

Pole Creek Fire
Sisters, OR 2012

2014 Greater Sisters Country Community Wildfire Protection Plan

May 12, 2014

Prepared by
Alison Green
Project Wildfire
projectwildfire.pw@gmail.com
www.projectwildfire.com
(541) 322-7129

Executive Summary

Community Wildfire Protection Plans (CWPPs) are documents that designed to be developed by local group of stakeholders who are invested in the wildland fire threat to their area. The group of stakeholders typically consists of a representative from the fire department, the state, any governing bodies and especially property owners. Each of these representatives should bring their concerns regarding wildland fire to the discussion and propose solutions to their concerns.

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. Continued efforts have 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 by participating in programs such as Firewise and FireFree.

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 wildlands valued by residents and visitors. These landscapes however, are now significantly altered due to fire prevention efforts, modern suppression activities and a general lack of large scale fires, resulting in overgrown forests with dense fuels that burn more intensely than in the past. In addition, the recent increase in population has led to a swell in residential development into forested land, in the wildland urban interface.

The 2014 Greater Sisters Country Community Wildfire Protection Plan will assist the Sisters – Camp Sherman, Black Butte Ranch and Cloverdale Fire Districts and Sisters area residents in the identification of surrounding lands, including federal and state lands at risk from high intensity wildland fire. The Greater Sisters Country CWPP identifies priorities and strategies for reducing hazardous wildland fuels while improving forest health, supporting local industry and economy and improving fire protection capabilities. It also identifies strategies to address special areas of concern such as evacuation routes as well as outlines actions that individuals can take to help protect themselves and their neighborhoods against the threat of wildland fires.

The Greater Sisters Country Community Wildfire Protection Plan is ultimately developed by and for the community members to enhance their understanding of their local surroundings and how their landscape determines their risk of wildland fire. Each risk assessment and recommendation in this plan has been made after careful consideration by the Steering Committee. Specific recommendations for homeowners to reduce their risk can be found on pages 37 and 38 of this CWPP.

Declaration of Agreement

The Greater Sisters Country Community Wildfire Protection Plan was originally completed and signed on June 21, 2005. A revision to the original plan was approved on May 15th, 2006. The Sisters City Council accepted a second revision of this plan on October 8th, 2009. As directed by this CWPP, fuels reduction activities have been completed on public and private lands. Recent wildland fires have also impacted the landscape. Combined, these events have changed the priorities outlined in the three previous documents. The Deschutes County Board of Commissioners accepted the original plan by resolution #2006-040.

_____ _____

Roger Johnson, Fire Chief — Date
Sisters – Camp Sherman Rural Fire Protection District

_____ _____

Thad Olsen, Fire Chief — Date
Cloverdale Rural Fire Protection District

_____ _____

Dan Tucker, Fire Chief — Date
Black Butte Ranch Rural Fire Protection District

_____ _____

Andrew Gorayeb, City Manager — Date
City of Sisters

_____ _____

Kevin Benton, District Forester — Date
Oregon Department of Forestry

_____ _____

Tammy Baney, Chair — Date
Deschutes County Board of Commissioners

_____ _____

Tony DeBone, Vice Chair — Date
Deschutes County Board of Commissioners

_____ _____

Alan Unger, Commissioner — Date
Chair, Deschutes County Board of Commissioners

Acknowledgements

Assembled within the true spirit of collaboration, the following people are acknowledged for their participation and commitment resulting in the creation of the 2014 Greater Sisters Country Community Wildfire Protection Plan.

Joanne Anttila	Board Member — Crossroads
Jack Barringer	Resident — Black Butte Ranch
Kevin Benton	Oregon Department of Forestry
Leland Bliss	Sisters School District
Guy Chamness	Bureau of Land Management
Matt Cyrus	Board Member — Aspen Lakes
Chris Dayton	Oregon Department of Forestry
Tony DeBone	Deschutes County Commissioner
Rodney Dines	US Forest Service
Ben Duda	Oregon Department of Forestry
Betty Fadeley	Business Manager — Tollgate
Vince Grace	US Forest Service
Alison Green	Project Wildfire
Pauline Hardie	City of Sisters, Community Development
Roger Johnson	Fire Chief, Sisters – Camp Sherman FPD
Ed Keith	Deschutes County Forester
Gary Marshall	Sisters – Camp Sherman FPD
Kristie Miller	District Ranger, US Forest Service
Trevor Miller	US Forest Service
Thad Olsen	Fire Chief, Cloverdale FD
Eric Porter	Sisters City Planner
Jinny Reed	US Forest Service
Dan Tucker	Fire Chief, Black Butte Ranch FD
Shana Vialovos	Board Member — Crossroads
Ed Young	Resident-Metolius



Table of Contents

Executive Summary i

Declaration of Agreement ii

Acknowledgements iii

Contact information v

Purpose 1

Planning Summary 3

Collaboration 6

Community Profile 7

Public and Private Accomplishments 8

- **Wildland Urban Interface Description** 14
- **Wildland Fuel Hazards** 16

Community Base Maps 19

- **Communities at Risk** 19

Community Assessments of Risk 21

- **ODF Assessment of Risk Factors** 21
  - **Risk of Wildfire Occurrence** 21
  - **Hazard** 21
  - **Protection Capability** 21
  - **Values Protected** 24
  - **Structural Vulnerability** 25
- **Summary of ODF Assessment of Risk Factors** 26
- **ODF Assessment of Risk Factors with Ranking** 28
- **Oregon Forestland – Urban Interface Fire Protection Act of 1997 (SB 360)** 28
- **Fire Regime Condition Class** 30
- **Areas of Special Concern** 32

Prioritized Hazard Reduction Recommendations and Preferred Treatment Methods 32

- **Prioritized Communities at Risk** 32
- **Priorities and Goals** 33
- **Preferred Treatments – Public Lands** 33
- **Preferred Treatments – Private and County Owned Lands** 35

Recommendations to Reduce Structural Ignitability 37

- **Structural Ignitability Recommendations** 37
- **Defensible space checklist** 38

Other Recommendations 39

Action Plan and Implementation 40

Evaluation and Monitoring 42

Appendices

- **Appendix A – Community Maps** 44
- **Appendix B – Community Assessments** 46



Contact Information

Copies of this CWPP may be found and downloaded at:

www.projectwildfire.org

Ed Keith, County Forester
Deschutes County
61150 SE 27th Street
Bend, OR 97702
(541) 322-7117

Roger Johnson, Fire Chief
Sisters – Camp Sherman Fire District
301 S. Elm Street
Sisters, OR 97759
(541) 549-0771

Dan Tucker, Fire Chief
Black Butte Ranch Fire District
13511 Hawks Beard
Black Butte Ranch, OR 97756
(541) 595-2288

Thad Olsen, Fire Chief
Cloverdale Fire District
68787 George Cyrus Rd
Sisters, OR 97759
(541) 548-4815

Kevin Benton, Unit Forester
Oregon Department of Forestry
3501 NE 3rd Street
Prineville, OR 97754
(541) 447-5658

Rodney Dines, Fire Management Officer
Central Oregon Fire Management Services- Cascade Division
Pine St & Highway 20, PO Box 249
Sisters, OR 97759
(541) 549-7700

Alison Green, Program Coordinator
Project Wildfire
61150 SE 27th Street
Bend, OR 97702
(541) 322-7129

2014 Greater Sisters Country Community Wildfire Protection Plan



Purpose

The purpose of the Greater Sisters Country Community Wildfire Protection Plan (CWPP) is to:

- Protect lives and property from wildland fires;
- Instill a sense of personal responsibility and provide steps for taking preventive actions regarding wildland fire;
- Increase public understanding of living in a fire-adapted ecosystem;
- Increase the community's ability to prepare for, respond to and recover from wildland fires;
- Restore fire-adapted ecosystems; and
- Improve the fire resilience of the landscape while protecting other social, economic and ecological values.

Originally completed in 2005 with a revised planning boundary in 2006 and revised again in 2009, this comprehensive revision maintains the original purpose and outlines the updated priorities, strategies and action plans for fuels reduction treatments in the Greater Sisters Country wildland urban interface (WUI). This CWPP also addresses special areas of concern and makes recommendations for reducing structural vulnerability and creating defensible space 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; revisited at least annually to address its purpose.

