



# West Umatilla County Community Wildfire Protection Plan

WORKING DOCUMENT – June 28, 2009

*Valuing the protection of Wildland-Urban Interface  
Areas and associated Communities-at-Risk across  
Umatilla County*

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# ***I. Introduction***

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## ***Executive Summary***

Through the initiative of the Oregon Department of Forestry, the Umatilla County Commissioners has tasked a committee of local, state, and federal wildfire agencies, along with land managers and private citizens, with creating a Community Wildfire Protection Plan (CWPP). Existing fire protection resources and programs have been reviewed. Communities have been identified that are at a higher risk from a wildfire event, project areas have been designated and prioritized, and strategies developed to achieve the goals of the CWPP. Prevention education involving citizens and stakeholders has begun. This working document will serve as an informational resource that will enhance community safety through hazard and risk reduction in the wildland-urban interface in what is known as the West Umatilla County Planning area. This document is an addendum to the Umatilla County - Foothills/Blue Mountains Region CWPP. All background information related to the planning process and policies that influence the development of this document can be found in the Umatilla County – Foothills/Blue Mountains Region document.

## ***CWPP Partners***

The development of the West Umatilla County CWPP relies upon the collaboration of multiple agencies and organizations working together to define common goals and objectives. ODF obtained project funding through a Umatilla County Title III allocation. Once this funding was secured, letters were sent to various fire services cooperators and interested citizens, inviting them to participate in the planning process. Members of the steering committee and other resource advisors include:

- *Angie Johnson, Oregon Department of Forestry (ODF) - Facilitator*
- *BJ Workman, Umatilla County Emergency Services/CSEPP – Administrative Support*
  
- Ray Denny, Emergency Services Manager
- JR Cook, Planning Department
- Cliff Bracher, Landowner, Bracher Farms
- T. Spratling, Manager, Cunningham Sheep
- Tammy Dennee, Oregon Wheatgrowers Association
- John Fowler, City of Pendleton Fire Chief
- Larry Givens, Umatilla County Commissioners and Landowner
- Shane Garner, City of Milton-Freewater Fire Chief
- Merle Gehrke, Echo Fire Chief
- Tom Groat, Confederated Tribes of the Umatilla Emergency Management
- Scott Stanton, Pilot Rock Rural Fire Protection District Chief

- Josh Hanning, Farm Services Agency
- David King, ODF
- Chet Prior, Landowner
- Michael Roxbury, Umatilla Rural Fire Protection District Chief
- George Ruby, Oregon Department of Transportation
- Rick Saager, Milton-Freewater Rural Fire Protection Chief
- Chris Schulte, Mid-Columbia US Fish and Wildlife Service
- Jim Stearns, Hermiston Fire Chief (Retired)
- Pat Hart, Hermiston Fire Chief
- Michele Tally, Helix Fire Chief
- Loren Unruh, Natural Resource Conservation Service
- Jim Whelan, Stanfield Fire Chief
- Nancy Wilson, Bureau of Indian Affairs
- Tyler Wilson, Umatilla Chemical Depot
- Todd Wimmer, Union Pacific Railroad
- Dave Wyckoff, Manager, Wyckoff Farms

The steering committee prepared this plan in compliance with the National Fire Plan, the 10-Year Comprehensive Strategy, Oregon Senate Bill 360, and Healthy Restoration Act. The plan is mutually agreed to and endorsed by the Umatilla County Commissioners, the NEO District Forester on behalf of ODF, and the County Structural Fire Representative, who mutually agree to the contents of the plan. This plan is not legally binding and should be viewed as a working document and planning tool for fire and land managers of Umatilla County. The signature page can be found in Appendix A.

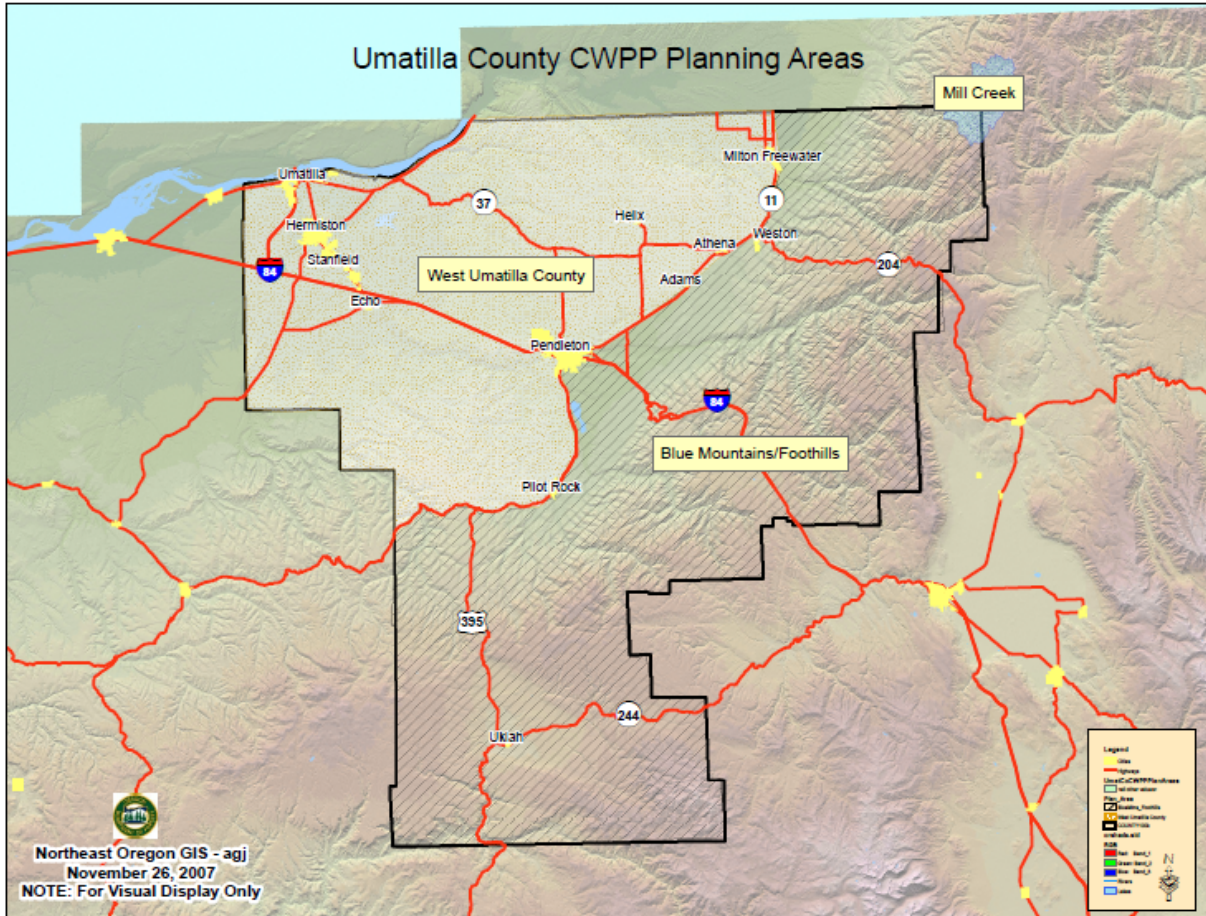
### ***Planning Area Boundaries***

Umatilla County has a large and diverse landscape, from low elevation desert and agricultural ground in the western half, to rolling foothills with open pine grasslands, and into steep canyons with heavy mixed conifer stands in the Blue Mountains range along the eastern border. Since the interface areas are found along the eastern and southern borders of the County, the decision was made to use the highway system as a division line and focus planning resources on the eastern region. The CWPP project area is referred to as the Blue Mountains and Foothills Region of Umatilla County as shown in Figure 1. The remainder of the County is covered under the West Umatilla County CWPP (known as the West Umatilla County Planning area – also shown in Figure 1).

