Community Wildfire Protection Plan
March 19, 2013

A community-driven plan developed in collaboration with:

Prepared by:

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Copies of this CWPP are available at www.UDRC.org and www.projectwildfire.org

Declaration of Agreement

The Upper Deschutes River Coalition Community Wildfire Protection Plan (CWPP) was revised and approved in February 2007. As directed by that CWPP, substantial fuels reduction, fire prevention and fire preparedness activities have been completed on public and private lands. The CWPP Steering Committee reconvened in November 2012 to reassess the condition and risk in its WUI communities and update the plan.

Under the 2003 Healthy Forests Restoration Act, the CWPP is approved by the applicable local government, the local fire department and the state entity responsible for forest management. This plan is not legally binding as it does not create or place mandates or requirements on individual jurisdictions. It is intended to serve as a planning tool for fire and land managers and residents to assess risks associated with wildland fire and identify strategies and make recommendations for reducing those risks.

Carl Jansen, President
Upper Deschutes River Coalition — Date: 3/19/13

Jerry Hubbard, Vice President, Executive Director
Upper Deschutes River Coalition — Date: 3/19/13

Kevin Benton, Unit Forester
Oregon Department of Forestry — Date: 4/2/13

Mike Supkis, Fire Chief
La Pine Rural Fire Protection District — Date: 3-19-2013

Alan Unger, Chair
Deschutes County Board of Commissioners — Date: 3/19/13

Acknowledgements

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Carl Jansen, President, Spring River Fire & Safety
Jerry Hubbard, Vice President & Executive Director, DRRH #1-5
John Moore, Treasurer, Spring River
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Mick McMicken, Fall River
John O'Shaughnessy, River Forest Acres
Dick Patterson, Haner Park
Conrad Ruel, DRRH #1-5
Jeff Weiland, Spring River Fire & Safety

UDRC Partners

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Sunriver Library
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Joe Stutler, Deschutes County Advisor
Karen Tulare, Accountant
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Upper Deschutes River Coalition
Community Wildfire Protection Plan

Incorporated in 2004 as a non-profit corporation, the Upper Deschutes River Coalition (UDRC) is comprised of 26 neighborhoods and communities "collectively addressing natural resource issues along the Upper Deschutes River and its tributaries".

The mission of the UDRC is to:

- Ensure healthy, fire-resistant forests
- Promote clean and abundant river flows
- Enhance beneficial wildlife habitat

The UDRC continues to increase its membership with neighborhoods and communities interested in furthering the restoration and protection of natural resources along the Upper Deschutes River. The UDRC 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 Community Wildfire Protection Plan (CWPP).**

At the time of our first CWPP, there existed no template for such an effort. All we knew was that our region was continuously at risk from the threat of wildfire, and therefore the need existed to find a way to address and hopefully mitigate that threat in a coordinated, community-wide manner. The Upper Deschutes River Coalition was formed to confront that issue, and a few months later, with the invaluable assistance and cooperation of several agencies, among them Project Wildfire, the BLM, Oregon Department of Forestry and the US Forest Service, the first CWPP was completed.

Thanks in large measure to what was in that plan and the one following it, we have been able to turn words into actions - both in the form of on-the-ground work and in landowner education - which have resulted in numerous Fire Adapted Communities within our coalition. As an additional benefit, this work has also resulted in our organization enjoying greater recognition and influence outside our boundaries.

Of course, along with growing experience comes the recognition that our work is far from done; that in fact, the job of confronting the threat of wildfire will always be with us. Therefore this, our third CWPP is revised and updated with what we have learned about the process, as well as reflecting the changes in conditions that our previous efforts have brought about.

Dean Drabin, Resident
Upper Deschutes River Coalition

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Purpose

The purpose and goals of the Upper Deschutes River Coalition CWPP are 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 treatment of hazardous fuels;**
- **Create and maintain fire adapted communities;**
- **Increase public understanding of living in a fire-adapted ecosystem;**
- **Increase the ability of UDRC 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.**

Originally completed in 2004 and revised in 2007, this comprehensive update outlines a clear purpose with updated priorities, strategies and action plans for hazardous fuels reduction treatments in the Upper Deschutes River Coalition (UDRC) planning area. It is important to note that the goals of this CWPP are not listed in any particular order or given any special priority.

This CWPP also addresses special areas of concern and makes recommendations for reducing structural vulnerability and creating fire adapted communities in the identified Communities at Risk. It is intended to be a living vehicle for fuels reduction, educational, and other projects to decrease overall risks of loss from wildland fire; reviewed yearly and updated every five years to address its purpose.

Wildland fire is a natural and necessary component of ecosystems across the country. Central Oregon is no exception. Historically, wildland fires have shaped the forests and rangelands valued by residents and visitors. These lands are now significantly altered, or "out of whack" due to fire prevention efforts, modern suppression activities and a general lack of large scale fires resulting in

large tracts of overstocked ponderosa and lodgepole pine forests with dense ground fuels of bitterbrush and saplings which burn hotter and 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).

Within these boundaries, there is a significant amount of public land with numerous destination resorts, and developed and dispersed recreation sites which provide valuable recreation and economic opportunities to both residents and visitors in Deschutes County. In the summer months, transient populations occupy these areas creating a seasonal challenge for those agencies responsible for fire suppression and evacuation.

To address these issues, the UDRC continues to take proactive steps to collaborate with members of fire agencies, local businesses and organizations, and individuals to produce a robust and useful Community Wildfire Protection Plan.

Planning Summary

The Deschutes County Board of Commissioners adopted the most recent update of the UDRC Community Wildfire Protection Plan by resolution on February 21, 2007.

Since that time, the UDRC continues to be a leader in implementing projects that address the critical condition of the forestlands and watershed of the Upper Deschutes River area. The Coalition is also an active participant in Project Wildfire and participates regularly in wildfire prevention education and activities.

Continued efforts have also been made by county, state and federal land management agencies to reduce the threat of high intensity wildland fires through education and fuels reduction activities on public lands. In addition, private residents have responded enthusiastically to the defensible space and preparation guidelines and recommendations to reduce hazardous fuels on their own properties.

Although reducing the risk of high intensity wildland fire is the primary motivation behind this plan, managing the wildlands for hazardous fuels reduction and fire resilience is only one part of the larger picture. Residents and visitors desire healthy, fire-resilient wildlands that provide habitat for wildlife, recreational and economic opportunities, and scenic beauty.

In keeping with the strategy of the original UDRC CWPP, the Steering Committee revisited the planning outline in *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities* (Communities Committee, Society of American Foresters, National Association of Counties, and National Association of State Foresters 2005); and Deschutes County Resolution 2004-093.

Eight steps are outlined to help guide Steering Committees through the planning process:

Step one: Convene the decision makers.

The UDRC CWPP Steering Committee reconvened in November 2012 to review the work completed within and adjacent to the WUI boundaries on public and private lands; and reevaluate the priorities for future fuels reduction treatments. The Steering Committee is comprised of the Program Director from Project Wildfire; the co-chairs of the UDRC private lands, public lands and watershed committees; representatives from Oregon Department of Forestry (ODF); representatives from the Bureau of Land Management and the US Forest Service, the Deschutes County Forester, other stakeholders and members of the public.

Step two: **Involve state and federal agencies.**

The Healthy Forests Restoration Act (HFRA) directed communities to collaborate with local and state government representatives, in consultation with federal agencies and other interested parties in the development of a CWPP. The Steering Committee recognized the importance of this collaboration and involved not only members from the USDA Forest Service and USDI Bureau of Land Management (BLM) but Oregon Department of Forestry (ODF) and Deschutes County representatives as well. Each agency brought a wealth of information about fuels reduction efforts planned and completed along with educational information based on current research across the nation.

Step three: Engage interested parties.

Representatives from the Communities at Risk participated on the Steering Committee. The Steering Committee also included members of local businesses, homeowner/neighborhood associations, and other organizations and individuals.

Step four: Establish a community base map.

The Steering Committee reviewed the previous maps and boundaries from the 2007 CWPP. The group approved the 2013 CWPP boundary with the new inclusion of the Sunriver Business Park.

Step five: Develop a community risk assessment.

Fire Regime Condition Class (FRCC) was used as a risk assessment tool in the 2007 CWPP. FRCC is a generally accepted assessment of the *condition* of a landscape rather than a risk analysis in terms of the potential for fire activity. No updated data however, has been published since it was originally collected in 2005. The Steering Committee therefore relied on the ODF Assessment of Risk Factors and the classification ratings and assessment of individual lots under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 (aka Senate Bill 360).

Step six: Establish community hazard reduction priorities and recommendations to reduce structural ignitability.

Based on the assessments, the Steering Committee produced three groups of priorities for fuels reduction treatments on public and private lands. The Steering Committee also made recommendations to reduce structural ignitability based on information in the assessments and local knowledge.

Step seven: Develop an action plan and assessment strategy.

The Steering Committee identified an action plan for key projects; roles and responsibilities for carrying out the purpose of the CWPP; potential funding needs and the evaluation process for the CWPP itself.

Step eight: Finalize the Community Wildfire Protection Plan.

A draft of the UDRC CWPP was available for public comment prior to the final signing and approval of the plan. The UDRC Community Wildfire Protection Plan was mutually approved by

the Upper Deschutes River Coalition, the Oregon Department of Forestry, the La Pine Rural Fire Protection District and the Deschutes County Board of Commissioners as demonstrated in the Declaration of Agreement.

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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 Community Wildfire Protection Plan that includes the identification and prioritization of areas needing hazardous fuels treatment. It further provides authorities to expedite the National Environmental Protection 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 community-defined wildland urban interface.

Since the enactment of this legislation, communities have had the opportunity to direct where federal agencies place their fuels reduction efforts. HFRA also allows community groups to apply for federal funding to make communities safer against the threat of wildland fire.

Although some of the authorities under HFI and HFRA have been subsequently challenged in federal courts, all have been successfully appealed and the original intent and authorities under each remain the same.

As with the original CWPP and its subsequent revision, community members from 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 this 2013 UDRC CWPP.

The Upper Deschutes River Coalition adopted this plan on March 19, 2013. Deschutes County adopted the UDRC Community Wildfire Protection Plan by resolution on _____, 2013.

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Community Profile

Deschutes County is located in central Oregon and is a rapidly growing social, economic and recreational destination. Certified estimates from Portland State University put the 2011 population at 160,140 – up 39% since 2000 (http://www.pdx.edu/prc/population-estimates-0).

