

DRAFT

**Mount Veeder Fire Safe Council**

**WILDFIRE ASSESSMENT / VEGETATION MANAGEMENT PLAN**

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**OVERVIEW**

The Mt Veeder area consists of about 26,000 acres with over 450 residences and businesses. Bounded on the east by the Mayacamas Mtn. 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 ramshackle firetraps 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. These watersheds are denoted on maps attached.

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

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 has opened many new access routes.

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The result of over a century of access development is that many creeks and ridges in 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.

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.

The closest fire units are found between Dry Creek and Mt Veeder Roads, where the Lokoya/Mt. Veeder Volunteer Fire Department has two(?) engines. The Mayacamas Volunteer Fire Department is at the junction of Trinity and Cavedale Roads with (? Engines). Cal Fire units are located in Yountville, with the Napa City Fire Department east of Highway 29.

## ACCESS

The major routes are discussed in order, from south to north.

Partrick Road travels through the lowest elevation and most southern portion of the district, traversing grass lands and open woodland until the top, where dense forest of fir is mixed with oak woodland which overlooks Redwood Creek to the north. The route bypasses several significant stands of eucalyptus, planted originally for the horticultural trade. Housing is sparse but clustered in the flatter areas, totalling perhaps 30 residences in the Browns Valley and Carneros watersheds.

Redwood Road begins close to the Napa Valley floor in oak woodland and extends through redwood forests above old orchards and through current vineyards near Castle Rock . Residences pepper the area near the road, most often in old orchard areas and have perhaps 60 residences. The area has abundant water, and old landslide areas are obvious. Redwood Creek is dry in the lower portions for most of the summer. There was once a connection between Partrick and Redwood Roads, but is now gated or even closed to access.

Mt. Veeder Road begins where Pickle Canyon Creek flows into Redwood Creek and ends at Oakville Grade on Dry Creek. In its seven miles, it exits the top of Pickle Canyon, crosses Wing and Montgomery watersheds, finally dropping into Dry Creek at the north. The southern portions tend toward oak woodland and brush species on the west facing slopes, with fir and oak on the eastern facing, all of it dense, often seeming impenetrable. This feeling is incorrect, since this portion of the road has only a thin veneer of wildland vegetation in many areas, with vineyards broadly located on each ridge well above the road. Pickle Canyon has about 40 residences, most of them above the road which is punctuated often with vineyard access roads.

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Once Mt Veeder Road crests near the junction with Lokoya Road, the density of housing dramatically increases, and redwood enters the species mix, often with dense fir accompaniment. The road traverses Segassia and Wing drainages in redwoods, fir and relatively dense housing. For much of this length, it is nearly a mile with no access, cross-county through brush field and forest to Dry Creek Road. Very little infrastructure exists away from the Mt Veeder Road proximity. This area contains about 80 residences scattered along the road and into Lokoya, and is the closest the Mt. Veeder area has to dense housing.

Mt. Veeder Road enters Montgomery Creek drainage which is dense in woodland and brushy vegetation, although redwood and fir are abundant above the road, and some large vineyards break up the wildland vegetation density. The area below the road is dense wildland vegetation save for a few roads entering, particularly Scully Ranch which provides good access deeply into this drainage. About 30 residences are scattered along this section of road, many of them off long driveways.

Dry Creek Road follows Dry Creek throughout its length, only departing at Enterprise School (site) crossing Dry Creek to climb the drainage to Sonoma County line. This traverse is often in old orchard and former settlements, but has dense brushy slopes above in the west-facing portion, with dense and rarely penetrated fir forest facing to the east. This long stretch of access (8 miles) has perhaps 170 residences near the road, with only a few long driveways above the road itself. Remnant roadways connect Dry Creek Road to the ridge to the west, while the east side of Dry Creek is steep, brushy, and without any access.

Wall Road is about a half mile above Dry Creek, and is close to the county line throughout its length, with about 30 residences widely disbursed. It is in oak woodland and fir, with many openings due to old orchards and new vineyards which punctuate the three miles of road.

Campbell Creek and Campbell Flat are gated communities with very sparse housing in the middle of dense brush fields and recovering oak woodland. Likewise, Oakville Grade Road is located in a brush field recovering from fire, and has a few residences below the road. Perhaps 10 residences exist on these vast acres.

