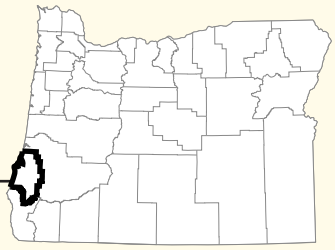
Photo Source: Coos forest Protective Assn.

Coos County

Community Wildfire Protection Plan

Prepared for: Coos County



Photos: Gary Halvorson, Oregon State Archives

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

Community Service Center
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September, 2011

Special Thanks & Acknowledgments

Coos County developed this Community Wildfire Protection Plan through a partnership among the University of Oregon's Community Service Center, local wildfire planning experts, and a range of federal, state, and local stakeholders. The project is funded through federal Title III funds. The project utilized a four-phase planning process developed in part based on guidance contained in *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities (2004)* and the *Community Guide to Preparing and Implementing a Community Wildfire Protection Plan (2008)*.

Project Steering Committee

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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

Contents

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, critical infrastructure, drinking water, and forests. The assessment identified the following assets as being at high or very high threat from wildfire:[1]

Table i.1: Wildfire Threat Assessment Summary

Community Asset	Priority
Life - Communities	
Powers (City)	Very High
Fairview (RFPD)	High
Bridge (RFPD)	High
Coquille (Reservation)	High
Life - Parks	
Bennett Park	High
Ham Bunch - Cherry Creek Park	High
Watersheds	
City of Powers - Bingham Creek	High
Bridge Water District - Main Spring	High
Critical Infrastructure	
Kenyon Mtn (Douglas 911) aka Signal Tree	High
Slide Creek	High
Forests	
USFS: Matrix	High
Private forest	High

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

Project Name	Description/objective	Value Addressed	Key Partners
North			
Blue Ridge Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project).	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Golden & Silver Falls	Improve fire access including communication of fire threat and evacuation routes	Parks	Roads and Parks Departments
Coquille Indian Reservation	Fuels reduction project(s) to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed	Life, Water	Coos Bay-North Bend Water Board
City of Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed	Life, Water	City of Coquille Fire, Coquille RFD, Coquille Watershed Association
Fairview RFD	Four Corners, defensible space fuels project to protect large power substation. Improve evacuation routes.	Critical Infrastructure, Life	Fairview RFD, BPA/PPL
Shutter Creek Correctional Institution	Use inmate crews to treat fuels adjacent to camp and improve limited access to summer cabins.	Life	Oregon Department of Corrections
Southeast			
Signal Tree Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project in conjunction with CFPA lookout and communication tower replacement project).	Critical Infrastructure	BLM, ODF, CFPA, ODOT, private communication providers (e.g. AT&T, KVAL, US Cellular, etc.)
Slide Creek Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, Plum Creek Timber Company
Bridge RFD	Education and defensible space to reduce threat to community and watershed	Life, Water	Bridge RFD, Coquille Watershed Association
City of Powers	Education and defensible space to reduce threat to community and watershed	Life, Water	Powers Volunteer Fire Department, Coquille Watershed Association
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)	Critical Infrastructure	BPA/PPL
Southwest			
Bennett Butte Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Resort Area (W. of 101) golf course	Significant amount of gorse, likely treat with defensible space and fuels.	Life	Roads Department, Bandon Dunes Resort
City of Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines	Life, Water, Critical Infrastructure	City of Bandon Public Works, BPA
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed	Life, Water	Curry County
Gorse Eradication	Remove gorse all along southern coast	Life, Water, Critical Infrastructure, Parks	CFPA, Roads Department
Additional Projects Identify by Community Members During Community Forums			
Remote homes	Egress of remote homes west of Myrtle Point	Life	CFPA, Homeowners
Gorse removal	Remove gorse along coast	Life	CFPA, Roads Department
Gorse removal	Gorse removal along coast south of Cape Arago	Life	CFPA, Roads Department
Gorse removal	Gorse treatment from Old Seven Devils Road to Whisky Run Road	Life	CFPA, Roads Department
Roadside brushing	Sumner Rural Fire Protection District - Road brushing and fuel reduction	Life	Roads Department

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. A set of objectives and actions support each goal.

Goal 1: Wildfire Safety and Awareness

Increase knowledge about wildfire safety among seasonal and full-time county residents who 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 among 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's 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.

Many public and private entities share responsibility for wildfire awareness and preparedness. Residents and businesses will play an intergral role in reducing the threat of wildfire in Coos County. The ability, willingness, and resources to act on the part of the community at large must match onging public outreach efforts on the part of agencies.

Chapter 1: Introduction

Overview

Coos County has suffered several catastrophic wildfires throughout its recorded history. These fires, along with other recent wildfires in Oregon and across the western United States, have resulted in increased public awareness in 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: wildfire context in Coos County; plan purpose; plan development process; CWPP mission, goals, and objectives; and plan organization.

Wildfire Context

Wildfires are a natural and an important component of a healthy forest ecosystem. However, since the 1990s, evidence of and concern regarding the threat of catastrophic wildfires has increased 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 locally. 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 Forests Restoration Act (HFRA) limits the WUI to within ½ mile of an at-risk community's boundary or within 1½ 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), over 2,500 wildland fires ignite on protected forestlands in Oregon every year. The Oregon NHMP 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 that 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 industrial accidents. 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 illustrates the components that make up the Wildfire Behavior Triangle.

Figure 1.1: 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 large-scale 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 fires (i.e., fires over 10 acres in size). 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 1800s:[7]

- **2005:** Camas Creek wildfire burned 178 acres.
- **Aug.-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 four 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. Approximately 90% of Elliott State Forest burns. Fire stops 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 over 17,000 acres and damaged or destroyed 30 homes and structures. Statewide that

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[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/FIREStlist.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.

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; it also 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-based wildfire mitigation strategy developed through collaboration among local, state, and federal agencies. The 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). 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]

- **Collaboration:** Local and state government representatives, in consultation with federal agencies and other interested parties, must collaboratively develop a CWPP.

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

[9] Healthy Forests Restoration Act, 2003.

- **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 economic, social, and ecological health of communities in Coos County. The county organized development of the CWPP into the following four phases: (1) project initiation, (2) risk assessment, (3) public outreach and collaboration, (4) and CWPP adoption. The following subsections 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), which are 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, refine the work plan, and 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
- Coos County Emergency Management
- Coos County Board of County Commissioners
- Coos Watershed Association

[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.

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 provides information about the areas where wildfire is most likely to occur and the type of land and property in those areas; it also analyzes 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 County, attitudes toward 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

[11] Retired from the U.S. Forest Service, Jim Wolf is conducting a risk assessment and is 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.

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 that the steering committee identified: 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 steering committee met with CSC staff on August 18 to review the document and provide final comments and edits. CSC incorporated all edits and presented a final plan to the county for adoption in October 2011.

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 identify 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 who 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 private 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, drinking 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 among local, state, and federal agencies to address wildfire risk reduction and response.

Objectives:

- Develop a multijurisdictional strategic plan to facilitate interagency collaboration, communication, and coordination among Coos County's public and private agencies, nongovernmental 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 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

This section describes the plan's organizational structure:

Chapter 2: Community Profile summarizes the population, economy, critical infrastructure, and physical characteristics of Coos County. The information is roughly organized according to the values at risk (life, drinking water, critical infrastructure, and forests) 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 Forests 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, 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 CWPP. 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. The survey gathered information on homeowner perceptions of wildfire risk and attitudes toward measures that 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 forums' 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

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

The information presented below summarizes the population, economy, critical infrastructure, and physical characteristics of Coos County. The information is roughly organized according to the values at risk (life, drinking water, critical infrastructure, and forests) identified by the steering committee; particular attention is given to factors related to wildfire risk and vulnerability.