The Upper Deschutes River Coalition planning area is located between Sunriver and La Pine, Oregon adjacent to US Forest Service and BLM public lands. It is comprised of 69,005 acres rich with ponderosa & lodgepole forests, meandering rivers and diverse wildlife. There are 6,395 lots in the planning area – ½ to 40 acres in size. Dispersed among those lots are 3,152 structures with a resident population of 7,880. Approximately half of the private lots are vacant, with no structures.

Historically the area was characterized by open stands of ponderosa pine and native grasslands. Following logging in the first half of the 1900's many of these stands naturally regenerated to lodgepole pine. Lodgepole pine is a species that lives and dies by high intensity and active stand replacement crown fires. It is therefore less desirable from a wildland fire perspective because of the risk these stands pose to the communities and activities nearby.

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 with some areas of native bunchgrasses. Due to the lack of disturbance, these stands continue to become more and more overcrowded.

The climate in all areas is considered semi-arid and typical of the east slopes of the Cascade Mountains, with most of the annual precipitation coming as winter snow or fall and spring rains. Summers are dry and prone to frequent thunderstorms with lightning storms producing multiple fire ignitions.

US Highway 97, a major transportation route through the state, runs north to south, directly through the planning area. As central Oregon grows, more residents and tourists crowd the highways and increase congestion, particularly during the summer months when fire season reaches its peak. As part of the central community, transportation routes are included in the consideration of the WUI boundary due to their critical role as roads and travel corridors that link communities together and serve as evacuation routes.

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Public and Private Accomplishments

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, and private landowners are engaged in hazardous fuels treatment projects across the CWPP planning boundary.

US Forest Service & Bureau of Land Management

Currently, under the combined management of the Central Oregon Fire Management Service (COFMS), the US Forest Service and the Bureau of Land Management are involved in multiple fuels projects in WUI areas that stretch across this CWPP planning area to reduce hazardous fuels and the likelihood of high intensity wildfire.

Table 1 – Current US Forest Service Projects on Public Lands

Project Name & Start Date	Total Acres	Thinning Planned	Thinning Complete	Thinning Remaining	Mowing Planned	Mowing Complete	Mowing Remaining	Underburn Planned	Underburn Complete	Underburn Remaining
Charlie Brown EA 2005**	**288**	0	0	0	293	229	59	288	0	288
Dilman EA 2003**	**4,864**	3,929	3,232	697	2,649	1,854	795	3,545	2,269	1,276
East Tumbull 2010**	**481**	437	267	411	0	0	0	332	0	332
Fall EA 2006**	**3,271**	2,129	1,719	410	1,498	393	1,105	999	200	799
Katalo East EA 2006**	**1,427**	136	59	77	350	350	0	1,427	1,021	406
Klak EA 2003**	**1,704**	553	553	0	1,462	1,256	206	601	601	0
Lavacast EA 2008**	**4,310**	2,098	1,277	821	3,596	1,031	2,565	3,627	0	3,627
Lavacast CE 2010**	**935**	549	0	549	306	221	85	629	0	629
Myst CE 2009**	**713**	509	465	44	713	628	85	299	0	299
TOTAL	**17,993**	**10,340**	**7,572**	**3,009**	**10,867**	**5,962**	**4,900**	**11,747**	**4091**	**7,656**

* EA = Environmental Assessment; CE = Categorical Exclusion

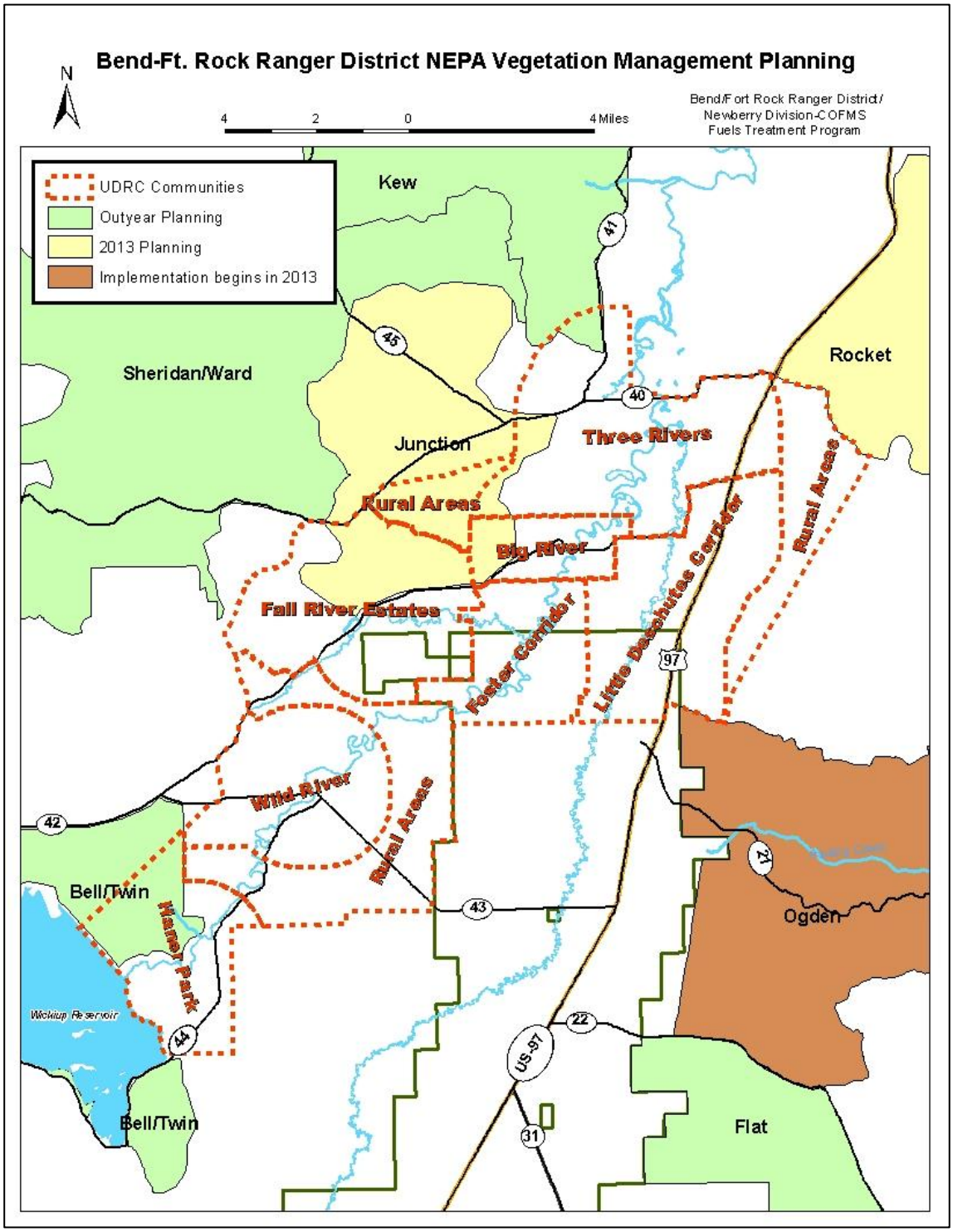
** This is the year of that fuels reduction work began in the project area, planning for a project usually starts two-four years prior to fuels implementation

These public land projects are currently in the planning stage:

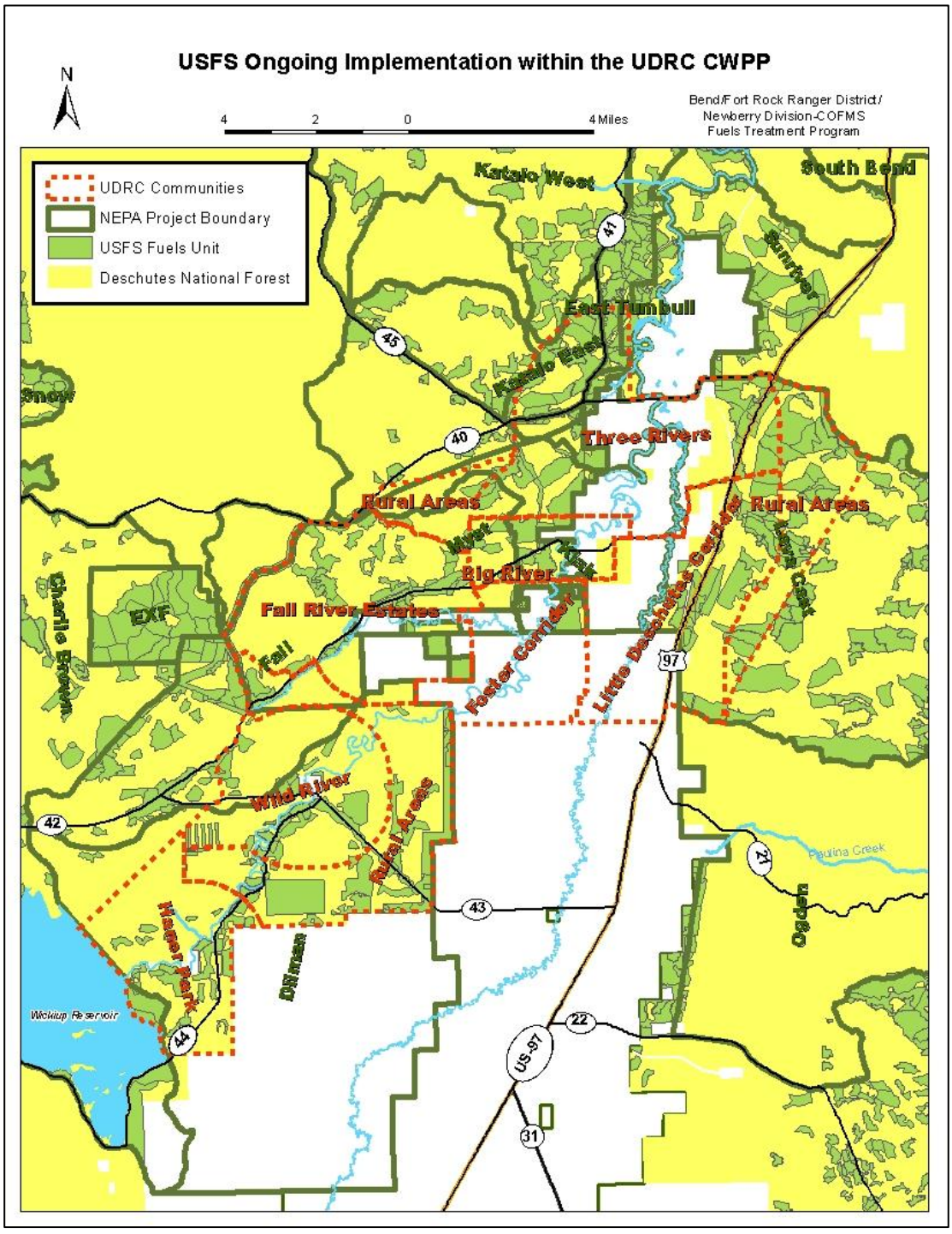
- **Ogden** (Implementation scheduled to begin in 2013) – Between Highway 97 and Newberry Caldera.
- **Junction** (In planning phase, implementation scheduled to begin in 2015) – Near junction of 45 and 40 roads.
- **Rocket** (In planning phase, implementation scheduled to begin 2015) –East side of Hwy 97, across from Lava Butte.
- **Kew** (Planning scheduled to begin in 2014) – Adjacent to the 41 and 46 roads.
- **Twin/Bell** (Planning scheduled to begin in 2016) – Wickiup area, including Haner Park.

