

APPENDIX E

LYONS PARK ESTATES DETAILED COMMUNITY ASSESSMENT RESULTS

Overall Risk Assessment: **High**

Houses: 65

Description: Lyons Park Estates is located on the foothills south of the town of Lyons on a north- and east-facing slope. The neighborhood is bordered on the south and east by Heil Valley Ranch, Boulder County Open Space. The recently opened Picture Rock Trail has increased use of the area, along with the potential for human caused fire. The neighborhood is bordered on the north by agricultural land and on the west by the former Aggregate Industries quarry site.

Average Lot Size: Approximately 5 Acres. However, the topography concentrates the houses, resulting in this being the 3rd most densely populated area in the district outside the Town of Lyons.

Access Ingress/Egress, Response Time: Single ingress/egress is provided on a mix of county-maintained, well graded gravel roads greater than 24 ft wide, and privately maintained steep and winding gravel roads less than 20 feet wide. There are turn-arounds at each cul-de-sac. Due to circuitous routes, Fire Department response time is 5-10 minutes (2 miles) to the entrance at the north edge of the development on paved side roads, but more than 20 minutes to the furthest houses at the top of Sandstone Drive. All roads have thick vegetation to the road edge. Only alternate egress is along a poorly maintained, nearly impassable fire road into Heil Ranch Open Space.

Predominant Fuel Model: Predominant fuel models are 8 and 9, consisting of open and closed stands of ponderosa pine, predominantly not limbed except in the vicinity of houses. There are occasional meadows with grass fuel model 2, and Red Gulch Road is Agricultural.

Terrain/Topography: The terrain is very steep. While the average slope is 28%, there are many steep, heavily wooded areas where the slope is greater than 40%. Many houses are set high on the slope with insufficient setback. The gulch along Flint Gulch road presents a hazard to the access/evacuation route, with the likelihood that a fire there could cut off access to Sandstone Drive. Predominant aspects are north and east, resulting in fairly dense vegetation.

Home Construction: Houses were constructed over a period of about 35 years, from the mid-1970s to present. Average age is about 20 years old. Older houses are predominantly wood-sided with asphalt roofs. A few newer homes were built during the 2000's to newer codes with non-combustible siding and non-combustible decks. A few homes have wood shake roofs. Propane tanks are common. Above ground propane tanks are common.

Defensible Space: Needs significant improvement. While some homeowners (including those in newer houses) have done a good job of mitigation, there are many that have done little or none, even in zone 1. This means firefighters would have a difficult time defending many homes from an advancing wildfire. The combination of this lack of defensible space, and flammable materials adjacent to the home, with a wood-sided house, should be taken as a matter of grave concern.

Zone 3 is largely untouched throughout the neighborhood. Several vacant lots are also untouched. This provides large patches of fuel model 9 on steep slopes, which increases the potential for fire spread.

Water Supply: Insufficient. There is a 10,000-gallon community cistern at the top of Quartz Way, and only 5 private cisterns of 1800 gallons. The community cistern is not optimally located. Depending on the location of a fire, it may not be accessible at all. Some homeowners have drinking water cisterns that may provide some limited additional capacity. There is limited room to set up water supply operations, with long transit times from the nearest hydrant at in the town of Lyons.

Special Hazards: Although electrical lines are buried to most properties, overhead electrical lines cross over the road repeatedly, presenting a potential ingress/egress hazard.

Issues:

Insufficient water supply.

Ingress/egress concerns due to vegetation along all roads.

Inadequate defensible space around residences.

Need Safety Zone.

Recommendations:

Homeowners need to improve mitigation for defensible space, especially zone 1 and 2 and those with wood sided houses.

Additional cisterns needed.

Mitigation for ingress/egress along all roads.

Boulder County Parks and Open Space prioritize a mitigation project for a fuel break in Heil Valley Ranch south of Lyons Park Estates.

