A Community Wildfire Protection Plan

Mt. Veeder Fire Safe Council

Executive Summary

The mission of the Mount Veeder Fire Safe Council is to reduce loss of life and property from wildfire. This is achieved by planning and executing fuel reduction projects and by increasing public awareness of both the fire loss risk as well as the actions that must be taken to reduce the potential for wildfire devastation.

Critical to the success of the Mount Veeder Fire Safe Council's objective is the collaboration of the community in determining the viability and priority of identified projects.

The Mount Veeder community and the local Fire Department have always been involved in fire safety. The Mount Veeder Fire Safe Council ("MVFSC") has been active in the community since 2001. Initial grants in addition to like-kind contributions were obtained that provided funding for chipping programs and public awareness. In 2009 a renewed effort was embarked on to continue the objectives of MVFSC and to provide new funding for fuel reduction projects and public awareness. Since that time two golf tournament fund raisers have been held. Tournament fees, raffles and silent auctions were successful in raising funds for Community MVFSC programs. In addition to the golf tournaments, grants have been obtained from PG&E and Napa Communities Firewise Foundation. Money from these two sources have helped to fund early programs of the MVFSC.

Besides the early 2003 programs including the first chipper program in Napa County, the current MVFSC programs include the "Cove", a prototypical project that showcased to the community how community and agency cooperation can achieve the positive results of fuel reduction. Further, public awareness packets were sent out using the funding. Finally, funding was expended on Fire Smart Defensible Space, Inc. to do a thorough assessment of the Mount Veeder Community and develop a Wildfire Assessment / Vegetation Management Plan. This Plan was instrumental in developing this CWPP. The assessment narrative is attached as Exhibit A; the accompanying Exhibit B contains graphs of the data collected during the assessment process.

The MVFSC is vigilant about involving the Community in fire safety and making structures and human life on in our Community as fire safe as possible.

Mt. Veeder Fire Safe Council
Community Wildfire Protection Plan
Mutual Agreement Page

The Community Wildfire Protection Plan developed for/by Mt. Veeder Fire Safe Council:

- Was collaboratively developed. Interested parties and federal land management agencies managing land in the vicinity of Mt. Veeder Rd, Dry Creek Rd., Redwood Rd., Lokoya Rd. and Partrick Rd (known in this CWPP as the Mt. Veeder Fire Safe Council Community) have been consulted.

- This plan identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect the Mt. Veeder Fire Safe Council Community.

- This plan recommends measures to reduce the ignitability of structures throughout the area addressed by the plan.

The following entities mutually agree with the contents of this Community Wildfire Protection Plan:

_____ Date:_____
Brad Wagenknecht - Supervisor
Napa County District 1

_____ Date:_____
Mark Luce - Supervisor
Napa County District 2

_____ Date:_____
Tim Streblow, Chief
CalFire Sonoma-Lake-Napa Unit Chief and
Napa County Fire Department Chief

_____ Date:_____
Gary Green, Chief
Dry Creek / Lokoya Volunteer Fire Dept.

_____ Date:_____
Greg Holquist – Chair
Mt. Veeder Fire Safe Council

This document shall be known as the Mt. Veeder Fire Safe Council Community Wildfire Protection Plan.

The following decision makers were invited to be involved in the development and approval of this Community Wildfire Protection Plan:

I. Federal Government

1. Representative – Mike Thomson
2. Senator – Barbara Boxer

II. Local Government Napa County Supervisors:

1. District 2 – Mark Luce
2. District 1 – Brad Wagenknecht

III. Fire Safety Professionals

A. Napa County

1. CalFire and Napa County Fire Chief – Ernie Loveless
2. Marshal – Pete Munoa
3. Napa Firewise – Darren Drake
4. S-L-N Unit Prefire Planner – John Lovee

B. Napa City

1. City Chief – Tim Borman
2. Marshal – Darren Drake

C. Dry Creek / Lokoya Volunteer Fire Dept.

1. Chief – Gary Green
2. Captain – Bill Robertson

The representatives of the federal agencies managing land in the vicinity of the communities are:

Agency	Representative	Date Invited to Participate
Bureau of Land Management	(name representative)	date
Natural Resource Conservation Service	Phil Blake	date

The representatives of the state/local agencies that have jurisdictional responsibilities in the vicinity of the communities are:

Agency	Representative	Date Invited to Participate
Sugarloaf State Park	(name representative)	date
Napa County Resource Conservation District	Don Gasser	3-1-09
Napa County Roads Dept.	(name representative)	date
Napa County Office of Emergency Services	Gary Pearson	date
Napa City Fire Dept	Tim Borman	

