

Upper Jacoby Creek

COMMUNITY ASSESSMENT



INTRODUCTION

The Firewise Communities/USA program is designed to provide an effective management approach for preserving wildland living aesthetics. The program can be tailored for adoption by any community and/or neighborhood association that is committed to ensuring its citizens maximum protection from wildland fire. The following community assessment is intended as a resource to be used by the Upper Jacoby Creek residents for creating a wildfire safety action plan. The plan developed from the information in this assessment should be implemented in a collaborative manner, and updated and modified as needed.

Data collection for this assessment took place during two different visits to the area; one in September of 2011 and one in November of 2012. During the second visit, it was noted that significant steps had been made to address the fire safety challenges faced by the community. Those involved in data gathering were as follows:

- Sarah Trapkus, Upper Jacoby Creek Firewise Committee Member
- Marilyn Kelly, Upper Jacoby Creek Firewise Committee Member
- Denise Hisel, Upper Jacoby Creek Firewise Committee Member
- Mark Rodgers, CAL FIRE Battalion Chief, Pre-Fire Planning
- Cybelle Immitt, Humboldt County Public Works/Humboldt County Fire Safe Council

Cybelle Immitt completed the “Assessing Wildfire Hazards in the Home Ignition Zone” training provided by the National Fire Protection Association (NFPA) and Firewise.

DEFINITION OF THE HOME IGNITION ZONE

Upper Jacoby Creek is located in a wildfire environment. Wildfires will happen-- exclusion is not a choice. The variables in a fire scenario are when the fire will occur, and where. This assessment addresses the wildfire-related characteristics of Upper Jacoby Creek. It examines the area’s exposure to wildfire as it relates to ignition potential. The assessment does not focus on specific homes, but examines the community as a whole.

A house burns because of its interrelationship with everything in its surrounding home ignition zone---the house and its immediate surroundings. To avoid a home ignition, a homeowner must eliminate the wildfire’s potential relationship with his/her house. This can be accomplished by interrupting the natural path a fire takes. Changing a fire’s path by clearing a home ignition zone is an easy-to-accomplish task that can result in avoiding home loss. To accomplish this, flammable items such as dead

vegetation must be removed from the area immediately around the structure to prevent flames from contacting it. Also, reducing the volume of live vegetation will affect the intensity of the wildfire as it enters the home ignition zone.

Included in this assessment are observations made while visiting Upper Jacoby Creek. The assessment addresses the ease with which home ignitions can occur under severe wildfire conditions and how these ignitions might be avoided within the home ignition zones of affected residents. Upper Jacoby Creek residents can reduce their risk of destruction during a wildfire by taking actions within their home ignition zones. This zone principally determines the potential for home ignitions during a wildland fire; it includes a house and its immediate surroundings within 100 to 150 feet.

The result of the assessment is that wildfire behavior will be dominated by the residential characteristics of this area. The good news is that by addressing community vulnerabilities, residents will be able to substantially reduce their exposure to loss. Relatively small investments of time and effort will reap great rewards in wildfire safety.

DESCRIPTION OF THE SEVERE CASE WILDLAND FIRE CHARACTERISTICS THAT COULD THREATEN THE AREA

Fire intensity and spread rate depend on the fuel type and condition (live/dead), the weather conditions prior and during ignition, and the topography. Generally the following relationships hold between the fire behavior and the fuel, weather and topography.

- Fine fuels ignite more easily and spread faster with higher intensities than coarser fuels. For a given fuel, the more there is and the more continuous it is, the faster the fire spreads and the higher the intensities. Fine fuels take a shorter time to burn out than coarser fuels.
- The weather conditions affect the moisture content of the dead and live vegetative fuels. Dead fine fuel moisture content is highly dependent on the relative humidity and the degree of sun exposure. The lower the relative humidity and the greater the sun exposure, the lower will be the fuel moisture content. Lower fuel moistures produce higher spread rates and fire intensities.
- Wind speed significantly influences the rate of fire spread and fire intensity. The higher the wind speed, the greater the spread rate and intensity.
- Topography influences fire behavior principally by the steepness of the slope. However, the configuration of the terrain such as narrow draws, saddles and so forth can influence fire spread and intensity. In general, the steeper the slope, the higher the uphill fire spread and intensity.