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

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 wildlands valued by residents and visitors. These landscapes however, are now significantly altered due to fire prevention efforts, modern suppression activities and a general lack of large scale fires, resulting in overgrown forests with dense fuels that burn more intensely than in the past. In addition, the recent increase in population has led to a swell in residential development into forested land, in the wildland urban interface.

The 2014 Greater Sisters Country Community Wildfire Protection Plan will assist the Sisters – Camp Sherman, Black Butte Ranch and Cloverdale Fire Districts and Sisters area residents in the identification of surrounding lands, including federal and state lands at risk from high intensity wildland fire. The Greater Sisters Country CWPP identifies priorities and strategies for reducing hazardous wildland fuels while improving forest health, supporting local industry and economy and improving fire protection capabilities. It also identifies strategies to address special areas of concern such as evacuation routes as well as outlines actions that individuals can take to help protect themselves and their neighborhoods against the threat of wildland fires.



Planning Summary

The Sisters City Council adopted the most recent update of the Greater Sisters Country Community Wildfire Protection Plan by resolution on October 8th, 2009 by resolution number 2009-22. Additionally to the current revision to the Community Wildfire Protection Plan, an ordinance is being considered by the City of Sisters that would require Senate Bill 360 standards (Oregon Forestland-Urban Interface Fire Protection Act, see page 28) on all properties within city limits. This ordinance would allow for ornamental trees, brush and grasses only if they are maintained and irrigated.

Continued efforts have 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 Greater Sisters Country 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 Greater Sisters CWPP Steering Committee reconvened in November 2013 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; Fire Chiefs from Sisters-Camp Sherman, Cloverdale, and Black Butte Ranch Fire Districts; 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 2009 CWPP. The group approved the 2014 CWPP boundary, which now has seven (7) rating areas that replaced the previous fourteen (14). The Steering Committee was able, with this change to the base map, to include over 700 additional structures in the risk assessment process.

Step five: Develop a community risk assessment.

The Steering Committee relied on the ODF Assessment of Risk Factors and the Structural Vulnerability factors for each of the seven Communities at Risk.

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 Greater Sisters Country CWPP was available for public comment prior to the final signing and approval of the plan. The Greater Sisters Country Community Wildfire Protection Plan was mutually approved by the Sisters-Camp Sherman Fire, Cloverdale Fire, Black Butte Ranch Fire, the Oregon Department of Forestry, the City of Sisters, and the Deschutes County Board of Commissioners as demonstrated in the Declaration of Agreement.

This page intentionally left blank.



Collaboration

In 2003, 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 initial version, community members of Sisters, Oregon came together with representatives from Sisters – Camp Sherman Fire District, Black Butte Ranch Fire District, Cloverdale Fire District, Oregon Department of Forestry (ODF), the USDA Forest Service (USFS), the USDI Bureau of Land Management (BLM), the City of Sisters, Deschutes County and Project Wildfire to revisit the Greater Sisters Country CWPP and refocus the priorities. The Steering Committee completed this revision in accordance with *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities* (Communities Committee, Society of American Foresters, National Association of Counties, National Association of State Foresters 2005); and Deschutes County Resolution 2004-093.

A draft of the Greater Sisters Country CWPP was available for public comment for 30 days prior to the final signing and approval of the plan. Interested parties provided comments for consideration by the Steering Committee during this period.

The Sisters City Council approved the 2014 Greater Sisters Country Community Wildfire Protection Plan on June 12th, 2014. This CWPP was also formally adopted by Deschutes County by resolution #2014-290.



Community Profile

The Greater Sisters Country is located in central Oregon on the east side of the Cascade Mountains. According to the census 975 residents called the city of Sisters home in 2000. Deschutes County estimates the 2012 Sisters population at 2,080 with another 9,437 in rural population that inhabit areas surrounding the city of Sisters. This is an increase of 133% within the city limits in twelve years. These figures do not include the high influx of visitors during the tourist season.

Sisters is known for its outstanding recreational opportunities, cultural traditions and general small town feel. The annual Sisters Rodeo, the Starry Nights Music series and the Sisters Quilt Show consistently bring thousands of visitors to the area. Within the planning area there is also a significant amount of public land with developed and dispersed recreation sites, which provide valuable recreation opportunities to both residents and visitors. In the summer months, the County estimates a transient population of up to 10,000 people that occupy these areas creating a seasonal challenge for those agencies responsible for fire suppression and evacuation.

The CWPP planning area boundary lies within the larger area of the eastern Cascade slopes and foothills. The area is dominated by western juniper, sage brush, and grasses on the high desert to the east; and a transition from ponderosa pine to mixed conifer to a sub-alpine mix of tree species near the crest of the Cascades in the west. The vegetation is adapted to the prevailing dry climate and is highly susceptible to wildland fire with major threats to the area each year. Volcanic cones and buttes dot the landscape across much of the region. Most of the communities in the area lie at an elevation of 3,200 feet.

Approximately 7,000 acres of the CWPP planning boundary are agricultural lands. The large property owners consistently maintain and irrigate their agricultural property within the Greater Sisters CWPP planning boundary. These lands provide irrigated fuel breaks in the larger landscape of wildland fuels.

The Greater Sisters community presents a unique challenge for the wildfire planning process. Not only are the core city business and residential areas at significant risk from wildfire, so too are the many subdivisions outside the city limits that have been developed in the thick of nearby forests. Dense stands of trees, topographical challenges and thick ground vegetation contribute to the overall wildland fire risk in the Greater Sisters planning area.

The climate in Sisters is 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 that may be wet or dry. These thunderstorms frequently cause multiple fire ignitions. In 2013, 23 lightning fires occurred with 1,512 acres burned and 25 human caused fires occurred with 6.5 acres burned.

The communities of Greater Sisters Country are bound together by Oregon State Highways 20, 126 and 242. The City of Sisters lies at the intersection of these corridors. As central Oregon grows, more residents and tourists crowd these highways and increase congestion, particularly during the summer months when fire season reaches its peak. The City of Sisters Transportation System Plan calls for improving access through Sisters. This will benefit emergency response by improving access routes in the event of a major wildland fire. The Highway 242 and Highway 20 corridor as well as Forest Road 16 (Three Creeks Road) 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.

The Eagle General Aviation Airport is located at the intersection of Camp Polk Road and Barclay Drive, less than one mile from the Sisters city limits. Roberts Field in Redmond is the primary commercial aviation hub in Central Oregon and lies 20 miles east of the Sisters area. General aviation and wildland fire support facilities are also available at Roberts Field.



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, Deschutes County and private landowners are engaged in hazardous fuels treatment projects across the planning area.

US Forest Service & Bureau of Land Management

The US Forest Service

The US Forest Service – Sisters Ranger District manages 203, 890 non-wilderness acres within the Greater Sisters area of which 104,469 acres are classified as Wildland Urban Interface (WUI). District operations continue to make great strides to increase both forest health and reduce the potential for high intensity wildland fire through fuels reduction activities. The following tables and maps provide a snapshot of fuels treatment projects on Forest Service lands that have occurred during the life of the Greater Sisters Area CWPP.