The following two maps show current and planned projects in the UDRC planning area.

US Forest Service Project Planning Map



US Forest Service Project Implementation Map



The following photos were taken before and after a prescribed fire on public lands immediately adjacent to the Spring River Community at Risk in 2011. This underburn was conducted as part of the Katalo project noted above. The Steering Committee includes them here as an example of successful treatments on the landscape adjacent to private properties. The photos reveal the impact of low intensity fire applied on the landscape to reduce ladder fuels under trees thereby reducing the risk of higher intensity fires in the future. By breaking up the continuity of grounds fuels, future fires are more likely to stay low, out of tree crowns, and allow for faster and easier suppression.

Before

After

Before

After

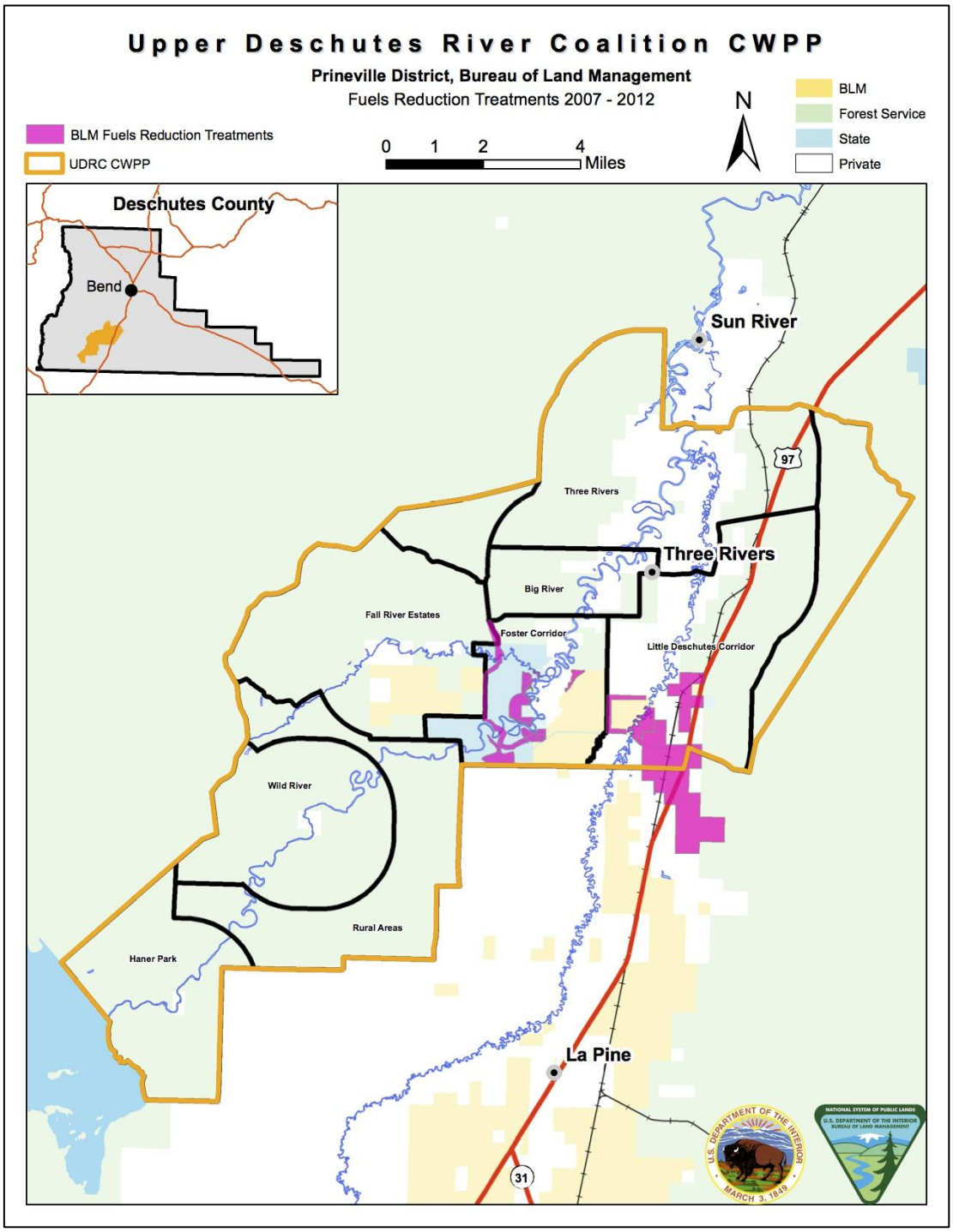
All photos courtesy of Mel Durrant, US Forest Service.

Table 2 – Current Bureau of Land Management Projects on Public Land

Project Name & Start Date	Total Acres	Treatment Types	Status	Completion Date
La Pine State Park – Unit 1 2007	**346**	Pre-Commercial thinning, hand piling & burning	Completed	2008
Little Deschutes River Prescribed Burn 2008	**137**	Broadcast burning	Completed	2009
Honey Do 2010	**31**	Pre-Commercial thinning, hand piling & burning	Completed	2010
La Pine State Park – Unit 2 2011	**280**	Pre-Commercial thinning, hand piling & burning	Active	2013
Prairie 2014	**2,690**	Commercial thinning, biomass utilization, pre-commercial thinning, hand piling & burning	Planning	TBD
Total	**3,284**			

The following map shows current and planned BLM projects in the UDRC planning area.

Bureau of Land Management Project Map



It is important to note that projects on federal lands stretch across years and sometimes decades from the planning process through implementation and include various methods of treatment as well as numbers of entries required to achieve the desired outcome.

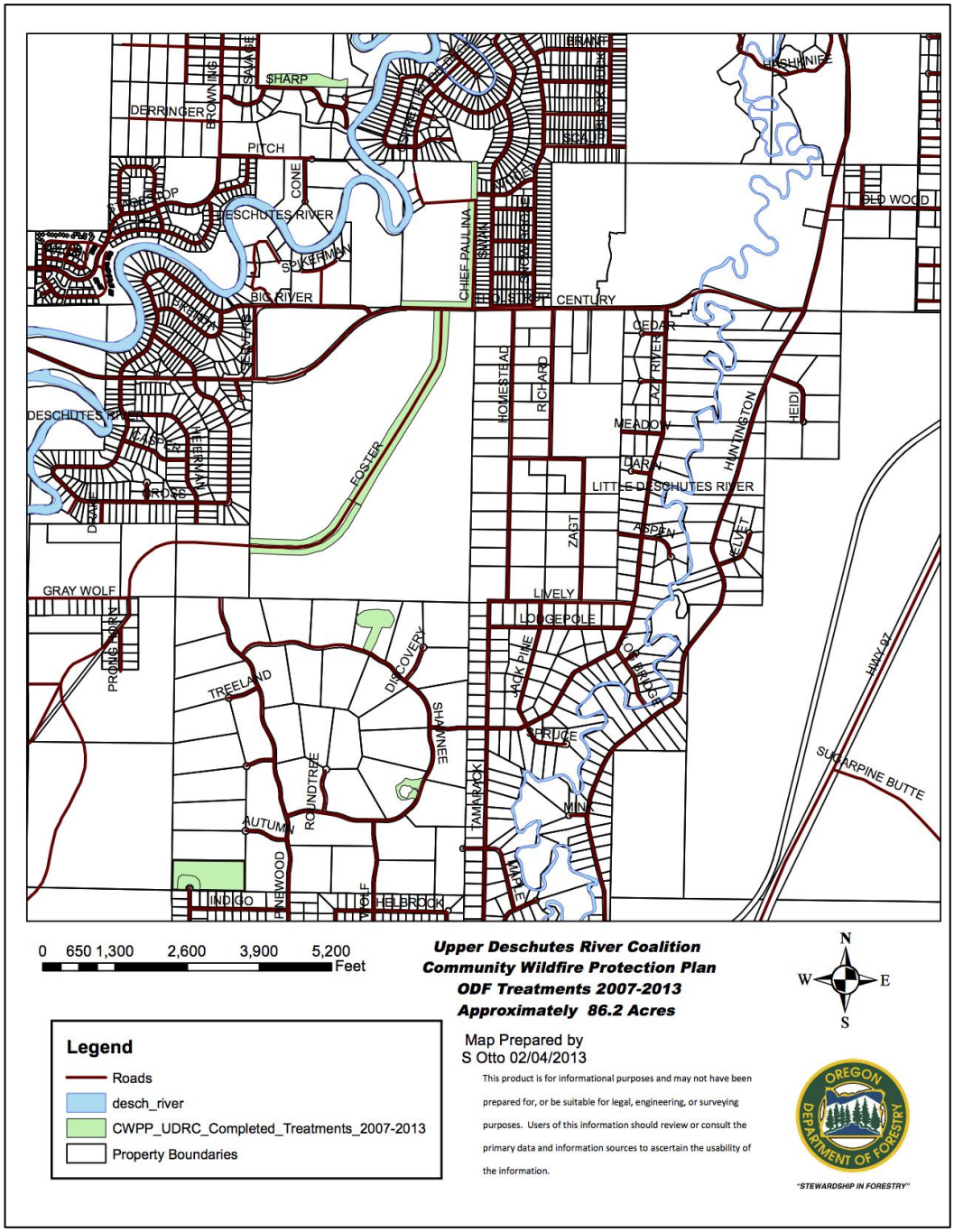
The goal for each of these projects is to reduce the potential for high intensity wildfire, restore healthy forests, improve habitat and protect communities from wildfire.