Life

Population location, density, and demographics are important factors to consider when developing wildfire protection plans. Although 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, or existence outside the protection of rural fire-district boundaries. 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 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.

Table 2.1: Land Ownership by Acre

Landowner Entity	Acreage	Percent of Total Acreage
Private Ownership	675,000	46.6%
Bureau of Land Management	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%**

Source: *Atlas of Oregon,* University of Oregon Press.

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 lists 21 unincorporated communities in Coos County. [14]

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 the more stringent fire and building codes adopted in 1985.[15]

Furthermore, older structures may not comply with 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

Table 2.2: Age of Housing Structures

Year Built	Total Structures	Percent of Total Structures
2005 or later	839	2.8%
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 earlier	3,758	12.5%
Total	**30,015**	**100.0%**

Source: U.S. Census, "Coos County Selected Housing Characteristics," 2006-8 American Community Survey Three-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 face more challenges 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 of Coos County's overall economy. Despite representing a smaller percentage of employment when compared to local government or the leisure and hospitality sectors, agriculture accounted for the production and sale of $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 it can affect 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,

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

[17] Ibid.

[18] U.S. 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 water supplies are impacted.[20]

Geography and Climate

The terrain along the coast and in the river valleys is relatively flat, but 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 that 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 and 95 inches per year, but areas on the higher western slopes of the Coast 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. 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 substations, telecommunication towers, a natural gas pipeline running between Coos Bay and Roseburg, and rural fire stations. Notably, highly flammable fuels surround many critical infrastructure facilities throughout the county.

Transportation networks, systems for power transmission, and critical facilities such as hospitals and police stations are all vital to the function of the region. Due to the fundamental role that infrastructure plays in both pre 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 (U.S. 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 are in use by state highways and 115 are in use by county highways.[23] The county's marine transportation consists primarily of shipping in and out of the port of Coos Bay, and to a lesser extent, the Port of Bandon.

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[20] Coos County Natural Hazard Mitigation Plan. May 2010, Section 3 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.

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 and 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 forestland. The BLM and the U.S. Forest Service administer an additional 672,000 acres of forestland (see Table 2.1 above). Included in land-management responsibilities are preparing, selling, and administering timber sale contracts. Additionally, the Department of Forestry administers the Special Forest Products program and sells commercial permits for forest resource-extraction activities. The Department of Forestry can incorporate wildfire mitigation measures in county-owned forests.

According to the Atlas of Oregon, approximately 900,000 acres (87% of the total land area of Oregon) is zoned as commercial forestland.[26] This commercial forestland acreage is divided among public ownership, 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] The public owns over half of the land in Coos County.

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 affected if wildfires destroyed large stands of timber. Additionally, after a forest fire, erosion increases, potentially affecting watersheds, 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 vulnerable assets and systems (values at risk), efforts can be geared toward protecting Coos County's most valuable resources.

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[24] Ibid.

[25] Ibid.

[26] *Atlas of Oregon*, University of Oregon Press.

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

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. Though the Healthy Forests 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 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 legislation and plans. The chapter concludes with a review of federal, state, and local agencies involved with wildfire planning.

The Healthy Forests Restoration Act of 2003[28]

President Bush signed the Healthy Forests 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 their wildland/urban interfaces (WUI) and develop community wildfire protection plans (CWPPs). The HFRA serves as a guiding framework for CWPP processes nationwide. The legislation requires that communities develop CWPPs in order to receive federal grant funding for priority projects, and it 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 nongovernment 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 manage their land actively. 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.

[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 the Interior to (1) develop a response to severe wildfires, (2) reduce fire impacts on rural communities, and (3) ensure 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 forestland burned due to years of fire-suppression management and fuels buildup. 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 among 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 firefighter and public safety awareness.

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). RFDs are defined in the plan as any department serving a community population of 10,000 or fewer within the WUI. Funding requests for the departments are limited to training, equipment, and prevention activities. The rural RFDs must have the capability to meet cost-share at a minimum of 10%, which may include in-kind services or noncash goods. In Coos County, many homes are located outside of the WUI boundary and are often the responsibility of combined efforts from many RFDs. A CWPP must be in place for RFDs and VFDs to access funds needed to protect and educate homeowners in these remote areas. In prioritizing funding allocation among RFDs, agencies evaluate and compare applicants based on (1) department wildland fire prevention and education program needs, (2) department training program needs, (3) community and DOI values at risk, and (4) percentage of wildland/urban lands. 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 1994[30]

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 U.S. 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 that both the USFS and the BLM shared 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 carried out in some reserve areas, program timber harvest can now only take place in matrix

[29] U.S. Department of the Interior and U.S. 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. http://www.reo.gov/library/reports/newroda.pdf

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:

- National Environmental Policy Act (NEPA)
- National Forest Management Act
- Federal Land Policy and 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
- The Federal Advisory Committee Act

The important forest management aspects of these acts referenced in the Forest Service/BLM plan are also germane to this CWPP. Fuels-reduction projects in forested areas of Coos County, for example, must recognize and follow federal policy. The 1994 U.S. Forest Service plan affects the prioritization of projects and WUI development, and it sets guidelines on taking federal land practices inside the WUI of Coos County. The Coos County CWPP incorporates many of the values from this ROD in the four values at risk that the Coos County steering committee identified.

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 in turning fire-vulnerable urban and suburban properties into less volatile zones. Senate Bill 360 also requires that a classification committee composed of three county members, a state fire marshal, and a state forester define the forestland-urban interface areas. Finally, Senate Bill 360 requires landowners within the forestland-urban interface to reduce excessive vegetation that 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
- Meet the state's definition of *forestland*
- 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 that they may sign and return to ODF after they have met the fuel-reduction standards.

Senate Bill 360 helps define and regulate the wildland/urban interface identification process for the Coos County CWPP and 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 with statewide planning mandates.

Goal 1

Goal 1 pertains to citizen involvement and community participation. Similar to the CWPP requirements listed in the HFRA, Goal 1 ensures that citizens have the opportunity 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.

Goal 4

Goal 4 directs the state to "maintain the forest land base" and "protect the state's forest economy." This goal directs jurisdictions to implement forest-zones and establish forest management regulations. The primary intent of Goal 4 is to "assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture."

Goal 5

Goal 5 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 affect these resources and open spaces.

[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

Goal 7

Goal 7 is intended to protect life and property from natural hazards. Goal 7 requires that local governments include inventories of certain natural hazards, including wildfire, in their comprehensive plans. In addition, Goal 7 directs jurisdictions to adopt policies and implementing measures to reduce risk.

Bureau of Land Management Coos County[33]

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. The plan includes several proposed alternatives. The alternative favored by the BLM balances protection of older forests management and enhancement of values such as dispersed nonmotorized 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 Plans[34]

The Coos County Multijurisdictional Natural Hazards Mitigation Plan is a FEMA-approved plan that makes Coos County eligible for special projects grants via the Robert T. Stafford Disaster Relief and Emergency Assistance Act through 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 hazard mitigation plan includes action strategies for earthquakes, floods, landslides, and wildfires.

The Coos County Multijurisdictional Natural Hazards Mitigation Plan specifically addresses fire hazard mitigation. In this section, the plan identifies the Coos Forest Protective Association (CFPA) as the primary promoter of wildfire mitigation in the county. The CFPA is a private, nonprofit corporation responsible for protecting 1.5 million acres of private, county, state, and federal timber and grazing lands from fire in Coos, Curry, and western Douglas counties.[35] The CFPA is directly involved with the CWPP creation process and includes board members from many public and private organizations. The CFPA works with individual property owners identified as having a moderate risk of structural ignitability issues. The Coos County Multijurisdictional Hazard Plan also references the Coos County Development Code (section 4.4.400). This code contains regulations for

[33] Coos Bay District Record of Decision and Resource Management Plan, May 1995.

