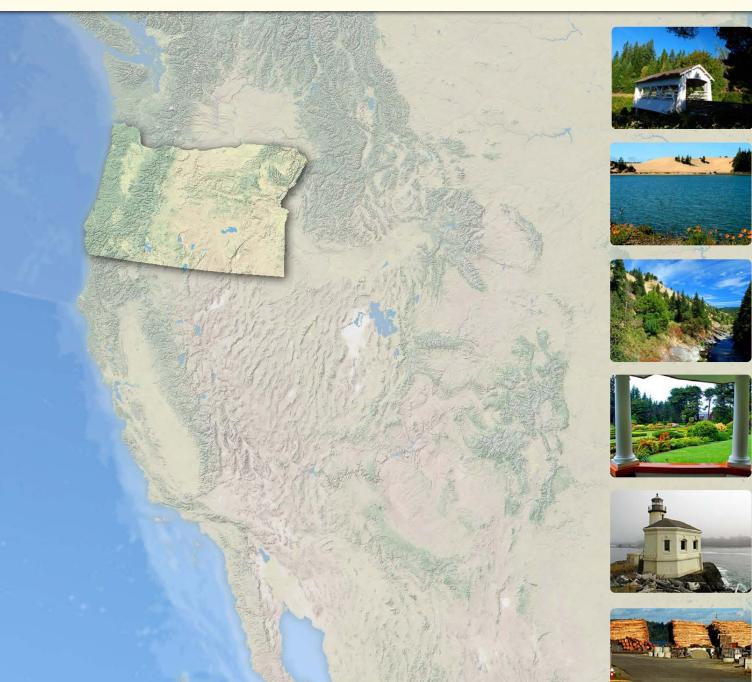


Coos County Community Wildfire Protection Plan

Prepared for: Coos County





Coos County Community Wildfire Protection Plan

Report for:

Coos County Board of Commissioners

Coos County 250 N. Baxter Coquille, OR 97423

Prepared by:

Oregon Partnership for Disaster Resilience and the Community Planning Workshop

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Risk Assessment and Geographic Information Systems (GIS) Maps

Jim Wolf, Independent Wildfire Planning Analyst, conducted the Coos County CWPP Wildfire Risk Assessment and developed the maps utilized in this plan. The contributions from Mr. Wolf were essential in illustrating the threat, extent and potential losses associated with wildfire in Coos County.

Professional Wildfire Planning Consultants

Kathy Lynn, Wildfire Planning Process Specialist, provided planning process consulting to the graduate research team as well as invaluable plan review support.

Earl Burke, Wildfire and Fuels Management Specialist, was a key liaison to the project Steering Committee, served as a key source of local knowledge to the graduate research team throughout the planning process and provided invaluable plan review.

In Memory

This plan is dedicated to the memory of Coos County Commissioners Nikky Whitty and Andy Jackson whose service and dedication to Coos County will not be forgotten.

About the Community Service Center

The Community Service Center (CSC), a research center affiliated with the Department of Planning, Public Policy and Management at the University of Oregon, is an interdisciplinary organization that assists Oregon communities by providing planning and technical assistance to help solve local issues and improve the quality of life for Oregon residents. The role of the CSC is to link the skills, expertise, and innovation of higher education with the transportation, economic development, and environmental needs of communities and regions in the State of Oregon, thereby providing service to Oregon and learning opportunities to the students involved.

About the Oregon Partnership for Disaster Resilience

The Oregon Partnership for Disaster Resilience (OPDR) is a coalition of public, private, and professional organizations working collectively toward the mission of creating a disaster resilient and sustainable state. Developed and coordinated by the Community Service Center at the University of Oregon the OPDR employs a service learning model to increase community capacity and enhance disaster safety and resilience statewide.

About the Community Planning Workshop

Community Planning Workshop (CPW) is one of the core programs of the University of Oregon's Community Service Center (csc.uoregon.edu). Established in 1977, CPW provides students the opportunity to address planning and public policy problems for clients throughout Oregon. Students work in teams under the direction of faculty and Graduate Teaching Fellows to develop proposals, conduct research, analyze and evaluate alternatives, and make recommendations for possible solutions to planning problems in rural Oregon communities.

Coos County Community Wildfire Protection Plan

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Executive Summary

In April of 2010, the Coos County Board of Commissioners retained the service of the University of Oregon's Community Service Center (CSC) to develop this Community Wildfire Protection Plan (CWPP). The county developed this plan in an effort to increase community knowledge about wildfire and minimize the risk of wildfire in Coos County.

Purpose of This Plan

The purpose of the Coos County CWPP is to establish a five-year strategic vision for long-term wildfire risk reduction activities and public outreach in Coos County. The plan outlines Coos County's wildfire mitigation goals, strategies, and activities and highlights other relevant plans, including: land use, natural resource, capital improvement, and emergency operation plans. The Coos County CWPP addresses the requirements of the 2003 Healthy Forests Restoration Act (HFRA), as well as other relevant federal and state wildfire policies. Once adopted, the Coos County CWPP will serve as a supplement to the wildfire chapter of the Coos County Natural Hazard Mitigation Plan (NHMP). The requirements for an HFRA compliant CWPP are:

- **Collaboration:** Local and state government representatives, in consultation with federal agencies and other interested parties, must collaboratively develop a CWPP.
- **Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect at-risk communities and essential infrastructure.
- **Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures.

Methodology

To complete the CWPP, the planning team organized the process into the following four stages: (1) Project Initiation, (2) Risk Assessment, (3) Community Engagement and (4) Plan Writing and Adoption. To develop the CWPP, the CSC team convened a project steering committee, reviewed relevant policies, conducted public outreach through a household survey, stakeholder interviews and three community forums, and compiled the information into a final plan. In addition, the CSC retained the services of technical wildfire planning experts to complete a wildfire risk assessment

and assist with the planning process, community outreach and document review.

Risk Assessment

The Wildfire Risk Assessment prioritizes risk according to four community identified values: Life, Infrastructure, Drinking Water and Forests. The assessment identified the following assets as being at High or Very High threat to wildfire:¹

Priority
Very High
High
High
High

Table i.1: Wildfire Threat Assessment Summary

Source: Coos CWPP Risk Assessment

In addition to identifying threats to specific assets, the Risk Assessment also resulted in a list of priority project areas. Table i.2 presents a summary of identified projects:

¹ Refer to the Coos County CWPP Risk Assessment for complete, prioritized asset lists for each of the four values at risk.

Table i.2: Priority Fuel Reduction Projects Summary

Project Name	Description/objective
North	
Golden & Silver Falls	Improve access and communication
Coquille Indian Reservation	Fuels reduction project to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed
Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed
Fairview	4 Corners, defensible space fuels project to large power substation. Evacuation
Shutter Creek	Use inmate crews to treat fuels adjacent to camp and limited access to summer cabins.
Southeast	·
Signal Tree Com Site	Treat fuels to reduce the threat of wildfire to 911 communications
Slide Creek Com Site	Treat fuels to reduce the threat of wildfire to 911 communications
Bridge	Education and defensible space to reduce threat to community and watershed
Powers	Education and defensible space to reduce threat to community and watershed
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)
Southwest	
Bennett Butte:	Treat fuels to reduce the threat of wildfire to 911 communications
Resort Area (W. of 101) golf course	Significant amount of gorse, likely treat with defensible space and fuels.
Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed
Southern Coast	Remove gorse all along southern coast
Additional Projects Iden Myrtle Point Coast: General	tify by Community Members During Community Forums Egress of remote homes west of Myrtle Point Remove gorse along coast
Coast: South of Cape Arago	Gorse removal along coast south of Cape Arago
Coast: Seven Devils to	Gorse treatment from Old Seven Devils Road to Whisky
	Run Road

Source: Coos CWPP Risk Assessment

Plan Mission

The mission of the Coos County Community Wildfire Protection Plan is to prepare and protect the people, property, and resources of Coos County from wildfire through education, prevention, mitigation and collaboration.

Plan Goals

The Coos CWPP planning process resulted in a set of goals that the plan Coordinating Body will use to further the county's wildfire protection objectives and achieve the plan mission. Each goal is supported by a set of objectives and actions that the county will need to take in order to accomplish each goal.

Goal 1: Wildfire Safety and Awareness

Increase knowledge about wildfire safety among seasonal and full-time county residents that live, work or recreate within the Coos County WUI zone.

Goal 2: Hazard Assessment & Inventory

Refine the wildfire hazard assessment to ensure that new and enhanced data is being used to prioritize wildfire risk reduction activities in Coos County.

Goal 3: Fuels Reduction

Reduce hazardous fuels in the WUI on public and private land.

Goal 4: Interagency Communication

Increase coordination between local, state and federal agencies to address wildfire risk reduction and response.

Goal 5: Noxious Weed Control

Reduce the occurrence of and rate of spread of noxious weeds in Coos County.

Plan Implementation and Maintenance

Plan implementation is a critical component of the CWPP and is the foundation of Coos County's efforts to reduce risk in the WUI. The CWPP action items dictate that regular review and update of the CWPP occurs. The Plan Coordinating Body will be responsible for implementing, maintaining and updating the CWPP. The Coordinating Body will meet on a quarterly basis to oversee implementation of the action items presented in the CWPP.

Responsibility for wildfire awareness and preparedness is shared by many public and private entities. Residents and businesses will play in intergral role in reducing the threat of wildfire in Coos County. Onging bublic outreach efforts on the part of agencies must be matched with the ability, willingness, and resources to act on the part of the community at large.

Chapter 1: Introduction

Overview

Coos County has suffered several catastrophic wildfires throughout its history. These fires, along with other recent wildfires in Oregon and across the Western United States, have resulted in increased public awareness about the potential loss of life, homes, critical infrastructure, and other vulnerable community assets, as well as natural resources such as water and forests due to wildfire. To help increase community knowledge about wildfire and minimize the risk of wildfire in Coos County, the County collaborated with key agencies and community stakeholders to develop this Community Wildfire Protection Plan (CWPP).

This chapter addresses the following: the context of wildfire, the purpose of the plan, plan development process, CWPP mission and goals, key stakeholders, and plan organization.

Wildfire Context

Wildfires are a natural and an important component of a healthy forest ecosystem. However, since the 1990's, there has been evidence of, and increasing concern regarding, the threat of catastrophic wildfires throughout the United States. The increase in the number and frequency of large wildfires across the west is due to a number of factors, including expanding rural populations, increasing development and urban encroachment in forested areas, an intensifying buildup of forest fuels, and the spread of flammable invasive plant species over the past decade.¹ In Coos County, existing development near wildland areas combined, with the spread of gorse and other flammable plant species throughout the county, is increasing the level of wildfire risk. Wildfires in the wildland/urban interface (WUI) pose serious threats to life and endanger property, critical infrastructure, water resources, and valued commercial and ecological forest resources. The WUI is an area within or adjacent to an at-risk community identified in a Community Wildfire Protection Plan (CWPP). In the absence of a CWPP, the Healthy Forest Restoration Act (HFRA) limits the WUI to within 1/2 mile of an at-risk community's boundary or within 1¹/₂ miles when mitigating circumstances exist, such as sustained steep slopes or geographic features aiding in creating a firebreak.²

As development encroaches into wildland settings, the risk of wildfire in a community rapidly increases. New residents moving into remote locations may not have appropriate levels of homeowner's insurance or adequate fire protection services available to meet their structural protection needs.

¹ Oregon Department of Forestry website: http://www.oregon.gov/ODF/FIRE/cwpp_success.shtml

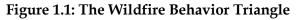
² Oregon Department of Forestry Communities at Risk Assessment (2006).

http://www.oregon.gov/ODF/FIRE/CAR.shtml#Statewide_Risk_Assessment_Methodology

Additionally, decades of fire suppression and an increase in periods of hot, dry weather have led to the buildup of dense fuel (dry brush and other flammable organic matter) in forests, which increases the risk of wildfire. According to the Oregon Natural Hazard Mitigation Plan (NHMP) wildfire chapter, over 2,500 wildland fires ignite on protected forestlands in Oregon every year. The Oregon NHMP wildfire chapter goes on to state, "ODF and USFS statistics show that approximately two-thirds of these fires are caused by human activity; the remainder result from lightning."³

Wildfire Behavior

A wildfire is an uncontrolled fire that burns on forestland, rangeland or other wildland areas and which damages, or threatens to damage, public and private forest resources, property or structures.⁴ Ignition of a wildfire may occur naturally from lightning or from human causes such as debris burns, arson, careless smoking, recreational activities, or from an industrial accident. Once started, three primary conditions (known commonly as the "Wildfire Behavior Triangle") affect the fire's behavior: (1) fuel, (2) topography, (3) and weather. Figure 1.1 graphically illustrates the components that make up the Wildfire Behavior Triangle.





Source: http://www.srd.alberta.ca/Wildfire/WildfirePreventionEnforcement/WildfireBehaviour.aspx

Forest managers classify fuel by volume and type; fuel is the material that feeds a fire. Due to the prevalence of conifer, brush and rangeland fuel types, Oregon is vulnerable to largescale wildfires. Topography influences the movement of air and directs the course of a fire. Slope and hillsides, for example, are key factors in fire behavior. Notably, hillsides with steep topographic characteristics can also be desirable areas for residential development, especially along the Oregon coast. Weather is the most variable factor affecting wildfire behavior. High-risk areas in Oregon share a hot, dry season in late summer and early fall with high temperatures, low humidity and wind.