Oregon Department of Forestry

The Oregon Department of Forestry works with larger landowners on a cost share basis to reduce hazardous fuels and the potential for losses on larger tracts of land. Over the last five years, ODF has worked with five private landowners across eight projects to reduce hazardous fuels within the UDRC CWPP boundary. A total of 86.2 acres has been treated. ODF is also the program administrator for the Oregon Forestland-Urban Interface Fire Protection Act of 1997, also known as Senate Bill 360. See page 41 for information about Senate Bill 360.

The following map shows larger private lots where ODF has completed hazardous fuels reduction treatments in collaboration with landowners.

Oregon Department of Forestry Treatment Map



Deschutes County

In 2004, Deschutes County hired a County Forester to manage the County's land stock and work collaboratively with adjacent land managers and stakeholders including private citizens, the US Forest Service, the Bureau of Land Management, Oregon Department of Forestry and Project Wildfire to reduce the potential for catastrophic fires that impact Deschutes County citizens. The County Forester has made huge strides in those efforts including working with Oregon Department of Forestry to classify all lands within the County under the Oregon Forestland-Urban Interface Fire Protection Act. See page 41 for information about Senate Bill 360.

Project Wildfire

Over the last five years, Project Wildfire in cooperation with Deschutes County, has secured over $8.5 million in grant funding to reduce hazardous fuels on private lands. In order to stretch the grant money as far as possible, Project Wildfire developed the Sweat Equity Program whereby residents create or maintain defensible space on their property; bring the woody debris to the roadside and the grant funding pays to have it hauled away at no charge to the resident. Project Wildfire manages this program and now estimates that residents participating in this program are treating 10,000 acres each year. The benefit of this program is not only the treatment of hazardous fuels, but the education and resident "buy-in" that are occurring at the individual resident and neighborhood levels.

Similar to the Sweat Equity Program, Project Wildfire also coordinates and manages the FireFree Program whereby residents also complete their defensible space work and bring it to local recycling sites at no charge.

The debris collected through the Sweat Equity Program is combined with the debris collected through the FireFree Program to yield as much as 200,000 cubic yards of woody biomass each year. The debris is ground into a biomass fuel and utilized for making clean energy and electricity throughout the region.

Firewise Communities USA

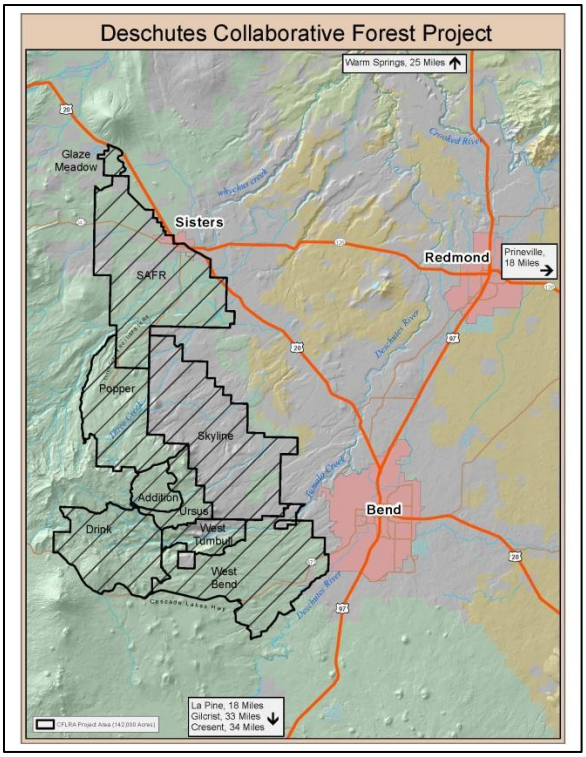
The Firewise Communities USA program is a national recognition program which highlights communities that have chosen to complete and maintain defensible space; ensure adequate access, water and signage; promote ongoing fire prevention education, and build or retro-fit structures with non-combustible building materials such as siding, decks and roofing. Oregon Department of Forestry is the statewide liaison for the Firewise Communities USA program and in coordination with Project Wildfire, is leading the charge to identify and assist neighborhoods in their Firewise and FireFree endeavors.

The Fall River Estates neighborhood became Oregon's first Firewise Community in 2005. Since then, the UDRC boasts the state's highest number of Firewise Communities in a CWPP boundary with the addition of Crosswater, Caldera Springs, Spring River, Fall River, River Meadows, and

Wild River. Specific plans to develop additional Firewise Communities in the UDRC planning area are detailed in the Action Plan and Implementation section of this CWPP on page 61.

Collaborative Forests Landscape Restoration Act – Deschutes Collaborative Forest Restoration Project

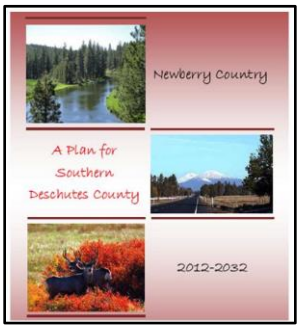
In 2010, a collaborative group of local agencies and organizations formed a proposal for funding a large, collaborative forest restoration and hazardous fuels reduction project on public lands managed by the Deschutes National Forest. This landscape level project is known as the Deschutes Collaborative Forest Project (DCFP). Under the federal Collaborative Forest Landscape Restoration Act (CFLRA), the proposal was approved for funding up to $10 million over the next ten years. The Steering Committee and several task-oriented sub-committees now provide input and recommendations to the Deschutes National Forest for projects located on the 145,000 acre landscape. The entire project spans the west side of the Greater Bend WUI, the western portion of the East & West Deschutes County CWPP boundary, and is also included in the Sisters CWPP boundary to the north and the Sunriver CWPP boundary to the south. At the time this CWPP was published, a proposed amendment to the original boundary was being considered to include additional landscape acreage near Sunriver. If the amendment is approved, additional funding can be allowed for forest restoration projects.



As restoration projects on this landscape are implemented, the prescriptions and guidelines identified in this CWPP will be met marking a significant treatment of wildland hazardous fuels on a landscape scale, a priority in each of the CWPPs in Deschutes County. This will also allow for the creation and realization of fire adaptive communities along much of the west side of the county.

The Deschutes Collaborative Forest Project now has a website in place – www.deschutescollaborativeforest.org – along with a social media presence on Facebook to continue the stakeholder dialogue and educational outreach for this important landscape.

Newberry Country: A Plan for Southern Deschutes County



Deschutes County is currently amending its Comprehensive Plan to formally recognize an area specific plan titled *Newberry Country: A Plan for Southern Deschutes County*. The Plan encompasses the rural areas south of Lava Butte except Sunriver and La Pine, which are governed separately. It addresses the area's unique assets, local values and preferences for growth and development, the environment, natural hazards, transportation and more.

The plan provides a framework for implementing a vision for building a stronger, more resilient rural community in Southern Deschutes County by managing growth to 2032. It recognizes the realities facing rural Deschutes County, while acknowledging what governments can and cannot influence. It is part of the County's Comprehensive Plan, but has more geographically specific goals and policies. It also contains a vision statement conveying the expectations of South County residents for the future, an inventory of existing conditions in the area, and the results of the public involvement process. It is being developed with significant public input and calls for collaboration among all sectors: government, businesses, non-profits, and residents to achieve a shared vision. The current draft can be found here: www.deschutes.org/newberrycountry.

Private Landowner Accomplishments

Since the implementation of the original UDRC CWPP, lot owners have made tremendous strides in reducing the potential for catastrophic losses on private lands. Working with Deschutes County and Project Wildfire, they have participated in fuels reduction projects, FireFree and Sweat Equity programs annually. The UDRC regularly updates participation in these programs to document success and the need for ongoing maintenance on private lots within the planning area. The map on page 44 details the defensible space work on individual lots in the UDRC planning area.

Community Base Maps

Utilizing the best available information and data from the US Forest Service, Oregon Department of Forestry, the Fire Learning Network and Deschutes County databases, the Steering Committee relied on the following maps and GIS data to complete the risk assessment process:

- UDRC CWPP WUI boundaries with identified Communities at Risk
- 2009 Classification ratings under Oregon Forestland Urban Interface Fire Protection Act 1997 (aka Senate Bill 360)
- 2011 Deschutes County tax lot and population data
- Wildland fire starts from 2002 – 2011.

This information is located in Appendix A.

The Steering Committee carefully identified characteristics including population, geographic and vegetative information along with wildland urban interface (WUI) areas, or Communities at Risk, within each project area according to the Healthy Forests Restoration Act.

The Healthy Forests Restoration Act defines wildland urban interface 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 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 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.

The Steering Committee has carefully planned and mapped the WUI for all the communities in the CWPP 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 eight Communities at Risk within the planning area. The UDRC WUI boundary covers 69,005 total acres.

The UDRC CWPP planning boundary is bordered by the Sunriver CWPP to the north and the Greater La Pine CWPP to the south. Its east and west flanks are bordered by the East & West Deschutes County CWPP.

In some cases the standard 1½ mile boundary around the WUI areas, or Communities at Risk, does not meet the planning area boundary. For planning and assessment purposes under this CWPP, "rural areas" refers to the lands outside the WUI boundaries described below.

Wildland Urban Interface Description

For assessment and prioritization purposes, the Steering Committee confirmed the following eight WUI areas, or Communities at Risk, within the UDRC planning area:

Three Rivers – 12,134 acres with 1,776 structures. Resident population 4,440. Including neighborhoods:

Spring River	Crosswater
DRRH #1-5 & 9	Caldera Springs
Sundance Properties	Thousand Trails
OWW II	Vandevert Ranch
Harper	Pace Estates
Sunriver Business Park	

Wild River – 7,421 acres with 107 structures. Resident population 268.

Little Deschutes Corridor – 9,907 acres with 491 structures. Resident population 1,228. Including neighborhoods:

Lazy River West	Lazy River/Huntington Road
Pinewood Country Estates	Sun Country Estates
Vandevert Acres	Whispering Pines
DRRH #8	

Haner Park – 6,453 acres with 33 structures. Resident population 83. Including the neighborhood of Haner Park.

Foster Road Corridor – 5,378 acres with 259 structures. Resident population 648. Including neighborhoods:

River Forest Acres	Beaver Special Road District
DRRH #6	La Pine State Park

Big River – 2,914 acres with 395 structures. Resident population 988. Including neighborhoods:

River Meadows	Cougar Grove
OWW I	Pitch Court
Gatehouse	Fountainbleu

Fall River Estates – 10,242 acres with 91 structures. Resident population 228. Including the neighborhood of Fall River Estates.