[34] Coos County Hazard Mitigation Plan, University of Oregon library, https://scholarsbank.uoregon.edu/xmlui/handle/1794/10751 2010

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

setbacks and firebreaks in rural developments. Section 4.8.700 contains fire safety regulations for new developments in the forest zone.

Local, State, and National Stakeholders

The development of the Coos County CWPP engaged stakeholders including Coos County citizens, Coos County fire districts, Coos County Emergency Management, the Coos Forest Protective Association, the Coos Watershed Association, the Oregon Department of Forestry, the Office of the State Fire Marshal, the U.S. Forest Service, the Bureau of Land Management, and the Federal Emergency Management Agency (FEMA).

Coos County Citizens

Individual residents and community groups play 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 visible address signs 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) office is a division of the Coos County Sheriff's Office and is responsible for all emergency management activities, including writing, maintaining, and exercising the Coos County Hazard Mitigation Plan. CCEM is staffed with one full-time manager and coordinates with many liaisons from other community agencies and departments, as well as with state and federal agencies. During an emergency, staff from various county departments responds to the emergency operations center along with state and federal agency liaisons. Radio Amateur Communication Emergency Services (RACES) 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 is the cooperation and participation of local and 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 from the Pacific

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

Ocean east to the Rogue/Siskiyou National Forest in Curry County and Camas Valley in Douglas County.[37]

Coos Watershed Association

The Coos Watershed Association (CWA) is a local nonprofit 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, as well as all of the sloughs and creeks that drain into Coos Bay.[38]

Coos County Forest[39]

The Coos County Forest covers approximately 15,000 acres. The Forest is located in the westerly portion of Coos County. The Beaver Hill/Seven Devils unit is a 12,000-acre block located about eight miles south of Coos Bay. The Daniels Creek/Blue Ridge unit consists of 3,000 acres in two blocks located approximately 12 miles southeast of Coos Bay.

The County acquired these lands through tax foreclosure, exchanges, and acquisitions, beginning in 1936 - present. These lands had been privately owned and were originally logged by railroad system during the period 1900-1935. The Bandon Fire (1936) burned over half of what is now the Beaver Hill/Seven Devils unit. Most of these lands were used for sheep and cattle grazing from about 1936 until about 1950. Large open areas still remaining from the grazing years were planted by school kids, Boy Scouts, welfare workers etc. in the late 1950's and early 1960's. The Coos County Forest is managed to produce revenue from the sale of timber on a sustained yield basis. Sale of special forest products permits and mineral leases produce additional revenue.

The Coos County Forest produced net revenues to the Forestry Fund of $1,222,685 in FY 2010 during a poor market for timber (revenues were $3.5 million in 2008 at a market peak). The Forestry Fund disburses revenues to the County General Fund based on a 5-year running average of its net revenues.

Oregon Department of Forestry

The Oregon Department of Forestry (ODF) is responsible for management, emergency response, law enforcement, and governance on state forestlands. State foresters establish priorities, allocating resources, and establishing forestland policy. Additionally, state foresters apply their expertise and experience in communities through state and federal grant-funded education and technical assistance. Finally, state foresters build 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)

OSFM helps 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 invoking the Oregon Emergency Conflagration Act. When

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

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

[39] Coos County Forestry Department, http://www.co.coos.or.us/forestry/historygeninfo.html

directed by the governor, the act allows the state fire marshal to mobilize structural firefighting personnel and equipment if fire threatens a significant number of structures or lives 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 forestland 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.

Bureau of Land Management

In Coos County, the Bureau of Land Management (BLM) is responsible for managing forest resources on Oregon-California Railroad Land Grant (O&C) lands. The BLM is also responsible for forest fuel management and modification of these lands. Through the Western Oregon Contract, the BLM addresses wildfire suppression activities through a 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 to consolidate 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 2003. The primary mission of FEMA is to "prepare for, protect against, respond to, recover from, and mitigate all hazards" 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. [40]

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).[41] 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

[40] Federal Emergency Management Agency: Wildfires 2011, http://www.fema.gov/hazard/wildfire/ca_2007.shtm

[41] U.S. Fire Administration 2011, http://www.usfa.dhs.gov/fireservice/index.shtm.

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 that the Coos CWPP is consistent with existing local, state, and federal guidelines. The CWPP implementation committee will continue to review the documents detailed in this chapter during the implementation and monitoring processes.

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, a summary of the assessment methodology, 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 is in Appendix A.

Figure 4.1: Understanding Risk

Source: USGS- Oregon Partnership for Disaster Resilience Research Collaboration, 2006

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 rates, locations and sizes of past wildfires, the locations and types of area 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 prioritize and fund wildfire mitigation projects effectively. 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.*[42]

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)[43] to assess the likelihood of harm or loss to specific values designated in the Coos County CWPP.

[42] Healthy Forests Restoration Act, 2003.

[43] 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 refine the boundaries of the risk assessment and are tools in identifying and implementing priority fuels-reduction projects.[44]

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

1. Natural Hazard - Wildfire threat (i.e., the probability an area will burn at an intensity to cause damage based on computer-generated wildfire simulations).
2. Vulnerable System - 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. Wildfire Risk – 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. Although 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 of 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 the 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 mimic probable ignition location of larger fires more accurately.

[44] The Coos County CWPP risk-assessment boundary encompasses the entire county. Although the plan establishes a WUI boundary that meets the HFRA definition, the intent of this plan is to cover all lands 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."[45] 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 identify homes. A CAR is generally under a common fire-protection jurisdiction, government, or tribal trust or allotment for which there is a significant threat of 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).[46] The risk assessment also assesses the risk to each of the populated areas outside of protection districts. Table 4.1 (below) contains a list of communities at risk in Coos County, along with population data for each CAR. The table includes American Community Survey and 2010 U.S. Census county population totals for comparison purposes. Please refer to Map A.1 in Appendix A for locations of communities at risk.

Table 4.1: Communities at Risk

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 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
Table Population Total	**63,848**
ACS County Population Total[+]	*63,230*
2010 Census Total[T]	*63,043*

Sources: * LandScan 2008;
[+] American Community Survey 2005-9 (five-year estimates);
[T] U.S. Census Bureau, 2010 Census.

[45] Healthy Forests Restoration Act, 2003.

[46] http://www.oregon.gov/ODF/FIRE/CAR.shtml

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.[47] 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 of the Interior in a CWPP. The second section of this definition describes the criteria to use if a CWPP is not developed and is not relevant following Coos County CWPP approval.

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 shows historic burn 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.

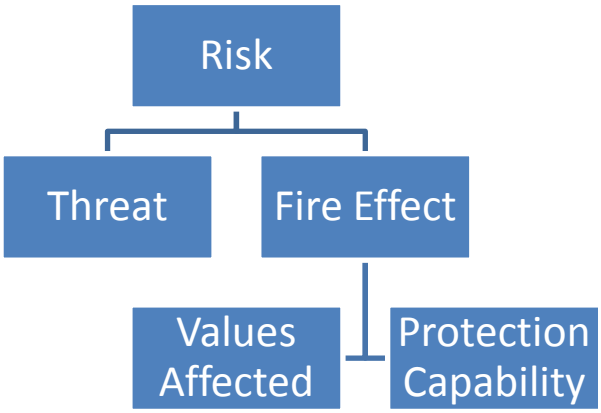
The steering committee established a draft WUI boundary by integrating information from multiple sources. The 2004 Southwest Oregon Interagency Fire Management Plan (SWOFMP) served as a starting point for defining the WUI. Ridgelines and watershed boundaries also served as topographic indicators in establishing 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 its final meeting on August 18, 2011. Map 4.1 shows the established WUI boundary, neighboring county WUIs, and public land ownership.

