**Summary Report**

Circle Oaks – Napa County

**History**

The Circle Oaks subdivision has been involved in Community Wildfire Protection Planning (CWPP) for almost 20 years. Their initial plan was created in 2000, amended in 2003, and their most recent version was updated in 2013. Circle Oaks received recognition in 2008 as establishing the first Firewise USA community in Napa County.

Wildland fires are frequent in the area during fire season. The 1981 Atlas Peak Fire burned 33,606 acres and the recent 2017 Atlas Fire burned 51,624 acres and destroyed 783 structures. Both fires burned dangerously close and around the perimeter of the subdivision before it was completely extinguished and fully contained. Other fires have burned in the area, but most have been halted at least a mile from the perimeter of the subdivision. It is worth noting that many recent fires have ignited on the main road (Monticello Rd.), effectively hindering evacuation egress for civilians and access for fire suppression resources during active burning.

**Overview**

Circle Oaks is a subdivision located in the State Response Area (SRA) in eastern Napa County off Monticello Rd. (Hwy 121). The community is surrounded by wildlands, ranches and vineyards, intermixed with brush, and oak woodlands. The houses and roads within the subdivision are built upon moderate terrain, but are often above or below steeper slopes. The aspect is generally northeasterly, and Capell Valley Creek provides part of the boundary on the northern perimeter of the subdivision. Circle Oaks Dr. and Country Club Ln. are the main evacuation routes within the subdivision that lead to the single point of egress located at Circle Oaks Dr. and Monticello Rd. (Hwy 121).

The parcels are circular in shape at approximately 115’ diameter, and ¼-acre in size. Currently there’s about 185 houses built on the 339 available parcels, and an estimated 750 residents. Most of all the parcels have been sold and absentee ownership is common on the unbuilt and empty parcels, with perhaps 30 parcels owned by out-of-state persons. The Circle Oaks subdivision encompasses 220 +/- acres, and has about 130 +/- acres of open space land.

The vegetation around the perimeter of the subdivision consist of grey pine, oak, madrone, chaparral, manzanita, and grass. These types of vegetation species can also be found all throughout the subdivision. Specifically, in topographic areas of concern (i.e chimneys, drainages, ravines) where fire can travel much faster. An important aspect of any vegetated site is the slope or steepness. In a windless condition and consistent fuels, fire will travel twice as fast up a 30% slope, and four times as fast up a 55% slope. Many slopes within the Circle Oaks subdivision exceed 60%. With the pre- heating that occurs as fire moves uphill, rates of spread can become dangerously fast and make it extremely difficult for firefighters to contain and extinguish the fire. It also makes it difficult to survive the heat and smoke when working above the flames. Chestnut Ct. and Columbine Ct. are exposed to a fire from the south. Steep terrain and short distance to boundary make these potentially dangerous situations. Columbine Ct. has very difficult terrain, and just above are Juniper Dr. and Lookout Dr., also vulnerable from below.

**Recommendations**

The purpose of these recommendations is to improve the subdivision’s fire safety, and aid in the evacuation of residents during an emergency scenario. The recommendations may include creating a secondary access to the subdivision, improvements to the existing access road, and other additional fire safety measures.

The community recommendations that we have identified are as follows;

1. **Evacuation routes.**
2. Parking restriction should be enforced on all streets within the subdivision during Red Flag days.
3. “Evacuation Route” signs with directional arrow and reflective tape posted along Circle Oaks Dr. and Country Club Ln.
4. During an “Immediate” emergency evacuation notice. Both lanes on Circle Oaks Dr. and Country Club Ln. will be “One Way” traffic, resulting in having four (4) egress lanes for civilian evacuations.
5. There’s a gate at the end of Juniper Dr. that leads to a dirt road and ties-in to Deer Run Ln. With improvements and continued maintenance, this route can be identified as an access (ingress) point for “Emergency Vehicles Only” into the subdivision during an “Immediate” emergency evacuation scenario. By having this emergency access (ingress), fire suppression resources can enter the subdivision and not impede in civilian evacuation flow.
6. Maintain horizontal and vertical vegetation clearance along all roads
7. **Defensible Space**
8. Immediate Zone (0’-5’)
9. Clear dead vegetation, dried leaves, pine needles and ground debris
10. Recommend replacing wood mulch products with non-combustible materials

(i.e crushed stone or gravel)

1. Maintain trees and shrubs that are next to the home, and cut branches that overhang to the roof and/or within 10 feet of chimneys
2. Remove any leaf litter or debris from roof and gutters
3. Intermediate Zone (5’-30’)
4. Maintain lawns and keep grass height short (4 inches or less)
5. Keep trees and shrubs limited to small clusters to break up fuel continuity
6. Remove ladder fuels (vegetation under trees)
7. Water shrubs, trees, and lawns to keep them from becoming dry
8. Extended Zone (30’-100’)
9. At these distances property lines my overlap, it is imperative that neighbors work together.
10. Remove any accumulation of ground litter or debris from trees and shrubs
11. Clear vegetation from any storage sheds and/or outbuildings
12. **Fuels Reduction**
13. Recommend brush clearing, limbing up, crown thinning, and slash pile burning or chipping in areas within the subdivision that have been identified as being “Topographic Hazards”
14. Continue to aggressively pursue absent vacant lot owners to perform much needed maintenance of their property. Working closely with County Officials with the enforcement of County Ordinance 1290, Fire Protection-Weed and Rubbish Abatement
15. Perimeter protection is vital to community fire protection, the perimeter can be

breached by embers and/or internal house ignition.

1. The area immediately to the north is a significant threat to survival, due to the large wind-driven fires which commonly come from that direction. Much of the property in this northern area is currently not well managed for fire and is overstocked with vegetation. The excess of grey pine, manzanita, and other chaparral species represents a nearly complete ladder of fuels which would burn quickly and hot if ignited. The presence of pines means an ability to cast hot embers for great distances.

Recommend a shaded fuel break along this northern perimeter section

1. Northeast of the subdivision is Capell Creek, which a fire could make a quick run uphill and directly threaten the homes between the creek and Circle Oaks Dr. Portions of this area are within the subdivision boundary. A fuel treatment project could help to extend the defensible space for the homes on Circle Oaks Dr., Rockrose Ct., Boxelder Ct., and Catalpa Ct.

Recommend removal of understory vegetation, limbing up, and slash pile burning or chipping.

1. Above Capell Creek is the North Perimeter Road, which is critical for protection of the homes located just above the moderate to steep slopes on the Courts mentioned above. This North Perimeter Road could create a potential control line in the event of a major wildland fire.

 Recommend a vegetation treatment project to remove 20’ below and 10’ above the road.

1. The west perimeter of the subdivision is generally higher in elevation than the subdivision, and many homes along Ridgecrest Dr., Country Club Ln., and Juniper Dr. have less than a 30’ set back from the slope of the hillside.

Recommend a shaded fuel break along the ridgeline. This project could create a potential control line in the event of a major wildland fire, like the 1981 Atlas Peak Fire, and the 2017 Atlas Fire.

It is our strong opinion that these recommendations will have a positive effect on the protection of life, property, and the environment.