The region surrounding Upper Jacoby Creek has been fortunate not to have experienced many major wildfire events in recent decades; however, this community is deeply situated within the wildland-urban interface (WUI), where there is an increased likelihood that wildland fires will become structural fires and vice versa. In recent years, one residential home burned completely when a chimney fire ignited the structure from the inside. Although, in this instance, firefighters were able to contain the blaze to the one structure, the community is densely forested with high fuel loads and there is significant potential for firebrands from one structure fire to ignite neighboring homes.

The single road leading into the community and the remoteness of the area necessitate lengthy emergency response times and limit firefighter access and ability to bring fires under control. These long response times combined with seasonal windows of favorable conditions for wildland could lead to a serious threat to multiple properties within the community. Similarly, roadside fuels within such a highly vegetated community create a fire hazard risk such that, if ignition from vehicles or other sources did occur, fire could spread rapidly through the area and have disastrous consequences for people and properties.

SITE DESCRIPTION

The Upper Jacoby Creek community is located in the forested, rural area, east of the City of Arcata. Jacoby Creek Road borders the south side of the community, with Fickle Hill Road to the north. Although rural in terms of infrastructure and location, the neighborhood is densely populated. Approximately 33 households exist along Garden and



Glory Lanes, on 1.5 miles of road; and approximately 200 households are situated along Jacoby Creek Rd. The network of roads and driveways within the Upper Jacoby Creek area add up to approximately 15 miles. The landscape is densely forested with redwood and fir as the two most prevalent tree species. Alder and willow trees are found in riparian areas. The terrain is characterized by hilly slopes, which can increase the spread of wildfires. The area is categorized as “High Fire Hazard Severity,” as determined by the California Department of Forestry and Fire Protection (CAL FIRE). Ignition risks include lightning strikes, vehicles, poorly maintained slash fires, and other human-related causes.

Historically, indigenous tribes inhabiting this region incorporated low-intensity, intentional burns in their management of the forest ecosystems. When fire suppression became the national norm in managing wildfire in the mid-20th century, it allowed for the accumulation of heavy fuel loads. This was followed by intense timber harvests throughout this area, which contributed to alterations in forest ecosystems. Green Diamond Resource Company and Barnum Timber Company own and manage land surrounding this neighborhood. Green Diamond Resource Company logging operations continue today. In recent years, the company has undertaken efforts within its practices to reduce fire risk, such as sending byproducts of their logging operations to nearby biomass facilities.

The Jacoby Creek Forest, owned and managed by the City of Arcata, is located to the east of the community along Jacoby Creek Road; it encompasses 1,200 acres. Most of the surrounding forest is identified in County records as Timber Production Zone (TPZ), meaning that the primary use is the production of timber, whether it be at an industrial or non-industrial level.

CAL FIRE is responsible for providing wildfire suppression services to the Upper Jacoby Creek community. The nearest CAL FIRE station is located in Trinidad, which can lead to response times of an hour and a half or longer. Firefighting resource from the Arcata Fire Protection District will respond to fires if available but the area is not within the District's jurisdictional boundary. This type of response is often referred to as "good will service" because the fire department is not responsible for the area nor does it receive compensation for its efforts.

ASSESSMENT PROCESS

The Assessment Team visited Upper Jacoby Creek in both September of 2011 and November of 2012. Both times the Team met at the home of one of the Upper Jacoby Creek Firewise Committee members. During the first meeting Desmond Cohan, a member of the Arcata Fire Department, was in attendance to explain what the community's expectations should be for a



firefighter response from his department. CAL FIRE Battalion Chief, Hugh Scanlon, was also in attendance and described the expected CAL FIRE response.

During the September site visit, maps of the community were made and reviewed by the group and local roads were driven so that observations could be made. It was determined that the community had significant wildfire risk. The Assessment Team made a few recommendations for what could be done to reduce the risk and work together as a community to become Firewise.

In November of 2012, the Assessment Team reconvened in Upper Jacoby Creek. The Team conducted a drive-through of the community, stopping to take photographs and discuss particular areas. Homes were examined with special attention given to types of building materials (particularly roofing) and amount of flammable vegetation and other materials within the home ignition zone. Access roads and water sources were closely evaluated.