Assessment Layers

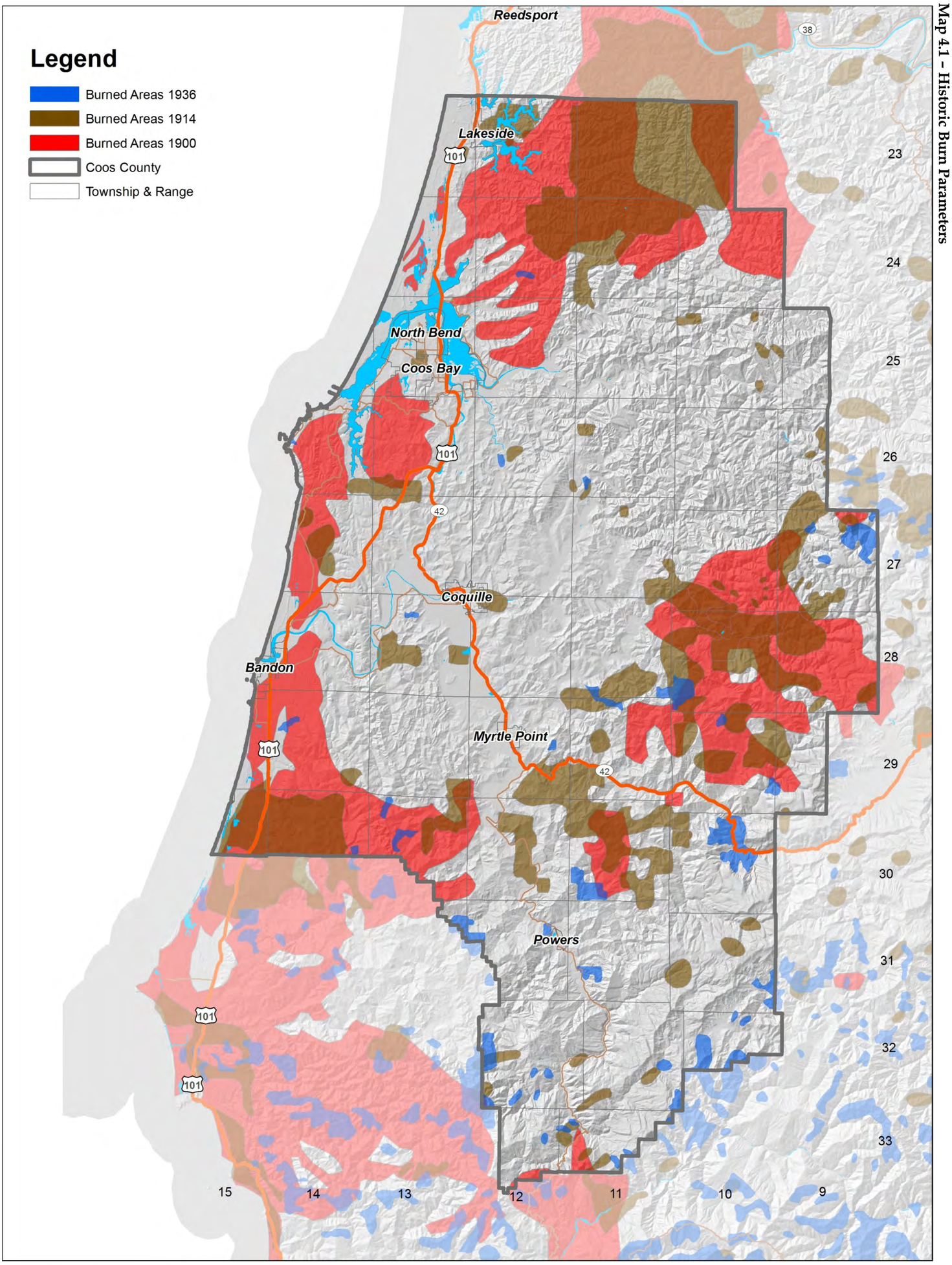
The CWPP synthesizes information from three types of assessment "layers" to develop the final risk-assessment map: (1) wildfire threat/fire effect, (2) values impacted and (3) protection capability. Figure 4.1 illustrates the risk-assessment model utilized in developing the Coos County CWPP.

[47] State of Oregon Natural Hazard Mitigation Plan, 2004.

Figure 4.1: Coos County Risk-Assessment Model



Source: Jim Wolf



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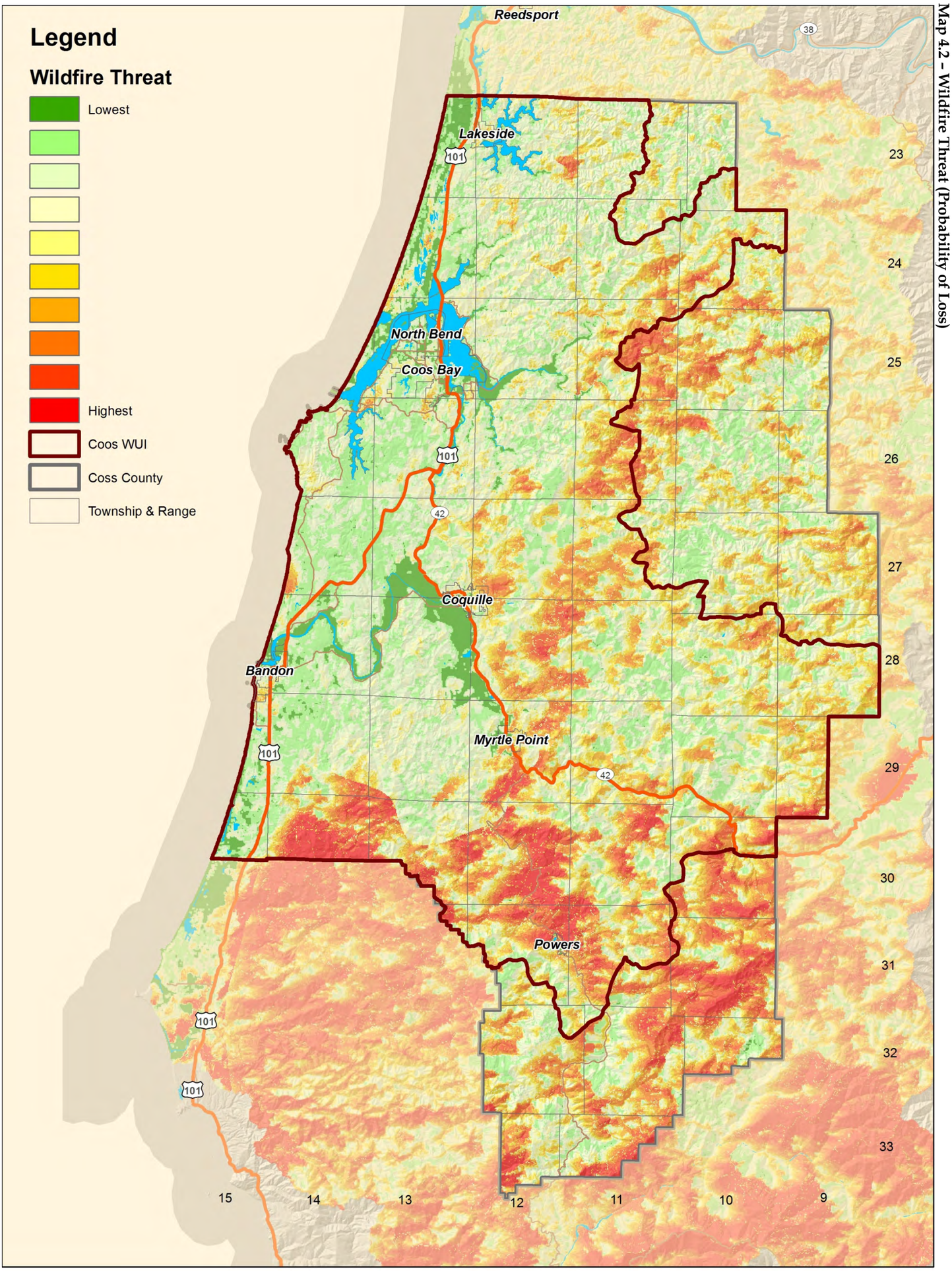
N W E S

0 2 4 8 Miles

Historic Fire Perimeters (surveyed burned areas) for Coos County



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Wildfire Threat (Probability of Loss) for Coos County

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, 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 the map 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 ODF utilized 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, as well as 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 the steering committee will use them to inform the development of action items and priority-project lists developed each year. It is important to note 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 Appendices C and D.

