Upper Deschutes River Natural Resources Coalition Revised Community Wildfire Protection Plan

February 21, 2007

Adopted by the Upper Deschutes River Natural Resources Coalition Board of Directors on February 20, 2007

Declaration of Agreement

The Healthy Forests Restoration Act requires that the applicable local government, the local fire department, and the state entity responsible for forest management agree to the Community Wildfire Protection Plan. The undersigned have reviewed this plan and agree to the completed document.

_____ _____

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La Pine Rural Fire Protection District

_____ _____

Carl Jansen, President — Date
Upper Deschutes River Natural Resources Coalition

_____ _____

Travis Medema, District Forester — Date
Oregon Department of Forestry

_____ _____

Dennis Luke, Commissioner — Date
Deschutes County Board of Commissioners

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Mike Daly, Chair — Date
Deschutes County Board of Commissioners

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Acknowledgements

The following people are acknowledged for their participation and commitment resulting in the creation of the Upper Deschutes River Natural Resources Coalition Community Wildfire Protection Plan.

Scott Baldwin, La Pine RFPD
Mike Benefield, Central Oregon Fire Management Service
David Blair, Original project coordinator
Steve Castillo, USDI Bureau of Land Management
Ray Cecchi, River Meadows
Lisa Clark, Central Oregon Fire Management Service
Jim Court, Former Fire Chief, La Pine RFPD
Phil Cruz, USDA Forest Service
Dean Draben, Oregon Water Wonderland I
Bob Dryden, Beaver Road Special Road District
Bruce Edmunston, Spring River Fire & Safety Association
Dennis Fiore, Bureau of Land Management
Melinda Fortner, Deschutes County GIS
Stephen Fitzgerald, OSU Extension Service
Dr. Stuart Garrett, Oregon Native Plant Society
Jim Gustafson, Fire Chief, La Pine RFPD
Sue Manley Hinton, Sunriver Nature Center & Observatory
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Carl Jansen, President, UDRNRC
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Jake Keller, Oregon Water Wonderland II
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Ken Lane, Vandevert Ranch
Jim Larsen, Cougar Grove
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Tim Lillebo, Oregon Natural Resources Council
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Tom Russell, Deschutes River Rec Homesites #1-5
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Vern Risseeuw, Deschutes River Rec Homesites #6
Conrad Ruel, Deschutes River Rec Homesites #1-5
Jim Schlaich, USDA Forest Service
Walt Schloer, USDA Forest Service, Retired
Cathy Smith, Crosswater
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Upper Deschutes River
Natural Resources Coalition
Community Wildfire Protection Plan

Purpose

The purpose of the Upper Deschutes River Natural Resources Coalition Community Wildfire Protection Plan (CWPP) is to:

- Protect lives and property from wildland fires;
- Maintain a watershed with healthy fire resistant forests providing quality fish and wildlife habitat;
- Instill a sense of responsibility among residents, visitors, conservation groups and federal, state and local agencies to take preventive actions regarding wildland fire;
- Provide guidance to federal agencies for implementing fuels reduction treatments;
- Prioritize the use of limited funds for the removal of ladder fuels in neighborhoods and surrounding lands;
- Increase public understanding of living in a fire-adapted ecosystem;
- Increase the ability of Coalition communities to prepare for, respond to and recover from wildland fires;
- Restore fire-adapted ecosystems with diverse, multi-structured forests emphasizing large ponderosa pine trees;
- Improve the fire resilience of the landscape while protecting other social, economic and ecological values;
- Promote biomass utilization and alternative energy; and
- Improve carbon dioxide emission levels and carbon sequestration.

This document outlines the priorities, strategies and action plans for fuels reduction treatments in the Upper Deschutes River Natural Resources Coalition (UDRNRC or "Coalition") planning area. This CWPP also addresses special areas of concern and makes recommendations for reducing structural vulnerability and creating defensible spaces in seven sub regions within the planning area. It is intended to be a living vehicle for fuels reduction, education, and other projects to decrease overall risks of loss from wildland fire; updated and revisited as necessary to address its purpose.

Wildland fire is a natural and necessary component of forest ecosystems across the country. Central Oregon is no exception. Historically, wildland fires have shaped the forests valued by residents and visitors. Forests and other wildlands are now significantly altered due to fire prevention efforts, modern suppression activities and a general lack of large scale fires, resulting in overgrown forests with closed canopies and decaying fuels that burn more intensely than in the past. In addition, the recent explosion in population has led to increased residential development into forests in the wildland urban interface (WUI). To address these issues, members of fire agencies, local businesses and organizations, and individuals collaborated to develop the Upper Deschutes River Natural Resources Coalition CWPP.

Although reducing the risk of catastrophic wildland fire is the primary motivation behind this plan, managing the forests and wildlands for hazardous fuels reduction and fire resilience is only one part of the larger picture. Residents and visitors desire healthy, fire-resilient forests and wildlands that provide habitat for wildlife, recreational opportunities, and scenic beauty. The Coalition's mission is ***to maintain a watershed with healthy fire resistant forests, pure and abundant river flows, restored and protected wildlife habitat with appropriately segregated ATV use and recreational shooting; sustained by the effective stewardship of residents, visitors, conservation groups, federal, state, and local agencies.***

The Coalition's CWPP identifies surrounding lands, including federal and state lands, at risk from catastrophic wildland fire. It identifies strategies for reducing hazardous wildland fire fuels while improving forest health, and improving fire protection capabilities. It also identifies actions that individuals can take to help protect themselves and their neighborhoods against the threat of wildland fires.

Collaboration

In 2003, the Congress passed historical bi-partisan legislation: the Healthy Forests Restoration Act (HFRA). This legislation directs federal agencies to collaborate with communities in developing a CWPP, which includes the identification and prioritization of areas needing hazardous fuels treatment. It further provides authorities to expedite the National Environmental Policy Act (NEPA) process for fuels reduction projects on federal lands. The act also requires that 50% of funding allocated to fuels projects be used in the wildland urban interface.

For the first time communities have the opportunity to direct where federal agencies place their fuels reduction efforts. With a CWPP in place, community groups can apply for federal funding and other grants to treat hazardous fuels and address special concerns to reduce the risk of catastrophic loss as a result of wildland fire.

The Upper Deschutes River Natural Resources Coalition is a recognized non profit organization in the state of Oregon whose membership consists of sixteen (16) neighborhoods in southern Deschutes County south of Sunriver and northeast of Wickiup Reservoir in La Pine. The group is an assembly of "neighborhoods collectively addressing natural resource issues along the Upper Deschutes River and its tributaries."

In 2004 community members local neighborhoods came together with representatives from the La Pine Rural Fire Protection District, the Oregon Department of Forestry, the USDA Forest Service, the USDI Bureau of Land Management, and Deschutes County to develop the original Upper Deschutes River Natural Resources Coalition Community Wildfire Protection Plan. This group signed into place the first CWPP in the state of Oregon.

Since that time, the Coalition has been a leader in implementing projects that address the critical condition of the forestlands and watershed of the Upper Deschutes River area. The Coalition continues to increase its membership with neighborhoods interested in furthering the restoration and protection of natural resources along the Upper Deschutes River. The Coalition is also an active participant in Project Wildfire and participates regularly in wildfire prevention education and activities.