The northern edge of Umatilla County borders the state boundary line between Oregon and Washington. Mill Creek Watershed is located in the northeast corner of Umatilla County, about 15 miles east of Milton-Freewater; it straddles the state line and crosses into four counties, including Umatilla County. Mill Creek Watershed falls within the Walla Walla Ranger District of the Umatilla National

Forest and is adjacent to the Wehena-Tucannon Wilderness area. This area is covered under the Mill Creek Watershed CWPP. See Figure 1.

Figure 1 - Umatilla County CWPP Planning Areas



## ***Fire Districts and Unprotected Areas***

Several agencies provide structural fire protection within the CWPP project area for all, or portions of, five incorporated municipalities (Ukiah, Pilot Rock, Pendleton, Weston, and Milton-Freewater). In addition to Forest Service and ODF, wildland fire protection is offered through several rural fire districts (RFD) as outlined below. All organizations and agencies operate under mutual aid agreements with ODF for additional wildland fire protection.

- The cities of Echo, Helix, Hermiston, Milton-Freewater, Pendleton, Stanfield, and Umatilla all have city-operated fire departments that provide structural protection inside their respective city limits. The Pendleton Fire Department also has contracted with three rural fire districts outside city limits to provide protection services; McKay Dam RFD, Lower McKay RFD, and Riverside RFD are all tax-based fire districts within five miles of Pendleton. Echo, Helix, Hermiston, Stanfield, and Umatilla respond outside their city limits as well.
- Pilot Rock RFD is a volunteer department that provides fire suppression for the City of Pilot Rock (population 1,540) and the surrounding 342 square miles. Difficult terrain with limited road access, and well as limited labor resources during daytime hours provide unique challenges. Boundaries are adjacent to ODF protected lands as well as the Umatilla Indian Reservation.
- Another recognized rural fire district provides multiple services inside the project boundary. East Umatilla RFPD has both paid staff and volunteer members, and has three stations in its protection area. Services are provided to the cities of Athena, Adams, and Weston, as well as to residents along Highway 204 on Weston Mountain. This WUI area has a high density of year-round dwellings and seasonal cabins, and is a major recreational destination in the Blue Mountains area.
- The Umatilla Indian Reservation has structural protection through the CTUIR Fire Department and wildfire protection through the Bureau of Indian Affairs (BIA). Both agencies are stationed out of Mission, an unincorporated town on the reservation, eight miles east of Pendleton.
- Subscription service is offered in the northern end of the County through Milton-Freewater Rural Fire Department.
- Walla Walla County Fire District #4 provides structural fire protection to Oregon residents in the Mill Creek and Umapine areas through individual contracts. They provide service about two miles into Oregon (on County Road 582), but will go further up if requested under mutual aid.
- The BLM contracts with the USFS-Umatilla National Forest for protection in Juniper Canyon. The US Fish and Wildlife Service provides wildland fire

protection on their refuges. Oregon Department of Forestry does not provide protection for private landowners in the true western side of Umatilla County.

The lack of forestland in western Umatilla County results in private land unprotected by ODF. Whatever land that is not protected by rural or city structural fire districts is considered unprotected, including remote areas such as Holdman, Juniper Canyon, and Butter Creek. It is the goal of ODF to promote formation of Rangeland Protection Associations. More information regarding Rangeland Protection Associations can be found in [Section XX](#).

**Figure 2. INSERT FIRE PROTECTION DISTRICTS - BJ just sent me an updated layout.**

## ***II. Mission and Goals***

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**Mission Statement:** To create a West Umatilla County Community Wildfire Protection Plan that is consistent and coordinated with the Umatilla County - Blue Mountains and Foothills Region Community Wildfire Protection Plan.

### **Goals & Statements:**

- Promote wildfire awareness and target fire prevention and safety information across at-risk communities:
  - Coordinate community meetings to discuss fire related concerns with landowners
  - Distribute information on Farm and Ranch Fire Safety
  
- Promote cooperative emergency fire response for the protection of life, property, and natural resources:
  - Identify resource equipment inventory, training needs and level of protection of participating fire agencies through annual reviews
  - Review interagency communications and suppression strategies for emergency fire response situations
  - Encourage formation of Rangeland Protection Associations in unprotected areas
  
- Identify and reduce hazardous fuels and coordinate risk reduction strategies across the landscape:
  - Develop and utilize a common set of base information for risk assessment
  - Promote landowner assistance programs
  - Gather local and community knowledge of fire related concerns through public outreach
  - Prioritize fuel reduction areas and projects
  - Utilize treatment types that also maintain, enhance, and protect wildlife habitat, aesthetic and recreational values
  
- Conduct annual monitoring and evaluation of plan progress
  - Review goals and update plan as needed or as new information becomes available



### ***III. West Umatilla County Profile***

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#### ***Communities***

West Umatilla County consists of lands devoted to agriculture. Wheat, corn, and potatoes are the primary crops raised in western Umatilla County. The communities across the area consist of city centers and then scattered farms and ranches branching out from the city. The cities and communities identified are:

#### Incorporated Cities

- Pendleton
- Stanfield
- Echo
- Hermiston
- Helix
- Adams
- Athena
- Milton-Freewater
- Umatilla
- Pilot Rock

#### Other Communities

- Holdman
- Juniper Canyon
- Cold Springs
- Riverside
- McKay
- Hat Rock
- South Shore
- West Hills outside Pilot Rock
- Butter Creek
- West Hills/Golf Course area outside of Milton-Freewater
- Umatilla Depot
- Reith
- Umapine
- Mission (included in this plan – was missed in the Blue Mountains/Foothills CWPP)

## ***Fire Environment***

The West Umatilla County Community Wildfire Protection Plan can be viewed as a stand-alone document; it is also part of the wildfire section of the county's Natural Hazard Mitigation Plan. Both planning efforts include an assessment of hazard and risk. The West Umatilla County CWPP contains a more comprehensive quantitative and qualitative risk assessment for the western part of the county. Wildfire is defined as an uncontrollable burning of forest, brush, or grassland. Fire has always been a part of high desert Western ecosystems and can have devastating effects. Eastern Oregon has a lengthy history of wildfire in both wildland and in wildland-urban interface (WUI) areas. In contrast to other parts of this region, western Umatilla County is notable for a relative lack of forested land and the predominance of agricultural crops and grasslands. Both the forests and grasslands of the County are highly susceptible to wildfire and many of the county's cities and unincorporated communities, in addition to rangelands and agricultural lands, are vulnerable to its effects. Wildfires are an annual occurrence in the county and large fires have varied in size.

As mentioned above, West Umatilla County wildlands are predominantly agricultural crops and grasslands made up of wheat stubble, grass, brush, and sage. Some forested areas are made up of timbered stringers found in draws. The hilly or mountainous topography of much of the County also exacerbates wildfire hazards: these areas can cause a wildfire to spread rapidly and burn larger areas in a shorter period of time, especially as fires migrate uphill.

Communities in the county located in a wildland-urban interface (WUI) are at increased risk to wildfire hazards. The WUI occurs where man-made structures meet or intermix with wildland vegetation. WUI boundaries in the western part of Umatilla County take into account geography, distance from communities, and values at risk. See Figure 4 below.

Insert WUI map here. Also, check Umatilla County NHMP and website for any other information that could be added into this section.

## ***Conditions Contributing to Wildfires***

*Ignition* of a wildfire may occur naturally from lightning or from human causes such as debris burns, arson, careless smoking, recreational activities, or vehicle malfunction along county roads, highways, and I-84. Once started, four main conditions affect the fire's intensity and behavior: fuel load and distribution (how much flammable plant material is present and what type it is), topography, weather, and residential development.

*Fuel* is the material that feeds a fire. Fuel is classified by volume and type. Oregon is prone to wildfires due to its prevalent conifer, brush and rangeland fuel types; rangeland and brush dominate in western Umatilla County.

*Topography* influences the movement of air and directs a fire's course. Slope and elevation are key factors in fire behavior.

*Weather* is the most variable factor affecting wildfire behavior. High risk areas in Oregon, like the western portion of Umatilla County, share a hot, dry season in late summer and early fall with high temperatures and low humidity.

The increase in residential *development* in interface areas has resulted in greater wildfire risk. Fire can sweep through vegetation that is adjacent to a combustible home, and some rural parts of Umatilla County do not have fire protection services for privately owned structures.

