Flat Fire, 2025

Greater Sisters Country

Community Wildfire Protection Plan

2025

Prepared by
Corinne Heiner
Natural Resources Specialist
Deschutes County
Corinne.Heiner@deschutes.org
(541) 322-7129

Table of Contents

Executive Summary

Purpose

Community Wildfire Protection Plans (CWPPs) are documents that are designed by a 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(s), the state Forestry Department, 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 larger landscape to restore forest health and more resilient conditions and improving fire response by all fire agencies are also discussed and addressed in the action plan. 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 property owners 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. These programs allow the Greater Sisters Country CWPP Area to be a more Fire Adapted Community.

Since its creation in 2005, the Greater Sisters Country Community Wildfire Protection Plan (CWPP) has been revised four times (2006, 2009, 2014, and 2019) by a local steering committee to be applied as it was intended by a wide variety of private landowners and public agencies to decrease the risks of high-intensity wildfire in the Greater Sisters Country Area. This is the fifth revision, completed in 2025.

The 2025 Greater Sisters Country CWPP will assist agencies and local property owners in the identification and prioritization of all lands, including surrounding public lands that are 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.

Addressing these goals in a cooperative, collaborative manner maintains alignment with the goals outlined in the National Cohesive Wildland Fire Management Strategy (Cohesive Strategy) – resilient landscapes, Fire Adapted Communities, and safe and effective wildfire response. For more information on Cohesive Strategy, visit http://www.forestsandrangelands.gov/.

The goals of the Greater Sisters Country CWPP are to:

- Protect lives and property from wildland fires.
- Instill a sense of responsibility among residents, visitors, conservation groups, and federal, state and local agencies to take preventive actions regarding wildland fire.

- Provide guidance to landowners, public and private, and federal agencies on the implementation of fuels reduction treatments.
- Prioritize the use of limited funds for the treatment of hazardous fuels.
- Create and maintain fire-adapted communities where residents and visitors understand that wildfire risk is high in our region and are prepared for when it occurs.
- 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 with diverse, multi-structured forests emphasizing large ponderosa pine trees.
- Improve the fire resilience of the landscape while protecting other social, economic, and ecological values.
- Improve the resilience of critical infrastructure during a wildfire event, including utilities, transportation, and communications.

The Greater Sisters Country CWPP integrates information from a variety of sources to present a comprehensive picture of risk and possible treatments on the landscape and enables community organizations and their partners to act in a coordinated fashion. A complete plan also allows the adjacent federal land management agencies to make use of the expedited authorities provided by the Healthy Forest Initiative (HFI) and the Healthy Forest Restoration Act (HRFA). In addition, for communities seeking federal grant funding from the National Fire Plan, a completed community wildfire protection plan has become a *de facto* requirement. Lastly, developing a community wildfire protection plan is a powerful tool to help get residents and visitors involved in fire protection efforts.

Planning Area Description

The Greater Sisters Country CWPP is multi-jurisdictional and addresses all lands and all ownerships within the boundaries of the plan area. It is located in the northwestern-most corner of Deschutes County. The eastern edge abuts the Greater Redmond CWPP. The southern edge of the boundary meets the northern boundaries of the East-West Deschutes County CWPP and Greater Bend CWPP. The western boundary is the county line shared with Linn and Lane Counties. The northern boundary is the country line shared with Jefferson County.

The 2025 revision has updated the Greater Sisters CWPP boundary area to remain within the Deschutes County boundary. a smaller area within the planning area is considered the Wildland Urban Interface (WUI). The WUI is the area that actions described in this plan are focused on and consists of areas with structures or other infrastructure that are considered values at risk including an adequate buffer of those areas based on local knowledge of fire behavior.

Geography and the Environment

The communities of Greater Sisters Country are bound together by Oregon State Highways 20, 126 and 242. The CWPP Planning area boundary lies within the larger area of the eastern Cascade slopes and foothills. The area is dominated by western juniper, sagebrush, and grasses on the high desert to the east; and a transition from ponderosa pine to mixed conifer to a subalpine 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.

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 such as steep slopes and river canyons, 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 with predominant winds. These thunderstorms frequently cause multiple fire ignitions.

Today, with less stand management, logging activity, and highly effective wildland fire suppression, the forestland is predominantly dense conifer forests consisting primarily of ponderosa and lodgepole pine. Much of the understory consists of dense bitterbrush with some areas of native bunch grasses. The other main vegetation type is shrubland on the eastern portion of the planning area. Due to the lack of disturbance, vegetation has continued to become more overcrowded.

Wildland Fire Advanced Hazard Report

The CWPP steering committee used the Oregon Wildfire Risk Explorer tool that was created in partnership with the Oregon Department of Forestry (ODF) and the Institute for Natural Resources at Oregon State University (OSU) to undertake a wildland fire risk assessment and gauge the relative risk and hazard due to wildland fire for the lands and communities within the planning area. This tool is intended to direct the implementation of wildfire mitigation activities to the highest priority areas and promote cross-boundary coordination. The full advanced hazard report can be found on page 65.

Action Plan and Implementation

The Steering Committee recognizes that the Greater Sisters CWPP is a living tool that can be used for multiple outcomes. The plan contains recommendations consistent with the three goals of the Cohesive Strategy (safe and effective wildfire response, Fire Adapted Communities, and resilient landscapes), as well as prioritized recommendations and preferred treatment methods.

With critical needs assessed and priority areas identified through the risk assessment process, the Steering Committee identified the following recommendations to meet the purposes of the Greater Sisters CWPP:

- Reduce hazardous fuels on public lands
- Reduce hazardous fuels on private land
- Reduce structural vulnerability
- Increase education and awareness of the wildfire threat
- Identify, improve, and protect critical transportation routes.

Declaration of Agreement

The Greater Sisters Country Community Wildfire Protection Plan was originally completed and signed on June 21, 2005. Other revisions were approved in 2006, 2009, 2014, and 2019. 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.

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

_____ _____

Tony Prior, 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

_____ _____

Gordon Foster, Unit Forester — Date
Oregon Department of Forestry

_____ _____

Tony DeBone, Commissioner — Date
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 2025 Greater Sisters Country Community Wildfire Protection Plan.

Eric Metzgar	Oregon Department of Forestry
Sheldon Rhoden	Bureau of Land Management
Jona Ensley	Bureau of Land Management
Matthew Martin	City of Sisters Principal Planner
Dan Tucker	Fire Chief, Black Butte Ranch FD
Jacob Derksen	Black Butte Ranch Natural Resources Manager
Kevin Moriarty	Deschutes County Forester
Gordon Foster	Oregon Department of Forestry
Ian Reid	District Ranger, US Forest Service
Lucas Garcia	US Forest Service/COFMS
Ryan Gregg	US Forest Service/COFMS
Corinne Heiner	Project Wildfire
Patti Adair	Deschutes County Commissioner
Tony Prior	Fire Chief, Sisters – Camp Sherman FD
Jeff Puller	Sisters – Camp Sherman FD Fire Marshal
Ashley Volz	Deschutes County Emergency Services Coordinator
Thad Olsen	Fire Chief, Cloverdale FD
Heather Miller	Oregon State Fire Marshal

Contact Information

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

Tony Prior, 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

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

Corinne Heiner, Program Director
Project Wildfire
61150 SE 27th Street
Bend, OR 97702
(541) 322-7129

This page intentionally left blank

2025 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 for taking preventive actions regarding wildland fire.
- Increase public understanding of the risks associated with 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.
- Guide landowners, public and private, and federal agencies on the implementation of fuels reduction treatments.
- Prioritize the use of limited funds for the treatment of hazardous fuels.
- Create and maintain fire-adapted communities.
- 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 full document updates in 2009, 2014, and 2019, 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, education, 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 habitats 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 2025 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 specific areas of concern, such as evacuation routes, and 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 Greater Sisters Country Community Wildfire Protection Plan by resolution on October 8th, 2009, and its most recent update in 2019. Additionally, in 2014, the Sisters City Council adopted Ordinance 444, which amended its Municipal Code addressing the Urban/Rural Interface regulations and recommendations contained in Senate Bill 360 (Oregon Forestland Durban Interface Fire Protection Act). The ordinance incorporated changes regarding fire prevention, the spread of noxious weeds and improved aesthetics to ensure the health, safety, and welfare of the residents of the City of Sisters. The Municipal Code which includes Wildland Urban Interface (WUI) standards in Chapter 8.20 was re-codified in May 2019.

In 2022, at the request of the City of Sisters, Tamarack Wildfire Consulting prepared a Wildfire Risk Assessment and Mitigation Plan for City-owned or managed properties. The plan provides recommendations for reducing the risk and impacts of wildfire. The city has implemented some of the recommendations, such as fuel reductions, and will evaluate opportunities to implement others.

In 2025, the Sisters City Council adopted Ordinance 543, which amended its Development Code addressing defensible space for the construction of new buildings. The ordinance incorporated changes to standards to provide supplementary development regulations to reduce or minimize the potential impacts of wildfire on properties, the occupants of properties and the occupants of adjacent properties. Hazardous fuel thinning and mowing was completed at the Wastewater Plant and Edgington properties.

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 February 2019 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 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 in 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 2019 CWPP. The group approved the 2025 CWPP boundary. The Steering Committee was able to estimate 5743 structures in the risk assessment process.

Step five: Develop a community risk assessment.
The Steering Committee relied on the Oregon Wildfire Risk Explorer tool to create an Advanced Report (page 65).

Step six: Establish community hazard reduction priorities and recommendations to reduce structural ignitability.
Based on the report, the Steering Committee produced priorities for fuels reduction treatments on public and private lands. The Steering Committee also made recommendations to reduce structural ignitability is based on information in 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.

Collaboration and Background

In 2002, President George W. Bush established the Healthy Forests Initiative (HFI) to improve regulatory processes to ensure more timely decisions, greater efficiency and better results in reducing the risk of high-intensity wildfire. This initiative allowed forest management agencies for the first time to expedite the documentation process for the purpose of reducing hazardous fuels on public land.

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.

Communities now have the opportunity to participate in determining where federal agencies place their fuels reduction efforts. With a CWPP in place, community groups can apply for federal grants to treat hazardous fuels and address special concerns to reduce the risk of catastrophic loss as a result 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.

In 2009, Congress passed the Federal Land Assistance, Management, and Enhancement (FLAME) Act and called for a National Cohesive Wildland Fire Management Strategy to address wildland fire related issues across the nation in a collaborative, cohesive manner. The Cohesive Strategy was finalized in 2014 and represents the evolution of national fire policy:

> ***To safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire.***

The primary, national goals identified as necessary to achieving the vision are:

Resilient landscapes: Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives.

Fire-adapted communities: Human populations and infrastructure can withstand wildfire without loss of life and property.

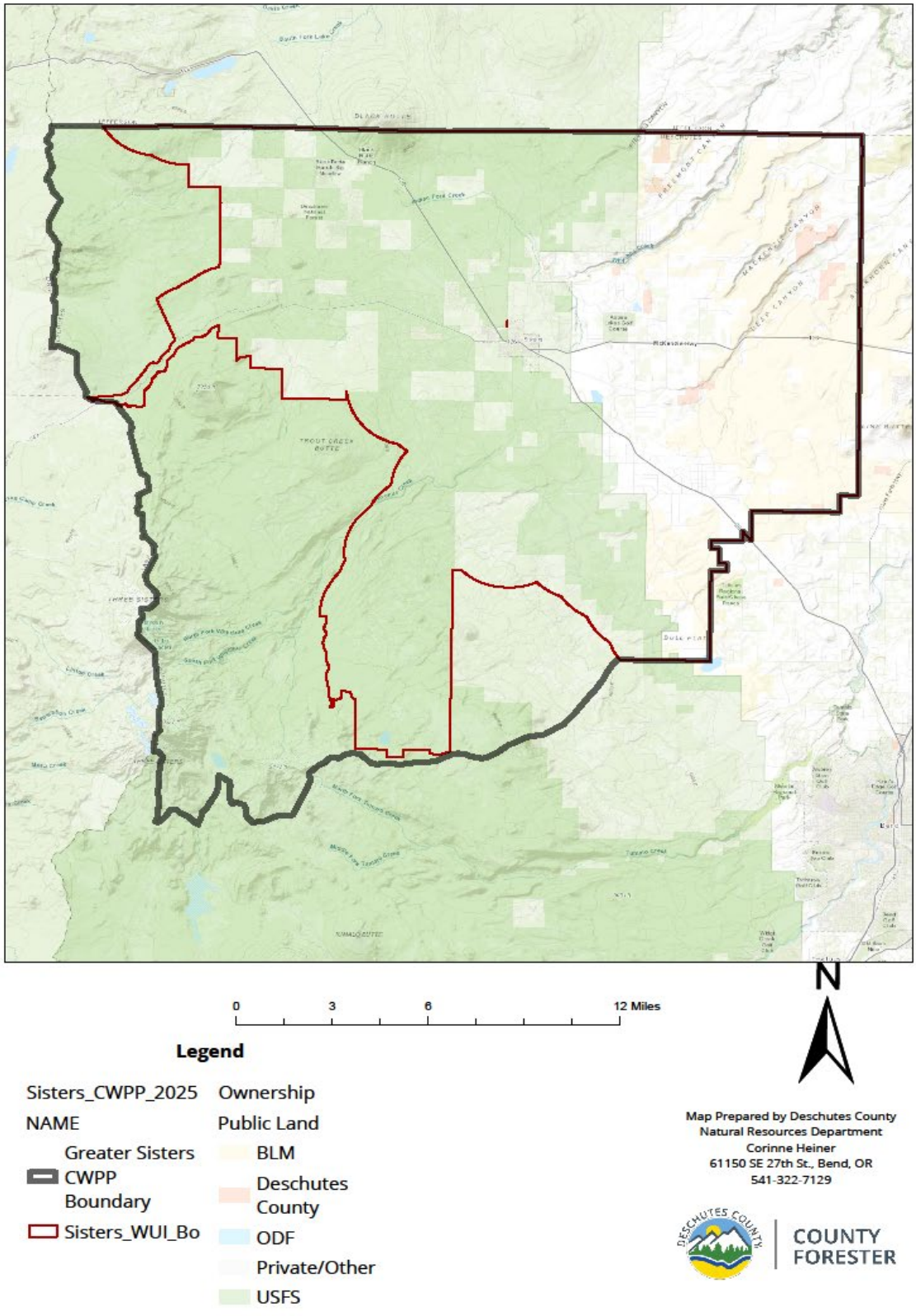
Wildfire response: All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

Building a collaborative and cooperative environment with the fire department(s), 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 participants involved. The importance of collaboration with neighboring CWPPs is recognized by the Steering Committee and is referenced throughout this CWPP as documentation of collaborative efforts to maximize hazardous fuels reduction efforts in the area. The Steering Committee agrees that the Greater Sisters Country Community Wildfire Protection Plan will be a living document, intended to promote fuels reduction, education, and other projects to decrease overall risks of loss from wildland fire; it is intended to be revisited at least annually to address its purpose.

At a minimum, the Greater Sisters Country CWPP Steering Committee shall include: 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 along with members of the public.

2025 Greater Sisters CWPP Boundary Map



Community Profile

The Greater Sisters Country is in central Oregon on the east side of the Cascade Mountains. In 2023, the population according to the City of Sisters is 3,738 with another 11,025 estimated in the rural population that inhabits areas surrounding the city of Sisters. This is an increase of 37% within the city limits since 2018. 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 seasonal challenges 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, sagebrush, 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.

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. 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 Sister's Eagle Airport is located at the intersection of Camp Polk Road and Barclay Drive, within 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

Federal 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 U.S. Forest Service

The U.S. 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). The Deschutes National Forest, including the Sisters Ranger District, continues to increase forest health and reduce the potential for high-intensity wildland fire through its fuels reduction activities. The following maps provide an overview of fuels treatment projects on National Forest System 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 goal for these projects is to reduce the potential for a 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.

It is also important to note that total acres treated for each treatment type (with the exception of non-commercial thinning) were increased from the previous CWPP period (2014-2019). This represents an increased period of federal funding from multiple initiatives targeted at reducing hazardous fuels on federally managed lands. These initiatives include the Joint Chief's Landscape Restoration Partnership, Collaborative Forest Landscape Restoration Program, Bipartisan Infrastructure Law, and Inflation Reduction Act.

In 2024 the Sisters Ranger District was able to complete two cross-boundary prescribed fire treatments utilizing agreements under the Wyden Amendment authority totaling 210 acres. The District has several pending agreements for additional treatments across shared boundaries and hopes to continue using this authority and agreement mechanism to facilitate increased prescribed fire to protect public and private property from the effects of high-intensity wildfire. In addition, the District still has hundreds of acres remaining of potential under burning with signed decisions in the Melvin Butte, SAFR, and Metolius areas.

US Forest Service-2019-2025 Fuel Reduction Treatments by Planning Area (in acres)							
Project Name	Project Status	Non-Commercial (small tree) thin	Commercial Thinning	Mowing/ Mastication	Yarding/ Piling	Pile Burning	Underburning (Prescribed Fire)
Metolius Basin Forest Management Project	Ongoing	150	0	2820	7	7	1763
Greater Suttle Lake Vegetation Management	Completed	239	239	0	239	239	0
Flymon	Ongoing	607	339	308	715	0	398
Sisters Water Tower Fuels Reduction	Ongoing	26	0	0	26	0	0
Sisters Area Fuels Reduction (SAFR)	Ongoing	87	728	6583	164	1272	4139
Melvin Butte Vegetation Management Project	Ongoing	1999	1498	120	585	2323	0
Milli Fire Salvage/ Danger Tree Abatement	Completed	595	595	0	595	1817	0
Green Ridge Fire Danger Tree Abatement	Completed	0	94	0	94	94	0
Highway 20 Integrated Vegetation Management Project	Ongoing (Maintenance)	0	0	1895	0	226	858
Other		0	0	849	585	585	0
TOTAL		**3703**	**3493**	**12575**	**3010**	**6563**	**7446**

Project Areas:
The above treatments represent multiple project areas (see attached map below). These projects are in various phases, with some nearing completion, and some receiving maintenance treatments. Numerous areas have been identified as priority areas for future treatments including:

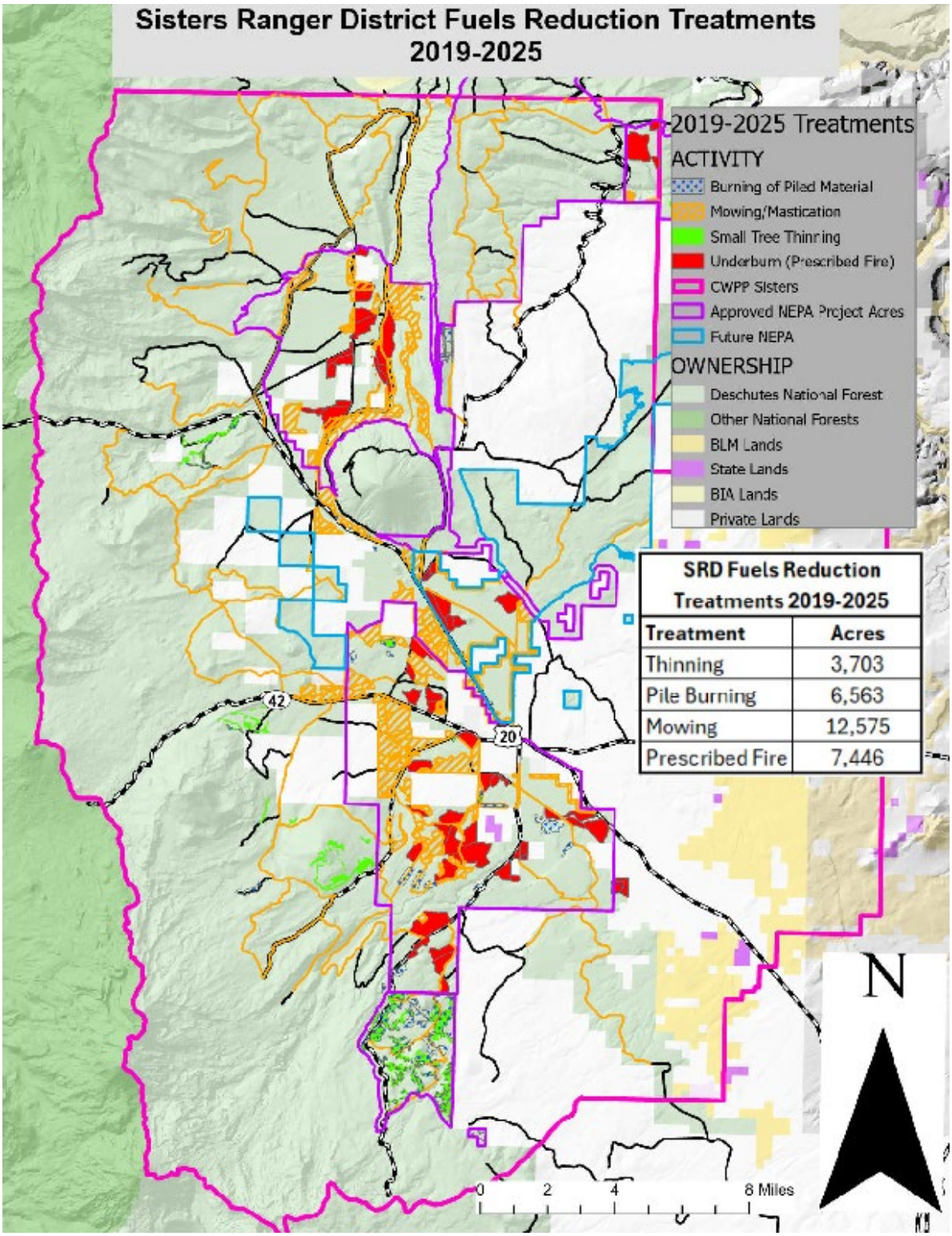
Green Ridge Landscape Restoration Project (Decision signed spring 2025): Implementation expected to begin as soon as fall 2025. Northeastern portion of Sisters Ranger District on the western slope of Green Ridge.

Cougar Rock Restoration Project: (Decision signed winter 2025): North of Sisters, with treatments planned at the base of Black Butte near the FS 11 road, and areas near Stevens Canyon Road near Indian Ford Rd. Implementation expected to begin as early as fall 2025.

Deschutes National Forest Fuels Maintenance Environmental Assessment: (In planning phase, implementation expected beginning 2026)- Throughout the Sisters Ranger District in past planning areas east of Black Butte including Highway 20, and Sisters Area Fuels Reductions projects.

Sisters Canyons Active Restoration Project: (In planning phase) North of Sisters, on the northeastern part of the Sisters Ranger District. Project area boundary subject to change.

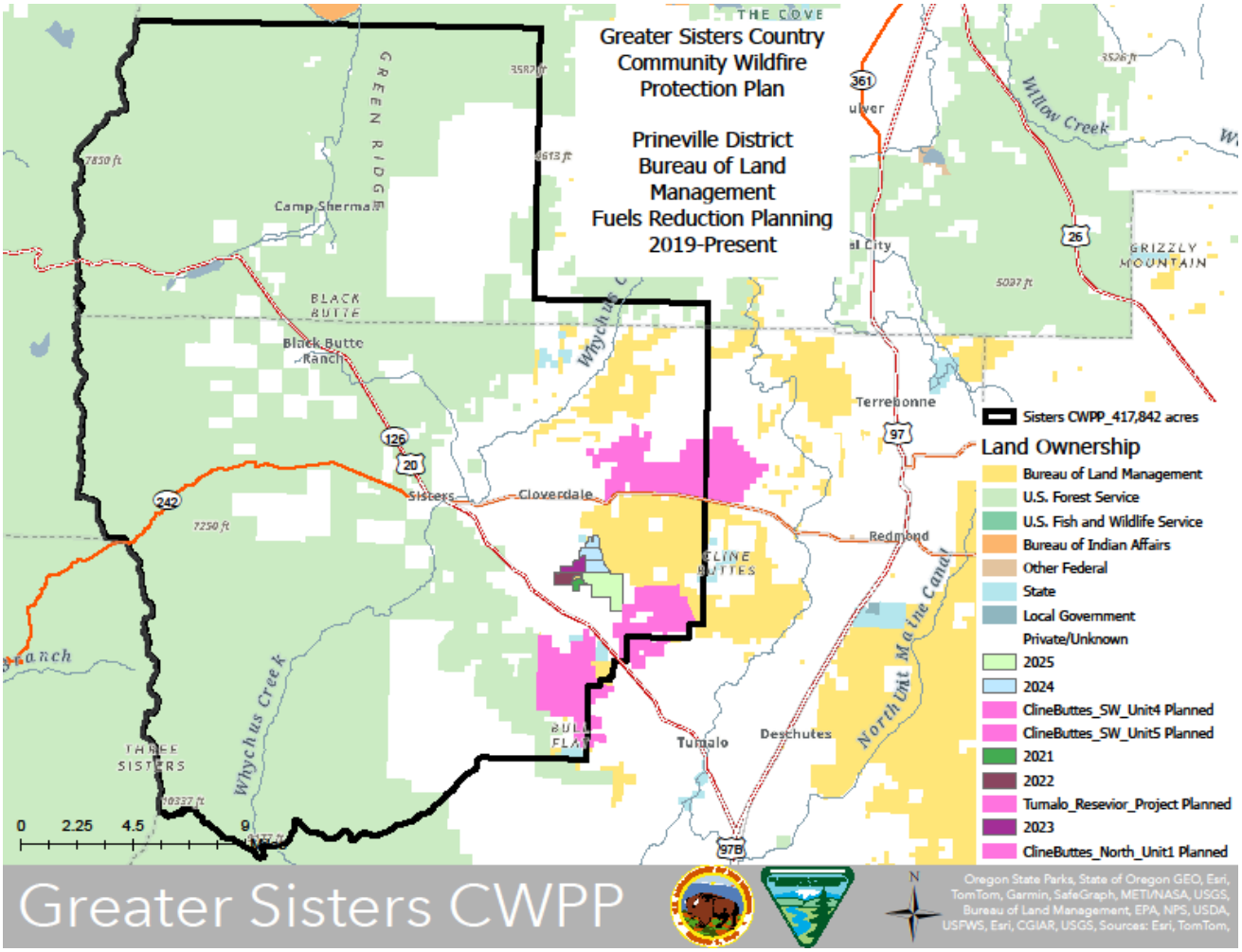
US Forest Service Current Planning Areas and Treatment History 2019-2025

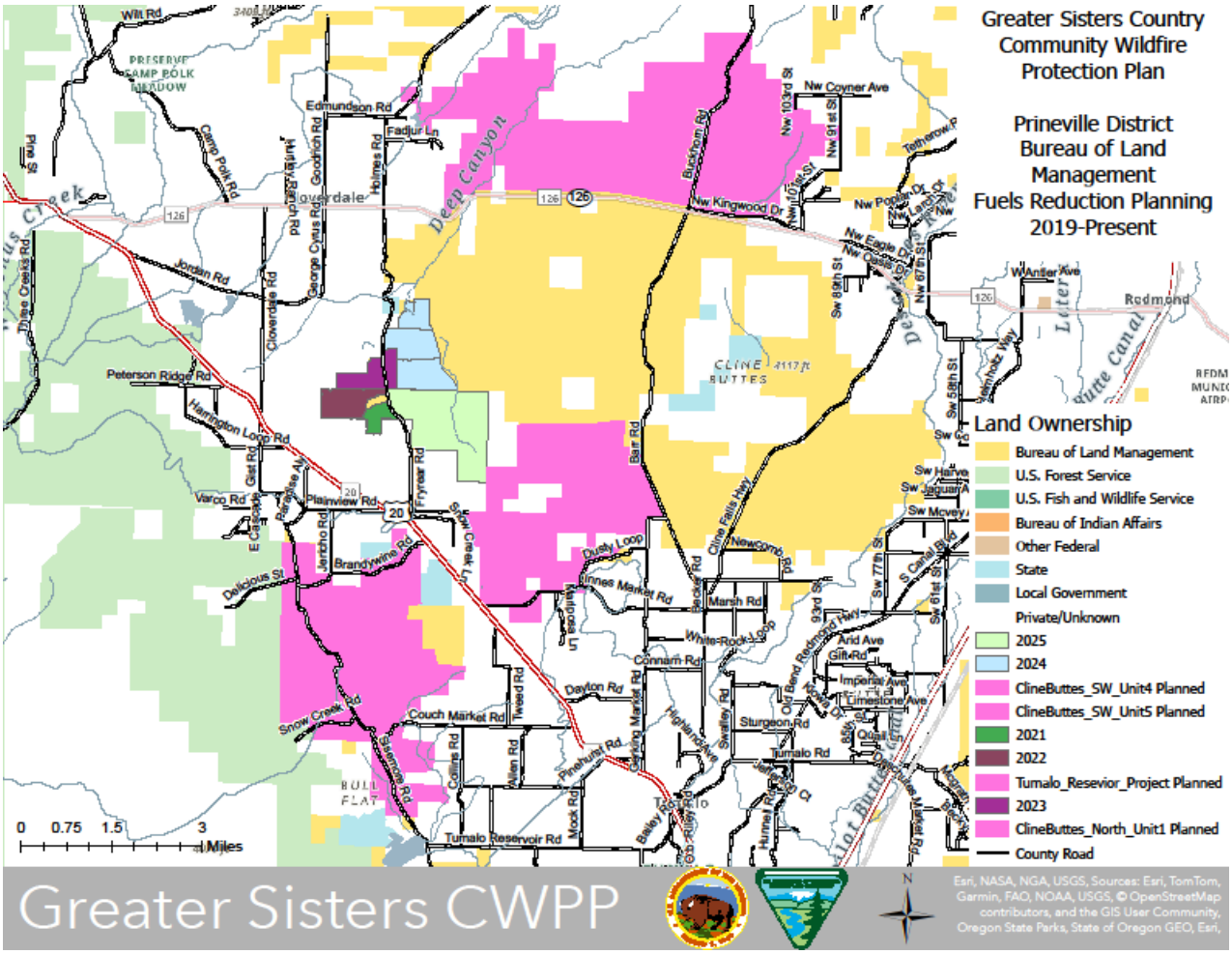


The Bureau of Land Management

The Prineville District manages 31,105 acres within the Greater Sisters area, all of which are classified as Wildland Urban Interface (WUI). The BLM has conducted approximately 3,993 acres of fuels mitigation within the Sisters WUI between 2020-2025. Continued projects are planned in the Cline Buttes project area between 2025-2028 including 3,914 acres along Fryrear Rd. and 8,104 acres between Hwy 126 and Lower Bridge Rd.