³ http://csc.uoregon.edu/opdr/sites/csc.uoregon.edu.opdr/files/OR-SNHMP_fire_chapter_feb2009_0.pdf; accessed June 16, 2011

⁴ http://www.oregon.gov/ODF/FIRE/SB360/sb360_glossary.shtml; accessed June 14, 2011

History of Wildfire in Coos County

The Community Service Center (CSC) team adapted the wildfire history section from the July 2010 Coos County NHMP wildfire chapter.⁵ Since 1917, Coos County has experienced 68 large-scale (i.e. fires over 10 acres in size) fires. Of those 68 fires, seven exceeded 1,000 acres, one exceeded 6,000 acres, and two exceeded 30,000 acres in size.⁶

*The following is a partial list of significant wildfires that have occurred in Coos County since the middle part of the 1800's:*⁷

- 2005: Camas Creek wildfire burned 178 acres.
- August-Oct. 1999: Wildfire in Coos County, no specific details.
- **1966:** Wildfire burns 1,636 acres of state forest in Coos County.
- **1965:** Wildfire burns 1,860 acres of state forest.
- **1952**: Williams River fire burns 2,679 acres.
- June 1945: Coos Bay waterfront fire burns 689 acres.
- **Sept. 1936:** Bandon Wildfire, 146,000 acres burned. Bandon destroyed, \$1,000,000 in damages. Wildfire fueled primarily by the large amount of gorse that surrounded the community.
- **Sept 1936:** Temperatures reach 90 degrees and humidity drops to 6%, sparking wildfires throughout Coos and Curry Counties.
- **1921**: Front Street fire in Marshfield, 23 businesses and 4 residences destroyed.
- **1918:** Coquille destroyed by fire.
- **1914:** Three-block area in Bandon destroyed by fire. Damage estimated at close to half a million dollars.
- 1892: Coquille's Front Street business district destroyed by fire.
- **Sept. 1872:** Fire rages from South Slough, burning as far east as Coalbank Slough and north to Coos Bay.
- **1868:** Coos Bay Fire. 90% of Elliott State Forest burns. Fire is stopped when it reaches the ocean after burning through 296,000 acres.

In recent decades, wildfires have had a significant impact on communities elsewhere in Oregon. In 1990, Bend's Awbrey Hall Fire destroyed 21 homes, causing \$9 million in damage and costing over \$2 million to suppress. The 1996 Skeleton Fire in Bend burned

⁵ Between January of 2009 and June of 2011, ODF fire statistics show 56 fires totaling roughly 45 acres burned in Coos County (http://www.odf.state.or.us/DIVISIONS/protection/fire_protection/fires/FIRESlist.asp). As such, no significant updates to the wildfire history have been reported in the past year.

⁶ 2008 Coos County Hazard Analysis. Available from Coos County Emergency Management.

⁷ Hazard History gathered from Coos Forest Protective Association.

over 17,000 acres and damaged or destroyed 30 homes and structures. Statewide that same year, 218,000 acres burned, destroying 44 homes and threatening more than 600. The 2002 Biscuit fire in southern Oregon affected over 500,000 acres and cost \$150 million to suppress.⁸ For more information on the history of wildfire in Oregon, refer to the wildfire chapter in the 2009 Oregon Enhanced Natural Hazard Mitigation Plan.

Purpose of the Plan

The purpose of the Coos County CWPP is to establish a strategic vision for long-term wildfire risk reduction activities and public outreach in Coos County. The plan includes Coos County's wildfire mitigation goals, strategies, and activities and highlights other relevant plans and partnerships, including land use, natural resource, capital improvement, and emergency operation plans. Additionally, the Coos County CWPP addresses the requirements of the Healthy Forests Restoration Act (HFRA), as well as other relevant federal and state policies. Once adopted, the Coos County CWPP will serve as a supplement to the wildfire chapter of the Coos County Natural Hazard Mitigation Plan (NHMP).

Wildfire Policy Framework

In recent years, federal and state legislative wildfire initiatives have focused on preventing catastrophic fires through fuel treatments, community outreach, and the development of other wildfire mitigation efforts. At the national level, Congress passed and signed into law the HFRA in 2003. This legislation emphasizes the role of local communities in developing and promoting wildfire mitigation projects that reduce hazardous fuels within the WUI boundary through collaboration with federal and state land management agencies. Title 1 of the HFRA conceptualized a Community Wildfire Protection Plan (CWPP) to serve as a vehicle to facilitate this collaboration of local communities and government agencies. Refer to Chapter 3 of the Coos County CWPP – Existing Plans, Policies, and Programs – for additional information.

What is a CWPP?

A CWPP is a community wildfire mitigation strategy developed through collaboration among local, state, and federal agencies. HFRA requires that the following entities agree upon the final CWPP document: (1) the local government (i.e. Coos County), (2) local fire departments/protection districts, and (3) the State entity responsible for forest management (i.e. Oregon Department of Forestry (ODF)). Throughout the planning process, these groups must consult with local representatives from the United States Forest Service (USFS), the Bureau of Land Management (BLM), and other interested parties or persons (e.g. watershed council members, emergency managers, property owners, etc.).

There are three minimum requirements of a CWPP: 9

⁸ Coos County Natural Hazards Mitigation Plan, May 2010, p. WS-1.

⁹ Healthy Forest Restoration Act, 2003.

- **Collaboration:** Local and state government representatives, in consultation with federal agencies and other interested parties, must collaboratively develop a CWPP.
- **Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect at-risk communities and essential infrastructure.
- **Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures.

Plan Development

In early 2010, Coos County representatives initiated the development of a CWPP in response to community concern and understanding that the risk of wildfires is rapidly increasing throughout Oregon. The Coos County Board of Commissioners determined that planning for and actively mitigating these risks is essential to the ecological, economic, and social health of communities in Coos County. Development of the Coos County CWPP can be broken down into four phases: (1) Project Initiation, (2) Risk Assessment, (3) Public Outreach and Collaboration, (4) and CWPP Adoption. The following sections briefly describe each phase of the planning process in more detail.

1. Project Initiation

In April of 2010, Coos County hired the Oregon Partnership for Disaster Resilience (OPDR) and Community Planning Workshop (CPW) (two programs within the University of Oregon's Community Service Center (CSC)¹⁰) to facilitate development of a CWPP. Specifically, the County asked the CSC to direct a collaborative planning process with county, state, and federal partners that incorporated strategies and priorities for the protection of life, infrastructure and natural resources in Coos County. Once hired, CSC staff met with representatives of Coos County and other stakeholders to clarify the goals and objectives of the project, to refine the work plan, and to compile a list of local decision makers, federal agencies, and other stakeholders to make up the Coos County CWPP Steering Committee.

The Coos County CWPP Steering Committee included individuals representing the following entities:

- Oregon Department of Forestry
- Coos Bay District Bureau of Land Management
- U.S. Forest Service
- Coos Forest Protective Association
- Oregon State Fire Marshals
- Coos County Emergency Management

¹⁰ The CSC is a university based community and regional planning resource center that provides comprehensive technical planning and public process services to organizations and agencies throughout Oregon while educating and training graduate level students through high quality, community-based service learning.

- Pacific Timber
- Coos County Board of County Commissioners
- Coos Watershed Association

The Steering Committee and the CSC worked collaboratively, engaging Coos County citizens and elected officials, to develop a strategic vision for long-term wildfire risk reduction and outreach in Coos County.

2. Risk Assessment

A risk assessment serves as the basis for understanding wildfire hazards and prioritizing fuels reduction projects on public and private land. The Coos County Wildfire Risk Assessment (Risk Assessment) provides information about the areas where wildfire is most likely to occur, the type of land and property in those areas, and an analysis of the potential risks to life, property, and natural resources. The CSC collaborated with Jim Wolf,¹¹ a wildfire planning analysis consultant, and used state-of-the-art methods, tools, and fire spread models to assess the likelihood of harm or loss to specific values designated in the Coos County CWPP. Wolf developed the Risk Assessment using an iterative process with key input and feedback from the Steering Committee, agency stakeholders, and community representatives.

The Coos County CWPP Risk Assessment includes four main components:

- **Fuels Hazard:** The natural conditions including vegetative fuels, weather, and topographic features that may contribute to and affect the behavior of wildfire.
- Threat of Wildfire Occurrence: Assesses the potential and frequency that wildfire ignitions may occur by analyzing historical ignitions over the past 10 years.
- Values at Risk: Life, Watersheds, Infrastructure, and Forests: The people, property, and essential infrastructure that may suffer losses in a wildfire event.
- Local Preparedness and the Potential Impact of a Wildfire: Preparedness and potential impacts regarding clear road access routes, a manageable distance between fire stations, and a manageable distance between water sources.

3. Public Outreach and Collaboration

The success of a CWPP depends on effective public engagement through outreach and collaboration. Input from individuals and organizations throughout Coos County helped ensure that the final CWPP reflects the highest priorities of the County. The CSC utilized a variety of data and information collection methods to engage key stakeholders and the public during the plan development process. These included:

• **Homeowner Surveys**: In January 2011, the CSC developed and administered a mailed survey to 1,500 randomly selected landowners in Coos County. The survey gathered information on landowner perceptions of wildfire risks in Coos

¹¹ Retired from the US Forest Service. Jim Wolf is conducting a risk assessment and mapping the WUI areas within Coos County. He has significant experience with this type of work and completed a wildfire risk assessment for Curry County in 2008.

County, attitudes towards various fuel reduction methods, and knowledge regarding the ignitability of structures in the county.

- **Stakeholder Interviews**: The CSC conducted 22 phone interviews with various stakeholders in March and April of 2011, using a set of interview questions that addressed key issues, concerns, and current activities related to the Coos County CWPP. Interview responses highlighted objectives of collaboration, prioritization of fuel reduction treatments, and treatment of structural ignitability.
- **Public Forums**: In March and April of 2011, the CSC led three community forums in three key Coos County jurisdictions identified by the Steering Committee: North Bend, Coquille, and Bandon. These public meetings brought together a variety of interested individuals from the community to share local information, discuss community-wide issues, and provide input on the goals and priorities of the Coos County CWPP. The forums also provided the public with an opportunity to evaluate and contribute to the Draft Risk Assessment.

4. CWPP Adoption

The CSC submitted the final draft of the CWPP to the Steering Committee in July 2011. The plan was released for public review and comment via [announcements in newsletters; distribution to stakeholders and participants at the public forums, etc.] for XX weeks. The CSC submitted the final plan to the Board of County Commissioners for adoption after addressing comments received during the public review period.

Coos County CWPP Mission, Goals and Objectives

The following section outlines the Coos County CWPP Mission and Goals. The mission statement guides the overall direction of the plan; goals set specific areas of focus for the plan and the objectives provide strategies for achieving the goals.

Mission Statement

The mission of the Coos County Community Wildfire Protection Plan is to prepare and protect the people, property, and resources of Coos County from wildfire through education, prevention, mitigation and collaboration.

Goals and Objectives

The following goals and objectives serve to guide implementation of the Coos County CWPP.

Goal 1: Wildfire Safety and Awareness

Increase knowledge about wildfire safety among seasonal and full-time county residents that live, work or recreate within the Coos County wildland-urban interface zone.

Objectives:

Develop and implement a five-year countywide community based wildfire education and outreach program that provides information on:

- Basic wildfire behavior;
- Effective strategies to reduce structural ignitability;

- Identification of appropriate personal and structural safety procedures to follow during a wildfire event;
- Coordination of community neighborhood projects and informational meetings on Firewise landscaping.

Goal 2: Hazard Assessment & Inventory

Refine the wildfire hazard assessment to ensure the use of new and enhanced data to prioritize wildfire risk reduction activities in Coos County.

Objectives:

- Update the risk assessment on an annual basis using best available data.
- Use the risk assessment to develop an updated list of fuels reduction priority projects on public and land

Goal 3: Fuels Reduction

Reduce hazardous fuels in the wildland urban interface on public and private land.

Objectives:

- Develop a five-year operations plan for high, medium and low priority hazardous fuels reduction on public and private lands or modification projects based on the CWPP's four Values at Risk: Life, Water, Critical Infrastructure and Forest Resources.
- Identify funding opportunities to implement priority fuels reduction projects.
- Prioritize high, medium and low priority fuels reduction projects for vulnerable structures and critical infrastructure, in areas outside established rural fire protection districts.
- Coordinate with public land management agencies to identify strategies to conduct landscape scale fuels reduction projects.

Goal 4: Interagency Communication

Increase coordination between local, state and federal agencies to address wildfire risk reduction and response.

Objectives:

- Develop a multi-jurisdictional strategic plan to facilitate interagency collaboration, communication and coordination between Coos County's public and private agencies, non-governmental organizations, and community members to initiate and strengthen wildfire mitigation and management efforts. Specific planning objectives should:
- Enhance fire suppression and fuel treatment mitigation efforts on public and private lands.
- Improve time and efficiency of emergency wildfire response procedures.

• Expand the protection and safety of residents outside currently established Rural Fire Protection Districts in Coos County.

Goal 5: Noxious Weed Control

Reduce the occurrence of and rate of spread of noxious weeds in Coos County.

Objectives:

- Develop and implement a five-year interagency abatement plan for an annual control of fire prone noxious weeds, specifically gorse.
- Use the CWPP risk assessment to identify priority areas for noxious weed abatement.
- Conduct educational outreach including literature disbursement, coordination, and incentives.

Plan Organization

The remainder of the Plan is organized as follows:

Chapter 2: Community Profile summarizes population, economy, critical infrastructure, and physical characteristic information for Coos County. The information is roughly organized according to the Values at Risk (life, critical infrastructure, water, and forest) identified by the Steering Committee; particular attention is given to factors related to wildfire risk and vulnerability.

Chapter 3: Existing Plans, Policies and Programs presents a review the Healthy Forest Restoration Act (HFRA), Oregon State Senate Bill 360, forest management plans from the Forest Service, the Bureau of Land Management, and related Coos County plans. The chapter also presents a review of key agencies and programs important to wildfire planning.