The Assessment Team then spent time reviewing information about the history and fire environment of the area. Details and photographs were gathered to illustrate observations and craft recommendations for reducing the community's vulnerability to damage from wildfire. The assessment was then compiled and the Team prepared to present the findings to the Upper Jacoby Creek Firewise Committee

IMPORTANT CONSIDERATIONS

The Firewise Communities/USA program seeks to create a sustainable balance that will allow communities to live safely while maintaining environmental harmony in a WUI setting. Homeowners already balance their decisions about fire protection measures against their desire for certain flammable components on their properties. It is important for them to understand the implications of the choices they are making. These choices directly relate to the ignitability of their home ignition zones during a wildfire.

1) Poor Signage

Many homes and driveways throughout this community lack adequate signs. In some instances, signs at the base of driveways exist but are confusing, contain misinformation, or are difficult to see, while other locations lack any identifiable markings at all. This can be very problematic for firefighters trying to locate and respond to a fire event. The address sign pictured at right illustrates how home-made signs can be unclear and confusing. It also lacks any reflective material: making it hard to see at night. A few actions that might begin to address this issue are the following:



- Obtain funding to purchase address signs for residents and educate the community about the importance of signage.
- Additional posting of street names.
- Create more detailed maps of the local area.

2) Limited Access to Water

Firefighting requires huge quantities of water. There are no fire hydrants in the community. Although a community water system exists in the area, it is informal and outdated and may lack the necessary water volume and/or pressure to adequately fight fire. The water system is also susceptible to freezing, and some tanks are extremely difficult to access. Additionally, residence's water tanks are not always equipped with the rated hoses and attachments required by firefighters. A few actions that might begin to address this issue are the following:

- Obtain funding to update community water tanks and fittings.
- Encourage homeowners to invest in larger or additional water tanks and/or obtain the proper hoses and fittings for firefighting.
- Clearly mark water sources for firefighters with blue reflectors.

3) Unmaintained Home Ignition Zones

The home ignition zone includes the home and its immediate surroundings within 100-200 feet. The home's resistance to ignition and, ultimately, its likelihood of survival during a wildfire event, is largely due to the condition of this zone. Many properties in this community have unmaintained home ignition zones with accumulations of hazardous

fuels that increase their risk of structural ignitability. A few actions that might begin to address this issue are the following:

- Educate residents about the importance of maintaining the home ignition zone and ways to reduce structural ignitability.
- Encourage community collaboration in order to assist residents, such as elderly or disabled persons, who may be incapable of the physical demands required of clearing and maintaining their home ignition zones.
- Identify and refer residents to homes within the community that provide a good example of what well-maintained home ignition zones looks like.

OBSERVATIONS AND RECOMMENDATIONS



Windy, narrow, steep, dirt roads (such as the one pictured at left) pose significant challenges to emergency responders trying to access residences in this community in a timely manner. The poor quality of these roads, many of which are uneven and laden with potholes, can cause serious damage to fire trucks attempting to traverse these roads quickly. Overgrown roadside vegetation can also inhibit fire truck access. Such roadside fuels are also vehicle ignition hazards.



Antiquated tanks within the community water system have proven to fail residents during a fire. Their outdated materials are susceptible to freezing and may have insufficient water pressure to fight fire. The spout of the water tank pictured at left is located approximately 15 feet above the ground, demonstrating the inaccessibility of some of these tanks.



Abandoned structures laden with flammable materials (such as the one pictured at left) have high ignition potential and are easy targets for arsonists. If ignited, these structures present a serious threat to the surrounding wildlands and create the potential for fire spreading to other structures in the community.

SUCCESSFUL FIREWISE MODIFICATIONS

When adequately prepared, a house can likely withstand a wildfire without the intervention of the fire service. Further, a house and its surrounding community can be both Firewise and compatible with the area's ecosystem. The Firewise Communities/USA program is designed to enable communities to achieve a high level of protection against WUI fire loss even as a sustainable ecosystem balance is maintained.

A homeowner/community must focus attention on the home ignition zone and eliminate the fire's potential relationship with the house. This can be accomplished by disconnecting the house from high and/or low-intensity fire that could occur around it. The following describes some of the fire safety improvements accomplished within the Upper Jacoby Creek community.