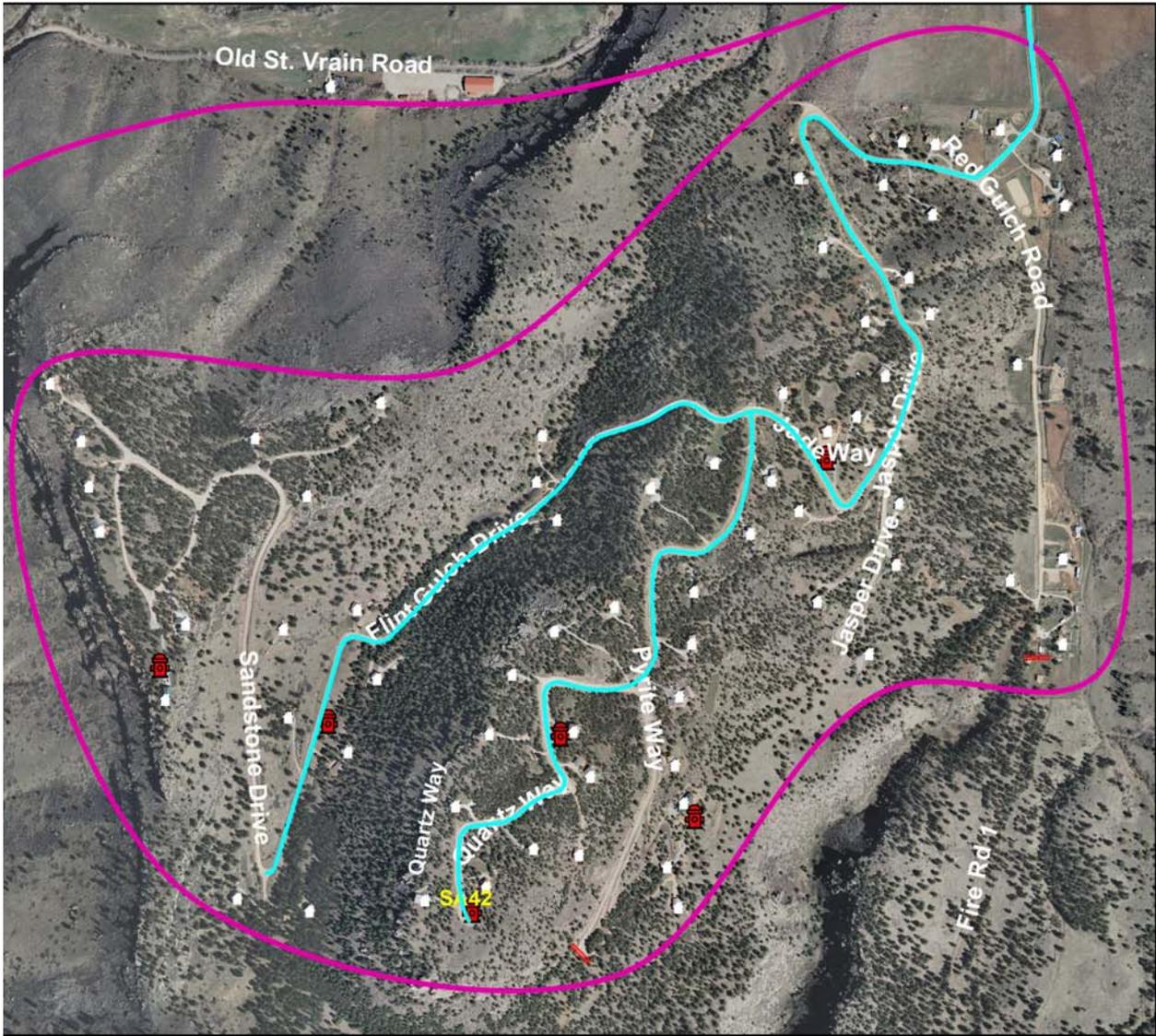
Replace missing street signs, place at all intersections.

Identify safety zone.

Homeowners ensure visible address signs.

Investigate alternate emergency evacuation route through Heil Valley Ranch on Fire Road 1a through the Pyrite Access Gate (requires mitigation and road work).

Wildfire Risk and Hazard Severity Assessment		
Neighborhood: Lyons Park Estates		
Neighborhood Rating: High		
Number of Houses: 65		
Means of Access to Neighborhood		
Fire Department Response Time	10-20 Minutes	6
Ingress and Egress	One Road In and Out	7
Road Width	20-24 and > 24 Feet	2
Road Condition	Not Paved, Graded, some County Maintained, >5%	5
Fire Service Access	> 300 feet with Turnaround and Pullouts	2
Street Signs	1 Missing, Confusing Layout	2
Vegetation Along Access Route	Several Areas Require Mitigation	7
Other Access Hazards	Electric Wires Repeatedly Cross Above Road	2
Below Items were evaluated for each house, then averaged for the neighborhood:		
Vegetation (Fire Behavior Fuel Models)		
Fuel Models 8 & 9	Predominantly ponderosa open or closed crown, minimal slash	12.2
Defensible Space Mitigation		
Zone 1: within 30 ft	Some mitigation	9.4
Zone 2: 30 – 100 ft	Some mitigation	4.2
Zone 3: beyond 100 ft	Minimal mitigation	2.1
Topography		
Slope	Average 28%	7
Building Setback	Many not at least 30 feet from slope > 30%	3.2
Hazardous Topography	Steep Slopes and Chimney (Gulch)	1.3
Firefighter Access		
Address Visible	Most Non-reflective but otherwise visible	1.4
Driveway Length	Most < 100 feet, several > 300 feet	1.6
Turnaround for Engine	Most OK or N/A	0.9
Driveway Clearance for Engine	Most OK or N/A	0.1
Building Construction		
Roofing Material	Predominantly Asphalt, 3 with wood shakes	1.2
Siding	Predominantly Wood	6.3
Decks	Many wood deck, some composite, mostly open	3
Combustibles within 30 feet	Most OK but several problem areas	2
Firefighting Water Availability		
Cisterns	Severely Insufficient, only 19,000 gallons total, Community Cistern Poorly Located	8.2
Utility Hazards		
Aboveground Gas or Propane	Propane tanks common	1.7
Aboveground Electric Wires	Only a few in vicinity of houses	0.3
Neighborhood Total		99.1

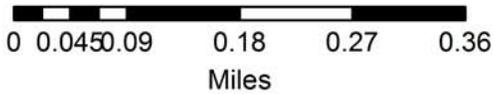


CWPP Community: Lyons Park Estates

Wildfire Risk:
High

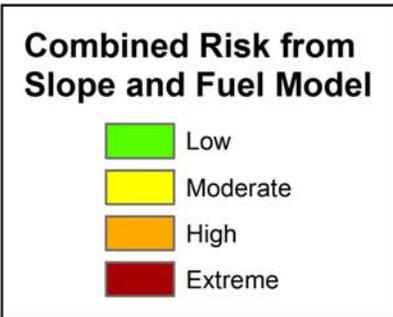
Legend

- Evacuation Route
- SA # Staging Area
-  Helo Landing Zone
-  Cistern/Water Source
- CWPP Communities
- Lyons FPD Outline



CWPP Community: Lyons Park Estates

Wildfire Risk:
High



This map only shows the wildfire risk resulting from the combination of slope and fuel model. It does not reflect any other factors such as response times, home construction, defensible space or water supply.