Bureau of Land Management (BLM) Project Maps




Greater Sisters Country Community Wildfire Protection Plan
Prineville District Bureau of Land Management Fuels Reduction Planning 2019-Present
Land Ownership
Bureau of Land Management
U.S. Forest Service
U.S. Fish and Wildlife Service
Bureau of Indian Affairs
Other Federal
State
Local Government
Private/Unknown
2025
2024
ClineButtes_SW_Unit4 Planned
ClineButtes_SW_Unit5 Planned
2021
2022
Tumalo_Resevior_Project Planned
2023
ClineButtes_North_Unit1 Planned
County Road
0 0.75 1.5 3 Miles
Greater Sisters CWPP
Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Oregon State Parks, State of Oregon GEO, Esri,

USDA Natural Resources Conservation Service (NRCS)

The USDA Natural Resources Conservation Service (NRCS) offers a variety of conservation programs and services to help landowners address resource concerns on their properties. Through key partnerships at the local level, the NRCS works collaboratively to get conservation on the ground. Public spatial data collection is not available due to private land privacy laws.

State Accomplishments

Oregon Department of Forestry

The Oregon Department of Forestry (ODF) Prineville-Sisters Unit provides direct wildland fire protection to all non-federal lands within the entire CWPP area and assists federal agencies and the Rural Fire Protection Districts with fire protection within the CWPP area under mutual aid agreements. The Unit staffs 10 wildland fire engines, one five-person crew, and one dozer to respond to wildland fires throughout the fire season. The Prineville-Sisters Unit also provides support in fuels mitigation in the CWPP area. This support is provided through technical assistance with the development of Firewise Communities. Through close partnerships with federal and local agencies, the Unit assists in numerous other projects and prevention efforts within the area, including planning fuels projects on adjacent ownerships and conducting cross-boundary prescribed burns projects.

ODF provides wildland fire protection and technical forestry assistance to private landowners and nonfederal agencies. The Greater Sisters CWPP area falls entirely within the Sisters sub-unit of ODF Central Oregon District; all state-owned and private lands are under ODF jurisdiction for wildland fire protection and Oregon Forest Practices Act administration. Properties within the Sisters-Camp Sherman, Black Butte Ranch, and Cloverdale Rural Fire Protection Districts share this jurisdiction with ODF for wildfire response, and mutual aid agreements with the US Forest Service ensure another layer of collaborative fire protection.

ODF has provided several grants to residents within the CWPP, including the Three Creeks, Buttes to Basins, Whychus, and Greater Sisters defensible space grants. The Landscape Resiliency Program was established through Senate Bill 762, Section 18 (2021) to improve forest restoration and resiliency. This grant program has funded landscape-scale projects that reduce wildfire risk on public and private forestlands and rangelands, and in communities near homes and critical infrastructure through restoration of landscape resiliency and reduction of hazardous fuels. Projects completed under LRP funding have improved forest resiliency on larger private properties along Whychus Creek, on Green Ridge, near Trout Creek Butte, near Black Butte Ranch, and in the Metolius Basin. The Oregon Department of Forestry is signatory to a cooperative agreement with the Natural Resources Conservation Service, providing technical forestry assistance and federal funding to private landowners for hazardous fuels mitigation projects throughout the greater Sisters area. Sisters Sub-Unit staff provided direct support in grant writing, project coordination, and field leadership to the Central Oregon Wildfire

Workforce Partnership is providing training and work experience to local youth on hazardous fuels reduction projects in the Sisters Area.

In addition to staffing the Henkle Butte Lookout Tower full time during fire season, the Oregon Department of Forestry has some cameras installed for smoke detection and is currently in the planning phase of installing more in Deschutes County. These cameras are monitored throughout fire season to aid in effective suppression response by wildland agency resources by allowing for more accurate and timely reporting of smoke size and location. ODF Central Oregon District will continue to utilize the state Multi-Mission Aircraft platform for infrared detection of new fire starts following lightning storms. The MMA successfully detected 29 new fires in the summer of 2022. Local ODF staff will also participate in aerial detection of fires by providing fire-qualified personnel with a locally based interagency fire detection plane that can size up a fire and direct resources to its location by radio.

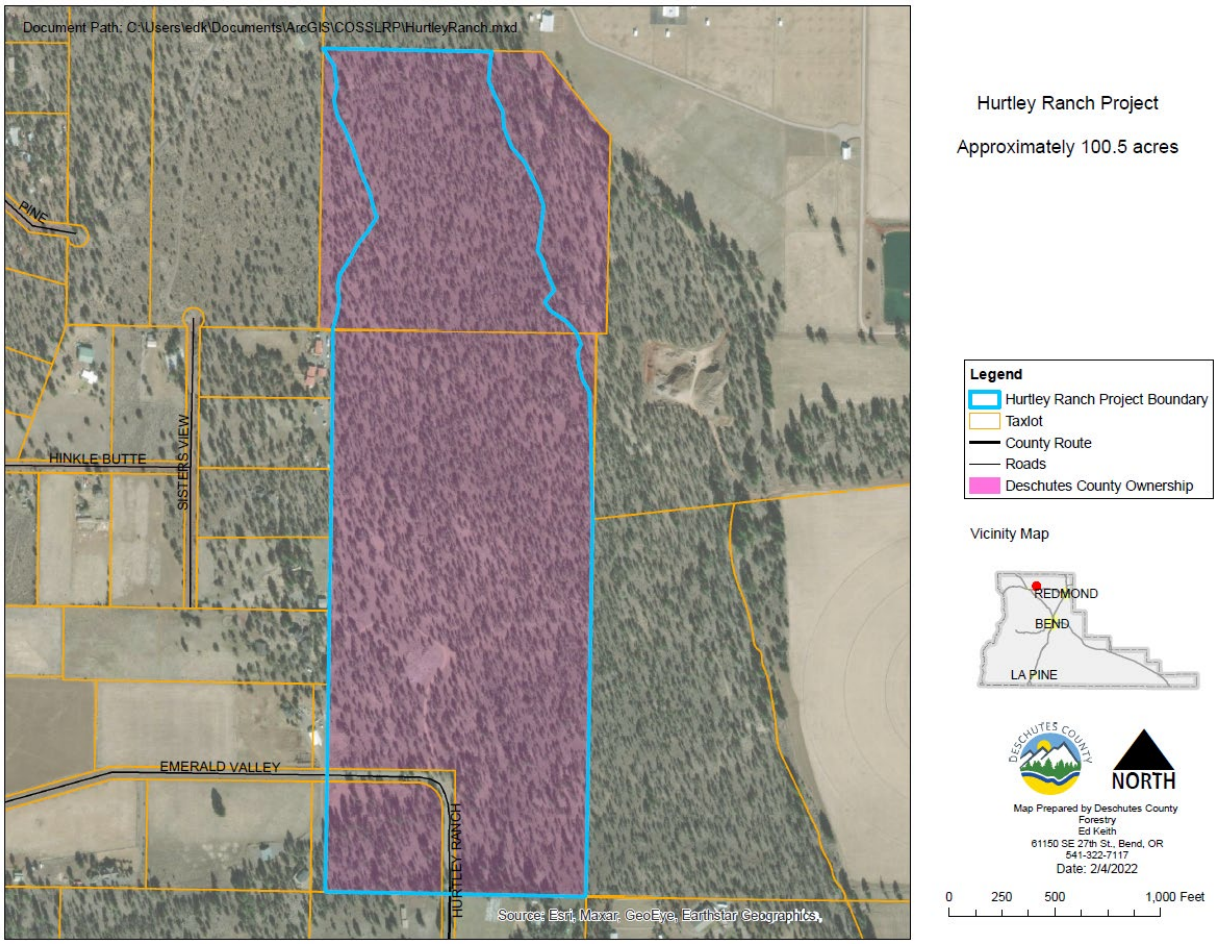
Deschutes County

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

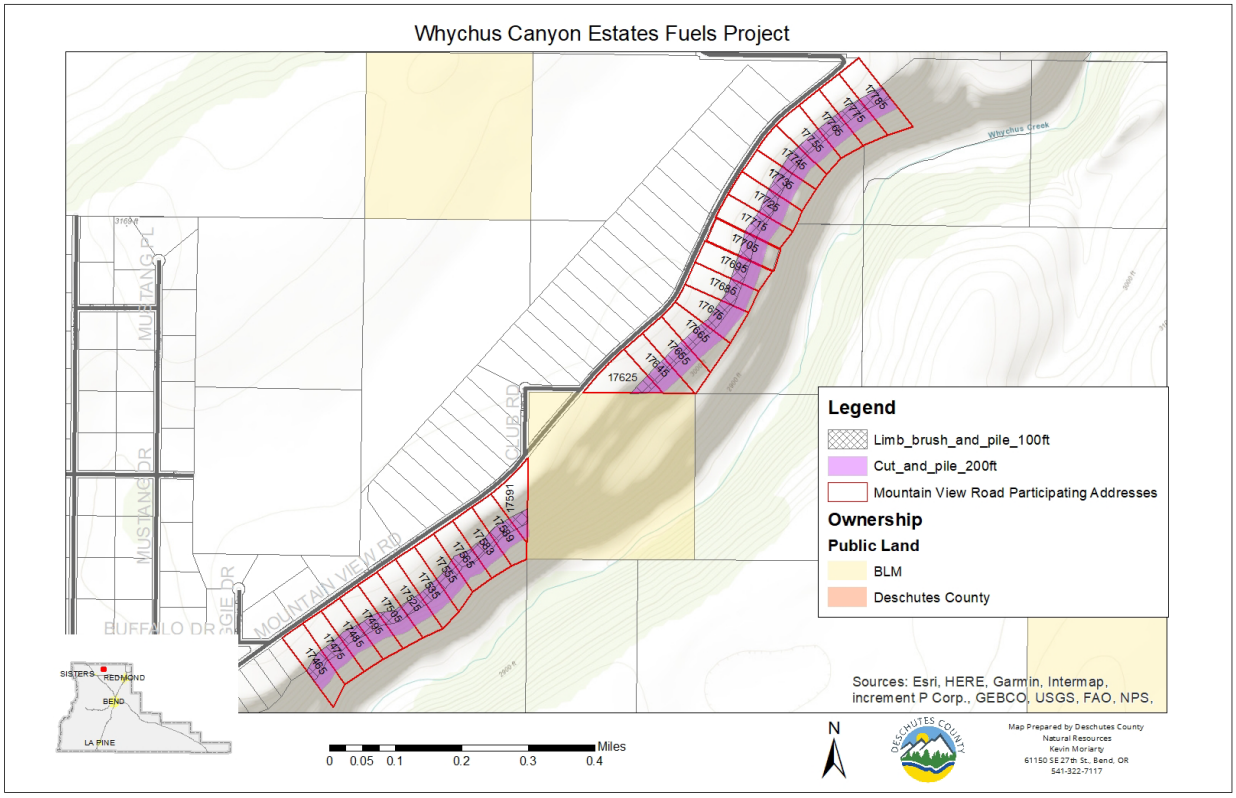
Deschutes County Natural Resources Department offers a Fuel Reduction Grant program to assist Firewise USA™ communities in defensible space and community protection projects. The Department also has been offering a Spring Bin Rental Program, which will be offered again in 2026. More information on these programs can be found at https://www.deschutes.org/forester.

Deschutes County was awarded Community Wildfire Risk Reduction funds through the Oregon State Fire Marshal in 2023. These funds have allowed Deschutes County to award funds to communities doing fuels reduction and defensible space work. The Natural Resources Department has offered a Sweat Equity Bin Rental Program and a Fall Fuel Reduction Grant Program to communities within Deschutes County, many of which are in the greater Sisters community. Over the three-year grant period, Deschutes County has awarded $75,000 in 2023, $125,000 in 2024, and $125,000 in 2025 to communities across the county for fuels treatments and defensible space improvements. The Sweat Equity Bin Rental Program has been awarded as a service award to 46 communities.

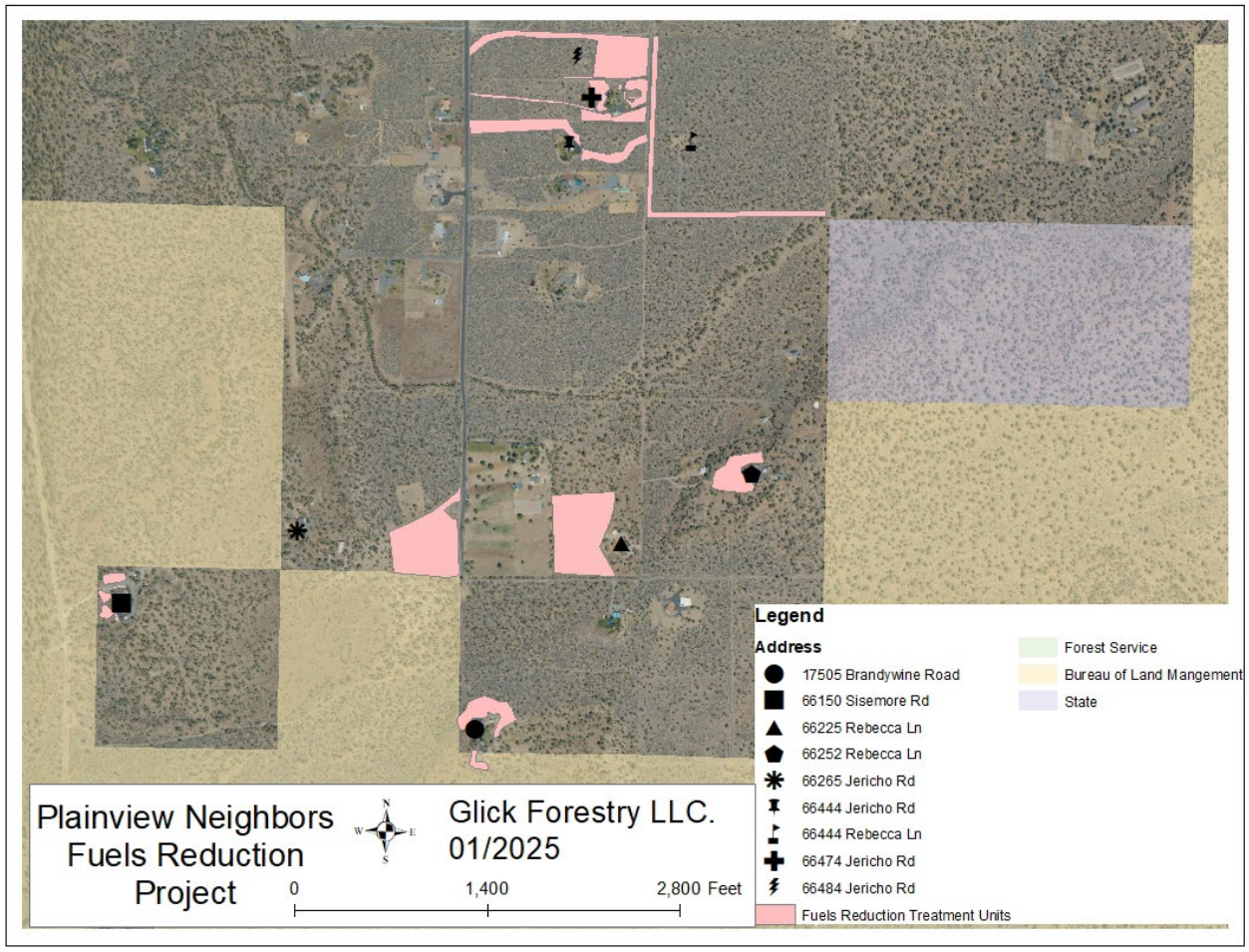
The Deschutes County Natural Resources Department completed the Hurtley Ranch Fuels Reduction Project in 2022 through the Landscape Resiliency Project funds. The Hurtley Ranch Fuels Reduction Project was a 100.5 acres treatment northeast of the City of Sisters. The project included juniper removal, thinning, and mastication. The project directly impacted surrounding private properties.



Deschutes County implemented a fuels reduction treatment along the canyon rim along Whychus Canyon Estates utilizing the Bureau of Land Management Community Assistance funds in 2023. The fuel reduction project was completed on 28 private properties within Whychus Canyon Estates communities. Whychus Canyon Estates is a FireWise USA community approximately 6 miles Northeast of the City of Sisters. The project reduced hazardous fuels that posed a fire risk to the community by creating a 200ft. shaded fuel break along the canyon rim. This fuel reduction treatment was instrumental in the protection of private properties during the Flat Fire in the summer of 2025.



Deschutes County implemented the Plainview Neighbor Fuels Reduction Project in 2024 utilizing funds from the Bureau of Land Management Community Fire Assistance Grant program. The Plainview Neighbor project established a mitigation plan for 8 properties designed to improve defensible space and ingress/egress routes.



City of Sisters

The City of Sisters operates with a council-manager form of government. Current City Council goals address wildfire mitigation and community resiliency, housing, livability and growth, public safety, economic development, essential infrastructure, good governance, and environmental sustainability. The Sisters water system dates to the 1930s. The transmission and distribution mainline in the City's water system totals approximately 38 miles with approximately 2,100 active service connections. Continued updating and maintenance in the past 5 years has led to greater preparedness for wildfire events.

In 2023, the City was awarded grant funding through the Oregon State Fire Marshal's Community Wildfire Risk Reduction program to treat forested land surrounding critical facilities as part of its Hazardous Fuels Reduction Project. The project involved reducing stand density,

increasing crown distance, and removing ladder fuels on approximately 40 acres and was completed in 2024.

In 2025, the City began design work on a waterwise and Firewise demonstration garden. The project involves removing the turfgrass areas surrounding City Hall and replacing them with landscaping that is drought and fire-resistant. This demonstration garden will serve as an educational tool for the public on best practices for Firewise landscaping.

Project Wildfire

Project Wildfire, in cooperation with the Deschutes County Sheriff's Office of Emergency Management Program, has helped property owners find grant funding to reduce hazardous fuels on private lands. Providing home assessments for individuals on how vulnerable a structure will be during a wildfire and then offering recommendations that should be taken so the home will have a better chance to survive a wildfire is a free service Project Wildfire offers. As property owners work on proactive planning in preparation for wildfires, they help achieve Project Wildfire's mission to prevent deaths, injuries, property loss, and environmental damage resulting from wildfires in Deschutes County.

In partnership with Deschutes County and Republic Services, Project Wildfire plans and implements a Spring FireFree event every year. FireFree days are completely free for property owners to drop off yard debris at landfills and transfer stations throughout Deschutes County. The public has come to expect this FireFree event, and there is a high level of participation each year. The event is an easy and cost-effective way for homeowners to create and maintain their defensible space. Since the FireFree program began in 1999, 754,146 cubic yards of debris have been dropped off at landfills across the County. The Sisters Northwest Transfer Station has collected 25,282 total cubic yards of debris from 2019-2025.

Firewise USA®

The Firewise USA® program is a national recognition program that 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 retrofit structures with noncombustible building materials such as siding, decks, and roofing. Adequate water availability and access are also required.

The Firewise USA program recognizes communities that have demonstrated their commitment to wildfire preparedness. The Firewise program is led by the Oregon Department of Forestry and supported by Oregon State Fire Marshal and local fire departments. Through these steps, communities throughout Deschutes County have effectively lowered their wildfire risk. Partnerships have fostered collaboration between neighbors, increased awareness, and their

communities' ability to respond to wildfires. More information on the Firewise program can be found at https://www.nfpa.org/education-and-research/wildfire/firewise-usa.

Fire-Adapted Communities Network (FACNET)

This CWPP contributes to the overarching framework and goal of the National Fire-Adapted Communities (FAC) program. The FAC program acknowledges that 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 fire can be allowed to play its natural role on a meaningful scale. This program is in direct alignment with the Cohesive Strategy goal of creating more fire-adapted communities.

Deschutes County is recognized as a pilot community in the Fire Adapted Communities Learning Network. This network encourages the development and sharing of best practices and innovations to accelerate the adoption of fire-adapted community concepts nationwide. 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 endpoint in becoming a fire-adapted community. Sustaining, growing, and adapting strategies, partnerships, and capacity through time are key. Visit https://fireadaptednetwork.org/ for more information.

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 expanded 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 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.

Deschutes Land Trust

The Deschutes Land Trust has completed several fuels mitigation projects on our protected lands within the Sisters CWPP area. The primary treatment objective across all project areas was juniper reduction, both for wildfire mitigation and overall ecological health. A combination of implementation strategies and tactics was used.
Hand-cut, pile, and burn was used on approximately 500 acres, and mechanical thinning was implemented on approximately 67 acres. Many of these project areas were tested during the Flat Fire with mixed results. Some units where thinning work had been done did not seem to mitigate the fire effects due to the intensity and speed at which the fire was moving. Although some units seemed to have positive effects on the suppression efforts, specifically at Whychus Canyon Preserve and Aspen Hollow Preserve. Another action that the Land Trust prioritizes is the treatment of non-native invasive annual grasses, specifically cheatgrass and medusa head. Wildfires within the Sisters CWPP area are often fueled by annual grasses, and the Land Trust is prioritizing large-scale chemical treatments to combat the spread of these grass species post-fire.

Projects:

Rimrock Ranch:
450 acres of Juniper cut/pile/burn
67 acres of mechanical juniper thinning (wood utilized in stream restoration on Whychus Creek)

Whychus Canyon Preserve:
9 acres of juniper cut/pile/burn

Aspen Hollow Preserve:
30 acres of juniper and pine cut/pile/burn

Camp Polk Meadow Preserve:
1 acre of juniper cut/pile/burn

The Lower Bridge Rangeland Fire Protection Association (LBRFPA)

The Lower Bridge Rangeland Fire Protection Association is a non-profit organization that exists to prevent and suppress wildland fires. The geographic area in the defined boundaries is 34,000+ acres on the east edge of the Sisters area CWPP. It was created to provide wildland fire

protection on lands that lie between the Cloverdale and Redmond fire department coverage. The LBRFPA is funded by dues paid by property owners and grants. Equipment is mostly provided through the federal excess property program and the Oregon Department of Forestry.

Deschutes Soil and Water Conservation District

Deschutes Soil and Water Conservation District (DSWCD) has been supporting the Natural Resources Conservation Service (NRCS) with the current Buttes to Basins Joint Chiefs Landscape Restoration Initiative, which targets the Wildland Urban Interface around Bend and Sisters in Central Oregon. Currently, landowners have contracts with NRCS to implement forest health and fuels reduction projects on their properties, which equate to approximately 800 acres, but continue to scale up. The Environmental Quality Incentives Program (EQIP) that NRCS delivers is a financial incentive program, which still leaves landowners with a significant cost for landscape-scale projects. Senate Bill 762 is an opportunity to utilize additional funds to supplement these projects, which will help expedite implementation to ensure project completion in a timely manner. These projects will include the following conservation practices: Forest Stand Improvement, Brush Management, Woody Residue Treatment, Tree/Shrub Pruning, and several other practices that will help improve forest health and reduce fuels. This project supplemented project costs for 5 landowners with EQIP contracts with NRCS and 2 additional landowners that do not have EQIP contracts.

The following were completed through this project:

- 290 acres treated
- Total Project Cost: $534,704.46
- NRCS reimbursed: $233,960.58
- DSWCD SB 762 funding reimbursed: $252,722

Treatments completed included:

- Forest Stand Improvement (small and large stand thinning)
- Woody Residue Treatment (slash treatment, mastication, mowing)
- Chipping/Pile burning
- Fuel Break along Roads

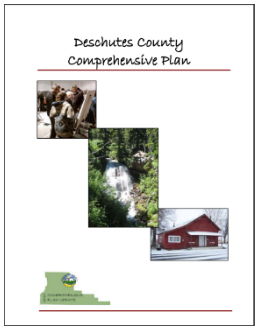
Central Oregon Fire Prevention Cooperative

The Central Oregon Fire Prevention Co-op has actively contributed to Deschutes County to various wildfire education events. These events include:

- Firebusters fire & life safety program each October, which is focused on kids from kindergarten to 5th grade. The video segments are aired on KTVZ for all to see and always include home and wildfire safety topics.

- Wildfire Home Protection Strategies classes throughout Deschutes County.
- Wildfire prevention & preparedness PSAs in 2023, topics included prescribed fire, resident mitigation, safe debris burning, evacuation planning, safe recreation, and smoke preparedness.
- Booths at the Sportsman Show, Home & Garden Show, and Deschutes County Fair each year in Redmond touching on fire prevention and home preparedness.
- 2024 Wildfire Preparedness Fair at the La Pine Fire Station on Hunting Road.
- The Central Oregon Fire Prevention Cooperative helped support and organize 5 wildfire preparedness fairs across Deschutes County in 2025.

Deschutes County Comprehensive Plan



The Deschutes County Comprehensive Plan is a statement of issues, goals, and policies meant to guide the future of land use in the County that covers a 20-year period from **2023-2040**. The Plan is intended to recognize the expectations and rights of property owners and the community. It also provides a blueprint for land use conservation and development. This is accomplished through goals and policies that tell a cohesive story of where and how development should occur and what places should remain undeveloped. The plan has several natural hazard policies that focus on wildfires:

- Coordinate with stakeholders to support forest management projects that contribute to public safety by treating wildland hazardous fuels, particularly in the designated Wildland Urban Interface...
- Protect people, property, infrastructure, the economy, and the environment from natural hazards.
- Support forest management practices that reduce severe wildfire hazard areas
- Support local fire protection districts and departments in providing and improving fire protection services.
- Ensure the County's built environment and infrastructure are adequately prepared for natural disasters.
- Support of Central Oregon Ready, Responsive, Resilient (CORE3) regional coordinated services training facility.
- Increase outreach and education for hazard awareness and natural disaster preparedness, especially for low-income, elderly, non-English speaking residents, and other vulnerable populations.
- Review and revise the County Code as needed to:
    - Address wildfire concerns to and from development, through consideration of site location, response capacity, construction and design, landscaping, defensible space, fuel management, access, and water availability.
    - Require new subdivisions and destination resorts to achieve Firewise Standards from the beginning of the projects and maintain those standards in perpetuity.

Central Oregon Wildfire Workforce Partnership

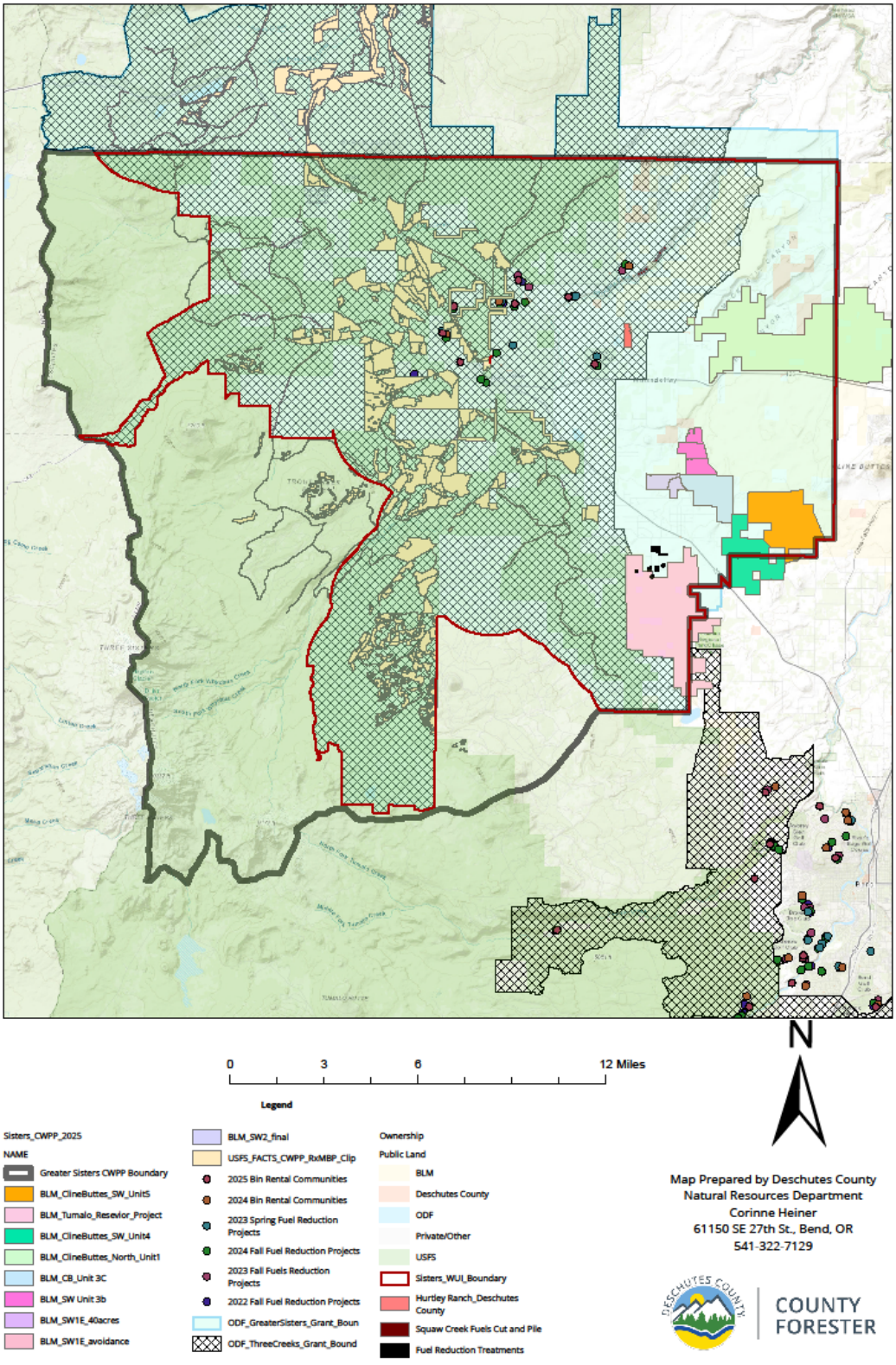
The Central Oregon Intergovernmental Council and the Heart of Oregon Corps partnered in 2022 to form the Central Oregon Wildfire Workforce Partnership, or COWWP, under the Oregon Conservation Corps funding opportunity. Continued support has come from the Oregon Department of Forestry Small Forestland Grant and the Oregon State Fire Marshal's Community Wildfire Risk Reduction Grant.

