

8.0 EDMONDS – PRISON HILL

FUEL HAZARD: **MODERATE-HIGH** COMMUNITY RISK: **HIGH**

The Edmonds–Prison Hill neighborhood is located to the east of South Edmonds Drive between Fairview Drive and Snyder Avenue. The wildland-urban interface occurs primarily along Gentry Way, at the base of the Prison Hill Range, which rises 500 to 900 feet to the east above the neighborhood.

8.1 INTERFACE CONDITIONS AND FUEL HAZARD

The Edmonds–Prison Hill neighborhood is characterized by a classic interface condition with intermixed fuel conditions in some interior parts of the neighborhood. Medium density vegetative fuels around the neighborhood consist primarily of rabbitbrush, big sagebrush, bitterbrush, desert peach, and Mormon tea. Typical shrub heights range from two to three feet, with bitterbrush often reaching five feet in height. Fuel loads are estimated at 2.0 to 4.0 tons per acre and are classified as a **moderate fuel hazard**.

Slopes of 8 to 20 percent behind the east private property lines rapidly increase to slopes greater than 40 percent reaching the ridgeline of the Prison Hill Range. The predominant wind direction is from the south-southwest, with strong afternoon downslope winds during the summer months and on the approach of cold fronts. Downslope afternoon winds in the late afternoons commonly spread wildfire into the wildland-urban interface, and are the most common factor contributing to structure loss in a WUI for this region.

Vegetation, fuels, and topography contribute to the potential fire hazard around wildland-urban interface neighborhoods. Fuel hazard conditions for the Edmonds-Prison Hill wildland-urban interface are shown in Figure 8-2 and photographs of general fuel conditions are shown in Figure 8-3 at the end of this chapter.

Table 8-1 summarizes the history of fuels reduction treatments within the Edmonds–Prison Hill Assessment Area.

Table 8-1. Fuels treatment history in the vicinity of the Edmonds–Prison Hill neighborhood.

Treatment Type	Treatment Area (approximate acres)	Treatment Year	Ownership
Fuelbreak 11,250' x 100' (3 segments)	26	2008	BLM ⁴
Fuelbreak 11,250' x 100' (3 segments)	26	2002	BLM

8.2 NEIGHBORHOOD RISK/HAZARD RATING

The risk/hazard assessment resulted in classifying the Edmonds–Prison Hill neighborhood in the **High Hazard** category (63 points). A summary of the values that affect the hazard rating is

⁴ Land scheduled for transfer to Carson City in 2009 or 2010.

included in Table 8-2 at the end of this chapter. The primary wildfire hazard conditions in the Edmonds–Prison Hill neighborhood were related to community design, construction materials, lack of defensible space, and the potential for severe fire behavior due to topography and fuel loading.

8.2.1 Community Design

Throughout most of Edmonds–Prison Hill neighborhood there is a clear line of demarcation between wildland fuels and structures in the neighborhood. However due to the large number of contiguous undeveloped parcels in the neighborhood, it has some characteristics of an intermix interface condition. In the Edmonds–Prison Hill neighborhood, most homes are situated on lots less than one acre in size.

- **Interface Condition:** classic wildland-urban interface condition.
- **Access:** South Edmonds Drive is the primary access road to the Edmonds–Prison Hill neighborhood. Secondary access roads include Bennett Avenue, Clearview Drive, Sinbad Street, and Damon Road. These roads are greater than 24 feet wide which allows for accessibility of fire suppression equipment. The road gradient is steeper than five percent. Steep roads and limited access to the neighborhood could limit fire suppression and evacuation activities during a wildland fire.
- **Signage:** Street signs were not visible on several (17 percent) of the streets in the survey area. Fifteen percent of the residential addresses were not visible on the homes surveyed. Clear and visible residential addresses are important to aid firefighting personnel in locating homes during low visibility conditions that may occur during wildland fire.
- **Utilities:** low risk of ignition.

8.2.2 Construction Materials

Most of the homes surveyed within the neighborhood (92 percent) were built with fire resistant composite roofing materials; however, nearly half of the homes (45 percent) were built with combustible siding. Twenty-seven percent of the homes surveyed had unenclosed or unscreened balconies, decks, porches, eaves, or attic vents that create drafty areas where sparks and embers can be trapped, smolder, ignite, and rapidly spread fire to the house.

8.2.3 Defensible Space

Of the 75 homes evaluated, nearly half did not have landscaping that would meet the minimum defensible space requirement to help protect the home and minimize the potential for damage or loss during a wildfire.