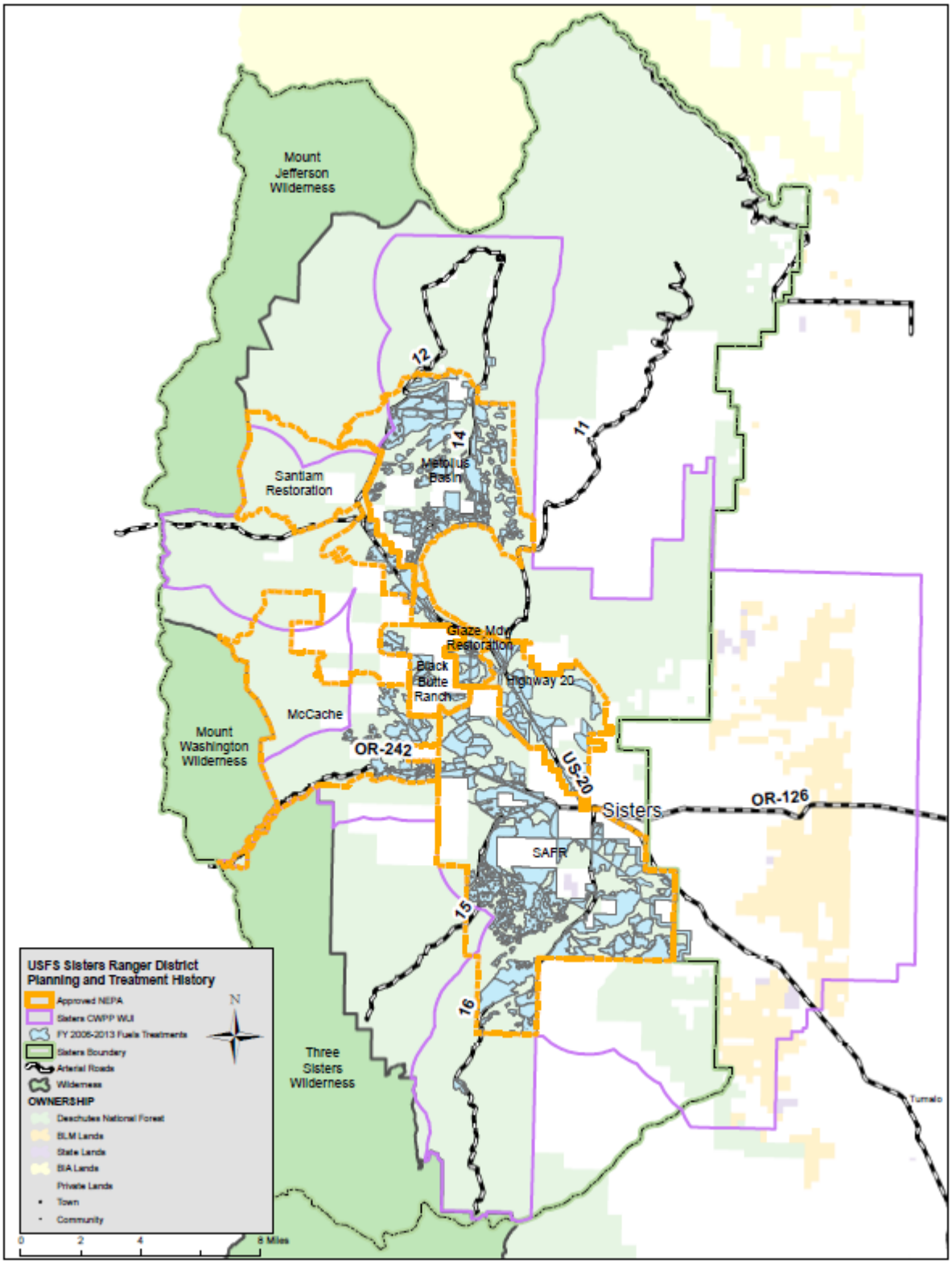
It is important to note that each project area requires multiple types of fuels reduction activities to achieve the desired result including mechanical shrub mowing, tree thinning, hand piling, and under burning. Therefore, multiple entries are required in order to adequately restore forest ecosystem health and reduce hazardous fuels. The ultimate goal for these projects is to reduce the potential for high intensity fire that can spread to tree crowns, requiring costly suppression efforts and causing large losses on the landscape as well as in and around communities.

US Forest Service 2006-2013 Fuel Related Treatments by Planning Area

Project Name & Start Date	Project Status	Commercial Thin Complete	Pre-commercial Thin Complete	Mastication Complete	Biomass Removal Complete (burning of piled material, yarding of material, and/or grinding of material)	Underburning
Black Butte Ranch Natural Fuels (CE, 1996)	95% complete (in maintenance)	0	413	291	468	484
Hwy 20 (EA, 1998)	95% complete (in maintenance)	0	236	697	382	2370
McCache Veg Mgmt (EA, 2001)	Ongoing	0	1,374	88	1,424	404
Metolius Basin Veg Mgmt (EIS, 2003)	Ongoing	2,421	4,738	2,459	4,417	866
Santiam Restoration (EA, 2003)	95% complete (in maintenance)	0	564	0	591	282
Sisters Area Fuels Reduction (EA, 2008)	Ongoing	4,856	12,778	7,199	8,260	496
Glaze (EA, 2008)	Ongoing	501	562		336	0
Other (NEPA not Required)		0	559	308	111	404
Total		**7,778**	**21,224**	**11,042**	**15,989**	**5,306**

*EIS = Environmental Impact Statement; EA = Environmental Assessment; CE = Categorical Exclusion

US Forest Service Current Planning Areas and Treatment History 2006-2013



The treatments associated with the various planning areas represented above are in various phases of completion, with some nearing their end (See above table). As projects come to a close, Forest Service land managers assess new priority treatment areas and begin associated project analysis. Numerous areas have been identified for fuels related treatments in the future planning areas shown below. Of these areas, the following are currently under development.

- **Melvin Butte approximately 5,300 acres** (In planning phase, implementation scheduled to begin in 2015) – East of 16 with an ingress/egress hazardous fuels treatment buffer west of 16 rd. Remaining acres associated with Popper planning areas not impacted by Pole Creek Fire. Within and adjacent to Whychus Creek Community at Risk block.

- **Fly approximately 17,000 acres** (In planning phase, implementation scheduled to begin in 2015/16) – Northeastern periphery of Sisters Ranger District between Eyerly Fire and slope of Green Ridge. The majority of project area is east of Metolius Community at Risk block.

- **Garrison approximately 18,600 acres** (In planning phase, implementation scheduled for 2015/16) – North of the City of Sisters and Indian Ford. In Whychus Canyon Community at Risk block.

- **Weirbull approximately 8,000 acres** (On the horizon for planning in 2017/18) – Southeast of the City of Sisters. In both Whychus Creek and Fryrear Butte Community at Risk blocks.

- **North Basin approximately 27,000 acres** (On the horizon for planning 2017/18) – In the Metolius Community at Risk block.

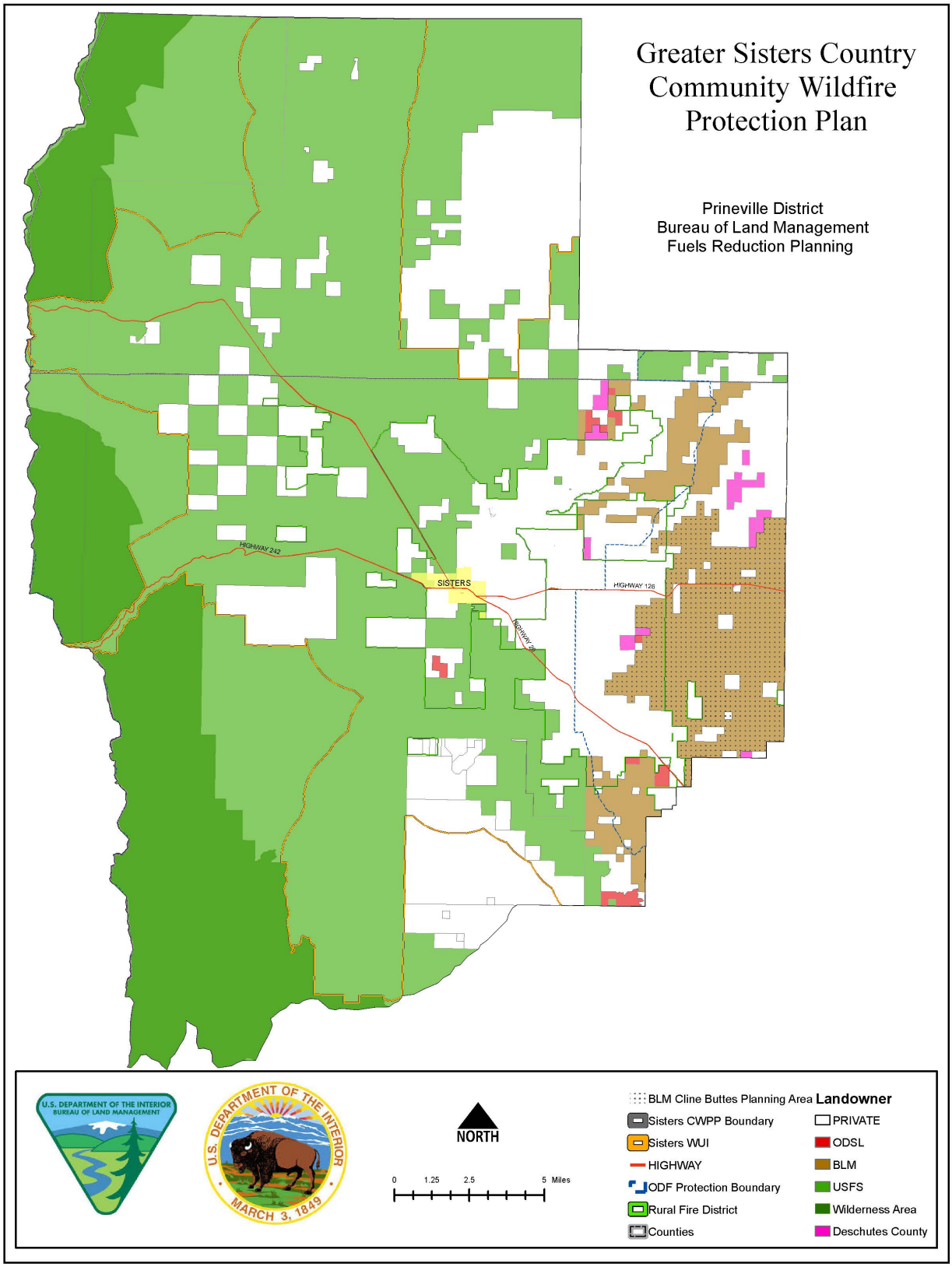
- **West Trout approximately 19,000 acres** (On the horizon for planning 2018/19) – West of Whychus Creek Community at Risk block and within the CWPP Planning Boundary.