### ***Impacts***

The ecosystems of most forest and wildlands depend upon fire to maintain various functions. These benefits can include, depending upon location and other circumstances, reduced fuel load, disposal of slash and thinned tree stands, increased forage plant production, and improved wildlife habitats, hydrological processes and aesthetic environments. The effects of fire on ecosystem resources can include damages, benefits, or some combination of both. Despite these potential benefits, fire has historically been suppressed for years because of its effects on rangelands, recreation areas, agricultural operations, and the obvious significant threat to property and human life. The effects of a wildfire on the built environment, particularly in the face of a major wildfire event, can be devastating to people, homes, businesses and communities.

In western Umatilla County, where the majority of private land is grassland for sheep and cattle, wheat farming, or Conservation Reserve Program (CRP) contract ground, large wildfires can have significant economic impacts on ranchers' stock and range allotments, as burned land is unfit for grazing use for several years after a fire, or crops and hay are lost due to a large wildfire progressing through dry land farming operations.

## ***Fire History***

Fire protection is provided across the county in the form of structural or limited wildland fire protection. Structural fire protection is provided by cities or rural entities. Wildland fire protection can also be provided by private citizens that form a rangeland fire protection association. ODF does not offer fire protection in the western part of the county unless called upon by the structural entities in need. It is up to homeowners and landowners to ultimately provide their own fire protection by following fire prevention methods outlined in Section VI of this plan. Wildland agencies or rangeland associations are not equipped to put out house fires, hence the importance of continued support to the city and rural structural fire protection districts.

When analyzing fire occurrence, it was determined that statistics for fires within rural and municipal fire protection districts (and fires in rangeland protection association areas) were not captured in a format that could be utilized in GIS<sup>1</sup> analysis. This data would have been important to determining statistics related to cause, size of fires, and occurrence.

Local knowledge of fire chiefs was used to discuss cause and location of fires. Fire cause across the western part of Umatilla County is largely associated with fires started by lightning. Human causes are mostly associated with abandoned campfires, debris burning, or fires started along the interstate and highways (faulty vehicle equipment, cigarettes tossed out of windows of vehicles, etc.).

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<sup>1</sup> Geographic Information System – data for fire statistics, vegetation, topography, and weather was analyzed using GIS software, ArcGIS (an ESRI product).

## ***IV. Risk Assessment***

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### ***West Umatilla County Wildfire Hazard Assessment***

To identify and prioritize wildland-urban interface areas-at-risk in West Umatilla County, an assessment of factors was conducted; these factors contribute to large wildfire events that can leave communities vulnerable. The data was derived from the statewide hazard assessment conducted in 2005. This section will outline the process used and highlight unfamiliar definitions. Three key guidance documents were referenced in the assessment of communities-at-risk and the wildland-urban interface areas:

1. *Field Guidance: Identifying and Prioritizing Communities at Risk*. National Association of State Foresters. June 27, 2003. (Available at: <http://www.stateforesters.org/>)
2. *Concept for Identifying and Assessment of Communities at Risk in Oregon*. Draft prepared by Jim Wolf, Fire Behavior Analyst, Oregon Department of Forestry. July 19, 2004.
3. *WildlandUrban Interface Communities-at-Risk Program, Final Mitigation Recommendations*. Reports provided for BLM by Dynamac Corporation, 2002.

In West Umatilla County, a ***community-at-risk (CAR)*** is defined as a group of homes or other structures with basic infrastructure (such as shared transportation routes) and services that may be near federal land. A ***wildland-urban interface (WUI)*** area surrounds a community-at-risk, including that community's infrastructure or water source, and may extend 1 ½ miles or more beyond that community. This boundary depends on topography and geographic features that could influence wildfire, the location of an effective firebreak, or Condition Class 3 lands.

It is important to understand the meaning of risk and hazard in relation to wildfire. ***Risk*** is the chance or probability of occurrence of fire. ***Hazard*** is the exposure to risk; in a wildfire situation, those hazards can be related to either the natural or the man-made environment. Natural hazards include fuel type and amount of fuels, topography, and weather. Man-made hazards include the limited availability of water, limited access to structures, limited green space around structures, and the ignitability of structures. The capability of firefighting resources will be compromised by the severity of both natural and man-made hazards.

### ***Fire Occurrence/Risk of Ignition***

The rate of fire occurrence is an important component of the assessment. Historical fire records were used for a ten year period (1996-2005). Data was

compiled by ODF. The fire occurrence rate (FOR) per 1,000 acres was used to yield a statistical analysis of the project area. The number of fires for the past ten years for the State of Oregon was determined in order to calculate fire occurrence per 1,000 acres. A fire occurrence rate determined by the hazard assessment conducted statewide was calculated for each WUI and a value was assigned to determine risk. This value was also used to assist in prioritization of WUI areas within West Umatilla County.

### ***Fuels / Vegetation***

Data used to determine fuel hazard was derived from the State of Oregon Hazard Assessment conducted in 2005. For West Umatilla County, the increased risk of a large wildfire event is caused by the buildup of flashy fuels and changes in vegetation composition over time. A value was assigned to determine hazard level for each WUI.

### ***Topographic Hazard***

Slope and aspect affect both the intensity and rate of spread of a wildfire. The topography factor was derived from the Digital Elevation Model for Umatilla County. A value was assigned to each WUI to determine hazard.

### ***Weather Hazard***

In western Umatilla County, weather patterns can produce summer lightning storms that start many fires. These multiple starts can put a strain on the firefighting resources in the western part of the county. With the drying of fuels over time and the low relative humidity factored in, the probability for large fires can significantly increase during these lightning events. The number of days per season that fuels are capable of producing a significant fire event is also important to consider. Data provided by Oregon Department of Forestry that supports a hazard rating for weather is associated with a factor for eastern Oregon, which received the highest hazard rating for weather. This high hazard value was assigned by an analysis of daily wildfire danger rating indices in each regulated use area of the state. This assigned value is constant across all WUI areas in western Umatilla County.

## **Overall Fire Protection Capability Hazards (Structural Vulnerability)**

The western Umatilla County structural fire community supports a county fire defense board chief to make decisions related to overall structural fire response. An assessment of each structural fire protection district was conducted either by the chief of the associated district or the county fire defense board chief.



Figure 1 - Homes in WUI

Consideration was given to the level of training/equipment/preparedness of firefighting resources, type of access to homes, density of structures, availability of water sources, community preparedness, and structural vulnerability. A value was assigned to each WUI area.

## **Values At-Risk**

This category was based on public input collected during community meetings and comments received from informational questionnaires. Steering committee members provided input based on their local experience and knowledge of the areas as well.

Values at-risk are an important, but highly subjective component of the assessment. Values lost because of a devastating wildfire affect residents in different ways. West Umatilla County's economy is impacted when large wildfires eliminate valuable rangeland for grazing and wildlife habitat, which affects landowners and local businesses. Social values-at-risk include home and property, wildlife, recreation, and cultural and historical sites. In addition, loss of human life and loss of homes could be overwhelming for families, destroying the fabric of the close-knit, small-town atmosphere residents of West Umatilla County cherish about their communities.

Ecologically, general wildlife habitat and diversity, as well as threatened and endangered species of fish, wildlife, and plant life could be wiped out or severely harmed in the long-term, depending on the intensity of the wildfire, leaving behind by the following spring a sprouting of invasive and noxious weeds. Water quality could be impacted if a moderate to high intensity wildfire burned through watersheds, affecting the health of fish and wildlife as well as domestic water supplies for residents.

### ***Using the Hazard Assessment to Score WUI Areas***

The West Umatilla County CWPP Committee identified communities-at-risk across the landscape using several factors. As previously defined, this could mean a group of homes or structures with basic infrastructure and services that may be near federal land. The next step was to designate WUI boundaries that would incorporate those communities-at-risk as appropriate by using assessment information (previously described). The hazard assessment information was used to develop a scoring matrix that would provide results used for prioritizing the WUI areas within western Umatilla County (see Table 1).