Young adult crews perform fuel reduction work on private and public property within Jefferson, Deschutes, and Crook Counties. Work has been prioritized in underserved and high wildfire-risk communities and has ranged from tree thinning, seedling removal, chipping, brush removal, and ladder fuel reduction in natural areas to create defensible spaces around homes, neighborhoods, and critical infrastructure.

Through the COWWP program, youth receive entry-level Wildland Firefighting certifications in partnership with the Oregon Department of Forestry & the U.S. Forest Service. Other training courses include S212 chainsaw certifications, Home Ignition Zone training in collaboration with the Oregon State Fire Marshal and Oregon State University Extension, and more. The COWWP program trains and employs local youth and young adults in wildfire reduction and related skills. In addition to gaining on-the-job training, certifications, and knowledge in fire fuel reduction practices, youth in the program will receive wages, scholarships, and additional workforce training in soft and hard skills to prepare them to enter the professional workforce.

For project information/link to the application: https://www.coic.org/cowwp/

2025 Greater Sisters CWPP Treatment Map



Community Base Maps

The Steering Committee agreed to utilize the Oregon Explorer Wildfire Risk Explorer, which makes data available from the Wildfire Risk Assessment. This tool provides data, generates maps, charts, graphics, reports, and interpretations. The full report with maps is found on page 65 of this document.

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.
- adjacent to an evacuation route.

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 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 predominantly forested or rangelands with limited structural development. The wildland fire risk in those areas is significantly less than in the WUI areas.

The Greater Sisters Country WUI boundary lies within the CWPP boundary and is approximately 409 square miles and covers 261,982 acres. There are non-WUI areas in the remainder of the CWPP boundary that bring the total acreage under this CWPP to 286,774 acres or 448 square miles.

Fuel Hazards and Ecotypes

The vegetation in the Greater Sisters Country WUI includes

- Ponderosa pine

- Western juniper
- Bitterbrush
- Manzanita
- Ceanothus or Snowbrush
- Western sage
- Mixed conifer
- Native perennial grasslands

Ponderosa pine is currently found in varying degrees across the entire Sisters planning area. Historically, ponderosa pine forests contained more understory grasses and fewer 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. Like 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 junipers also occur across the Sisters WUI but are 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 junipers are expanding their 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 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 are 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 mature 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 a 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 alongside 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 a 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. Like the dry mixed conifer sites, the vegetation consists of Douglas fir, white fir, ponderosa pine, western larch, and lodgepole pine. Spruce can be found in the wetter riparian areas.

Noxious weeds and cheatgrass are found across the planning area and present yearly challenges for residents, agricultural users and fire suppression agencies. Cheatgrass and other noxious weeds typically occur where the ground has been disturbed to create roads, paths, or other plantings. Once established, they return perennially and can reach heights of three feet or more, creating an easily ignitable fuel bed once they dry out during summer months. Fires that occur in this type of fuel spread quickly and can direct fire to other fuels such as trees or structures.

Cheatgrass provides a flammable link in the brush and forests vegetation types. It cures early in the fire season and ignites readily during dry periods because of its very fine structure that responds readily to changes in the atmospheric moisture, tendency to accumulate litter and invasive nature. Cheatgrass promotes more frequent fires by increasing the biomass and horizontal continuity of fine fuels that persist during the summer lightning season. Its expansion has dramatically changed fire

regimes and plant communities over vast areas of western rangelands by creating an environment where fires are easily ignited, spread rapidly, cover large areas, and occur frequently. Fire in these habitats can have severe effects on native species of plants and animals.

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 have significantly impacted the Greater Sisters Country landscape. The table below recognizes the large fires that have endangered the Greater Sisters County since 2010. All these large wildfires have threatened residents and prompted evacuations within multiple neighborhoods.

Fire Name	Fire Size (acres)	Year Occurred
Flat Fire	23,357	2025
Grand View	5943	2021
Green Ridge	4338	2020
Milli	24,079	2017
Whychus	1,540	2017
Sheep Springs	683	2017
Two Bulls	6,903	2014
Green Ridge	1,510	2013
Pole Creek	26,795	2012
Shadow Lake	10,025	2011
Rooster Rock	6,274	2010

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 because of a wildland fire.

Community Assessment of Risk

For the 2025 Greater Sisters Country Community Wildfire Protection Plan, the Steering Committee used the Advanced Oregon Wildfire Risk Explorer (OWRE) map viewer to organize data into folders based on wildfire risk concepts. All OWRE advanced reports include information about overall wildfire risk, burn probability, flame length, overall potential impact, the hazard to potential structures, fire history, land management, and estimated housing density. Additional layers of interest may appear after the layers listed above.

Protection Capabilities

In considering overall risk, the ability to provide a fire protection response must be considered. There are three structural fire districts that provide fire response within the planning area. In addition, wildland fire agencies provide fire response for areas of state and federal protection. A portion of the private lands located in the northeast corner of the planning area have no structural or wildland fire protection.

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 55 square miles. The District also provides advanced life support ambulance transport service to more than 800 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, a Fire Marshal, a Battalion Chief of Training, a Community Risk Specialist, and an Executive Assistant/Finance Manager. Two part-time positions, including an Administrative Assistant and a Mechanic. The District also employs three Shift Commander/Paramedics and six Firefighter/Paramedics. Volunteer Firefighters are an integral part of the organization and provide both fire suppression and emergency medical services. The Fire Corps program utilizes volunteers to provide fire prevention and public education programs to residents of the District.

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

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

The District is a party to the Central Oregon Mutual Aid Agreement. During a major event, the District may request assistance from all other fire departments that are signatories 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 parties 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.

The Lower Bridge Rangeland Fire Protection Association (LBRFPA)

Current equipment includes military 6x6 water tenders (2800 gallon and 2000 gallon), Humvees with water tanks, and slip-tanks for pick-up trucks. The LBRFPA volunteer firefighters work in conjunction with public agencies to provide initial response locally and assist in mutual aid on fires such as the 2025 Alder Springs and Flat fires.

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 resident student volunteers responded 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 residents immediately adjacent to Black Butte Ranch property under contract.

The District recognizes the importance of maintaining safe and accessible evacuation routes for the community, with particular emphasis on Powerline Road. Ensuring this route remains in good condition is essential for safe and timely evacuation during emergencies.

BBR BOARD POLICY ON WILDFIRE MITIGATION

- Require all BBR homes and Community Buildings to be ignition resistant: Changes made to both the home and surrounding property can greatly reduce the risk of structural ignition during a wildfire event. BBR Management, through the BBR ARC, will set standards for new building practice, retrofits, and mitigation measures that will be supported, incentivized, and mandated when necessary.

- BBR Rules and Regulations and standards must be in use and enforced. Lot Certification practices shall be followed systematically to keep all lots in compliance. Implementation of the Forest Management Plan shall be completed to reduce ground fuels and thin trees in all common areas. Evacuation routes must be kept clear and in passable condition. BBR HOA will maintain status as a Fire-Wise Community.

- BBR Management will work with Electric Utility Providers and the BBR Water Company. Procedures will be in place to reduce risk and manage systems before and during a wildfire event.

- BBR HOA will coordinate with federal, state, and local organizations. Seeking support and funding from local agencies, universities, and the federal government. Track statewide guidance pursuant to Oregon Legislative Activity and revise BBR standards, rules, and regulations to meet state standards.

- Homeowners, guests, and employees must understand their role and take action in reducing wildfire risk and evacuation procedures. Education on how this is accomplished should be provided in a proactive and accessible manner. Cooperating with the BBR Fire Department and Police, policy and procedures will be established, and communication plans created. Everyone at the Ranch must know how to exercise fire safety and evacuation procedures.

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 three 24-hour shift captains/EMT's (one per shift), as well as 14 dedicated volunteer personnel and 6 student firefighters (two per shift). 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, three brush units, and two command vehicles. The district was recently rated by the Insurance Service Office (ISO) and received a Fire Suppression Rating of 3.

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 signatories 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 parties 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 a minimum of 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 - COFMS

The Forest Service and BLM provide wildland fire protection on the federal lands within Central Oregon and the lower Columbia Basin of Oregon. Together, the interagency organization is 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 two Fire Chiefs, five Deputy Fire Management Officers, and an executive Board including decision makers from both forests and BLM District. COFMS has a central dispatching facility in partnership with the Oregon Department of Forestry that employs 14 year-round employees and 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: 29 engines, 5 initial attack hand crews, 7 prevention personnel, 2 dozers, 1 Type three helicopter (call when needed), 35 smoke jumpers, two interagency Hotshot Crews (Redmond & Prineville), 1 Type one helicopter with 20 rappelers, 1 Type one helicopter.

Natural Hazard Mitigation Plan

A Natural Hazard Mitigation Plan (NHMP) is a document outlining the jurisdiction's commitment to reducing risks from natural hazards and serves as a guide for decisionmakers as they commit resources to mitigation projects. A local government must have a mitigation plan approved to receive pre- and post-disaster mitigation grants. The Deschutes County Multi-Jurisdictional Natural Hazard Mitigation Plan (MJNHMP), which is required to be updated every 5 years, was last updated and approved in 2021.

The plan focuses on reducing or alleviating the losses of life, property, and injuries resulting from natural hazards through long and short-term strategies by identifying resources, information, and strategies for risk reduction. The MJNHMP is also intended to guide and coordinate mitigation activities throughout the county. Wildfire is Deschutes County's second-highest threat (winter storms are ranked first). Rank is determined using a formula that takes into consideration not only the probability of the hazard but also the severity of impact on the community and the built environment. Many of the projects and plans coordinated by and overseen by Project Wildfire, Firewise Communities, and Community Wildfire Protection Plans are noted and cross-referenced in the MJNHMP.

Law Enforcement

The Deschutes County Sheriff's Office (DCSO) and the Oregon State Police (OSP) provide law enforcement services for the Sisters area. Both organizations have the authority and responsibility to conduct evacuations in the event of a major emergency. DCSO and OSP may utilize tools such as public address systems on vehicles, emergency messages via radio and television, door-to-door notification, and Deschutes Alerts.

Deschutes Alerts utilizes Everbridge software to notify people during an emergency. Using Deschutes Alerts, emergency services can reach people via landline telephone, cell phone, text message, email, and/or TTY/TDD devices. The system contains opt-in, user-created profiles as well as data from a variety of sources, including landline and cell phone user data. Every county in Oregon utilizes a similar platform for alert and warning. Visit oralert.gov to find a specific county's system via zip code.

Emergencies can happen with little or no notice, at any time of the day or night. Deschutes Alerts allows you to receive emergency notifications about threats to your safety. You can opt in to receive notifications via phone calls, text messages, email, and more based on the locations you care about.

Once you sign up, you will receive time-sensitive messages based on locations you specify, such as your home, work, or school. You choose where you receive the alert via phone call, text, email, smartphone app, TTY/TDD, or a combination of any of these methods.

Please remember the system is only as good as the data you provide. Ensure that you register a physical address in Deschutes County, Camp Sherman, or Crooked River Ranch. If you move or change your phone number, please update your records.

Click here to sign up for a new Deschutes Alerts account. The website is available at www.deschutesalerts.org.

If you need assistance signing up, please call Deschutes County Sheriff's Office at 541-388-6501.

Central Oregon public safety and land management agencies convened an annual pre-season meeting to discuss the upcoming wildland fire season. Topics addressed at this meeting include predicted wildland fire activity, weather forecasts, communication, and coordinated response to wildland fire incidents.

At the county level, the Deschutes County Emergency Operations Plan (EOP) and DCSO's Emergency Management Unit work to coordinate emergencies cross-jurisdictionally for all hazards that may befall the county.

The **American Red Cross** offers a gamut of tools to boost community preparedness, such as community presentations on emergency preparedness kits. The Red Cross gives presentations to church groups, HOAs, citizen groups, etc. Red Cross plays a vital role in emergency response

during large wildfire events and in the recovery post-fire. At any time of day or night, trained Red Cross volunteers respond to the scene of structural or wildland fires and provide food, shelter, and emotional support to those affected.

Values Protected

The burn probability ratings by acreage in the Greater Sisters CWPP area is 191,045 (73%) as high, 54,958 (21%) as moderate, 5,234 (2%) as low, and 10,468 (4%) as non-burnable.

The risk to assets, people, and property are concentrated around the City of Sisters, Black Butte Ranch, Transportation corridors and agricultural properties. There are approximately 5,743 structures in the Greater Sisters planning area, with an estimated real market value of $2,829,349,079.

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. The physical loss to roads, water, and sewer systems would be minimal because most are underground or otherwise not flammable.

Other Community Values

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.

A business resiliency study conducted by FEMA in 2012 presents statistics for small businesses that have been impacted by a natural disaster such as a large wildfire. All the statistics apply to those businesses that did not have a business continuity plan or an emergency plan:

- 43% of companies never reopened.
- 51% of companies closed within 2 years.
- 80% of companies that do not recover from a disaster within one month are likely to go out of business.
- 75% of companies without a business continuity plan fail within three years of a disaster.
- Companies that can’t resume operations within ten days (of a disaster hit) are not likely to survive.
- Of those businesses that experience a disaster and have no emergency plans, 43% never reopen; of those that do reopen, only 29% are still operating two years later.

A large wildfire can have lingering effects that last for months, and the largest impacts last for at least a month. With much of the local economy tied to small local businesses that depend on the

local surrounding forest environment, the consequences of a wildfire that closed major recreation and tourism opportunities would be catastrophic. Business resiliency of the local small businesses is a critical piece in creating a more fire-adapted community. Based on a statewide economic impact study of the spending losses to the travel and tourism industry due to wildfires in 2017, Deschutes County lost an estimated $16 million. Specific action items for business owners are in the Action Plan.

The loss of recreational use by visitors to the area because of scenic quality, specifically large "burn over" areas, will have an unknown economic impact not only to the area but to the remainder of Deschutes County and neighboring cities like Bend and Redmond. If a large wildland fire occurs in this area, the result will be a catastrophic loss to both the developed and dispersed recreational opportunities in the Greater Sisters Country area.

Structural Vulnerability

Structural vulnerability refers to the defensible space and building materials used on structures. It also includes the type and amount of fire department access, such as the numbers of roads in and out, road widths and signage.

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 places high value on the importance of making structures and neighborhoods in the WUI as fire safe as possible. The issue of adequate water resources was raised in this assessment and is addressed as a priority item under Action Plan and Implementation.

Areas of special concern

Critical Transportation Routes

For purposes of this CWPP, the Steering Committee defines Critical Transportation Routes as:

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

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

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

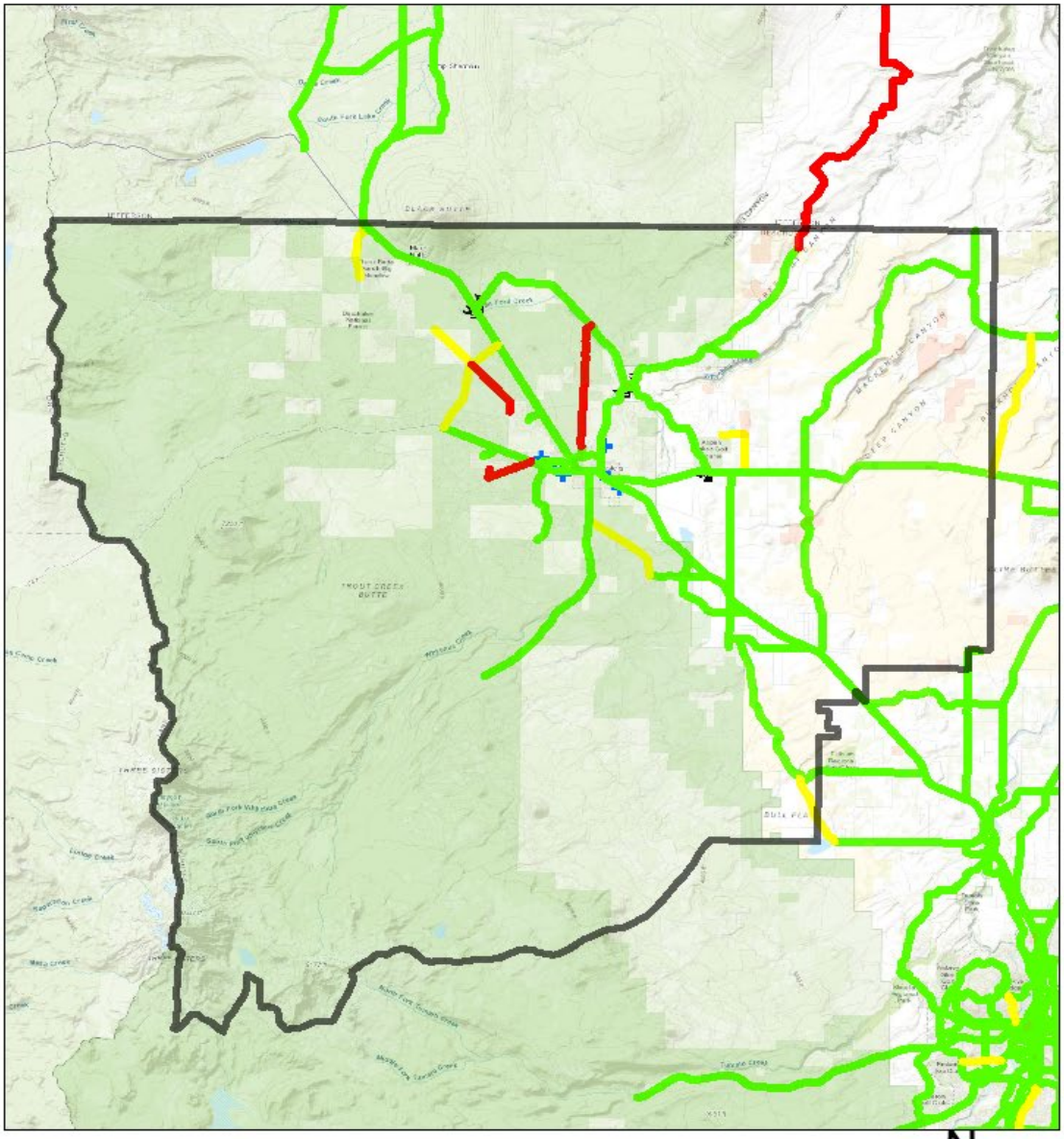
The Steering Committee is also concerned with the lack of maintained roads leading in and out of the high-risk areas in the WUI. Should an evacuation be necessary, the Steering Committee expressed great concern over the number and quality of the evacuation routes. Many of the egress routes people would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

The current condition of some of the evacuation routes is a significant life safety issue. Working with Deschutes County and Project Wildfire, neighborhoods within the Communities at Risk have taken advantage of a signage program to increase visibility of evacuation route signs along roads. The signs are made from high-intensity reflective material and indicate proper exit routes from these neighborhoods.
The Steering Committee underscored the need to continue to identify, develop, and protect critical transportation routes as part of this planning process. Ingress/egress issues are included under 36 Recommendations to Reduce Structural Vulnerability. This issue is also highlighted under Action Plan and Implementation.

The steering committee is included in a review of critical transportation routes, which include three tiers:

- Tier 1 – Primary Routes - Major arterial roadways
- Tier 2 – Secondary Routes - Collector roadways
- Tier 3 – Emergency Routes – may be gated, open at the direction of emergency services

2025 Greater Sisters CWPP Critical Transportation Routes Map



Resident Evacuation Preparation

The Steering Committee emphasized the critical need for residents in the CWPP Boundary to take steps to prepare themselves for an evacuation event. One of the most important items residents can do is register for emergency alerts through Deschutes Alerts (co-managed by Deschutes County 911 and Deschutes County Sheriff's Office Emergency Management. If the emergency responders cannot reach the residents, they can't provide information for protective actions during local emergencies. Residents can go to Deschutesalerts.org to sign up for emergency alerts or to update their profile.

Local law enforcement officials follow the same evacuation protocols. Residents should be aware of the evacuation levels and their implications. For more information on how to prepare you and your family, visit projectwildfire.org/evacuation.

Level 1: Be Ready

There is an incident in your area and residents should be aware of the potential evacuation. Be aware of the danger, monitor emergency services sources and local media for information. Those people who will need additional time to exit an area or have health conditions (especially respiratory conditions that could be made worse by smoke) should consider leaving. You are encouraged to prepare or even move livestock and pets out of the area. Be prepared to leave if conditions worsen.

Level 2: Get Set

There is significant danger in your area and residents should be prepared to leave at a moment's notice. You are encouraged to leave and should do so as soon as possible. If you choose to stay, you should be able to leave immediately if conditions worsen. You MAY have time to gather necessary items, but doing so is at your own risk. Entry to evacuated areas may be denied until the hazard subsides. This may be the only notice you receive. Emergency services cannot guarantee we will be able to notify you if conditions rapidly deteriorate.

Level 3: Go Now!

There is immediate and imminent danger, and you should evacuate immediately. **DO NOT DELAY LEAVING** to gather any belongings or make efforts to protect your home. Leave immediately and as quickly as possible. Drive carefully, turn on your headlights, and follow any directions from emergency services personnel. Entry to evacuated areas will be denied until the hazard subsides.

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 priorities, as well as preferred treatments and goals under the Greater Sisters Country Community Wildfire Protection Plan.

Goals

With critical needs assessed and priority areas listed, the Steering Committee identified the following goals to meet the Purpose 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 can produce flame lengths of less than four feet. This enables a 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 approximately 70% of the Greater Sisters Country planning area. They 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 Communities at Risk is adjacent to public lands.

The Steering Committee intends 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 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 a 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 concerning 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 that 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 maintaining 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 31% of the area in the planning area. The County owns less than 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 Oregon Forestland-Urban Interface Fire Protection Act of 1997 was utilized for defensible space standards of protection from wildland fire. This statute previously outlined standards and requirements for defensible space on private property within a Forest Protection District. The Steering Committee agreed that the required standards under this previous law are the goal to achieve on private and county-owned lands throughout the Greater Sisters Country WUI.

The Default Standards under the Oregon Forestland-Urban Interface Fire Protection Act of 1997 were:

- 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 the roof.
- Remove flammable materials from under decks and stairways.
- Move firewood 30 feet away from structures.

Since the 2021 Legislative session the Oregon Forestland-Urban Interface Fire Protection Act of 1997 was repealed by SB 762. The Oregon State Fire Marshals office created a model code that is consistent with the 2024 International Wildland-Urban Interface Code. Property owners can also achieve these 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.

You can read more about Defensible Space at the Oregon State Fire Marshal website: https://www.oregon.gov/osfm/wildfire/Pages/defensiblespace.aspx

Recent Legislation and History

Oregon's approach to wildfire preparedness has changed considerably over the past several decades. The progression of statewide legislation reflects a growing understanding of wildfire risk and the need for coordinated community-focused solutions. Senate Bill 360, adopted in 1997, created the initial structure for identifying wildland urban interface areas and encouraged property-level defensible space. Senate Bill 762, passed in 2021, expanded this foundation by investing in community risk reduction programs, statewide preparedness, and home-hardening guidance. Senate Bill 80, adopted in 2023, strengthened this work by reorganizing state agencies and aligning community-facing wildfire programs under the Oregon State Fire Marshal. Most recently, Senate Bill 83, enacted in 2025, removed the statewide hazard map and its associated mandates, allowing communities to continue pursuing mitigation strategies without state regulatory standards. Together, these bills trace the evolution of Oregon's wildfire policy and provide important context for local planning efforts.

Senate Bill 360 (1997) - Oregon Forestland-Urban Interface Fire Protection Act
SB 360 established Oregon's first statewide approach to the forestland-urban interface (WUI) by classifying interface areas and requiring vegetation/fuel reduction (defensible space) on identified properties within counties that adopted the act. Implementation is county-led with Oregon Department of Forestry (ODF) support.
For CWPPs, SB 360 created the baseline framework for parcel-level risk reduction, identifying interface areas and promoting defensible space treatments around structures and along access routes.

Senate Bill 762 (2021) - Comprehensive Wildfire Preparedness & Resiliency
SB 762 expanded Oregon's wildfire preparedness system by:

- Directing development of a statewide wildfire risk map tied to WUI classifications.

- Charging the State Fire Marshal to adopt minimum defensible space standards.
- Directing building and energy code agencies to develop wildfire-resilient construction standards for high-risk areas.
- Funding community risk reduction (grants, outreach, and evacuation planning), response capacity, and landscape resilience.
- Plans for public electricity utilities to reduce risks associated with wildfire.
- Building code guidelines to reduce risks associated with wildfire.
- Programs to support local communities in detecting, preparing for, communicating, or mitigating the environmental and public health impacts of wildfire smoke.
- Emergency response and disaster recovery associated with wildfire events.
- Programs to reduce wildfire risk through the restoration of landscape resiliency and the reduction of hazardous fuel on public or private forestlands and rangelands and in communities near homes and critical infrastructure.
- The creation of an Oregon Conservation Corps Program to reduce wildfire risk to communities and critical infrastructure and to help create fire-adapted communities.
- Requirements for Counties to ensure all lands have a baseline level of fire protection.
- Creation of a Wildfire Programs Advisory Council.

For CWPPs, SB 762 broadened the toolkit beyond fuels work by adding state resources for risk communication, evacuation planning, and home hardening alignment, initially linked to a statewide wildfire risk map intended to guide where defensible space and building code measures would apply.

Senate Bill 80 (2023)

Senate Bill 80 reorganized Oregon's statewide wildfire mitigation framework by transferring the Wildfire Programs Office from the Oregon Department of Forestry to the Oregon State Fire Marshal (OSFM). This change centralizes community wildfire risk reduction, defensible space programs, public education, and mitigation grants under OSFM. SB 80 clarifies that OSFM leads parcel-level mitigation and preparedness efforts, while ODF continues to focus on wildland fire suppression, forest health, and landscape-scale fuels management. SB 80 funded the OSFM $3 million to their Community Wildfire Risk Reduction program. It also created the Landscape Resiliency Fund and adjusted the existing Community Risk Reduction fund to allow for philanthropic donations for the purpose of reducing wildfire risk.

Senate Bill 80 provides a clearer statewide structure for implementing defensible space education, home-hardening outreach, and community risk reduction programs. This bill ensures continuity for SB 762-funded programs and positions OSFM as the primary state partner for mitigation planning in coordination with local fire districts and Deschutes County.

Senate Bill 83 (2025) - Repeal & Reset of Statewide Wildfire Hazard Mapping and Linked Mandates

SB 83 repealed the statewide wildfire hazard map and removed state-level regulatory requirements that would have imposed mandatory defensible space and wildfire-resilient building standards based on that map. Local governments may still adopt model codes or standards, but the state map is no longer the regulatory trigger.

Local governments and fire departments should continue to promote defensible space, home hardening, and may voluntarily adopt their own model codes and standards. SB 83 removes the state mandate tied to using the statewide wildfire hazard map; it does not limit local action. SB 762 funding and capacity investments remain relevant to support CWPP implementation; what changed is the state-mandated linkage between the map and private-parcel requirements.

Overall progression for CWPPs:

- SB 360 (1997): Launches WUI classification and defensible space duties—county-anchored.
- SB 762 (2021): Scales up with a state risk map, defensible space and building standards, and funding for community programs.
- SB 80 (2023): Moved the Wildfire Programs Office originally created by SB 762 to be managed under the Oregon State Fire Marshal.
- SB 83 (2025): Repeals the state risk map and associated state-level mandates, while allowing continued local adoption of standards and use of statewide funding and support programs.

IBHS Wildfire Prepared Home (WFPH) Standard

The Wildfire Prepared Home (WFPH) standard, developed by the Insurance Institute for Business & Home Safety (IBHS), is a science-based, voluntary home-hardening designation. It translates wildfire and ember exposure research into practical measures that CWPPs can promote at the parcel level. There are two levels: WFPH Base and WFPH Plus.