- **Tower approximately 5,000 acres** (On the horizon for planning 2018/19) – In both Metolius and Indian Ford Creek Community at Risk blocks.

The Bureau of Land Management

The Prineville District manages 43,393 acres within the Greater Sisters area all of which are classified as Wildland Urban Interface (WUI). The BLM has not conducted any recent fuels mitigation within the Sisters WUI, however future projects will be planned in the Cline Buttes planning area, shown on the following map.

Bureau of Land Management (BLM) Project Map



Oregon Department of Forestry (ODF) continues to work with landowners in the Greater Sisters area developing forest management plans that reduce hazardous fuels in and around subdivisions to provide defensible space and healthy forests. In the last eight years, thousands of acres have been treated under ODF cost share grant programs in the Sisters planning area.

Deschutes County owns 1% of the land in the greater Sisters Country WUI. Through ongoing funding opportunities including grants, Deschutes County is taking steps to reduce the hazardous vegetation and provide for a more fire safe community. The County has reduced hazardous fuels on approximately 1,440 acres of land in the last three years.

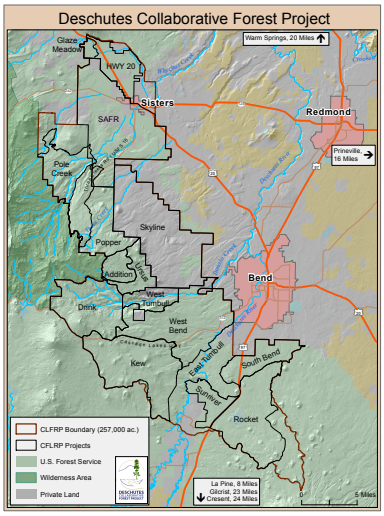
The Firewise Communities USA program is a national recognition program which highlights communities that have chosen to complete and maintain defensible space; ensure adequate access, water and signage; promote ongoing fire prevention education, and build or retro-fit structures with non-combustible building materials such as siding, decks and roofing. Adequate water availability and access are also required. Firewise Communities USA now recognizes 6 communities in the Greater Sisters Country CWPP area – Aspen Lakes, Cascade Meadow Ranch, Crossroads, Metolius Meadows, Summer Lane and Tollgate.

The Firewise Communities program recognizes communities who have demonstrated their commitment to wildfire preparedness. Through these steps, the Firewise Communities in the Greater Sisters Area have effectively lowered their wildfire risk. They have fostered collaboration between neighbors, increased awareness and their communities' ability to respond to wildfire. Their neighborhoods provide a safe and effective location for fire professionals to work and these neighborhoods have dramatically decreased their odds of losing their homes to wildfire.

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 257,000 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. An amendment to the original boundary was approved in 2012 to include additional landscape acreage near Sunriver and Black Butte Ranch. Now portions of the $10 million award can be expended across a broader area.



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 adapted 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.

Fire-Adapted Communities

This CWPP is just a piece of the over-arching framework and goal of Fire-Adapted Communities. People and nature are increasingly threatened by fire, despite fire's natural, beneficial role. At the same time, firefighting costs are escalating and diverting money away from proactive land management. The solution is to make natural areas and communities more fire-ready so that we can allow fire to play its natural role at a meaningful scale. The Fire Adapted Communities (FAC) initiative and the FAC Learning Network are helping homeowners, communities and land managers in fire-prone areas prepare for inevitable fires -- to "live with fire" safely. A fire-adapted community acknowledges and takes responsibility for its wildfire risk, and implements appropriate actions at all levels. Actions address resident safety, homes, neighborhoods, businesses and infrastructure, forests, parks, open spaces and other community assets. There is no end-point in becoming a fire-adapted community. Sustaining, growing and adapting strategies, partnerships and capacity through time are key. Visit www.fireadapted.org for more information. Working toward being more fire adapted by developing a CWPP addresses one of the three prongs outlined in the larger goal of the National Cohesive Wildland Fire Management Strategy.

Wildland Urban Interface Description

The Healthy Forests Restoration Act defines the wildland urban interface (WUI) as an area within or adjacent to an at-risk community that has been identified by a community in its wildfire protection plan. For areas that do not have such a plan, it is identified as:

- extending ½ mile from the boundary of an at-risk community,

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

In the 2009 CWPP review and revision, the initial WUI boundary determination process was reviewed. The WUI was refined and adjusted to better reflect the definition of community as outlined in this document and included considerations of community growth, seasonal recreation areas, and access and egress corridors that were not identified in the initial plan.

The committee then expanded the definition of the WUI based on the three categories of community as defined in the 2001 Federal Register. Those categories include:

Category 1. Interface Community

The Interface Community exists where structures directly abut wildland fuels. There is a clear line of demarcation between residential, business, and public structures and wildland fuels. Wildland fuels do not generally continue into the developed area. The development density for an Interface Community is usually three or more structures per acre, with shared municipal services. Fire protection is generally provided by a local government fire department with the responsibility to protect the structure from both an interior fire and an advancing wildland fire. An alternative definition of the Interface Community emphasizes a population density of 250 or more people per square mile.

Category 2. Intermix Community

The Intermix Community exists where structures are scattered throughout a wildland area. There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area. The development density in the Intermix ranges from structures very close together to one structure per 40 acres. Fire protection districts funded by various taxing authorities normally provide life and property fire protection and may also have wildland fire protection responsibilities. An alternative definition of Intermix Community emphasizes a population density of between 28-250 people per square mile.

Category 3. Occluded Community

The Occluded Community generally exists in a situation, often within a city, where structures abut an island of wildland fuels (e.g., park or open space). There is a clear line of demarcation between structures and wildland fuels. The development density for an Occluded Community is usually similar to those found in the Interface Community, but the occluded area is usually less than 1,000 acres in size. Fire protection is normally provided by local government fire departments.

For planning purposes in the 2014 Greater Sisters Country CWPP, the Steering Committee agreed that the defined wildland urban interface boundary will include all three categories of community as defined above.

The WUI also includes a ½ mile buffer on each side of the major transportation and evacuation routes through and out of the planning area. These routes include State Highways 20, 242, and 126; US Forest Service Roads 14 and 16 (Three Creeks Road). The WUI boundary continues all the way to the wilderness boundary of the Cascade Mountains on the west; to the Warm Springs Indian Reservation on the north; to the Greater Bend CWPP boundary and the East & West Deschutes County CWPP boundary on the south and the Greater Redmond CWPP boundary to the east.

