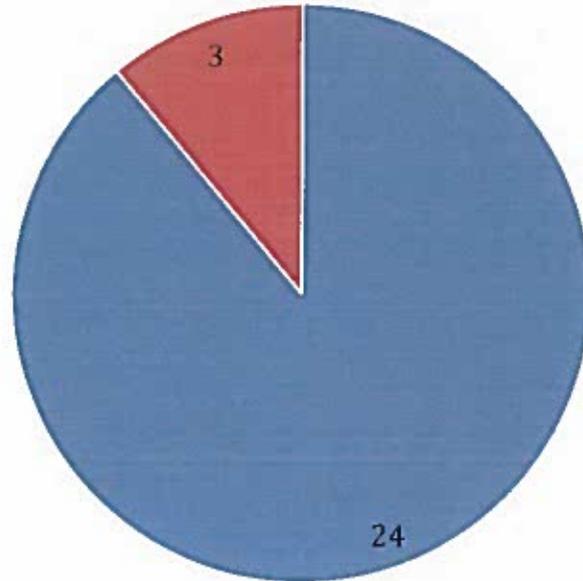
Number of respondents: 31



Number of respondents: 27



If you were to evacuate would you know which route to use?

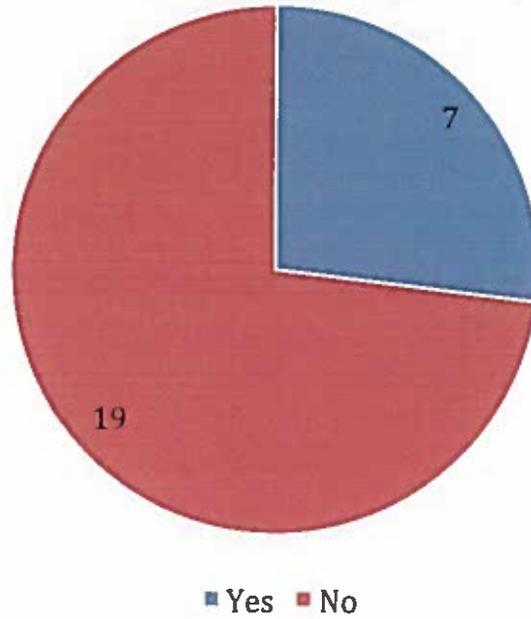


■ Yes ■ No

Number of respondents: 27



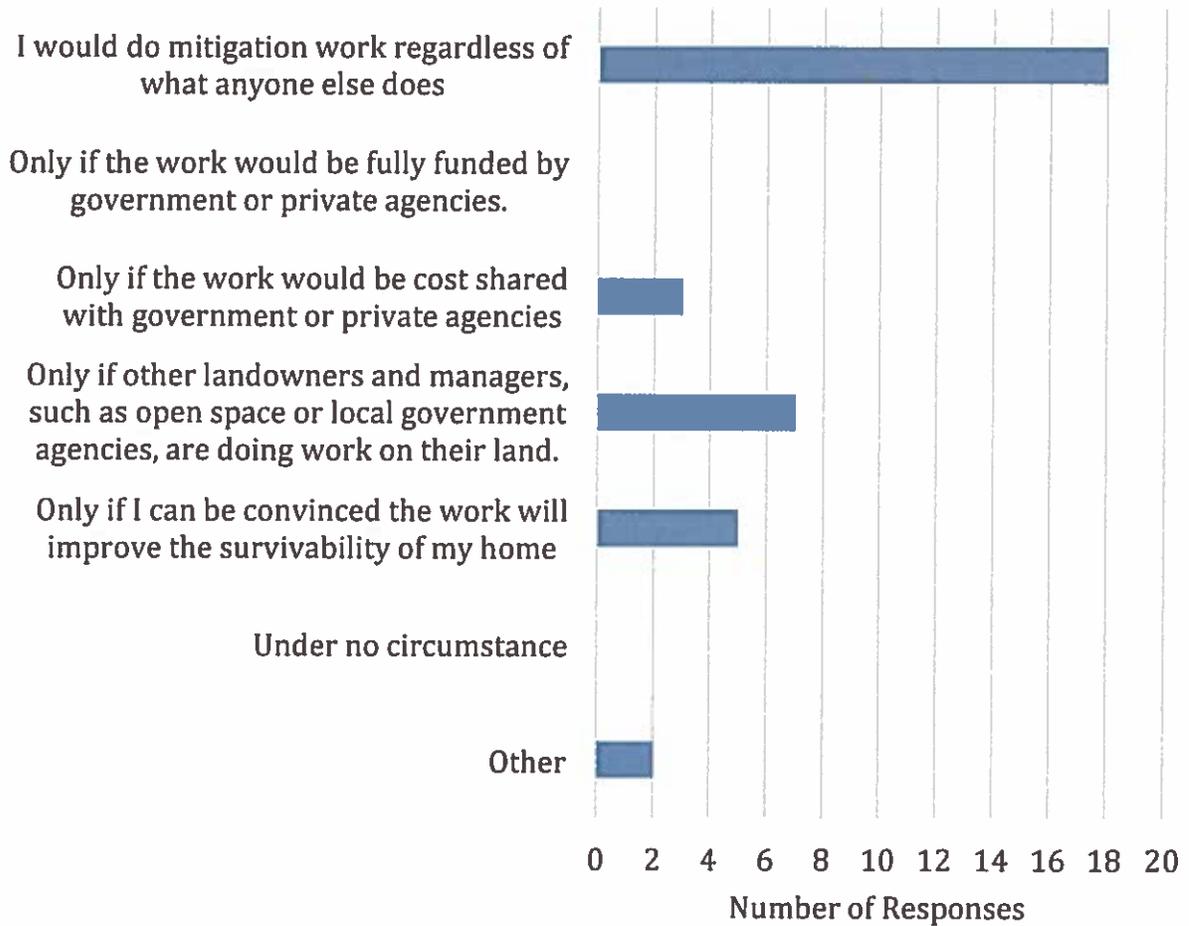
Do you have a prearranged meeting place for family members in the event of an evacuation?