The weighting of each element of the matrix was based on input received from the community, members of the steering committee, and information derived from the statewide assessment and scoring, and was not scientifically proven in any way. A statistician was not involved in the process, as this was meant to be community-driven, with input captured in its raw form by the community and the committee involved with its development. The information used to arrive at a score is in no way considered scientific statistical analysis. The scores are approximate and representative of group consensus.

The list of priorities helped the committee build an inventory of projects and action items that could be implemented to protect the WUI areas from large wildfire. A more complete explanation of each category is found in the appendices of this plan. An aggregate score of 23 points was established as the overall high score. See Table 1 on next page.



Table 1. Scoring Matrix - Factors Used for Ranking West Umatilla County WUI Areas

Rating Factors for Communities-at-Risk	Point Breakdown
<b>Likelihood of Fire Occurring</b> (historical fire starts data from BLM; based on occurrence rate per 1,000 acres )	1 pt – low occurrence 2 pts – moderate occurrence 3 pts – high occurrence
<b>Topographic Hazard</b> (slope and aspect combined)	1 pt – 0% - 25% 3 pts – 25% - 40% 5 pts – more than 40%
<b>Total Fuel Hazard</b> (surface and crown fuels combined)	1 pt – low hazard 3 pts – moderate hazard 5 pts – high hazard
<b>Overall Fire Protection Capability</b> (equipment, training, preparedness, access to homes, structure density, etc.)	1 pt – low capability 3 pts – moderate capability 5 pts – high capability
<b>Weather Factor</b> (all of Umatilla County received a high value of 3)	3 pts - high
<b>Values at Risk</b> (taken from surveys and public input; major infrastructure, municipal water source, utility lines/pipelines, etc.)	2 pts – high 1 pt – low
<b>Total Points Possible = 23</b>	

## ***V. Mitigation Action Plan***

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### ***Prioritization of WUI Areas in West Umatilla County***

The WUI boundaries were drawn to capture the overall limitations of each fire protection district, fuel hazard, CAR's, and values-at-risk. Logical anchor points on the landscape were used to designate WUI boundaries, including natural fuel breaks, ridgelines, and roads. Local knowledge and public input was also part of the decision process for determining WUI boundaries.

Insert WUI Map here.

Thirteen WUI areas were identified for West Umatilla County. Based on the total points scored, each WUI was ranked with an adjective rating of High or Moderate Priority. This ranking will be used to establish funding for potential mitigation projects. It will also assist the county with planning needed to address additional concerns, like developing rules and policies associated with mitigation of large wildfire and protection of property.

**Table 2 – WUI Areas in West Umatilla County, by Priority.**

Priority Level	WUI Name	Total Score
High	Juniper Canyon	21
	Pendleton	19
	Stanfield	19
	Umatilla	18
	Echo	18
	Reith	18
	Hermiston	17
	Helix	17
	Mission	17
	Pilot Rock	17
	Milton-Freewater	17
Moderate	Umatilla Depot	15
	Highway 11 Corridor	14

### ***Mitigation Strategies***

The inventory of projects and action items that could be implemented to protect WUI areas in West Umatilla County is not all-inclusive. Community members who have other ideas to help protect their specific community can contact one of the committee members at any time. Communities are encouraged to use this information to improve upon the strategies listed. All projects are listed by category.

The categories are Education, Fuels Treatment, or Emergency Preparedness. Education projects are those related to fire prevention or collaboration/awareness

on a particular issue related to this CWPP. Fuels treatment projects are those related to treating fuels on the landscape or creating defensible space around homes. Emergency Preparedness projects are those related to emergency response in a wildfire event, either pre-suppression or suppression. Strategy Sheets for each WUI are located in the Appendices of this Plan.

### ***Education***

Education comes in the form of delivery of fire prevention information to the public during community events, debris clean-up days, and signing during fire season. The best approach is for agency personnel to outreach to the public where they are; however, use of local media outlets is also encouraged.

### ***Fuels Treatment***

The following is a list of the type of treatment that would be appropriate for the rangeland in West Umatilla County:

1. Grazing
2. Mowing
3. Plowing
4. Irrigation
5. Controlled burning
6. Re-seeding to natural vegetation

Land management agencies and organizations have specific information related to effective use of treatment types mentioned in the list above. Landowners are encouraged to collaborate with agencies like Farm Services and NRCS where necessary to protect the larger landscape. This will achieve optimum results and stretch limited grant or tax dollars as far as they can go. When trying to achieve the goal of reducing fuels to modify fire behavior, other issues related to erosion, grazing needs, and weed infestation need to be addressed.

### ***Emergency Preparedness***

The primary focus of the public safety portion of this fire plan is to protect lives, private property and key values from wildfire. As part of this public safety mission, there is a partnership formed between private property owners and businesses, non-profit organizations, county, state and federal agencies to increase the likelihood of homes, businesses and other developed properties to survive a nearby wildfire.

### ***Home Site Access***

Consider how you access your home. Fire suppression forces will always consider if accessing your home puts them at risk during fire suppression work. Firefighters may utilize structural fire fighting equipment, engines, brush rigs or tenders to protect homes from fire. These vehicles require more space to turn around in than cars and pickups.

Having an adequate and safe area for firefighters to work around your home is a factor of access. Issues like the grade of the road, surface material, length, available turn-outs or turn-a-rounds are essential considerations when looking at protecting homes. Overgrown roadside vegetation could become a flame front, trapping firefighters. Above ground utility lines running along your access may also become a hazard. Clearly marked rural address numbers at the start of your access greatly aids fire suppression efforts. *Remember*, firefighters may be working during darkness to protect your home.

## **Evacuation**

When a wildfire threatens a community our collective first priority is to protect life. The useful technique is to recommend people to move out of harm's way. Evacuation is simply a tool used to protect life during a hazardous/unpredictable event. By removing the threat to life from an area, firefighters can avoid the split focus of worrying about people in the hazard area as they work to suppress the fire and protect property.

One of the necessary accompaniments with evacuations will be traffic control points established around the perimeter of the incident. Evacuations seek to remove the threat to life by displacing people out of the hazard area. Traffic control points are necessary to prevent people from getting back into the hazard area until it is determined safe to do so. It is critical that you obtain credible information and follow the directions given.

A community that maintains defensible space around their homes may significantly reduce the need to evacuate the community. And the defensible space likely will increase the survivability of the home. When necessary during evacuations, communities will be advised of locations opened as shelters to provide cover, food and information to those displaced by a wildfire. The American Red Cross (ARC) has a national mandate to provide these services and locally the ARC is integrated into Umatilla County's emergency plan. The ARC also supports evacuees in obtaining emergency prescription medications and serving as a conduit for health or welfare messages between evacuees and family/friends. The Umatilla County Sheriff's Office will be the lead agency in protecting property within evacuated areas and in establishing traffic control points related to wildfire.

## **Re-Entry**

The incident commander of the agency with jurisdiction during a wildfire event will determine under what conditions re-entry into evacuated areas will occur; on a case-by-case basis.

## Shelter in Place<sup>1</sup>

If you cannot evacuate your home when a fire approaches, then:

- Shut off liquefied petroleum gas (LPG) or natural gas valves.
- Move furniture away from windows and sliding glass doors to keep it from igniting from the heat of fire radiating through windows.
- Remove your curtains or drapes. If you have metal blinds or special fire resistant window coverings, close them to block heat radiation.
- Stay inside your house, away from outside walls.
- Close all doors, but leave them unlocked.
- Keep your entire family together and remain calm.
- Remember: If it gets hot in the house, it is many times hotter and more dangerous outside.

After the fire passes:

- Check the roof immediately, extinguishing all sparks and embers. If you must climb onto the roof, use caution, especially if it is wet.
- Check your yard for burning woodpiles, trees, fence posts or other materials.
- Keep the doors and windows closed.
- Continue rechecking your home and yard for burning embers for at least 12 hours.

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<sup>1</sup> **Take Responsibility: Be Prepared if a Wildfire Occurs Brochure** -Cooperative Wildfire Prevention Program by the Burns Interagency Fire Zone, Burns BLM.