There are additional lands not classified as WUI that are within the overall CWPP boundary. The Steering Committee chose not to classify the additional lands within the CWPP outside the WUI boundary, as they are predominately forested or rangelands with limited structural development. The wildland fire risk in those areas is significantly less than in the WUI areas. See community maps in Appendix A.

The Greater Sisters Country WUI boundary lies within the CWPP boundary and is approximately 409 square miles and covers 261,750 acres. There are non-WUI areas in the remainder of the CWPP boundary that bring the total acreage under this CWPP to 425,937 acres or 665 square miles.

Wildland Fuel Hazards

The vegetation in the Greater Sisters Country WUI includes

- Ponderosa pine
- Western juniper
- Bitterbrush
- Manzanita
- Ceanothus or Snowbrush
- Western sage
- Mixed conifer

Ponderosa pine is currently found in varying degrees across the entire Sisters planning area. Historically, ponderosa pine forests contained more understory grasses and less shrubs than are present today. These plants combined with fallen pine needles, formed fast-burning fuels that led to recurrent widespread burning. Low-intensity ground fires that occur at intervals of 11-15 years characterize the fire history for ponderosa pine. The pattern of low ground fires and stand dynamics resulted in the open park-like conditions that early inhabitants and visitors found in the region.



Less stand management, less logging activity and highly effective wildland fire suppression have significantly altered the ponderosa pine forest type. Removal of the larger "yellow belly" pines has dramatically decreased open park-like forests, replacing them with more evenly spaced and smaller "black-bark" forests. Similar to other species of conifer forest types, the suppression of fire has greatly increased the number and density of trees, creating ladder fuels and putting the

stands at risk of attack from insects and disease. These factors have contributed to more intense fires in ponderosa pine forests in recent years.

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



Western juniper also occurs across the Sisters WUI but is more predominant to the east of the planning area. The fire history of western juniper is characterized by fire that occurs approximately every 30 years and is generally limited by the availability of fuels. Western juniper trees have thin bark and fires kill them easily. Western juniper is expanding its range over the previous century. Several factors may account for the expansion: a) fire suppression which allows the stands to grow unchecked by fire, b) overgrazing by domestic livestock which opens up new sites for colonization, c) re-establishment of juniper after an area is logged, and d) climate change.



Bitterbrush occurs throughout the Greater Sisters Country on all aspects and elevations and is frequently found with mixed shrubs such as Manzanita and Sage. 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 Sisters wildland urban interface area is rich with patches of bitterbrush that burn well on their own and provide fire-ready ladder fuels for taller tree stands.



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

Ceanothus or Snowbrush mainly occurs on the west side of Sisters in the higher elevations. It can commonly be found growing along side Manzanita, Bitterbrush and mixed Conifer Forests. Ceanothus is promoted by fire, a "medium or hot" fire can create more favorable growing conditions by removing the canopy. The shrub usually increases following fire, often dramatically where it was previously uncommon or not present. Like Manzanita, Ceanothus burns quite hot; its foliage contains volatile oils that contribute to its high fire hazard.





Western sage is found on the eastern lowlands of the Sisters planning area and commonly grows in association with juniper and bitterbrush. Most fires kill western sage plants. In many western sage communities, changes in fire occurrence along with fire suppression and livestock grazing have contributed to the current condition of sage communities. Prior to the introduction of annuals, insufficient fuels may have limited fire spread in big sagebrush communities. Introduction of annuals, especially cheatgrass, has increased fuel loads so that fire carries easily. Burning in sage communities commonly sets the stage for repeated fires. Fire frequency can be as little as 5 years, not sufficient time for the establishment and reproduction of big sagebrush. In these cases annuals such as cheatgrass commonly take over the site.

Mixed conifer (wet and dry) is a complex forest type that varies considerably depending on elevation and site conditions. In the plan area, dry mixed conifer and wet mixed conifer forest types occur, depending on the elevation.



The dry mixed conifer includes Douglas fir, ponderosa pine, lodgepole pine, western larch and true fir. Found at elevations ranging from 3,600 feet to 4,500 feet, it occupies a transitional zone between the higher elevation mixed conifer zone and the true ponderosa pine or lodgepole pine zone.

The wet mixed conifer is found in the higher elevations (4,000 – 7,000 feet) on the west side of the fire plan area. Similar to the dry mixed conifer sites, vegetation consists of Douglas fir, white fir, ponderosa pine, western larch, and lodgepole pine. Spruce can be found in the wetter riparian areas.

The historical range of fire intervals in the wet and dry mixed conifer varies considerably; from 35 to 200 years and can be of variable intensity; from low intensity maintenance burns to stand replacement events.

Fires too, have significantly impacted the Greater Sisters Country landscape. The table below recognizes the large fires that have endangered the Greater Sisters County since 2000. All of these large wildfires have threatened residents and prompted evacuations within multiple neighborhoods. The Cache Fire also resulted in the loss of two homes within Black Butte Ranch.

Fire Name	Fire Size (acres)	Year Occurred
Cache Fire	3,894	2002
B&B Complex	90,769	2003
Lake George Fire	5,550	2006
Black Crater Fire	9,400	2006
GW Fire	7,357	2007
Summit Springs	1,973	2008
Wizard Fire	1,847	2009
Black Butte 2	578	2009
Rooster Rock	6,134	2010
Shadow Lake	10,000	2011
Pole Creek	26,795	2012
Green Ridge	1,510	2013



Community Base Maps

The Steering Committee agreed to utilize the best available information and data from the US Forest Service, Oregon Department of Forestry, the Fire Learning Network and Deschutes County databases. Using this data, the Steering Committee relied on the following maps and GIS data (Appendix A) to complete the updated risk assessment process:

- Greater Sisters Country WUI and CWPP boundaries with Communities at Risk;
- 2013 Deschutes County tax lot and population data;
- Fire starts in the last ten years

Communities at Risk

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

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

The Steering Committee revised the base map to identify the following seven (7) Communities at Risk, which incorporate several neighborhoods within the Greater Sister's Country Planning Area. The Steering Committee defined these Communities at Risk by using fire district boundaries, major roadways and Sisters city limits.

City of Sisters – 1,210.5 acres with approximately 1,200 structures; population of 2,080.

Indian Ford Creek – 39,934 acres with 1,694 structures; including Black Butte Ranch, Tollgate, Cascade Meadow and other rural Indian Ford neighborhoods; population of 4,235.

Whychus Canyon – 40,126 acres with 1,258 structures; including Sage Meadows, Indian Ford Meadow, Panoramic, Aspen Lakes, Squaw Creek Estates and other rural Whychus Canyon neighborhoods; population of 3,145.

Whychus Creek – 56,802 acres with 239 structures; including Crossroads and other rural Whychus Creek neighborhoods; population of 598.

Metolius – 60,555 acres with 279 structures; including Camp Sherman, Suttle Lake and other rural Metolius neighborhoods; population of 698.

McKenzie Canyon – 17,673 acres with 70 structures; population of 175.

Fryrear Butte – 45,471 acres with 788 structures; including Plainview, Forked Horn and other rural Cloverdale neighborhoods; population of 1,970.

Although the above rating areas are located within the overall WUI acreage, they are also assessed separately under this CWPP.



Community Assessment of Risk

For the 2014 Greater Sisters Country Community Wildfire Protection Plan the Steering Committee the Oregon Department of Forestry Assessment of Risk Factors on the seven (7) Communities at Risk.

ODF Assessment of Risk Factors

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

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 evidence from the USFS, ODF, the Sisters – Camp Sherman Fire Protection District, Cloverdale Fire Protection District and Black Butte Ranch Fire Protection District of fire occurrences per 1,000 acres per ten years, as well as home density and 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 Communities at Risk poses an extreme risk of high intensity wildland fire. The City of Sisters and surrounding rural neighborhoods are also threatened by embers falling on the community 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 wildland urban interface.

A wildland fire could start within any of the Communities at Risk or in any of the forested areas adjacent to or surrounding the communities. With a fire of any significance, it could be difficult to assemble the resources necessary to adequately address all of the fire and life safety issues that could arise in the early stages of emergency operations.

Protection capability

The ratings for this category 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, lessons learned, weather forecasts and how agencies can/will respond to meet the needs of fire events.