Core elements (appropriate for CWPP guidance):

1. 0–5 ft “home buffer” (ember-resistant zone):
    a. Keep the first five feet next to the structure noncombustible, removing combustible mulch and vegetation immediately adjacent to the home.

2. Roof and gutters:
    a. Class-A roof where feasible; maintain roofs and gutters free of debris to prevent ember ignition. Gutter protection or frequent cleaning is emphasized.

3. Vents and openings:
    a. Use ember-resistant vent screening and seal gaps where embers can enter (e.g., under eaves, at roof-wall intersections, around utility penetrations).

4. Siding and attachments:

    a. Favor noncombustible or ignition-resistant siding materials and avoid direct wood-to-structure connections that can carry fire to the home (for example, providing a noncombustible break where fences meet the building).

5. Decks and porches:
    a. Treat materials, design, and storage so that embers cannot easily ignite the deck surface or accumulated debris beneath and between deck boards.

6. Ongoing yard maintenance:
    a. Regular removal of receptive fuels (leaves, needles, downed branches, etc.) near structures.

These components make up WFPH Base, which is suitable for retrofits of existing homes. WFPH Plus adds enhanced measures typically implemented with new construction or major exterior renovations.

IBHS has released updated technical guidance and a "summary of changes" to the WFPH standard in 2025, but the overall Base/Plus framework remains the same. The CWPP can direct residents and local partners to the current IBHS checklist and technical specification for the most up-to-date details.

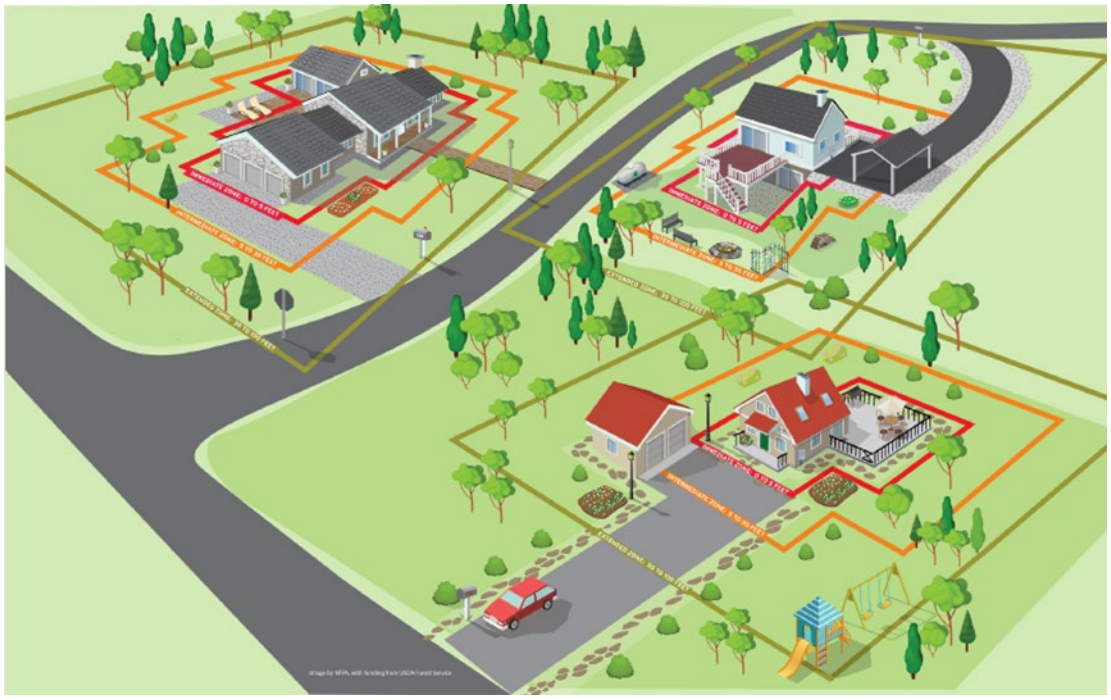
WFPH is voluntary, research-driven, and focused on the dominant cause of home loss in community wildfires, embers. It gives homeowners, HOAs, and local partners a clear, credible checklist that is independent of changing state-level regulatory requirements. It integrates well with local defensible space programs, Firewise practices, and evacuation planning. More information on the IBHS WFPH program can be found at https://wildfireprepared.org/.

These legislative developments create a clearer and more stable foundation for community wildfire planning in Sisters and throughout Deschutes County. While Senate Bill 83 changes how statewide hazard information is used for regulatory purposes, the broader investments and organizational improvements established through Senate Bills 360, 762, and 80 continue to support local defensible space efforts, home-hardening initiatives, public education, and cooperative planning across agencies. This updated legislative landscape enables the CWPP to focus on practical, science-based strategies that strengthen neighborhood-level resilience, including voluntary standards such as the IBHS Wildfire Prepared Home program. By recognizing the intent and effect of these statewide policies, the CWPP can more effectively guide collaborative projects, funding opportunities, and community engagement efforts aimed at reducing wildfire risk.

Education

Recommendations to Reduce Structural Vulnerability, including Ingress/Egress

There are approximately 10,388 structures spread across this CWPP boundary.
The graphic and two tables that follow below summarize recommendations to reduce structural vulnerability. The lists are compiled with tips and suggestions from the FireFree and Firewise programs, which promote homeowner responsibility for reducing fire hazards on their property. More information about these programs can be found at www.firefree.org and www.firewise.org.



Home Safety Checklist for Home Ignition Zones:

Immediate Zone: 0-5'

- Clean roofs, gutters and the area within 5' of the residence of all dead leaves, needles, flammable debris and vegetation
- Move any flammable material away from wall exteriors – mulch, flammable plants, leaves and needles, firewood piles – anything that can burn. Remove anything stored underneath decks or porches.

Intermediate Zone: 5-30'

- Thin out dense groups of trees.
- Remove vegetation under trees and prune trees up to six to ten feet from the ground.

Extended Zone: 30-100'

- Dispose of heavy accumulations of ground debris.
- Remove dead plants and trees.
- Remove small trees growing between or under mature trees.

	What are ten steps I can do to prepare my defensible space?
❑	Define your defensible space – at least 30 feet
❑	Reduce flammable brush around your home and under nearby trees.
❑	Prune or remove trees.
❑	Keep the grass and weeds cut low.
❑	Clear wood piles and building materials away from your home.
❑	Keep your yard and roof clean.
❑	Keep address signs visible
❑	Choose fire-resistant building materials and lawn furniture.
❑	Recycle yard debris – avoid burning.
❑	Be prepared to respond to wildfire.

	What additional steps can I take to reduce risks to my home and neighborhood?
❑	Remove all branches and limbs that overhang roofs.
❑	Remove leaves & needles from gutters, roofs, and decks.
❑	Remove dead plants and brush.
❑	Keep decks free of flammable lawn furniture, toys, doormats, etc.
❑	Screen vents and areas under decks with 1/8" metal mesh or fire-resistant siding.
❑	Trim vegetation along driveways a minimum distance of 14' wide x 14' high for fire trucks.
❑	Choose fire-resistant plants. Visit: https://extension.oregonstate.edu/catalog/pub/pnw-590-fire-resistant-plants-home-landscapes to view *Fire-Resistant Plants for the Home Landscape.*
❑	Increase Homeowner education and actions with programs such as FireFree, Firewise, and Urban Interface Fire Protection Act.
❑	Re-apply for Firewise USA® recognition annually, if applicable
❑	If you are interested in a free home assessment call Redmond Fire and Rescue or the Oregon Department of Forestry
❑	If burning debris outside Redmond City Limits – call the Burn Line at Redmond Fire and Rescue at 541-322-6335 to see if burning is allowed. Do not burn building materials

Action Plan and Implementation

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. Addressing all three of these goals maintains residents' commitment to aligning with national goals, which are outlined in the Cohesive Strategy.

The Steering Committees recognize that the Greater Sisters Country CWPP is a living tool with multiple applications. The value of the action plan is to establish measurable activities or actions that will further the goals outlined by the CWPP. The following actions are intended to assist individuals and agencies in the implementation of this CWPP across the planning boundary.

Improving Fire Protection Capabilities

Immediately following the acceptance and signed approval of this plan, the Steering Committee will forward copies of the 2025 Greater Sisters Country CWPP available to all public land managers and public safety officials, including:

- Central Oregon Forest Management Service - US Forest Service and BLM
- Oregon Department of Forestry
- Sisters-Camp Sherman Fire Protection District
- Black Butte Ranch Rural Fire Protection District
- Cloverdale Rural Fire Protection District
- City of Sisters
- Deschutes County Sheriff's Office
- Oregon Department of Transportation

The Steering Committee is again charged with the task of engaging community members to review the risk assessment, including the overall wildfire risk in this CWPP, and identify projects that will strengthen the potential for the neighborhoods to survive a high-intensity wildland fire in the Greater Sisters Country area and the adjacent WUI.

Local Fire Departments, wildland fire agencies, and the City of Sisters are charged with identifying and strategizing the exploration of additional water delivery improvements and assessing 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. The benefits of looped lines, fire hydrants, redundant power supplies, protected wells, reservoirs, and the surrounding landscape should be considered. The Steering Committee has decided and agreed to create a working group to address these concerns.

Local Fire Departments, the City of Sisters, Deschutes County Sheriff's Office, Oregon Department of Transportation, and homeowner groups will work together to identify and map existing critical transportation routes in the CWPP area. The Critical Transportation Route map can be found on page 48.

The Steering Committee will assist in conducting further assessments to determine the evacuation needs and identify potential projects for developing new routes and/or improving existing routes. The Steering Committee will assist in conducting further assessments to determine the evacuation needs of the Greater Sisters Country area and identify at least one neighborhood per year to approach and develop evacuation signage projects. The Steering Committee will continue to encourage federal land managers to work with local landowners to minimize the closures of roads that could be considered critical transportation routes.

Working towards a more Fire Adapted Community

The Steering Committee intends to engage in continued discussions with landowners to facilitate fuels reduction projects on private lands. These actions can be accomplished through educational activities or grants for specific projects on private lands. Specific action items include:

Specific Action Items		
Category	**Specific Issues**	**Action Proposed**
Fuel Loading and Overgrown Vegetation	Vegetation is overgrown, and there is a lack of Defensible Space.	• Residents should be encouraged to reduce vegetation and improve defensible space by mitigating their fuels to create a fire-resilient and healthy landscape through fuels reduction and home hardening work to provide homes and structures with defensible space.
Home Hardening	Some homes are not properly hardened for wildfire.	• Residents should be encouraged to improve home hardening and defensible space, specifically the need for action in the 0-5 zone around structures and homes.
Historical and Recent Fire Behavior	Significant risk of crown fire potential is high in adjacent open spaces of forest and rangelands.	• It should be a priority for land managers to manage vegetation near structures outside of the home ignition zones. • Residents are urged to create and maintain defensible space, reduce ladder fuels, and thin where necessary. • It is a priority of the Steering Committee to manage vegetation adjacent to structures with the current best practices.
Water Access and Delivery	Water access is limited in some communities.	• Identify projects to improve water access and delivery.

Specific Action Items		
Outreach and Education	Need for increased outreach and education for defensible space.	• Encourage communities to become recognized as Firewise USA™ sites. • Prioritize education for defensible space year-round to increase survivability and insurability. • Encourage residents to participate in the Insurance Institute for Business and Home Safety-Wildfire Prepared Home Program (IBHS-WFPH).
Formation of Sub-Committee	Some access roads are locked off or not maintained.	• Convene a sub-committee to improve condition of access roads and to look at issues involving access roads that may be locked off and need to be maintained for increasing access along ingress and egress during a wildfire or evacuation event.
Transportation Routes	Overgrown vegetation along transportation routes and Ingress and Egresses throughout the Sisters CWPP boundary area.	• Encourage to clear roadside vegetation along transportation routes. • Ensuring fire readiness and access to evacuation routes are clear of vegetation will ensure access for emergency personnel during large wildfires and/or other emergency incidents. • Egress projects for fuel treatments and road rights-of-way should be prioritized. Plans for animal evacuation should be prioritized.

Specific Action Items		
Evacuation Preparedness	Need for improved education and awareness on evacuation kits, need to increase participation in Deschutes Alerts.	• Encourage residents to create evacuation kits for their families in case of wildfire. • Encourage residents to sign up for Deschutes Alerts through outreach from Project Wildfire and Project Wildfire Neighborhood Coalition meetings and Firewise USA™ education. • Continuing education on evacuation preparedness and completing the evacuation kit project with the Deschutes County Sheriff's Office in 2025 for residents and visitors in case of a large wildfire. They have also noted that it is important to the community that residents utilize Deschutes Alerts. http://deschutesalerts.org.

The Steering Committee has expressed the vital need to educate vacant lot owners in the CWPP Boundary. The group will work on strengthening the relationships between residents and local leadership so that they can collaboratively develop an educational campaign. Education was an overarching theme that the Steering Committee agreed was a paramount priority throughout the revision process.

The Steering Committee will pursue funding for demonstration lots for residents to use as examples in visible, strategic locations throughout the CWPP boundary. 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.

One important piece of a Fire Adapted Community is preparing for the recovery process after a wildland fire occurs. There are many resources for residents who are recovering from a wildland fire that can impact their small business and home. Building community and business resiliency is the key to being fully adapted to fire.

Restoring Resilient Landscapes

The Steering Committee intends to engage in continued discussions with the local community and adjacent landowners to implement the CWPP and accomplish hazardous fuels reduction projects 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.

There are 286,774 acres in the Planning Area. Significant fuels reduction projects continue to improve the overall health and fire resiliency of the landscape. Achieving a resilient, healthy landscape, however, requires multiple entries on treatment sites, over a period of years. For example, thinning and mowing may occur over a 12-24-month project period. The under burning component of the project may not occur for 3-5 years while the land recovers from the thinning and mowing and produces adequate shrub content to support prescribed fire.

Therefore, the Steering Committee recognizes that although significant fuels reduction work has been completed, the need continues in the landscape. The Steering Committee supports the ongoing planning and treatment process on public lands, especially an increase in the use of prescribed fire. There are multiple prescribed fire techniques that land managers may use to best suit the area they are working within. The goal is to restore low-intensity fire, also known as a broadcast burn, to the local ecosystem, which has been historically dependent on fire for its health.

Treating ground fuels is a critical component of any effort designed to reduce fire threats, and it has added ecological benefits, such as recycling nutrients. Once an area, or unit, has been thinned and the slash has been treated, the site can be broadcast burned. Fire practitioners prepare the area by constructing fire lines and/or using natural breaks such as roads or existing trails for containment lines for the prescribed burn. Where site objectives dictate that standing dead trees and large downed woody material need to be protected, they can be either hand-lined or otherwise excluded from the burn block. Extra protection measures may not be necessary for many fire-tolerant cultural or archaeological sites: treating these areas with prescribed fire has the advantage of protecting them from emergency suppression activities during a wildfire. Generally, the target flame length is under four feet, although some sites require a “hotter” burn to achieve the resource objectives.

Historically, large-scale broadcast burning has occurred in the spring. As the demands to boost prescribed fire use increase, utilizing as many “burn windows”, or days when the weather conditions are favorable, will be a critical piece in achieving restoration goals. This, however, is a more challenging time to use prescribed fire and will depend on the availability and preparedness of appropriate resources and weather.

Burn operations usually begin by mid-morning following the break-up of the nighttime temperature inversion and the establishment of the daytime wind pattern. Completion of ignition

should be targeted early enough to ensure adequate smoke dispersal prior to the onset of cooler nighttime temperatures.

Extensive public notification is an essential element of the program. The public can contact the Deschutes National Forest if they have health concerns that are exacerbated by smoke so that they can be notified prior to a prescribed burn. The Deschutes National Forest uses www.centraloregonfire.org to notify residents of prescribed burns on the Forest.
Fire personnel also rely on their local partners to notify and educate the local public through educational programs with civic groups, service clubs, homeowner associations, etc.

Once thinning, slash treatment, and first under-burning has been completed, the treated area constitutes an effective fuel break for the next several years. Follow-up thinning and maintenance burns must be scheduled as necessary to ensure the treated areas remain free of the risk of catastrophic wildfire. Adequate access must be assured, not only to conduct needed follow-up treatments but also to permit the rapid response of fire suppression forces.

For our area, it is no longer a question of whether wildfire will occur, but when, where, and how much damage will result. Working with residents before the wildfire, not during or after it, is preferred. Experience with wildfires burning in previously treated areas demonstrates the following:

- Improved access for firefighters and apparatus
- Increased efficiency when locating and constructing fire lines
- Easier detection and suppression of spot fires
- Decreased mop-up time and effort
- Reduced fire intensity, torching, and mortality
- Improved public safety
- Reduction of loss
- Reduction of air emissions

Another benefit, particularly in interface areas, is reduced trash accumulation through the elimination of hiding cover necessary for transient camps and party spots.

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 Director 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 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.

Oregon CWPP Planning Tool - Advanced Report

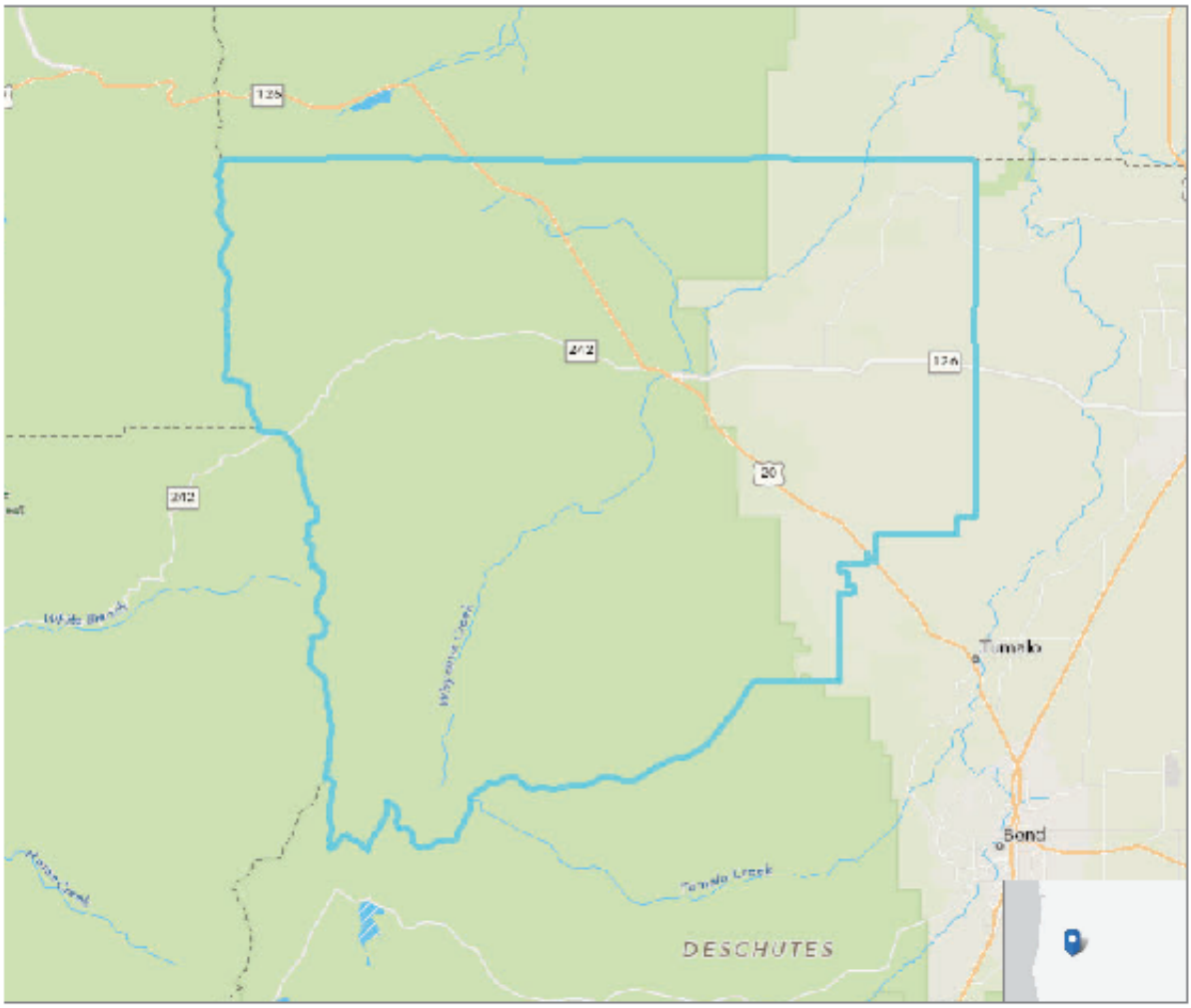
Custom Area

Area: 286,774 Acres

Report generated: September 4, 2025 03:07 PM

For current conditions and local fire restrictions, contact your local fire district or visit: www.keeporegongreen.org/current-conditions.

AREA OF INTEREST



This report from the Oregon CWPP Planning Tool summaries wildfire risk for a selected area of interest. Wildfire risk combines the likelihood of a fire occurring with the exposure and susceptibility of valued resources and assets on the landscape.

Nearly all areas in Oregon experience some level of wildfire risk. Conditions vary widely with local topography, fuels, and local weather, especially local winds. In all areas, under warm, dry, windy, and drought conditions, expect higher likelihood of fire starts, higher fire intensities, more ember activity, a wildfire more difficult to control, and more severe impacts.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

REPORT CONTENTS

Oregon CWPP Planning Tool - Advanced Report

Custom Area

INTRODUCTION AND CONCEPTS

1.1 Purpose of CWPP Planning Tool Advanced Report

The Oregon CWPP Planning Tool Advanced Report summarizes wildfire risk and wildfire hazard data in order to support updates to Community Wildfire Protection Plans (CWPPs), Natural Hazard Mitigation Plans (NHMPs), and fuels reduction and restoration treatment planning.

1.2 Introduction to Wildfire Risk Concepts

The Advanced CWPP Planning Tool map viewer uses wildfire risk data from the 2023 PNW Quantitative Wildfire Risk Assessment (2023 PNW QWRA), produced by researchers at Oregon State University in collaboration with state and federal land management agencies. The PNW QWRA represents wildfire risk to a suite of resources and assets based on a 2022 landscape and recent historical climate, weather and fire observations. Analytics produced as part of the 2023 PNW QWRA support development and implementation of the Oregon Department of Forestry's 20-year Landscape Resiliency Strategic Plan, implementation of the U.S. Forest Service's Wildfire Crisis Strategy, and numerous other regional and local wildfire-related strategic plans. The Advanced CWPP Planning Tool offers users access to a limited selection of data layers from the QWRA. Access to the full PNW QWRA dataset and report is available here: https://oe.oregonexplorer.info/externalcontent/wildfire/2023_PNW_Quantitative_Wildfire_Risk_Assessment_Data_Access.pdf.

1.2.1 Quantitative Wildfire Risk Assessment Framework

In the 2023 PNW QWRA, wildfire risk is quantified as the spatially coincident estimates of fire likelihood (burn probability), fire intensity (e.g., flame length) and the impacts (susceptibility) to highly-valued resources or assets for which risk is being evaluated (Figure 1).

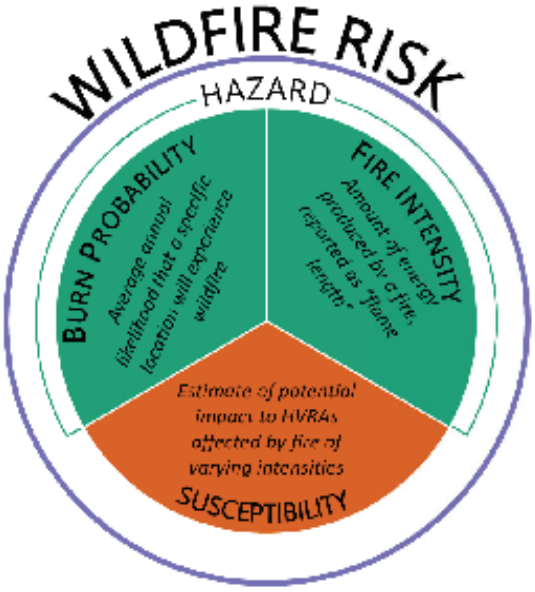


Figure 1

1.2.1.1 Wildfire Hazard

The Advanced Wildfire Risk Report includes maps and descriptions of both burn probability and fire intensity for the user-

defined area. Scientists use the term "hazard" to refer to the joint metric of burn probability and fire intensity (Figure 1).

Burn probability is an estimate of the average annual likelihood that a wildfire will occur at any given location. It is calculated using a model that integrates information about the physical landscape, historical fire occurrence, and historical weather observations, and which runs 10,000 or more simulations of plausible fire seasons. The number of times a point on the landscape is encountered by simulated fire, divided by the number of simulated fire seasons, provides the estimate of average annual likelihood of fire, or burn probability. These burn probability values reflect long-term annual averages and should not be thought of as seasonal forecasts.

Wildfire intensity is a measure of how much energy is produced at the flaming front of a wildfire. Intensity is often measured in terms of flame length for ease of relating to and representing this component of wildfire hazard. Higher flame lengths represent more intense fires. Wildfire intensity is important because it provides a cross-walk to determine the impact of fire on any given resource or asset. Similar to burn probability, fire intensity is determined by simulating fire behavior under a large range of potential weather scenarios.

1.2.1.2 Wildfire Risk

The Advanced Wildfire Risk Report includes several representations of risk. The 2023 PNW QWRA evaluated risk to eight highly-valued resources and assets (HVRAs) by quantifying the susceptibility of each HVRA (i.e. how each might be affected by fire of varying intensity) and then integrating the susceptibility values with burn probability and fire intensity data. The result is a spatially explicit evaluation of relative risk reflecting the underlying hazard as well as the unique locations and susceptibility of HVRAs.

Wildfire risk is represented several different ways in this report. Integrated risk outputs reflect the risk to all eight HVRAs integrated into a single value. In other words, where multiple HVRAs are mapped in the same location their risk values are summed to calculate a single net risk value. Non-integrated risk outputs represent the risk to a single HVRA.

This report also includes both conditional and expected risk layers. Conditional risk is the risk to any HVRA given that a fire occurs. In other words, conditional risk accounts for the presence of HVRAs, the susceptibility of HVRAs and the underlying fire intensity data, but it does not include burn probability. Conditional risk layers are frequently used during active fire response when a fire is already occurring and the burn probability is irrelevant. By contrast, expected risk layers account for all the same information, but also include burn probability in the risk calculation. Expected risk layers are designed to support strategic prioritization because by including burn probability they account the relatively likelihood of different fire impacts in any given year.

1.2.1.3 Important Wildfire Risk Concepts

Wildfire risk can reflect adverse and negative consequences of wildfire.

Quantitative wildfire risk assessments, like the 2023 PNW QWRA, account for beneficial impacts of wildfire (e.g., habitat improvement) as well as negative impacts. Where risk is reported as beneficial in the following report, it does not mean that wildfire will always have positive outcomes. Positive risk values illustrate that under average fire weather conditions, we might expect a net beneficial impact for the specific HVRA(s) included in the output; under different fire weather conditions or for different HVRAs the expected outcome at the same location might be very different. Likewise, negative risk values do not indicate that fire will always and for all HVRAs have negative consequences.

Wildfire risk is relative.

In the following report, wildfire risk values have been classified into categories from "Very High Loss" to "Very High Benefit" based on the underlying quantitative values. Importantly, these categories reflect risk values at any one location relative to all other risk values in Oregon and Washington. For this reason, it is not appropriate or accurate to compare risk outputs in this report to risk assessment outputs from sources other than the 2023 PNW QWRA.

A regional, relative perspective of risk is particularly helpful when creating regional priorities. For the purposes of a CWPP or other more local planning scenarios, regional relative measures of risk will still show a gradient of risk within the planning area that can be used to develop priorities. For detailed, local risk mitigation planning, planners can use raw risk data from the 2023 PNW QWRA and re-classify the data within their specific planning extent so that risk values are relative to their

planning area.

Risk outputs from the 2023 PNW QWRA are not the same as Oregon's Statewide Wildfire Hazard Map.

The 2023 PNW QWRA is not the same as Oregon's statewide wildfire hazard map required by Senate Bill 762 (2021). Oregon's statewide wildfire hazard map was intentionally designed to support a narrow set of state agency rules and regulations and is not adequate for broader community wildfire risk reduction planning. In contrast, the PNW QWRA provides a much more complete set of data to help communities understand their risk and develop robust strategies for mitigating it.