## ***VI. Community Outreach and Education***

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### ***CWPP Public Meetings and Questionnaire Results***

The CWPP relies on input from citizens and communities about what they perceive to be most at risk from a wildfire event and what they value most about their surroundings. A series of eight public meetings were held across West Umatilla County during November/December 2007 and June 2008. The purpose was two-fold: first, to inform interested citizens of the planning effort covering the WUI areas of the County, and second, to gather information from the local knowledge base about the risks of wildfire events specific to their communities. These meetings were helpful in identifying the values and resources that the communities and residents felt were most at risk and in need of protection from wildfire.

Information about the CWPP project and upcoming meetings was distributed across the region. An informational brochure was created providing background and local project information; a public meeting flyer was designed listing dates and locations. Over 100 brochures and meeting notices were distributed to local agencies, businesses, and community gathering places such as grocery stores, hardware stores, city halls, and post offices. Information was also posted on the ODF website.

Each public meeting included a PowerPoint presentation followed by discussion and a question and answer session. Various members of the Steering Committee attended each meeting, along with private citizens interested in the effort. The attendance by the public was very limited.

Common themes presented themselves in the questionnaires returned. Many citizens do not see themselves at a tremendous risk to large wildfire. However, those that have been impacted in the past by wildfire were more than interested in improving protection from wildfire. Those that did respond to the questionnaires identified many values at risk as well, including wildlife habitat and agriculture. Other values at risk identified during public discussions and results from the questionnaire are –

Homes  
Hunting/Fishing  
Oregon Trail Sites  
Livestock  
Transportation Corridors  
Life  
Power Lines  
Hay Loss  
Neighborhood/Community

Rangeland Health  
Businesses/Schools  
Family  
Way of Life  
Air Quality  
Communication Sites  
Other Infrastructure  
Farm Buildings  
Airport

Structural fire chiefs that responded to their questionnaire identified many issues that impact response time during a wildfire event. Due to the size of many districts in West Umatilla County, getting to a home in a timely manner impacts how fire departments can best deliver service. Other issues raised related to improving structural fire response are –

- House identifiers in poor locations or non-existent
- Flashy grass fuels contribute to large fire spread, limiting the amount of time an engine can get to the fire
- Limited water supply
- Structural fire departments exist for incorporated cities; some rural structural fire districts
- Misunderstanding among citizens – any fire truck leads them to believe that agency responding can attend to a structure fire.
- Remote, scattered locations of communities – no fire protection available or very limited wildland fire protection
- Volunteers for the Rural Fire Protection Districts are desperately needed.

## ***Fire Prevention***

### **Living with Fire**

This national prevention program guides homeowners step-by-step through the process of eliminating hazards around their home. This newspaper publication shows how to create survivable space around your home, taking into account the topography and vegetation that surrounds it. The newspaper is available locally through ODF or on-line at <http://pnwfireprevention.com/prevention/living>.

### **Firewise**

This is a program developed by the National Fire Protection Association (NFPA) and features templates to help communities reduce risk and protect property from the dangers of wildland fires. Along with an interactive and resource-filled website full of free materials, the program offers training throughout the nation. Many Firewise workshops have been held across northeast Oregon where citizens and local agencies participated. For information concerning the Firewise program, visit online at <http://www.firewise.org>.

## Farm and Ranch Fire Safety

This prevention tool was developed by the Rangeland Protection Association,



BLM, and Oregon Department of Forestry. This tool can be distributed to cities, the county planning department, and fire districts for use in prevention programs. A copy of the information can be obtained by contacting ODF, Northeast Oregon District, at (541) 963-3168 or the Rangeland Protection Coordinator for ODF, Eastern Oregon Area, at (541) 447-5658. Or, you may refer to the copy in the Appendices of this plan.

### Fire-Resistant Plants for Oregon Home Landscapes

The OSU Extension Service in Redmond has developed a pamphlet suggesting specific types of vegetation

**Fire-resistant** plants are plants that don't readily ignite from a flame or other ignition sources. Although fire-resistant plants can be damaged or even killed by fire, their foliage and stems don't contribute significantly to the fuel and, therefore, the fire's intensity.

that may reduce wildfire risk around the home. Most people landscape their property with aesthetics in mind, not thinking about whether a plant or shrub material is flammable and could actually increase the risk around their home. This brochure describes the different plant materials that homeowners can use for landscaping that will complement their home while improving the chances of their home surviving a wildfire. Brochures have been distributed at public meetings and are available at the ODF office or through the OSU Extension Service office in Redmond. Visit their online site at <http://www.extension.oregonstate.edu/emergency/FireResPlants.pdf>.

### Rangeland Fire Protection Associations (RFPA) **(Insert Logo)**

An RFPA is setup as a non-profit corporation to prevent and suppress range fires. This is an opportunity for local landowners to protect their own and their neighbor's property where no fire protection services are currently available. RFPA's operate under the concept of "neighbors helping neighbors." For more information, contact the Rangeland Coordinator, ODF-Eastern Oregon Area, at (541) 447-5658.



## **Fuels Treatment Opportunities**

A healthy rangeland is the best defense against large wildfire. Landowners are encouraged to work with specialists from Farm Services or NRCS on ways to improve rangeland health that will also lead to mitigating the detrimental effects of large wildfire. Not only could those agencies assist landowners in determining the best way to return the landscape to natural vegetation following a wildfire, they can also assist in treating invasive weeds. NRCS may be able to offer cost-share assistance through their conservation program geared toward promoting a more fire-adaptive ecosystem. Check with NRCS at <http://www.or.nrcs.usda.gov/> or call (541) 278-8049.

## ***VII. Monitoring and Evaluation***

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### ***Schedule***

The maintenance for this plan will be directed by the Umatilla County Commissioners, and coordinated with the core committee members of the represented agencies. The committee that put this plan together will be best fit for evaluating how goals and objectives are being accomplished as set forth in this plan.

Proposed CWPP plan maintenance will be set annually to review the plan, reevaluate priorities for action items and progress, with a comprehensive revision set for every five years. Annual review of the strategy recommendations will be necessary as various projects or tasks are accomplished and areas at-risk decline in hazard rating. Annual review will also be needed as County infrastructure needs change or are met and should include representation of stakeholders who participated in the development of the plan being reviewed.

A total revision of the plan every five years is recommended in accordance with revision of the County's Natural Hazard Mitigation Plan. Also, needs of the county change; specifically, population increases, fuels reduction projects are completed, emergency services are provided in outlying areas, and computer support needs are met or increased and areas of extreme wildfire hazard decline or increase.

### ***Continued Public Involvement***

The continued involvement by the public for the West Umatilla County Wildfire Protection Plan is needed to accomplish many of the recommendations. Copies of the plan will be available at the Umatilla County Planning Department office, Oregon Department of Forestry in Pendleton, and on the web at <http://www.co.umatilla.or.us/>.

Continued dialogue about the mission set forth in this plan with the public is always appreciated. The website provides an opportunity to send comments and/or questions to the Plan contact at any time.

## ***VIII. Appendices***

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### **Appendix A – Glossary and Acronym List**

#### ***Glossary***

**At-Risk Community:** a group of homes or other improvements (such as utilities or transportation routes) within or adjacent to federal land in which conditions are conducive to a large-scale wildland fire and pose a significant threat to human life or property.

**Community Wildfire Protection Plan:** a plan for at-risk communities identifying and prioritizing areas for hazardous fuels treatments, and recommending methods of treatment.

**Conflagration:** a raging, destructive fire. Often used to describe a fire burning under extreme fire weather. The term is also used when a wildland fire burns into a wildland-urban interface, destroying many structures.

**Crown Fire:** a fire that advances from treetop to treetop or shrubs independent of a surface fire.

**Defensible Space:** an area, typically a width of 30 feet or more, between an improved property and a potential wildfire where the combustibles have been removed or modified.

**Escape Route:** route away from dangerous areas on a fire and should be pre-planned.

**Evacuation:** the temporary movement of people and their possessions from locations threatened by wildfire.

**Extreme Fire Behavior:** a level of fire behavior characteristics that ordinarily precludes methods of direct control. One or more of the following is usually involved: high rates of speed, prolific crowning and/or spotting, presence of fire whirls, a strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environments and behave erratically, sometimes dangerously.