8.2.4 Suppression Capabilities

Wildfire Protection Resources

The Carson City Fire Department is responsible for wildfire and structure fire protection within the Edmonds–Prison Hill neighborhood. The Bureau of Land Management also provides wildland fire protection for the publicly administered lands surrounding the Edmonds–Prison Hill neighborhood. Ownership and administration of much of this land will transfer from the BLM to Carson City in 2009 or 2010. Fire protection for those lands will become the responsibility of the CCFD.

Water Sources and Infrastructure

Water availability for fire suppression in the Edmonds–Prison Hill neighborhood includes 500 gpm hydrants within 500 feet of structures.

8.3 RECOMMENDATIONS

The fuelbreak established along the east interface was observed to be well maintained with minor shrub encroachment and moderate cheatgrass and annual weeds. The intermix condition in the interior of the neighborhood, with islands of developed parcels surrounded by untreated wildland fuels, presents a greater wildfire risk than the fuels in the interface.

- Monitor fuelbreaks annually for shrub encroachment and cheatgrass conditions.
- Consider prescribed annual grazing as a fuelbreak maintenance option to control cheatgrass and other fine fuels. Maintain low shrub canopy cover by mechanical means or hand crews as necessary.
- Conduct an assessment of fuel hazard conditions on undeveloped lots within the neighborhood boundaries and notify inattentive property owners of Ordinances that require fuel hazard reduction.
- Conduct annual defensible space and hazardous fuels evaluations on private and public lands.
- Distribute copies of *Living With Fire: A Guide for the Homeowner, Eastern Sierra Front Edition* (U of NV Cooperative Extension).
- Encourage homeowners to follow the UNR Cooperative Extension's recommendations for fire safe landscaping.
- Continue the defensible space dumpster program to provide homeowners with an easily accessible biomass removal option.

Table 8.2 Results of the wildfire risk/hazard rating in the Edmonds-Prison Hill neighborhood.

<p>A. Urban Interface Condition 1</p> <p>B. Community Design</p> <p>1. Ingress / Egress <u>1</u> /5</p> <p>2. Width of Road <u>1</u> /5</p> <p>3. Accessibility <u>3</u> /3</p> <p>4. Secondary Road <u>1</u> /5</p> <p>5. Street Signs <u>3</u> /5</p> <p>6. Address Signs <u>3</u> /5</p> <p>7. Utilities <u>1</u> /5</p> <p>C. Construction Materials</p> <p>1. Roofs <u>1</u> /10</p> <p>2. Siding <u>5</u> /5</p> <p>3. Unenclosed Structures <u>3</u> /5</p> <p>D. Defensible Space</p> <p>1. Lot Size <u>5</u> /5</p> <p>2. Defensible Space <u>7</u> /15</p> <p>F. Fire Behavior</p> <p>1. Fuels <u>3</u> /5</p> <p>2. Fire Behavior <u>7</u> /10</p> <p>3. Slope <u>10</u> /10</p> <p>4. Aspect <u>7</u> /10</p> <p>E. Suppression Capabilities</p> <p>1. Water Source <u>1</u> /10</p> <p>2. Department <u>1</u> /10</p>	<p>TALLIES</p> <p>75 Total Houses 6 Residential Streets</p> <p>B5. Street Signs</p> <p><u>1</u> not visible <u>5</u> visible <u>83%</u> visible</p> <p>B6. Address Signs</p> <p><u>11</u> not visible <u>64</u> visible <u>85%</u> visible</p> <p>C1. Roofs</p> <p><u>6</u> combust <u>69</u> not combust <u>92%</u> not combust</p> <p>C2. Siding</p> <p><u>34</u> combust <u>41</u> not combust <u>55%</u> not combust</p> <p>C3. Unenclosed Structures on Lot</p> <p><u>20</u> not enclosed <u>55</u> enclosed <u>27%</u> not enclosed</p> <p>D1. Lot Sizes</p> <p><u>70</u> <1ac <u>5</u> >1ac <10ac <u>0</u> >10ac</p> <p>D2. Defensible Space</p> <p><u>35</u> not adequat <u>40</u> adequate <u>53%</u> adequate</p>
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Community Hazard Score: 63 /128