In 2006, the Coalition assembled a Steering Committee to revisit the goals and priorities of the original CWPP to recognize completed projects and account for additional high risk areas through a comprehensive risk assessment process. The Steering Committee consists of members from the Upper Deschutes River Natural Resources Coalition, the La Pine Rural Fire Protection District, the Oregon Department of Forestry, the USDA Forest Service, the USDI Bureau of Land Management, Deschutes County and Project Wildfire. This is the revised plan as prepared by the Steering Committee in accordance with *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities* (Communities Committee, Society of American Foresters, National Association of Counties, National Association of State Foresters 2005); and Deschutes County Resolution 2004-093.

The Coalition acknowledges that there are neighborhoods in this planning area that are not members of the non profit group. Regardless of official membership in the Coalition, all neighborhoods and ownerships within the planning area are addressed by this CWPP.

A draft of this CWPP was available for public comment for 30 days prior to the final signing and approval of the plan. Interested parties provided comments during this period.

The Upper Deschutes River Natural Resources Coalition adopted this plan on February 20, 2007. Deschutes County adopted the UDRNRC Community Wildfire Protection Plan by resolution on February 21, 2007.

Background information

The Upper Deschutes River Natural Resources Coalition has a dynamic history of proactive projects that will help protect its neighborhoods from the threat of wildfire. The Fall River Estates neighborhood in cooperation with Oregon Department of Forestry completed neighborhood-wide defensible space work and in 2005 was designated as a Firewise Community, the first such designation in the State of Oregon. Since then, the Crosswater destination resort community is in full compliance with Firewise standards and the newest destination resort, Caldera Springs, is on target for national recognition in 2007 as a Firewise Community.

In July 2003 the Davis Fire burned 21,181 acres and caused the evacuation of residents from the Haner Park subdivision; in August 2005 the Park Fire burned 139 acres and caused the evacuation of 500 people from the La Pine State Park and over 200 residents in nearby subdivisions. These catastrophic events served as a wake-up call to residents here as both fires bordered Coalition neighborhoods.

As part of the ongoing wildland fire risk management of the surrounding public and private forestlands, the US Forest Service, the Bureau of Land Management, Oregon Department of Forestry, Deschutes County and private landowners are engaged in several hazardous fuels treatment projects.

The Coalition collaborated with the US Forest Service to plan and implement the General Patch Bridge and Myst fuels reduction projects. The General Patch Bridge project, completed in 2006, treated 80 acres bordering Oregon Water Wonderland I & II and River Meadows neighborhoods. The Myst project will be implemented in 2007 and will treat 763 acres bordering Spring River Acres, River Forest Acres, Oregon Water Wonderland I, Beaver Road District and Fall River Estates neighborhoods.

Oregon Department of Forestry is working with local neighborhoods to create a shaded fuel break along the west boundary of Vandevert Ranch and Oregon Water Wonderland II and Thousand Trails to the south.

Individual landowners in Coalition neighborhoods are also taking responsibility for reducing the wildfire risks. Currently, individual property owners in Oregon Water Wonderland Units I & II, Deschutes River Recreation Homesites #1-5 and #6 are undertaking ladder fuels reduction projects on their properties to remove hazardous fuels on over 400 acres. These projects will be completed in 2009.

Community Base Maps

The UDRNRC CWPP relies on the following maps and geographic data (Appendix A):

- Oregon Department of Forestry Statewide Risk Assessment
- Wildland Urban Interface boundary with seven identified sub regions
- 2005 Fire Regime - Condition Class
- 2005 Crown Fire Potential
- 2005 Deschutes County population and tax lot data
- Historical Fire Starts & Large Fire History

Community Profile

Historically, the Coalition planning area was a mix of forest types including open understory ponderosa pine and occasional stands of lodgepole pine. Following logging in the first half of the 1900s many of these stands naturally regenerated as lodgepole pine. Lodgepole pine is a species that lives and dies by high intensity and active crown fires. It is therefore less desirable from a wildfire standpoint because of the risk these stands pose to the communities of the Coalition planning area. Today, with less stand management, logging activity and highly effective wildland fire suppression, the forestland is predominantly dense lodgepole pine with some mixed stands of lodgepole and ponderosa pine. Much of the understory consists of dense bitterbrush and manzanita with some areas of native bunchgrasses. Due to the lack of disturbance, these stands continue to become more and more overcrowded and at increasing risk for extreme fire behavior.

The 2004 Coalition CWPP included the following description by the US Forest Service in its Fall Environmental Assessment project:

> Historically, low intensity fires maintained and thinned ponderosa pine within the project area by killing much of the understory trees and shrubs on a 7 to 15 year cycle. In the absence of fire over the last 80 years, well-developed shrub layers and high stand densities have placed the ponderosa pine stands at high risk for high intensity, stand-replacing wildfires that can have detrimental effects on wildlife, soils and water quality. An estimated 74 percent of the project area is classified as extreme or high for fire behavior. The common property line between private and public land (urban interface) in the vicinity of the Fall River Estates subdivision is composed of a mix of lodgepole pine and ponderosa pine. The shrub layer within these stands is capable of producing flame lengths greater than 15 feet with a high to moderate potential for a crown fire that could quickly threaten adjacent private property.

Wildland Urban Interface Description

The Healthy Forests Restoration Act defines wildland urban interface (WUI) as an area within or adjacent to an at-risk community that has been identified by a community in its wildfire protection plan.

For areas that do not have such a plan, it is identified as:

- extending ½ mile from the boundary of an at-risk community,
- extending 1½ miles from the boundary of an at-risk community when other criteria are met such as a sustained steep slope or a geographic feature that creates an effective firebreak, or is classified as Condition Class 3 land,
- adjacent to an evacuation route.

The Steering Committee has carefully planned and mapped the WUI for all the communities in the Coalition planning area (see maps in Appendix A). The WUI for this CWPP extends along the communities from the southern boundary of Sunriver, upstream along the Deschutes River to just below Wickiup Reservoir. The planning area consists of 53,959 acres of public lands managed by the US Forest Service (USFS) and the Bureau of Land Management (BLM); 2,288 acres of state land, 211 acres of county owned land and 12,547 acres of private lands that make up the seven sub regions within the planning area. The Coalition WUI boundary covers 69,005 total acres.

Communities at Risk

The Healthy Forest Initiative (HFI) and the Healthy Forests Restoration Act (HFRA) define a "community at risk" from wildland fire as one that:

- is a group of homes and other structures with basic infrastructure and services (such as utilities and collectively maintained transportation routes) in or adjacent to federal land;
- has conditions conducive to large-scale wildland fire; and
- faces a significant threat to human life or property as a result of a wildland fire.

For assessment and prioritization purposes, the Steering Committee identified the following seven sub regions as Communities at Risk within the Coalition planning area:

Table 1 – Communities at Risk

Community at Risk	Acres	Structures	Population
Three Rivers – including Spring River Acres, Bandley, Deschutes River Recreation Homesites #1-5 & 9, Sundance Properties Sunriver, Oregon Water Wonderland II, Caldera Springs, Thousand Trails, Crosswater and Vandevert Ranch neighborhoods.	12,031	1,490	3,725
Wild River – including the Wild River subdivision.	7,421	97	243
Foster Road Corridor – including River Forest Acres, Beaver Special Road District, Deschutes River Recreation Homesites #6 neighborhoods and La Pine State Park.	5,379	229	573
Little Deschutes Corridor – including Lazy River, Pinewood Country Estates, Pine River Estates, Sun Country Estates, Vandevert Acres, Vandevert Acres South, Whispering Pines, and Deschutes River Recreation Homesites #8 neighborhoods.	9,907	454	1,135
Big River – including River Meadows, Cougar Grove, Oregon Water Wonderland I neighborhoods.	2,914	370	925
Haner Park – including Haner Park subdivision.	6,433	56	140
Fall River – including Fall River Estates subdivision.	10,241	87	218

There are an additional 14,658 acres of undeveloped rural areas within the WUI boundary. These areas do not have structures and population on record at this time or infrastructure. While this acreage is not addressed or ranked as part of the risk assessments, it is addressed as a high priority under Preferred Treatments and Goals for Hazardous Fuels Reduction on page 26.