Life

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 jurisdictions[48] 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: Communities

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.

[48] 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 affect 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).[49] 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 public water systems to the risk-assessment inputs: (1) the 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 (fewer 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 Appendix A specifies the public surface drinking water classifications; Map A.8 shows public surface water system watersheds.

[49] 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.[50] The steering committee identified two items under critical infrastructure: (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: Critical 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; the consultant also combined forest ownership and NW Forest Plan Land Use Allocation (LUA) into a layer that delineates the forest cover into four classes based upon intended use and value. Appendix

[50] http://www.dhs.gov/files/programs/gc_1189168948944.shtm

A, Table A.10 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.

Table 4.6: Forests Categorized by Owner/Land-Use Allocation

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
Bureau of Indian Affairs (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	
U.S. Corps of Engineers	
Oregon Parks and Recreation Dept	

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 to 9) to each of these classes. Finally, the risk assessment assigns a percent influence among 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 closely, 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

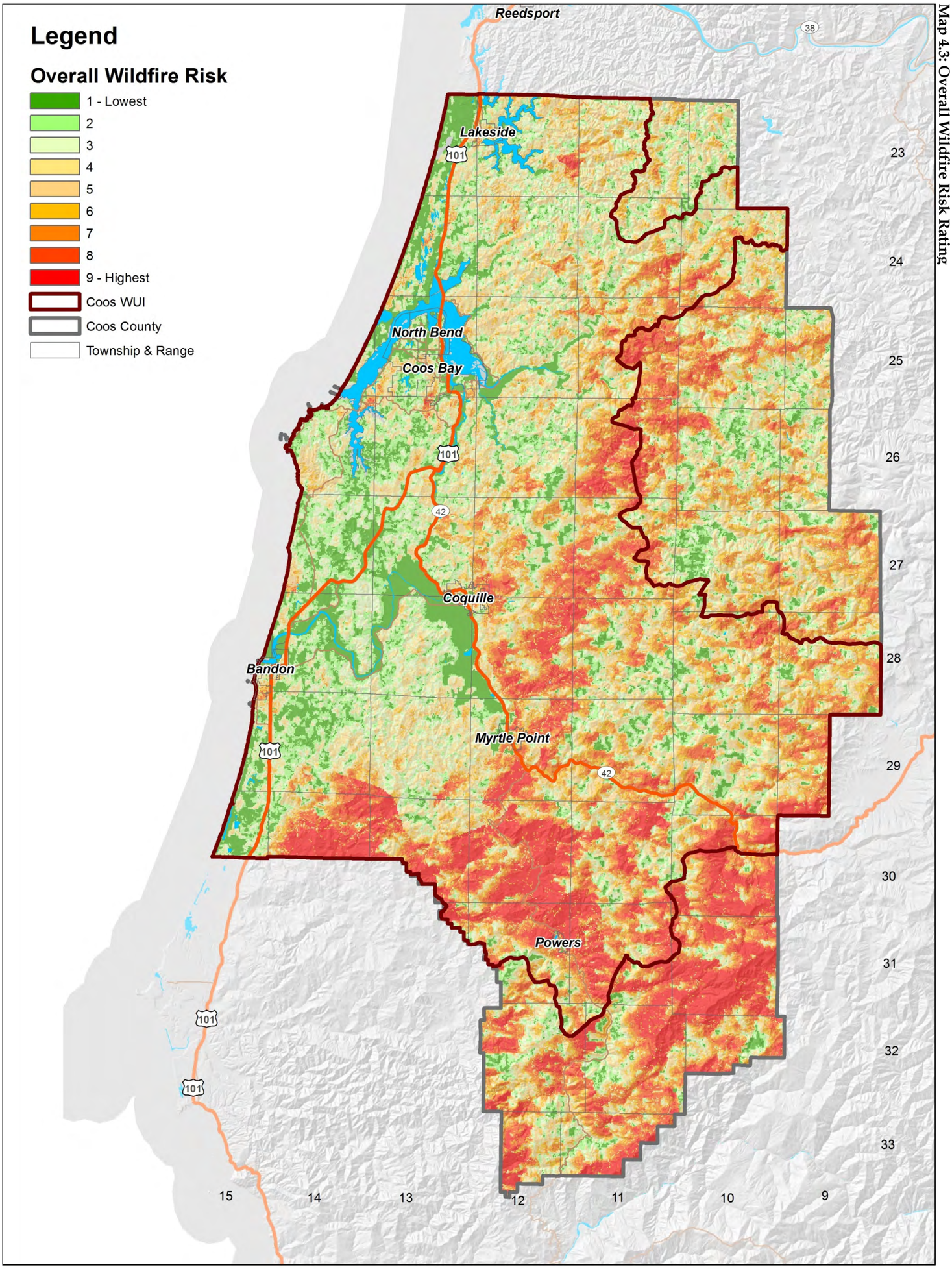
In order to meet the Healthy Forests Restoration Act (HFRA) requirement to prioritize fuels-reduction projects on both public and private lands, the CCCWPP used the priorities listed above along with adjacency to federal ownership, land-use allocation, and past and planned projects to identify and prioritize potential projects and funding sources. Table 4.7 presents a preliminary list of priority projects. The CWPP implementation committee 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.

Table 4.7: Priority Fuel-Reduction Projects

Project Name	Description/objective	Value Addressed	Key Partners
North			
Blue Ridge Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project).	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Golden & Silver Falls	Improve fire access including communication of fire threat and evacuation routes	Parks	Roads and Parks Departments
Coquille Indian Reservation	Fuels reduction project(s) to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed	Life, Water	Coos Bay-North Bend Water Board
City of Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed	Life, Water	City of Coquille Fire, Coquille RFD, Coquille Watershed Association
Fairview RFD	Four Corners, defensible space fuels project to protect large power substation. Improve evacuation routes.	Critical Infrastructure, Life	Fairview RFD, BPA/PPL
Shutter Creek Correctional Institution	Use inmate crews to treat fuels adjacent to camp and improve limited access to summer cabins.	Life	Oregon Department of Corrections
Southeast			
Signal Tree Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project in conjunction with CFPA lookout and communication tower replacement project).	Critical Infrastructure	BLM, ODF, CFPA, ODOT, private communication providers (e.g. AT&T, KVAL, US Cellular, etc.)
Slide Creek Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, Plum Creek Timber Company
Bridge RFD	Education and defensible space to reduce threat to community and watershed	Life, Water	Bridge RFD, Coquille Watershed Association
City of Powers	Education and defensible space to reduce threat to community and watershed	Life, Water	Powers Volunteer Fire Department, Coquille Watershed Association
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)	Critical Infrastructure	BPA/PPL
Southwest			
Bennett Butte Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Resort Area (W. of 101) golf course	Significant amount of gorse, likely treat with defensible space and fuels.	Life	Roads Department, Bandon Dunes Resort
City of Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines	Life, Water, Critical Infrastructure	City of Bandon Public Works, BPA
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed	Life, Water	Curry County
Gorse Eradication	Remove gorse all along southern coast	Life, Water, Critical Infrastructure, Parks	CFPA, Roads Department
Additional Projects Identify by Community Members During Community Forums			
Remote homes	Egress of remote homes west of Myrtle Point	Life	CFPA, Homeowners
Gorse removal	Remove gorse along coast	Life	CFPA, Roads Department
Gorse removal	Gorse removal along coast south of Cape Arago	Life	CFPA, Roads Department
Gorse removal	Gorse treatment from Old Seven Devils Road to Whisky Run Road	Life	CFPA, Roads Department
Roadside brushing	Sumner Rural Fire Protection District - Road brushing and fuel reduction	Life	Roads Department

Source: Coos CWPP Risk Assessment.