Chapter 4: Wildfire Risk Assessment presents an overview of the wildfire risk assessment, definitions of key terms and concepts, a summary of the assessment methodology, and concludes with an illustration of the high hazard areas and a list of the priority fuels reduction projects in Coos County.

Chapter 5: Goals, Action Items and Priority Projects presents the goals, objectives and action items that will drive implementation of the Coos County Community Wildfire Protection Plan. The first part of the chapter summarizes the methods used in developing the mission, goals, objectives and actions. Next, the chapter presents each goal followed by the objectives and actions that relate to it. The chapter concludes with a list of priority project areas generated by the risk assessment.

Chapter 6: Plan Implementation and Maintenance describes the process and strategies that the County and its partners will use to implement the Coos County CWPP. Process strategies include an annual monitoring, evaluation and priority-project selection schedule, as well as a five-year update process.

The Plan also includes five appendices:

Appendix A: Wildfire Risk Assessment presents the objectives and methods used in developing the risk assessment for the Coos County CWPP. The appendix also presents the data, maps and tables developed during the risk assessment process. Appendix A is the full technical documentation that supports Chapter 4 of the Coos CWPP.

Appendix B: Household Survey Summary summarizes the results of a household survey sent to property owners within the Coos County WUI (wildland/urban interface). The survey gathered information on homeowner perceptions of wildfire risk and attitudes toward measures homeowners and communities could take to reduce the ignitability of structures.

Appendix C: Stakeholder Interviews Summary summarizes the results of targeted stakeholder interviews. The planning team conducted the interviews to collect information on key issues, concerns, and current activities related to the CWPP objectives of collaboration, prioritization of fuel reduction treatments, and treatment of structural ignitability.

Appendix D: Public Forums Summary summarizes the results gathered during three public forums conducted in Coos County. The forum purpose was to collect input on wildfire planning from community members, discuss community wildfire issues, and provide input on the plan goals and priority projects.

Appendix E: Action Item Forms present detailed information on each of the action items listed in the plan including rationale, ideas for implementation and alignment with plan goals.

Chapter 2: Coos County Profile

Overview

The following chapter presents a community profile summary for Coos County. A full community profile is included in the Coos County Natural Hazard Mitigation Plan. The full profile is incorporated herein by reference.

The information presented below summarizes population, economy, critical infrastructure, and physical characteristic information for Coos County. The information is roughly organized according to the Values at Risk (life, critical infrastructure, water, and forest) identified by the Steering Committee; particular attention is given to factors related to wildfire risk and vulnerability.

Life

Location, density, and demographics are important population factors to consider when developing wildfire protection plans. While the majority of Coos County's population lives within incorporated city limits, significant numbers of full and part-time residents reside on rural properties located within the Wildland Urban Interface. These properties typically consist of single-family homes that are vulnerable due to their proximity to fuels, poor emergency vehicle access, inadequate defensible space around homes and structures or they exist outside the protection of rural fire district boundaries and therefore do not have readily available structural protection. These characteristics make fire suppression very difficult for firefighters.¹²

Land Ownership

Table 2.1 shows a breakdown of land ownership entities in Coos County. Private parties own almost half of the land in the county. This affects wildfire planning efforts in two ways. First, lands owned by state and federal agencies are easier to regulate than those owned by private individuals. Second, with a majority of land being owned by individuals who are personally liable for creating defensible space on their property, wildfire planning efforts need to emphasize public education and personal responsibility.

¹² Coos County Natural Hazards Mitigation Plan, May 2010, p. WF-9.

Landowner Entity	Acreage	Percent of Total Acreage
Private Ownership	675,000	46.6%
ureau of Land Managemen	593,000	40.9%
US Forest Service	79,000	5.4%
State of Oregon	80,000	5.5%
Other	23,000	1.6%
Total	1,450,000	100%

Table 2.1: Landownership by Acre

Source: University of Oregon Press, Atlas of Oregon

In addition to the seven incorporated communities of Bandon, Coos Bay, Coquille, Lakeside, Myrtle Point, North Bend and Powers, Coos County also has a number of unincorporated communities. These communities are located in the northern portion of the county, all within an hour of the coast. Unincorporated communities are located outside urban growth boundaries (UGB), are primarily residential, and have at least two other land uses (e.g., commercial, industrial and/or public land use).¹³ The Department of Land Conservation and Development has identified twenty-one unincorporated communities in Coos County.

Age of Housing Structures

Coos County has a large number of older housing structures (see table 2.2 on the following page) that may be more vulnerable to the threat of wildfire because they were constructed prior to more stringent fire and building codes adopted in 1985.¹⁵

Furthermore, older structures often do not comply with more current zoning codes. This is especially important to consider alongside any wildfire planning efforts. Zoning and other fire codes provide provisions for access requirements in case of an emergency event. Emergency management teams face numerous obstacles when responding to rural homes, including lack of driveway access and clear addressing.

¹³ Oregon Administrative Rule 660, Division 22, "Definitions," 660-022-0010.

¹⁴ Coos County Natural Hazards Mitigation Plan, May 2010, p. 2-16.

¹⁵ http://www.oregon.gov/OSP/SFM/docs/Codes/Codes_OFCC/BuildingCodesDivision.pdf?ga=t

Year Built	Total Structures	Percent of Total Structures
2005 or	839	2.8%
later	039	2.0 /0
2000-2004	1,383	4.6%
1990-1999	4,176	13.9%
1980-1989	3,088	10.3%
1970-1979	6,353	21.2%
1960-1969	3,705	12.3%
1950-1959	4,215	14.0%
1940-1949	2,498	8.3%
1939 or	2 759	12.5%
earlier	3,758	12.3%
Total	30,015	100.0%

Table 2.2: Age of Housing Structures

Source: US Census, "Coos County Selected Housing Characteristic," 2006-8 American Community Survey 3-year Estimates, www.census.gov

Employment and Industry

Compared with other communities in Oregon, Coos County has only a moderately diverse economy.¹⁶ An economy that is heavily dependent upon a few key industries may have a more difficult time recovering after a natural disaster than one with a more diverse economic base.

Local government is the largest employer in Coos County, providing 21.6% of the county's jobs. In the event of a natural disaster, the government sector may not be as vulnerable as other sectors, because funding streams are established annually and they are eligible to receive outside funding sources. ¹⁷ The retail sector is the second largest industry providing 13% of all the county's jobs, followed by leisure and hospitality.

Agriculture

Coos County's agricultural sector is also an important component to Coos County's overall economy. While representing a smaller percentage of employment when compared to local government or the leisure and hospitality sector, it produced and sold \$44,305,000 in goods in 2007.¹⁸ The agricultural sector is highly vulnerable to wildfires. Wildfire can damage farm facilities and agricultural products, and can impact the delivery of goods and services.

Water

In the majority of rural areas in Coos County the water supply to fight wildfires is limited making fire suppression difficult.¹⁹ Rural residents rely on community water systems, wells

¹⁷ Ibid.

¹⁶ Oregon Employment Department, Hachman Diversity Index By County, 2006, data file, available upon request.

¹⁸ US Department of Agriculture, "2007 Census of Agriculture, Coos County," www.agcensus.usda.gov, accessed March 29, 2010.

¹⁹ Coos County Natural Hazards Mitigation Plan Steering Committee.

and/or springs for water. These water reserves are often inadequate to fight wildfires, especially in the summer months when supplies can be reduced.²⁰

Geography and Climate

The terrain along the coast and in the river valleys is relatively flat, while the Coast Range, which runs through majority of the county, gives the inland areas a mountainous topography.

Coos County has a mild and humid marine climate which results from the moderating influences of the Pacific Ocean and from rainfall induced by the Coast Range. Rainfall amounts vary depending on the location. Along the lower coastal elevations, rainfall averages between 60 to 95 inches per year, while areas on the higher west slopes of the coast mountain range may get up to 200 inches.²¹ Although the county's climate is generally considered temperate, there are exceptions. During the summer, Coos County sees little rainfall creating dry conditions optimal for large wildfires. Usually by August, conditions are very dry and optimal for wildfires. Coastal winds also heighten the wildfire risk during the dry summer months.

Critical Infrastructure

Examples of vulnerable critical infrastructure in Coos County include BPA power lines, power sub-stations, telecommunication towers, the natural gas pipeline running between Coos Bay and Roseburg, and rural fire stations. Notably, many critical infrastructure facilities throughout the county are surrounded by gorse, a highly flammable invasive weed.

Transportation networks, systems for power transmission, and critical facilities such as hospitals and police stations are all vital to the functioning of the region. Due to the fundamental role that infrastructure plays in both pre-disaster and post-disaster wildfire planning, it deserves special attention in the context of creating resilient communities. The information provided in this section of the profile can serve as the basis for informed decisions about how to reduce the vulnerability of Coos County's infrastructure to wildfire.

Transportation

Transportation infrastructure is a concern in the face of a large wildfire. Wildfire can prohibit proper function in the case of mass evacuations. Highways, bridges, marine ports, and airports are at the greatest risk of disruption due to wildfire.

Two State Highways (US 101 and OR 42) are located in Coos County, along with four District Highways (OR 42S, OR 240, OR 241 and OR 242). Highway 101 is the most important north-south corridor west of Interstate 5, providing access for all coastal communities to the rest of the state. ²²

There are 468 bridges and culverts in Coos County, of which 138 bridges are in use by state highways, and 115 bridges are in use by county highways.²³ The county's marine

²⁰ Coos County Natural Hazard Mitigation Plan. May 2010, Section3 Tab 1 p.14.

²¹ Oregon Bluebook, Coos County, http://bluebook.state.or.us/local/counties/counties06.htm.

²² Coos County Natural Hazards Mitigation Plan, May 2010, p. 2-12.

²³ State of Oregon Natural Hazard Mitigation Plan. Part 2: Hazard Chapters. "Risk Assessment" March, 2006.

transportation consists primarily of shipping in and out of the port of Coos Bay, and to a lesser extent, the Port of Bandon.

Critical Facilities

Critical facilities are those facilities that are essential to government response and recovery activities (e.g., police and fire stations, public hospitals, public schools). Coos County has three hospitals, nine police stations, and 19 fire & rescue stations.²⁴ The county also has six school districts (Coos Bay, North Bend, Myrtle Point, Coquille, Bandon, and Powers) and one community college.²⁵

The Coos Curry Electric Cooperative provides power to local critical facilities as well as businesses and residential customers in Coos, Curry, Douglas, and Josephine Counties. In addition, a local fiber optic network operated by Comspan provides high-speed internet, cable, and telephone access to Coos County and is located in Bandon. Some of the most vulnerable pieces of infrastructure in the county are isolated radio transmission sites that provide emergency and 911 communication capabilities throughout the county.

Forests

The Oregon Department of Forestry is responsible for land management services for the 80, 000 acres of state forest land. The BLM and the US Forest Service administers an additional 672,000 acres of forest land (see Table 2.1 above). Included in land management responsibilities are preparing, selling, and administering timbers sale contracts. Additionally, the Forest Department administers the Special Forest Products program and sells commercial permits for forest resource extraction activities. The Forest Department can incorporate wildfire mitigation measures in county-owned forest.

According to the Atlas of Oregon, approximately 900,000 acres (87% of the total land area of Oregon) is zoned Commercial Forestland (see Table 2.1).²⁶ This Commercial Forestland acreage is divided among public, small private parcels, and forest industry ownership. The majority of standing saw timber in the county (55%) is located on public lands. An additional 29% of saw timber is located on forest industry lands and 16% is on small private lots.²⁷ Over half of the land in Coos County is publicly owned.

A large forest fire would have a devastating impact on Coos County's economy and environment. Employment in the forestry and logging sector would be significantly impacted if wildfires destroyed large stands of timber. Additionally, after a forest fire, erosion increases, potentially affecting the Coquille River watershed, and having detrimental impacts on water quality and fish habitat.

Conclusion

Coos County is an area marked by a diverse topography and a moderately temperate climate. Effective wildfire mitigation requires careful and targeted planning. By focusing on

²⁵ Ibid.

²⁴ State of Oregon Natural Hazard Mitigation Plan. Part 2: Hazard Chapters. "Risk Assessment" March, 2006.

²⁶ Atlas of Oregon, University of Oregon Press

²⁷ Coos County Natural Hazards Mitigation Plan, May 2010, p. 2-15.

vulnerable assets and systems (values at risk), efforts can be geared towards protecting Coos County's most valuable resources.

Chapter 3: Existing Plans, Policies and Programs

Overview

Existing plans, policies and programs at the national, state, and local level are instrumental in guiding the CWPP planning process. While the Healthy Forest Restoration Act (HFRA) of 2003 helped initiate the community wildfire planning process nationally, other legislation, such as Oregon State Senate Bill 360, were important for informing the plan. The Community Service Center (CSC) reviewed these as well as plans from the Forest Service, the Bureau of Land Management, and other Coos County level plans to ensure that the CWPP is consistent with relevant planning documents. This chapter also presents our review of key agencies and programs important to wildfire planning. The chapter begins with an overview of key pieces of federal legislation before transitioning into relevant state and local level legislation and plans. The chapter concludes with a review of federal, state and local agencies involved with wildfire planning.

Healthy Forest Restoration Act 2003²⁸

President Bush signed the Healthy Forest Restoration Act (HFRA) of 2003 into law after several large wildfires caused catastrophic damage throughout the western United States. The purpose of the HFRA is to reduce the threat of destructive wildfires while upholding environmental standards and encouraging early public input during review and planning processes. The HFRA emphasizes thinning and fuels reduction in overpopulated stands to reduce disease, insect infestation and likelihood of wildfire. The legislation also calls for communities to define the Wildland/Urban Interface (WUI) and develop a Community Wildfire Protection Plan (CWPP). The HFRA serves as a guiding framework for CWPP processes nationwide. The legislation requires that communities develop a CWPP in order to receive federal grant funding for priority projects and provides guidance for the overall plan creation process.