Fuel Hazards and Ecotypes

The Coalition planning area encounters diverse vegetation types including:

- Ponderosa pine
- Lodgepole pine
- Bitterbrush
- Manzanita

Historically, **ponderosa pine** forests contained more understory grasses and shrubs than are present today. These plants, combined with fallen pine needles, formed fast-burning fuels that led to recurrent widespread burning. Frequent low-intensity ground fires that

occur with a fire return interval of 7 -15 years characterize the fire regime for ponderosa pine. The pattern of low ground fires and stand dynamics resulted in the open park-like conditions that early inhabitants and visitors found in the region.

Less stand management, less logging activity and highly effective wildland fire suppression have significantly altered the ponderosa pine forest type. Removal of the larger pines has dramatically decreased open park-like forests, replacing them with more evenly spaced and smaller forests. Similar to other species of conifer forest types, the suppression of fire has greatly increased the number and density of trees, creating ladder fuels and putting the stands at risk of attack from insects and disease. These factors have contributed to more intense fires in ponderosa pine forests in recent years.

Mature **lodgepole pine** in central Oregon is characterized by dense, uniform stands, an absence of other species, and a general lack of understory shrubs (although bitterbrush is often found with mature lodgepole pine). Lodgepole pine forests exhibit a moderate severity fire regime with a fire return interval between 60 and 80 years. Fire in lodgepole pine stands can be low, moderate, or severe over time and often results in full stand replacement.

In addition to fire, mountain pine beetles are worth noting as a significant disturbance agent as the two processes are linked. The fire cycle in lodgepole pine is 60-80 years and occurs as follows: a stand replacement fire leads to stand regeneration ➔ Dead snags from the fire fall to the forest floor and fuels begin to accumulate ➔ Windstorms blow more trees to the ground ➔ Forest fires burn some of the downed logs and lead to heart rot in the standing trees ➔ The heart rot stresses the stands and makes it vulnerable to attack by the mountain pine beetle ➔ A major outbreak of the mountain pine beetle causes significant mortality and soon the conditions are ripe for another stand replacement fire.

Bitterbrush occurs throughout the planning area on all aspects and elevations and is frequently found with mixed shrubs such as manzanita. Fire severely damages bitterbrush, especially if rain is not received shortly after a burn. Bitterbrush is fire dependent, but not fire resistant. It regenerates mostly from seed after a fire and often sprouts from caches of seeds made by rodents. Bitterbrush will sprout after burning regardless of the severity of the burn and matures relatively quickly. Consequently, the wildland urban interface area is rich with patches of bitterbrush that burn well on their own and provide fire-ready ladder fuels for taller tree stands.

Manzanita is a shrub that also occurs throughout the planning area, usually mixed with other shrub species such as bitterbrush. Manzanita is established both through sprouts and seeds that are stimulated by fire. Fires in manzanita are conducive to rapid and extensive fire spread due to both physical and chemical characteristics. The shrub has volatile materials in the leaves, low moisture content in the foliage and persistence of dead branches and stems. Manzanita is particularly susceptible to fire where it is the primary understory component.

The result of the fuel hazards and forest types in the Coalition CWPP planning area is an overgrowth of ponderosa pine with thickets of lodgepole pine, excessive forest floor fuels and an abundance of dead or dying vegetation that contribute to a substantially elevated risk of wildland fires that are difficult to control. These overly dense conditions lead to fire behavior that produces flame lengths over eight feet with crowning and torching that can result in stand replacement severity fires.

Not only have large, stand replacement fires not occurred, but also the more frequent low intensity fires have not been allowed to burn either. This practice of fire exclusion along with insufficient vegetation/fuels reduction has resulted in the buildup of excessive live and dead fuels.

Oregon Department of Forestry classifies thirteen individual neighborhoods in the planning area as "extreme" under the Oregon Forestland Urban Interface Fire Protection Act of 1997, commonly referred to as Senate Bill 360. River Forest Acres, Fall River Estates, and Deschutes River Recreation Homesites Unit 6 neighborhoods are classified as "high density extreme."

Community Assessment of Risk

The Upper Deschutes River Natural Resources Coalition CWPP utilized the following methods to determine the highest priority Communities at Risk for hazardous fuels reduction: the Oregon Department of Forestry Assessment of Risk Factors, Fire Regime - Condition Class and 2005 population density data from Deschutes County. These methods additionally revealed other areas for concern that are detailed under Special Areas of Concern and Action Plan and Implementation.

ODF Assessment of Risk Factors

The ODF Assessment of Risk Factors is based on five categories of evaluation that include a variety of information designed to identify and evaluate wildland fire risk in communities across Oregon: 1) risk of wildfire occurrence, 2) hazard, 3) protection capability, 4) human and economic values protected and 5) structural vulnerability.

1. Risk of Wildfire Occurrence

The risk of wildfire occurrence refers to the likelihood of a fire occurring based on historical fire occurrence, home density and ignition sources. **The risk is high in all Communities at Risk except Wild River and Fall River which ranked out at moderate** based on historical evidence of fire history as well as ready ignition sources like dry lightning storms, debris burning, equipment use, juveniles, campfires, and arson.

The current condition of the vegetation on the federal and private lands adjacent to and within the Coalition WUI poses an elevated hazard that can lead to catastrophic loss from wildland fire. The communities of La Pine and Sunriver are also threatened by the likely possibility of a crown fire sweeping into the community, or by embers falling on the communities from an adjacent wildland fire.

2. Hazard

The hazard rating describes resistance to control once a fire starts based on weather, topography (including slope, aspect and elevation), vegetation and crown fire potential. As stated earlier, less logging activity, effective wildland fire suppression and a lack of forest management has led to dense vegetation in the wildland urban interface. **All Communities at Risk are rated extreme under this assessment.**

A wildland fire could start within the communities or in any of the forested areas adjacent to or surrounding the communities. With a fire of any significance, it could be difficult to assemble the resources necessary to adequately address all of the fire and life safety issues that could arise in the early stages of emergency operations. The potential exists for a catastrophic wildland fire for any number of reasons, during a significant portion of each year.

3. Protection capability

Fire protection capability ranges from low to high among the sub regions. **The Haner Park area is at the highest risk** and **the Foster Road Corridor rated moderate while the remaining five Communities at Risk rated low.** The ratings are based on fire protection capability and resources to control and suppress wildland and structural fires. The ratings also consider response times and community preparedness.

When local resources are fully engaged, all agencies can request additional resources through the State of Oregon and request federal resources through the Pacific Northwest Coordination Center.

In addition to this high level of coordination, all fire departments and agencies in Central Oregon convene each year for a pre-season meeting to discuss the upcoming wildland fire season. Topics addressed at this meeting include predicted wildland fire activity, weather forecasts and how agencies can/will respond to meet the needs of fire events.

<u>La Pine Rural Fire Protection District</u>

The La Pine RFPD provides first response structural and wildland fire coverage within its 115 square mile service district. The District provides Emergency Medical Services, including Advanced Cardiac Life Support transport, within a 1,000 square mile boundary.