**Fire Behavior:** the manner in which a fire reacts to the influences of fuel, weather and topography.

**Fire Front:** that part of the fire within which continuous flaming combustion is taking place. Unless otherwise specified it is assumed to be the leading edge of the fire perimeter.

**Hazard:** a fuel complex defined by volume, type condition, arrangement and location (topography) that determine the ease of ignition and resistance to control. Hazards may also include the built environment such as constructed improvements, access to those improvements, and water availability.

**Fire Prevention:** activities, including education, engineering, enforcement and administration that are directed at reducing the number of wildfires, the costs of suppression and fire-caused damage to resources and property.

**Fire Protection:** the actions taken to limit the adverse environmental, social, political and economical effects of fire.

**Fire Regime:** periodicity and pattern of naturally occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity and area extent.

**Fire Storm:** violent convection caused by a large continuous area of intense fire. Often characterized by destructively violent surface indrafts, near and beyond the perimeter, and sometimes by tornado-like whirls.

**Fire Weather:** weather conditions that influence fire starts, fire behavior or fire suppression.

**Firebrand:** any source of heat, natural or human made, capable of igniting wildland fuels. Flaming or glowing fuel particles that can be carried naturally by wind, convection currents, or by gravity into unburned fuels. Examples include leaves, pine cones, glowing charcoal and sparks.

**Fuel Condition:** relative flammability of fuel as determined by fuel type and environmental conditions.

**Fuel Loading:** the volume of fuel in a given area generally expressed in tons per acre.

**Fuel Modification:** any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.

**Fuels:** all combustible material within the wildland-urban interface, including vegetation and structures.

**Fuel Break:** an area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for fire fighting.

**Greenbelt:** a fuel break designated for use other than fire protection.

**Ground Fuels:** all combustible materials such as grass, duff, loose surface litter, tree or shrub roots, rotting wood, leaves, peat or sawdust that typically support combustion.

**Hazardous Areas:** those wildland areas where the combination of vegetation, topography, weather and the threat of fire to life and property create difficult and dangerous problems.

**Hazard Reduction (see also Mitigation):** any treatment of living and dead fuels that reduces the threat of ignition and spread of fire.

**Ignition Probability:** chance that a firebrand will cause an ignition when it lands on receptive fuels.

**Initial Attack:** the actions taken by the first resources to arrive at a wildfire to protect lives and property, and prevent further extension of the fire.

**Ladder Fuels:** fuels that provide vertical continuity allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease.

**Mitigation:** action that alleviates the severity of a fire hazard or risk.

**Overstory:** that portion of the trees in a forest that forms the upper or uppermost layer.

**Preparedness:** 1) Condition or degree of being ready to cope with a potential fire situation. 2) Mental readiness to recognize changes in fire danger and act promptly when action is appropriate.

**Prescribed Burning:** controlled application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions, which allows the fire to be confined to a predetermined area, and to produce the fire behavior and fire characteristics required to attain planned fire treatment and resource management objectives.

**Risk:** the chance of a fire starting from any cause.

**Structural Fire Agency:** a firefighting organization, usually at the local level, trained and equipped to fight structure fires. Local structural fire agencies may also be trained and equipped to combat wildland fires.

**Suppression:** the most aggressive fire protection strategy, it leads to the total extinguishment of a fire.

**Surface Fuel:** fuels lying on or near the surface of the ground, consisting of leaf and needle litter, dead branch material, downed logs, bark, tree cones, and low stature living plants.

**Survivable Space:** the characteristics of a home, its materials and design, in concert with the flammable materials in a home's immediate surroundings that result in high ignition resistance from flames and firebrands (burning embers). Survivable space characteristics relate to the ignitability of a home without necessarily including the higher thermal vulnerability of firefighters.

**Tree Crown:** the primary and secondary branches growing out from the main stem, together with twigs and foliage.

**Understory:** low-growing vegetation under a stand of trees. Also, that portion of trees in a forest stand below the overstory.

**Wildfire:** an unplanned and uncontrolled fire spreading through vegetative fuels, at times involving structures.

**Wildfire Causes:** the general causes of wildland fires are 1) natural, like lightning; 2) accidental, like debris burning; and 3) intentional, like arson.

**Wildland:** an area in which development is essentially non-existent, except for roads, railroads, power lines and similar transportation facilities. Structures, if any, are widely scattered.

**Wildland Fire:** any fire occurring on the wildlands, regardless of ignition source, damages or benefits.

**Wildland Fire Agency:** a firefighting organization, usually at the state or federal level, trained and equipped to fight wildland fires. Typically, wildland fire agencies are not trained and equipped to combat structure fires.

**Wildland-Urban Interface:** an area within or adjacent to an at-risk community where wildland fuels intermix with combustible homes and structures. Wildland-Urban Interface areas in Umatilla County are identified in the Umatilla County Community Wildfire Protection Plan – Blue Mountains/Foothills Region and West Umatilla County.

### ***Acronym List***

**BIA** – Bureau of Indian Affairs

**BLM** – Bureau of Land Management

**CAR** – Community at Risk

**CSEPP** – Chemical Stockpile Emergency Preparedness Program

**CTUIR** – Confederated Tribes of the Umatilla Indian Reservation

**EOC** – Emergency Operations Center

**EOP** – Emergency Operations Plan

**FEMA** – Federal Emergency Management Agency

**HFRA** – Healthy Forests Restoration Act

**NFP** – National Fire Plan

**NRCS** – Natural Resource Conservation Service

**ODF** – Oregon Department of Forestry

**ODOT** – Oregon Department of Transportation

**OEM** – Oregon Emergency Management

**OSFM** – Oregon State Fire Marshall

**OSP** – Oregon State Police

**PLS** – Public Land Survey

**RFPA** – Rangeland Fire Protection Association

**RFPD** – Rural Fire Protection District

**UCES** – Umatilla County Emergency Services

**USFS** – United States Forest Service

**USFW** – United States Fish & Wildlife

**WUI** – Wildland-Urban Interface

## Appendix B – Maps



## Appendix C – Mitigation Action Sheets

Juniper Canyon WUI  
CAR Name: Holdman

Priority Category: High

### Risk Assessment Factors

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	5 (H)	3 (M)	5 (H)	3 (H)	2 (H)	21 (H)

### Education Projects

- Distribute Farm and Ranch Fire Safety Brochure to individual landowners.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

### Treatment Projects

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- Coordinate with Lewis & Clark College to develop a plan for building in a fire break around homes proposed in subdivision proposed along river.

### Emergency Response Projects

- County to determine how homes proposed along river (Lewis & Clark College land development) will receive structural fire protection.
- Encourage and support development of a RFPA (possibly room for two).
- Improve coordination and communication for response to BLM parcels within WUI.

Pendleton WUI

**CAR Name:** Pendleton, Riverside, McKay

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	3 (M)	3 (M)	5 (H)	3 (H)	2 (H)	19 (H)

**Education Projects**

- Explore creating Firewise communities in the area.
- Participate in community events, distributing fire prevention materials.
- Distribute information related to ordinances already in place; determine how those ordinances can be enforced or enhanced.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields, along roads and directly behind subdivisions.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.

**Emergency Response Projects**

- Use radio media for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.
- Resolve communication issues – frequency problems and confusion when/where to deal with different dispatch centers (Umatilla County vs. PICC).
- Determine how best to provide Logistics to fully support large incidents.
- Develop process for identification, use, and training in handling air resources.

Stanfield WUI

**CAR Name:** Stanfield, Hazel Lane, Ash Road

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	5 (H)	3 (M)	3 (M)	3 (H)	2 (H)	19 (H)

**Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Create bilingual version of “Surviving Wildfire” Program.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- City to work with farmers to create fire breaks adjacent to buildings in town.
- Railroad to create fire breaks on property to eliminate fire spread to WUI.
- Specific treatment areas to consider would be the open space that abuts Vantage Addition, wetland area near Orchard Park, and CRP adjacent to Hazel Lane.