Sisters – Camp Sherman Rural Fire Protection District

The Sisters-Camp Sherman Rural Fire Protection District is a combination career and volunteer department providing structural and wildland fire services to over 200 square miles. The District also provides advanced life support ambulance transport service to more than 2000 square miles in mountainous and high desert terrain. Special services provided include, vehicle extrication, water rescue and hazardous materials response. A broad range of community risk and fire safety services are provided to area residents utilizing a combination of career and volunteer staffing. The District currently employs a Fire Chief, a Deputy Chief of Operations, an Administrative Assistant, two part-time positions including the Community Risk and Fire Safety Manager and Financial Manager. The District also employs three Shift Commander/Paramedics and Six Firefighter/Paramedics. The Volunteer Firefighters are an integral part of the organization and provide both fire suppression and emergency medical services. The Auxiliary Volunteer program provides fire prevention and public education programs to residents of the District.

The District headquarters station is located in the City of Sisters. In addition to the headquarters station, the District utilizes three other volunteer stations, which are located in the Tollgate Subdivision, Squaw Creek Canyon Estates Subdivision and the community of Camp Sherman.

The District utilizes a fleet of firefighting and EMS apparatus including: five structural and interface engines, three water tenders, two heavy brush engines, three light brush engines, one heavy rescue truck, three ambulances, one command vehicle and three staff vehicles.

The District is a party to the Central Oregon Mutual Aid Agreement. In the event of a major structural fire, the District may request assistance from all other fire departments that are signatory to the agreement. In addition, all Central Oregon fire departments and the wildland fire agencies including the US Forest Service, Oregon Department of Forestry, and the Bureau of Land Management are party to the Central Oregon Cooperative Wildland Fire Agreement. These cooperative agreements allow for interactive coordination in the event of a wildfire that threatens communities in Central Oregon.

Black Butte Ranch Rural Fire Protection District

Black Butte Ranch Rural Fire Protection District serves the residential and resort community of Black Butte Ranch. Located at the foot of the Cascade Mountains and the Three Sisters Wilderness, the district covers three square miles and protects 1,251 residences and a handful of light industrial buildings. Eight career staff, and six to twelve fire/EMS students and volunteers

respond to calls from one centrally located station. The district trains all personnel in structural firefighting, emergency medical delivery, hazardous materials operations, and wildland fire suppression. The fire district also provides primary services to three residences immediately adjacent to Black Butte Ranch property under contract.

The District participates in the Central Oregon Mutual Aid Agreement. In the event of a major structural fire, the District may request assistance from all other fire departments that are signatory to the agreement. In addition, all Central Oregon fire departments and the wildland fire agencies including the US Forest Service, Oregon Department of Forestry, and the Bureau of Land Management are party to the Central Oregon Cooperative Wildland Fire Agreement.

Cloverdale Rural Fire Protection District

The Cloverdale Rural Fire Protection District is approximately 50 square miles in size and is located in the triangle between the Bend, Redmond, and Sisters – Camp Sherman fire districts. The Cloverdale Fire district is a combination department comprised of a paid Chief and Training officer as well as 20 dedicated volunteer personnel. Cloverdale provides fire prevention and suppression services, along with first response medical services, to assist the Sisters' ambulance service. The Cloverdale personnel are trained in structural and wildland firefighting as well as extrication, hazardous materials and emergency medical care.

The district has two stations strategically located to serve the district. Equipment includes; two structural engines, three water tenders, one light brush unit, two quick response ems/ brush units, one interface truck, and two command vehicles. The district was recently rated by the Insurance Service Office (ISO) and received a Fire Suppression Rating of 3 for the hydranted areas and 6 for the non-hydranted areas.

The District participates in the Central Oregon Mutual Aid Agreement. In the event of a major structural fire, the District may request assistance from all other fire departments that are signatory to the agreement. In addition, all Central Oregon fire departments and the wildland fire agencies including the US Forest Service, Oregon Department of Forestry, and the Bureau of Land Management are party to the Central Oregon Cooperative Wildland Fire Agreement.

Oregon Department of Forestry (ODF)

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

Oregon Department of Forestry provides one Type 6 engine and one hand crew in the Sisters area, typically June through October. Ten additional engines are available for response in the Prineville-Sisters unit. 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

The Forest Service provides wildland fire protection on the federal lands within the Greater Sisters planning area. Working in cooperation with the USDI Bureau of Land Management (BLM), they are identified as the Central Oregon Fire Management Service (COFMS). COFMS includes the Deschutes National Forest, the Ochoco National Forest, the Crooked River National Grassland, and the Prineville District of the BLM. These four units are managed cooperatively under combined leadership, with an Interagency Fire Management Officer, two Deputy Fire Management Officers, and a Board of Directors including decision makers from both agencies, with Forest Service District Rangers and BLM Field Managers. COFMS has a central dispatching facility in partnership with the Oregon Department of Forestry that serves as a Coordination Center for fire and fuels operations, as well as safety and training issues for COFMS. In total, COFMS provides the following resources: 26 engines, six initial attack hand crews, six prevention units, two dozers, two water tenders, one Type 3 helicopter, 35 smoke jumpers, two interagency Hotshot Crews (Redmond & Prineville), one Type 2 helicopter with 20 rappellers, one Type 1 helicopter, Central Oregon Dispatch Center (COIDC), Redmond Air Center, an air tanker base, a regional fire cache and 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 the Deschutes & Jefferson County Sheriffs' who have the responsibility for ensuring the safe and orderly evacuation of a 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; Fire District staff, Forest Service Law Enforcement and community-wide volunteers. Any other issues relative to a major emergency are addressed by the Countywide Disaster Plan and the Deschutes County Department of Emergency Services.

Oregon State Police assists the law enforcement efforts and cooperates with Deschutes and Jefferson County and Forest Service for protection in the Greater Sisters 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 considers whether the area has an organized stakeholder group that looks out for its own area through mitigation efforts, a phone tree, etc., or whether the area receives only outside efforts such as newsletters, mailings or fire prevention information from other groups. The Steering Committee used local knowledge to determine the level of preparedness.

Values Protected

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 and tax records from 2013, there are approximately 5,355 structures in the Greater Sisters planning area, with an estimated real market value of $956,578,119.

Approximately, 350 businesses operate in the Sisters area. If a large wildland fire occurs in this area, which resulted in the closure of either State Highway 20, 242 or 126, the economic loss to businesses in Sisters could exceed $500,000 per day, and on the larger impacted area of central Oregon the loss could exceed $3.5 million per day. The closure of Highway 20 for two weeks during the B&B Complex fire in 2003 resulted in the loss of $500,000 of daily commerce in Sisters, which resulted in the activation of the Federal Emergency Management Agency (FEMA) Disaster Loan program.

The essential infrastructure includes multiple webs of utilities, roads, water and a recently added municipal sewer system 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. Physical loss to roads, water and sewer systems would be minimal because most are underground or otherwise not flammable.

Structural Vulnerability

In recent years, many neighborhoods in the greater Sisters area have taken steps to decrease the vulnerability of structures to wildland fire. Although attitudes and behaviors towards fire are changing 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 Steering Committee puts high value on the importance of making structures and neighborhoods in the Greater Sisters Country area as fire safe as possible.

Adequate water resources were not considered in this assessment and are addressed as a priority item under Action Plan and Implementation.

The following table is a summary of the seven 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. The specific definitions for the point values in the ODF risk ratings are below.

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. A risk factor of low is the goal for each community.

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 assessed.