The District is managed by a five-member elected board of directors. The District consists of 20 career and 14 volunteer positions involved directly in fire and EMS Operations. The District also houses three resident students who participate in the Fire/EMS program at Central Oregon Community College. All firefighting personnel

have received training in wildland firefighting practices, structural fire protection and suppression techniques, and other related topics. The District has adopted the National Incident Management Systems (NIMS) Incident Command System and all personnel have received training and continue to train in its use. There are three career personnel and 19 support volunteers not involved in fire and EMS.

The District works out of one centrally located fire station and two satellite stations. It maintains a fleet of three structural fire engines, three Advanced Cardiac Life Support ambulances, three heavy brush engines, one light brush engine, three water tenders and three staff/utility vehicles.

The District is a party to the Central Oregon Mutual Aid Agreement. In the event of a major fire the department may request assistance from all other fire departments that are signatory to the agreement. In addition to Central Oregon Fire Departments, this includes the US Forest Service, Oregon Department of Forestry, and the Bureau of Land Management. Conversely, when these agencies need assistance and the District has resources available, it assists them. The La Pine Rural Fire Protection District and Sunriver Fire Department cooperate in "automatic aid" which includes response zones in certain parts of each district.

Oregon Department of Forestry

Within the planning area, private forestland is protected by the Central Oregon District of the Oregon Department of Forestry (ODF). ODF provides wildland fire response for fires burning on, or threatening private forestlands paying a Forest Patrol Assessment. There are some areas within the Coalition WUI that receive dual protection from ODF and the La Pine RFPD because they are located within the rural fire protection district and are also classified as private forestland within the ODF district. In those cases La Pine RFPD provides initial response and transfers fire command to ODF upon their arrival.

Oregon Department of Forestry provides one Type 6 engine in the La Pine area during fire season, typically June through October. Ten additional engines are available for response in the Prineville-Sisters unit as well as one dozer and one hand crew. Statewide resources are also available to ODF including initial attack hand crews, dozers, water tenders, helicopters, air tankers, and overhead staff positions, depending on statewide needs.

USDA Forest Service and USDI Bureau of Land Management

The Forest Service and BLM provide wildland fire protection on the federal lands within the Coalition planning area. Together, they are identified as the Central Oregon Fire Management Service (COFMS). COFMS includes the Deschutes National Forest, the Ochoco National Forest, the Crooked River National Grassland, and the Prineville District of the BLM. These four units are managed cooperatively under combined leadership, with an Interagency Fire Management Officer, two Deputy Fire Management Officers, and a Board of Directors including decision makers from both agencies, with Forest Service District Rangers and BLM Field Managers. COFMS has a central

dispatching facility in partnership with the Oregon Department of Forestry that serves as a communications hub for fire and fuels operations, as well as safety and training issues for COFMS. In total, COFMS provides the following resources: 15 engines, 4 initial attack hand crews, 6 prevention units, 2 dozers, 2 water tenders, and 1 helicopter with module. Additional regional and national resources are potentially available and include 35 smokejumpers, 2 inter-regional Hotshot crews, 1 air tanker, 1 National Fire Cache, and 20 overhead staff positions. During fire season these resources are in high demand and may not always be available.

Law Enforcement

Police services are provided by Deschutes County Sheriff in the Coalition planning area. The Sheriff's Department has responsibility for ensuring the safe and orderly evacuation of the community in the event of a major emergency. A number of resources have been allocated to accomplish this task including hi/lo sirens on vehicles; emergency notification via radio and television; reverse 9-1-1 capability; Sheriff's Department staff; La Pine Rural Fire Protection District staff and community-wide volunteers. Any other issues relative to a major emergency are addressed by the Countywide Disaster Plan and the County Department of Emergency Services.

Oregon State Police assists the federal agency law enforcement efforts and cooperates with Deschutes County for protection in this area.

Community Preparedness

Also under the category of Protection Capabilities, the ODF Assessment of Risk examines a community's level of organization and preparedness to respond in an emergency situation. The assessment looks at whether the area has an organized stakeholder group that looks out for its own area through mitigation efforts, a phone tree, etc. Or, does the area only receive outside efforts such as newsletters, mailings or FireFree information from other groups? Within the planning area, the sub regions varied from having a high level of organization to not having any. The Coalition used local knowledge to determine the level of preparedness.

4. Values Protected

The human and economic values protected in the Coalition planning area are also at risk with the **Three Rivers and the Big River communities in the high category and the remaining five communities in the moderate category.** These ratings are based on home density per ten acres and community infrastructure such as power substations, transportation corridors, water and fuel storage, etc.

Based on Deschutes County tax records from 2005, there are approximately 2,784 homes in the Coalition WUI, with an appraised value of $858,331,250 including land and improvements.

The essential infrastructure includes multiple webs of utilities, roads, water and sewer systems and has an approximate replacement value of $275,000 per mile for electrical

transmission lines; $150,000 per mile of electrical distribution lines; and $2 million per electrical sub-station. Loss to roads, water and sewer systems would be minimal because most are underground or otherwise not flammable.

The US Forest Service and Oregon State Department of Fish and Wildlife have designated two sections of the WUI boundary as key elk habitat for the Ryan Ranch and Fall River elk herds. The boundary is also traversed by an important deer migration route.

Also falling within the Coalition planning area is a portion of the Upper Deschutes River that is classified by the state as a State Scenic Waterway. The same area is also considered protected under the Federal Wild and Scenic Rivers Act. With outstanding scenic, recreational, cultural, geologic, wilderness, fish and wildlife, historical and botanical values, residents place high importance on providing for the long term fire safety and maintenance of these values.

5. Structural Vulnerability

Although attitudes and behaviors towards fire are changing in central Oregon thanks to educational programs like FireFree and Firewise, the exponential population growth and continued development into the wildland urban interface present fresh challenges each year. The Coalition places high value on the importance of making structures and neighborhoods in the wildland urban interface as fire safe as possible.

The Steering Committee addressed structural vulnerability based on a combined approach including the National Fire Protection Act (NFPA) 1144 survey and the ODF Assessment of Risk standards. The survey revealed that while some areas have taken great strides towards improving the structural ignitability of homes, others have a great deal yet to do.

The Three Rivers, Little Deschutes Corridor and Foster Road Corridor sub regions all ranked in the moderate category while the Wild River, Haner Park, Big River and Fall River sub regions ranked in the low category.

The survey included assessments of the following:

- Flammable roofing – wood or non-wood present;
- Defensible space – meets local requirements or not;
- Ingress/egress – one, two or more roads in/out;
- Road width – No roads to roads more than 24 feet wide;
- All season road conditions – surfaced or not with grade more or less than 10%;
- Fire Service access – more or less than 300 ft with or without turnaround;
- Street signs – Present with 4” reflective characters or absent.

The following table is a summary of the Communities at Risk, the value ratings (with corresponding scores) and the total scores for each community in each category. The higher the total score in this assessment, the higher the overall risk.