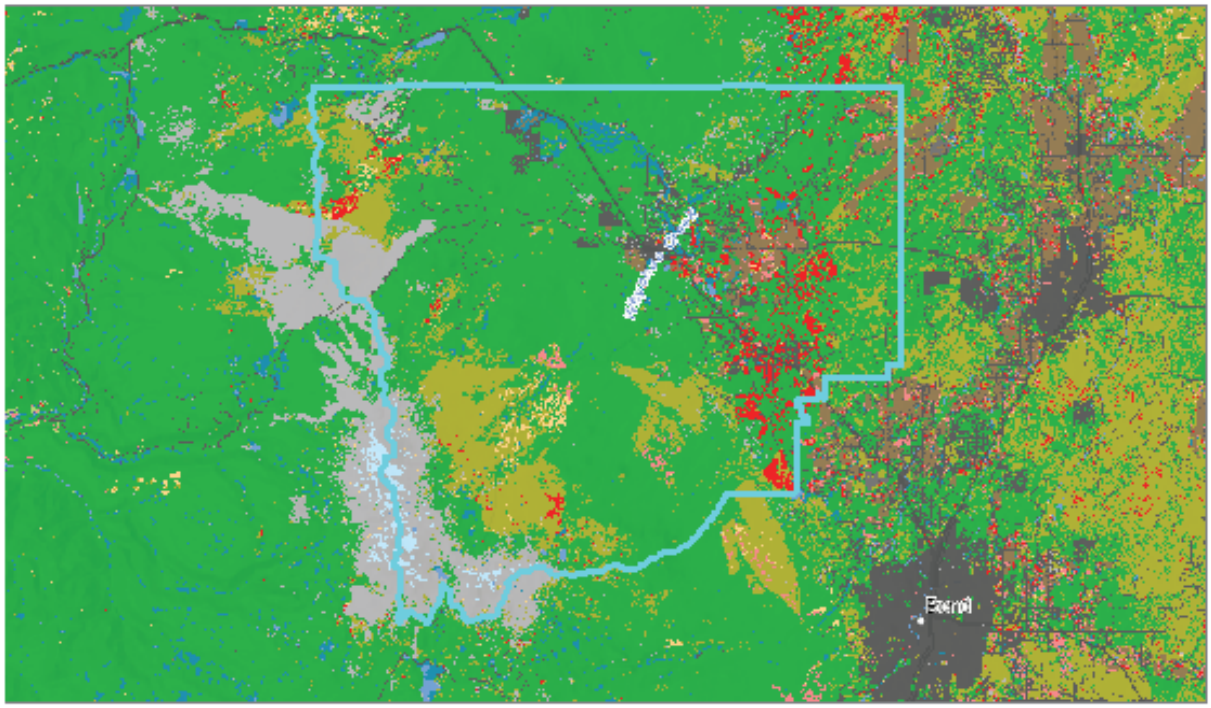
Additional Resources for Wildfire Risk Planning

- Oregon Department of Forestry CWPP list - https://www.oregon.gov/ODF/Fire/Pages/CWPP.aspx
- Oregon Explorer Communities Reporter Tool - demographic and other data for counties and communities https://oe.oregonexplorer.info/rural/CommunitiesReporter/
- FEMA Wildland Urban Interface resources - https://www.usfa.fema.gov/wui/
- NFPA Firewise USA ™ - teaching people how to adapt to living with wildfire and encouraging neighbors to work together and take action to prevent losses. - https://www.nfpa.org/Public-Education/By-topic/Wildfire/Firewise-USA
- Headwaters Economics - Full Community Costs of Wildfire - https://headwaterseconomics.org/wildfire/homes-risk/full-community-costs-of-wildfire/

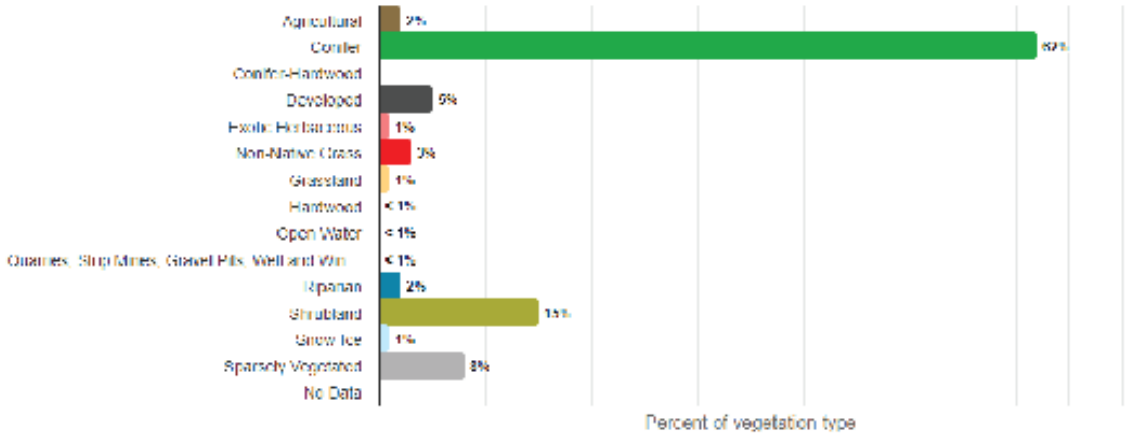
Oregon CWPP Planning Tool - Advanced Report

Custom Area

EXISTING VEGETATION TYPE



Vegetation Types in Custom Area



Oregon CWPP Planning Tool - Advanced Report

Custom Area

Custom Area

Category	Acres	% of Total*
Agricultural	6655	2
Conifer	179173	62
Conifer-Hardwood	0	0
Developed	13507	5
Exotic Herbaceous	2071	1
Exotic Tree-Shrub	9055	3
Grassland	2265	1
Hardwood	4	< 1
Open Water	607	< 1
Quarries, Strip Mines, Gravel Pits, Well and Wind Pads	84	< 1
Riparian	5871	2
Shrubland	42146	15
Snow-Ice	1651	1
Sparsely Vegetated	23819	8
No Data	0	0

Existing Vegetation Type Data Dictionary https://www.landfire.gov/evt.php
Source: LANDFIRE (2022) https://www.landfire.gov

Resource:
US Forest Service Fire Regime Table
https://www.fs.usda.gov/database/feis/fire_regime_table/fire_regime_table.html

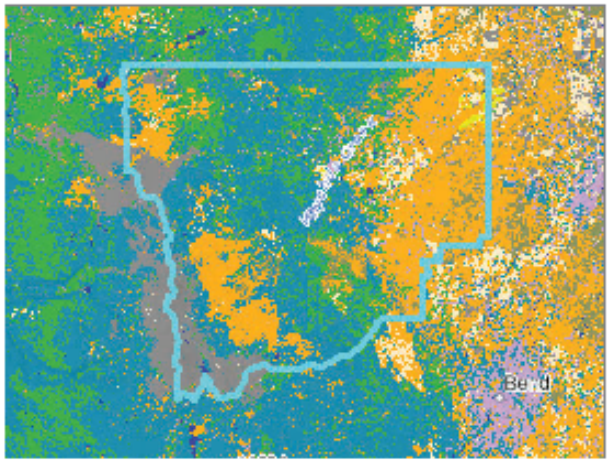
** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

FUEL MODEL GROUPS

Fuel models describe the fire-carrying materials that make up surface fuels, such as such as grasses, shrubs and litter (see next page). Fuel models are developed from climate characteristics, existing vegetation type, cover, height, and other vegetation characteristics, and help us understand the fuels igniting and carrying fire. These fuel models can be grouped into broad categories of burnable fuels based on descriptions of live and dead vegetation that represent distinct fuel types, size classes, and load distributions (amounts), shown in the map and chart below. Fuels and other elements of the fuelscape in the risk assessment were extensively reviewed and refined by local expert consultation, and the fuelscape was updated to account for wildfires and fuel treatments that occurred through 2021.



Learn more about the Scott and Burgan Fire Behavior Fuel Models on the LANDFIRE website:
https://landfire.gov/fbfm40.php

Custom Area Fuel Model Groups (see next page for descriptions of codes)

Category	Description	Acres	%*
Grass	Fuel models 101-104, (GR1; GR2; GR3; GR4)	7894	3
Grass/Shrub	Fuel models 121-123, (GS1; GS2; GS3)	86850	30
Non-burnable-other	Fuel Models 91-93,99, (NB1; NB2; NB3; NB9)	23956	8
Non-burnable-water	Fuel Models 98, (NB8)	669	< 1
Slash-blowdown	Fuel Models 202, (SB2)	0	0
Shrub	Fuel Models 141-147, (SH1; SH2; SH3; SH4; SH5; SH6; SH7)	10345	4
Timber Litter	Fuel Models 181-189, (TL1; TL2; TL3; TL4; TL5; TL6; TL7; TL8; TL9)	101399	35
Timber-Understory	Fuel Models 161-163, 165, (TU1; TU2; TU3; TU5)	49932	17
Agriculture	Fuel Models 101-102 (GR2; GR1)	1405	< 1
Burnable Urban	Custom fuel model designed to capture fire transmission into developed areas under severe fire weather conditions.	4459	2

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Group	Description
Grass Fuel models 101-104, (GR1;GR2; GR3;GR4)	GR1: Short, sparse dry climate grass is short, naturally or heavy grazing, predicted rate of fire spread and flame length low GR2: Low load, dry climate grass primarily grass with some small amounts of fine, dead fuel, any shrubs do not affect fire behavior GR3: Low load, very coarse, humid climate grass continuous, coarse humid climate grass, any shrubs do not affect fire behavior GR4: Moderate load, dry climate grass, continuous, dry climate grass, fuelbed depth about 2 feet
Grass/Shrub Fuel models 121-123, (GS1;GS2; GS3)	GS1: Low load, dry climate grass-shrub shrub about 1 foot high, grass load low, spread rate moderate and flame length low GS2: Moderate load, dry climate grass-shrub, shrubs are 1-3 feet high, grass load moderate, spread rate high, and flame length ismoderate GS3: Moderate load, humid climate grass-shrub, moderate grass/shrub load, grass/shrub depth is less than 2 feet, spread rate is highand flame length is moderate
Non-Burnable-Other	Fuel Models 91-93, 99, (NB1; NB2; NB3; NB9) NB1: Urban NB2: Snow/Ice NB3: Agriculture NB9: Barren
Non-burnable-Water	Fuel Model 98, (NB8): Water
Slash-blowdown	Fuel Model 202, (SB2): Moderate load activity fuel or low load blowdown, 7-12 t/ac, 0-3 inch diameter class, depth about 1 foot, blowdown scattered with many still standing, spread rate and flame low
Shrub Group Fuel Models 141-147, (SH1;SH2; SH3; SH4;SH5; SH6; SH7)	SH1: Low load dry climate shrub, woody shrubs and shrub litter, fuelbed depth about 1 foot, may be some grass, spread rate and flame low SH2: Moderate load dry climate shrub, woody shrubs and shrub litter, fuelbed depth about 1 foot, no grass, spread rate and flame low SH3: Moderate load, humid climate shrub, woody shrubs and shrub litter, possible pine overstory, fuelbed depth 2-3 feet, spread rate and flame low SH4: Low load, humid climate timber shrub, woody shrubs and shrub litter, low to moderate load, possible pine overstory, fuelbed depth about 3 feet, spread rate high and flame moderate SH5: High load, humid climate grass-shrub combined, heavy load with depth greater than 2 feet, spread rate and flame very high SH6: Low load, humid climate shrub, woody shrubs and shrub litter, dense shrubs, little or no herbaceous fuel, depth about 2 feet, spread rate and flame high SH7: Very high load, dry climate shrub, woody shrubs and shrub litter, very heavy shrub load, depth 4-6 feet, spread rate somewhat lower than SH6 and flame very high

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Group	Description
Timber Litter Group Fuel Models 181-189, (TL1;TL2; TL3; TL4;TL5; TL6; TL7;TL8; TL9)	TL1: Low load compact conifer litter, compact forest litter, light to moderate load, 1-2 inches deep, may represent a recent burn, spread rate and flame low TL2: Low load broadleaf litter, broadleaf, hardwood litter, spread rate and flame low TL3: Moderate load conifer litter, moderate load conifer litter, light load of coarse fuels, spread rate and flame low TL4: Small downed logs moderate load of fine litter and coarse fuels, small diameter downed logs, spread rate and flame low TL5: High load conifer litter, light slash or dead fuel, spread rate and flame low TL6: Moderate load broadleaf litter, spread rate and flame moderate TL8: Large downed logs, heavy load forest litter, larger diameter downed logs, spread rate and flame low TL8: Long needle litter, moderate load long needle pine litter, may have small amounts of herbaceous fuel, spread rate moderate and flame low TL9: Very high load broadleaf litter, may be heavy needle drape, spread rate and flame moderate
Timber-Understory Group Fuel Models 161-163, 165,(TU1; TU2;TU3; TU5)	TU1: Low load dry climate timber grass shrub, low load of grass and/or shrub with litter, spread rate and flame low TU2: Moderate load, humid climate timber-shrub, moderate litter load with some shrub, spread rate moderate and flame low TU3: Moderate load, humid climate timber grass shrub, moderate forest litter with some grass and shrub, spread rate high and flame moderate TU5: Very high load, dry climate shrub, heavy forest litter with shrub or small tree understory, spread rate and flame moderate
Agriculture Fuel Models 101-102 (GR2; GR1)	GR1: Short, sparse dry climate grass is short, naturally or heavy grazing, predicted rate of fire spread and flame length low (used in agriculture types other than dryland agriculture) GR2: Low load, dry climate grass primarily grass with some small amounts of fine, dead fuel, any shrubs do not affect fire behavior (used in dryland agriculture types)
Burnable Urban	The Burnable Urban fuel model is a custom fuel model designed to capture fire transmission into developed areas under severe fire weather conditions.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

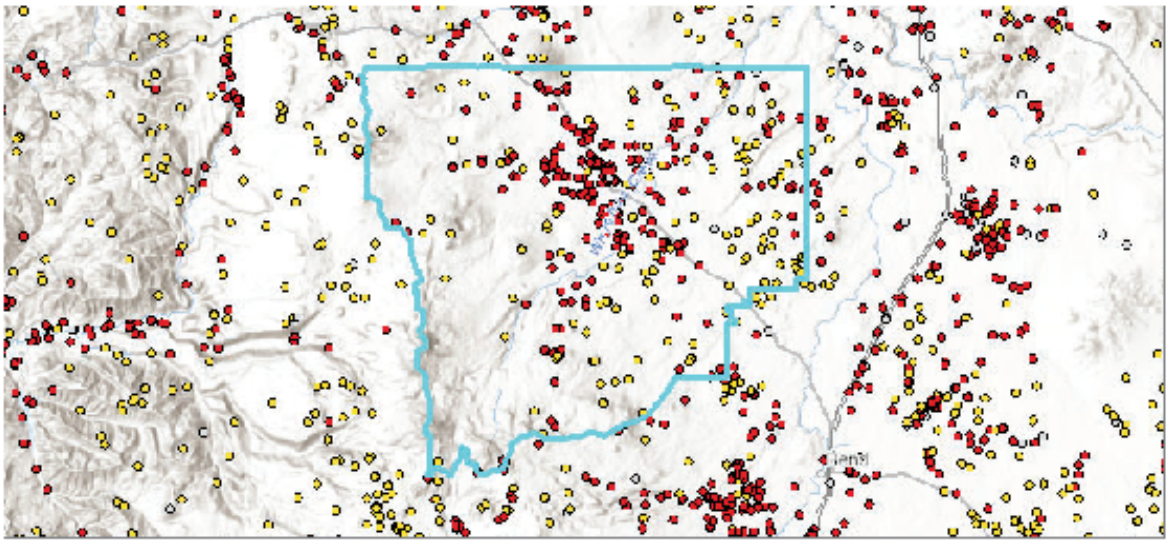
FIRE HISTORY - FIRE IGNITIONS

Knowing where and why fires start is the first step in awareness, prevention, and mitigation. Viewing local fire starts in conjunction with burn probability (provided later in this report) provides a comprehensive view of local fire history and potential.

Statewide, 71% of fires recorded by ODF are human-caused, and many of these fires are near populated areas. Lightning caused fires make up 29% of fire starts.

Data Source: Short, Karen C. 2022. Spatial wildfire occurrence data for the United States, 1992-2020 [FPA_FOD_20221014]. 6th Edition. Fort Collins, CO: Forest Service Research Data Archive. https://doi.org/10.2737/RDS-2013-0009.6

2021-2024: National Interagency Fire Center. (2025). InFORM Fire Occurrence Data Records. Accessed February 19th, 2025.



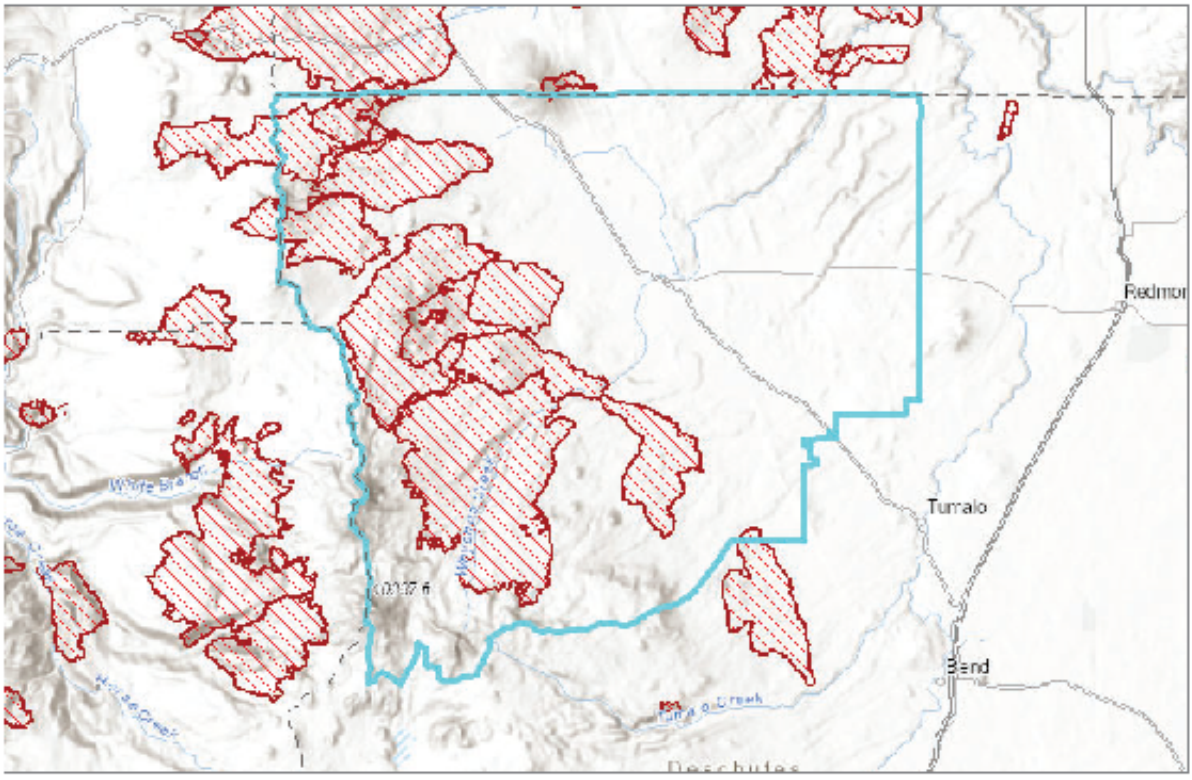
Custom Area fire starts between 2014-2024

Total Acres Burned	24238
Total Number of Fires	342
Average Acres Burned Per Year	2203
Average Fires Per Year	31
Percent Natural Caused	33%
Percent Human Caused	66%

Oregon CWPP Planning Tool - Advanced Report

Custom Area

FIRE HISTORY - FIRE PERIMETERS



Wildfires >= 100 Acres Through 2024

Wildfire Name	Year	Total Acres Burned
GRANDVIEW 0558 OD	2021	5,943
0843 CS MILLI	2017	24,029
Two Bulls	2014	6,904
Pole Creek	2012	26,795
Shadow Lake	2011	10,402
Rooster Rock	2010	6,119
Black Butte 2	2009	578
Stevens Canyon 0788	2008	187
Dry Creek	2008	110
GW	2007	8,570
Black Crater	2006	9,412
Lake George	2006	6,482
Link	2003	3,592

Data Source: National Interagency Fire Center (NIFC). 2003-2023 fire perimeters were sourced from "InterAgencyFirePerimeterHistory All Years View" and 2024 fire perimeters were sourced from "WFIGS Interagency

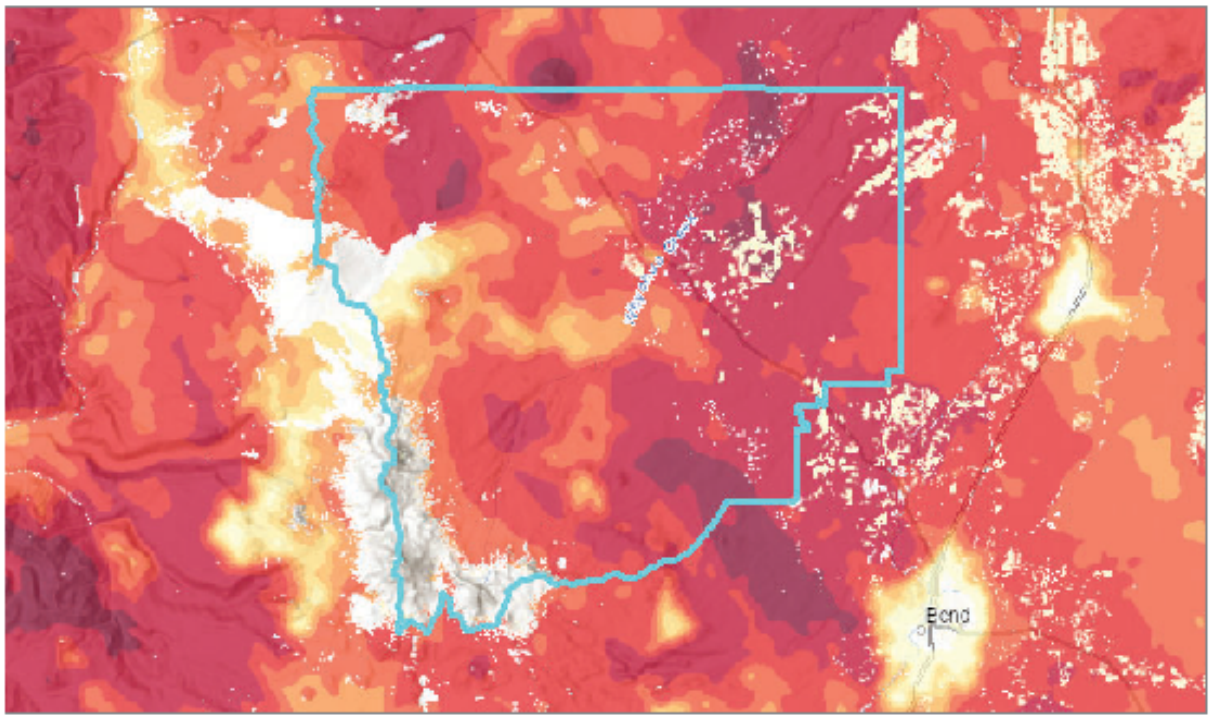
^ Table of Contents

Fire Perimeters", both of which are feature services available on the NIFC Open Data site: https://data-nifc.opendata.arcgis.com/ . Data curated by the Institute for Natural Resources, January 2025. Download: https://oe.oregonexplorer.info/externalcontent/spatialdatafordownload/Oregon_Fire_Perimeters_2000_2024.zip

Oregon CWPP Planning Tool - Advanced Report

Custom Area

BURN PROBABILITY



Wildfire likelihood (burn probability) is an estimate of the average annual likelihood that a wildfire will occur at any given location. Burn probability is simulated using a model that integrates information about the physical landscape, historical fire occurrence, and historical weather observations. Scientists simulated 10,000 or more plausible fire season scenarios across sub-regions of Oregon and the number of times a point on the landscape was encountered by simulated fire, divided by the number of simulated fire seasons, provides the estimate of average annual likelihood of fire, or burn probability. These burn probability values reflect long-term annual averages and should not be thought of as seasonal forecasts.

Burn Probability

0.0464159 - 0.1000000
0.0215443 - 0.0464159
0.0100000 - 0.0215443
0.0046416 - 0.0100000
0.0021544 - 0.0046416
0.0010000 - 0.0021544
0.0004642 - 0.0010000
0.0002154 - 0.0004642
0.0001000 - 0.0002154
>0 - 0.0001000
0

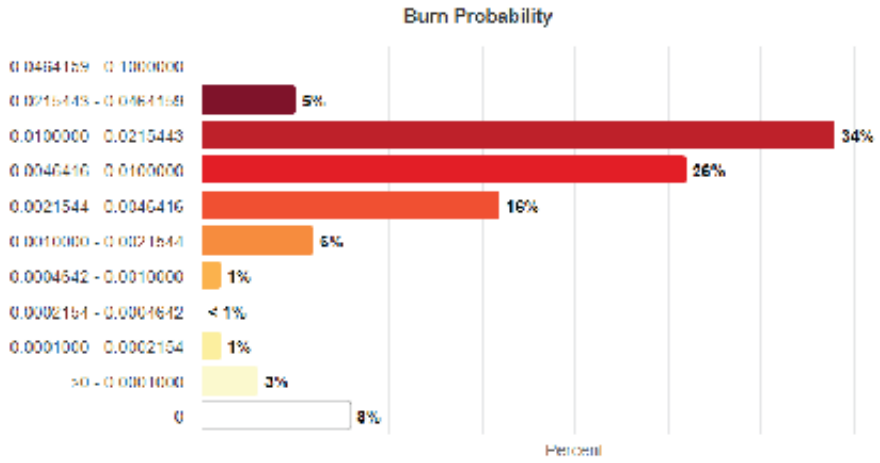
^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Burn Probability in Custom Area

Fire Likelihood	Private	Local	State	BLM	USFS	USFWS	Other Fed	Tribal	Total
0.0464159 - 0.1000000	0	0	0	0	0	0	0	0	0
0.0215443 - 0.0464159	10,197	0	257	607	1,876	0	0	0	12,937
0.0100000 - 0.0215443	46,348	16	868	23,158	26,272	0	0	0	96,662
0.0046416 - 0.0100000	13,983	114	92	6,940	53,041	0	0	0	74,170
0.0021544 - 0.0046416	5,108	1	169	0	40,695	0	0	0	45,973
0.0010000 - 0.0021544	1,416	0	<1	0	16,986	0	0	0	18,402
0.0004642 - 0.0010000	116	0	0	0	3,579	0	0	0	3,695
0.0002154 - 0.0004642	0	0	0	0	1,243	0	0	0	1,243
0.0001000 - 0.0002154	0	0	0	0	1,944	0	0	0	1,944
>0 - 0.0001000	5,842	0	4	18	1,569	0	0	0	7,433
0	1,149	25	16	122	22,821	0	0	0	24,133
Total Area	84,159	156	1,406	30,845	170,026	0	0	0	286,592



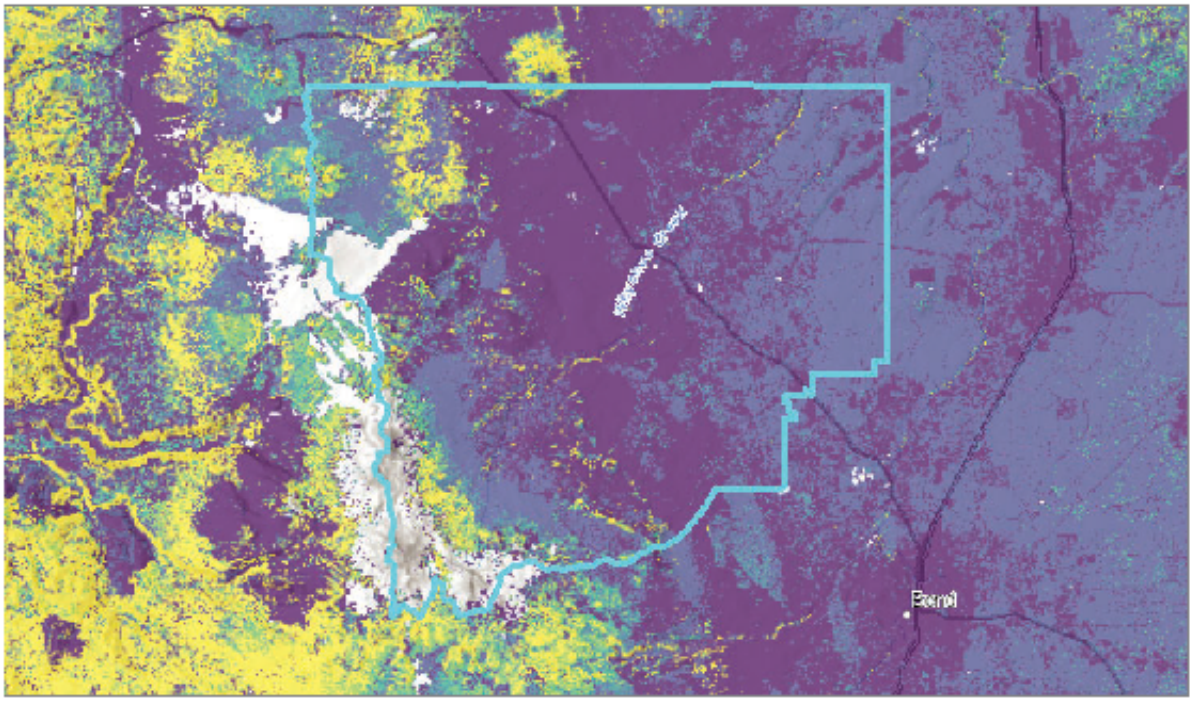
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

AVERAGE FLAME LENGTH - FIRE INTENSITY



Wildfire intensity is a measure of how much energy is produced at the flaming front of a wildfire. Intensity is often represented in terms of flame length for ease of relating to and representing this component of wildfire hazard. Higher flame lengths represent more intense fires. At any given location, fire intensity can vary widely depending on fuel conditions and wind speed and direction. This report represents a weighted average flame length for all locations in Oregon.

