

**STAFF REPORT FOR THE PLANNING COMMISSION BRIEFING
December 3, 2018**

**WILDFIRE SAFETY IMPROVEMENTS
(PC-2017-9605)**

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SECTION 1.0 INTRODUCTION

This project, PC-2017-9605, is intended to improve upon the County’s wildfire protections in the zoning code. The purpose of this briefing is to introduce the Planning Commission to the reasons for undertaking the project, the general scope of the project and to discuss next steps.

SECTION 2.0 COUNTY PLAN DIRECTION

This section references three county plan documents. The full plans are available at:

- Comprehensive Plan <https://multco.us/landuse/comprehensive-plan>
- Community Wildfire Protection Plan <https://multco.us/em/community-wildfire-protection>
- Climate Action Plan <https://multco.us/sustainability/2015-climate-action-plan>

MULTNOMAH COUNTY COMPREHENSIVE PLAN (2016)

Chapter 7 (Natural Hazards) of the Multnomah County Comprehensive Plan provides background information and policy direction on a range of community hazards including landslides, floods, wildfires and earthquakes.

Policy 7.7 of the Comprehensive Plan provides the original basis and the starting point for this project.

Policy 7.7: Require development in areas prone to wildfire risks to meet fire safety and mitigation standards.

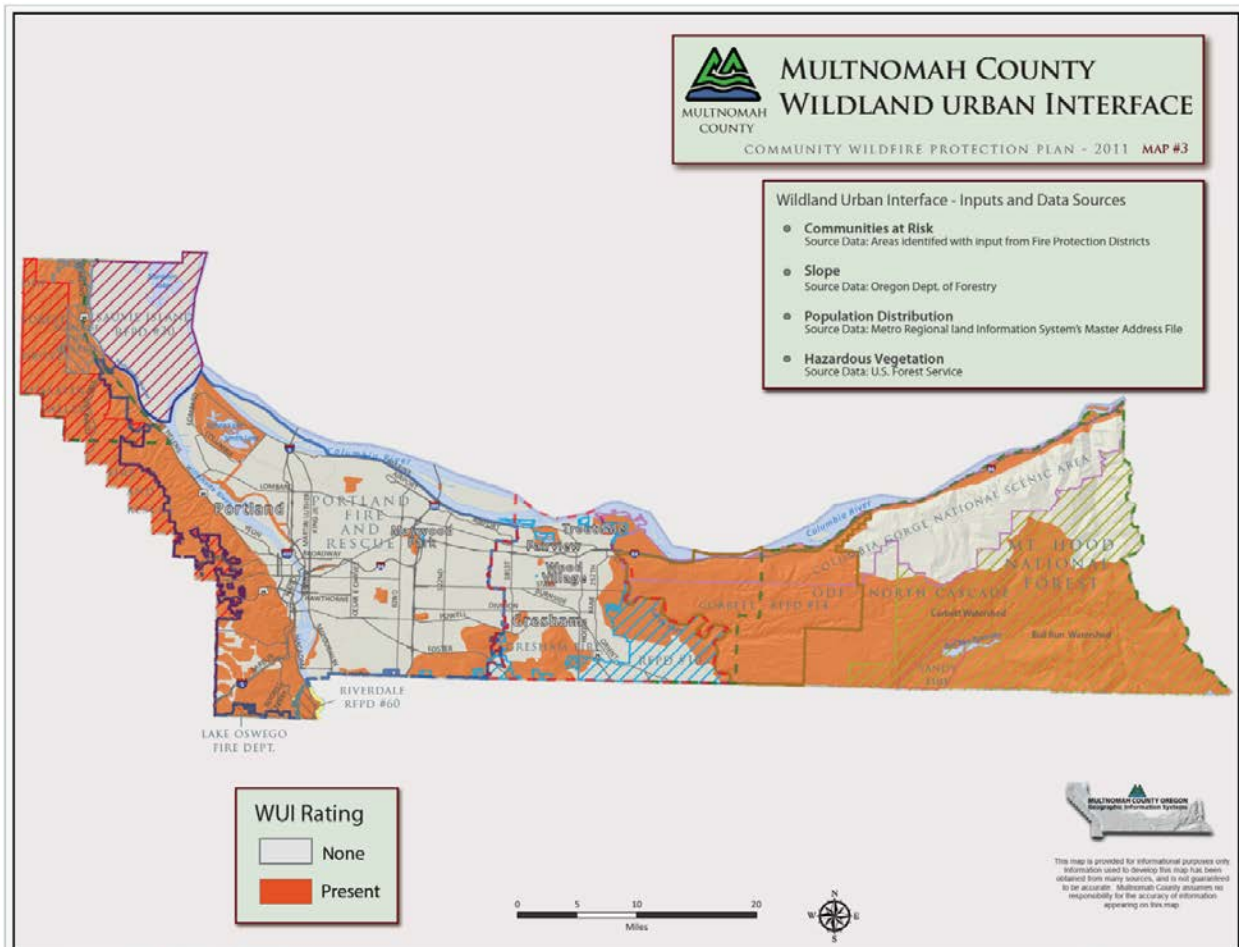
Strategy 7.7-1: Use current mapping data related to wildfire risk in determining the location of fire prone areas, supplemented by onsite assessments, if needed.