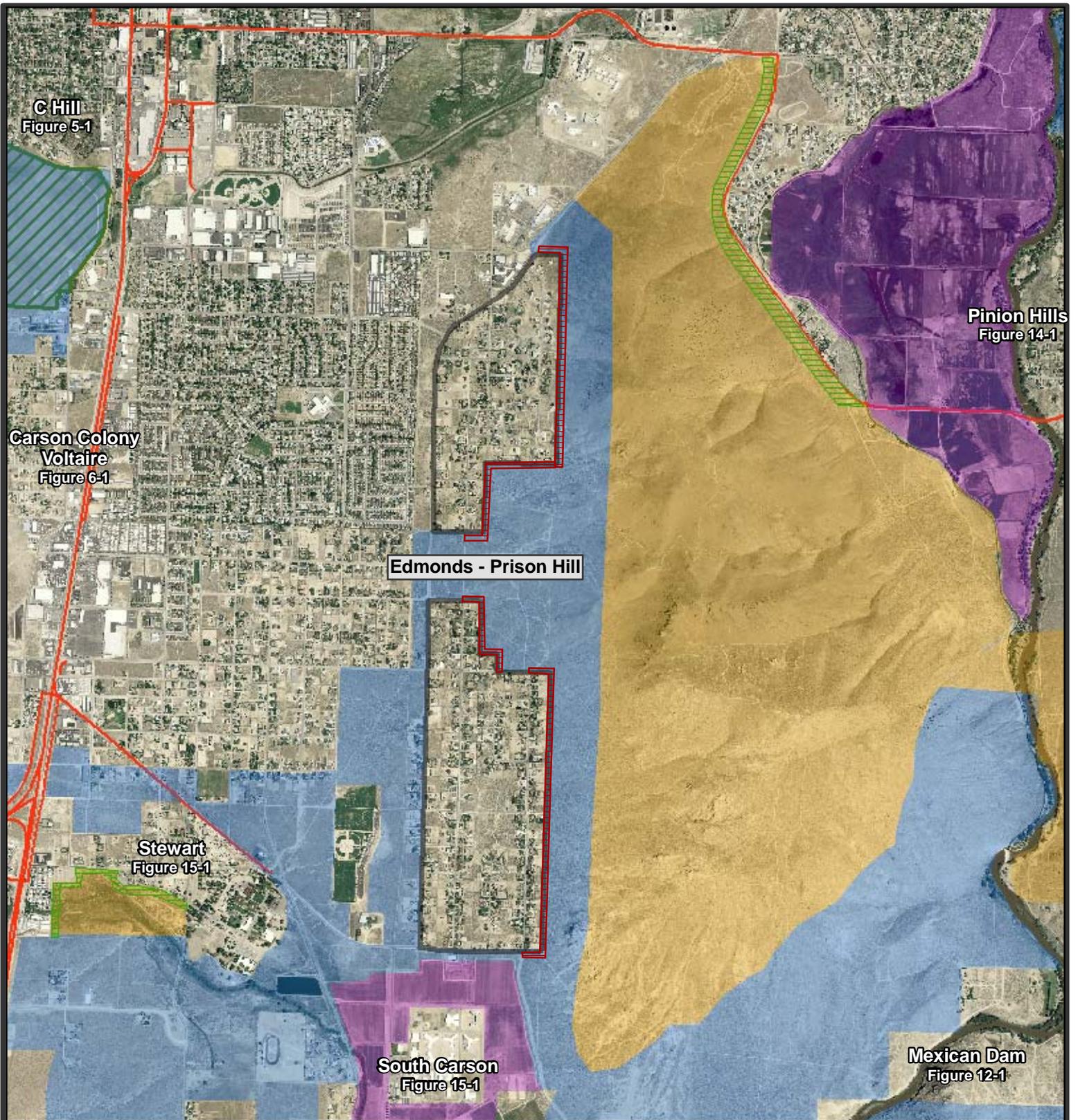


Figure 8-1. Edmonds - Prison Hill fuel hazard conditions and recommendations for fuel hazard reduction.

Recommended Treatments

-  Establish fuelbreak
-  Maintain Fuelbreak
-  Grazing Treatment

Fuel Hazard Class

-  Low
-  Moderate
-  High

 Neighborhood Boundary

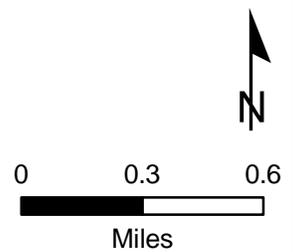


Figure 8-2. Representative fuel types in the wildland-urban interface around the Edmonds – Prison Hill neighborhood.



Edmonds-Prison Hill 1. UTM 4335795N 263388E. View to North-Northeast



Edmonds Prison Hill 2. UTM 4334617N 263352E. View to South