The CWPP development strategy as defined by the HFRA is a collaborative process that involves state, local, tribal, federal and non-government entities including land and business owners. The process also strengthens public participation in developing high priority forest health projects. The HFRA reduces the complexity of environmental analysis, allowing federal land agencies to use the best science available to actively manage their land. Agencies use environmental assessment and environmental impact statements as tools for management but also take significant input from the community on where it would like to focus fuel treatment efforts. The HFRA informs the Coos County CWPP by establishing minimum plan requirements (establishing the WUI, community collaboration, prioritization of fuels reduction projects).

²⁸ The White House http://georgewbush-whitehouse.archives.gov/infocus/healthyforests/restor-act-pg2.html 2003

National Fire Plan

In 2000, the Clinton Administration enacted the National Fire Plan (NFP). This legislation directed the Secretaries of Agriculture and Interior to (1) develop a response to severe wildfires, (2) reduce fire impacts on rural communities and (3) assure sufficient firefighting capacity in the future.²⁹ The enactment of this legislation followed a landmark wildfire season in which hundreds of thousands of acres of national forest land burned due to years of fire suppression management and fuels build up. The Department of the Interior (DOI) greatly increased funding for forest management. The NFP recognized that safe and effective fire suppression and fuel reduction in the wildland/urban interface demands close coordination between local, state, tribal, and federal firefighting resources. Programs included in the plan increased fire training, equipment purchases, and prevention activities on a cost-shared basis. The NFP also outlines awareness of firefighter and public safety.

According to the NFP, rural fire assistance projects in the future should be coordinated statewide. A statewide forester is responsible for maintaining cooperative fire agreements with Rural Fire Departments (RFD) and Volunteer Fire Departments (VFD). Rural Fire Departments are defined in the plan as any department serving a community population of 10,000 or less within the WUI. Funding requests for the departments is limited to training, equipment, and prevention activities. The rural RFD's must have the capability to meet costshare at a minimum of 10%, which may include in-kind services, or non-cash goods. In Coos County, many homes are located outside of the WUI boundary and are often the responsibility of combined efforts from many RFD's. A CWPP must be in place for RFD's and VFD's to access funds needed to protect and educate homeowners in these remote areas. In prioritizing funding allocation between RFD's, agencies evaluate the department's wildland fire prevention and education program needs relative to other applicants, the department's training program needs relative to other applicants, the community's and DOI's values to protect relative to other applicants, and the percentage of wildland/urban lands relative to other applicants. Agency evaluators will also determine the number of wildland fire engines in the department relative to the percentage of wildland/urban interface acres protected.

Forest Service and Bureau of Land Management Record of Decision 1994³⁰

The Record of Decision (ROD) of 1994 is a document that identifies many important pieces of legislation for the creation of the Coos County CWPP and the WUI. The 1994 US Forest Service plan is a record of decision in response to President Bill Clinton's "Forest Plan for a Sustainable Economy and a Sustainable Environment" proposal of 1993. This proposal encompassed the Pacific Northwest and Northern California. The final plan aims to address techniques and practices of forest management. The impetus of this plan centered on the protection of several endangered species including the Northern Spotted Owl and the Marbled Murrelet. This plan was unprecedented in that it was the first to adopt a common management approach shared by both the USFS and the BLM for an entire region.

The Record of Decision divided acreage not set aside by Congress into late succession reserves, adaptive management areas, managed late succession areas, administratively withdrawn areas, riparian reserves, and matrix lands. Although thinning and salvage can be

²⁹ US Department of Interior and US Forest Service 2000 http://199.134.225.50/nwcc/t2_wa4/pdf/RuralAssistance.pdf

³⁰ RECORD OF DECISION for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl April 1994

carried out in some reserve areas, program timber harvest can now only take place in matrix and managed reserved acres, thus protecting many old growth ecosystems and species from harvest. The 1994 Forest Service and Bureau of Land Management plan incorporates ten pieces of federal and state legislation into the forest management strategy. These include the following documents:

- National Environmental Policy Act (NEPA)
- National Forest Management Act
- Federal Land Policy Management Act
- Oregon and California Lands Act
- The Endangered Species Act
- The Coastal Zone Management Act
- Executive Order 11990 (Protection of Wetlands)
- The Clean Air Act
- The Clean Water Act and
- The Federal Advisory Committee Act.

The important aspects of these acts in regards to forest management are included in the plan, but should also be referenced for the development of the CWPP. Fuels reduction projects in forested areas of Coos County, for example, must recognize and follow federal policy. The 1994 US Forest Service plan affects the prioritization of projects, development of the WUI and sets guidelines on taking practices on federal land inside the WUI of Coos County. The Coos County CWPP incorporates many of the values from this ROD in the four values at risk identified by the Coos County Steering Committee.

Senate Bill 360: Oregon Forestland-Urban Interface Fire Protection Act

Senate Bill 360, or the Oregon Forestland-Urban Interface Fire Protection Act, enlists the aid of private property owners toward the goal of turning fire vulnerable urban and suburban properties into less-volatile zones. Senate Bill 360 also requires that the wildland/urban interface areas be defined by a classification committee composed of three county members, a state fire marshal and a state forester. The Senate Bill 360 legislation requires land owners within the forestland-urban interface to reduce excessive vegetation which may fuel fires near structures, roads or along driveways.

The identification criteria for forestland-urban interface are lands within the county that are:

- Inside an Oregon Department of Forestry protection district
- Lands that meet the state's definition of "forestland"
- Lands that meet the definition of "suburban" or "urban"

In some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries and lots that are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. Senate Bill 360 requires a review and monitor process. This process institutes a risk classification rating with a range from "low" to "extreme" fire risk. The five-member committee must reconvene every five years to reevaluate forestland-urban interface classifications and definitions. The Oregon Department of Forestry (ODF) is responsible for supplying the public with information about the Bill's fuel reduction standards within the forestland-urban interface. The ODF also mails each of these property owners a certification form, which may be signed and returned to ODF after the fuel-reduction standards have been met.

Senate Bill 360 helped define and regulate the Wildland/Urban Interface identification process for the Coos County CWPP and also provides tools and incentives for private landowners to reduce structural ignitability on their property. ³¹

Oregon State Planning Goals

The Oregon Statewide Planning Goals, enacted in 1973, encompass the state's policies related to land use planning and development.³² Oregon communities are statutorily mandated to adopt and implement local comprehensive plans in accordance with the 19 planning Goals and their accompanying statutes and administrative rules. Several Oregon State Planning Goals relate directly to goals contained in the Coos County Wildfire Protection Plan. Goals 1, 4, 5 and 7 address land management and hazard planning standards. It is important for the Coos County CWPP planning effort to ensure consistency statewide planning mandates.

<u>Goal 1</u>

Goal 1 pertains to citizen involvement and community participation. Similar to CWPP requirements listed in the HFRA, Goal 1 ensures the opportunity for citizens to be involved in all phases of the planning process. Goal 1 also requires that federal, state and regional agencies in Oregon coordinate their planning efforts with the affected governing bodies and make use of existing local citizen involvement programs established by counties and cities.

<u>Goal 5</u>

Goal 5 of the Oregon State Planning Goals requires the conservation and protection of natural resources, scenic and historic areas, and open spaces. This goal requires local governments to adopt programs that protect all of these resources for future generations. This is applicable to the development of the CWPP because potential wildfire risk can directly impact these resources and open spaces.

<u>Goal 7</u>

Goal 7 of the Oregon State Planning Goals addresses the need for protection against natural disaster. The first part of Goal 7 requires that local governments adopt comprehensive plans, such as inventories, policies and implementing measures to reduce risk to people and property from natural hazards. Wildfires are one of these natural hazards specified in Goal 7. The Coos CWPP will be a comprehensive strategic plan that will address wildfire hazard

³¹ Oregon Department of Forestry 2011 http://www.oregon.gov/ODF/FIRE/SB360/sb360.shtml

³² Oregon State Planning Goals Nov 2010 http://www.oregon.gov/LCD/goals.shtml

in the County through inventories, project prioritization, and implementing measures. Completion of the Coos CWPP is an action item of the Coos Natural Hazard Mitigation Plan which similarly carries out the same processes to mitigate natural hazard risk in the county.

Bureau of Land Management Coos County³³

The 1995 Record of Decision for the Coos Bay District Resource Management Plan covers nearly 400,000 acres of BLM land. The plan incorporates the new ecosystem management styles and Northern Spotted Owl habitat conservation requirements of the BLM federal plan. There are several alternatives proposed in this plan however the BLM chose the alternative that emphasizes protection of older forests, and management and enhancement of values such as dispersed non-motorized recreation opportunities and scenic resources.

The CWPP development process has referenced this document for regulations on timber management in late succession reserves, managed reserves, riparian reserves and matrix lands. Land categories within the WUI listed in this plan informed the project prioritization process. Furthermore, the Risk Assessment made use of BLM boundaries and public land management areas noted in this plan.

Other County Level Plans³⁴

The Coos County Multi-jurisdictional Natural Hazards Mitigation Plan is a FEMA approved plan that makes Coos County eligible for the Robert T. Stafford Disaster Relief and Emergency Assistance Act special projects grants through year 2015. This plan serves the cities of Bandon, Coos Bay, Coquille, Lakeside, Myrtle Point, North Bend, and Powers. Its mission is to reduce property damage and prevent loss of life in a natural disaster scenario.

The Coos CWPP will be incorporated as one chapter in the Coos Hazard Mitigation Plan. Much like the CWPP, the hazard plan requires the collaboration of public agencies, private sector organizations, and citizens. Groups included in the plan are government agencies, conservation groups, and the Coquille Tribe. The Oregon Department of Disaster Resilience served as facilitators of the project. The plan includes action strategies for earthquakes, floods, landslides and wildfires.

The Coos County Multi-jurisdictional Natural Hazards Mitigation Plan specifically addresses fire hazard mitigation. In this section, the plan identifies the Coos Forest Protection Association (CFPA) as the primary promoter of wildfire mitigation. The Coos Forest Protective Association (CFPA) is a private, nonprofit corporation in the business of providing protection from fires on 1.5 million acres of private, county, state and Bureau of Land Management timber and grazing lands in Coos, Curry and western Douglas counties.³⁵ The CFPA is directly involved with the CWPP creation process and contains board members from many public and private organizations. The Coos Forest Protective Association works with individual property owners who were identified as having a moderate risk of structural ignitability issues. The Coos County Multi-jurisdictional Hazard Plan also references the Coos County Development Code (section 4.4.400). This code contains fire safety regulations for new developments in the forest zone.

³³ Coos Bay District Record of Decision and Resource Management Plan May 1995

³⁴ Coos County Hazard Mitigation Plan UofO Library https://scholarsbank.uoregon.edu/xmlui/handle/1794/10751 2010

³⁵ Coos Forest Protective Association http://www.coosfpa.net/CFPA%20Description.pdf 2011

Local, State and National Stakeholders

The development of the Coos County CWPP engaged stakeholders from a variety of interests including: Coos County citizens, Coos County Fire Districts, Oregon Department of Forestry, the United States Department of Agriculture (USDA) Forest Service, the Bureau of Land Management, Coos County Emergency Management, Coos Forest Protective Association, and the Coos Watershed Association.

Coos County Citizens

Individual residents and community groups played a critical role in the development of the Coos County CWPP, and will be critical in its implementation. By staying informed, attending community meetings, talking with other members in the community, and/or asking questions about wildfire management, community members can help increase awareness about wildfire risk in the county. Citizens can protect themselves and their neighbors by reducing wildfire risk around their own homes through simple and inexpensive actions, such as clearing yard debris, cleaning gutters, and installing a visible address sign for emergency personnel.

Coos County Fire Districts

Local fire districts are knowledgeable about wildfire risk throughout Coos County and are deeply connected to the community members they serve. Fire District staff can play a key role in CWPP implementation by engaging in education and outreach efforts at a neighborhood level.

Coos County Emergency Management

The Coos County Emergency Management (CCEM) is a division of the Coos County Sheriff's Office and is responsible for all emergency management related activities; including writing, maintaining, and exercising the Coos County Hazards Mitigation Plan. CCEM is staffed with one full-time Manager, and coordinate with many liaisons from other community agencies and departments, along with State and Federal agencies. During an emergency, staff from various county departments, respond to the emergency operations center along with state and federal agency liaisons. RACES (Radio Amateur Communication Emergency Services) volunteers provide backup communications throughout the County for various government agencies as needed. Volunteer assistance is vital in providing the necessary programs to the community through this Office of Emergency Management as well as the cooperation and participation of local city government entities.³⁶

Coos Forest Protective Association

The Coos Forest Protective Association (CFPA) is a private, nonprofit corporation that protects 1.5 million acres of private, county, state and Bureau of Land Management timber and grazing lands in Coos, Curry and western Douglas counties. The District boundaries run from the Coos/Lane County line south to the California border and the Pacific Ocean east to the Rogue/Siskiyou National Forest in Curry County and Camas Valley in Douglas County.³⁷

³⁶ Coos County Emergency Management website, http://www.co.coos.or.us/emindex.html

³⁷ Coos Forest Protective Association website, http://www.coosfpa.net/CFPA%20Description.pdf

Coos Watershed Association

The Coos Watershed Association (CWA) is a local non-profit organization that promotes environmental integrity and economic stability for communities of the Coos watershed. The Coos Watershed is the area of land that drains through Coos Bay into the Pacific Ocean. It includes all forks and tributaries of the Coos and Millicoma Rivers, and all of the sloughs and creeks that drain into Coos Bay.³⁸

Oregon Department of Forestry

The Oregon Department of Forestry (ODF) is responsible for state and BLM lands management, emergency response, law enforcement, and governance. By setting priorities, allocating resources and establishing policies State Foresters helped facilitate the efforts of the communities they serve. Additionally, State Foresters are able to express their expertise and experience to the community through state and federal grant funded education and technical assistance. Finally, these State Foresters built trust with Coos County by maintaining strong partnerships during implementation of the Coos County CWPP, and in local emergency response and recovery.