Strategy 7.7-2: To reduce wildfire risk and associated impacts while protecting wildlife habitat, expand requirements to areas identified as prone to wildfires but not currently subject to regulations after revising standards to better ensure wildlife habitat compatibility. Weigh and balance wildlife habitat needs with effective wildfire risk reduction.

Strategy 7.7-3: Ensure that agencies responsible for fire protection are provided an opportunity to comment on development applications prior to approval of the application.

MULTNOMAH COUNTY COMMUNITY WILDFIRE PROTECTION PLAN (2011)

There are a number of useful wildland fire relating mapping resources located within the 2011 Multnomah County Community Wildfire Protection Plan (MCCWPP). The following MCCWPP maps may prove useful in the implementation of Policy 7.7:





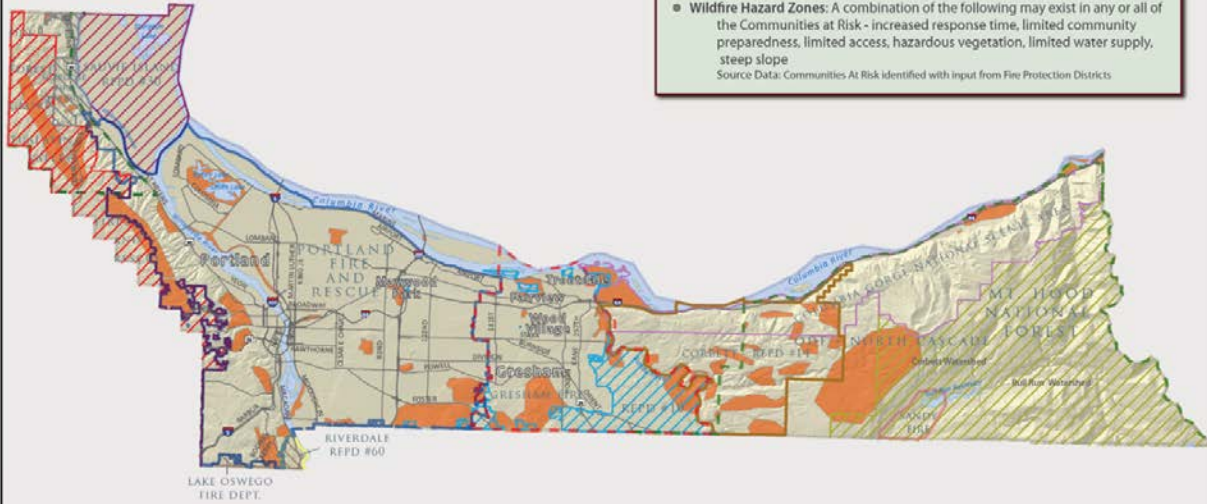
MULTNOMAH COUNTY COMMUNITIES AT RISK

COMMUNITY WILDFIRE PROTECTION PLAN - 2011 MAP #2

Communities At Risk - Inputs and Data Sources

- **Wildfire Hazard Zones:** A combination of the following may exist in any or all of the Communities At Risk - increased response time, limited community preparedness, limited access, hazardous vegetation, limited water supply, steep slope