A small group of dedicated community members have formed the Upper Jacoby Creek Firewise Committee, a voluntary group that meets once a month. This committee has collaborated to educate neighboring residents about defensible space, visible signage, and proper water tank fittings. They have also produced an informational brochure containing Firewise information for distribution at community events.

Mission Statement: To become a Firewise Community through achieving recognition from The National Fire Protection Association (NFPA).

An important fact you should know...

Where we live is not part of any existing fire district. In the event that you do have a fire on your property, it is the Fortuna or Trinidad Fire Department who responds first, as well as Cal Fire. It takes approximately 45 minutes for a fire truck to get to upper Jacoby Creek Road. Cal Fire's main priority is to protect the watershed. It is up to you to protect your home and property. This is a cost of living where we do.

What Your Responsibility Is

- ❖ Understanding your home's ignition zone and working towards maintaining it!
- ❖ Installing and maintaining the fire extinguishers in your home
- ❖ Having a well marked, accessible, and up to date water source approved by CDF
- ❖ Making sure your address is clear for fire trucks to find
- ❖ Having a plan in case of a fire

What We Can Do Together

- ❖ Keep a list of our neighbors names, numbers and addresses on hand in case of emergency
- ❖ Have annual or bi-annual events where we:
- ❖ Remove brush from our own and our neighbors properties
- ❖ Chip all our brush
- ❖ Limb trees over the roads
- ❖ Create neighborhood Emergency Locations stocked with general firefighting supplies:

Shovels Pitchforks
Buckets Hose
Water tenders

Our Goals

To be acknowledged by the NFPA as a Firewise community.
To strengthen community within Jacoby Creek. Know our neighbors.
To one day have a Jacoby Creek Volunteer Fire Department.

We have all chosen to live where we do for a variety of reasons. Above all, we share appreciation for the natural beauty and privacy that is offered by living in the Upper Jacoby Creek area. Though close to town, sometimes it feels like we are far away. We are blessed to call this place home.

We smile as we pass on the road in our vehicles, on bike, or on foot. We say hello to our neighbors at the mailboxes. But do you really know who lives up here with you? Do you ever find yourself wondering how many homes there are past the bus stop? In case of an emergency, what are your resources? Who can help you? Who can you help?

By understanding how a Firewise Community works and investing time in making your property safe, you are not only protecting yourself and your investment, you are also helping to build a stronger community. If we become a Firewise Community, we have succeeded in working together. What else could we accomplish?

FIRE DOES NOT KNOW PROPERTY LINES

This brochure, produced by the Upper Jacoby Creek Firewise Committee, discusses what it means to be a Firewise community and steps residents can take to enhance their fire preparedness.

The Firewise Committee hosted a Firewise event in October 2011, to further inform and involve community members about fire safety efforts. The event consisted of setting up a booth on the side of the road near a school bus stop. Neighbors pulled over to talk on their way in and out of the community and informational materials were provided. A map of the community was displayed and community members placed pins on the locations of their homes and exchanged contact information. Fire extinguishers were provided per purchase and experts were on hand to show people how to properly use them.



In May 2012, the Firewise Committee co-hosted a workshop to gather community input for the Humboldt County Community Wildfire Protection Plan update. The workshop was held at the beginning of Jacoby Creek Road in the Bayside Grange and many residents of the Upper Jacoby Creek area were in attendance. The workshop doubled as a Firewise event and included a presentation given by members of the Upper Jacoby Creek Firewise Committee, the neighboring Arcata Fire Department, CAL FIRE, The Humboldt County Fire Safe Council, and the Arcata City Forest. The workshop provided a valuable forum for community members to identify fire hazards in their community and discuss steps to mitigate those hazards.

IS YOUR COMMUNITY PREPARED FOR WILDFIRE?

Is your neighborhood ready?

Help identify priority projects in your community to survive the next fire.

Come learn about the new
**Humboldt County
Community Wildfire Protection Plan,**
The Upper Jacoby Creek Firewise effort, and how you can help your
community prepare for wildfire.





Arcata Area Communities
Including Arcata, Jacoby Creek, Fickle Hill, and all residences in the surrounding forested areas.