Map 4.3: Overall Wildfire Risk Rating

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Overall Wildfire Risk for Coos County

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 it collects new information and identifies additional project ideas.

Table 4.8: Community-Identified Project Alternatives

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 removal	Gorse treatment from Old Seven Devils Road to Whisky Run Road
Roadside brushing	Sumner Rural Fire Protection District - Road brushing and fuel reduction

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 develop 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 its 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 the steering committee reviewed and approved. 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), which 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, implementation committee, 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; and
- Coordination of community neighborhood projects and informational meetings on Firewise landscaping.

Table 5.1: Goal 1 Action Items

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 Implementation 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)
1.6	Assess and improve wildfire education currently provided in Coos County public schools.	Wildfire Education and Outreach Coordinator	Short-Term (0-2) years

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.

Table 5.2: Goal 2 Action Items

Number	Action Item	Coordinating Body	Timeline
2.1	Coos Forest Protective Association, in partnership with Coos County Emergency Management and the Coos County CWPP Implementation Committee, will re-run and update the risk assessment using best available data at least every five years or as conditions change.	Coos Forest Protective Association	Ongoing
2.2	The Coos County CWPP Implementation Committee will use the past priority project lists together with any updated risk assessment information to create a new list of priority fuels reduction projects on both public and private lands.	Coos Forest Protective Association and the Coos County CWPP Implementation Committee	Ongoing
2.3	Conduct specific hazard identification, documentation and inventory surveys within the Coos County Community Wildfire Protection Plan (CWPP) area to aid in determination of fuel reduction project needs and prioritization.	Coos county CWPP Implementation 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, drinking water, critical infrastructure, and forest resources.
- Identify funding opportunities to implement priority fuels-reduction projects.
- Utilizing a coordinated, multistakeholder process, identify strategies to conduct landscape scale fuels-reduction projects.

Table 5.3: Goal 3 Action Items

Number	Action Item	Coordinating Body	Timeline
3.1	Establish a semi-annual woody debris disposal campaign to facilitate the removal of excess vegetation and biomass on private property.	CWPP Implementation 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	Twice per year (spring/fall) host a "Treatment Day" to assist homeowners with creating defensible space.	RFPD Chiefs	Short Term (0-2 years)
3.4	Survey insurance provider in Coos County to determine which companies offer policy incentives to property owners for conducting fuel treatments or other wildfire mitigation measures (i.e. maintaining defensible space) and promote and publicize list.	CWPP Implementation Committee	Short Term (0-2 years)/ Ongoing
3.5	Incorporate annual BLM priority fuels reduction list into the CWPP.	BLM	Ongoing

Goal 4: Interagency Communication

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

Objectives:

- Develop a multijurisdictional strategic plan to facilitate interagency collaboration, communication, and coordination among Coos County's public and private agencies, nongovernmental 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.

Table 5.4: Goal 4 Action Items

Number	Action Item	Coordinating Body	Timeline
4.1	Conduct quarterly interagency communication meetings with representatives from fire protection agencies serving Coos County.	CWPP Implementation 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 Implementation Committee	Short Term (0-2 years)/ Ongoing
4.3	Provide the Coos County Commission with an annual update on CWPP implementation progress and resource needs.	CWPP Implementation Committee	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 Implementation 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)

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.

Table 5.5: Goal 5 Action Items

Number	Action Item	Coordinating Body	Timeline
5.1	Hire part-time Noxious Weed Abatement Analyst.	Coos County Noxious Weed Board	Short Term (0-2 years)
5.2	Within two years, survey and geocode gorse locations throughout Coos County.	Coos County Noxious Weed Board	Ongoing
5.3	Expand the number and reliability of area specific gorse maps county wide	Coos County Noxious Weed Board	Short Term (0-2 years)
5.4	Design, produce and distribute gorse removal literature to community members.	Coos County Noxious Weed Board	Ongoing
5.5	Conduct community forums, public meetings and land owner education seminars focused on the removal of gorse and other noxious and invasive weeds.	CFPA	Ongoing
5.6	Develop a five-year plan to reduce Gorse on private property and along major roadways in the Bandon area.	Coos County Noxious Weed Board	Short Term (0-2 years)

Priority Project Areas

In order to meet the Healthy Forests 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, and past and planned projects to identify and prioritize potential projects and funding sources. Table A.19 is a list of projects.

Table A.19: Priority Fuel-Reduction Projects

Project Name	Description/objective	Value Addressed	Key Partners
North			
Blue Ridge Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project).	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Golden & Silver Falls	Improve fire access including communication of fire threat and evacuation routes	Parks	Roads and Parks Departments
Coquille Indian Reservation	Fuels reduction project(s) to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed	Life, Water	Coos Bay-North Bend Water Board
City of Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed	Life, Water	City of Coquille Fire, Coquille RFD, Coquille Watershed Association
Fairview RFD	Four Corners, defensible space fuels project to protect large power substation. Improve evacuation routes.	Critical Infrastructure, Life	Fairview RFD, BPA/PPL
Shutter Creek Correctional Institution	Use inmate crews to treat fuels adjacent to camp and improve limited access to summer cabins.	Life	Oregon Department of Corrections
Southeast			
Signal Tree Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project in conjunction with CFPA lookout and communication tower replacement project).	Critical Infrastructure	BLM, ODF, CFPA, ODOT, private communication providers (e.g. AT&T, KVAL, US Cellular, etc.)
Slide Creek Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, Plum Creek Timber Company
Bridge RFD	Education and defensible space to reduce threat to community and watershed	Life, Water	Bridge RFD, Coquille Watershed Association
City of Powers	Education and defensible space to reduce threat to community and watershed	Life, Water	Powers Volunteer Fire Department, Coquille Watershed Association
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)	Critical Infrastructure	BPA/PPL
Southwest			
Bennett Butte Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Resort Area (W. of 101) golf course	Significant amount of gorse, likely treat with defensible space and fuels.	Life	Roads Department, Bandon Dunes Resort
City of Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines	Life, Water, Critical Infrastructure	City of Bandon Public Works, BPA
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed	Life, Water	Curry County
Gorse Eradication	Remove gorse all along southern coast	Life, Water, Critical Infrastructure, Parks	CFPA, Roads Department
Additional Projects Identify by Community Members During Community Forums			
Remote homes	Egress of remote homes west of Myrtle Point	Life	CFPA, Homeowners
Gorse removal	Remove gorse along coast	Life	CFPA, Roads Department
Gorse removal	Gorse removal along coast south of Cape Arago	Life	CFPA, Roads Department
Gorse removal	Gorse treatment from Old Seven Devils Road to Whisky Run Road	Life	CFPA, Roads Department
Roadside brushing	Sumner Rural Fire Protection District - Road brushing and fuel reduction	Life	Roads Department

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 and 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 CWPP implementation committee chairperson who will maintain the plan, manage the implementation committee, and serve as a liaison to the Coos County NHMP. The plan also identifies a CWPP implementation committee 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.