Source Data: Communities At Risk identified with input from Fire Protection Districts

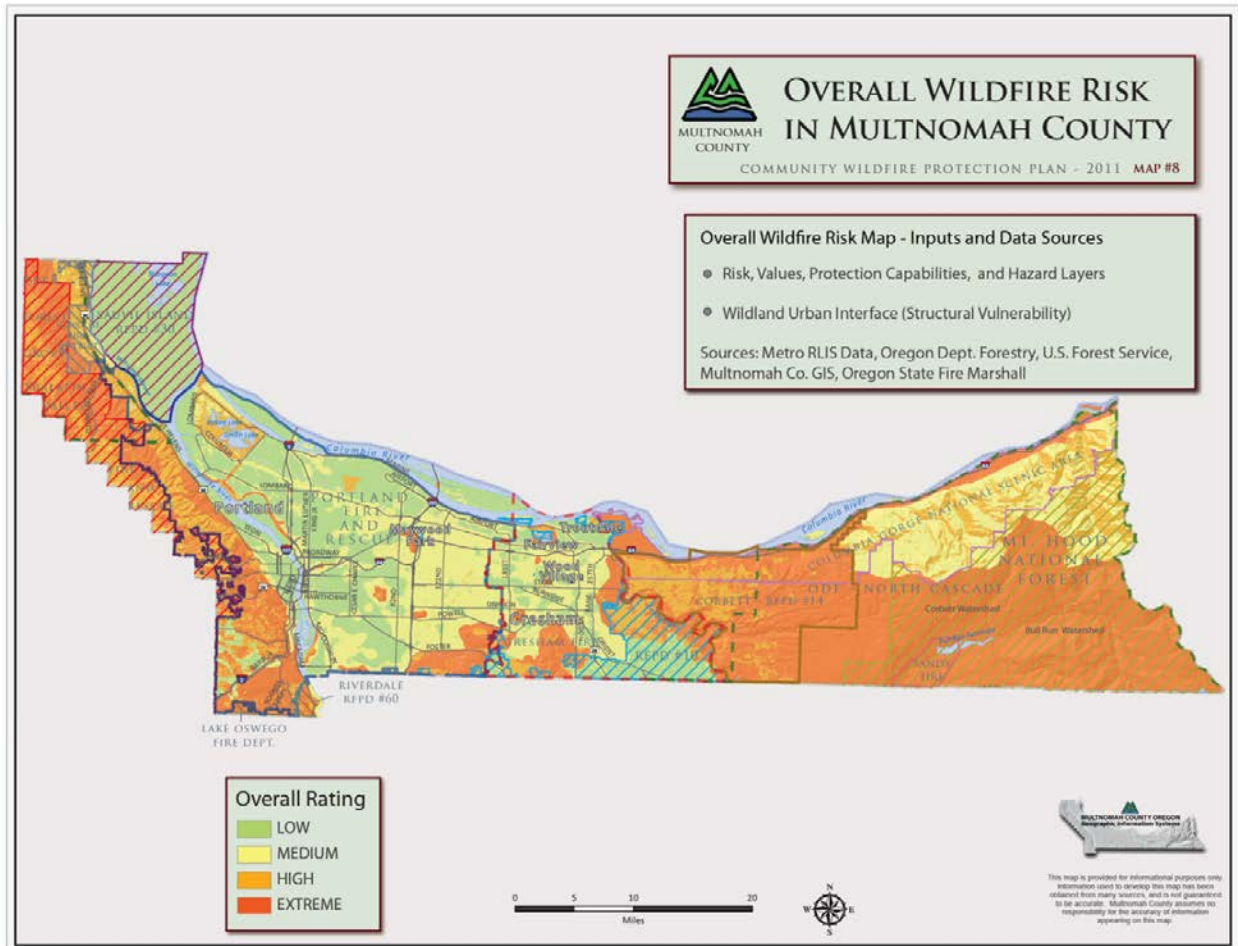


Risk Areas

Present



This map is provided for informational purposes only. Information used to develop this map has been obtained from many sources, and is not guaranteed to be accurate. Multnomah County assumes no responsibility for the accuracy of information appearing on this map.