Rural Areas – 14,658 acres with no structures. Resident population 0.

Fuel Hazards and Ecotypes

The majority of the vegetation in the planning area includes:

- Ponderosa pine
- Lodgepole pine
- Bitterbrush
- Riparian areas

Ponderosa pine is currently found throughout the UDRC planning area. Historically, ponderosa pine forests contained more understory grasses and sporadic 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 occurred every 11-15 years characterized 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, logging activity and highly effective wildland fire suppression, have significantly altered the ponderosa pine forest type. Removal of the larger "pumpkin" pines has dramatically decreased clumpy open forests, replacing them with more evenly spaced and smaller, younger "black-bark" forests. Similar to other species of conifer forest types, the suppression of

fire has greatly increased the stocking levels 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 result 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 mature lodgepole pine. 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 planning area is rich with patches of bitterbrush that burn well on their own and provide fire-ready ladder fuels for taller tree stands.

A **riparian area** is defined as the strip of moisture-loving vegetation growing along the edge of a natural water body. The exact boundary of the riparian area is often difficult to determine because it is a zone of transition between the water body and the upland vegetation. With four river flows within the WUI area, riparian areas are of great concern from the wildland fire perspective. Vegetation types in these riparian areas vary and include trees, shrubs, grasses, forbs and willows. The primary exposure from a wildland fire perspective is during the spring before "green up" has occurred and autumn when the vegetation has cured and is highly flammable. Riparian areas include all rivers and tributaries within the planning area.

The result of the fuel hazards and forest types in the planning area is an overgrowth of trees, 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, torching and ember showers 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.

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Community Assessments of Risk

Fire Regime Condition Class (FRCC) was used as a risk assessment tool in the 2007 CWPP. FRCC is a generally accepted assessment of the *condition* of a landscape based on vegetation type and structure and its departure from historical fire intervals. It is not a standard measure of fire risk. It does provide however, some insight regarding the potential severity of a fire that a landscape may experience due to its current condition. No updated data has been published since it was originally published in 2006. The Steering Committee notes the importance of a landscape level analysis, rather than a lot-by-lot assessment, and understands the overall goal to return the landscape to its historical condition. The Steering Committee chose to utilize the 2006 Condition Class data for assisting with prioritizing projects on public lands only.

The Steering Committee also relied on the ODF Assessment of Risk Factors and the classification ratings of individual private lands under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 (aka Senate Bill 360).

ODF Assessment of Risk Factors

The Oregon Department of Forestry 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 across Oregon: risk of wildfire occurrence, hazard, protection capability, human and economic values protected and structural vulnerability. The summary of this assessment is on page 38. The individual assessments for each Community at Risk are located in Appendix B.

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 calculations are based on the number of wildland fire starts per 1,000 acres per ten years, as well as home density and ready ignition sources like dry lightning storms, debris burning and equipment use. A score is given for each evaluation with the total scores corresponding to a level of risk in each category.

The risk is high in all Communities at Risk except Wild River and Fall River Estates which ranked 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

Ember showers: smoldering embers from a nearby fire that can land in gutters, roof valleys; on or under decks and siding; in vents; or on lawn furniture where they can ignite and cause damage to a home. They can travel miles and ignite spot fires far from the original fire.

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.

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, effective wildland fire suppression has led to the extensive buildup of overstory and ground vegetation in the WUI. **All Communities at Risk are rated extreme under this assessment.**

With over half of the private lots in the planning area considered vacant with no structures, the Steering Committee considers this situation as an additional hazard. While some vacant lots have been treated to reduce hazardous fuels, the overwhelming majority have not been treated, posing a significant hazard to the communities in which they lie. In addition, many of the vacant lots are owned by "absentee owners" with no real attachment to the neighborhoods, thereby increasing the difficulty in engaging landowners to participate in hazardous fuels reduction activities.

The Steering Committee highlighted the Crown Fire Potential subcategory within the Hazard section to confirm its definition and how it applies in this assessment. The ODF Assessment of Risk asks for the relative crown fire potential in terms of three types of crown fire: passive, active and independent.

They are defined generally as follows:

> **Passive crown fire** - a type of crown fire in which the crowns of individual trees or small groups of trees burn, but solid flaming in the canopy cannot be maintained except for short periods.

Active crown fire - a crown fire in which the entire strata of fuel is involved in flame, but the crowning phase remains dependent on heat released from surface fuel for continued spread. An active crown fire presents a solid wall of flame from the surface through the canopy fuel layers. Flames appear to emanate from the canopy as a whole rather than from individual trees within the canopy.

Independent crown fire - a fire that advances in the tree crowns alone, not requiring any energy from the surface fire to sustain combustion or movement. Independent crown fires are rare.

With accurate definitions of crown fire, the Steering Committee adjusted the responses in this subcategory, which ultimately changed the quantitative totals in this section of the 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 quickly assemble the resources necessary to adequately address all of the fire and life safety issues that can arise in the early stages of emergency operations. The potential exists for a high intensity wildland fire for any number of reasons, during a significant portion of each year.

Protection capability

Fire protection capability risk rating ranges from low to high among the Communities at risk. **The Haner Park and Foster Road Corridor areas rated moderate risk and the Rural Areas remained at high risk while the remaining five communities rated low risk.** 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 and will respond to meet the needs of fire events.

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

The La Pine Rural Fire Protection District provides first response structural and wildland fire coverage within its 115 square mile fire service district supported by local taxpayers. The District provides Emergency Medical Services, including Advanced Life Support paramedic transport, within a 1,000 square mile service area.

The District is managed by a five-member elected board of directors. The District consists of 23 career and 21 volunteer reserve and student scholarship positions involved directly in fire and EMS Operations. The resident students participate in the Fire/EMS program at Central Oregon Community College. There are two administrative personnel and 12 support volunteers who provide off-line support services. All firefighting personnel receive training in wildland urban interface firefighting practices, structural fire protection and suppression techniques, and other related topics. The District uses the National Incident Management Systems (NIMS) Incident Command System and all personnel have received training and continue to train in its use. The District works out of three fire stations located on Huntington Road (downtown La Pine), Burgess and Day Road, and South Century Drive. It maintains a fleet of three structural fire engines, three Advanced Life Support paramedic ambulances, three heavy brush engines, three water tenders, two light brush engines, and three staff/utility vehicles.

The District is a party to the Central Oregon Fire Department 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, the District cooperates

with wildland fire protection agencies in the area including Oregon Department of Forestry, Walker Range Fire Protection Association, the US Forest Service, and the Bureau of Land Management.

Oregon Department of Forestry (ODF)

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 of those landowners who pay a Forest Patrol Assessment. There are some areas within the UDRC 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 forestlands 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 from 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 US Forest Service and BLM provide wildland fire protection on the federally managed lands within the UDRC CWPP 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 Grasslands, 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 manages the following local, regional and national resources:

- 26 engines
- Six initial attack hand crews
- Six prevention units
- Two dozers
- Two water tenders
- One Type 3 helicopter
- 35 smokejumpers
- Two inter-regional Hotshot crews (Redmond & Prineville)
- One Type 2 helicopter with 20 rappellers
- One Type 1 helicopter

- Central Oregon Interagency Dispatch Center (COIDC)
- Redmond Air Center
- An air tanker base
- A regional fire cache
- Required 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 UDRC 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 local 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, or 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 Communities at Risk varied from a high level of organization to none. The Steering Committee used local knowledge to determine the level of preparedness.

Values Protected

The human and economic values protected in the UDRC CWPP planning area are also at risk with **Three Rivers in the high category; Wild River, Little Deschutes Corridor, Big River and Fall River Estates in the moderate category; and the Foster Road Corridor and Haner Park communities in the low 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, there are approximately 3,152 structures in the UDRC WUI, with an appraised value of $979,587,465 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 likely be minimal in the event of a fire 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 CWPP boundary is also traversed by a noted deer migration route.

Also falling within the 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.

Structural Vulnerability

Although attitudes and behaviors towards fire are changing in central Oregon thanks to educational programs like FireFree and Firewise, the population growth and continued development into the wildland urban interface present fresh challenges each year. The UDRC places high value on the importance of making structures and neighborhoods in the WUI 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 Little Deschutes Corridor and Foster Road Corridor Communities at Risk ranked in the moderate category while the Three Rivers, Wild River, Haner Park, Big River and Fall River Estates Communities at Risk 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 feet, 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. Summary totals from the 2006 assessment are included for comparison. The full assessments on each Community at Risk are located in Appendix B.

Table 3 – ODF Assessment of Risk Summary

Community at Risk	What is the likelihood of fire occurring?	Hazard Rating	Protection Capability	Human & Economic Values	Structural Vulnerability	2012 Total Score	2006 Total Score	Pure Rank
Three Rivers	35 High	63 Extreme	0 Low	35 High	17 Low	**150**	172	**2**
Wild River	25 Moderate	56 High	0 Low	22 Moderate	24 Low	**127**	150	**5**
Little Deschutes Corridor	28 High	68 Extreme	3 Low	22 Moderate	33 Moderate	**154**	186	**1**
Haner Park	30 High	66 Extreme	12 Moderate	2 Low	28 Low	**138**	162	**4**
Foster Road Corridor	30 High	65 Extreme	10 Moderate	2 Low	43 Moderate	**150**	183	**2**
Big River	32 High	64 Extreme	1 Low	30 Moderate	12 Low	**139**	162	**3**
Fall River	15 Moderate	63 Extreme	0 Low	22 Moderate	16 Low	**116**	141	**6**
Rural Areas	28 High	61 Extreme	19 High	12 Low	NONE	**NA**	NA	**NA**

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

Although not used as an assessment tool for the prioritization of private lands in this update of the UDRC CWPP, the Steering Committee notes it here because of its description of the condition of the overall landscape and its assistance in prioritizing proposed treatments on public lands included in this CWPP.

Fire Regime Condition Class considers the type and structure of vegetation across a landscape and the departure from its natural, historical fire 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 (ponderosa pine & bitterbrush) and IV (lodgepole pine) are the predominant representations on the landscape in the eight Communities at Risk. Ponderosa pine for example, has a fire return interval of approximately 35 years with high potential for low severity fires. Therefore, it falls within Fire Regime I.