Table 1 – ODF Assessment of Risk

	City of Sisters	Indian Ford Creek	Whychus Canyon	Whychus Creek	Metolius	McKenzie Canyon	Fryrear Butte
Likelihood of fire occurring							
Fire occurrence	20	20	20	20	20	10	20
Ignition risk - home density	10	5	5	5	5	0	5
Ignition risk - other factors	8	10	10	10	10	10	10
Total	**38**	**35**	**35**	**35**	**35**	**20**	**35**
Rating	**High**	**High**	**High**	**High**	**High**	**Mod**	**High**
Hazards							
Weather	40	40	40	40	40	40	40
Slope	0	0	3	3	3	3	0
Aspect	5	5	5	5	5	5	5
Elevation	2	2	2	2	2	2	2
Vegetation	5	15	25	17	18	25	15
Crown fire potential	0	5	5	5	5	2	2
Total	**52**	**67**	**80**	**72**	**73**	**77**	**64**
Rating	**Mod**	**High**	**High**	**High**	**High**	**High**	**High**
Protection capabilities							
Fire response	0	1	6	3	8	15	0
Community preparedness	2	1	2	2	2	3	3
Total	**2**	**2**	**8**	**5**	**10**	**18**	**3**
Rating	**Low**	**Low**	**Low**	**Low**	**Mod**	**High**	**Low**
Values protected							
Home density	30	20	15	15	15	2	15
Community infrastructure	20	20	20	20	20	0	20
Total	**50**	**40**	**35**	**35**	**35**	**2**	**35**
Rating	**High**	**High**	**High**	**High**	**High**	**Low**	**High**

Table 1 – ODF Assessment of Risk, continued.

Structural vulnerability	City of Sisters	Indian Ford Creek	Whychus Canyon	Whychus Creek	Metolius	McKenzie Canyon	Fryrear Butte
Flammable roofing							
non wood - 0							
wood - 30	1	7	3	3	5	3	3
Defensible space							
Meets SB 360 - 0							
Non compliant - 30	9	9	12	9	10	15	5
Ingress - egress							
Two or more roads - 0	0	0					
One road - 7			6	4	2	7	5
Road width							
Greater than 24 feet - 0	0						
20 - 24 feet - 2			2				2
Less than 20 feet - 4		4		3	3	3	
All season road condition							
surfaced, < 10% grade - 0	0	0		0			0
surfaced, > 10% grade - 1			1				
Non surfaced, <10% grade - 1					2		
Non surfaced, >10% grade - 3						3	
Other than all season - 4							
Street signs							
Present - 4" reflective letters - 0			0			0	0
Absent - 5	2	5		4	2		
Fire Service Access							
< 300 ft. with turnaround - 0	0						
> 300 ft. with turnaround - 2			2				1
< 300 ft. w/o turnaround - 4		4		3	3	3	
> 300 ft. w/o turnaround - 5							
Total	**12**	**29**	**26**	**26**	**27**	**34**	**16**
Rating	**Low**	**Low**	**Low**	**Low**	**Low**	**Mod**	**Low**

Table 2 provides a summary of the ODF Assessment of Risk and the total score for each.

Table 2 – ODF Assessment of Risk Summary with Ranking

	Likelihood of fire occurring	Hazard	Protection capability	Values Protected	Structural Vulnerability	Total	Rank
Whychus Canyon	35 High	80 High	8 Low	35 High	26 Low	**184**	**1**
Whychus Creek	35 High	72 High	5 Low	35 High	26 Low	**173**	**2**
Indian Ford Creek	35 High	67 High	2 Low	40 High	24 Low	**168**	**3**
Metolius	35 High	73 High	10 Moderate	35 High	27 Low	**180**	**4**
City of Sisters	38 High	52 Moderate	2 Low	50 High	12 Low	**154**	**5**
Fryrear Butte	35 High	64 High	3 Low	35 High	16 Low	**153**	**6**
McKenzie Canyon	20 Moderate	77 High	18 Moderate	2 Low	34 Moderate	**151**	**7**

While the Metolius rating area scored higher than Indian Ford Creek And Whychus Creek in the ODF Assessment of Risk, due to the large amount of land treated and large fire history, the Steering Committee agreed that the Whychus Creek and Indian Ford Creek rating areas pose a greater fire risk to the Greater Sisters Area and thus assigned them a higher priority ranking.

Oregon Forestland-Urban Interface Fire Protection Act of 1997

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 wildland urban interface properties into less volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified 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 wildland 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 wildland 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.

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 takes effect on properties that are within a wildland urban interface area and for which a certification card has not been received by the Department of Forestry. 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.

The Steering Committee presents the following groups of priorities for consideration under this CWPP:

Extreme Risk Priority Communities

Whychus Canyon

Whychus Creek

Very High Risk Priority Communities

Indian Ford Creek

Metolius

High Risk Priority Communities

City of Sisters
Fryrear Butte
McKenzie Canyon

Fire Regime - Condition Class

Fire Regime - Condition Class considers the type of vegetation and the departure from its natural fire behavior return interval. Five natural (historical) fire regimes are classified based on the average number of years between fires (fire frequency) combined with the severity of the fire on dominant overstory vegetation. All five fire regimes are represented on the landscape in the Greater Sisters Country WUI. Western juniper for example has a fire return interval of approximately 30 years with high potential for stand replacement fires. Therefore, it falls within Fire Regime II.

Table 5 summarizes Fire Regimes.

Table 5 – Fire Regimes

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

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

Table 6 summarizes Condition Class.

Table 6 – Condition Class

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

Areas of special concern

Critical Transportation Routes

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

The Steering Committee expressed great concern over the need to identify, develop and protect critical transportation routes as part of this planning process. A detailed look at specific ingress/egress issues for each Community at Risk is included under Recommendations to Reduce Structural Ignitability. This issue is also highlighted under Action Plan and Implementation.



Prioritized Hazard Reduction Recommendations and Preferred Treatment Methods

The Steering Committee agreed that the Greater Sisters Country Community Wildfire Protection Plan is a living tool that can be used for multiple outcomes. The following is an outline of the prioritized Communities at Risk, as well as preferred treatments and goals for hazardous fuels reduction under the Greater Sisters Country Community Wildfire Protection Plan.

Prioritized Communities at Risk

Based on the combined assessment as shown in Table 4 and group consensus, the Steering Committee has identified the following prioritized Communities at Risk for hazardous fuels reduction treatments on public and private lands in the Greater Sisters Country WUI:

Extreme Risk Priority Communities

Whychus Canyon

Whychus Creek

Very High Risk Priority Communities

Indian Ford Creek

Metolius

High Risk Priority Communities

City of Sisters
Fryrear Butte
McKenzie Canyon

Priorities and goals

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

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

Preferred treatments and goals for hazardous fuels reduction

The overall standard of the Greater Sisters Country 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. This enables safe and effective initial attack. The overall goal is to reduce the potential for crown fires and provide for a healthy, fire resilient landscape that supports the social, economic and ecological values of Sisters area residents and visitors. The Steering Committee recognizes the effectiveness and value of maximizing treatment efforts in areas that are adjacent to federal, state, or private projects and recommends that future projects consider these benefits when selecting areas for treatment. The following specific standards are recommended for treatments on public and private lands within the Greater Sisters Country planning area.

Public lands

Federal lands make up 61% of the Greater Sisters Country planning area and are managed by the US Forest Service from the Sisters Ranger District and the Bureau of Land Management from the Prineville District. Each of the seven Communities at Risk is adjacent to public lands.

It is the intent of the Steering Committee that the Greater Sisters Country WUI area is subject to expedited measures for hazardous fuels treatment and allocation of funds to protect the Communities at Risk as stipulated by the Healthy Forests Restoration Act.

The maps in Appendix A detail the WUI boundary throughout the Greater Sisters Country CWPP area and the individual Communities at Risk calling for protection specifically by reducing wildland fuel hazards on public lands.

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 of each Community at Risk. This buffer will begin at the edge of private lands and extend onto the federal lands to the designated WUI boundary. This enables safe and effective initial attack. This standard will be achieved by the federal land management agencies through a variety of treatment methodologies such as thinning, prescribed burning and mechanical treatments.

Based on the risk assessments, the priorities of the Greater Sisters Country CWPP with regard to public lands within the WUI are as follows:

- All areas within the designated WUI boundary beginning with the first ¼ mile buffer around each Community at Risk utilizing the following priorities:
- Within 300 feet of any evacuation route from each Community at Risk.
- All areas beyond the initial ¼ mile of each prioritized Community at Risk above, in ¼ mile increments until the WUI boundary is reached.
- For mixed conifer and lodgepole stands which have missed typical fire cycles and still pose threats of potential crown fires to communities, specific fuels treatments shall be accomplished on federal and state lands to reduce and maintain fuel loads to that which can produce flame lengths of less than four feet to provide for effective initial attack and minimize the resistance to control.
- Although the treatments should focus on areas rated Extreme Risk Priority Communities, maintenance of previously treated lands is also a top priority where treatment is critical to maintain this status within the CWPP area. 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 park-like ponderosa pine dominated forests. In exclusively lodgepole pine and mixed conifer stands where site conditions are favorable to ponderosa pine, intensive thinning should occur with a reforestation strategy to restore a proper ratio, as determined by the agency, of lodgepole or mixed conifer to ponderosa pine. Excessive dead/down fuels should be removed followed by understory maintenance.