The MCCWPP also contains action items relevant to this project:

Action Item	Priority	Timeframe	Lead
Modify the current Multnomah County land use planning access and water supply forms to reflect both County standards as well as minimum state fire code requirements to offer clarity to the applicant.	High	Short Term	Multnomah County Land Use and Transportation
Work with Multnomah County to include the local fire agency to the list of stakeholders that must sign off and approve prior to both land use and building permit final acceptance.	High	Short Term	Multnomah County Land Use and Transportation

Work with Multnomah County to allow alternative building construction and materials in areas unable to meet access and fire flow requirements.	High	Ongoing	Multnomah County Land Use and Transportation
Encourage Multnomah County Land Use Planning to meet individually with local fire agencies to establish relationships, articulate expectations, and reduce wildfire hazards to future development.	High	Ongoing	Multnomah County Land Use and Transportation

MULTNOMAH COUNTY / CITY OF PORTLAND CLIMATE ACTION PLAN (2015)

The 2015 Multnomah County / City of Portland Climate Action Plan recognizes the likelihood of increased fire frequency and intensity as climate change progresses. Below are goals and objectives that relate to this project:

Climate Change Prep

2030 OBJECTIVE 14

Reduce risks and impacts from heat, drought and wildfire by preparing for hotter, drier summers with increased incidence of extreme heat days.

Hotter, drier summers may result in several significant impacts for the Portland area. Higher temperatures result in increased air pollution, such as ground-level ozone and pollen counts, exacerbating Portland’s already high incidence of respiratory illnesses and allergies. Such conditions may be further exacerbated by air quality impacts resulting from the potential of increased wildfires. Higher temperatures and shifts in precipitation patterns also lead to increased surface water temperatures, reduced flows in rivers and streams and negative impacts on aquatic habitats and the fish and wildlife they support.

ACTIONS TO BE COMPLETED BY 2020	Lead agency
<p>14M Urban-Wildland Interface Fires — Manage the risk of wildfires as a result of drier summers, especially in areas where homes and businesses are next to natural and forested areas by:</p> <p>a) Reviewing the feasibility of adopting nationally recognized codes to strengthen building standards in wildfire risk areas.</p> <p>b) Completing an assessment to characterize high-priority wildfire risk areas and developing recommendations to reduce risks in and around these areas.</p>	<p>City: PBEM, Fire, BES, PP&R, BPS, BDS</p> <p>County: DCS, HD, MCEM</p>

<p>c) Implementing the 2011 Multnomah County Community Wildfire Protection Plan.</p> <p>d) Increasing and improving the quality of vegetated corridors and buffer areas around wildfire-prone areas.</p> <p>e) Prepare public health agencies and health care providers to address health impacts of wildfire smoke.</p>	
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SECTION 3.0 SUMMARY OF EXISTING COUNTY FIRE SAFETY ZONING REGULATIONS

Currently there are fire standards in the CFU zones and the Forest zones in the Columbia River Gorge National Scenic Area as well as residential zones adjacent to scenic area Forest zones. The County zoning codes can be found at <https://multco.us/landuse/zoning-codes>

Fire Standards in CFU Zones:

§ 39.4110 FOREST PRACTICES SETBACKS AND FIRE SAFETY ZONES.

The Forest Practice Setbacks and applicability of the Fire Safety Zones is based upon existing conditions, deviations are allowed through the exception process and the nature and location of the proposed use. The following requirements apply to all structures as specified:

Table 1.