Office of State Fire Marshal

OSFM works in a collaborative role in helping to respond to WUI fire issues. As part of its fire prevention program, OSFM provides statewide standardization and technical assistance to local fire agencies and to communities with no structural fire protection. Coordination of structural firefighting resources occurs pursuant to the *Conflagration Act*. When directed by the Governor, the Act allows the State Fire Marshal to mobilize structural firefighting personnel and equipment, when a significant number of structures or lives are threatened by fire, and the local capacity to provide structural protection has been exhausted.

United States Forest Service

The United States Forest Service (USFS) provides wildfire protection for forest resources in Coos County within the Siskiyou National Forest. The district is responsible for National Forest fire management objectives in Coos County. National Forest land is adjacent to several of the Communities at Risk identified in this plan. The Forest Service manages and maintains several important recreation sites and areas that are important to the economy of Coos County's communities.

Bureau of Land Management

The Bureau of Land Management (BLM) is responsible for managing the forest resources on Public Domain and Oregon-California Railroad Land Grant (O&C) lands in Coos County. The BLM is responsible for forest fuel management and modification for these lands. Through the Western Oregon Contract with BLM, wildfire suppression, on BLM lands, is enforced by CFPA through contract with the Oregon Department of Forestry. There are several BLM parcels adjacent to Coos County Communities at Risk and WUI areas.

Federal Emergency Management Agency (FEMA)

Formally created in 1979 in a consolidation of disaster related programs (including the National Fire Prevention and Control Administration), the Federal Emergency Management Agency (FEMA) became part of the Department of Homeland Security in March of 2003.

³⁸ Coos Watershed Association, http://www.cooswatershed.org/

The primary mission of FEMA is to "prepare for, prevent, respond to and recover from disasters" in situations where local government resources are overwhelmed or incapacitated. A State of Emergency must be declared for the agency to respond. FEMA divides the nation into ten regions. The Pacific Northwest, which includes Washington, Oregon, Idaho and Alaska, is located in Region X (ten). Housed within FEMA is the U.S. Fire Administration (USFA), which focuses on critical infrastructure protection, emergency medical services, firefighter safety, rural firefighter service and state fire contracts. ³⁹

FEMA is one of the federal agencies charged with evaluating the need for project funding based on identified projects in the CWPP. FEMA has responded to wildfire scenarios several times in the last ten years, most recently the California wildfires of 2007 and 2008. Since 2002, FEMA has launched several public education campaigns and grant funding projects for rural fire departments and communities. The grants developed by FEMA and the USFA are part of the Assistance to Firefighters Grant Program. Major grants include Fire Prevention and Safety Grants and the Staffing for Adequate Fire and Emergency Response Grants (SAFER). 40 The SAFER grant can provide fire departments with funding to hire additional firefighters for two years per grant. Fire Prevention and Safety grants are designed to enhance firefighter safety and primarily focus on high risk populations. Funding sources are critical in implementing many of the action items in the Coos County CWPP. FEMA grants can provide funding for additional staff to carry out action items as well as priority projects identified by the plan.

Conclusion

The CSC and the Coos CWPP Steering Committee collaborated with a variety of agencies, organizations, and key stakeholders to create a final CWPP that reflects the documents and legislation presented in this Chapter to the best of our ability. The CSC focused its efforts on reviewing specific action items in each of the plans and legislation detailed above to ensure the Coos CWPP is consistent with existing local, state, and federal guidelines. The documents detailed in Chapter 3 will continuously be reviewed and referenced in the implementation and monitoring processes.

³⁹ Federal Emergency Management Agency: Wildfires 2011 http://www.fema.gov/hazard/wildfire/ca_2007.shtm

⁴⁰ U.S. Fire Administration 2011 http://www.usfa.dhs.gov/fireservice/index.shtm.

Chapter 4: Wildfire Risk Assessment

Overview

The Coos County CWPP risk assessment serves as the basis for understanding wildfire hazards and prioritizing fuels reduction projects on public and private land in Coos County. The wildfire risk assessment provides: (1) information about the areas where wildfire is most likely to occur, (2) the type of land and property in those areas, and (3) an analysis of the potential risk of wildfire to life, property, and natural resources. Figure 4.1 below illustrates the elements considered in a typical risk assessment process.

This chapter presents an overview of the wildfire risk assessment, definitions of key terms and concepts, a summary of the assessment methodology, and concludes with an illustration of the high hazard areas within the county and a list of the priority fuels reduction projects in Coos County. A complete technical report on the risk assessment process can be found in Appendix A.

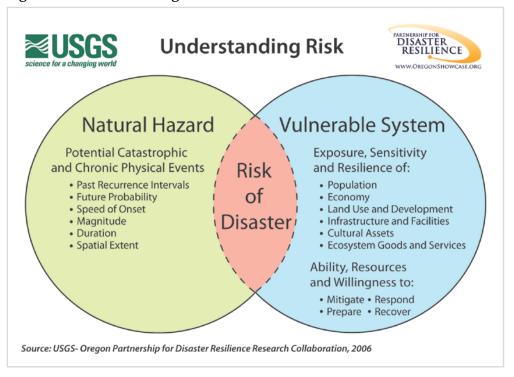


Figure 4.1: Understanding Risk

Risk Assessment Overview

This section provides an overview of the process used to develop the Risk Assessment for the Coos County Community Wildfire Protection Plan (CWPP). This includes the definition and objectives of a wildfire risk assessment.

What is a Wildfire Risk Assessment?

A meaningful wildfire risk assessment provides an understanding of the potential loss of life, property, natural resources, and other values important to the community in the event of a wildfire. Wildfire risk assessments accomplish this by documenting and mapping key hazard characteristics, including: occurrence rate, location and size of past wildfires; the location and type of vegetation; annual weather patterns; topography; and wildfire protection (i.e. firefighting) capabilities. Next, the assessment identifies and maps important community values. In the case of Coos County, these values include people and property, critical infrastructure, surface drinking water sources and important natural and industrial forestland resources. As a final step, the assessment combines and analyzes hazard characteristics and community values to determine areas of greatest risk. Composite risk maps provide a starting point for determining what, where and how to prioritize wildfire risk reduction strategies in the county.

Risk Assessment Objectives

The primary objectives of the Coos County CWPP Risk Assessment process were (1) to designate the county's wildland urban interface zone and (2) to compile information needed to effectively prioritize and fund wildfire mitigation projects. The risk assessment is a key element of the Coos County CWPP and an essential tool used to meet the following CWPP requirement from the Healthy Forests Restoration Act (HFRA):

Identify the wildland urban interface, communities at risk, and high-risk areas in the county, and provide the basis for development of a prioritized list of fuel hazard reduction projects across the County that addresses both short-term (reduce fire hazards in the WUI) and long-term (forest health, ecosystem restoration, and landscape fire management) goals and strategies.⁴¹

This assessment fulfills the requirements set forth in the HFRA, as well as those of the FEMA Disaster Mitigation Act of 2000 (44 CFR 201.6). The CSC and the CWPP Steering Committee used this assessment, together with information collected from stakeholders and the public, to develop a prioritized list of fuel-hazard reduction projects across the county.

Risk Assessment Methodology

The CSC hired a private consultant with significant prior experience in Geographic Information Systems (GIS) and computer wildfire modeling to conduct the risk assessment. The risk assessment used state-of-the-art computer processing tools and fire spread models supported by the Western Wildland Environmental Threat Assessment Center (WWETAC)⁴² to assess the likelihood of harm or loss to specific values designated in the Coos County CWPP.

⁴¹ Healthy Forest Restoration Act, 2003.

⁴² http://www.fs.fed.us/wwetac/

The risk assessment process began with the identification of Communities at Risk (CAR) and establishing the WUI boundary. The CAR list and the WUI boundaries are used to refine the boundaries of the risk assessment and can also be used as a tool in identifying and implementing priority fuels reduction projects.⁴³

The risk assessment then focused on generating three overall layers to understand wildfire risk in Coos County. These layers include:

- 1. <u>Natural Hazard</u> Wildfire threat (i.e. the probability an area will burn at an intensity to cause damage based on computer generated wildfire simulations).
- 2. <u>Vulnerable System</u> Wildfire effect based upon:
 - 1. Spatially identified values at risk (i.e. the physical location of things that are important to the county); and
 - 2. Response capability (i.e. ability to access and fight a fire should one occur).
- 3. <u>Wildfire Risk</u> Likelihood of loss or harm to values at risk.

The following subsections describe the methods used to complete each of the risk assessment components described above.

Assessment Limitations

There are three primary limitations to the assessment worth summarizing here. For a complete technical explanation of the limitations, refer to Appendix A.

The first limitation is one of scale. While the LANDFIRE data used for the fire modeling is viewable and informative at a 30-meter scale, it is intended for large, landscape level planning. LANDFIRE outputs are *not* intended for project level planning. Additional information and assessment will be needed in the planning of specific fuel treatment projects.

The second, and potentially most significant, limitation to this assessment was the lack data regarding the specific location and extent of gorse in Coos County. Process participants did describe areas of gorse concentration near the coast between Cape Arago and the southern county line. However, specific location information has not been geocoded, and therefore was not included in the fire model. As a result, the assessment may underestimate risk of wildfire in areas with high concentrations of gorse.

Finally, because the ignition pattern of all fires and associated Ignition Risk Rating is concentrated in populated areas and major transportation corridors, the assessment does not utilize specific ignition risk data common in fire prevention and response planning. Instead, the assessment relies on a random ignition protocol embedded in the RANDIG program to more accurately mimic probable ignition location of larger fires.

⁴³ The Coos County CWPP Risk Assessment boundary encompasses the entire county. While the plan establishes a WUI boundary that meats the HFRA definition, the intent of this plan is to cover all lands located within Coos County's jurisdictional boundary.

Communities at Risk

The HFRA defines a CAR as, "a group of homes and other structures with basic infrastructure and services within or adjacent to Federal land." ⁴⁴ For the purposes of this analysis, the Coos County CWPP refined the HFRA definition utilizing direction from the Oregon Department of Forestry's statewide assessment of CARs. Specifically, the assessment utilizes a one home per 40-acre density threshold to indentify homes. A CAR is generally under a common fire protection jurisdiction, government, or tribal trust or allotment, for which there is a significant threat due to wildfire. The Coos County CWPP designates the populated portions of fire districts as the CAR in this plan (consistent with the State of Oregon's designated *Communities at Risk Assessment*). ⁴⁵ The risk assessment also assesses the risk to each of the populated areas outside of protection districts. Table 4.1 (next page) contains a list of Communities at Risk in Coos County, along with population data for each CAR. Please refer to Map A.1 in Appendix A for locations of Communities at Risk.

⁴⁴ Healthy Forest Restoration Act, 2003.

⁴⁵ http://www.oregon.gov/ODF/FIRE/CAR.shtml

Community at Risk	Population
Bandon (city)+	3,159
Bandon (RFPD)*	4,243
Bridge (RFPD)*	630
Bunker Hill+	1,663
Charleston (RFPD)*	3,782
Coos County Unprotected*	4,404
Coos Bay+	15,461
Coos, Lower Umpqua, and	FO
Siuslaw Reservations*	58
Coquille (city)+	4,079
Coquille (RFPD)*	2,829
Coquille Reservation*	345
Dora-Sitkum (RFPD)*	173
Fairview (RFPD)*	375
Green Acres (RFPD)*	762
Hauser (RFPD)*	1,438
Lakeside+	1,478
Libby (RFPD)*	838
Millington (RFPD)*	2,715
Myrtle Point+	2,425
North Bay (RFPD)*	2,487
North Bend+	9,564
Powers+	719
Sumner Timber Park (RFPD)*	221
County Total+	63,230

Table 4.1: Communities at Risk

Source: *LandScan 2008 +American Community Survey 2005-9 (5-year estimates)

Coos County CWPP WUI Boundary

The wildland-urban interface (WUI) is an area or zone where structures and other human developments meet or intermingle with wildland or vegetative fuels.⁴⁶ Lands within the WUI are eligible for National Fire Plan (NFP) grant funding to accomplish fuels reduction work.

The Healthy Forests Restoration Act (HFRA) defines the WUI as an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a CWPP. The second section of this definition describes the criteria to use if a CWPP is not developed and is not relevant once the Coos County CWPP is approved.

The majority of Coos County has a low frequency of wildfire. However, when fires occur, they tend to have a high degree of severity. Map 4.1 (previous page) shows historic burn

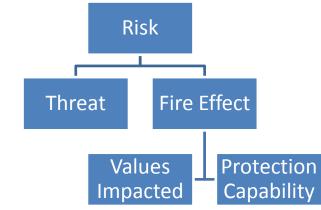
⁴⁶ State of Oregon Natural Hazard Mitigation Plan, 2004.

perimeters based upon forest vegetation surveys completed after devastating fires in 1900, 1914, and 1936. These are large, high-severity fires, driven by dry offshore winds and traveling long distances. Notably, fires of this magnitude have not occurred since 1936, allowing for a buildup of forest fuels in unmanaged forest stands. High severity fires and significant fuels buildup in the area were both key considerations when establishing the WUI boundary.