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 (CC) categorizes a departure from the natural fire frequency based on ecosystem attributes. In CC 1, the historical ecosystem attributes are largely intact and functioning as defined by the historical natural fire regime; a low departure. In other words, the stand has not missed a fire cycle. In CC 2, the historical ecosystem attributes have been moderately altered. Generally, at least one fire cycle has been missed; a moderate departure. In CC 3, historical ecosystem attributes have been significantly altered. Multiple fire cycles have been missed; a high departure.

Table 4 summarizes Condition Class.

Table 4 – Condition Class

Condition Class	Attributes
CC 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.
CC 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.
CC 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.

There are 69,005 acres in the UDRC WUI area. Significant fuels reduction projects continue to reduce the amount of acreage in Condition Class 2 & 3. Achieving Condition Class 1 on public lands however, requires multiple entries on treatment sites, over a period of years. For example, thinning and mowing may occur over a 12-24 month project period. The under-burning component of the project may not occur for another year while the land recovers from the thinning and mowing and produces an adequate shrub content to support prescribed fire.

Condition Class applies on the landscape level. Therefore, the Steering Committee recognizes that although significant fuels reduction work has been completed by US Forest Service and the BLM, the need continues on the landscape as a whole. The Steering Committee supports the ongoing planning and treatment processes on public lands.

Oregon Forestland-Urban Interface Fire Protection Act of 1997 (aka Senate Bill 360)

The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists the aid of property owners toward the goal of turning fire-vulnerable urban and suburban properties into less volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides.

The process of identifying forestland-urban interface areas follows steps and definitions described in Oregon Administrative Rules. Briefly, the identification criteria include:

- Lands within the county that are also inside an Oregon Department of Forestry protection district.
- Lands that meet the State's definition of "forestland".
- Lands that meet the definition of "suburban" or "urban;" in some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries.
- Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres.

Forestland-urban interface areas are identified in each county by a Classification Committee. Once areas are identified, this committee applies fire risk classifications to the areas. The classifications range from "low" to "high density extreme," and the classification is used by a property owner to determine the level of hazardous fuel reduction that needs to be established on the property to minimize risk of experiencing structural property loss from unwanted wildfire. The Classification Committee reconvenes every five years to review and recommend any changes to the classifications. This process was completed and approved in fall 2009. At the same time, Deschutes County elected to classify *all* the lands within its boundaries, regardless of ODF protection.

The Oregon Department of Forestry is the agency steward of this program. It supplies information about the Act's fuel-reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. Certification relieves a property owner from the Act's fire cost recovery liability. This potential liability takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by ODF. In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. The cost recovery liability under the Oregon Forestland-Urban Interface Fire Protection Act is capped at $100,000.

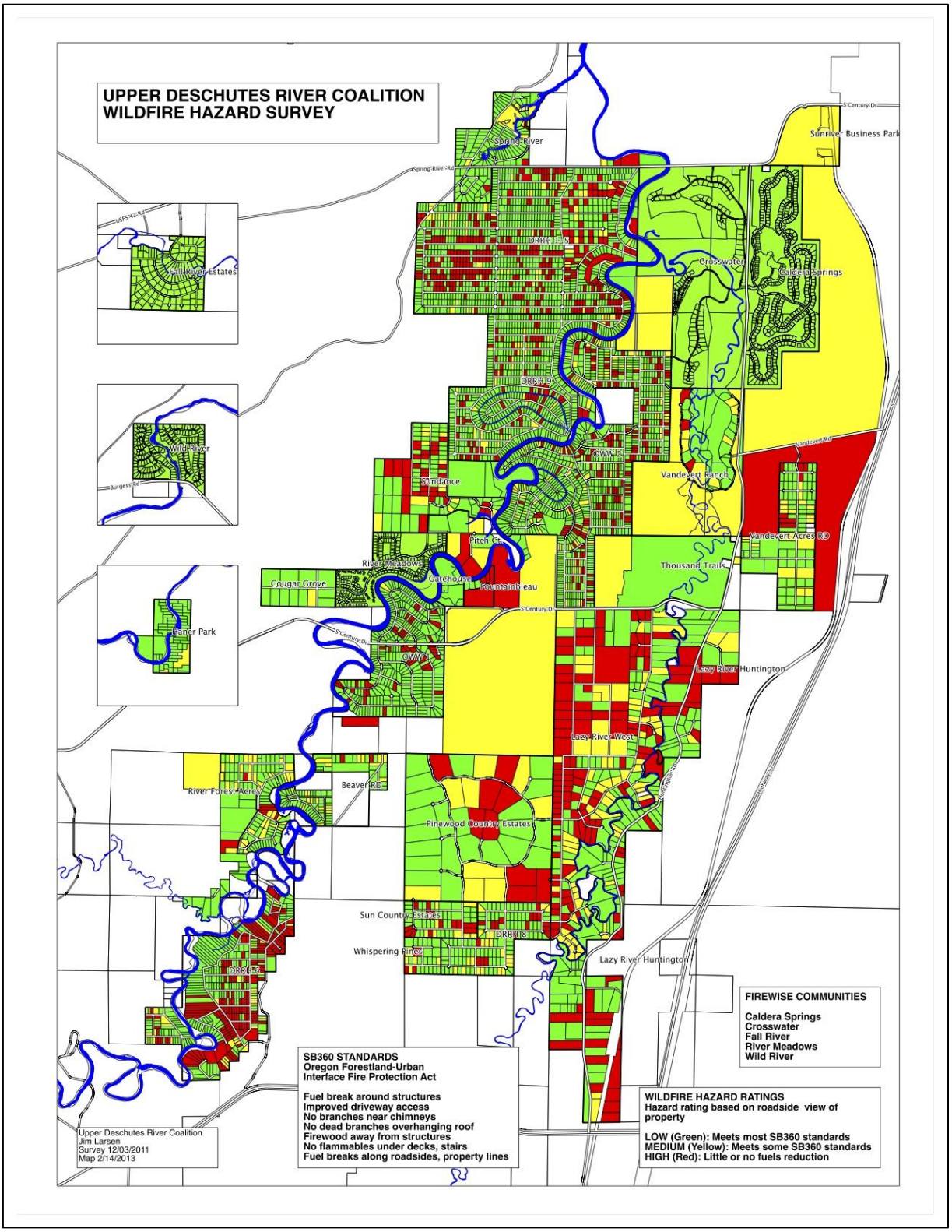
The specific recommendations under Senate Bill 360 for private lands are outlined under Prioritized Hazard Reduction Recommendations and Preferred Treatment Methods in this CWPP.

Each of the eight Communities at Risk in the UDRC CWPP has one or more corresponding classification ratings under Senate Bill 360. The ratings among the eight Communities at Risk include High, Extreme and High Density Extreme. The following table summarizes Senate Bill 360 classification ratings and the percentage of lots meeting requirements in each Community at Risk.

Table 5 – Senate Bill 360 Ratings by Neighborhood & Private Lot Compliance

Community at Risk	SB 360 Rating	Complied	Needs Some Work / Maintenance	No work completed
Three Rivers		75%	9%	16%
Spring River	Extreme			
DDRH 1-5 & 9	Extreme			
Sundance Properties	Extreme			
OWW II	Extreme			
Caldera Springs	High			
Thousand Trails	Extreme			
Crosswater	Extreme			
Vandevert Ranch	Extreme			
Harper	Extreme			
Pace Estates	Extreme			
Sunriver Business Park	Extreme			
Big River		91%	2%	7%
River Meadows	Extreme			
Cougar Grove	Extreme			
OWW I	Extreme			
Pitch Court	Extreme			
Gatehouse	Extreme			
Fountainbleau	Extreme			
Foster Road Corridor		57%	14%	29%
River Forest Acres	High Density Extreme			
Beaver Special Road Dist	Extreme			
DRRH 6	High Density Extreme			
La Pine State Park	Not classified			
Little Deschutes Corridor		56%	19%	25%
Lazy River West	Extreme			
Lazy River/Huntington Road	Extreme			
Pinewood Country Estates	Extreme			
Sun Country Estates	Extreme			
Vandevert Acres	High Density Extreme			
Whispering Pines	Extreme			
DRRH 8	Extreme			
Haner Park		97%	3%	0%
Haner Park	Extreme			
Wild River		100%	0%	0%
Wild River	Extreme			
Fall River Estates		100%	0%	0%
Fall River Estates	Extreme			

UDRC Defensible Space Compliance Map as of December 2011



The two assessments produced the following composite:

Table 6 - Composite ODF Assessment & SB 360 Ratings/Lot Compliance

Community at Risk	ODF Assess Rank	SB 360 Rating	Composite Rank
Three Rivers	2	3	Highest
Wild River	5	7	High
Little Deschutes Corridor	1	2	Highest
Haner Park	4	5	Higher
Foster Road Corridor	2	1	Highest
Big River	3	4	Higher
Fall River Estates	6	7	High
Rural Areas	NA	NA	

The Steering Committee utilized information from the ODF Assessment of Risk and the Senate Bill 360 Classification ratings and lot compliance to compile priorities for hazardous fuels treatments.

Three groups of priorities for fuels reduction treatments emerged from this analysis:

Priorities

- Highest – Little Deschutes Corridor, Foster Road Corridor, Three Rivers
- Next highest priorities (higher) – Big River, Haner Park
- High – Wild River, Fall River Estates

For each priority, the Steering Committee adds the following notes to provide a greater understanding of prioritizing risk in each area. For complete notes, see the assessments in Appendix B.

Highest priority areas

Little Deschutes Corridor

Recent thinning and prescribed burning projects have occurred on the East Side of Highway 97 but there is still much concern about the area west of the highway and the potential for fire spread and extreme fire behavior from prevailing winds coming out of the south and southwest. The Steering Committee agreed that both the public and private lands in this area are still in significant need of fuels treatment and/or maintenance.

Foster Road Corridor

The Steering Committee noted that recent thinning and prescribed burning projects on the public lands in the WUI have resulted in reduced surface fuels and a lower risk of spotting, torching and crown fire. In contrast however, the group agreed that the private lands in this area are still in significant need of fuels treatment and/or maintenance.

DRRH #6 is highlighted by the Steering Committee as significantly lacking in defensible space and fuels reduction on individual lots, many of which are vacant or owned by absentee owners. Within the Foster Road Corridor area, DRRH #6 is of utmost importance for treatments on private lands.

Three Rivers

DRRH #1-5 is highlighted by the Steering Committee as currently lacking in defensible space and fuels reduction on individual lots, many of which are vacant or owned by absentee owners. Within the Three Rivers Community at Risk, DRRH #1-5 is of utmost importance for treatment on private lands.