Fire intensity is an important component of wildfire risk because it is useful for estimating the likely impact on resources and assets. Fire intensity alone is not a suitable proxy for fire impacts because we also need to account for the susceptibility of the resource or asset (i.e. is the resource or asset fire hardened or otherwise fire-adapted), but when used in conjunction with susceptibility, fire intensity helps us estimate impacts. For example, two-foot flame lengths in a mature stand of timber might have mildly negative consequences, but eight-foot flame lengths would be a significant threat to the value of the timber.

Average Flame Intensity Under Normal Weather Conditions

12+ ft
8-12 ft
6-8 ft
4-6 ft
2-4 ft
0-2 ft
Non-burnable

^ Table of Contents

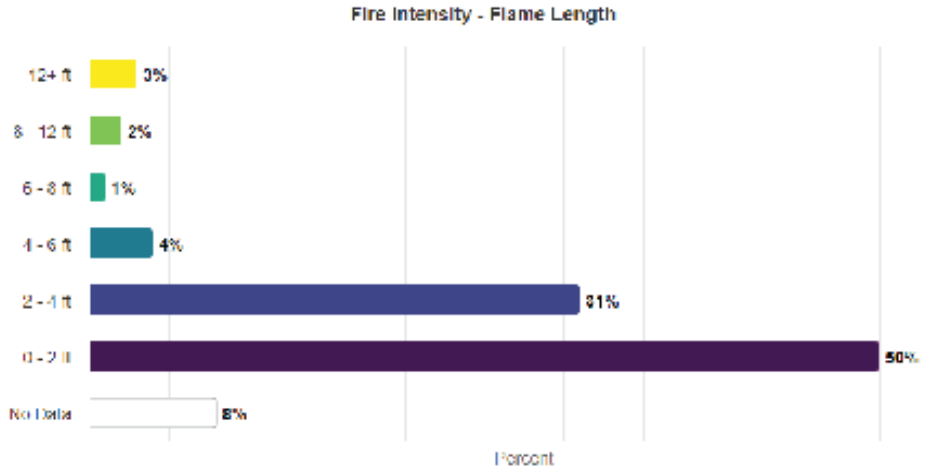
Report generated: September 4, 2025 03:07 PM

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Average Flame Length Custom Area

Category	Private	Local	State	BLM	USFS	USFWS	Other Fed	Tribal	Total
12+ ft	1,204	<1	0	49	8,592	0	0	0	9,845
8 - 12 ft	293	1	<1	4	4,400	0	0	0	4,698
6 - 8 ft	229	2	0	12	3,783	0	0	0	4,026
4 - 6 ft	1,687	4	24	315	9,694	0	0	0	11,724
2 - 4 ft	26,659	14	493	25,343	35,807	0	0	0	88,316
0 - 2 ft	52,907	111	872	5,000	84,928	0	0	0	143,818
No Data	1,181	25	16	122	22,821	0	0	0	24,165
Total Area	84,160	157	1,405	30,845	170,025	0	0	0	286,592



Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

INTEGRATED WILDFIRE RISK

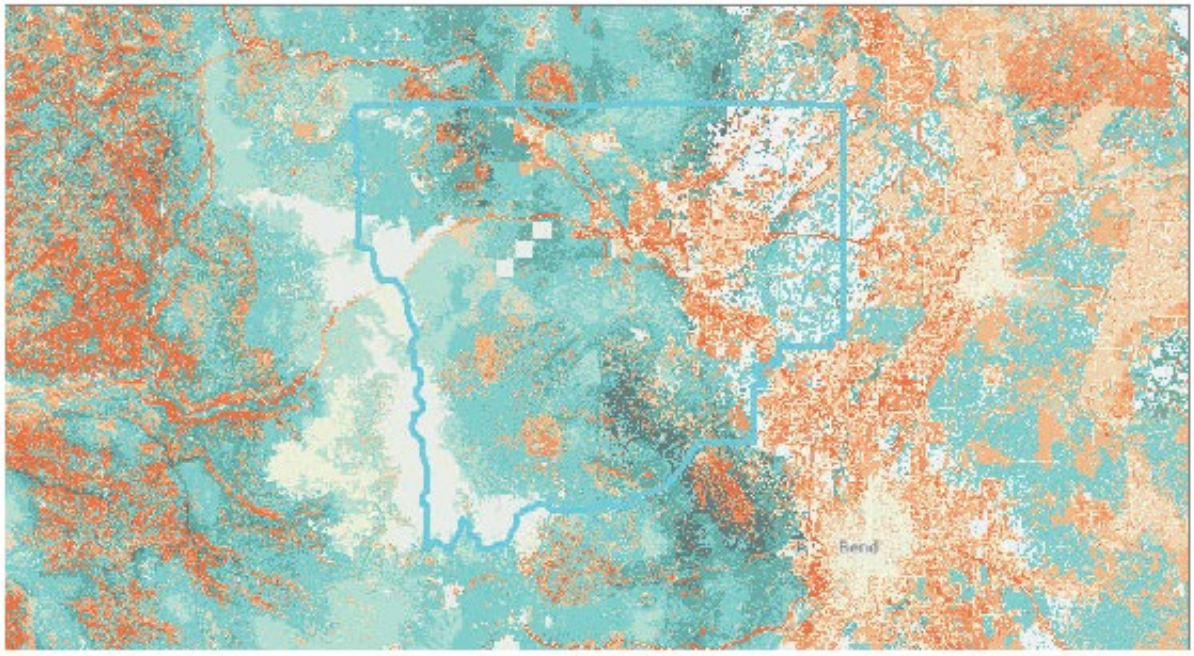
Integrated risk is a representation of cumulative risk at any location based on which resources and assets are present. For some resources and assets, wildfire may have beneficial impacts — e.g. fire can create desired forest structure conditions — while for others the impacts may be adverse — e.g. structures are damaged by fire. The integrated risk map synthesizes risk across all resources and assets present at a specific location and the result is either net beneficial or net adverse impacts.

The resources and assets included in the 2023 PNW Quantitative Wildfire Risk Assessment include: people and property, infrastructure, drinking water, timber, ecological integrity, wildlife habitat, recreation and agriculture. Not all resources and assets are present at every location and the integrated wildfire risk class at a specific location reflects only the resources and assets located there.

Integrated wildfire risk classes range from Very High Loss to Very High Benefit based on a comparison of risk values across Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Oregon CWPP Planning Tool - Advanced Report

Custom Area



Integrated Expected Wildfire Risk

Very High Loss
High Loss
Moderate Loss
Low Loss
Neutral
Low Benefit
Moderate Benefit
High Benefit
Very High Benefit
No Data

Expected wildfire risk accounts for the presence and susceptibility of highly-valued resources and assets (HVRAs), fire intensity, and the likelihood of a fire occurring (burn probability). Expected risk layers are designed to support strategic prioritization because by including burn probability they account the relatively likelihood of different fire impacts in any given year.

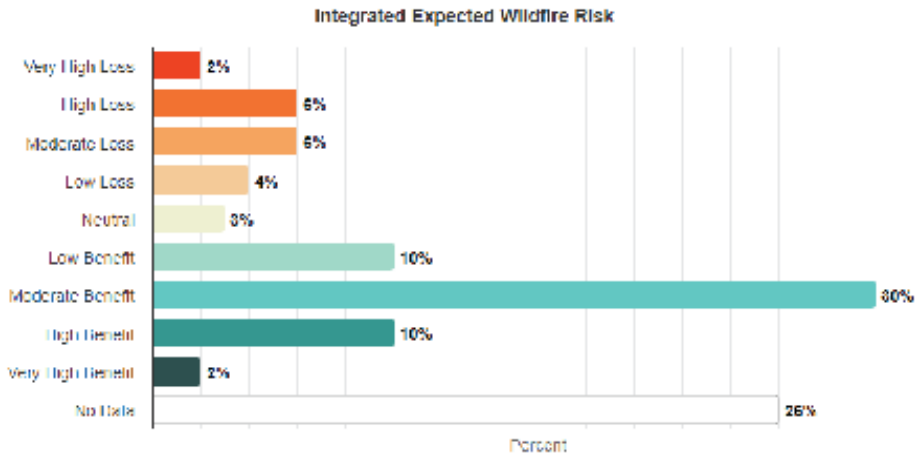
^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Integrated Expected Wildfire Risk in Custom Area

Category	Private	Local	State	BLM	USFS	USFWS	Other Fed	Tribal	Total
Very High Loss	4,736	5	34	428	1,603	0	0	0	6,806
High Loss	11,411	7	169	514	4,211	0	0	0	16,312
Moderate Loss	7,542	22	32	757	8,572	0	0	0	16,925
Low Loss	6,403	1	8	21	5,441	0	0	0	11,874
Neutral	7,007	15	80	966	1,460	0	0	0	9,528
Low Benefit	1,200	0	101	5	26,920	0	0	0	28,226
Moderate Benefit	9,602	40	206	4,354	72,135	0	0	0	86,337
High Benefit	10,884	2	86	971	16,695	0	0	0	28,638
Very High Benefit	5,406	0	42	59	814	0	0	0	6,321
No Data	19,971	63	648	22,768	32,174	0	0	0	75,624
Total Area	84,162	155	1,406	30,843	170,025	0	0	0	286,591

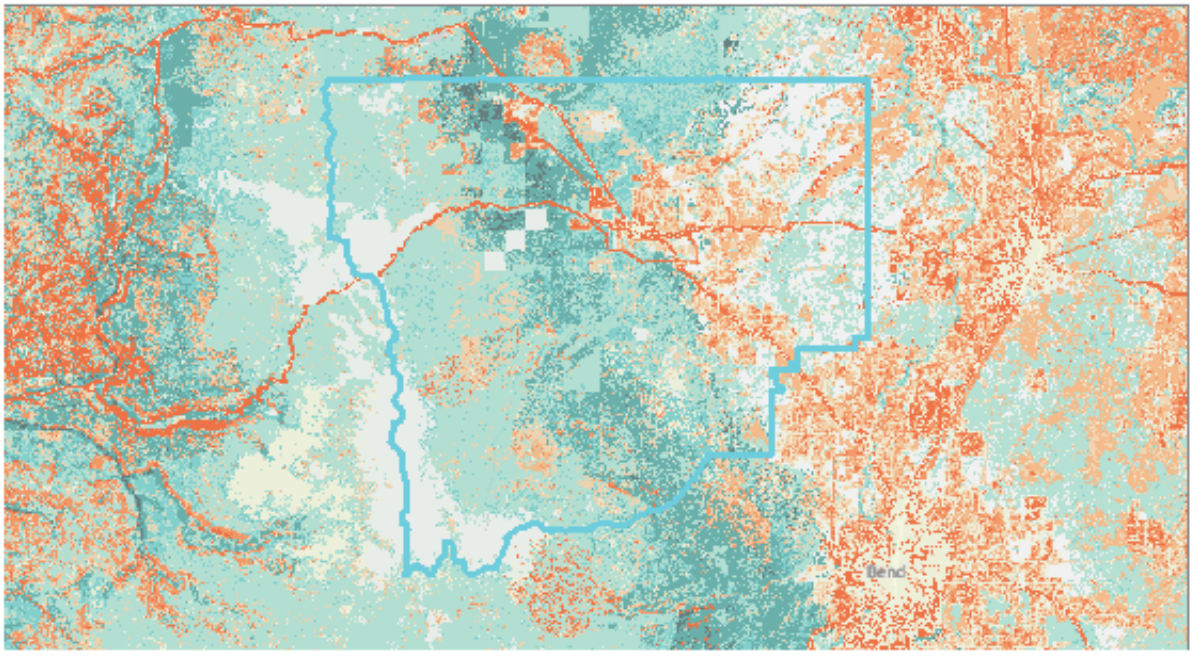


Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area



Integrated Conditional Wildfire Risk

Very High Loss
High Loss
Moderate Loss
Low Loss
Neutral
Low Benefit
Moderate Benefit
High Benefit
Very High Benefit
No Data

Conditional risk is the risk to any HVRA given that a fire occurs. In other words, conditional risk accounts for the presence of HVRAs, the susceptibility of HVRAs and the underlying fire intensity data, but it does not include burn probability. Conditional risk layers are frequently used during active fire response when a fire is already occurring and the burn probability is irrelevant. By contrast, expected risk layers account for all the same information, but also include burn probability in the risk calculation.

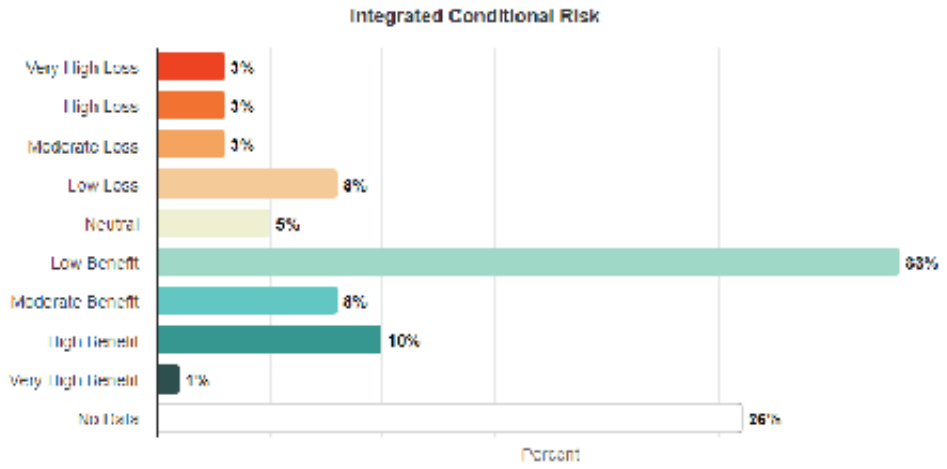
^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Integrated Conditional Wildfire Risk Custom Area

Category	Private	Local	State	BLM	USFS	USFWS	Other Fed	Tribal	Total
Very High Loss	3,827	7	35	394	3,116	0	0	0	7,379
High Loss	6,436	7	2	88	1,993	0	0	0	8,526
Moderate Loss	6,587	1	172	597	1,988	0	0	0	9,345
Low Loss	11,160	19	36	636	12,134	0	0	0	23,985
Neutral	9,121	17	82	969	2,787	0	0	0	12,976
Low Benefit	10,108	41	306	5,089	78,036	0	0	0	93,580
Moderate Benefit	5,110	2	9	158	18,873	0	0	0	24,152
High Benefit	11,244	0	120	177	17,068	0	0	0	28,609
Very High Benefit	529	0	4	6	1,814	0	0	0	2,353
No Data	19,994	61	638	22,773	32,220	0	0	0	75,686
Total Area	84,116	155	1,404	30,887	170,029	0	0	0	286,591



Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO AGRICULTURE

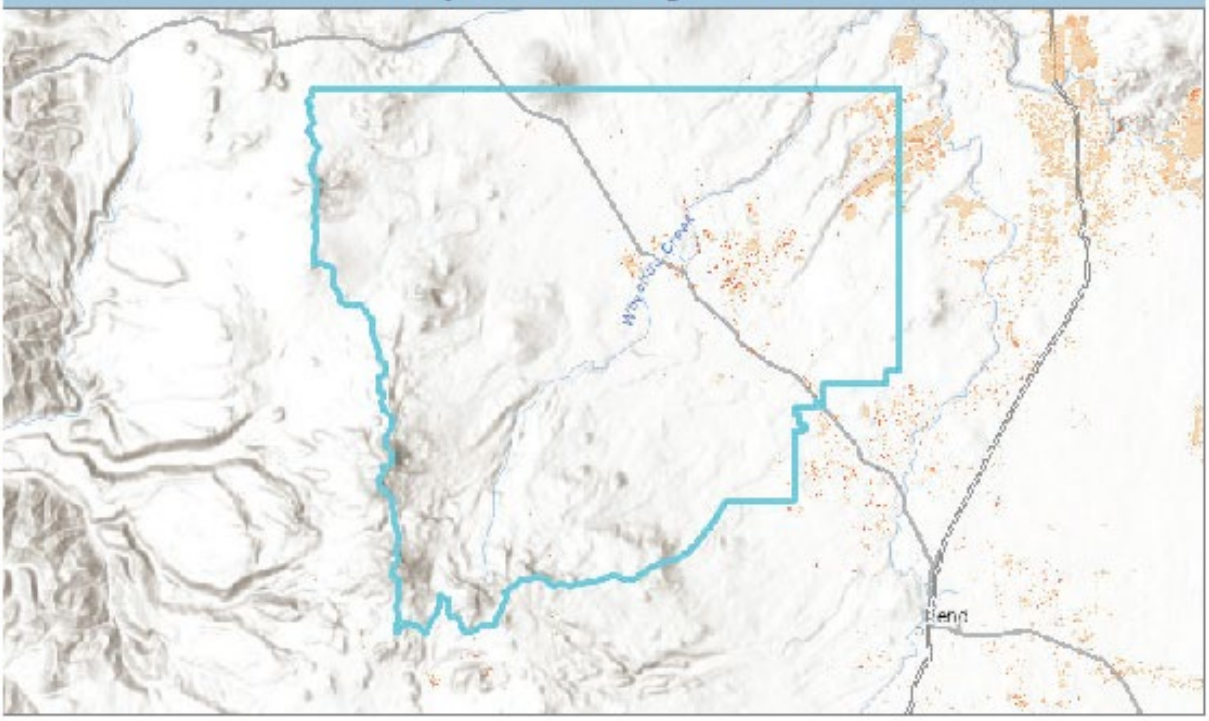
This data represents the conditional wildfire risk to cropland and associated infrastructure. In addition to wildfire hazard, the calculation of risk accounts for whether the crop is a perennial or an annual and whether or not the crop is irrigated. There are no presumed benefits of wildfire on agriculture and so risk is characterized only by the degree of expected loss. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk To Agriculture



Category	Acres	%*
Very High Loss	70	< 1
High Loss	169	< 1
Moderate Loss	61	< 1
Low Loss	1398	< 1
No Data	285217	99

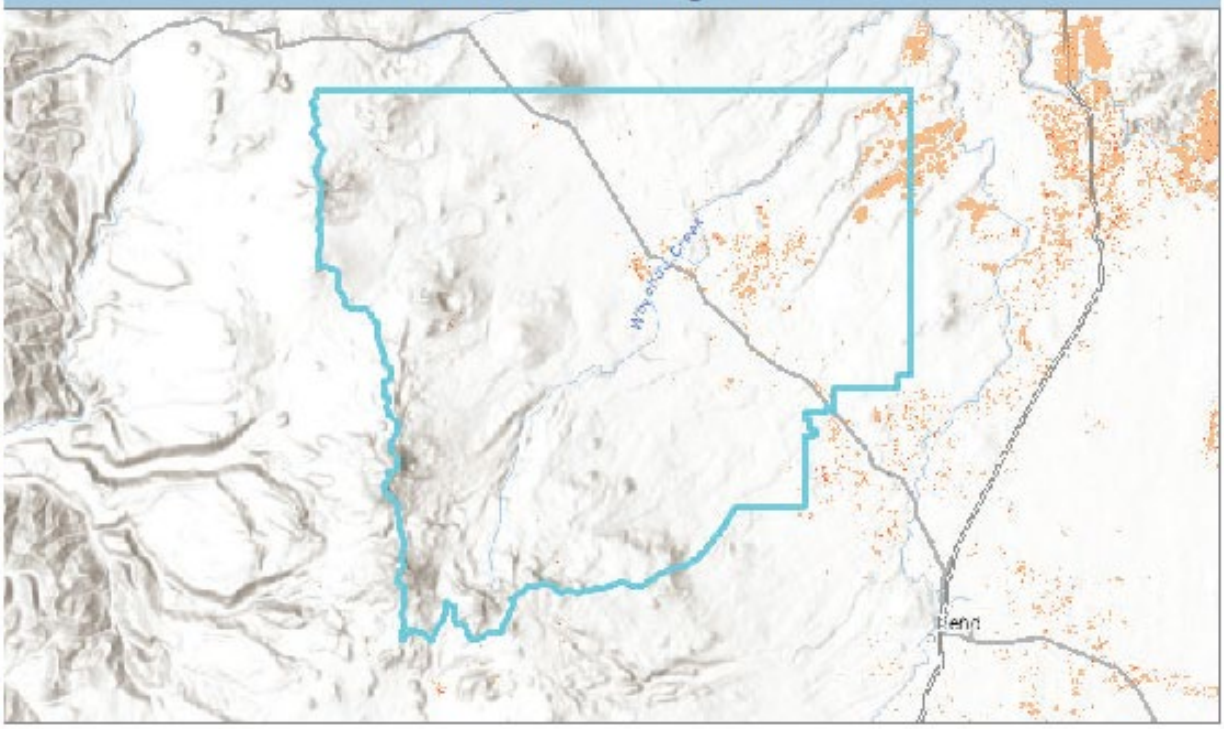
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Agriculture



Category	Acres	%*
Very High Loss	63	< 1
High Loss	4	< 1
Moderate Loss	1631	1
No Data	285217	99

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO DRINKING WATER

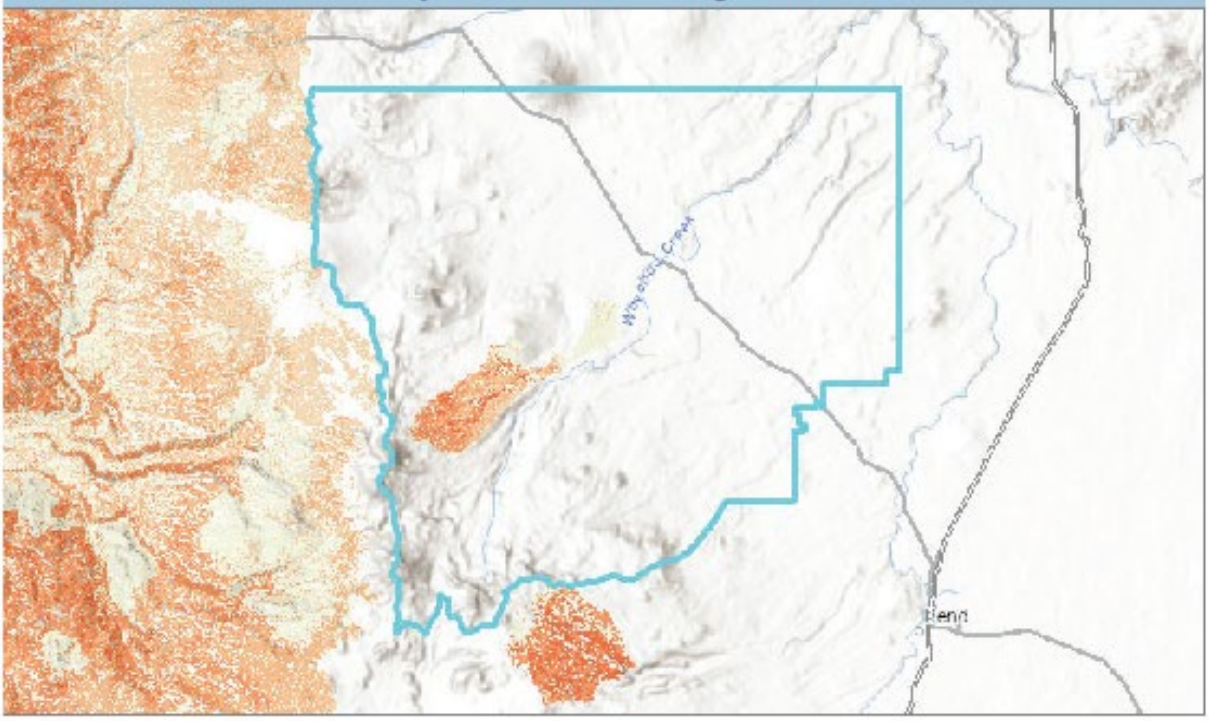
This data represents the conditional wildfire risk of post-wildfire sediment delivery to drinking water surface sources. In addition to wildfire hazard, the calculation of risk accounts the population served by the surface water source area, the size of the source area, the distance to the nearest drinking water body, and the erosion hazard. With respect to this particular aspect of wildfire risk to drinking water sources there are no presumed benefits of wildfire and so risk is characterized only by the degree of expected loss. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to Drinking Water



Category	Acres	%*
Very High Loss	253	< 1
High Loss	1115	< 1
Moderate Loss	1521	1
Low Loss	641	< 1
Neutral	1590	1
No Data	281795	98

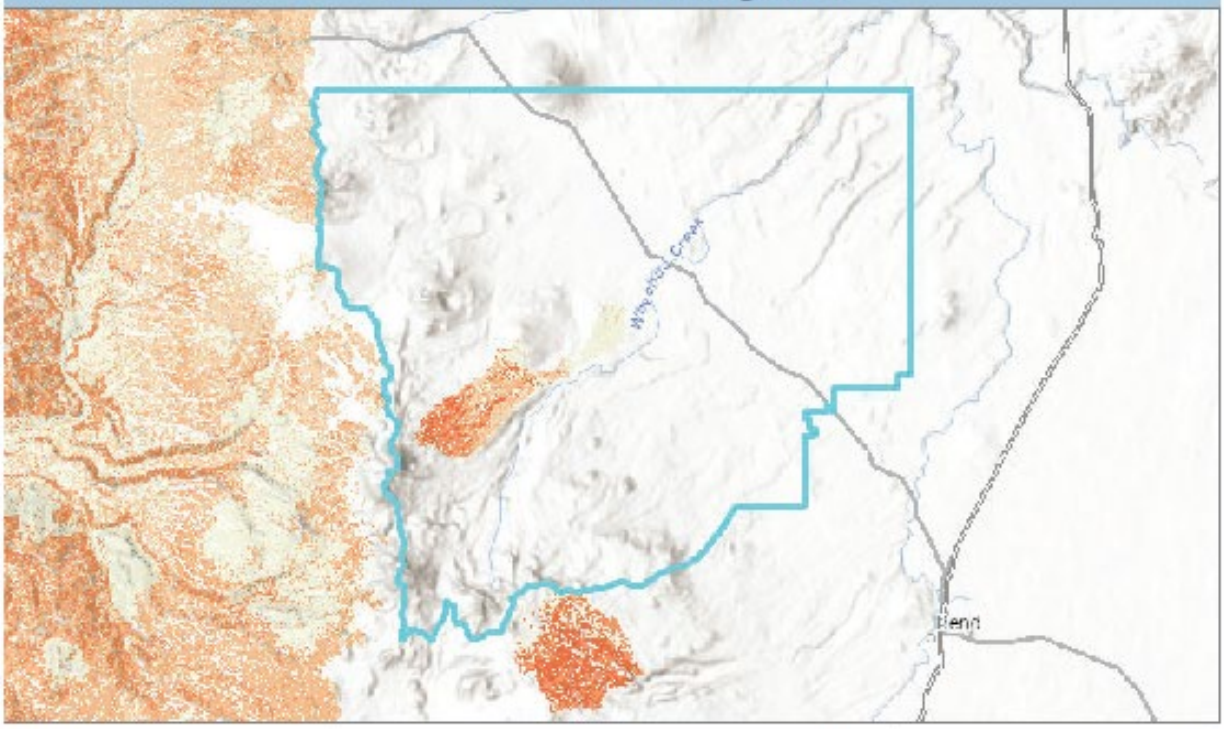
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Drinking Water



Category	Acres	%*
Very High Loss	442	< 1
High Loss	1083	< 1
Moderate Loss	1024	< 1
Low Loss	914	< 1
Neutral	1656	1
No Data	281795	98

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO ECOLOGICAL INTEGRITY

This data represents the conditional wildfire risk to ecological integrity. In forested ecosystems, risk to ecological integrity assesses whether wildfire moves forest structure towards or away from desired restoration targets. In grass and shrub ecosystems, risk to ecological integrity assess the likely effect of wildfire on overall condition, with a particular emphasis on post-fire invasion by non-native plant species (i.e., invasive annual grasses).