Monday, May 14th, 6:00 pm - 9:00 pm
Bayside Grange
2297 Jacoby Creek Road

Doors open at 5:30 pm for informational displays and refreshments.
For more information, call 707-268-3736 or email commdev@humboldt.ca.us
Humboldt County Community Development Services: 707-268-3736

The Upper Jacoby Creek Firewise Committee has also developed a road association that works to improve road quality in areas that could hinder emergency vehicle access. Residents of the Upper Jacoby Creek area pay bi-annual dues which are distributed between the Firewise group and the Road Association. Funding generated by these dues enabled these groups to purchase green, reflective road and address signs that have been

posted throughout the community. A number of roads in very poor condition have been repaved, and some work has been done to cut back roadside fuels. Additionally, several water tanks with water available for fire protection have been clearly labeled and blue, reflective dots have been placed near or affixed to these fire water sources. These actions significantly enhance emergency responders' abilities to locate and access homes and water in order to effectively provide protection services to community members. The following photographs show some examples of these good Firewise practices.



Large labels with visible colors and bold lettering coupled with blue, reflective dots on or nearby water tanks (as shown above) enable firefighters to locate water for fire protection more quickly and fight fires more effectively.

Repaving narrow, windy roads in poor condition makes access faster and easier for emergency responders and lessens the chances that their vehicles will incur damage en route to emergency incidents.





Green, reflective road signs can help expedite emergency response. In some instances (such as those pictured below) these signs supplemented pre-existing, hand-made signs that were less visible but had sentimental value within the community. Six new signs have been installed since the Firewise Committee began meeting.



NEXT STEPS

After reviewing the contents of this assessment and its recommendations, the Upper Jacoby Creek Firewise Committee, in cooperation with CAL FIRE and the Humboldt County Fire Safe Council, will determine whether or not it wishes to continue seeking Firewise Communities/USA recognition. If the site assessment and recommendations are accepted and recognition will be sought, the Upper Jacoby Creek Firewise Committee will create agreed-upon, area-specific solutions to the Firewise recommendations and create an action plan in cooperation with CAL FIRE and the Humboldt County Fire Safe Council.

Assuming the assessment area seeks to achieve national Firewise Communities/USA recognition status, it will integrate the following standards into its plan of action:

- Sponsor a local Firewise committee to maintain the Firewise Community program and status.

- Enlist a WUI specialist to complete an assessment and create a plan from which it identifies agreed-upon, achievable local solutions.
- Invest a minimum of \$2.00 annually per capita in its Firewise Communities/USA program. (Work done by municipal employees or volunteers, using municipal or other equipment, can be included, as can state/federal grants dedicated to that purpose.)
- Observe a Firewise Communities/USA Day each spring that is dedicated to a local Firewise project.
- Submit an annual report to Firewise Communities/USA. This report documents continuing participation in the program.

MURPHY'S

Do you live in a FireWise Community? Willow Creek and Bridgeville are recognized on the National Fire Protection Association website as Humboldt County FireWise communities. FireWise Communities/USA offers residents the knowledge and skill to prepare for a wildfire before it occurs. Although local fire departments are also alerted, CAL FIRE, located in Trinidad, is the fire department for many unincorporated areas including Bayside.

After witnessing the preventable damage of a home fire, one Bayside neighborhood is taking the five steps to become a FireWise Community. (1) They obtained a wildfire risk assessment. (2) Created an action plan. (3) Invested a minimum of \$2 per capita (4) and are conducting their FireWise Community event on Friday, October 14th from 3:30 to 5:30 at the information table at the Upper Jacoby Creek Road bus stop. Lastly they will (5) submit their FireWise Community application. For complete FireWise information visit www.firewise.org, or email cimitt@co.humboldt.ca.us.

CAL FIRE urges you to create a defensible space, post your address and have functioning smoke alarms.

Sunny Brae • Glendale
Trinidad • Cutten • Westwood

*Prices Effective October 12
through October 18, 2011*



CAL FIRE Crew
*Left to Right: Joshua Bennett, Tom Nix,
Robert Richardson, Matt McCluskey, Nathaniel King,
Will Jeffries, Johnny Hoppis*