Committee Chairperson

The Coos County CWPP committee chairperson will be responsible for the following:

- Organizing committee meetings (times, dates, locations, and agendas);
- Documenting the discussions and outcomes of implementation committee meetings;
- Serving as a liaison between the CWPP Coordinating Body, key community stakeholders, and the public at large;
- Identifying wildfire planning and mitigation-related funding sources to complete the action items included in this plan;
- Initiating the plan-update process, including a review of the risk assessment, goals, action items, and implementation strategies (to begin five years after plan adoption);
- Coordinating the local plan-adoption process; and
- Serving on the Coos County NHMP Coordinating Body.

CWPP Implementation committee

The implementation committee will primarily consist of the CWPP steering committee members and other key stakeholders involved with the development of the CWPP. The responsibilities of the implementation committee include:

- Attending future plan-implementation and maintenance meetings (or designating an alternative representative);
- Identifying priority fuels-reduction projects on an annual basis;
- Serving as the local evaluation committee for project funding;
- Prioritizing and recommending funding sources for priority fuels-reduction projects to the chair;
- Updating the Coos County CWPP, based on the five-year-update schedule set forth in this chapter;
- Coordinating ad hoc and/or standing subcommittees as needed;
- Coordinating public involvement activities throughout the county;
- Ensuring that the action items set forth in Chapter 5 of this plan are implemented based on the timeline provided.

In its implementation efforts, the implementation committee 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 implementation committee:

- Coos Forest Protective Association
- Bureau of Land Management – Coos Bay District
- Oregon Department of Forestry
- U.S. Forest Service
- Coos County Emergency Management
- Coos County Roads Department
- Coos County Forestry Department
- Coos County Water Resources
- Coos County Noxious Weed Advisory Board
- Coos County Board of Commissioners
- Coos Watershed Association
- Coquille Watershed Association
- Coos Soil and Water Conservation District
- Coos County Rural Fire Districts
- Oregon Parks and Recreation

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 implementation committee should engage a variety of stakeholders from mitigation agencies and other organizations.

Plan Maintenance

Beyond implementation of the CWPP action items, ongoing maintenance of the plan will ensure that the CWPP remains an effective and relevant document to wildfire-planning efforts in Coos County. To ensure that regular CWPP review and updates occur, the CWPP implementation committee will meet on a quarterly basis (four times a year). The chair will be responsible for scheduling and overseeing each meeting. The purpose of the quarterly

meetings will be to review implementation strategies for CWPP action items and to update the document based on newly acquired or 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, Coos County will:

- Provide a copy of the plan to local libraries throughout the county;
- Post an electronic copy of the plan on the Coos County website;
- Post dates, times, and locations of implementation committee meetings on the Coos County website; and
- Post dates, times, and locations of implementation committee meetings through other sources including local newspapers, e-mail listserves, and radio stations.

Plan Review

The implementation committee will review and update the CWPP every five years. The implementation committee will develop the review timeline in the future, with the goal of completing an update in September of 2016. The implementation committee will be responsible for identifying update goals and deficiencies of the plan.

Appendix A:
Wildfire Risk Assessment

Risk Assessment Objectives and Definitions

This appendix describes the objectives and methods used in developing the risk assessment for the Coos County CWPP. A key component of the CWPP planning process and primary objective of the project steering committee, the risk assessment resulted in a community base map, designation of the county's wildland urban interface zone and an evaluation of the threats and vulnerabilities associated with wildfire in Coos County. The risk assessment is a key element of the Coos County Community Wildfire Protection Plan (CCCWPP) and was an essential tool used to meet the following needs of a Community Wildfire Protection Plan (CWPP) as outlined by the Healthy Forest 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."

The CCCWPP wildfire risk assessment establishes the Wildland Urban Interface (WUI) and assesses wildfire risks for communities throughout Coos County. This assessment fulfills these requirements, as well as those of the FEMA Disaster Mitigation Act of 2000. The steering committee will use this assessment to develop a prioritized list of fuel hazard reduction areas across the county.

What is a Wildfire Risk Assessment?

A meaningful wildfire risk assessment provides an understanding of the risk of potential losses of life, property, natural resources, and other values important to the community due to wildfire. Risk assessments accomplish this by mapping the history of wildfire occurrence, fuel hazards, wildfire protection capabilities of the communities, and human and natural values threatened by wildfire.

Communities At Risk

A Community At Risk (CAR) is a geographic area within and surrounding permanent dwellings (at least 1 home per 40 acres) with basic infrastructure and services, under a common fire protection jurisdiction, government, or tribal trust or allotment, for which there is a significant threat due to wildfire.[1] The CCCWPP designates the populated portions of the fire districts as the communities at risk in this plan (consistent with The State of Oregon's designated *Communities at Risk (CAR) Assessment*[2]) and assesses the

[1] Healthy Forest Restoration Act, 2003.

[2] http://www.oregon.gov/ODF/FIRE/CAR.shtml

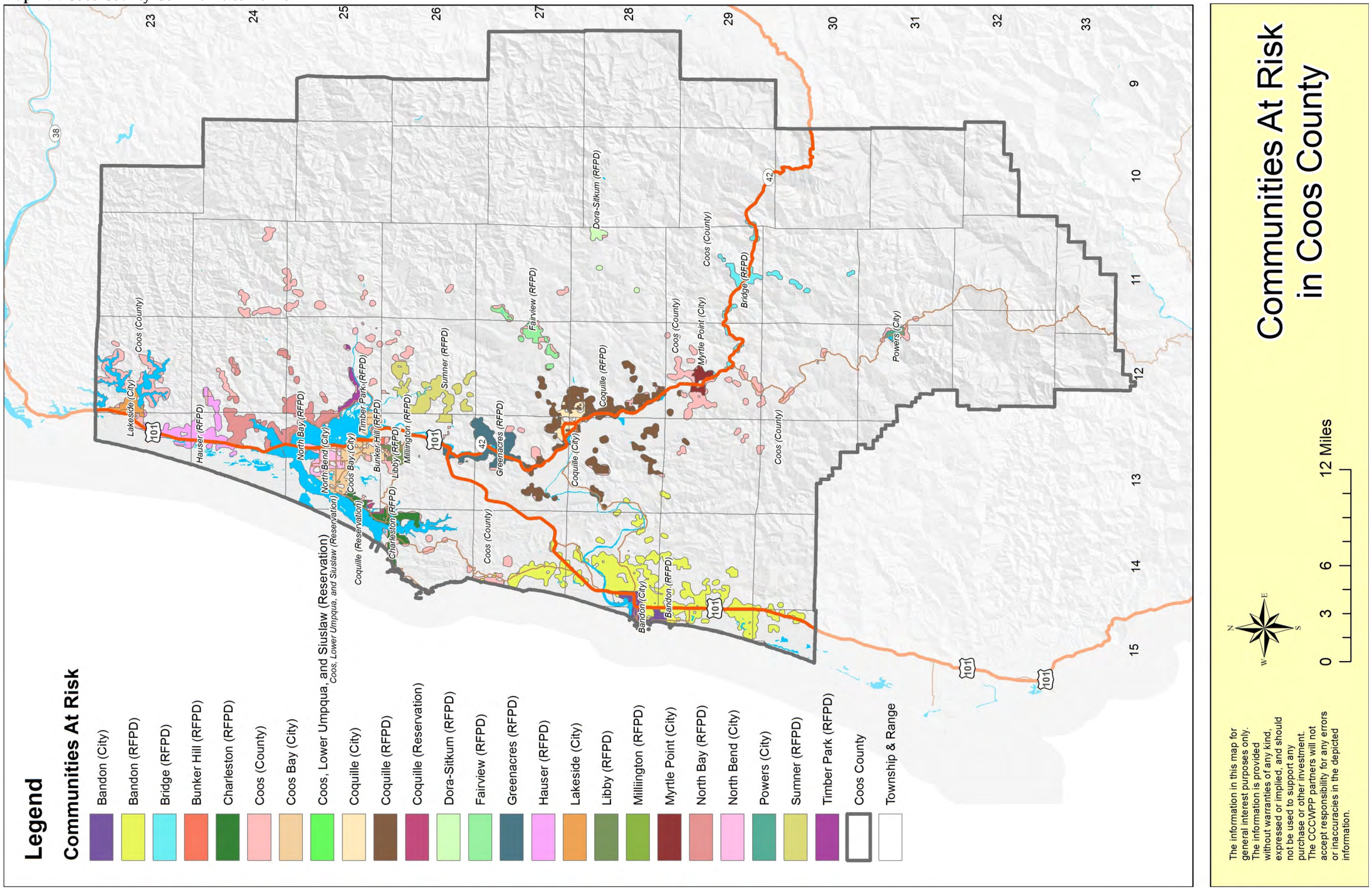
risk to each. Populated areas outside a city, rural fire protection district, or tribal lands are designated as Coos County unprotected. Table A.1 lists CAR for Coos County; Map A.1 shows the locations of each CAR in Coos County.