Next highest (higher) priority areas

Big River

The Steering Committee noted that recent thinning and prescribed burning projects on the public lands in the WUI have resulted in reduced surface fuels and a lower risk of spotting, torching and crowning. In contrast however, the Steering Committee agreed that the large private lots in this area are in severe need of fuels treatment and/or maintenance.

River Meadows is highlighted by the Steering Committee as a neighborhood that has received Firewise recognition, but is in need of maintenance to improve defensible space due to regrowth of small trees and brush. The Steering Committee recommends consultation with Oregon Department of Forestry to improve defensible space and reapplication for Firewise status.

Haner Park

Haner Park is the only recognized neighborhood in this boundary. The Steering Committee noted that while there have been treatments east of the 44 Road (Dillman project), there is still much concern about the area west of the 44 Road and the potential for fire spread and extreme fire behavior from prevailing winds coming out of the south and southwest. The Steering Committee

agreed that both public & private lands in this area are still in significant need of fuels treatment and/or maintenance.

High priority areas

Wild River

Wild River is the only neighborhood community in this boundary and is a recognized Firewise Community.

The US Forest Service has been active in reducing fuels and burning understory along Burgess Road to reduce the likelihood of high intensity fire along ingress/egress routes.

Fall River Estates

Fall River Estates is the only neighborhood community in this boundary and is recognized under Firewise Communities, USA.

The US Forest Service has been active in reducing fuels and burning understory along the highway to reduce the likelihood of high intensity fire along ingress/egress routes (Myst Project).

Areas of special concern

Critical Transportation Routes

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

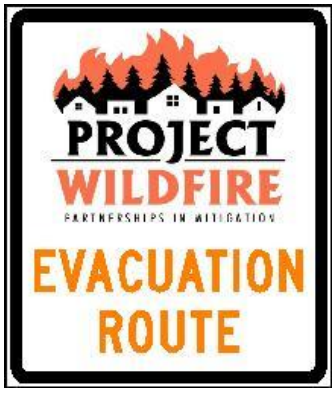
- all routes necessary for the support of routine flow of commerce to and/or through the greater planning areas,
- all routes that could be used for potential evacuation of citizens and/or visitors from a wildland fire threat to public safety,
- routes needed for emergency ingress and egress to a wildland 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).

A detailed look at specific ingress/egress issues for each WUI area is included under Recommendations to Reduce Structural Vulnerability. This issue is also highlighted under Action Plan and Implementation.

Deschutes County estimates that there are thousands of additional transient population who visit recreation sites and utilize the transportation corridors in these planning areas. Critical transportation routes are of prime concern for those agencies responsible for fire suppression and evacuation.

The Steering Committee is also concerned with the lack of maintained roads leading in and out of the high risk areas in the WUI. Should an evacuation be necessary, the Steering Committee expressed great concern over the number and quality of the evacuation routes. Many of the egress routes are dirt roads that contribute to substantial dust and debris clouds as vehicles attempt to use them. During the summer months, after a few cars travel a road, the dust is so dense that it is not safe for vehicles to continue using the road until the dust settles. Lack of maintenance has led to deteriorated road surfaces with large potholes, ruts and washboards that slow evacuation efforts and cause some vehicles to break down, further complicating a mass departure from the area. The current condition of some of the evacuation routes is a significant life safety issue.

Working with Deschutes County and Project Wildfire, neighborhoods within the Communities at Risk have taken advantage of a signage program to increase visibility of evacuation route signs along roads. The signs are made from high intensity reflective material and indicate proper exit routes from these neighborhoods.



The Steering Committee underscored the need to continue to identify, develop and protect critical transportation routes as part of this planning process. Ingress/egress issues are included under Recommendations to Reduce Structural Vulnerability. This issue is also highlighted under Action Plan and Implementation.

Water

Some of the Communities at Risk in the WUI areas have significant fire response times and rely on water transported to the scene for fire suppression. This presents significant challenges in the event of a wildland fire as there are limited water resources for fire suppression or protection. Adequate water resources were not considered in the assessment. This topic is addressed as a future item under Action Plan and Implementation.

Prioritized Hazard Reduction Recommendations and Preferred Treatment Methods

As maintained in the original CWPP, the Steering Committee agreed that the UDRC Community Wildfire Protection Plan is a tool that can be used for many outcomes. The following is an outline of the priorities, as well as preferred treatments and goals under the UDRC Community Wildfire Protection Plan.

Priorities

Based on the assessment composite as shown in Table 6 the Steering Committee has identified the following priorities:

- **Highest** – Little Deschutes Corridor, Foster Road Corridor, Three Rivers
- **Next highest priorities (higher)** – Big River, Haner Park
- **High** – Wild River, Fall River Estates

Goals

The Steering Committee identified the following goals to meet the Purpose on page one of this CWPP. It is important to note that the UDRC does not prioritize these goals over one another. The UDRC and the CWPP Steering Committee agree that they are interconnected and interdependent for success.

- Reduce hazardous fuels on public lands;
- Reduce hazardous fuels on private lands;
- Reduce structural vulnerability;
- Increase education and awareness of the 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 boundary throughout the UDRC CWPP and the recommended areas for treatments by reducing wildland fuel hazards on both public and private lands.

The standard of the UDRC CWPP is to decrease the risk of uncharacteristic and high intensity 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.

One of the CWPP goals is to provide for a healthy, fire resilient landscape that supports the social, economic and ecological values of area residents and visitors. The Steering Committee recognizes the effectiveness and value of maximizing treatment efforts in areas that are adjacent to federal 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 Upper Deschutes River Coalition WUI.

Public lands

Six of the eight Communities at Risk are adjacent to public lands managed by either the Forest Service or the Bureau of Land Management. State owned lands represent only a small percentage of the lands (3%) within the planning area.

It is the intent of the Steering Committee that the UDRC WUI 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 overall standard for public lands under this CWPP is to decrease the risk of high intensity wildland fire behavior by reducing and maintaining fuel loads to that which can produce flame lengths of less than four feet in the areas within the WUI boundary. This buffer will begin at the edge of private lands (except where other land management practices prohibit it such as riparian or wetland areas) and extend onto the federal lands to the designated WUI boundary. This standard can be achieved by federal land management agencies 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.

Federal land managers are strongly encouraged to work toward the overall standard by restoring Condition Class 2 and 3 lands with the goal of returning the landscape to Condition Class 1. In stands where Crown Fire Potential is rated Extreme by the federal agencies the recommended standard is to reduce fuel loads to that which can produce flame lengths of less than four feet, regardless of Condition Class:

- Within a ¼ mile buffer of the UDRC WUI boundary. Treatments should begin here and increase in ¼ mile increments until the WUI boundary is reached.
- Within 300 feet of any evacuation route from any of the Communities at Risk.
- Maintenance of previously treated lands is also a top priority. Treatment and maintenance of previously treated lands before treatment begins again in other places is an important component of keeping communities safe.

In general, the dominant strategy in all areas should be thinning from below, in an effort to restore large tree, open, ponderosa pine dominated forests. Federal land managers are strongly encouraged

to utilize mechanical treatments including prescribed fire to reduce fuel loads to that which can produce flame lengths of less than four feet.

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.

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 UDRC 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.

The Steering Committee also encourages federal and state land managers to work with local landowners to minimize road closures that could be used as alternate evacuation routes.

Industrial and non-industrial private forestlands

Private forestlands are generally larger land holdings 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 still a few private forestland parcels in the UDRC WUI that directly border some of the Communities at Risk. The Steering Committee recommends continued partnerships with private forestland owners that encourage 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

Only 18% of the land (12,547 acres) in the UDRC planning area is private land and is considered developed, or in rare cases intermixed with development. The County owns only 211 acres in this planning area.

Private land with *or* without structural improvements

On private lands within the CWPP WUI boundary with structural improvements or those that are vacant, the minimum goal is for each property to meet the Senate Bill 360 Standards for its individual classification rating.

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 http://www.oregon.gov/odf/pages/fire/sb360/sb360.aspx

The minimum Default Standards under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 (Senate Bill 360) are:

- Establish a primary fuel break of 30 feet around structures;
- 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 20 feet away from structures;

In addition to the default standards, if the structure has a flammable roof and the property is classified as High, a secondary fuel break of 20 feet is required. For properties rated Extreme or High Density Extreme, the secondary fuel break must be 70 feet (for a total of 100 feet). Furthermore, all properties rated High Density Extreme are required to have a 20-foot fuel break around the perimeter of the property.

Although not included in the Senate Bill 360 standard, the Steering Committee strongly recommends a 20-foot fuel break around the perimeter of any properties rated Extreme to break up continuous fuels in the community.

Property owners can also create and/or maintain defensible space, a fire-resistant buffer that allows for effective first-response firefighting and a significantly reduced risk of the spread of fire by participating in programs like FireFree and Firewise which promote a variety of fire safe actions to help prevent the spread of fire to protect individual homes and neighborhoods.

Lots without structural improvements, or vacant lots, pose an additional challenge. Within the UDRC WUI, over half of the private land is considered vacant (3,173 lots), 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." *As noted above, the Steering Committee strongly recommends a 20-foot fuel break around the perimeter of any properties rated Extreme regardless of whether there is a structure on the property.*

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Recommendations to Reduce Structural Vulnerability

Structural Vulnerability

There are 3,152 structures spread across this CWPP boundary. Structural vulnerability is addressed as a required evaluation under the ODF Assessment of Risk but more importantly, to assist local residents in preparing their properties against the threat of wildland fire. Based on the assessment of structural vulnerability for the ODF Assessment of Risk, Table 7 identifies the main hazards within the Communities at Risk. For each hazard or risk listed, an action is recommended to address the threat or decrease the risk.

In every instance, resident and landowner education is a primary goal. The Steering Committee recommends engaging in educational programs such as FireFree, Firewise and Senate Bill 360.

Adequate water resources for fire suppression were not considered as part of this assessment. This topic is addressed under Action Plan and Implementation.