Table 2 – ODF Assessment of Risk

Community at Risk	What is the likelihood of a fire occurring?	Hazard rating	Protection capability	Human and economic values protected	Structural vulnerability	Total score	Rank
Three Rivers	High 35	Extreme 71	Low 0	High 35	Moderate 32	**172**	**3**
Wild River	Moderate 25	Extreme 71	Low 8	Moderate 22	Low 24	**150**	**5**
Little Deschutes Corridor	High 30	Extreme 71	Low 8	Moderate 22	Moderate 55	**186**	**1**
Haner Park	High 30	Extreme 66	High 17	Moderate 22	Low 27	**162**	**4**
Foster Road Corridor	High 30	Extreme 71	Moderate 10	Moderate 22	Moderate 50	**183**	**2**
Big River	High 32	Extreme 71	Low 2	High 35	Low 22	**162**	**4**
Fall River	Moderate 25	Extreme 71	Low 8	Moderate 22	Low 15	**141**	**6**

Risk: Describes the likelihood of a fire occurring based on historical fire occurrence and ignition sources. Low = 0 – 13 points; Moderate = 14 – 27 points; High = 28 – 40 points.

Hazard: Describes resistance to control once a fire starts based on weather, topography and fuel. Low = 0 – 9 points; Moderate = 10 – 40 points; High = 41 – 60 points; Extreme = 61 – 80 points.

Protection capability: Describes fire protection capability and resources based on type of protection, response times and community preparedness. Low = 0 – 9 points; Moderate = 10 – 16 points; High = 17 – 40 points.

Values protected: Describes the human and economic values in the community based on home density per ten acres and community infrastructure such as power substations, transportation corridors, water and fuel storage, etc. Low = 0 – 15 points; Moderate = 16 – 30 points; High = 31 – 50 points.

Structural vulnerability: Describes the likelihood that structures will be destroyed by wildfire based on roofing and building materials, defensible space, separation of homes, fire department access and street signage. Low = 0 – 30 points; Moderate = 31 – 60 points; High = 61 – 90 points.

Total score: A sum of all the points from each category surveyed.

Fire Regime - Condition Class

Fire Regime - Condition Class considers the type of vegetation and the departure from its natural fire behavior return interval.

Five natural (historical) fire regimes are classified based on the average number of years between fires (fire frequency) combined with the severity of the fire on dominant overstory vegetation. Fire regimes I through IV are each represented on the landscape in the Coalition WUI. Ponderosa pine for example has an 11-15 year fire interval with low potential for stand replacement fires. Ponderosa pine therefore falls within Fire Regime I which describes species with fire return intervals between 0 – 35 years. Lodgepole pine has a 60-80 year fire interval with the potential for full stand replacement fires. Lodgepole pine therefore falls within Fire Regime IV which describes species with fire return intervals between 35 – 100 years (See Table 2). Table 3 summarizes Fire Regimes.

Table 3 – Fire Regimes

Fire Regime Group	Fire Frequency	Fire Severity	Plant Association Group
I	0 – 35 years	Low severity	Ponderosa pine, manzanita, bitterbrush
II	0 – 35 years	Stand replacement	Western juniper
III	35 – 100+ years	Mixed severity	Mixed conifer dry
IV	35 – 100+ years	Stand replacement	Lodgepole pine
V	> 200 years	Stand replacement	Western hemlock, mixed conifer wet

Condition Class categorizes a departure from the natural fire regime based on ecosystem attributes. In Condition Class 1, the historical ecosystem attributes are largely intact and functioning as defined by the historical natural fire regime. In other words, the stand has not missed a fire cycle. In Condition Class 2, the historical ecosystem attributes have been moderately altered. Generally, at least one fire cycle has been missed. In Condition Class 3, historical ecosystem attributes have been significantly altered. Multiple fire cycles have been missed. The risk of losing key ecosystem components (e.g. native species, large trees, soil) is low for Class 1, moderate for Class 2, and high for Class 3. Table 4 summarizes Condition Class.

Table 4 – Condition Class

Condition Class	Attributes
Condition Class 1	▪ Fire regimes are within or near an historical range. ▪ The risk of losing key ecosystem components is low. ▪ Fire frequencies have departed from historical frequencies (either increased or decreased) by no more than one return interval. ▪ Vegetation attributes are intact and functioning within an historical range.
Condition Class 2	▪ Fire regimes have been moderately altered from their historical range. ▪ The risk of losing key ecosystem components has increased to moderate. ▪ Fire frequencies have departed (either increased or decreased) from historical frequencies by more than one return interval. This change results in moderate changes to one or more of the following: fire size, frequency, intensity, severity or landscape patterns. ▪ Vegetation attributes have been moderately altered from their historic ranges.
Condition Class 3	▪ Fire regimes have been significantly altered from their historical range. ▪ The risk of losing key ecosystem components is high. ▪ Fire frequencies have departed (either increased or decreased) by multiple return intervals. This change results in dramatic changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns. ▪ Vegetation attributes have been significantly altered from their historic ranges.

Table 5 shows the percentage of Condition Class 2 and 3 lands in each Community at Risk.

Table 5 – Percentage of Condition Class 2 & 3

Community at Risk	Total acres	Percentage of Condition Class 2 & 3	Rank
Three Rivers	12,031	52%	1
Wild River	7,421	48.6%	2
Little Deschutes Corridor	9,907	42.0%	6
Haner Park	6,433	42.7%	5
Foster Road Corridor	5,379	22.0%	7
Big River	2,914	45.7	3
Fall River	10,241	43.5%	4

The Coalition presents Table 6 as a composite of the ODF Assessment of Risk (Table 2) and Condition Class (Table 5). The Coalition added population density rankings to the table based on the 2005 population estimates from Deschutes County and used Table 6 as a method to identify and assign priorities for hazardous fuels reduction treatments.

Table 6 – Composite of ODF Assessment of Risk & Condition Class and Population Density

Community at Risk	ODF Rank	Condition Class Rank	Population Rank	Total Score	Composite Rank of Scores
Three Rivers	3	1	1	**5**	**1**
Little Deschutes Corridor	1	6	2	**9**	**2**
Big River	4	3	3	**10**	**3**
Wild River	5	2	5	**12**	**4**
Foster Road Corridor	2	7	4	**13**	**5**
Haner Park	4	5	7	**16**	**6**
Fall River	6	4	6	**16**	**6**

The Steering Committee added the rankings together to produce a total score. The lower the total score in this table, the higher the risk of loss based on the criteria of all the assessments. Although Foster Road Corridor ranks out at number five in the composite, the Steering Committee agreed that it is more than double the population of Wild River, and includes the highly valued La Pine State Park. The Foster Road Corridor is also thick with lodgepole pine, adding significant crown fire potential. The group consensus was to place Foster Road Corridor as a higher priority for fuels reduction treatments than Wild River.

Based on group consensus, the Steering Committee determined two groups of area priorities for hazardous fuels treatment in these Communities at Risk:

Highest Priority Communities

- **Three Rivers**
- **Little Deschutes Corridor**
- **Big River**
- **Foster Road Corridor**

High Priority Communities

- **Wild River**
- **Haner Park**
- **Fall River**

Areas of special concern

Deschutes River Corridor

Part of the land area within this CWPP falls under provisions of the federal and state requirements of the Federal Wild and Scenic Rivers Act and Oregon State's Scenic Waterway Program. Policies and guidelines for the two programs are outlined in the following documents: Upper Deschutes Wild and Scenic River/Upper Deschutes River Management Plan and the State Scenic Waterways Comprehensive Management Plan.

Federal Guidelines – The entire affected area is designated *Recreational* under the plan. Emphasis is on protecting and restoring healthy riparian vegetation and upland vegetation that mimics pre-disturbance forest conditions. Amendment #12 states that if these W & S River management plans do not address an issue – like the fire danger to communities – then existing federal (like HFRA), state, and local laws and regulations apply as long as the river values are protected. This provision provides the opportunity to reduce fuel hazards within the corridor. Several other provisions in the plan allow treatment (both mechanical and prescribed burning) of fuels hazards with an approved written site specific plan and where they would not negatively impact riparian values or Outstanding Remarkable Values.