The steering committee established a draft WUI boundary by integrating information from multiple sources. The 2004 Southwest Oregon Interagency Fire Management Plan (SWOFMP) served as a starting point for defining the WUI. Ridgelines and watershed boundaries also served as topographic indicators in establishing the WUI. Next, the Steering Committee extended this boundary to include critical infrastructure. Finally, the Steering Committee considered communities and infrastructure at risk as designated in the CWPPs of adjacent counties (i.e. Douglas and Curry). To vet the draft WUI, the CSC collected additional information and public perspective on the location of the WUI during three public forums conducted throughout Coos County (refer to Appendix D – Forum Summaries). The Steering Committee considered all of the information collected and agreed on a final WUI boundary at their final meeting on August 18, 2011. Map 4.1 shows the established WUI boundary, neighboring county WUIs, and public land ownership.

Assessment Layers

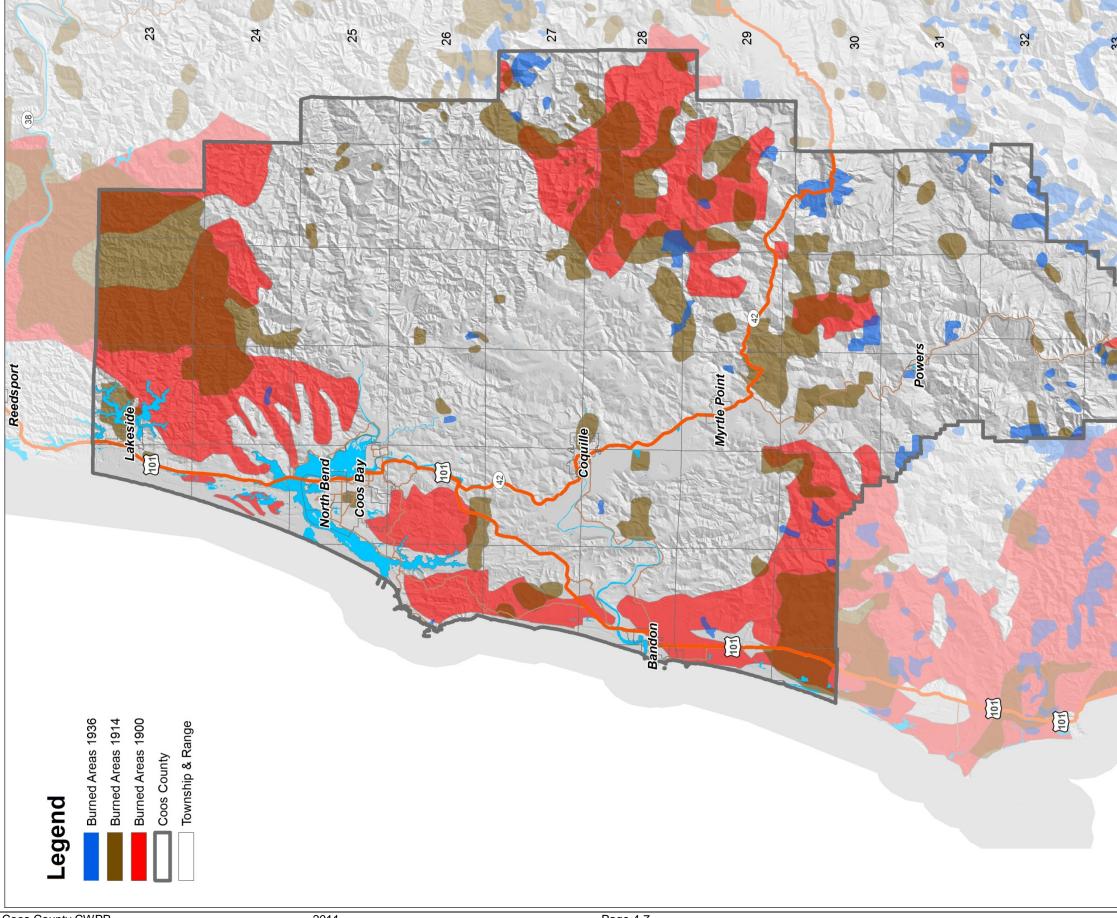
The CWPP synthesizes information from three types of assessment "layers" to develop the final Risk Assessment map: (1) wildfire threat/fire effect, (2) values impacted and (3) protection capability. Figure 4.1 illustrates the risk assessment model utilized in developing the Coos County CWPP.

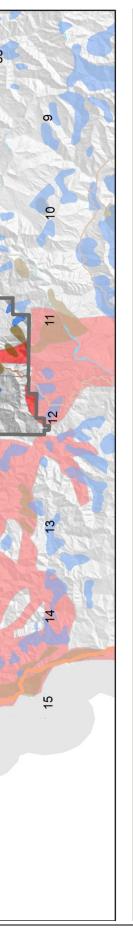




Source: Jim Wolf

Map 4.1 – Historic Burn Parameters



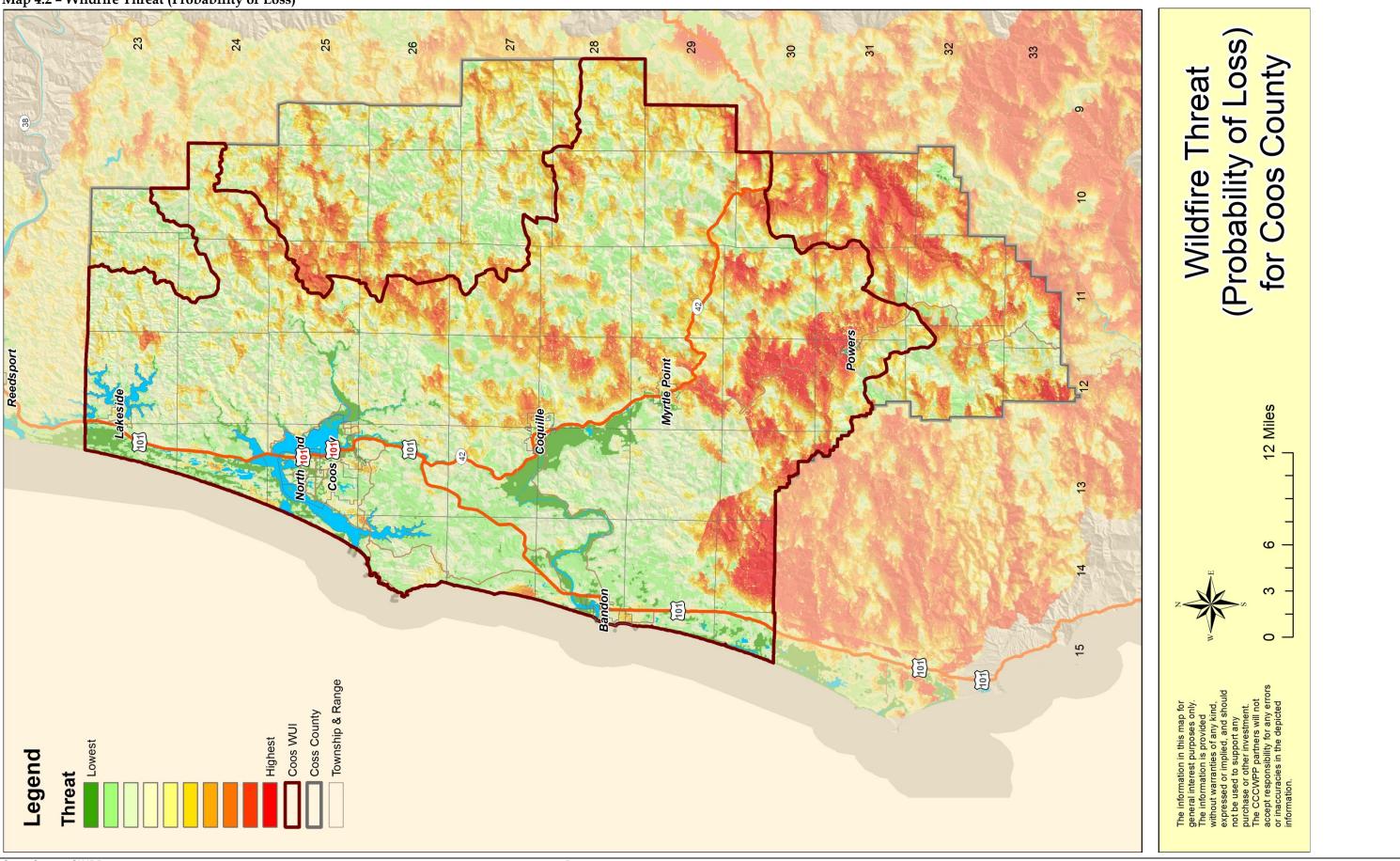


The information in this map for general interest purposes only. The information is provided without warranties of any kind, expressed or implied, and should not be used to support any purchase or other investment. The CCCWPP partners will not accept responsibility for any errors or inaccuracies in the depicted information.





Map 4.2 – Wildfire Threat (Probability of Loss)



Coos County CWPP

1. Wildfire Threat

To determine the threat of wildfire in Coos County, the consultant first used a GIS platform to map the landscape – topography, vegetation cover, structure and infrastructure locations, etc. – of Coos County. With input from the Steering Committee, the consultant modified the vegetation cover to account for known errors and updated for recent changes resulting from logging activities and a large fire. The consultant then used a computer-based wildfire simulation program (RANDIG), along with other computer based wildfire simulation tools, to model the likelihood of wildfires affecting locations throughout the county. To account for differences in weather and burning conditions across the county, the consultant broke the county into two weather-modeling zones (east and west). Each weather zone utilizes fuel moisture and wind conditions typical within each location.

To model each fire, RANDIG first estimates the likelihood that an ignition (such as a lightning strike or smoldering campfire) will develop into a wildfire. It then calculates the fire's potential intensity (how hot and destructive the fire is) and distribution (how big the fire will get). Once all of the virtual fires have "burned," RANDIG splits the county up into a 30-meter-by-30-meter grid and counts how many times and at what intensity a fire touches each square in the grid. For a detailed, technical explanation of this process, refer to Appendix A – Wildfire Risk Assessment.

As shown in Map 4.2, the areas at highest threat of wildfire in Coos County are generally in the interior portions of the county where fuels are drier, terrain is steep, and strong offshore winds can push fires. This is especially true in the southern interior where there is a distinct transition to vegetation more typical of Curry County and northwestern California. There are also isolated areas of high threat along the southern coastal strip and the north coast where daily strong north winds can push fire through shrubs (such as gorse) and low trees.

2. Values at Risk

Values at risk are those community assets at risk from wildfire. The steering committee met in October of 2010 to consider and select important values at risk for Coos County. As a starting point, the committee considered the values utilized by ODF to complete the statewide CAR assessment: life, forests, critical infrastructure, municipal water supplies, communication sites and state parks. The steering committee chose to combine the life and parks categories and the critical infrastructure and communications sites. This resulted in four primary community values discussed further below.

The CSC identified additional values at risk and potential project locations during the community outreach (public forums and stakeholder interviews) portion of the project. These data are important and will be used by the steering committee to inform the development of action items and priority project lists developed each year. It is important to not e that due to the highly subject nature of the data and the high potential for response bias, these data were not utilized directly in developing the risk assessment. For a complete description of the data collection methods and results from the forums and stakeholder interviews, please refer to Appendixes C and D.

<u>Life</u>

The primary consideration under the "life" category is the location of people. The steering committee directed the consultant to focus on where people live (home density) and recreate (parks) in assessing this category.

Home Density

The consultant extrapolated the location of people in the county using the CAR data described above. The Populated Jurisdictions⁴⁷ layer from the assessment represents areas with at least one home per 40 acres. Table 4.2 shows the very high, high and moderate priority CAR. For the full CAR list, refer to Table A.14 in Appendix A.

Table	4.2:	Comn	nunities

Community (jurisdiction)	Priority
Powers (City)	Very High
Fairview (RFPD)	High
Bridge (RFPD)	High
Coquille (Reservation)	High
Dora-Sitkum (RFPD)	Moderate
Myrtle Point (City)	Moderate
Coos (County)	Moderate, some portions Very High
Lakeside (City)	Moderate
Coquille (City)	Moderate
Libby (RFPD)	Moderate
Coquille (RFPD)	Moderate

Source: Coos CWPP Risk Assessment

Parks

The Steering Committee identified state, county, and federal parks with overnight camping as having potential public health and safety issues from wildfires. Table A.7 in Appendix A presents the park classification areas utilized. Table 4.3 below presents high, moderate and low risk parks identified by the risk assessment. Map A.7 identifies the specific locations of all life classifications.

⁴⁷ http://gis.oregon.gov/DAS/EISPD/GEO/alphalist.shtml#W

Table A.3 Public parks

Name	Priority		
Bennett Park*	High		
Ham Bunch - Cherry Creek Park*	High		
Cape Blanco	Moderate, some portions Very High		
Skeeter Camp/Burnt Mtn*	Moderate. Outside WUI		
Frona County Park*	Moderate		
Golden and Silver Falls*	Moderate		
Nesika Park*	Moderate		
Rooke and Higgins Park*	Moderate		
Bullards Beach	Moderate, some portions High		
Laverne County Park*	Low		
Park Creek*	Low. Outside WUI		
Sunset Bay	Low		
Umpqua Lighthouse	Low		
William M. Tugman	Low		
*SC identified potential health/safety issues			

Source: Coos CWPP Risk Assessment

Public Surface Drinking Water

Many CARs source their drinking water from surface water collection sources (streams, springs, reservoirs, etc.). Wildfire can adversely impact these drinking water sources, thereby eliminating the drinking water source for residents in the area. For the purposes of this assessment, the Steering Committee directed the consultant to focus on community public water systems regularly serving at least 25 year-round residents. The consultant identified watersheds that source the public surface water system using data from the Oregon Department of Environment Quality (ODEQ).⁴⁸ The ODEQ/Water Quality Division, Drinking Water Protection Program and the Oregon Department of Human Resources/Drinking Water Program compiled the data in a cooperative effort.