Other parties from our community that have shown interest in forest/fire management or may be interested in this CWPP are:

Interested Parties	Date Invited to Participate
Mt Veeder Fire Safe Council	Early
Eagle Bike Club	
PG & E	
Napa Firewise	
Home Winemakers Classic Committee	
Davey Tree	
AT & T	
Archer Taylor Preserve	
Napa Land Trust	
Girl Scouts of America	
Enchanted Hills	
Lighthouse for the Blind	
Mt. Veeder Appellation Council	
Napa Land Stewards	
Hill and Dale	

COMMUNITY OVERVIEW

The Mt Veeder Fire Safe Council Community consists of about 26,000 acres with over 450 residences and some businesses. Bounded on the east by the Mayacamas Mountain. ridgeline west of Napa Valley, and on the east by the ridge forming the Sonoma County line, this fire district runs from the city of Napa in the south to the wildland flanks of Mt St. John.

The structures within this area run the gamut from trophy homes and elegant wineries to small mountain cabins and abandoned buildings. Many stand alone in the midst of dense forest or irrigated vineyard, while others are clustered in enclaves where neighbors

are seen most every day. Many are fully occupied, but many others see only part-time habitation.

There are several primary watersheds within the area, almost all of which are dry by the end of summer. Paradoxically, Dry Creek is the largest, longest, and with most of the other creeks flowing into it, save for Campbell Creek at the north end. Other listed creeks and watersheds are Montgomery, Wing, Pickle Canyon, Redwood, and Carneros/Browns Valley.

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VEGETATION

The terrain varies from flat to nearly vertical, and the vegetation from bare rock to dense redwood forest. As a rule, the west and south facing slopes are dry, brushy, and scrubby, while the north and east facing slopes have grown into dense fir and redwood forests. Hardwood woodland is common on all aspects and in all areas, having burned more recently in some area than in others. Numerous areas are changing into more mature ecological types, and the spread of both fir and bay is ubiquitous within this huge area

Native Vegetation

The most noteworthy vegetation from a fire standpoint is generally the conifers, pines in particular, owing to their pitch. Redwood is a notable exception, as its presence tends to indicate more moist conditions. Bay is among the most flammable of the broad leave trees in its shorter forms, and it tends to sprout prolifically after cutting or fire.

All dead wood is much more flammable than green wood, and a first pass should attempt to remove as much as possible, particularly above 1” in diameter.

Brush species are notable for their explosiveness and ability to produce high heat and embers. Many sprout from the stump, and the quick regrowth following fire are a testimony to their ability to spread. When confronting thinning in large brush fields, some species have relatively lower flammability than some others, particularly Currant, Toyon, Hazelnut, Coffeeberry , Elderberry, Dogwood, Spice bush, and Poison oak(!).

Planted vegetation

Owing to a century of occupation, homeowners have planted numerous species around their homes, pyrophytes among them. Remnant orchards provide the most protection, while planted eucalyptus and juniper greatly increase fire spread and ember production if ignited. It is a general goal to reduce vegetation, particularly pyrophytic vegetation, around areas of value.

Pyrophytic vegetation

Pyrophytic species are literally 'fire-loving'. This is vegetation which is adapted to or which contributes to rapid burning, high heat output, and ember creation. Despite their seeming destruction by fire, these species spread their seed or renew themselves by sprouting following a fire. Many brush species and most chaparral are highly flammable and burn to help that plant species return to a dominant position. Many pyrophytes are found in native chaparrals which have inhabited California for millennia.

Anything that smells when crushed has oils which volatize and burn readily. These include pines, fir, and most conifers, as well as native bay and non-native eucalyptus. All organic material will burn, but these pyrophytic species demand removal if rapid fire spread is to be prevented.

TRANSPORTATION SYSTEMS

It is important that roads and evacuation route treatments are completed on driveways, roads, and other key transportation corridors.

Paved county roads provide access to most residential areas, and both roads and houses are common in areas of long-term habitation. Many of the earlier roads have been upgraded and in continuous use since the early days of development. Remnant orchards and infrastructure are common in these areas. Small parcel sizes exist where old ranches have been broken up, and these are the more dense housing locations.

Paved, gravel, and dirt roads and driveways serve newer housing developments and vineyards. Some serve many addresses, some are long and surrounded by wildlands. Winery, vineyard, and residential development in recent decades have opened many new access routes.

The result of over a century of access development is that many creeks and ridges have a road of some type upon or near them, allowing for compartmentalizing the land into smaller management units. Many large parcels tend to have several structures, vineyards, and internal road systems. Connections exist only rarely between major drainages, however, making cross-mountain travel difficult or impossible.