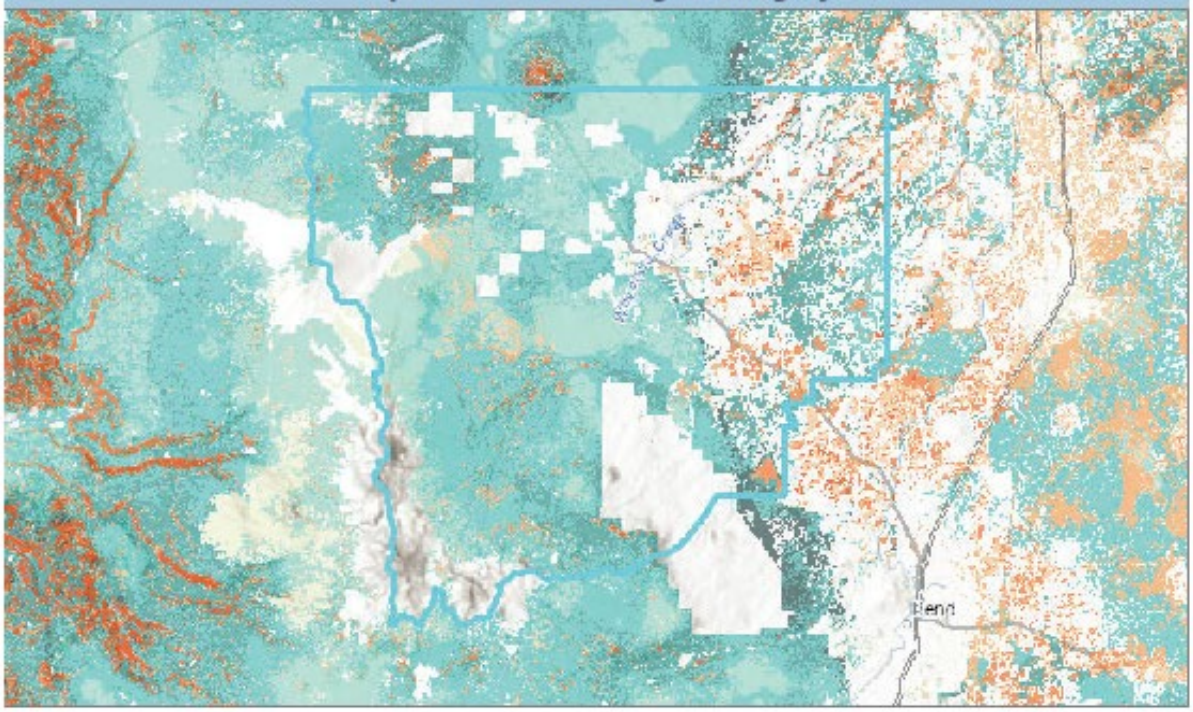
Wildfire is presumed to have both beneficial and adverse impacts on ecological integrity and therefore wildfire risk is characterized in terms of the degree of expected loss and expected benefits. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to Ecological Integrity



Category	Acres	%*
Very High Loss	1016	< 1
High Loss	3601	1
Moderate Loss	4234	1
Low Loss	4865	2
Neutral	2180	1
Low Benefit	45065	16
Moderate Benefit	69080	24
High Benefit	23128	8
Very High Benefit	1664	1
No Data	132082	46

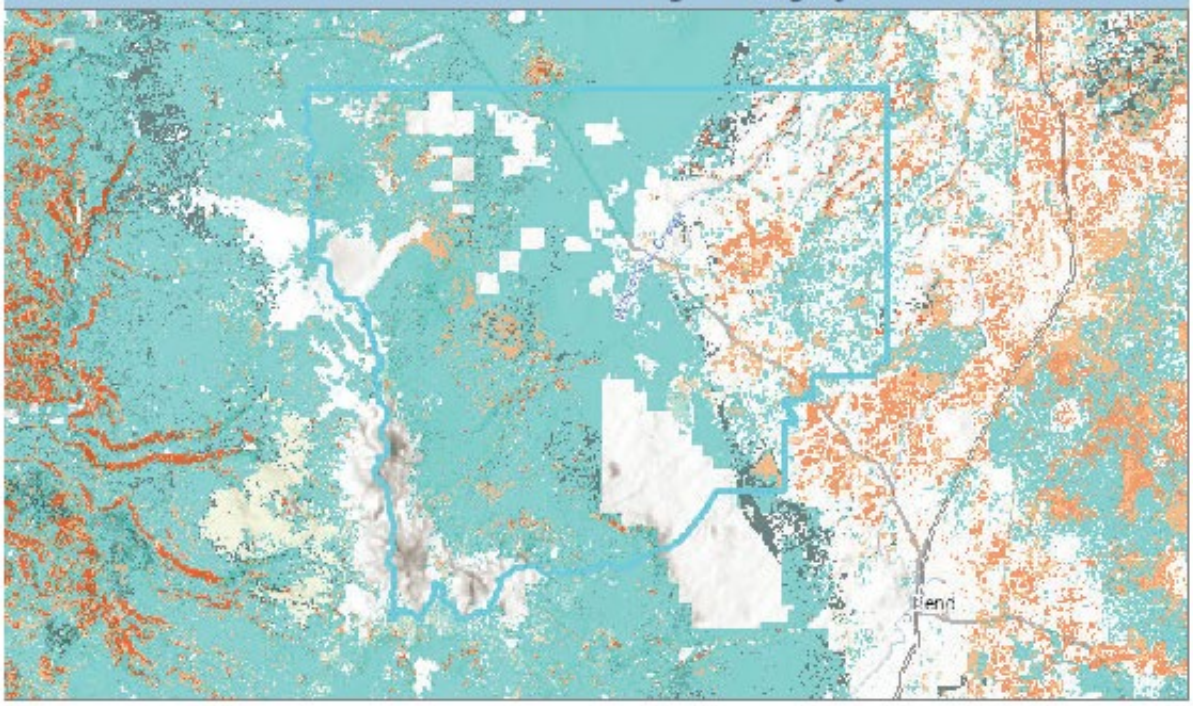
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Ecological Integrity



Category	Acres	%*
Very High Loss	1441	1
High Loss	2092	1
Moderate Loss	8104	3
Low Loss	2056	1
Neutral	1380	< 1
Low Benefit	2647	1
Moderate Benefit	128273	45
High Benefit	5285	2
Very High Benefit	0	0
No Data	132082	46

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO INFRASTRUCTURE

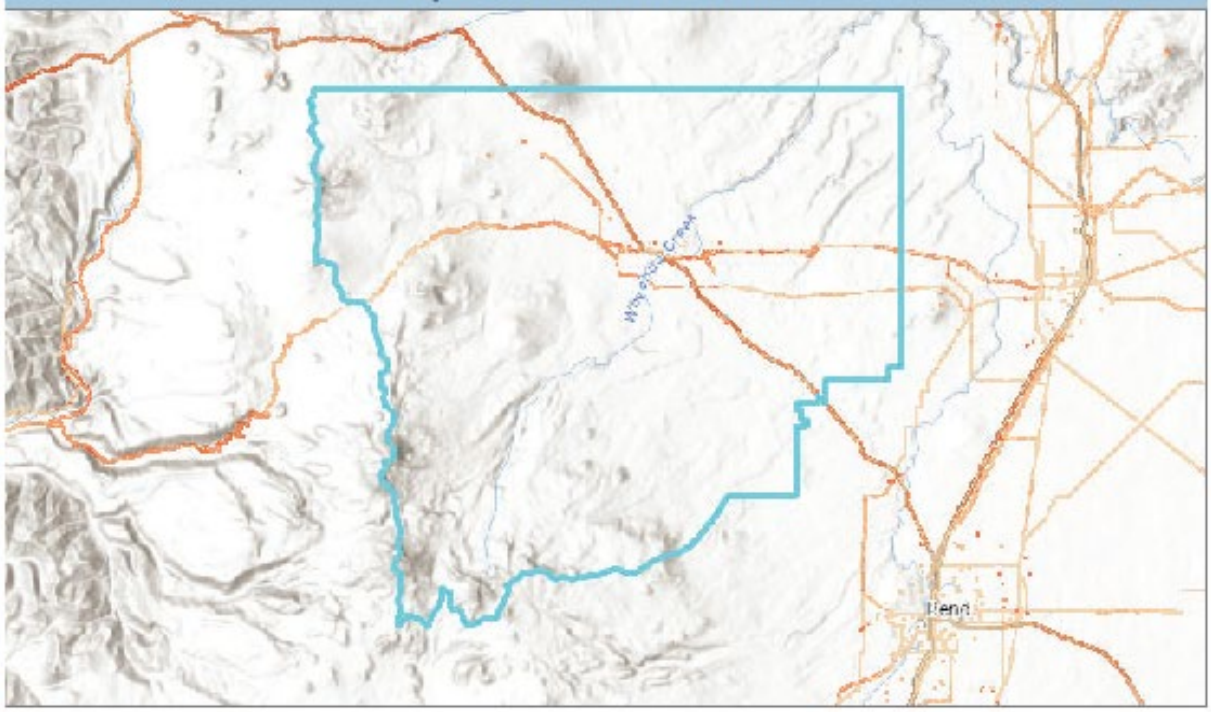
This data represents the conditional wildfire risk to critical infrastructure, namely energy, communication, transportation infrastructure, as well as other essential facilities. The risk assessment framework assumes that there are no beneficial impacts of wildfire on infrastructure and so risk is characterized only by the degree of expected loss. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to Infrastructure



Category	Acres	%*
Very High Loss	542	< 1
High Loss	2717	1
Moderate Loss	1272	< 1
Low Loss	1831	1
No Data	280552	98

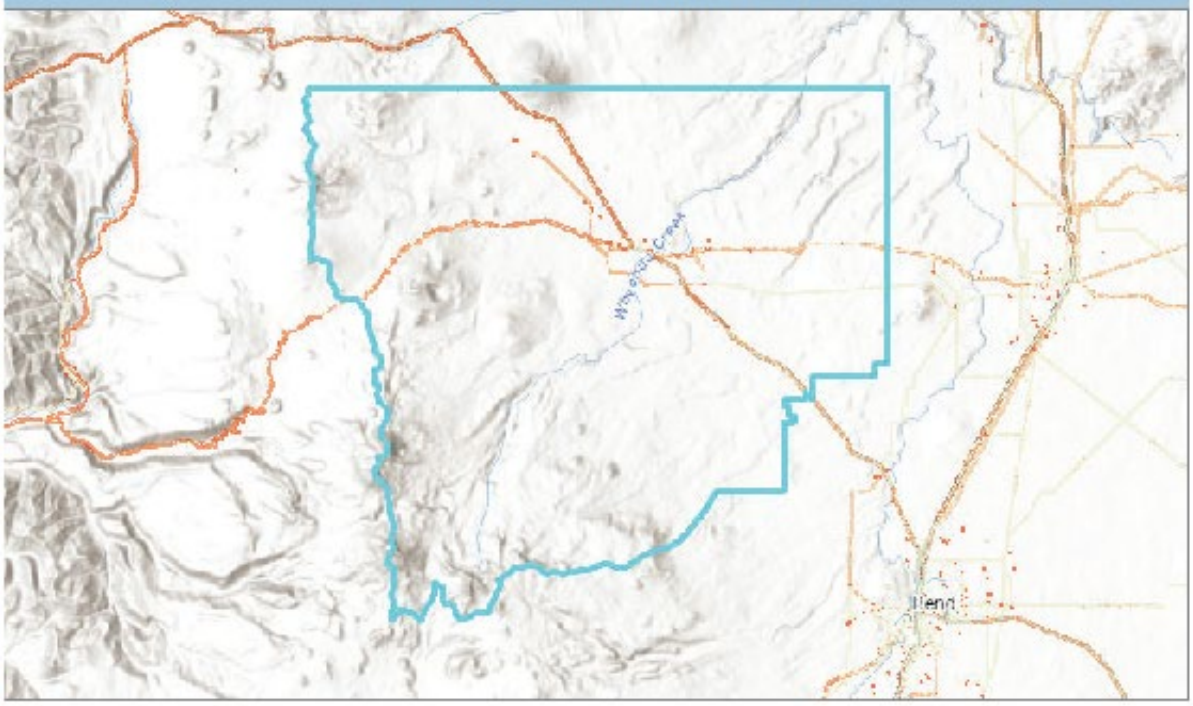
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Infrastructure



Category	Acres	%*
Very High Loss	295	< 1
High Loss	2089	1
Moderate Loss	1945	1
Low Loss	497	< 1
Neutral	1536	1
No Data	280552	98

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO PEOPLE AND PROPERTY

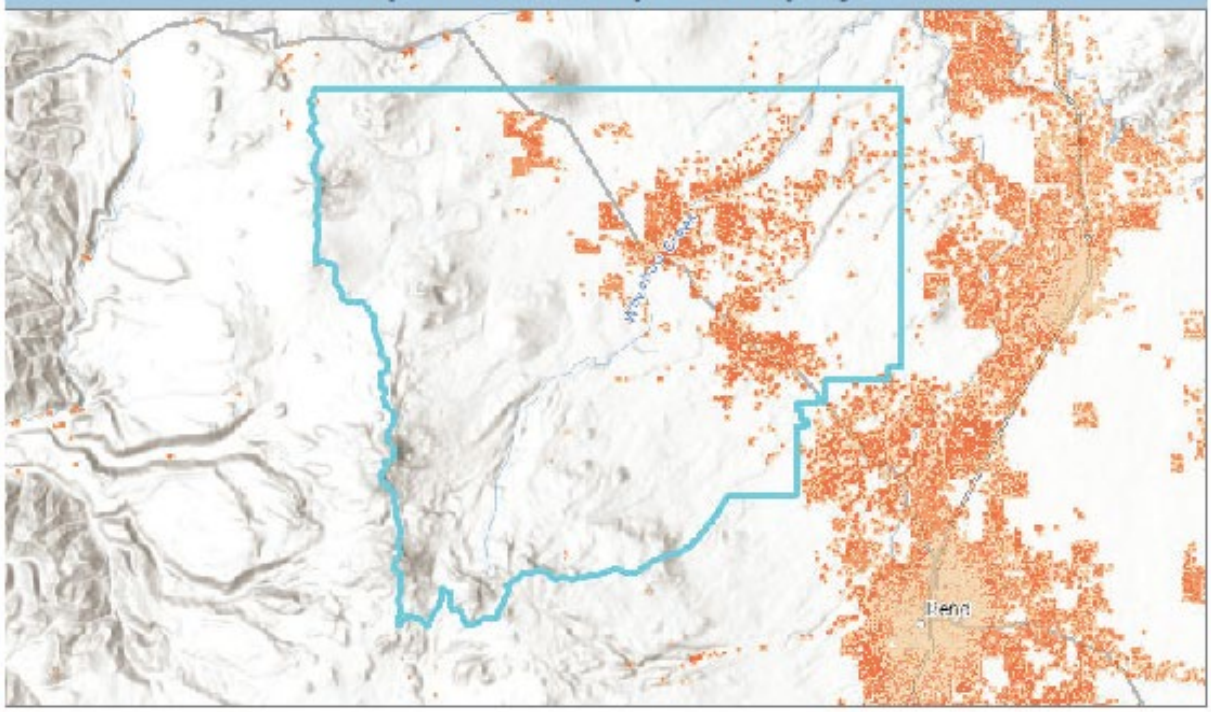
This data represents the wildfire risk to residential and non-residential structures. The susceptibility of People and Property was evaluated based on structure density. As structure density increases, the susceptibility is also presumed to increase because it is less safe for fire managers to work in high density environments and the likelihood for structure-to structure transmission increases. The risk assessment framework assumes that there are no beneficial impacts of wildfire on structures and so risk is characterized only by the degree of expected loss. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to People and Property



Category	Acres	%*
Very High Loss	9337	3
High Loss	9572	3
Moderate Loss	1031	< 1
Low Loss	7277	3
No Data	257334	90

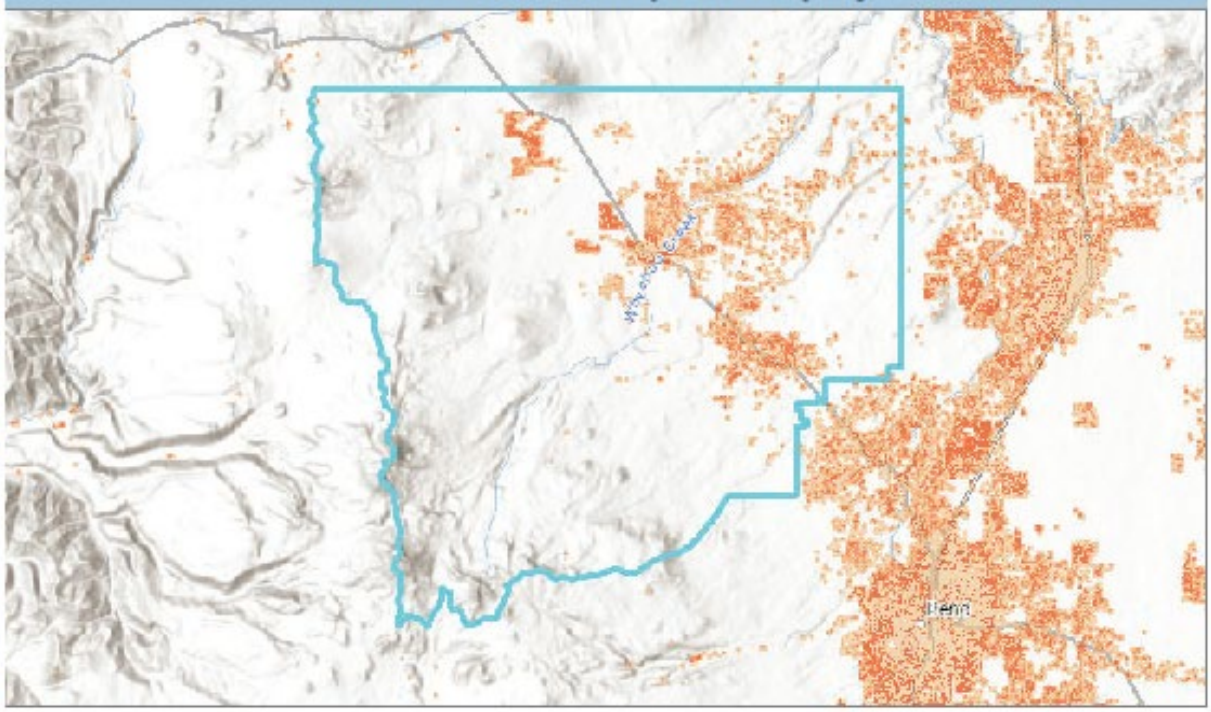
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to People and Property



Category	Acres	%*
Very High Loss	2669	1
High Loss	6163	2
Moderate Loss	7974	3
Low Loss	12773	4
No Data	257334	90

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Risk to Recreation

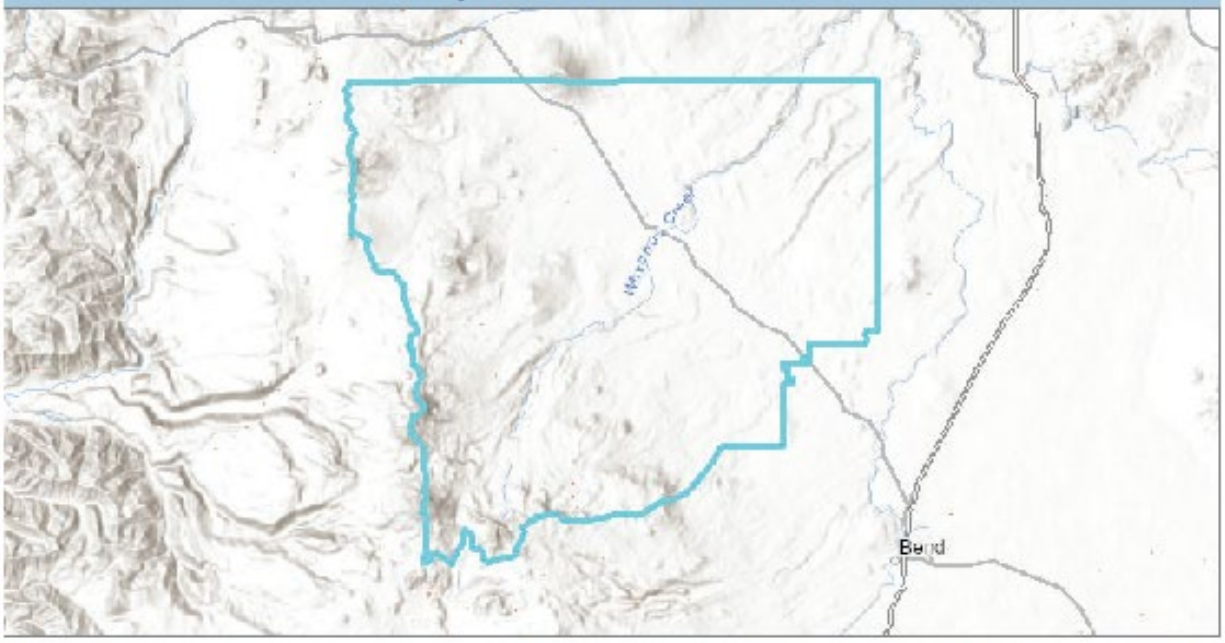
The Recreation HVRA is intended to evaluate wildfire risk to outdoor recreation infrastructure. This includes a very narrow set of infrastructure types including trail heads, developed campgrounds, ski infrastructure, boat launches, interpretive centers and others. The spatial footprint of these kinds of infrastructure is limited and may be hard to see in this report, or may not exist in the data. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to Recreation



Category	Acres	%*
Very High Loss	2	< 1
High Loss	6	< 1
Moderate Loss	32	< 1
Low Loss	12	< 1
No Data	286863	100

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Recreation

Category	Acres	%*
Very High Loss	2	< 1
High Loss	4	< 1
Moderate Loss	10	< 1
Low Loss	37	< 1
No Data	286866	100

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO TIMBER

This data represents the conditional wildfire risk to commercial timber resources. The risk calculations consider:

- The land manager type, including private, state, U.S. Forest Service, Bureau of Land Management and Tribal entities
- The fire regime
- The timber size class

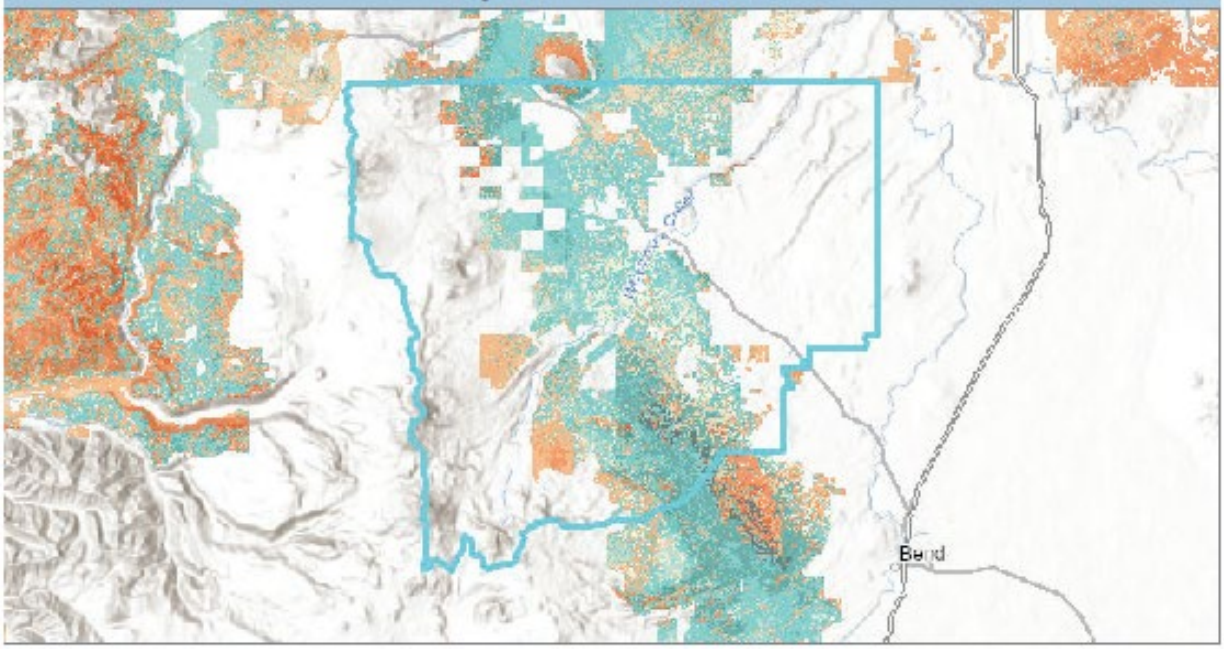
For some fire regime groups and timber size classes, low intensity fire was presumed to benefit commercial timber by reducing competition without damaging commercial value in the residual stand and therefore wildfire risk is characterized in terms of the degree of expected loss and expected benefits. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to Timber



Category	Acres	%*
Very High Loss	300	< 1
High Loss	3541	1
Moderate Loss	11783	4
Low Loss	10261	4
Neutral	8943	3
Low Benefit	6471	2
Moderate Benefit	42871	15
High Benefit	13738	5
Very High Benefit	1168	< 1
No Data	187839	65

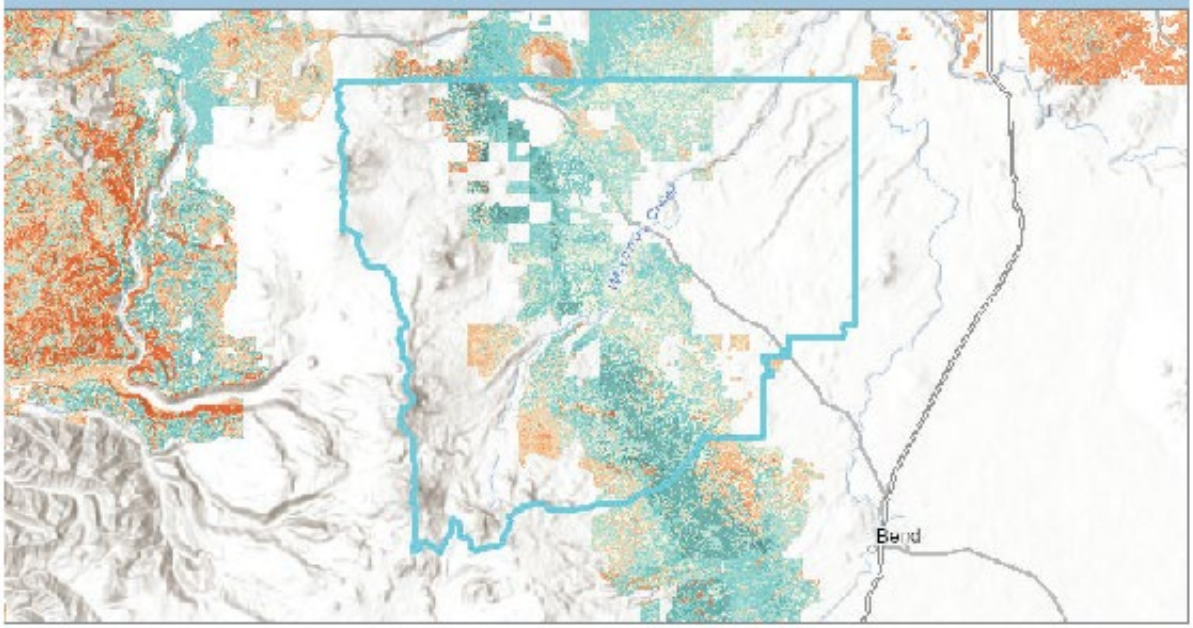
Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Timber



Category	Acres	%*
Very High Loss	166	< 1
High Loss	1369	< 1
Moderate Loss	4137	1
Low Loss	10677	4
Neutral	19723	7
Low Benefit	31368	11
Moderate Benefit	18724	7
High Benefit	11907	4
Very High Benefit	1003	< 1
No Data	187839	65

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

^ Table of Contents

Report generated: September 4, 2025 03:07 PM

Oregon CWPP Planning Tool - Advanced Report

Custom Area

RISK TO WILDLIFE HABITAT

This data represents the conditional wildfire risk to wildlife habitat of four federally-threatened and endangered species: coho salmon, chinook salmon, steelhead trout, bull trout, northern spotted owl, greater sage-grouse, and marbled Murrelet. For some of the terrestrial species, low intensity fire was presumed to benefit feeding and dispersal characteristics and therefore wildfire risk is characterized in terms of the degree of expected loss and expected benefits. This data characterizes risk at any one location relative to risk across the rest of Oregon and Washington. Users may want to access the raw QWRA data and reclassify the risk data so that risk is a relativized within the user-defined area only, rather than being compared to risk across all of Oregon and Washington.

Conditional wildfire risk represents wildfire risk based on the susceptibility of HVRAs and underlying fire intensity information, but does not account for burn probability. In other words, conditional risk is the risk *given that a fire occurs*. Expected risk considers burn probability in addition to the susceptibility of HVRAs and underlying fire intensity information. See the Introduction and Concepts section for more details.

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Expected Risk to Wildlife Habitat

Category	Acres	%*
Very High Loss	8	< 1
High Loss	155	< 1
Moderate Loss	166	< 1
Low Loss	76	< 1
Neutral	23	< 1
Low Benefit	848	< 1
Moderate Benefit	820	< 1
High Benefit	101	< 1
Very High Benefit	6	< 1
No Data	284713	99

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

Conditional Risk to Wildlife Habitat

Category	Acres	%*
Very High Loss	5	< 1
High Loss	52	< 1
Moderate Loss	237	< 1
Low Loss	84	< 1
Neutral	91	< 1
Low Benefit	1346	< 1
Moderate Benefit	317	< 1
High Benefit	70	< 1
Very High Benefit	0	0
No Data	284713	99

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

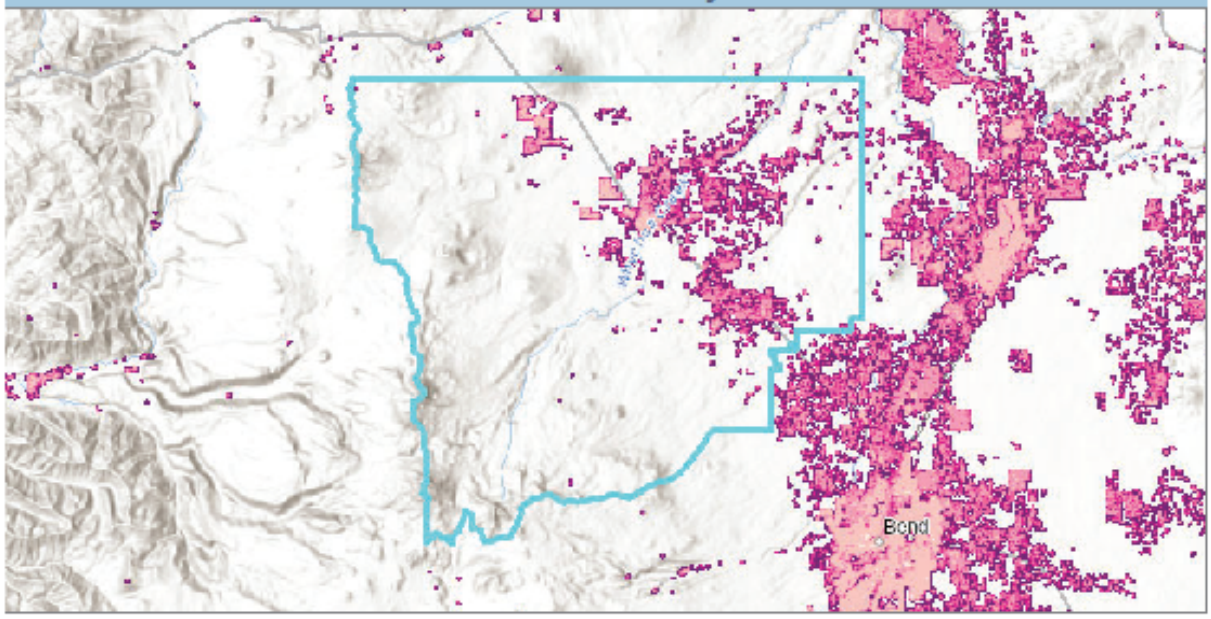
^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

Custom Area

STRUCTURE DENSITY

Structure Density



Category	Acres	%*
1 structure per 40 acres	7885	3%
1 structure per 20 acres	3694	1%
1 structure per 10 acres	5348	2%
1 structure per 5 acres	6338	2%
1 structure per 2 acres	5206	2%
3 structures per acre	1675	< 1%
> 3 structures per acre	0	0%
No Data	256760	90%

Source: 2023 Pacific Northwest Quantitative Wildfire Risk Assessment, US Forest Service

** Values may add up to over 100% due to rounding precision*

Risk to People and Property is represented by the risk to residential and non-residential structures greater than 400 sq. ft.