State Requirements – Under the state plan, affected areas are designated *Scenic, River Community, and Recreation*. All segments are governed by a rule that tree cutting or timber harvest require written notice to the state, except for owner firewood or cutting of dangerous trees. The concern is that timber harvests not detract from river visual values and that reforestation occurs, if warranted.

Critical Transportation Routes

Critical Transportation Routes do not have a standard definition in Deschutes County. For purposes of the Coalition CWPP, the Steering Committee defines Critical Transportation Routes as:

- all routes necessary for the support of routine flow of commerce to and/or through the planning area,
- all routes that could be used for potential evacuation of citizens and/or visitors from a wildland fire threat to public safety,
- routes needed for emergency ingress and egress to a wildland fire incident, not including unimproved or "two-track" roads,
- and, all routes needed to protect and support critical infrastructure (power substations, communication transmission lines, water and fuel storage, public service facilities, recreation facilities, etc).

The Steering Committee expressed great concern over the need to identify, develop and protect critical transportation routes as part of this planning process. A detailed look at specific ingress/egress issues for each Community at Risk is included under

Recommendations to Reduce Structural Vulnerability. This issue is also highlighted under Action Plan and Implementation.

Rural areas

The Steering Committee acknowledges that there are 14,948 acres of rural, undeveloped lands in the UDRNRC planning area that are at extreme risk of wildland fire. The US Forest Service manages 99% of these forestlands. The majority of these lands (55%) are categorized in Condition Class 2 and 3. These areas surround each of the populated sub regions and have multiple values at risk.

Though not formally assessed due to its lack of structures and population, the Steering Committee agrees that a wildfire in any of these rural areas poses significant threat to the nearby communities. The Steering Committee makes recommendations to address this issue under Prioritized Hazard Reduction Recommendations.

Prioritized Hazard Reduction Recommendations and Preferred Treatment Methods

The UDRNRC agrees that the CWPP is a living tool that can be used for many outcomes. The following is an outline of the prioritized Communities at Risk, as well as preferred treatments and goals for hazardous fuels reduction under the Upper Deschutes River Natural Resources Coalition Community Wildfire Protection Plan.

Prioritized Communities at Risk

Based on the combined assessment as shown in Table 6 and group consensus the Steering Committee has identified the following prioritized Communities at Risk for hazardous fuels reduction treatments on public and private lands in the Coalition WUI:

Highest Priority Communities

- **Three Rivers**
- **Little Deschutes Corridor**
- **Big River**
- **Foster Road Corridor**

High Priority Communities

- **Wild River**
- **Haner Park**
- **Fall River**

Priorities and goals

With critical needs assessed and priority areas listed, the Steering Committee identified the following goals to meet the Purpose on page 1 of the Coalition CWPP:

- Reduce hazardous fuels on public lands
- Reduce hazardous fuels on private lands (both vacant and occupied)
- Reduce structural vulnerability
- Increase education and awareness of wildfire threat
- Identify, improve and protect critical transportation routes

Preferred treatments and goals for hazardous fuels reduction

Appendix A includes detailed maps of the WUI boundaries throughout the Coalition planning area and the recommended areas for treatments by reducing wildland fuel hazards on both public and private lands.

The standard of the Coalition CWPP is to decrease the risk of uncharacteristic wildland fire behavior by reducing fuel loads to that which can produce flame lengths of less than four feet. This enables safe and effective initial attack. The overall goal is to return the landscape to Condition Class 1 and provide for a healthy, fire resilient landscape that supports the social, economic and ecological values of the Upper Deschutes River area residents and visitors. The Steering Committee recognizes the effectiveness and value of maximizing treatment efforts in areas that are adjacent to federal, state, military or private projects and recommends that future projects consider these benefits when selecting areas for treatment. The following specific standards are recommended for treatments on public and private lands within the Coalition planning area.

Federal and State owned lands

Federal lands occupy 78.2% of lands in the Coalition planning area. Except for the Crosswater and Vandevert Ranch neighborhoods, all Coalition Communities at Risk are adjacent to public lands managed by either the Forest Service or the Bureau of Land Management (BLM). The La Pine State Park occupies 2,288 acres of the plan area. The BLM is responsible for vegetation management in the southern part of the Park. The northern portion is managed by Oregon Parks & Recreation Department.

It is the intent of the Coalition that the UDRNRC planning area is subject to expedited measures for hazardous fuels treatment and allocation of funds to protect the communities and neighborhoods as stipulated by the Healthy Forests Restoration Act.

The Steering Committee recommends that federal and state landowners work toward the overall standard by treating Condition Class 2 and 3 lands with the goal of returning the

landscape to Condition Class 1 by reducing fuels loads to that which can produce flame lengths of less than four feet:

- Within a ¼ mile buffer of adjacent communities at risk. Treatments should begin here and increase in ¼ mile increments until the WUI boundary is reached.
- Within 300 feet of any evacuation route from adjacent communities at risk.

The standard will be achieved through a variety of treatment methodologies such as thinning, prescribed burning and mechanical treatments. Specific treatments should address fuels issues on a landscape scale rather than acre by acre. These treatments shall be consistent with the current COFMS Fire Management Plan on the federal lands and existing land management plans on state owned lands.

Within ¼ mile of any residential area, and within 300 feet of roads, trees should be thinned and widely spaced to protect and enhance the large trees on any given site. Ladder fuels and shrubs should be aggressively managed by mowing or prescribed burning. Lower branches should be trimmed. Additionally, it will be necessary to provide effective closures and signs to ensure these buffers are not abused by unmanaged OHV use.

The Steering Committee recommends that in the WUI farther than ¼ mile from residences, thinning from below and vegetation treatments should be done to accomplish greater diversity of forest structure, a greater variety of size and age classes, efforts to promote remaining large diameter ponderosa pine, and a selected mosaic of shrub and other vegetation to support wildlife. Throughout the WUI, forests should be thinned to an extent that leaves insufficient ladder fuels to support a fast moving crown fire.

In general, the dominant strategy in all areas should be thinning from below in an effort to restore large tree, open park-like ponderosa pine dominated forests. In exclusively lodgepole pine stands, where site conditions are favorable to ponderosa pine, intensive thinning should occur with a replanting strategy to restore basal areas between 40 and 80 square feet per acre. As a general matter, the Steering Committee agrees with the goal of restoring ponderosa pine stands throughout the analysis area.

The Steering Committee understands, and concurs with, a concern that these basal area targets could lead to the harvest of large (18” and over) ponderosa pine trees in certain instances. To avoid this outcome, the Committee recommends that for sites containing many large diameter ponderosa pines, an upper limit basal area of 120 square feet per acre should apply. While thinning may be designed to promote multi-age class, multi-diameter forests, the vast majority of the basal area left on a site should be with the largest diameter trees on the site. Finally, the Steering Committee would also seek specific explanation from the agency if the removal of any ponderosa pine trees greater than 18” diameter is proposed, unless necessary to address a specific hazardous situation.

With regard to the Upper Deschutes River Wild and Scenic River corridor, the Steering Committee is extremely concerned that this area presents some of the most dangerous forest fuel conditions in the analysis area and should be considered a high priority for treatment, as permitted under the river management plan. The Committee recommends thinning and other forest treatments using careful planning and low impact techniques. Forest management should occur in accordance with the other recommendations in this plan, as long as thinning and risk reduction activities reflect the following considerations:

- Forest management actions must be protective of riparian areas, elk and deer habitat, and vegetation and wildlife diversity.
- Compliance with agency guidelines for retaining volumes of dead and down vegetation for stream bank structure, future fishery habitat, and wildlife habitat;
- The Forest Service and BLM should consider the lowest impact harvest systems for thinning within the Wild and Scenic River Boundary.