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

Private and county owned lands

Private lands make up 37% of the area in the planning area. The County owns only 1% of the land in this planning area. The Steering Committee recommends that County owned lands be treated in the same manner as privately owned lands.

Private lands with structural improvements

On private lands with structural improvements, the goal is for each structure to meet the specific standards for classified lands as identified in the Oregon Forestland – Urban Interface Fire Protection Act of 1997, also known as Senate Bill 360. This statute outlines standards and requirements for defensible space on private property that receives fire protection from Oregon Department of Forestry. The Oregon Department of Forestry provides wildland fire protection in the Greater Sisters Country planning area and the Steering Committee supports the goals and standards of Senate Bill 360. The Steering Committee agreed that the required standards under each classification from Senate Bill 360 are the goal to achieve on private and county owned lands throughout the Greater Sisters Country WUI.

A detailed description of the standards is available from the Oregon Department of Forestry in the handbook for the Oregon Forestland – Urban Interface Fire Protection Act of 1997. This information is also available at www.oregon.gov/ODF/fire/SB360.

The Default Standards under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 are:

- Establish a primary fuel break of 30-100 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 30 feet away from structures;

Property owners can also achieve the Senate Bill 360 standards by taking advantage of FireFree and Firewise suggestions to 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. These national education programs promote a variety of fire safe actions to help prevent the spread of fire to protect individual homes and neighborhoods. Information about these programs can be found at www.firefree.org and www.firewise.org. More information is also listed in this plan under Recommendations to Reduce Structural Vulnerability.

Vacant lots

Within the Greater Sisters Country WUI, approximately 20% of the private lots are considered vacant, or lots with no structural improvements. Many of those lots 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.



Recommendations to Reduce Home Ignitability

Structural Ignitability

Based on the assessment of structural vulnerability for the ODF Assessment of Risk, Table 7 provides recommendations for property owners to reduce their homes probability of igniting. 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 – Recommendations to Reduce Structural Ignitability

☑	**How can I reduce my home's probability of igniting?**
❑	Increase Homeowner education with programs such as, FireFree, Firewise, Senate Bill 360
❑	Establish additional evacuation routes, sign & maintain evacuation routes
❑	Identify, upgrade and maintain any roads <20 feet in width
❑	Produce & install reflective signs for any non-reflective that may exist
❑	Maintain fuel reduction projects annually
❑	Re-apply for Firewise annually, if applicable

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?**
❑	If you are interested in a free home assessment – call you local Fire Agency
❑	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 30 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 30-100 feet of defensible space around your home.
❑	Screen vents and areas under decks with 1/8" metal mesh or fire resistant siding.
❑	Keep decks free of flammable lawn furniture, toys, doormats, etc.
❑	Choose fire-resistant roofing materials like metal, tile or composition shingles.
❑	Trim vegetation along driveways a minimum distance of 14' wide x 14' high for fire trucks.
❑	Choose fire resistive plants. Visit www.extension.oregonstate.edu/deschutes to view *Fire-Resistant Plants for the Home Landscape.*
❑	Use alternatives to burning debris like composting or chipping.
❑	If burning debris outside city limits – call the Burn Line at your local Fire District to see if burning is allowed. Do not burn building materials.



Other Recommendations

Education

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

- Instill a sense of personal responsibility for taking preventative 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.

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

There are several opportunities to enhance educational efforts in the Greater Sisters area. All fire districts, the US Forest Service and BLM, the Oregon Department of Forestry, the Central Oregon Fire Prevention Cooperative and Project Wildfire all provide wildland fire prevention programs through a variety of individual and collaborative efforts. The City of Sisters is working with the Sisters Area Chamber of Commerce to develop wildfire awareness and prevention information to place on the websites for both organizations.

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

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.

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 their local fire department 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 Greater Sisters Country CWPP is a living tool with multiple applications. The following priority actions are intended to assist individuals and agencies in the implementation of this CWPP across the Greater Sisters Country.

Priorities

Identify, Improve and Protect Critical Transportation Routes

The Steering Committee will work with the fire districts, the City of Sisters, Deschutes County, and Oregon Department of Transportation to identify and map existing transportation and evacuation routes in each Community at Risk. The Steering Committee will assist in conducting further assessments to determine the evacuation needs of each Community at Risk and identify potential projects developing new routes and/or improving existing routes. A few areas a specific concern the Steering Committee identified are: the access to north of Wizard Falls, access to both Edgington and Remuda sub-divisions, and ladder fuel reduction needs to be completed surrounding vital communication sites and other infrastructure within the Greater Sisters Area. The Steering Committee identified two lots surrounding Sisters High School that they agree pose a fire risk to critical infrastructure. They recommend the lots be thinned to reduce fire risk.

The Steering Committee encourages discussions with fire agencies and local landowners that address the issue presented when effective evacuation from an area is not available. Utilizing the 2009 Interagency Evacuation Guidelines, the Steering Committee will facilitate discussions to consider whether "sheltering in place" and safe staging areas are an option. The Forest Service will continue to closely consider all critical transportation routes during the planning and implementation stages on the National Environmental Policy Act (NEPA) as identified on page 6 of this document.

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

Reduce hazardous fuels on public lands

Immediately following the acceptance and signed approval of this plan, Project Wildfire will have the 2014 Greater Sisters Country CWPP available to all federal and state land managers including the Deschutes National Forest, the Bureau of Land Management, and the Oregon Department of Forestry. The intention of the Steering Committee is to engage in continued discussions with the Sisters community and adjacent landowners to implement the CWPP and accomplish hazardous fuels reduction projects that address the prioritized Communities at Risk

in the most expeditious manner possible. The Steering Committee recognizes the effectiveness and value of maximizing treatment efforts in areas that are adjacent to federal, state or private projects and recommends that future projects consider these benefits when selecting areas for treatment.

Reduce hazardous fuels on private lands

The intention of the Steering Committee is to engage in continued discussions with landowners to facilitate fuels reduction projects on private lands utilizing the list of prioritized Communities at Risk. These actions can be accomplished through education activities or grants for specific projects on private lands. The Steering Committee identified the subdivisions surrounding Edgington & Remuda Roads as being areas that should be first priority for fuel reduction.

The Steering Committee would like to promote Sweat Equity projects throughout the Greater Sisters Area. These will be projects that place the responsibility on the individual to perform ladder fuel reduction on their property. After the fuel has been removed the County will offer haul away or chipping of the material. This program allows for assistance in defensible space creation but empowers the homeowner with education.

Reduce Structural Vulnerability

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

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

Increase Awareness and Education

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

Fund Projects

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



Evaluation and Monitoring

The Steering Committee faced a complex task in the comprehensive revision of the Greater Sisters Country Community Wildfire Protection Plan. Implementing and sustaining these efforts will require a significant commitment. Building a collaborative and cooperative environment with the fire districts, community-based organizations, local government, and the public land management agencies has been the first step in reducing the risk of loss from wildland fire. The Steering Committee pledges to maintain this cooperation with the public over the long-term with the commitment of all the partners involved.

At a minimum, the Steering Committee shall include: the Program Coordinator from Project Wildfire; a Chief Officer from each fire district; a representative from Oregon Department of Forestry (ODF); a representative from Central Oregon Fire Management Service (COFMS), the City of Sisters and Deschutes County along with members of the Sisters area public.

The Steering Committee agrees that the Greater Sisters Country 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; revisited at least annually and revised every five years in order to address its purpose.

Sisters – Camp Sherman Rural Fire Protection District will work with Project Wildfire to convene the Steering Committee at least once per year, or as often as the Steering Committee deems necessary to implement and review the Greater Sisters Country Community Wildfire Protection Plan. Topics for discussion can include:

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

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