The closest fire units are found between Dry Creek and Mt Veeder Roads, where the Dry Creek/Lokoya Volunteer Fire Department has three (3) engines. The Mayacamas Volunteer Fire Department is at the junction of Trinity and Cavedale Roads with two (2) Engines. Cal Fire and/or Napa County Fire Department units are located in Yountville, Napa, St Helena, Greenwood Ranch, Carneros, Soda Canyon Mayacamas and Rutherford.

Parcel access data is contained as one of the graphs in Exhibit B. Fire trucks need 12' to access structures on a property. Though most access roads have the 12' width, the majority of the driveways to the structures have not maintained the 12' width or the required turn around. Address visibility is satisfactory in most locations; however, fire trucks cannot access the property unless they can find it. Less than 50% of the properties

surveyed have hydrants within 100'; however, most have at least a 2,500 gallon water source, though most do not have the proper Fire Department connection.

WILDFIRE THREATS

Wildfire remains a near-constant threat for residents of the area. The slopes and dense vegetation conditions coupled with vast areas of undisturbed wildland exacerbate the threat. Ignition sources continue to multiply as increased activity expands in the area.

Exhibit B shows the threats found on individual parcels surveyed, which include abundance of vegetation within 10' of structure and 100' of parcel boundary. Other items surveyed were dead wood within 10', roof free of debris, limbs cleared within 10' of chimney, 10' clearance from propane tank, 1/4" vent screens, chimney ½" vent screen, status of gutters and windows, and type of siding and roofing.

BASE MAPS

Attached as Exhibits C, D, and E are base maps of the community and adjacent landscapes of interest. Exhibit C is a contour map that shows the Watersheds outlined within the community. Exhibit D is the same as Exhibit C with the addition of the parcels within the community. Exhibit E is a Google Earth depiction of the community with the Watershed areas outlined.

Items that can be examined on these maps include the locations of existing and potential shaded fuel breaks, density of structures within a Watershed area, bodies of water and other natural and manmade fuel breaks such as vineyards.

Identifying the wildland-urban inface (WUI) zones in the MVFSC Community proved to be quite a challenge. The MVFSC Community is vast covering an extremely large area with different densities of assets throughout. After considering the location of the inhabited areas, the critical human infrastructure, and the risk of wildfire, the MVFSC has identified on the maps, multiple WUI zones defined by watersheds.

As designated on the base map, the following table lists the associated wildfire risk, as viewed by the MVFSC Community.

Risks	**Fuel Hazard**	**Risk of Wildfire Occurrence**	**Structural Ignitability**	**Lack of Firefighting Access**	**Overall Risk**
Watershed area at risk					
Dry Creek	High	High	High	Medium	High
Wing Canyon	Very High	High	High	Very High	Very High
Redwood	Very High	High	High	Very High	Very High
Segassia	Very High	High	High	Very High	Very High
Pickle Canyon.	High	High	High	High	High
Montgomery	Very High	High	High	Very High	Very High

Browns Valley/Carneros	Medium	Medium	High	Medium	Medium
Campbell	High	High	High	Medium	Medium
Shaded Fuel Breaks	High	High	High	High	High
Ridge Road	Medium	High	High	Medium	Medium
Oakville Ridge Road	High	High	High	High	High
Lokoya Perimeter	High	High	Very High	High	High

The priority rating table reflects the overall risk and the MVFSC Community values.

Watershed area at risk	Overall Risk	Community Value	Cultural Value	Overall Priority
Dry Creek	High	High	High	High
Wing Canyon	Very High	High	High	High
Redwood	Very High	High	High	High
Segassia	Very High	High	Medium	High
Pickle Canyon.	High	Medium	Medium	Medium
Montgomery	Very High	High	Medium	High
Browns Valley/Carneros	Low	Medium	Medium	Medium
Campbell	Medium	Low	Low	Low
Shaded Fuel Breaks				
Ridge Road	High	High	N/A	High
Oakville Ridge Road	High	Low	N/A	Medium
Lokoya Perimeter	High	High	N/A	High

Based on the results of the community risk assessment, priority ratings have been selected for the communities and areas of community importance. The MVFSC Community recommendations for the type and method of treatment for the surrounding vegetation are listed in the following table.