Oakville Ridge Road is another gated community which traverses the ridge to the east of Dry Creek and has about 5 residences. The road on top is often surrounded by dense brush, occasionally also dense forest. To its west is almost continuous brush until it drops to Dry Creek.

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*Mt. Veeder Fire Safe Council*

## RESIDENTIAL DENSITY

### Watershed Residential Density

<u>CREEK NAME</u>	<u>Addresses</u>
Dry Creek	200
Wing Canyon	30
Redwood	60
Segassia	50
Pickle Cyn.	40
Montgomery	30
Browns	
Valley/Carneros	30
Campbell	10
	450

### *Residential Density by Road Access*

<u>ROAD NAME</u>	<u>Addresses</u>	<u>Miles</u>
Dry Creek	140	8
Mt. Veeder	140	7
Redwood	60	6
Lokoya	40	1
Partrick	30	4
Wall	30	3
Oakville Grade	5	2
Oakville Ridge	5	3
	450	34

## VEGETATION

### *Native Vegetation*

The Appendix has a plant list, but the most noteworthy from a fire standpoint are 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 leaf 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.

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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 contribute 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 chaparral which have inhabited California for millennia.

Anything that smells when crushed has oils which volatilize 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.

Slope also enters as a concern along roads, since steeper ground means faster fire spread uphill. Most structures are near the top of slopes. Particular attention should be made in those areas where 'chimneys' exist with houses above. Greater clearing distance above and below the roads, and a high priority for removal of pyrophytes and dead material is warranted in steep areas where a fire could quickly cross a road and make an uphill run.

## FIRE HISTORY

A look at the Napa County Fire History maps is misleading. Not only are the early fires not shown, but the perimeter of the large 1945 fire is also not known. Personal contact with people in the area indicate that the top of Mt. Veeder was burned to bare earth. Great expanses of fire-return vegetation (chaparral, knobcone pine) is apparent in many locations now.

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This lack of information gives an urgent sense of fire threat, since what has not burned in a long time is probably overdue for wildfire. For much of the area, decadent brush and overstocked stands eventually will give way to nature's clearinghouse – wildfire.

### VEGETATION MANAGEMENT RECOMMENDATIONS

#### *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, and the NCCFF website has guidelines to get the most response for the efforts expended. 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.

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### *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 Borthers/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.

### *Landowner 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  
Create message board for announcements and emergency instructions.  
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.

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RPF # 495  
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### Native Plants within the Mount Veeder Fire Safe Council Communities

#### TREES

Blue Oak (*Quercus douglasii*)  
Coast Live Oak (*Quercus agrifolia*)  
Interior Live Oak (*Quercus wislizenii*)  
Valley Oak (*Quercus lobata*)  
Black oak (*Quercus kelloggii*)  
White oak (*Quercus garryana*)  
Scrub oak (*Quercus berberidifolia*)  
Tanoak (*Lithocarpus densiflorus*)  
Madrone (*Arbutus menziesii*)  
California bay (*Umbellularia californica*)  
Buckeye (*Aesculus californica*)  
Big-leafed maple (*Acer Macrophyllum*)  
White alder (*Alnus Rhombifolia*)  
Oregon ash (*Fraxinus latifolia*)  
Willows (*Salix spp.*)

Grey Pine (*Pinus sabiniana*)  
Ponderosa pine (*Pinus ponderosa*)  
Knobcone Pine (*Pinus attenuata*)  
Redwood (*Sequoia sempervirens*)  
Douglas-fir (*Psuedotsuga menziesii*)  
Nutmeg (*Torreya californica*)  
Pacific Yew (*Taxus baccata*)

#### SHRUBS

Coyote Brush (*Baccharis pilularis*)  
Manzanita (*Arctostaphylos spp.*)  
Chamise (*Adenostomata fasciculatum*)  
Currant and Gooseberry (*Ribes spp.*),  
Toyon or California Holly (*Heteromeles arbutifolia*)  
California Hazelnut (*Corylus cornuta*)  
Buckbrush (*Ceanothus cuneatus*)  
Coffeeberry /Redberry (*Rhamnus spp.*),  
Elderberry (*Sambucus spp.*)  
Mountain mahogany (*Cercocarpus spp.*)  
Pacific dogwood (*Cornus occidentalis*)  
Spice bush (*Calycanthus occidentalis*)  
Toyon (*Heteromeles arbutifolia*)  
others

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MAJOR WATERSHEDS WITHIN MT VEEDER FIRE SAFE COUNCIL AREA