**Emergency Response Projects**

- Work with Railroad to implement emergency response procedure.
- Improve communications with USF&W. Frequency issues arise when Stanfield Fire responds to Cold Springs to assist USF&W.

Umatilla WUI

**CAR Name:** Umatilla, Hat Rock, Southshore

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
2 (M)	3 (M)	3 (M)	5 (H)	3 (H)	2 (H)	18 (H)

**Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.
- Post prevention signs in susceptible areas along river – those areas you know population recreates.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.

**Emergency Response Projects**

- Use radio media for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.
- Determine capability of fire department to respond to a wildland fire event.

Echo WUI

**CAR Name:** Echo, Butter Creek, I-84 Corridor

**Priority Category:** High

### **Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	3 (M)	3 (M)	5 (H)	3 (H)	1 (L)	18 (H)

### **Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

### **Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.

### **Emergency Response Projects**

- Use radio media for communicating emergencies.
- Work with Railroad to implement emergency response procedure.
- Determine practicality for using Reverse 9-1-1 in emergency situations.

Rieth WUI  
CAR Name: Rieth

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	3 (M)	3 (M)	5 (H)	3 (H)	1 (L)	18 (H)

**Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.

**Emergency Response Projects**

- Use radio for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.

Hermiston WUI

CAR Name: Hermiston

Priority Category: High

### Risk Assessment Factors

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	3 (M)	3 (M)	3 (M)	3 (H)	2 (H)	17 (H)

### Education Projects

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Create bilingual version of “Surviving Wildfire” Program.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.
- Work with railroad to develop a plan for prevention, like right-of-way treatment, spark arrestor clean-out, and watchman service after work is conducted on tracks.
- Develop burn management/smoke management plans.

### Treatment Projects

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.
- Specific treatment opportunities to consider are the Irrigation District property, maintenance of ODOT projects, and the railroad right-of-way.

### Emergency Response Projects

- Use radio media for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.
- Improve radio communication interoperability.

Mission WUI

**CAR Name:** Mission, Wildhorse

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
3 (H)	3 (M)	3 (M)	3 (M)	3 (H)	2 (H)	17 (H)

**Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events, like Health & Safety Fair and Salmon Walk.
- Encourage Firewise Communities practices around homesites.
- Promote spring clean-up day.
- Conduct fire prevention program in the school – both elementary and high school.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.
- Continue to implement burn permit/smoke management program. Improve communication about the program with the community.
- Adopt Umatilla County CWPP into planning; continue to implement strategies in CWPP.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- Continue implementation of BIA fuels treatment projects; maintain completed projects.
- CTUIR to work with farmers to create fire breaks adjacent to buildings in community.
- Work with railroad to create a fuels treatment project along rail line in WUI.

**Emergency Response Projects**

- Seek alternative funding source for radio frequency maintenance and equipment (once CSEPP funding)
- CTUIR Fire needs to purchase tender.
- Improve volunteer recruitment practices.
- Continue to provide annual refreshers to firefighters.



Helix WUI  
CAR Name: Helix

Priority Category: High

### Risk Assessment Factors

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
2 (M)	5 (H)	1 (L)	5 (H)	3 (H)	1 (L)	17 (H)

### Education Projects

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

### Treatment Projects

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.

### Emergency Response Projects

- Use radio media for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.

Pilot Rock WUI

**CAR Name:** Pilot Rock, West Hills, Butter Creek

**Priority Category:** High

### **Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
2 (M)	5 (H)	3 (M)	3 (M)	3 (H)	1 (L)	17 (H)

### **Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

### **Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.

### **Emergency Response Projects**

- Use radio media for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.
- Utilize neighborhood watch program to notify residents in case of emergency.

Milton-Freewater WUI

**CAR Name:** Milton-Freewater, Umapine

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
2 (M)	3 (M)	3 (M)	5 (H)	3 (H)	1 (L)	17 (H)

**Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town.

**Emergency Response Projects**

- Use radio for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.
- Explore practicality of wildland training for City of Milton-Freewater Fire Department, including funding.

Umatilla Depot WUI  
CAR Name: Umatilla Depot

**Priority Category:** High

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
1 (L)	3 (M)	3 (M)	3 (M)	3 (H)	2 (H)	15 (M)

**Education Projects**

- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Develop fire prevention plan and share with the County.

**Treatment Projects**

- Conduct fuels treatment on Depot property, utilizing tilling, discing, and reseedling to fire-resistant natural vegetation.
- Develop maintenance plan for fuels treatment.

**Emergency Response Projects**

- Improve response on Depot.
- Develop contingency plan for fire escape off of Depot.

Highway 11 Corridor WUI  
CAR Name: Adams, Athena

Priority Category: Moderate

**Risk Assessment Factors**

Fire Occurrence	Topography	Total Fuels	Protection Capability	Weather	Values At-Risk	Aggregate Score
1 (L)	5 (H)	1 (L)	3 (M)	3 (H)	1 (L)	14 (M)

**Education Projects**

- Distribute Farm and Ranch Fire Safety Brochure at community events.
- Utilize fire prevention measures during traditional fire season months, like having tools and water available while mowing or welding.
- Encourage recycling of flammable materials and chemicals.

**Treatment Projects**

- Utilize agroforestry practices to create fire breaks between fields.
- Utilize green and brown stripping; create defensible space with tilling and discing practices between fields and along roads.
- Coordinate with NRCS to determine best times to mow or burn CRP when creating fire-adaptive landscapes.
- City to work with farmers to create fire breaks adjacent to buildings in town, like the school.

**Emergency Response Projects**

- Use radio for communicating emergencies.
- Determine practicality for using Reverse 9-1-1 in emergency situations.

## Appendix D – Firewise Checklist



- ✓ Keep a clearing of at least 30 feet around your house for fire fighting equipment.
- ✓ Space the trees you plant carefully.
- ✓ Remove **ladder fuels**. They link the grasses and brush with the tree tops.
- ✓ Create a **fuel break** - driveways, gravel walkways, or lawns.
- ✓ Maintain your irrigation system regularly.
- ✓ Prune limbs so the lowest is between 6' - 10' from the ground.
- ✓ Remove leaf litter from your roof and yard.
- ✓ Mow regularly.
- ✓ Remove dead or overhanging branches.
- ✓ Store firewood away from your house.
- ✓ Refuel garden equipment carefully and maintain regularly.
- ✓ If you smoke, use your ashtray.
- ✓ Store and use flammable liquids properly.
- ✓ Dispose of cuttings and debris promptly, according to local regulations.
- ✓ Observe local regulations regarding vegetative clearances and fire safety equipment requirements.
- ✓ Check your generator and/or hose to be sure it is in good repair.
- ✓ Don't keep combustibles under decks or elevated porches.
- ✓ Make trellises of non-flammable metal.
- ✓ Have at least two ground-level doors as safety exits.
- ✓ Keep at least two means of escape (either a door/window) in each room.
- ✓ Mark your driveway and access roads clearly.
- ✓ Keep ample turnaround space near your house for fire equipment.
- ✓ Prevent sparks from entering your house by covering vents with wire mesh no larger than 1/8".
- ✓ When possible, use construction materials that are fire-resistant or non-combustible.

## Appendix E – Farm and Ranch Fire Safety Checklist

A growing number of Oregonians live in remote areas where fire response may be miles away or may not exist at all.



Farm and ranch activities are associated with fire starts across Oregon. Take the time to check your farm or ranch for things you can do to mitigate the risk of a wildfire. It can make a difference.

*Farm and Ranch Fire Safety – It's up to you!*

This message from the following sponsors –



Fires associated with farm and ranch operations account for hundreds of thousands of dollars loss each year. Most large farms and ranches in eastern Oregon are in remote locations where assistance from a fire protection agency is limited (lengthy response time) or non-existent (unprotected areas).