Community, structure or area at risk	Type of Treatment	Method of Treatment	Overall Priority
Ridge Road – shaded fuel break	mechanical & hand labor	thinning	High
Oakville Ridge Road – shaded fuel break	mechanical & hand labor	Dense thinning	High

Lokoya – perimeter fuel break	mechanical & hand labor	Remove brush, thinning, pruning	High
Cove	mechanical & hand labor	Thinning & improving	High
Wing Canyon homes	hand labor	Thinning & pruning	High
Lokoya Road - Roadside clearing	hand labor	Thinning & pruning	High
Purchase & Install Addressing	Labor to install addresses at individual properties	Contract	High
Driveways	mechanical & hand labor	Thinning & pruning / Brochures & workshops	High
Reg. 4291 100' structural defensible space clearing	mechanical & hand labor	Thinning & pruning	High
Suggested 10' structural defensible space clearing	mechanical & hand labor	Thinning & pruning	High
Bridge capacity evaluation	Professional Evaluation	Engineering	High

Individuals and the community can reduce structural ignitability throughout the community by taking the following measures.

Defensible Space

The goal of creation of defensible space is often not to stop a fire, but to reduce flame lengths and to disallow a fire from rapid spread into the areas around the structures. If successful, the fire should burn around us without burning us out. While some residents may actually be fire fighters, the best activity for homeowners is to have developed the defense beforehand to allow the fire fighters to pursue the offense.

The actual removal of vegetation should follow certain priorities and rules of thumb. There are as many ways to thin a forest as there are trees. Forests grow and development of defensible space will require repeat visits and refinement to gain the desired results

Defensible space activities should include the removal vegetation near and below a structure for a distance of at least 100'. Vegetation downhill of the structures should be kept to an absolute minimum. All vegetation will burn, but dry wood ignites ten times easier than green.

Annual maintenance should be done prior to fire season according to State Law and Napa County Codes. These activities should be done by individual homeowners for at least 100' around structures. This distance should increase to 200' for residences above slopes steeper than 20%, and the distance should be doubled again for structures at the top of 40% slopes.

Decisions need to be made at each step in the process of creating defensible space. While creating defensible space, you want to be sure that you are not exacerbating erosion or reducing important habitat. Please see Napa Firewise website for an extensive description of guidelines for defensible space activities. See the Appendix for defensible space recommendations in each forest type.

Roadside Opening

With about 34 miles of paved roads within the area, merely opening the roadsides would cost millions of dollars. Plans must be made for strategic openings which enhance fires safety and improve the access for emergency usage.

The need to evacuate at the same time emergency vehicles are coming in is a prescription for disaster on the narrow winding roads. Having the roads 'feel' wider is one positive result of roadside opening.

Perimeter Protection

Most of the residences will need to rely on their own defensible space for survival, although some with close proximity to others have other opportunities for cooperative fire safety. Small parcels with housing closely adjacent should be targets for community action so as to build a defensible perimeter around groups of houses. Projects designed to protect these small 'communities' could be developed for roadside or wildland modification.

Shelter in Place

There are few opportunities to shelter-in-place, with Christian Brothers/Hess Collection, the dining hall at Enchanted Hills, and the pond area on Wall Road being the only known sites that have been offered. Other options should be investigated in case this important option becomes necessary.

Other Landowner and MVFSC Community Fire Wise Options

- Open Roads between drainages
- Open emergency corridors and roads
- Use Napa county chipper program
- Work with neighbors to develop area-wide strategies
- Maintain cut areas
- Discourage new non-native plantings, particularly pyrophytic species
- Continue message board for fire safe announcements.

- Advertise defensible space contractor lists and needs to lower costs for residents
- Develop meeting or shelter-in-place plans
- Work together on common problems where the burden of safety for many is confined to few discrete locations.
- Clear out flammable vegetation within 100' of the property boundary
- Clear out flammable vegetation within 10' of the structures on the property
- Be sure that address is visible from roadway
- Clear driveway to 12’ minimum width. so that the engines can access property and turn arounds
- Clear dead wood within 10' of structures
- Keep roof free of debris
- Clear limbs within 10' of chimney
- Clear flammables within 25' of propane tank
- Reroof with fire safe products
- Install 1/2" Chimney screen that are ember resistant
- Install 1/4" Vent Screens
- Install non flammable siding
- Keep up on good housekeeping

EXHIBITS

Exhibit A – Wildfire Assessment / Vegetation Management Plan

Exhibit B – Assessment Data Graphs

Exhibit C – Base map: Watersheds outlined on a contour map of the MVFSC Community.

Exhibit D – Base map: Same as Exhibit C with the addition of the parcels within the MVFSC Community.

Exhibit E – Satellite depiction of the MVFSC Community with the Watershed areas outlined.