Use	Forest Practice Setbacks			Fire Safety Zones
Description of use and location	Nonconforming Setbacks	Front Property Line Adjacent to County Maintained Road (feet)	All Other Setbacks (feet)	Fire Safety Zone Requirements (FSZ)
Replaced or restored dwelling in same location &/or less than 400 sq. ft. additional ground coverage; Alteration and maintenance of dwelling	May maintain current nonconforming setback(s) if less than 30 ft. to property line	30	30	Property owner is encouraged to establish Primary to the extent possible
Replaced or restored dwelling in same location & greater than 400 sq. ft. additional ground coverage; Alteration and maintenance of dwelling	Nonconforming setback(s) of less than 30 ft. to property lines that existed as of August 26, 2006 may be maintained	30	30	Primary is required, except that if there was a nonconforming Forest Practice setback of less than 30 feet to property lines as of August 26, 2006, Primary is required to the full extent of the nonconforming Forest Practice setback as it existed on August 26, 2006
At least a portion of the replaced or restored dwelling is within 100 ft. of existing dwelling	N/A	30	30	Primary required; Maintenance of vegetation in the Secondary is required to the extent possible
Replaced or restored dwelling over 100 ft. from existing dwelling	Meet current setback standards	30	130	Primary & Secondary required

Use	Forest Practice Setbacks			Fire Safety Zones
Description of use and location	Nonconforming Setbacks	Front Property Line Adjacent to County Maintained Road (feet)	All Other Setbacks (feet)	Fire Safety Zone Requirements (FSZ)
At least a portion of the Temporary Health Hardship Dwelling is within 100 ft. of existing dwelling	N/A	30	30	Primary required
Temporary Health Hardship farther than 100 ft. from existing dwelling	N/A	30	130	Primary and Secondary required
At least a portion of the mobile home during construction or reconstruction of a residence is within 100 ft. of dwelling	N/A	30	30	Primary required
Mobile home during construction or reconstruction of a residence farther than 100 ft. of dwelling	N/A	30	130	Primary and Secondary required
Template Dwelling	N/A	30	130	Primary & Secondary required
Heritage Tract Dwelling	N/A	30	130	Primary & Secondary required
Large Acreage Dwelling	N/A	30	130	Primary & Secondary required
Accessory structures within 100 ft. of the dwelling	N/A	30	30	Primary required
Accessory structures located more than 100 ft. from the dwelling	N/A	30	130	Primary & Secondary required

Use	Forest Practice Setbacks			Fire Safety Zones
Description of use and location	Nonconforming Setbacks	Front Property Line Adjacent to County Maintained Road (feet)	All Other Setbacks (feet)	Fire Safety Zone Requirements (FSZ)
Addition to an existing structure	Nonconforming setback(s) of less than 30 ft. to property lines that existed as of May 21, 2011 may be maintained	30	30	Primary is required, except that if there was a nonconforming Forest Practice setback of less than 30 feet to property lines as of May 21, 2011, Primary is required to the full extent of the nonconforming Forest Practice setback as it existed on August 26, 2006.
Other Accessory structures	N/A	30	130	Primary & Secondary required
Fences and Retaining Walls	N/A	Subject to all other applicable Code provisions, a fence or retaining wall over six feet in height shall be setback from all Lot Lines a distance at least equal to the height of such fence or retaining wall.	Subject to all other applicable Code provisions, a fence or retaining wall over six feet in height shall be setback from all Lot Lines a distance at least equal to the height of such fence or retaining wall.	N/A

Use	Forest Practice Setbacks			Fire Safety Zones
Description of use and location	Nonconforming Setbacks	Front Property Line Adjacent to County Maintained Road (feet)	All Other Setbacks (feet)	Fire Safety Zone Requirements (FSZ)
Other Structures	N/A	30	130	Primary & Secondary required
Property Line Adjustment; Lot of Exception; Land Divisions.	May maintain current nonconforming setback to existing structures	30	30	On tracts with required Primary & Secondary FSZ as part of a land use decision, both shall be maintained.

(A) Reductions to a Forest Practices Setback dimension shall only be allowed pursuant to approval of an adjustment or variance.