Within the Coalition WUI there are many side roads that were slated for closing as a part of the 1996 Upper Deschutes Wild and Scenic River Management Plan. Given that many of these are fire ignition sites because of smoking, remote camping, and OHV use, the Steering Committee supports current efforts to close these roads when supported by the nearest neighborhoods. Priority should be given to those areas that have a neighborhood commitment to become partners with the federal agencies and stewards of the nearby non-motorized area.

Industrial and non-industrial private forestlands

Private forestlands are generally larger landholdings managed for multiple values including timber, wildlife, recreation and water. The landowner may or may not live on the property however the property is largely forest vegetation excluding the area directly adjacent to any structures. There are several private forestland parcels in the planning area that directly border some of the Communities at Risk. The Steering Committee recommends continued partnerships with private forestland owners and encourages fuels management to the standards above as part of an overall plan for management of the forest resource.

Industrial and non-industrial private forestland owners can meet the overall standard by treating Condition Class 2 and 3 lands with the goal of returning the landscape to Condition Class 1 by reducing fuels loads to that which can produce flame lengths of less than four feet:

- Within a ¼ mile buffer of adjacent communities at risk. Treatments should begin here and increase in ¼ mile increments until the WUI boundary is reached.

- Within 300 feet of any evacuation route from adjacent communities at risk.

The standard can be achieved through a variety of treatment methodologies such as thinning, prescribed burning and mechanical treatments. Specific treatments should address fuels issues on a landscape scale rather than acre by acre. These treatments shall be consistent with existing land management plans for these areas.

Private and county owned lands

Private lands occupy 18.2% of the land in the Coalition planning area and are considered developed, or in rare cases, intermixed with development. The County owns less than 1% of the land in this planning area.

Private land with structural improvements

On private lands with structural improvements, the goal is for each structure to meet the Extreme or High Density Extreme Standards identified in the Oregon Forestland – Urban Interface Fire Protection Act of 1997, also known as Senate Bill 360. This statute outlines standards and requirements for defensible space on private property that receives fire protection from Oregon Department of Forestry.

A detailed description of the standards is available from the Oregon Department of Forestry in the handbook for the Oregon Forestland – Urban Interface Fire Protection Act of 1997. This information is also available at www.oregon.gov/ODF.

The Standards for Extreme and High Density Extreme classifications under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 are:

- Establish a primary fuel break of at least 30 feet around structures;
- Establish a secondary fuel break of up to an additional 70 feet around structures depending on roofing material;
- Create fuel breaks around driveways longer than 150 feet;
- Remove tree branches within 10 feet of chimneys;
- Remove any dead vegetation that overhangs a roof;
- Remove flammable materials from under decks and stairways;
- Move firewood at least 20 feet away from structures;

Vacant lots

Within the Coalition WUI, approximately 52% of the private land is considered vacant, or lots with no structural improvements. Many of those are owned by “absentee owners.” In general, vacant lots owned by absentee owners present a specific threat to neighborhoods in that owners have little to no connections to the neighborhoods and in

most cases do not recognize their responsibility to contribute to the safety of the entire neighborhood by reducing the hazardous vegetation on their properties. The risk of destructive wildland fires is thereby greater inside these neighborhoods due to the lack of owner attention on vacant lots.

Senate Bill 360 only addresses vacant lots that are afforded wildland fire protection by Oregon Department of Forestry and are classified as "High Density Extreme." This amounts to approximately 8.5% of the private lands within the Coalition WUI.

The Steering Committee recommends that owners of vacant lots follow the guidelines under Senate Bill 360 for "High Density Extreme" which includes a 20-foot fuel break along roadsides and property lines on lots without structures, regardless of their classification under Senate Bill 360.

Rural Areas

The Steering Committee acknowledges that there are 14,658 acres of rural, undeveloped lands in the UDRNRC planning area that are at extreme risk of wildland fire. The Steering Committee recommends that the federal land managers work toward the overall standard by treating Condition Class 2 and 3 lands with the goal of returning the landscape to Condition Class 1 by reducing fuels loads to that which can produce flame lengths of less than four feet:

- Within a ¼ mile buffer of adjacent Communities at Risk. Treatments should begin here and increase in ¼ mile increments until the WUI boundary is reached.
- Within 300 feet of any evacuation route from adjacent Communities at Risk.

Recommendations to Reduce Structural Vulnerability

Structural Vulnerability

Based on the assessment of structural vulnerability for the ODF Assessment of Risk, Table 7 identifies the main hazards within the seven Communities at Risk in the Coalition planning area. For each hazard or risk listed, an action is recommended to address the threat or decrease the risk. Adequate water resources for fire suppression were not considered as part of this assessment. This topic is addressed under Action Plan and Implementation. The neighborhoods are listed in priority order from Table 6.

Table 7 – Structural Vulnerability Hazards & Recommendations

Neighborhood at Risk	Primary Hazards	Recommended Actions
Three Rivers	Defensible space – hazardous vegetation in **Deschutes Rec Homesites 1-5 & 9; Oregon Water Wonderland II**	SB 360 compliance
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance
	Inadequate fire access	Establish and improve turnarounds
Little Deschutes Corridor	Defensible space – hazardous vegetation in **Lazy River, Vandevert Acres, Vandevert Acres South, Sun Country Estates, Whispering Pines, Pinewood Country Estates, Deschutes Rec Homesites #8 and Pine River Estates**	SB 360 compliance
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance
	Insufficient access & evacuation routes	Improve route(s), sign and maintain
	Inadequate fire access	Establish and improve turnarounds
	Some inadequate signage	Identify and improve signage
Big River	Defensible space – hazardous vegetation in **Oregon Water Wonderland I**	SB 360 compliance
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance
	Insufficient access & evacuation routes	Establish route(s), sign and maintain
	Inadequate fire access	Establish and improve turnarounds
Foster Road Corridor	Insufficient access & evacuation routes	Establish route(s), sign and maintain
	Defensible space – hazardous vegetation in **Deschutes Rec Homesites 6 and Beaver Road District**	SB 360 compliance
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance
	Inadequate fire access	Establish and improve turnarounds
Wild River	Insufficient access & evacuation routes	Establish route(s), sign and maintain
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance
	Inadequate fire access	Establish and improve turnarounds
Haner Park	Inadequate signage	Identify and improve signage
	Inadequate fire access	Establish and improve turnarounds
	Insufficient access & evacuation routes	Establish route(s), sign and maintain
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance
Fall River	Inadequate fire access	Establish and improve turnarounds
	Insufficient access & evacuation routes	Establish route(s), sign and maintain
	Some wood roofing	Treat or replace; FireFree, Fire Wise, SB 360 compliance

The Coalition recognizes that the best resources for wildfire preparedness are individual home and landowners who take responsibility for providing defensible space around their homes and lots. Table 8 provides a checklist for residents and lot owners seeking to reduce the risk of wildfire losses to their homes and properties.