Number of respondents: 26



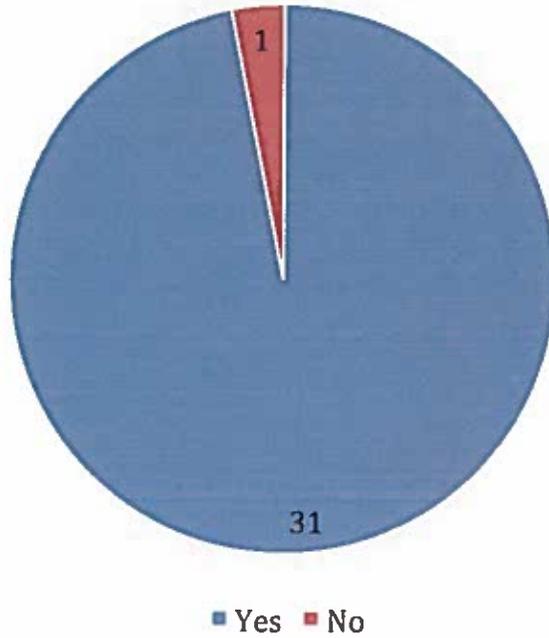
Under which of the following conditions would you be willing to do mitigation work on your property?



Number of respondents: 27



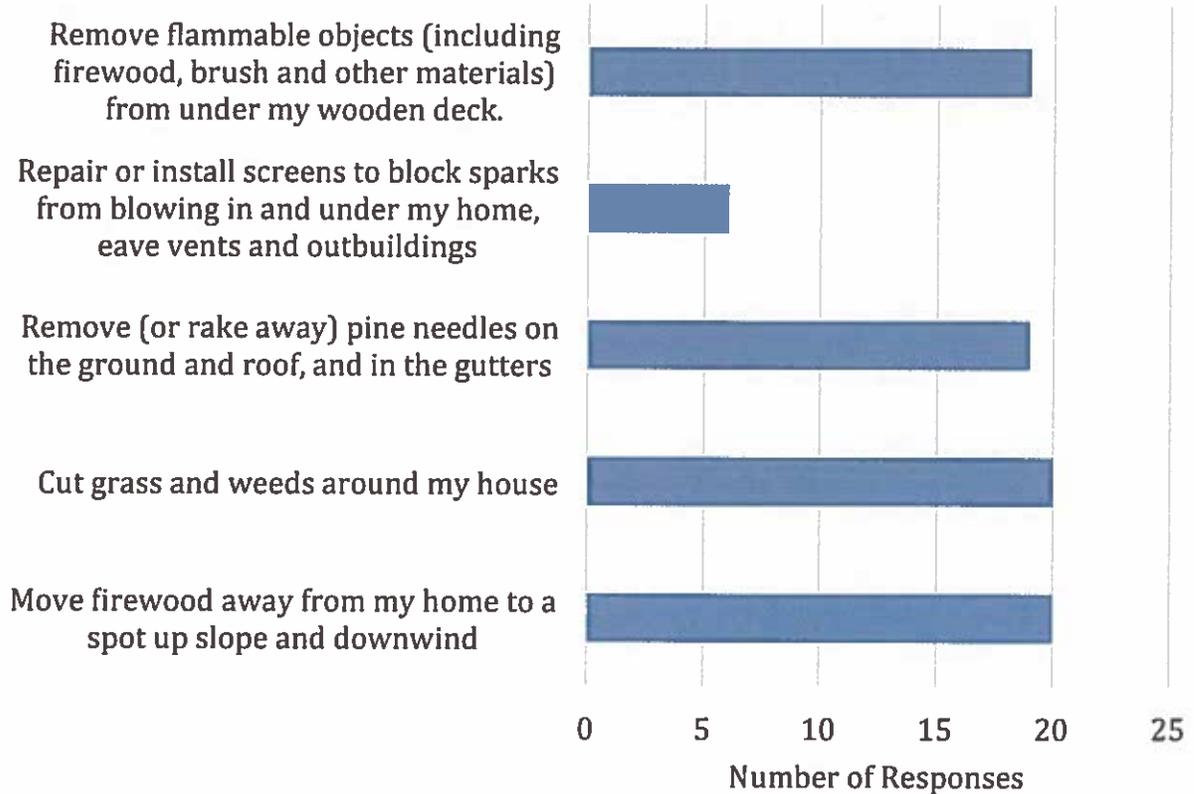
Are you aware of the free, community-sponsored slash
(woody debris) pick-up program?