### *You can....*

- ✓ **Use fire-resistant building materials.** Install metal, tile or concrete roofing material when building or remodeling. Use fire-resistant siding such as brick, metal, concrete or stucco. Cover all vents with 1/8" mesh screen to block embers from entering the structure.
- ✓ **Check the survivable space around your home and outbuildings.** Clear flammable vegetation and replace with fire-resistant plants or keep dry grass mowed. Move wood piles and lumber away from structures. Store gasoline, propane, fertilizer and other flammables away from the home (preferably in a metal shed). Check the distance between buildings and hay storage – have a plan to deal with a fire in any one structure to keep it from spreading to another.
- ✓ **Check the electrical wiring.** Ensure that electrical wiring is protected from potential animal damage and that it is grounded and adequate for the load. Avoid overloading circuits. This includes irrigation pumps.
- ✓ **Check around fueling areas.** Clear fueling areas of dry vegetation. Ground all fueling nozzles to avoid sparking a fire. Have a fire extinguisher available.
- ✓ **Check moisture content of hay.** Green hay fires are a common occurrence. Check stacks regularly; don't open a "hot stack" without adequate fire equipment on-site. Opening a stack will increase fire intensity.
- ✓ **Check all exhaust systems.** Place spark arrestors on all chimneys, stovepipes, tractors and other equipment. Hot carbon particles thrown from exhaust pipes can start a fire.
- ✓ **Be prepared when burning.** Ensure there is adequate clearance for open burning. Have fire-fighting equipment available. Check fires to make sure they are dead out before leaving the area.
- ✓ **Check welding areas.** Weld only in areas free of flammable vegetation and fuel. Have a plan for extinguishing any fire starts from sparks.
- ✓ **Check your firefighting equipment and water supply.** Always have both available and have a plan for catching any fire starts. You are the first line of defense in a wildfire.

## Appendix F – Fire Safe Agroforestry

# Fire... a hot button for agroforestry!

**Lyn Townsend**

Forester, West National Technology Support Center, Natural Resources Conservation Service, Portland, OR

HUMANS and fire have had a long history—sometimes good, sometimes not so good. According to the National Interagency Fire Center, over 96,000 fires burned nearly 10 million acres in 2006. This includes wildfires, which comprised most of the acreage, and prescribed fires. From 1999 to 2006, the average wildland fire acres burned was nearly double the average of 1960 to 1998—6.8 million versus 3.5 million acres, respectively! Why? The most likely answers are: 1) an increase in fuel loads on forest and shrub lands resulting from a lack of active fuel management in recent decades, and 2) a change in climate or climate cycles. The risk of the loss of life and property continues to increase as more and more people move into the Wildland Urban Interface (WUI)—pronounced “Wu-eee”—that fringe of wild land near suburbs or suburbs directly embedded into wildlands.

Fires are classed as either “uncontrolled” or “wild,” or “controlled” or “prescribed.” Of course, the latter can

**Wildfires can be devastating, but defensive agroforestry practices and strategic design criteria can be crucial management tools to reduce wildfire risk.**

become the former with unexpected high winds or lack of preparation. Fire relates to agroforestry in two ways: by using agroforestry practices to control buffer against wildfire, and by protecting

agroforestry practices from being damaged or killed by fire.

Key practices and how they address these aspects are:

- **Silvopasture** – In a silvopasture system, trees and shrubs are planted, grown, and maintained on a wide spacing with an understory that is grazed by livestock. Fuel loads are kept low, ladder fuels are nearly absent and, should a crown fire start, the



The area or strip near the road (far edge of wind-break) will be maintained mechanically as an effective firebreak reducing the likelihood of fires spreading into and through the planting. Photo courtesy of USDA NRCS

trees are spaced widely enough to inhibit crown-to-crown spread, thereby minimizing the level of damage to the trees or to the adjacent non-grazed forest land. Essentially, a silvopasture acts as a “fuel break” with grazing livestock providing the built-in annual understory fuel management.

- **Riparian forest buffers, windbreaks, alley cropping, multi-story cropping** – These agroforestry practices are effective fire control techniques when fire-resistant plant species, such as many native deciduous or succulent-leaf trees, are used and the planting is strategically located so that it can prevent or at least stall the spread of fire from one area to another. Prevailing wind

direction during fire season is an important planning criterion for locating the agroforestry practice. Another tactic is planting fire-resistant trees in the outer rows of multi-row plantings near homes or on the edges of small communities. Here, the trees create a “three dimensional” firebreak and could even catch firebrands that typically jump ahead and downwind during

most wildfires. For row-type plantings, the outer edge near a road (which could be a fire-ignition point) can be maintained mechanically as an effective firebreak reducing the likelihood of fires spreading into and through the planting. A design criterion to consider for selecting trees and shrubs, particularly shrubs, are choosing those species with capability to resprout after fire. Even though the damage has been done, at least the shrub can regenerate quickly using the existing root system.

Wildfires can be devastating, but defensive agroforestry practices and strategic design criteria can be crucial management tools to reduce wildfire risk and, if fire occurs, minimize the damage. †



## Appendix G – Evacuation Tips

**By preparing ahead**, your house has a better chance of surviving a wildfire. When a wildfire is immediately threatening your area, take the following steps to protect your home.

**First, if you see a fire approaching your home, report it immediately by dialing 911.** Stay on the phone to answer additional questions the emergency dispatcher may ask.

**Next, dress properly to prevent burns and lifelong scars.** Wear long pants and cotton or wool long-sleeve shirts or jackets. Gloves and a damp cloth provide added protection. Do not wear short sleeve shirts or clothing made of synthetic fabrics.

If there is time before the fire arrives, take the following actions.

### **Emergency Wildfire Survival Checklist**

#### ***Preparing to Evacuate***

- Park your car in the garage, heading out with windows closed and keys in the ignition.
- Close the garage door but leave it unlocked; disconnect the automatic garage door opener in case of power failure.
- Place valuable documents, family mementos and pets inside the car in the garage for quick departure, if necessary.
- If you do evacuate, use your pre-planned route, away from the approaching fire front.
- Keep a flashlight, cell phone and portable radio with you at all times.
- If you are trapped by fire while evacuating in your car, park in an area of clear of vegetation, close all vehicle windows and vents, cover yourself with a blanket or jacket and lie on the floor.
- If you are trapped by fire while evacuating on foot, select an area clear of vegetation along a road. Cover any exposed skin with a jacket or blanket. Avoid canyons that can concentrate and channel fire.

#### **Outside Your Home**

- Move combustible yard furniture away from the house or store it in the garage; if it catches fire while outside, the added heat could ignite your house.
- Cover windows, attic openings, eave vents, and sub-floor vents with fire resistive material such as 1/2 inch or thicker plywood. This eliminates the possibility of sparks blowing into hidden areas within the house. Close window shutters if they are fire resistive.
- Attach garden hoses to spigots and place them so they can reach any area of your house.
- Fill trash cans and buckets with water and locate them where firefighters can find them.
- If you have an emergency generator or a portable gasoline-powered pump that will supply water from a swimming pool, pond, well, or tank, clearly mark its location and make sure it is ready to operate.
- Place a ladder against the house on the side opposite the approaching fire to help firefighters to rapidly get onto your roof.
- Place a lawn sprinkler on flammable roofs, but don't turn it on unless the fire is an immediate threat. You do not want to reduce the supply of water for the firefighters.

#### **Inside Your Home**

- Close all windows and doors to prevent sparks from blowing inside.
- Close all doors inside the house to slow down the spread of fire from room to room.
- Turn on a light in each room of your house, on the porch, and in the yard. This will make the house more visible in heavy smoke or darkness.
- Fill sinks, bathtubs, and buckets with water. These can be important extra water reservoirs.

## **Appendix H – Plan Locations**

Umatilla County Emergency Management  
915 SE Columbia Drive  
Hermiston, OR 97838

Umatilla County Planning Department  
216 SE 4<sup>th</sup> Street  
Pendleton, OR 97801

Oregon Department of Forestry  
Pendleton Unit  
1055 Airport Road  
Pendleton, OR 97801

Confederated Tribes of the Umatilla  
Emergency Services  
Confederated Way (off of Mission Road)  
Community of Mission on Reservation

Located on Umatilla County Website at [www.co.umatilla.or.us](http://www.co.umatilla.or.us)