Following review of the information identified through the state sources described above, the Steering Committee added two additional public water systems to risk assessment inputs: (1) Coos Bay – North Bend Water Board's Joe Ney Slough intake and upslope watershed and (2) the area immediately surrounding the Bridge Water District's intake adjacent to Salmon Creek.

The assessment designates small watersheds (less than 10 square miles) as the most critical due to the potential for a wildfire to affect the entire watershed. Table 4.4 presents the small and large drinking water areas of concern. Table A.8 in the Appendix specifies the Public Surface Drinking Water Classifications; Map A.8 shows public surface water system watersheds.

⁴⁸ http://oregon.gov/DAS/EISPD/GEO/docs/metadata/OR_SW_DWSA.shp.xml

Table 4.4: Public surface drinking water watersheds

Name - Source	Priority
Small watersheds of high concern	
City of Powers - Bingham Creek	High
Bridge Water District - Main Spring	High
Garden Valley Water Association - China Creek	Moderate
City of Coquille - Rink Creek	Moderate
Coos Bay/North Bend Water Board - Joe Ney Slough	Low
City of Bandon - Ferry Creek	Low
Coos Bay/North Bend Water Board - Pony Creek	Low
Lakeside Water District - Eel Lake	Low
City of Bandon - Geiger Creek	Low
Large watersheds of high concern	
Langlois Water District - Floras Creek	Low due to size, yet highest mean risk in the county
City of Powers - South Fork Coquille River	Low due to size, yet similar risk as Powers Bingham Cr
City of Coquille - Coquille River	Low due to size, yet similar risk as Bridge main spring
City of Myrtle Point - North Fork Coquille River	Low due to size, moderate risk

Source: Coos CWPP Risk Assessment

Critical Infrastructure

Critical infrastructure includes the assets, systems, and networks communities rely on for physical and economic security and public health or safety.⁴⁹ The Steering Committee identified two items under critical infrastructure as: (1) communications sites that serve 911 emergency communications identified using FCC data and local knowledge and (2) power transmission lines. Table 4.5 shows Critical Infrastructure Classifications; Map A.9 shows critical infrastructure locations.

Table 4	.5: Critica	al infrastructure

Name	Priority
Kenyon Mtn (Douglas 911) aka Signal Tree	High
Slide Creek	High
Bennette Butte	Moderate
Power Transmission	Moderate, some portions Very High
Dean Mountain	Low
Blossom Hill	Low
Shutters Landing	Low
Blue Ridge	Low

Source: Coos CWPP Risk Assessment

Forest

Eighty-seven-percent of land in Coos County is forested land, and 68-percent of these forests are within the Wildland Urban Interface. The consultant generated a new GIS data layer using the LANDFIRE fuel model layer to identify forest cover, and a combination forest ownership and the NW Forest Plan Land Use Allocation (LUA) layer, to delineate the forest cover into four classes based upon intended use and value. Appendix A, Table A.10

⁴⁹ http://www.dhs.gov/files/programs/gc_1189168948944.shtm

specifies the Forest Classifications used in the assessment. Table 4.6 below shows the level of risk associated with each forest type. Appendix A, Map A.10 shows the locations of forest values.

Description	Level of Risk
USFS: Matrix	Much higher risk than others
Private forest	Much higher risk than those listed below
BLM: Matrix	Significant risk
BLM: Late Successional Reserve	Significant risk
BLM: Administratively Withdrawn	Significant risk
BIA	Significant risk
USFS: Late Successional Reserve	Significant risk
USFS: Not Designated	Significant risk
Oregon Dept of Forestry	Significant risk
Oregon Dept of State Lands (including South Slough)	Moderate risk
USFS: Administratively Withdrawn	
US Corps of Engineers	
Oregon Parks and Recreation Dept	

Table 4.6: Forests categorized by owner/land use allocation

Source: Coos CWPP Risk Assessment

Valuing and Weighting Impacts to Values

The Risk Assessment categorizes the impact to each Value into three or four classes described in Table A.11. The Steering Committee designated values (on a scale of 1-9) to each of these classes. Finally, the risk assessment assigns a percent influence between the four factors to generate a map of overall Values Impacted. Map A.11 shows the weighted impact to values for life, public surface drinking water, critical infrastructure, and forests. Map 4.3 shows the overall wildfire risk in Coos County.

3. Protection Capability

A major consideration in determining how quickly a fire can spread and, as a result, how big it might get is protection capability: how quickly, how close and with what equipment can emergency crews attack a fire? The risk assessment includes a new protection capability layer using fire district coverage and fire apparatus accessibility (i.e. distance from roads). Appendix A, Table A.12 shows the Protection Capability utilized in the assessment. Map A.12 shows the Protection Capability risk for Coos County.

Priority Fuels Reduction Project Areas

In order to meet the Healthy Forest Restoration Act (HFRA) requirement for prioritization of fuels reduction projects on both public and private lands, the CCCWPP used the priorities listed above along with adjacency to federal ownership, land use allocation, past and planned projects top identify and prioritize potential projects and funding sources. Table 4.7 presents a preliminary list of priority projects. The CWPP Coordinating Body will develop specific projects on an annual basis to address concerns within these priority areas.

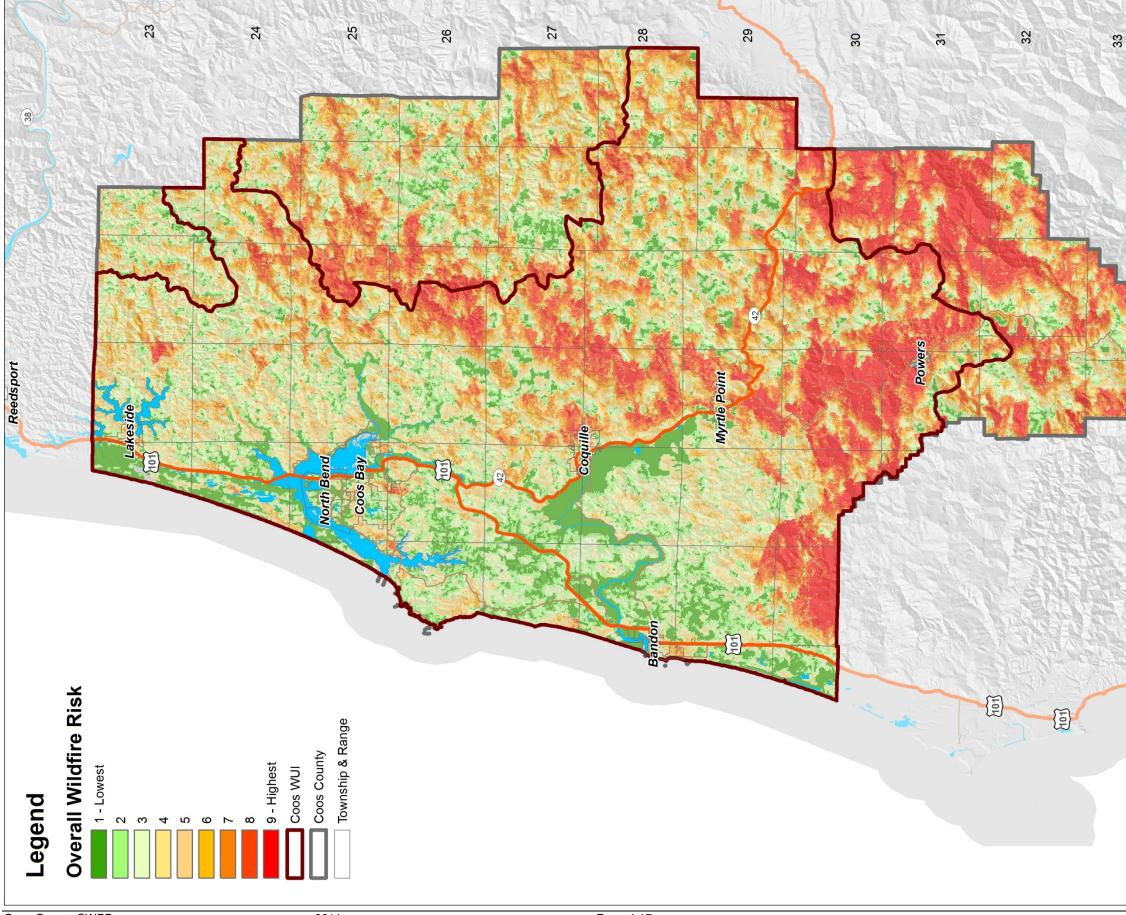
To determine project implementation, the steering committee will assess both resource availability and the cost/benefit of each project.

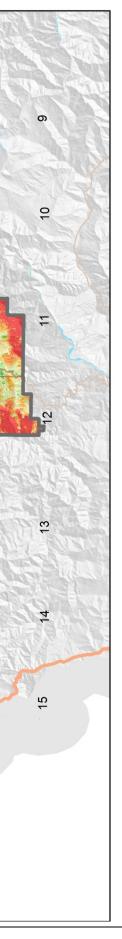
Project Name	Description/objective	Potential Partners	Term	Priority
North		1		
Golden & Silver Falls	Improve access and communication	Roads Dept	Short & long	
Coquille Reservation	Fuels reduction project to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed	Coos Bay-North Bend Water Board	Long term	
Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed			
Fairview	4 Corners, defensible space fuels project to large power substation. Evacuation			
Shutter Creek	Use inmate crews to treat fuels adjacent to camp and limited access to summer cabins.	Inmate crews (resource for creating defensible space)		
Southeast				
Signal Tree Com Site	Treat fuels to reduce the threat of wildfire to 911 communications	BLM, private? contact mentioned is Paul Rodriguez		
Slide Creek Com Site	Treat fuels to reduce the threat of wildfire to 911 communications	BLM/Plum Creek		
Bridge	Education and defensible space to reduce threat to community and watershed			
Powers	Education and defensible space to reduce threat to community and watershed			
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)	BPA/PPL		
Southwest				
Bennett Butte:	Treat fuels to reduce the threat of wildfire to 911 communications	BLM, private?		
Resort Area (W. of	Significant amount of gorse, likely treat with defensible	Contact: Michael		
101) golf course	space and fuels.	Kaiser		
Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines			
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed	Curry County		
Gorse	Remove gorse all along southern coast			

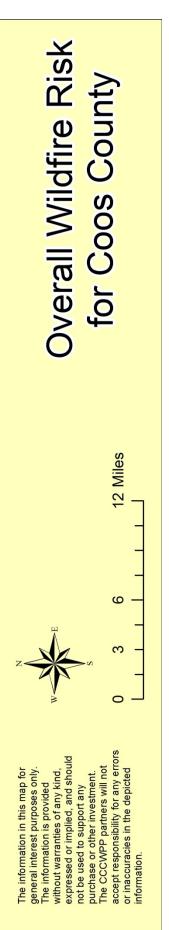
Table 4.7: Priority Fuel Reduction Projects

Source: Coos CWPP Risk Assessment

Map 4.3: Overall Wildfire Risk Rating







CWPP Project Alternatives

Throughout the plan development process, the CSC identified and collected specific wildfire fuel reduction, education and mitigation activity ideas from the project Steering Committee, stakeholders, forum participants and the public. The following list represents sample project ideas. Users of this list should see it as catalog of potential wildfire mitigation ideas; Coos County should add to this list as new information is collected and additional project ideas are identified.

Project Name	Description/objective
Remote homes	Egress of remote homes west of Myrtle Point
Gorse removal	Remove gorse along coast
Gorse removal Gorse removal along coast south of Cape Arago	
	Gorse treatment from Old Seven Devils Road to Whisky
Gorse removal	Run Road
	Sumner Rural Fire Protection District - Road brushing and
Roadside brushing	fuel reduction

Table 4.8: Community Identified Project Alternatives

Source: CWPP Public Forums

Future Use of the Risk Assessment

The Coos County CWPP Risk Assessment serves as the basis for ongoing assessments of wildfire hazards and prioritization of fuels reduction projects on public and private land. New or updated data on wildfire occurrence, noxious and invasive weed inventories, and changes in development and land use in or near the WUI will inform future updates to the Risk Assessment.

Chapter 5: Goals, Action Items and Priority Projects

Overview

This chapter presents the goals, objectives and action items that will drive implementation of the Coos County Community Wildfire Protection Plan. The first section summarizes the methods used in developing the mission, goals, objectives and actions. Next, the chapter presents each goal followed by the objectives and actions that relate to it. The chapter concludes with a list of priority project areas generated by the risk assessment.

Methodology

The steering committee utilized information and data collected from the landowner surveys, stakeholder interviews, public forums and risk assessment to inform development of the goals, objectives and action items.. The Steering Committee began the process of developing the action plan by drafting the CWPP's Mission Statement during their April 6th Steering Committee meeting. After agreeing on a draft mission statement, students with the Community Service Center (CSC) facilitated a brainstorming session to generate draft goals. Steering Committee members were asked to write down goals they wanted to see in the CWPP, and then share them with the group. The CSC later synthesized these proposed goals with data collected from their public outreach efforts and developed a final list of goals and objectives that were reviewed and approved by the Steering Committee. The mission of the Coos County CWPP is:

To prepare and protect the people, property, and resources of Coos County from wildfire through education, prevention, mitigation and collaboration.

The intent of the Mission Statement is to serve as the overarching guide for the action plan. Upon formal adoption of the CWPP, the Steering Committee will form a CWPP advisory Committee (with new members), who will oversee the implementation of many of the action items. For more detail about plan implementation, see Chapter 6 of this plan.

The framework for the action plan consists of three parts:

- Goals: The goals of the Coos County CWPP represent the overall direction of the Coos County CWPP. They embody the general data collected from the public outreach portion of the plan, as well as the CWPP Risk Assessment. The goals are not specific recommendations for wildfire mitigation techniques, but rather provide aspirational targets that inform objectives that are more specific.
- Objectives: The objectives of each CWPP goal serve as links to the action items. They are a more specific embodiment of the data collected through public outreach and the Risk Assessment.