Number of respondents: 32



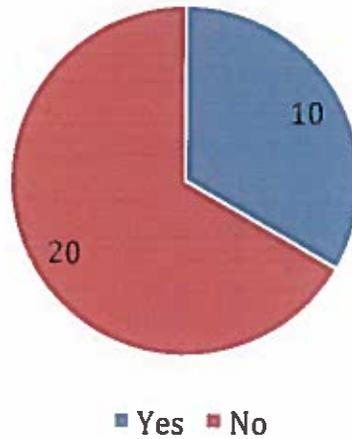
Which of the following mitigation actions do you do each spring to prepare for wildland fire season? Check all that apply.



Number of respondents: 28



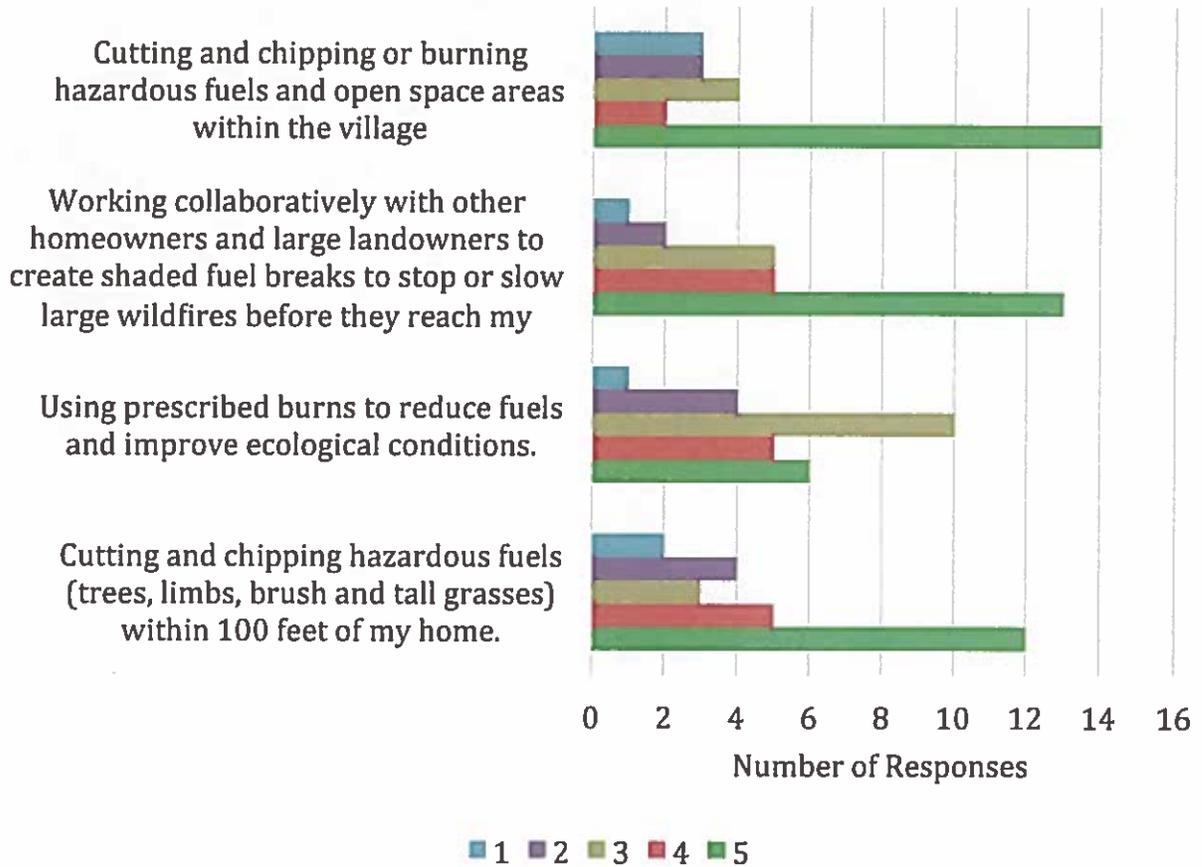
Would you join a volunteer organization that focuses on annual activities that remove hazardous fuels and manages mitigation activities in Angel Fire Green Spaces. If yes, please leave your name and contact information in the "other" option.



Number of respondents: 30



Rate your comfort level with the following activities. Rate from low = 1 to high =5



Number of respondents: 26