We mapped the structure density across Oregon using the Statewide Building Footprints of Oregon data, the best available statewide structure location dataset (Williams, 2021), and classified seven density classes ranging from less than one structure per 40 acres to greater than three structures per acre. The footprint of the density layer captures known structure locations and the surrounding 40-acre area. Structure density is an important consideration because it represents the concentration of risk and also because it is relevant to operations and therefore to potential fire effects. For instance, as density increases so does the likelihood of structure-to-structure transmission. Likewise, as density increases it is increasingly dangerous and difficult for fire fighters to protect structures.

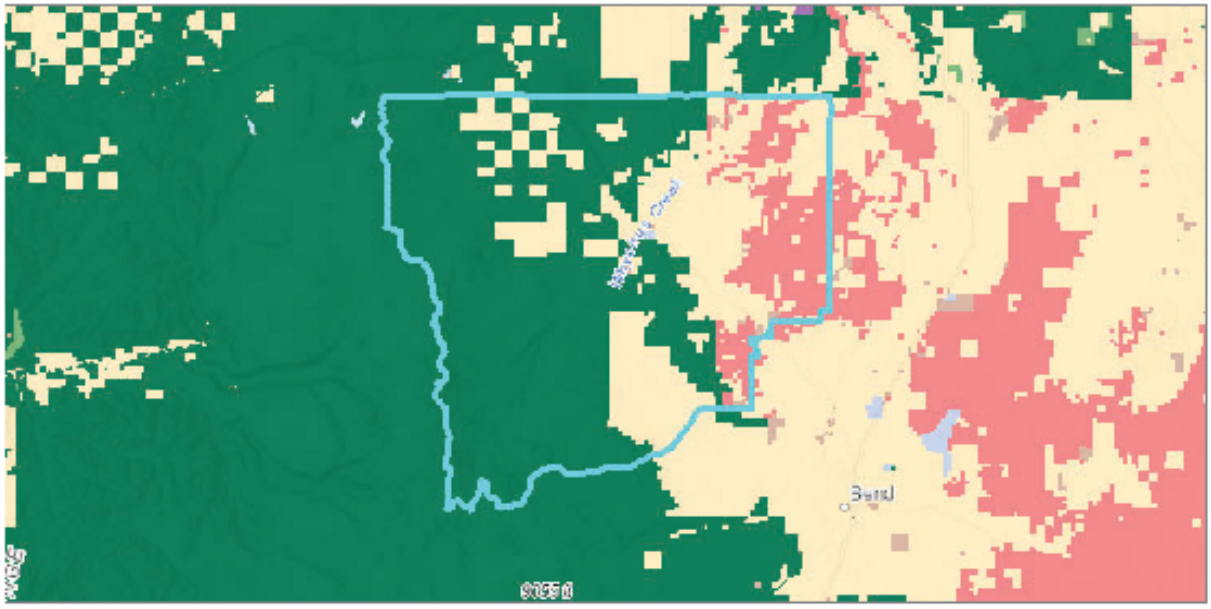
^ Table of Contents

Oregon CWPP Planning Tool - Advanced Report

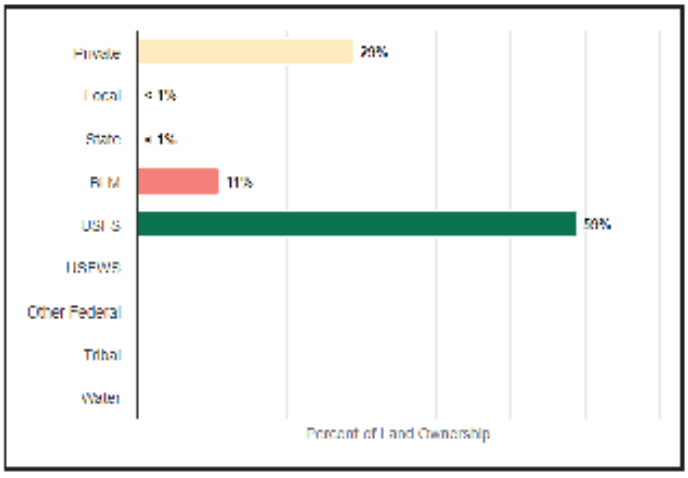
Custom Area

LAND MANAGEMENT

Knowing the land ownership and management in an area is important for hazard planning and awareness when wildfires occur. Oregon has a complete and coordinated wildfire management system between local, private, tribal, state, and federal agencies. These entities participate to fight fire in local areas and throughout the state according to their jurisdictions and protection responsibilities. Agencies differ in land use and overall management, including fire management.



	Major Landowner/Manager	Acres
	Private	84448
	Local	160
	State	1405
	Bureau of Land Management (BLM)	30862
	US Forest Service (USFS)	170035
	US Fish & Wildlife (USFWS)	0
	Other Federal	0
	Tribal	0
	Water	0



Source: Oregon Department of Forestry. 2024

** Values may add up to over 100% due to rounding precision*

Oregon CWPP Planning Tool - Advanced Report

Custom Area

This report we generated by the Oregon CWPP Planning Tool on September 4, 2025:
https://tools.oregonexplorer.info/viewer/cwpp_planning

Primary data source: McEvoy, A., Dunn, C., Rickert, I., & Pyrologix LLC. (2024). 2023 Pacific Northwest Quantitative Wildfire Risk Assessment (Version 1) [Data set]. Oregon State University. https://doi.org/10.7267/br86bc642

Download wildfire risk data:
https://oe.oregonexplorer.info/externalcontent/wildfire/2023_PNW_Quantitative_Wildfire_Risk_Assessment_Data_Access.pdf

The information is being provided as is and without warranty of any kind either express, implied or statutory. The user assumes the entire responsibility and liability related to their use of this information. By accessing this website and/or data contained within, you hereby release the Oregon Department of Forestry, Oregon State University, and all data providers from liability. This institution is an equal opportunity provider.

Glossary of Terms

• **Cohesive Strategy:** In 2009, Congress passed the Federal Land Assistance, Management, and Enhancement (FLAME) Act and called for a National Cohesive Wildland Fire Management Strategy, also known commonly as the Cohesive Strategy to address wildland fire-related issues across the nation in a collaborative, cohesive manner. The Cohesive Strategy was finalized in 2014 and represents the evolution of national fire policy: To safely and effectively extinguish fire, when needed; use fire where allowable; manage our natural resources; and as a Nation, live with wildland fire. The primary, national goals identified as necessary to achieve the vision are: Resilient landscapes: Landscapes across all jurisdictions are resilient to fire-related disturbances in accordance with management objectives. Fire-adapted communities: Human populations and infrastructure can withstand wildfire without loss of life and property. Wildfire response: All jurisdictions participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

• **Crown Fires:** A fire that advances from top to top of trees or shrubs more or less independent of a surface fire. Crown fires are sometimes classed as running or dependent to distinguish the degree of independence from the surface fire.

• **Defensible Space:** Defensible Space, in the context of fire control, is the natural and landscaped area around a structure that has been maintained and designed to reduce wildfire danger by using vegetation that is fire-resistant.

• **Deschutes Collaborative Forest 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).

• **Dispersed Campgrounds & Recreational Sites**: Campsites or recreational sites members of the public use that are outside of a designated campground or developed recreation site. These sites do not have trash removal or facilities such as tables and fire pits. For more information on how to use dispersed recreational sites, visit: http://www.fs.usda.gov/.

• **Fire Adapted Community:** One of the tenets of the Cohesive Strategy. A Fire Adapted is one that acknowledges and takes responsibility for its wildfire risk and implements appropriate actions at all levels. Deschutes County is a pilot community for the Fire Adapted Communities Learning Network. For more information, visit: https://fireadaptednetwork.org.

• **Fire Break:** A gap in vegetation or other combustible materials that act as a barrier to slow or stop the progress of a wildfire.

• **Fire Prone Area:** A geographic area that can support wildfire due to weather and vegetation.

• **Fire Resiliency:** A landscape or geographic location that can withstand wildfire without suffering catastrophic effects, such as loss of life, home loss or damage and/or environmental damage.

• **Fire Return Interval**: The time between fires in a defined area or landscape.

• **Fire Suppression Costs**: The financial figure that is incurred during any operations by firefighting agencies to suppress (or put out), a wildland fire.

• **FireFree:** A local program in Central Oregon that uses ten steps to educate property owners on how to defend their homes from wildfire. FireFree also provides two annual events where homeowners can dispose of debris created from wildfire preparedness activities.

• **Firewise:** A national program that provides a process that empowers neighbors to work together in reducing their wildfire risk. The National Fire Protection The association sponsors the Firewise program.

• **Hazardous Fuel Reduction:** Reducing vegetation that could accelerate a wildland fire.

• **Hazardous Fuels:** Any fuel or vegetation that will sustain or accelerate a wildland fire.

• **High Intensity:** Fire intensity represents that energy releases during various phases of the fire. High intensity fires are damaging to certain vegetation and ecosystems that are not adapted to them. Much of the lower elevation forests in Central Oregon is adapted to lower intensities.

• **Overstory:** Also called the canopy. Made up of the tallest trees that stand over the rest of the plants in the landscape.

• **Pacific Northwest Coordination Center:** The Northwest Interagency Coordination Center (NWCC) is the Geographic Area Coordination Center for the Northwest Region, which includes the States of Oregon and Washington. Located in Portland, OR the NWCC serves as the focal point for interagency resource coordination, logistics support, aviation support and predictive services for all State and federal agencies involved in wildland fire management and suppression in the region. Cooperating agencies include the: Bureau of Land Management, US Forest Service, Oregon Dept of Forestry, US Fish and Wildlife Service, Bureau of Indian Affairs, Washington Dept. of Natural Resources and the National Park Service.

• **Project Wildfire:**
The local county organization is responsible for education of local stakeholders, revisions of Community Wildfire Protection Plans, grant writing, and overall facilitation of wildfire mitigation in Central Oregon.

• **Resilient Landscapes:** A landscape that can recover quickly or repel disturbances that may be a departure from normal circumstances.

• **Silvicultural Treatments:** A planned series of treatments that aid in achieving the goals set forth by a diverse set of values. Silviculture is the practice of controlling the establishment, growth, composition, health and quality of forests to meet diverse needs and values.

• **Stand Dynamics:** The underlying physical and biological forces that shape and change a particular area or forest stand.

• **Structural Ignitability:** Also known as Structural Vulnerability, which refers to the probability of a home igniting during a large wildfire.

• **Structural Vulnerability Factors:** Factors that can increase or decrease a home's probability of igniting during a large wildfire. Examples include roof composition, roof cleanliness, vent covers, deck composition & cleanliness, etc.

• **Thick Bark Pine:** a local species is Ponderosa Pines. Their thick bark makes them a fire-resistant species. The lower elevation forests that were/are dominated by Ponderosa Pines are adapted to low intensity fire that would burn through as often as every ten years.

• **Tree Crowns:** See overstory. Also known as the tree canopy.

• **Understory:** The layer of vegetation beneath the main canopy of a forest.

• **Wildfire Preparedness:** Changing behaviors and/or processes to reduce the impact Wildfire may have on the population.

• **Wildland Fire:** A wildland fire is an uncontrolled fire that occurs in a natural area, such as a forest, grassland, or prairie. Wildfire can be caused by natural events like lightning, but most are started by humans, either accidentally or intentionally.

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

• **Wildland Urban Interface (WUI):** The line, area, or zone where structures and other human development meets or intermingles with undeveloped wildland or vegetative fuels. Describes an area within or adjacent to private and public

property where mitigation actions can prevent damage or loss from wildfire.
Much of Deschutes County is considered Wildland Urban Interface.

During the Fire Contacts

Deschutes County 911 Non-Emergency Line	(541) 693-6911
American Red Cross (Eastern & Central Oregon Chapter)	(541) 382-2142

Web links for Fire and Evacuation Information:

- Central Oregon Fire Information — Central Oregon Fire Info
- Deschutes County Emergency Blog — Deschutes County Emergency Info
- Central Oregon Interagency X Feed — x.com/CentralORFire
- Deschutes County Sheriff's X Feed — x.com/DeschutesSO
- Evacuation Guide — Ready, Set, Go
- Emergency Notifications — Deschutes County Alerts

Post Fire Recovery

Post-Fire Recovery Community Issues to Consider
Following a wildfire, communities may be facing a host of issues. The complexities involved in mid- and long-term strategies for economic, environmental, and social recovery may be daunting. Learning from the experiences of others is helpful. Consider relevant questions such as:

- How soon can or should schools reopen?
- Can debris removal efforts be expedited? If so, what is the cost, and who will pay for it?
- Does the impact warrant inviting the Oregon DOJ Charitable Activities Section regulators to send a team to ensure crooks and scam artists don't take advantage of vulnerable residents?
- Are emergency grants available to restore basic public services?
- What system(s) can be used to equitably and efficiently distribute the donations that a community receives following a catastrophic fire?
- What resources are available for small businesses attempting to reestablish, and/or do new programs need to be created?
- How will tourism be affected?

Deschutes County Long-Term Recovery Efforts

The Deschutes County Sheriff's Office Emergency Management Team, working with residents and community stakeholders, is developing a Disaster Recovery Framework. The framework is part of a suite of plans that address various elements of emergency management. It aims to establish guidelines for how the Deschutes County Community will work together to restore,

rebuild, and reshape the physical, social, economic, and natural environment in the months and years following a disaster or emergency.

After the Fire: Resources for Affected Residents

Fire Management Assistance (FMAG) is available to States, local and tribal governments, for the mitigation, management, and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster. The Fire Management Assistance declaration process is initiated when a State submits a request for assistance to the Federal Emergency Management Agency (FEMA) Regional Director at the time a "threat of major disaster" exists. The entire process is accomplished on an expedited basis, and a FEMA decision is made in a matter of hours.

The Fire Management Assistance Grant Program (FMAGP) provides a 75 percent Federal cost share, and the State pays the remaining 25 percent for actual costs. Before a grant can be awarded, a State must demonstrate that total eligible costs for the declared fire meet or exceed either the individual fire cost threshold, which applies to single fires, or the cumulative fire cost threshold, which recognizes numerous smaller fires burning throughout a State. Eligible firefighting costs may include expenses for field camps; equipment use, repair and replacement; tools, materials and supplies; and mobilization and demobilization activities.

FEMA Individual Assistance (FEMA IA) has created a set of tools to help those facilitating their community's recovery. Community Services Programs deliver a variety of services to assist in disaster recovery. Disaster Housing Resources provides links to access information on multiple disaster housing programs and strategies. FEMA Voluntary Agency and Donations Coordination deliver information, support and guidance during disaster recovery. The National Emergency Child Locator Center and National Mass Evacuation Tracking System are both tracking databases that can be activated during disasters and assist in reunifying family members. The National Shelter System is a database that supports the agencies responsible for Mass Care and Emergency Assistance.

FEMA Public Assistance (FEMA PA) mission is to help State, Tribal, and local governments, and certain types of Private Nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President.
Through the PA Program, FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations. The PA Program also encourages the protection of these damaged facilities from future events by aiding for hazard mitigation measures during the recovery process. The Federal share of assistance is not less than 75% of the eligible cost for emergency measures and permanent restoration. The grantee (usually the State) determines how the non-Federal share (up to 25%) is split with the sub-grantees (eligible applicants).

Small Business Disaster Loans through the Small Business Administration (SBA). SBA provides low-interest disaster loans to businesses of all sizes, private non-profit organizations,

homeowners, and renters. SBA disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.
Oregon VOAD (Voluntary Organizations Active in Disaster) is a group of faith-based, community service organizations with disaster relief roles related to short and long-term recovery from disasters. Functions include but are not limited to damage assessment, cleanup, building repair, donations management, childcare, clothing, communication, counseling, disaster welfare inquiry, financial assistance, food, human relations, mass care, sheltering, transportation, volunteer staffing, warehousing and bulk distribution. ORVOAD coordinates disaster planning with member agencies to ensure the reduction of duplication and an increase in the effective delivery of services.

The United States Department of Agriculture (USDA) may allocate funding to the **Natural Resources Conservation Service (NRCS)** and the **Farm Service Agency (FSA)** to assist landowners with recovery efforts after a wildfire. Program eligibility requirements and application period announcements are broadcast when funding is made available. Interested landowners should contact the Oregon Department of Forestry or the Deschutes Soil and Water Conservation District.

American Red Cross Casework: Providing Emergency Assistance trains Red Cross caseworkers how to conduct effective client interviews and provide appropriate assistance to help meet a client's immediate disaster-caused or disaster-aggravated needs.

Oregon Division of Financial Regulation: Consumer advocates can help you understand your insurance coverage and navigate the claims process. A helpful resource and contact information can be found at https://dfr.oregon.gov/insure/home/Documents/5062-fire.pdf.

Fire Recovery Safety Tips

REMEMBER – use caution and good judgment. Hazards may still exist, even though the fire is controlled.

ELECTRICAL

Electrical Safety Facts

General: An important part of the disaster recovery is hazard recognition. Should you come across damaged or fallen power poles or lines, contact your local electrical power authorities. DO NOT TOUCH THE DOWNED WIRES. In the cleanup area, be especially careful when cutting trees and operating heavy equipment around power lines. Vegetation and power poles may have lost stability due to fire damage.

If a power line or pole should fall next to you while working in the area, *do not walk – hop out of the area.* (Using this technique, you will be less likely to be a conductor of electricity).

Electricity is always trying to go somewhere. It goes easily through conductors; it does not go easily through non-conductors.

- Conductors
- Non-Conductors
- Metal
- Rubber
- Water
- Glass
- Wet Things
- Plastic
- Things In Water (including animals/pets)

One of the most important fixtures in the conduction of electric current are utility poles. The fire or fire suppression actions may have dislodged or broken some of these poles, causing the wires to sag or break, resulting in extremely hazardous conditions. Do not touch anything at the scene.

Trees can also be dangerous conductors of electricity. When a tree falls or grows into contact with power wires, the electric power diverts and finds a path to the ground through the branches and the trunk. Anyone who encounters these trees is subject to tragic consequences, since electric power can easily jump from the tree to the person.

Electrical Safety Tips

• Do not overload circuits; don't operate several large appliances at the same time on the same circuit

• Do not use extension cords to plug in many items on one outlet.

• Turn off appliances when you finish using them. Provide adequate air circulation around all appliances to prevent over-heating. Keep appliances clean, repaired and serviced.

• Check wires and plugs regularly. Replace worn or frayed wires. Do not run cords under carpets or across doorways.

• Be careful when replacing fuses or breakers. Keep the area near the circuit box dry and turn the main switch off before changing the fuse/breaker.

• Temporary lines should be removed from service.

Electrical Locations to Avoid

• Electrical meters and service lines coming into the home or other outbuildings.

• Any power supply line which appears to sag, show bare wire, or have insulation missing.

• Secured power sub-stations or any area identified as high voltage.

• Downed power lines.

Emergency Procedures for an Electrical Fire

• Call the fire department.

Shut off the power supply at the breaker if possible.

Restoring Electric Power

If, upon returning to your residence, there is no electrical power, please check to make sure the main breaker is on. If the breakers are on and power is still not present, please call to report the power outage to your local electrical power authorities.

Reporting problems like a down or broken wire will speed up the process of power restoration.

• Stand off to one side of the breaker box when turning on the main breaker. Do not stand directly in front of the box.

• If any smells of hot electrical insulation or sparking occur, turn off the breaker immediately and call an electrician.

• If electrical lights or appliances appear brighter than normal, turn off the main breaker. The service entrance needs to be checked.

Change a Fuse

Try to find the cause of the blown fuse and correct it by disconnecting the defective appliance or appliances causing the overload or short circuit. Shut off the main power switch when you change the fuse.

- Do not replace fuses with a higher amp rating fuse than you removed.
- Turn on the main switch to restore the power.
- If the fuse blows again, leave it alone and contact a certified electrician. Other problems may exist and should be investigated to remove the possibility of an electrical fire.

To Reset a Circuit Breaker

Try to find the cause of the overload or short circuit and correct it by disconnecting the defective appliance or appliances. Turn the switch to “on” to reset and restore power. If breaker trips again leave it alone and contact a certified electrician. Other problems may exist and should be found to remove the possibility of an electrical fire.

Special Information on Fuses & Circuit Breakers

Fuses and circuit breakers shut off the current whenever too much current tries to flow through a wire because of:

• A short circuit, possibly caused by a bare wire touching the ground.
• Overloading, possibly caused by too many lights or appliances on one circuit: or
• By defective parts in an appliance.

Know where the main circuit or fuse box is in your house. Be sure you can locate the main switch; it controls all the power coming into the house and is usually inside the circuit box. In some cases, however, it may be located outside of the house. Fuse or circuit boxes generally are labeled to designate which area of the house the circuits or fuses serve.

DRINKING WATER

Restoring Water Systems

Unless it was impacted by a fuel spill, the fire should not have affected wells at undamaged homes. If your house was damaged, your water system may potentially have become contaminated with bacteria due to loss of water pressure. In this case it is recommended that the well is disinfected, and the water be tested before consumption. To disinfect your water system, pour ½ - 1 cup of chlorine bleach inside the well casing and turn on all faucets until a chlorine scent in noticed. Allow the chlorine solution to remain in the system overnight. The following morning, open all faucets and flush the system until free of chlorine smell.

If you have a public use well or water system, contact the Deschutes County Public Health Department for specifics on testing prior to consumption of any water. The Drinking Water Program administers and enforces drinking water quality standards for approximately 175 public water systems within Deschutes County. More information can be found on their website at https://www.deschutes.org/health/page/drinking-water

Oregon implements drinking water protection through a partnership of DEQ (Department of Environmental Quality) and the OHA (Oregon Health Authority). The program provides information about drinking water and helps Oregonians get involved in protecting drinking water quality. In general, for questions regarding groundwater sources, contact OHA. Contact DEQ for questions about protecting public water supplies using surface water. For questions about regulations, water quality, treatment plants, and testing, contact OHA, the primacy agency for the implementation of the federal Safe Drinking Water Act in Oregon is.
OHA's webpages provide the most useful info for consumers about drinking water protection: https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/Pages/index.aspx

Information specifically about private domestic wells is here: https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/SOURCEWATER/DOMESTICWELLSAFETY/Pages/index.aspx

SOLID WASTE

Removing Debris

Cleanup of your property can expose you to potential health problems from hazardous materials. Wet down any debris to minimize health impacts from breathing dust particles. The use of a two-strap dust particulate mask with nose clip and coveralls will provide the best minimal protection. Leather gloves should be worn to protect your hands from sharp objects while removing debris. Hazardous materials such as kitchen and bathroom cleaning products, paint, batteries, contaminated fuel and damaged fuel containers must be handled properly. Contact your local County Officials for specific handling restrictions and disposal options.

All hazardous materials should be labeled as to their contents if known.

HEATING FUELS

Checking Propane Tanks

Propane suppliers recommend homeowners contact them for an inspection prior to reusing the system. If the fire burned the tank, the pressure relief valve probably opened and released the contents of the tank. Tanks, brass and copper fittings, and lines may be heat-damaged and unsafe. Valves should be turned off and remain closed until the propane suppliers inspect the system.

Checking Home Heating Oil Tanks

Heating oil suppliers recommend homeowners contact them for an inspection prior to reusing their system. The tank may have shifted or fallen from the stand and fuel lines may have kinked or weakened. Heat from the fire may have caused the tank to warp or bulge. Non-vented tanks are more likely to bulge or show signs of stress. The fire may have loosened or damaged fittings and filters. If the tank is intact and heating oil remains in the tank, the heating oil should still be good. If you have questions on the integrity of the tank, fuel lines, tank stand, or the fuel, or need assistance in moving the tank or returning it to service, contact your fuel supplier.

MISCELLANEOUS SAFETY AWARENESS

Ash Pits

Holes created by burned trees and stumps create ash pits, which are full of hot ashes. Mark them for your safety, as they can stay hot for many days following the fire, causing serious burns. Warn your family and neighbors, especially children. Tell them to watch for ash pits and not to put hands or feet in these holes—they are hot!

Evaluation of Trees Damaged by Fire

The following information will assist you in evaluating any trees that have been scorched or burnt by the fire. Identification of the type of tree affected is important and can easily be done. Two basic types of trees exist in this area: deciduous and evergreen. Deciduous trees are broad leaf trees that lose their leaves in the fall.

In this area we have a variety of deciduous tree species. Evergreen trees have needles, and, in this area, we mainly have Ponderosa Pine, Lodgepole Pine and Western Juniper.

First: visually check the tree stability. Any tree weakened by fire may be a hazard. Winds are normally responsible for toppling weakened trees. The wind patterns in your area may have changed because of the loss of adjacent tree cover. Seek professional assistance before felling trees near power lines, houses or other improvements.

If the tree looks stable:

• Visually check for burnt, partially burnt or broken branches and treetops that may fall.

• Check for burns on the tree trunk. If the bark on the trunk of the tree has been burned off or scorched by very high temperatures surround the tree's circumference, the tree will not survive. This is because the living portion of the tree (cambium) was destroyed. The bark of the tree provides protection to the tree during fire. Bark thickness varies based upon tree species: check carefully to see if the fire or heat penetrated the bark. Where fire has burnt deep into the tree trunk, the tree should be considered unstable until checked.

• Check for burnt roots by probing the ground with a rod around the base of the tree and out away from the base several feet. The roots are generally six to eight inches below the surface. If you find that the roots have been burned you should consider this tree very unstable; it could easily be toppled by wind.

If the tree is scorched:
• A scorched tree is one that has lost part or all its needles. Leaves will be dry and curled. Needles will be light red or straw colored. Healthy deciduous trees are resilient and may possibly produce new branches and leaves, as well as sprouts at the base of the tree. Evergreen trees, particularly long-needled trees, may survive when partially scorched. An evergreen tree that has been damaged by fire is subject to a bark beetle attack. Please seek professional assistance concerning measures for protecting evergreen trees from bark beetle attack.

Residual Smoke in Fire Interior

Smoke may be present on the interior of the fire for several days following containment. This occurs because of stumps, roots, and other surface materials being exposed to changing temperatures and wind conditions. Smoke volume from these materials may fluctuate depending on weather conditions. This activity should not pose a risk, and smoke will continue to dissipate until materials are fully consumed or extinguished by fire crews or weather.

Flooding Risk

With the recent large high intensity wildfires in Oregon certain locations within burned areas, or downhill and downstream of burned areas are much more susceptible to flash flooding and debris flows. Even areas that are not traditionally flood prone are at risk due to changes to the landscape caused by wildfire. Rainfall that would normally be absorbed will run off extremely quickly after wildfire, as burned soil can be as water repellant as pavement. As a result, much less rainfall is required to produce a flash flood. A good rule of thumb is, if you can look uphill from where you are and see an area burned by wildfire, you are at risk.

Preparing for Flooding

In the event of moderate to heavy rainfall, do not wait for a flash flood warning to take steps to protect life and property. Thunderstorms that develop over the burned area may begin to produce flash flooding and debris flows before a warning can be issued. If you are in an area vulnerable

to flooding and debris flows, plan and move away from the area. There may be very little time to react once the storms and rain start.

- Have an evacuation/escape route planned that is least likely to be impacted by Flash Flooding or Debris Flows.
- Have an Emergency Supply Kit available.
- Stay informed before and during any potential event, knowing where to obtain National Weather Service (NWS) Outlooks, Watches and Warnings via the NWS Pendleton Website, Facebook, Twitter, or All Hazards NOAA Weather Radio.
- Be alert if any rain develops. Do not wait for a warning to evacuate should heavy rain develop.
- Call 911 if you are caught in a Flash Flood or Debris Flow.
- Contact local officials for additional risk information and potential mitigation efforts. Contact the US Army Corps of Engineers regarding their Silver Jackets Program.