(B) Exception to the Secondary Fire Safety Zone shall be pursuant to MCC 39.4155 only. No reduction is permitted for a required Primary Fire Safety Zone through a nonconforming, adjustment or variance process.

(C) The minimum forest practices setback requirement shall be increased where the setback abuts a street having insufficient right-of-way width to serve the area. The county Road Official shall determine the necessary right-of-way widths based upon the county “Design and Construction Manual” and the Planning Director shall determine any additional setback requirements in consultation with the Road Official.

(D) Fire Safety Zones on the Subject Tract.

(1) Primary Fire Safety Zone.

(a) A primary fire safety zone is a fire break extending a minimum of 30 feet in all directions around a dwelling or structure. Trees within this safety zone shall be spaced with greater than 15 feet between the crowns. The trees shall also be pruned to remove low branches within 8 feet of the ground as the maturity of the tree and accepted silviculture practices may allow. All other vegetation should be kept less than 2 feet in height.

(b) On lands with 10 percent or greater slope the primary fire safety zone shall be extended farther down the slope from a dwelling or structure as follows:

Percent Slope	Distance In Feet
Less than 10	No additional required
Less than 20	50 additional
Less than 25	75 additional
Less than 40	100 additional

(c) The building site must have a slope less than 40 percent.

(2) Secondary Fire Safety Zone. A secondary fire safety zone is a fire break extending a minimum of 100 feet in all directions around the primary safety zone. The goal of this safety zone is to reduce fuels so that the overall intensity of any wildfire is lessened. Vegetation should be pruned and spaced so that fire will not spread between crowns of trees. Small trees and brush growing underneath larger trees should be removed to prevent the spread of fire up into the crowns of the larger trees. Assistance with planning forestry practices which meet these objectives may be obtained from the State of Oregon Department of Forestry or the local Rural Fire Protection District. The secondary fire safety zone required for any dwelling or structure may be reduced under the provisions of MCC 39.4155.

(3) No requirement in (1) or (2) above may restrict or contradict a forest management plan approved by the State of Oregon Department of Forestry pursuant to the State Forest Practice Rules; and

(4) Required Primary and Secondary Fire Safety Zones shall be established within the subject tract as required by Table 1 above. (5) Required Primary and Secondary Fire Safety Zones shall be maintained by the property owner in compliance with the above criteria listed under (1) and (2).

Fire Standards in Columbia River Gorge National Scenic Area:

The fire standards in the Columbia River Gorge apply to Forest zones and to development adjacent to Forest zones. The Columbia River Gorge Commission is currently engaged in an update to the Columbia River Gorge Management Plan which will likely result in updates to the existing fire standards. County staff are actively following and participating in the update process. County staff are committed to participating in the Management Plan update while simultaneously moving forward with this project. The Columbia River Gorge fire zoning code standards follow:

§ 38.7305 FIRE PROTECTION IN FOREST ZONES

(A) All buildings shall be surrounded by a maintained fuel break of 50 feet. Hazardous fuels shall be removed within the fuel break area. Irrigated or fire resistant vegetation may be planted within the fuel break. This could include green lawns and low shrubs (less than 24 inches in height). Trees should be spaced greater than 15 feet between the crowns and pruned to remove

dead and low (less than 8 feet) branches. Accumulated leaves, needles, and other dead vegetation shall be removed from beneath trees.

(B) Buildings with plumbed water systems shall install at least one standpipe a minimum of 50 feet from the structure.

(C) For properties located outside of a fire district, a pond, stream, tank or sump with storage of not less than 1,000 gallons, or a well or water system capable of delivering 20 gallons per minute shall be provided. If a well pump is located on-site, the electrical service shall be separate from the dwelling.

(D) Access drives shall be constructed to a minimum of 12 feet in width and not exceed a grade of 12 percent. Turnouts shall be provided at a minimum of every 500 feet. Access drives shall be maintained to a level that is passable to fire equipment. Variances to road standards may be made only after consultation with the local rural fire district and the Oregon Department of Forestry.