Table 7 – Structural Vulnerability Hazards & Recommendations

Community at Risk	Primary Hazards	Recommended Actions
Three Rivers Priority: DRRH #1-5	Flammable roofing – 10% non compliant	Replace as possible with fire resistant variety
	25% have little or no defensible space.	**Create & maintain defensible space**
	Lack of sufficient turnarounds for fire service access	Improve where possible
	Untreated vacant lots	**Apply 20' fuel break around each**
Wild River	Flammable roofing – 15% non compliant	Replace as possible with fire resistant variety
	Maintain defensible space around structures – 100% compliant	Create & maintain defensible space. Reapply each year for Firewise recognition.
	Access with only one road in/out	Establish additional routes, sign and maintain
	Lack of sufficient turnarounds for fire service access	Improve where possible
Little Deschutes Corridor Priority: Lazy River West	Flammable roofing – 15% non compliant	Replace as possible with fire resistant variety
	44% have little or no defensible space	**Create & maintain defensible space**
	Access with only one road in/out	Establish additional routes, sign and maintain
	Roads of insufficient width	**Identify, upgrade & maintain**
	Poor fire service access, turnarounds	**Improve & maintain where possible**
	Untreated vacant lots	**Apply 20' fuel break around each**
Haner Park	Flammable roofing – 10% non compliant	Replace as possible with fire resistant variety
	Only a few structures without defensible space	Create & maintain defensible space. Apply for Firewise Community recognition.
	Roads with only one road in/out	Establish additional routes, sign and maintain
	Lack of surfaced roads	**Identify, upgrade & maintain**
	Roads of insufficient width	**Identify, upgrade & maintain**
	Poor fire service access, turnarounds	**Improve & maintain where possible**
	Lack of street signage	**Identify, sign & maintain**
	Continued on next page	

Foster Road Corridor Priority: DRRH #6	**Flammable roofing – 33% non compliant**	**Replace as possible with fire resistant variety**
	43% have little or no defensible space	**Create & maintain defensible space**
	Roads with only one road in/out	Establish additional routes, sign and maintain
	Lack of surfaced roads	**Identify, upgrade & maintain**
	Roads of insufficient width	**Identify, upgrade & maintain**
	Poor fire service access, turnarounds	Improve & maintain where possible
	Lack of some street signage	Identify, sign & maintain
	Untreated vacant lots	**Apply 20' fuel break around each**
Big River	Flammable roofing – 5% non compliant	Replace as possible with fire resistant variety
	9% have little or no defensible space	Create & maintain defensible space. Apply for Firewise Community recognition
	Roads of insufficient width	**Identify, upgrade & maintain**
	Poor fire service access, turnarounds	**Improve & maintain where possible**
	Untreated large lots	**Apply 20' fuel break around each**
Fall River Estates	Flammable roofing – 5% non compliant	Replace as possible with fire resistant variety
	Maintain defensible space around structures – 100% compliant	Maintain defensible space. Reapply each year for Firewise Communities recognition.
	Access with only one road in/out	Establish additional routes, sign and maintain
	Poor fire service access, turnarounds	Improve & maintain where possible

* Action/items in **BOLD** are considered highest priorities by the Steering Committee within each area.

Table 8 provides a checklist for residents seeking to reduce the risk of catastrophic losses to their homes and properties. The list is compiled from tips and suggestions from the FireFree and Firewise programs, which promote homeowner responsibility for reducing fire hazards on their property. The Steering Committee approves this combined checklist. More information about these programs can be found at www.firefree.org and www.firewise.org.

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-resistant 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 - do not burn building materials.

Other Recommendations

Education

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

- Instill a sense of personal responsibility for taking preventive actions regarding wildland fire,
- Increase public understanding of living in a fire-adapted ecosystem, and
- Increase the community's ability to prepare for, respond to and recover from wildland fires.
- Create and maintain fire adapted communities.

With these goals in mind, education and outreach are top priorities. The rapid influx of new residents and visitors over the last decade is just one reason the Steering Committee 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 fire resilient forests and communities look like as well as easy access to resources that help them take action.

There are several opportunities to enhance educational efforts. Oregon Department of Forestry, La Pine Rural Fire Protection District, and Project Wildfire all provide wildland fire prevention and preparedness programs through a variety of individual and collaborative efforts.

The UDRC itself is a well-organized association of neighborhoods and communities that provides valuable ongoing education to its populations about the risks of catastrophic wildland fire and ways to improve their protection. The UDRC recently published a brochure in collaboration with Project Wildfire about the need for and how to create and maintain defensible space.

The Steering Committee also recommends support for projects that enhance a community's ability to communicate necessary information in the event of a wildfire. Programs that develop and maintain neighborhood phone trees or communication lists that identify neighbors who may need additional assistance during an evacuation are encouraged.

Fire Adapted Communities

The creation of fire adapted communities is new to the UDRC CWPP as a goal. As residents employ the recommendations in this CWPP, fire adapted communities will begin to surface. A recent public paradigm shift across the United States, a fire adapted community engages a higher degree of personal responsibility on the part of residents in fire prone areas. Residents and neighbors are encouraged to prepare not only their properties but also their families in fire safe practices including necessary evacuation protocols. Utilizing pre-fire strategies such as defensible

space and fire resistant landscaping and construction materials, communities can turn entire neighborhoods into fire adapted communities where even in the event of a wildland fire, people can safely evacuate themselves, homes survive with little or no intervention from fire agencies and if trapped, people know what to do to survive the fire.

Becoming a fire adapted community is a process. A fire adapted community includes the following characteristics:

- Is in or near a fire adapted ecosystem.
- Has adequate local fire suppression capacity to meet most community protection needs.
- Structures and landscaping are designed, constructed, retrofitted and maintained in a manner that is ignition resistant.
- Has local codes (building, planning, zoning, and fire prevention codes) that require ignition-resistant home design and building materials.
- Fuels on land near and inside the community are treated and maintained for safety.
- Has and uses a community wildfire protection plan.

A fire adapted community has also built other safety features such as buffers between fuels and the community; designated safe evacuation routes; and designated safe zones in the community when evacuation is not advisable.

The UDRC, Deschutes County and Project Wildfire endorse the national Ready, Set, Go! Program that provides a framework for enhancing current education programs that will lead to the development of fire adapted communities.

Utilizing the information in Tables 7 and 8 property owners are strongly encouraged to learn more about how they can reduce the hazards on their own property. Local residents are encouraged to contact Project Wildfire at (541) 322-7129 for information. Residents may also find additional information on how they can reduce hazards and protect themselves at www.firefree.org and www.firewise.org.

Action Plan and Implementation

The Steering Committee recognizes that the UDRC 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. It is important to note that the UDRC reviews and updates an Operations Plan annually. The Steering Committee acknowledges that yearly effort and maintains that the broad recommended actions in this CWPP support the specific projects in the annual Operations Plan.

Goals

Reduce hazardous fuels on public lands

Action:

Immediately following the acceptance and signed approval of this plan, the Steering Committee will make copies of the UDRC 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 dialogue with the Communities at Risk 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 recommend that future projects consider these benefits when selecting areas for treatment.

The UDRC structure includes a Public Lands Committee. This committee will collaborate with the US Forest Service and the BLM to incorporate fuels reduction in the CWPP priority areas within the agency project planning process.

Reduce hazardous fuels on private lands

Action:

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

Action:

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 Communities at Risk. 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 WUI areas.

Increase Awareness and Education

Action:

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

Identify, Improve and Protect Critical Transportation Routes

Action:

The Steering Committee will work with Deschutes County, and the Oregon Department of Transportation to identify and map existing transportation and evacuation routes in each WUI area. The Steering Committee will assist in conducting further assessments to determine the evacuation needs of each Community at Risk and identify potential projects to develop 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 an option?

The Steering Committees 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.

Identify and Improve Water Resources

Action:

The Steering Committees will work with local fire and land management agencies, Deschutes County and residents to identify, map and make recommendations to improve potential water resources that may be utilized to contribute to fire suppression during a wildland fire.

Fund Projects

Action:

The Steering Committees 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.

The following table summarizes the actions recommended in this CWPP.

Table 9 – Summary of Action Plan

Goals	Action	Entity Responsible	Timeline
		Steering Committee in cooperation with:	
Reduce hazardous fuels on public lands	Upon approval of this CWPP, forward copies of the 2013 UDRC CWPP to all public land managers and public safety officials. In addition make the CWPP available to developers, HOAs and any entities providing governance to communities and organized neighborhoods.	Project Wildfire	Upon CWPP approval in March 2013
Reduce hazardous fuels on private lands	Engage highest and higher risk communities in Sweat Equity or other fuels reduction projects on private lands.	Project Wildfire	By 12/2015
	Identify and certify two (2) new communities for application under the national Firewise Communities USA program.	ODF, Project Wildfire	By 12/2015
Reduce Structural Vulnerability	Identify and certify two (2) new communities for application under the national Firewise Communities USA program.	ODF, Project Wildfire	By 12/2015
	Identify and assess the water resources available for fire. Make recommendations for projects to ensure adequate water resources are available for fire suppression.	La Pine RFPD, UDRC	By 12/2015
Increase Awareness and Education	Provide FireFree and Firewise education and materials to all Communities at Risk - in addition to any ongoing educational events completed by those communities.	Project Wildfire	By 12/2015
Identify, Improve and Protect Critical Transportation Routes	Identify and map existing transportation and evacuation routes of concern. Identify at least one Community at Risk per year to approach and develop evacuation signage projects.	Project Wildfire, Deschutes County, ODOT	By 12/2015

Evaluation and Monitoring

Monitoring of progress and accountability for accomplishment of the actions in this plan is critical to the success of the CWPP. Monitoring provides an essential feedback loop that is the basis for continuous adaptation and improvement. Monitoring also includes the opportunity to identify and incorporate new accomplishment data and scientific information as it becomes available.

The Steering Committee faced a complex task in the development of the Upper Deschutes River Coalition Community Wildfire Protection Plan. Implementing and sustaining these efforts will require a significant commitment. Maintaining a collaborative and cooperative environment with residents, community-based organizations, local government and the public land management agencies will be critical to reducing the risk of loss from wildland fire. The Steering Committee pledges to maintain this cooperation with the public and stakeholders over the long-term with the commitment of all the partners involved.

At a minimum, the Steering Committee shall include: the Program Director from Project Wildfire; the co-chairs of the UDRC private lands, public lands and watershed committees; a representative from Oregon Department of Forestry (ODF); a representative from Central Oregon Fire Management Service (COFMS), and Deschutes County along with other stakeholders and members of the public.

The Steering Committee agrees that the UDRC 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 regularly to address its Purpose.

Project Wildfire will convene the Steering Committee as often as the Steering Committee deems necessary to implement and review the UDRC Community Wildfire Protection Plan with a minimum target for reviewing and updating the plan every five years. Topics for discussion can include:

- Identification and assessment of new or treated risks.
- Evaluation and tracking of progress toward goals.
- Updating of maps using current data.
- 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.

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