Table 8 – Defensible Space Checklist

☑ **What can I do to help prevent losses to my property and my neighborhood?**

- ❑ Post easy-to-read address signs so emergency crews can find your home.
- ❑ Reduce the density of nearby trees.
- ❑ Clear wood piles and building materials at least 20 feet away from your home.
- ❑ Remove low tree branches and shrubs. Trim up juniper and other trees at least 4 feet from the ground. Remove "ladder fuels" among trees.
- ❑ Keep grass and weeds cut low.
- ❑ Remove all branches and limbs that overhang roofs.
- ❑ Remove leaves & needles from gutters, roofs and decks.
- ❑ Remove dead plants and brush.
- ❑ Maintain a minimum of 30 feet of defensible space around your home.
- ❑ Screen vents and areas under decks with 1/8" metal mesh or fire resistant siding.
- ❑ Keep decks free of flammable lawn furniture, toys, doormats, etc.
- ❑ Choose fire-resistant roofing materials like metal, tile or composition shingles.
- ❑ Trim vegetation along driveways a minimum distance of 14' wide x 14' high for fire trucks.
- ❑ Choose fire resistive plants. Visit www.extension.oregonstate.edu/deschutes to view *Fire-Resistant Plants for the Home Landscape.*
- ❑ Use alternatives to burning debris like composting or chipping.
- ❑ If burning debris – call the Burn Line at La Pine RFPD at 536-9056 to see if burning is allowed. Do not burn building materials.

Other Recommendations

Education

As stated in the Purpose of the UDRNRC CWPP, three of the goals for this planning effort are to:

- Increase public understanding of living in a fire-adapted ecosystem;
- Increase the Coalition communities' ability to prepare for, respond to and recover from wildland fires;
- Restore fire-adapted ecosystems

With these goals in mind, education and outreach are top priorities for the Coalition. The rapid influx of new residents and visitors is just one reasons the Coalition places high value on the education of area residents and landowners. Many new residents are unfamiliar with wildland fire and have limited experience with issues like defensible space. Residents and visitors will continue to benefit from clear examples of what a fire resilient forest and community look like as well as easy access to resources that help them take action.

There are several opportunities to enhance educational efforts in the Coalition planning area. The La Pine Rural Fire Protection District, the Central Oregon Fire Prevention Cooperative and Project Wildfire all provide wildland fire prevention programs through a variety of individual and collaborative efforts.

Some neighborhoods in the area are well organized through road districts, homeowners associations and other groups. These groups provide valuable ongoing education to their populations about the risks of catastrophic wildland fire and ways to improve their protection. The Coalition provides support for these groups and encourages their formation to address the educational needs of current and incoming residents about living in a fire adapted environment and increasing personal responsibility for creating defensible space.

Local residents are encouraged to contact the La Pine Rural Fire Protection District or Project Wildfire for information. Residents may also find additional information on how they can reduce hazards and protect themselves from loss due to wildland fires at www.firefree.org and www.firewise.org.

Action Plan and Implementation

The Steering Committee recognizes that the UDRNRC CWPP is a living tool with multiple applications. The following priority actions are intended to assist individuals and agencies in the implementation of this CWPP across the Coalition boundary.

Priorities

Reduce hazardous fuels on public lands

Immediately following the acceptance and signed approval of this plan, the Steering Committee will make copies of the UDRNRC CWPP available to all federal and state land managers including the Deschutes National Forest, the Bureau of Land Management, and the Oregon Department of Forestry. The intention of the Steering Committee is to engage in continued discussions with Coalition neighborhoods and adjacent landowners to implement the CWPP and accomplish hazardous fuels reduction projects that address the prioritized Communities at Risk in the most expeditious manner possible. The Steering Committee recognizes the effectiveness and value of maximizing treatment efforts in areas that are adjacent to federal, state or private projects and recommends that future projects consider these benefits when selecting areas for treatment.

Reduce hazardous fuels on private lands

The intention of the Steering Committee is to engage in continued discussions with landowners to facilitate fuels reduction projects on private lands utilizing the list of prioritized Communities at Risk. These actions can be accomplished through education activities or grants for specific projects on private lands.

Reduce Structural Vulnerability

The Steering Committee is charged with the task of engaging community members to review the Structural Vulnerability Assessment in this CWPP and identify projects that will strengthen the potential for the neighborhoods to survive a catastrophic wildland fire within the Coalition WUI. Tables 7 and 8 can be utilized as a resource for homeowners to improve the fire resistance of their homes on an individual basis and also by groups to implement education programs in the individual sub regions.

The Steering Committee is also charged with the task of working with the La Pine Rural Fire Protection District to identify and assess the water resources available for fire suppression in the Communities at Risk. The Steering Committee will make recommendations for projects to ensure adequate water resources are available for fire suppression.

Increase Awareness and Education

The Steering Committee will work with La Pine RFPD and Project Wildfire to review the educational programs available and identify potential projects for implementation in those Communities at Risk that do not already participate in fire prevention education activities.

Identify, Improve and Protect Critical Transportation Routes

The Steering Committee will work with La Pine RFPD, Deschutes County, and Oregon Department of Transportation to identify and map existing transportation and evacuation routes in each Community at Risk. The Steering Committee will assist in conducting further assessments to determine the evacuation needs of each Community at Risk and identify potential projects developing new routes and/or improving existing routes.

The Steering Committee encourages exploratory discussions with fire agencies and local landowners that address the issue presented when effective evacuation from an area is not available. Are "sheltering in place" and safe staging areas viable options?

The Steering Committee will continue to encourage federal land managers to work with local landowners to minimize closures of roads that could be used as alternate evacuation routes from Communities at Risk.

Fund Projects

The Steering Committee will encourage and assist community groups in seeking funding for fuels reduction, educational and other projects to decrease overall risks of loss from wildland fire.

Evaluation and Monitoring

The Steering Committee faced a complex task in the development of the Upper Deschutes River Natural Resources Coalition Community Wildfire Protection Plan. Implementing and sustaining these efforts will require a significant commitment. Building a collaborative and cooperative environment with the La Pine Rural Fire Protection District, community-based organizations, local government and the public land management agencies has been the first step in reducing the risk of loss from wildland fire. The Steering Committee pledges to maintain this cooperation with the public over the long-term with the commitment of all the partners involved.

At a minimum, the Steering Committee shall include: the Program Coordinator from Project Wildfire; a Chief Officer from La Pine RFPD; a representative from Oregon Department of Forestry (ODF); a representative from Central Oregon Fire Management Service (COFMS), and Deschutes County along with members from the CWPP neighborhoods.

The Steering Committee agrees that the UDRNRC Community Wildfire Protection Plan will be a living document, intended to promote fuels reduction, educational, and other projects to decrease overall risks of loss from wildland fire; updated and revisited at least semi-annually to address its Purpose.

The Coalition will work with Project Wildfire to convene the Steering Committee at least twice per year, or as often as the Steering Committee deems necessary to implement and review the Community Wildfire Protection Plan. Topics for discussion can include:

- Identification and assessment of new or treated risks.
- Evaluation and tracking of progress toward goals.
- Updating of maps.
- Adoption of new and/or revised priorities.
- Identification of specific projects.
- Discussion of grant opportunities and determination of projects eligible for funding.
- Writing of grants.
- Identification of appropriate projects to address additional items as outlined in the Action Plan for Structural Vulnerability, Education and Critical Transportation Routes.
- Coordination of additional items, projects and assessments.

The Coalition and Project Wildfire will ensure that the evaluation and monitoring activities listed above are addressed by the Steering Committee each year. As members of the Steering Committee change, the Coalition and Project Wildfire will ensure that it maintains a balanced representation of agency and public members, with a continued focus on inviting interested parties to participate in the review and planning process.