• Action Items: The action items are the specific recommendations for wildfire mitigation efforts in Coos County. They are intended to be the means through which the objectives are accomplished. Each action item contains a rationale, coordinating body, external and internal partners, potential funding sources, and timeline. The tables in this chapter provide only an overview of the action items. For more detailed descriptions, see the Action Item Worksheets in Appendix E.

Coos County CWPP Goals and Objectives

The following section presents the goals and objectives of the Coos County CWPP. Following each goal are the subsequent action items associated with each goal. Additional information on each action item is included in Appendix E.

Goal 1: Wildfire Safety and Awareness

Increase knowledge about wildfire safety among seasonal and full-time county residents that live, work or recreate within the Coos County wildland-urban interface zone.

Objective:

Develop and implement a five-year countywide community based wildfire education and outreach program that provides information on:

- Basic wildfire behavior;
- Effective strategies to reduce structural ignitability;
- Identification of appropriate personal and structural safety procedures to follow during a wildfire event;
- Coordination of community neighborhood projects and informational meetings on Firewise landscaping.

Number	Action Item	Coordinating Body	Timeline
1.1	Create a "Wildfire Education and Outreach Coordinator" position to organize and manage community wildfire protection outreach and education strategies among agency and stakeholder reps in Coos County.	CWPP Advisory Committee	Short Term (0-2) years
1.2	Develop a countywide education and outreach initiative based on the literature and landscaping projects offered by FireWise.	Wildfire Education and Outreach Coordinator	Ongoing
1.3	Develop and implement a public education series in which private and public agencies collaborate to educate community members on hazard mitigation efforts.	Wildfire Education and Outreach Coordinator	Long Term (2-4+ years)
1.4	Package and distribute risk assessment maps and other relevant wildfire risk and protection information for public use.	Wildfire Education and Outreach Coordinator	Ongoing
1.5	Develop campaign that identifies and communicates evacuation routes to county residents.	Wildfire Education and Outreach Coordinator	Long Term (2-4+ years)

Table 5.1 Goal 1 Action Items

Goal 2: Hazard Assessment & Inventory

Refine the wildfire hazard assessment to ensure that new and enhanced data is being used to prioritize wildfire risk reduction activities in Coos County.

Objectives:

- Update the risk assessment on an annual basis using best available data.
- Use the risk assessment to develop an updated list of fuels reduction priority projects on public and land.
- Focus assessment and treatment on vulnerable structures and critical infrastructure, particularly in areas outside of RFPDs.

Number	Action Item	Coordinating Body	Timeline
2.1	Coos Forest Protective Association, in partnership with Coos County Emergency Management and the Coos County CWPP Advisory Committee, will annually re-run and update the Risk Assessment using best available data to ultimately help inform priority projects.	Coos Forest Protective Association	Ongoing
2.2	The Coos County CWPP Advisory Committee will use the past priority project lists and the annually updated Risk Assessment to annually create a reflective new list of priority fuels reduction projects on both public and private lands.	Coos Forest Protective Association and the Coos County CWPP Advisory Committee	Ongoing
2.3	The Coos County CWPP Advisory Committee will oversee a team of appointed individuals to use annually updated Risk Assessment data along with informed and updated fuels reduction projects to focus wildfire assessment and treatment efforts on vulnerable structures and critical infrastructure, particularly in areas outside of RFPDs jurisdictions.	Coos Forest Protective Association and the Coos County CWPP Advisory Committee	Ongoing

Goal 3: Fuels Reduction

Reduce hazardous fuels in the wildland urban interface on public and private land.

Objectives:

- Develop a five year operations plan for high, medium and low priority hazardous fuels reduction on public and private lands or modification projects based on the CWPP's four Values at Risk: Life, Water, Critical Infrastructure and Forest Resources.
- Identify funding opportunities to implement priority fuels reduction projects.
- Utilizing a coordinated, multi-stakeholder process, identify strategies to conduct landscape scale fuels reduction projects.

Number	Action Item	Coordinating Body	Timeline
3.1	Establish a semi-annual debris pick up service for the removal of excess vegetation and biomass on private property.	CWPP Advisory Committee	Long Term (2-4+ years)
3.2	Remove vegetation and other fuels from around critical infrastructure sites including power lines, communication sites, roads, and natural gas pipelines.	Coos Forest Protective Association	Long Term (2-4+ years)
3.3	Review policies and create incentives for logging companies that actively remove fuels from areas recently logged.	Coos Forest Protective Association	Long Term (2-4+ years)
3.4	Twice per year (spring/fall) host a "Treatment Day" to assist homeowners with creating defensible space.	Rural Fire Protection Districts	Short Term (0-2 years)/ Ongoing
3.5	Negotiate insurance premium discounts for WUI residents that perform fuel treatments on their property and have CFPA staff review the work on an annual basis.	Coos County Board of Commissioners	Short Term (0-2 years)/ Ongoing

Table 5.3 Goal 3 Action Items

Goal 4: Interagency Communication

Increase coordination between local, state and federal agencies to address wildfire risk reduction and response.

Objectives:

- Develop a multi-jurisdictional strategic plan to facilitate interagency collaboration, communication and coordination between Coos County's public and private agencies, non-governmental organizations, and community members to initiate and strengthen wildfire mitigation and management efforts. Specific planning objectives should:
- Enhance fire suppression and fuel treatment mitigation efforts on public and private lands.
- Improve time and efficiency of emergency wildfire response procedures.
- Expand the protection and safety of residents outside currently established Rural Fire Protection Districts in Coos County.

Number	Action Item	Coordinating Body	Timeline
4.1	Conduct quarterly meetings with the heads if fire departments in each protection district.	CWPP Advisory Committee	Long Term (2-4+ years)/ Ongoing
4.2	Nominate a member of the CWPP advisory committee to serve as a liaison to the Coos County Natural Hazard Plan Mitigation Steering Committee.	CWPP Advisory Committee	Short Term (0-2 years)/ Ongoing
4.3	Establish biannual rotating fire training course for fire management professionals.	Coos Forest Protective Association	Short Term (0-2 years)/ Ongoing
4.4	Hire part-time CWPP Database Manager (or designate duties as part of existing position) to administer responsibilities described in Action Item 4.5.	CWPP Advisory Committee	Short Term (0-2 years)
4.5	Develop centralized database and website accessible to all agencies (to share collected maps, wildfire protection techniques, GIS data, etc.).	CWPP Database Manager	Long Term (2-4+ years)

Table 5.4 Goal 4 Action Items

Goal 5: Noxious Weed Control

Reduce the occurrence of and rate of spread of noxious weeds in Coos County.

Objectives:

- Develop and implement a five-year interagency abatement plan for an annual control of fire prone noxious weeds, specifically gorse.
- Use the CWPP risk assessment to identify priority areas for noxious weed abatement.
- Conduct educational outreach including literature disbursement, coordination, and incentives.

Number	Action Item	Coordinating Body	Timeline
5.1	Survey and geocode gorse locations throughout Coos County.	Coos County Noxious Weed Board	Long Term (2-4+ years)/ Ongoing
5.2	Identification and expansion of existing gorse maps for the Coos County region.	Coos County Noxious Weed Board	Short Term (0-2 years)
5.3	Design, produce, and distribute gorse removal literature to community members.	Coos County Noxious Weed Board	Long Term (2-4+ years)
5.4	Conduct community forums, public meetings and landowner organizations that focus on the removal of gorse and other noxious and invasive weeds.	Coos Forest Protective Association	Long Term (2-4+ years)/ Ongoing
5.5	Develop a five-year plan to eliminate 30% of Gorse on private property and 70% of Gorse along major roadways in the Bandon area by 2016.	Coos County Noxious Weed Board	Ongoing
5.6	PLACEHOLDER	PLACEHOLDER	PLACEHOL DER

Table 5.5 Goal 5 Action Items

Priority Project Areas

In order to meet the Healthy Forest Restoration Act (HFRA) requirement for prioritization of fuels reduction projects on both public and private lands, the CCCWPP used the priorities listed above along with adjacency to federal ownership, land use allocation, past and planned projects top identify and prioritize potential projects and funding sources. Table A.19 is a list of projects.

Project Name	Description/objective	Potential Partners	Term	Priority
North				1
Golden & Silver Falls	Improve access and communication	Roads Dept	Short & long	
Coquille Reservation	Fuels reduction project to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed	Coos Bay-North Bend Water Board	Long term	
Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed			
Fairview	4 Corners, defensible space fuels project to large power substation. Evacuation			
Shutter Creek	Use inmate crews to treat fuels adjacent to camp and limited access to summer cabins.	Inmate crews (resource for creating defensible space)		
outheast				
Signal Tree Com Site	Treat fuels to reduce the threat of wildfire to 911 communications	BLM, private? contact mentioned is Paul Rodriguez		
Slide Creek Com Site	Treat fuels to reduce the threat of wildfire to 911 communications	BLM/Plum Creek		
Bridge	Education and defensible space to reduce threat to community and watershed			
Powers	Education and defensible space to reduce threat to community and watershed			
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)	BPA/PPL		
outhwest				
Bennett Butte:	Treat fuels to reduce the threat of wildfire to 911 communications	BLM, private?		
Resort Area (W. of	Significant amount of gorse, likely treat with defensible	Contact: Michael		
101) golf course	space and fuels.	Kaiser		
Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines			
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed	Curry County		
Gorse	Remove gorse all along southern coast			

Source: Coos CWPP Risk Assessment

Chapter 6: Plan Implementation and Maintenance

Overview

This chapter details the implementation strategies that will ensure the Coos County Community Wildfire Protection Plan (CWPP) contains the most up-to-date information available, as well has remains a relevant document for wildfire mitigation efforts throughout Coos County. These strategies include an annual monitoring, evaluation and priority-project selection schedule, as well as a five-year update process.

Implementing the Plan

The Coos County CWPP fulfills an action item set forth in the Coos County Natural Hazard Mitigation Plan (NHMP), developed in 2010. Once the Coos County Board of Commissioners reviews and adopts the CWPP by resolution, it will serve as a wildfire specific supplement to the Coos County NHMP.

The plan identifies a Convener who will maintain the plan, manage the coordinating body and serve as a liaison to the Coos County NHMP coordinating body. The plan also identifies a CWPP Coordinating Body that will direct plan implementation efforts and aid in the maintenance and periodic update of the plan. The following sections describe the responsibilities of both entities in further detail below.

Convener

The Coos County CWPP Convener will be responsible for the following:

- Organize Coordinating Body meetings (times, dates, locations, and agendas), as well as the agendas for those meetings;
- Document of the discussions and outcomes of Coordinating body meetings;
- Serve as a liaison between the CWPP Coordinating Body, key community stakeholders, and the public at large;
- Identify wildfire planning and mitigation related funding sources to complete the action items included in this plan;
- Initiate the plan update process, including a review of the Risk Assessment, goals, action items, and implementation strategies (to begin 5 years from plan adoption);
- Coordinate the local plan adoption process;
- Serve on the Coos County NHMP Coordinating Body.

CWPP Coordinating Body

The Coordinating Body will primarily consist of the Steering Committee members and other key stakeholders involved with the development of the CWPP. The responsibilities of the Coordinating Body include:

- Attend future plan implementation and maintenance meetings (or designate an alternative representative);
- Identify priority fuels reduction projects on an annual basis;
- Serve as the local evaluation committee for project funding;
- Prioritize and recommend funding sources for priority fuels reduction projects to the Convener;
- Update the Coos County CWPP, based on the five year update schedule set forth in this chapter;
- Coordinate ad hoc and/or standing subcommittees as needed;
- Coordinate public involvement activities throughout the county;
- Ensure that the action items set forth in Chapter 5 of this plan are implemented based on the timeline provided.

In its implementation efforts, the Coordinating Body should seek to engage a wide variety of local stakeholders to help execute the CWPP action items. The following lists agency and key stakeholder groups that should serve as part of the Coordinating Body:

TBD

This is not an exhaustive list. To ensure the relevance of the Coos County CWPP, as well as to ensure action items are completed comprehensively, the Coordinating Body should engage a variety of stakeholders from mitigation agencies and other organizations.

Plan Maintenance

Beyond implementation of the CWPP action items, maintenance of the plan will ensure that the CWPP remains an effective and relevant document to wildfire planning efforts in Coos County. The Oregon Partnership developed the following maintenance schedule for Disaster Resilience at the University Oregon. The process will ensure that regular reviews and updates of the CWPP occur.

The CWPP Coordinating Body will meet on a quarterly basis (four times a year). The convener will be responsible for scheduling and overseeing each meeting. The purpose of the quarterly meetings is to review implementation strategies for CWPP action items, as well as to update the document as whole, based on any newly available data.

Ongoing Public Outreach

The Community Service Center's public outreach efforts (landowner surveys, stakeholder interviews, and public forums) were a critical part of the CWPP's development. To ensure that community members play a continuing role in implementation and update of the plan, the Coordinating Body will:

- Provide a copy of the plan to local libraries throughout the county;
- Post an electronic copy of the plan on the Coos County's website;
- Post dates, times, and locations of Coordinating Body meetings on the Coos County website and;
- Post dates, times, and locations of Coordinating Body meetings through other sources including local newspapers, email listserves, and radio stations.

Plan Review

The Coordinating Body will review and update the CWPP every five years. The Coordinating Body will develop the review timeline in the future, with the goal of completing an update in September of 2016. The Coordinating Body will be responsible for identifying update goals and deficiencies of the plan. The Coos County Natural Hazard Mitigation Plan contains a plan review toolkit that would be a valuable tool to use when beginning the CWPP review process.