(E) Within one year of the occupancy of a dwelling, the Planning Director shall conduct a review of the development to assure compliance with these standards.

(F) Telephone and power supply systems shall be underground whenever possible.

(G) Roofs of structures should be constructed of fire-resistant materials such as metal, fiberglass shingle or tile. Roof materials such as cedar shake and shingle should not be used.

(H) Any chimney or stovepipe on any structure for use with a woodstove or fireplace should be screened with no coarser than 1/4 inch mesh metal screen that is noncombustible and corrosion resistant and should be equipped with a spark arrestor.

(I) All structural projections such as balconies, decks and roof gables should be built with fire resistant materials equivalent to that specified in the Uniform Building Code.

(J) Attic openings, soffit vents, foundation louvers or other ventilation openings on dwellings and accessory structures should be screened with no coarser than 1/4 inch mesh metal screen that is noncombustible and corrosion resistant.

SECTION 4.0 OBSERVATIONS

Occasional issues come up in the implementation of the current CFU fire safety standards. The following are some of the known issues and observations that come up from time to time:

1. Table 1 can be clunky to use and appears to apply primarily to residential uses on CFU properties, which makes it difficult to apply when considering structures that are accessory to other uses such as forest practices, recreation, and transportation.

2. Table 1 does not differentiate between different types of ‘accessory structures’. Structures, such as a basketball court are treated the same as a flammable structure like a detached garage.
3. The primary fire safety zones required in MCC 39.4110(D) are required to be enlarged pursuant to the table in (D)(1)(b) depending on the slopes at the building site. The subsection could benefit from some clarification of how the slopes are calculated. Questions have arisen such as:
 - a. Does slope refer to average slope or max slope?
 - b. Subsection (c) uses the term ‘building site’ but subsection (b) does not. Should ‘building site’ be used in (b) as well?
 - c. Should there be a definition of ‘building site’?
 - d. Does the building site refer to the area directly beneath the proposed structure or does it also include some area adjacent to the proposed structure?
 - e. If the slope is measured beyond the proposed building is it only measured down slope of the proposed structure?
 - f. Does the standard apply to existing grades or finished grades?
4. Reductions to secondary fire safety zones are allowed, but no reduction to the primary is permitted.
5. Some CFU zoned properties are relatively long and narrow, and it can be difficult or impossible to meet the standards on those lots. Some property owners have purchase additional land adjacent to theirs in order to make the standards work, but this is an expensive option that is not available to everyone. Some counties, such as Jackson County in southern Oregon have allowed fire safety zones to extend onto adjacent properties by way of an easement giving the property owner the right to maintain the fire safety zone off site. Many jurisdictions allow reductions pursuant to fire service provider approval and conditions.
6. There is no reliable system in place to ensure ongoing maintenance of fire safety zones after structures have been placed. Staff plans to engage local fire service providers regarding the question of ongoing maintenance by property owners. A more robust system could be considered. Perhaps a fire safety zone and emergency vehicle access recertification program would be useful.
7. Staff intends to work with wildland fire experts to audit current code against the latest best practices. There may be shortcomings in current code; for instance, the code requires a minimum of 15 feet between crowns within the primary fire safety zone, but is silent on

the spacing between trees and structures and whether overhanging branches are acceptable. Additionally, the code does address 'fire-wise' landscaping.

8. There are different standards in the CFU zones and the Columbia River Gorge. Perhaps some standards should be applied countywide.

SECTION 5.0 CONCLUSION

In addition to considering applying fire safety zones in more areas outside the CFU zone, the project should also include coordination with fire service providers, property owners, residents, and the county offices of Emergency Management and Sustainability.

In addition to evaluating existing County standards, access standards and building standards should also be reviewed. Other subsections of the zoning code, particularly those such as the Significant Environmental Concern that can result in conditions of approval to maintain trees and vegetation in the vicinity of development should also be reviewed in order to ensure an overall program that achieves the the goal of protecting significant environmental resources while minimizing the risks from hazards to life and property.