Table A.1 Communities at Risk

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 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
Table Population Total	**63,848**
ACS County Population Total[+]	*63,230*
2010 Census Total[T]	*63,043*

Sources: * LandScan 2008;
[+] American Community Survey 2005-9 (five-year estimates);
[T] U.S. Census Bureau, 2010 Census.

Map A.1: Coos County Communities At Risk



Wildland Urban Interface (WUI)

The WUI is defined as an area or zone where structures and other human developments meet or intermingle with wildland or vegetative fuels.[3] Tactical wildfire protection actions within the WUI, along with wildfire escape routes, and on strategically superior ground will help protect communities at risk from large wildfires coming from outside the WUI. Fuels treatment projects inside the WUI will usually offer the most projection for communities at risk.

The Healthy Forests Restoration Act (HFRA) defines the WUI as follows (A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan. Section (B) of this definition describes the criteria to use if a CWPP has not been developed and is not germane once the CCCWPP is approved.

Coos County CWPP Wildland Urban Interface (WUI) Boundary

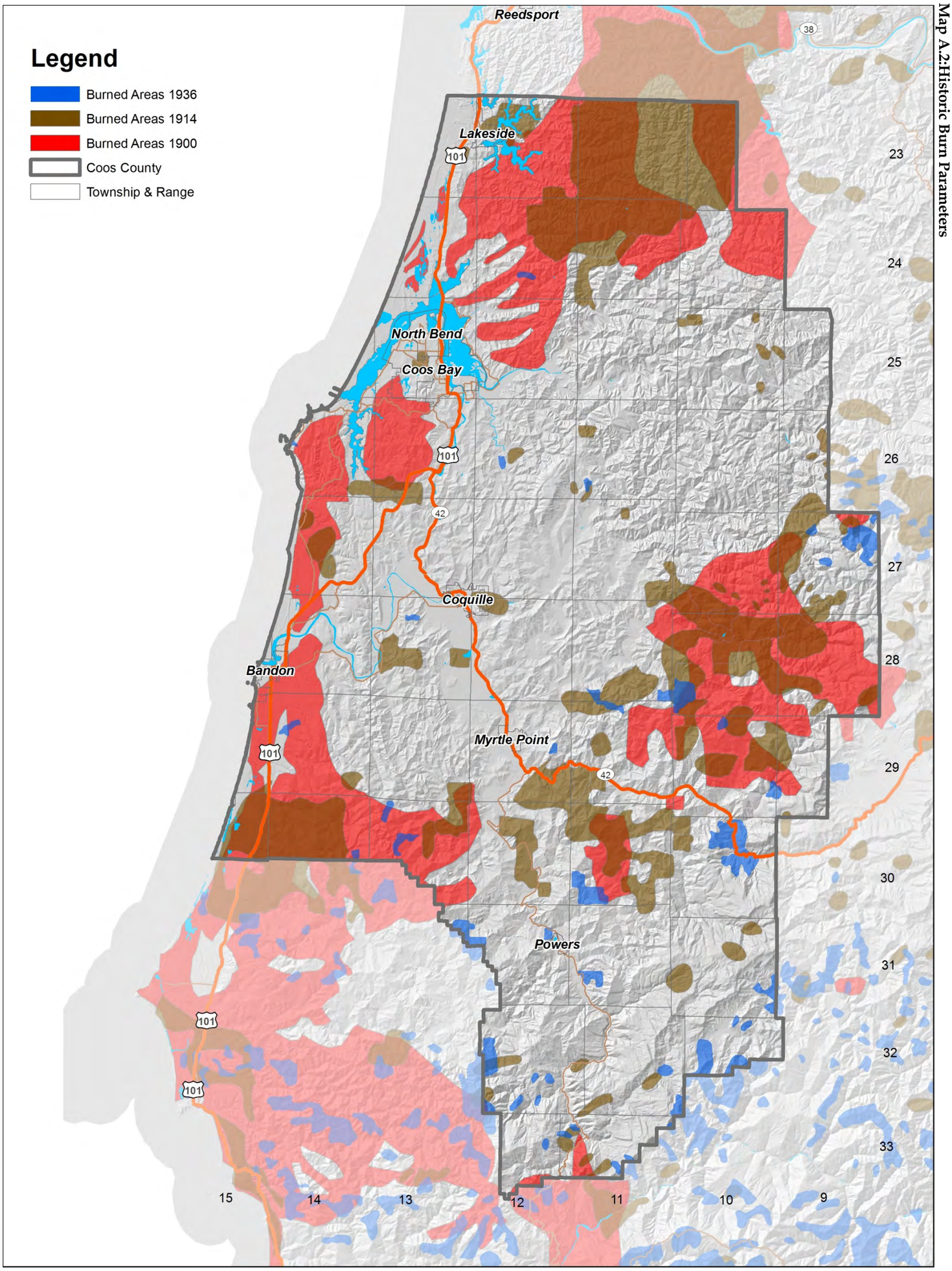
Given local ecology and forest characteristics, the generalized wildfire situation for most of Coos County can be described as fires of low-frequency, but high-severity. Map A.2 shows historic burn perimeters based upon areas classed as *burned* in historic forest vegetation surveys completed in 1900, 1914, and 1936. As shown, these were large, high-severity fires driven by dry off-shore winds that traveled long distances. Fires of this magnitude have not occurred in the 70-plus years since, allowing for a buildup of forest fuels in unmanaged forest stands. The steering committee strongly considered these when establishing the WUI boundary for this plan.

The steering committee established the CCCWPP WUI boundary by integrating information from multiple sources. The 2004 Southwest Oregon Interagency Fire Management Plan (SWOFMP) was used as a starting point for defining the Coos County WUI. It was developed based on communities at risk and topographic features that that serve as tactical and strategic locations for fire breaks. This boundary was extended by the steering committee to include critical infrastructure, as well as communities at risk designated by Douglas and Curry Counties. Ridgelines and watershed boundaries served as topographic guidelines in establishing the WUI.

Lands within the designated WUI are eligible for National Fire Plan (NFP) grant funding to accomplished fuels reduction work.

Map A.3 shows the established WUI boundary, neighboring county WUI's and public ownership.

[3] State of Oregon Natural Hazard Mitigation Plan, 2004.



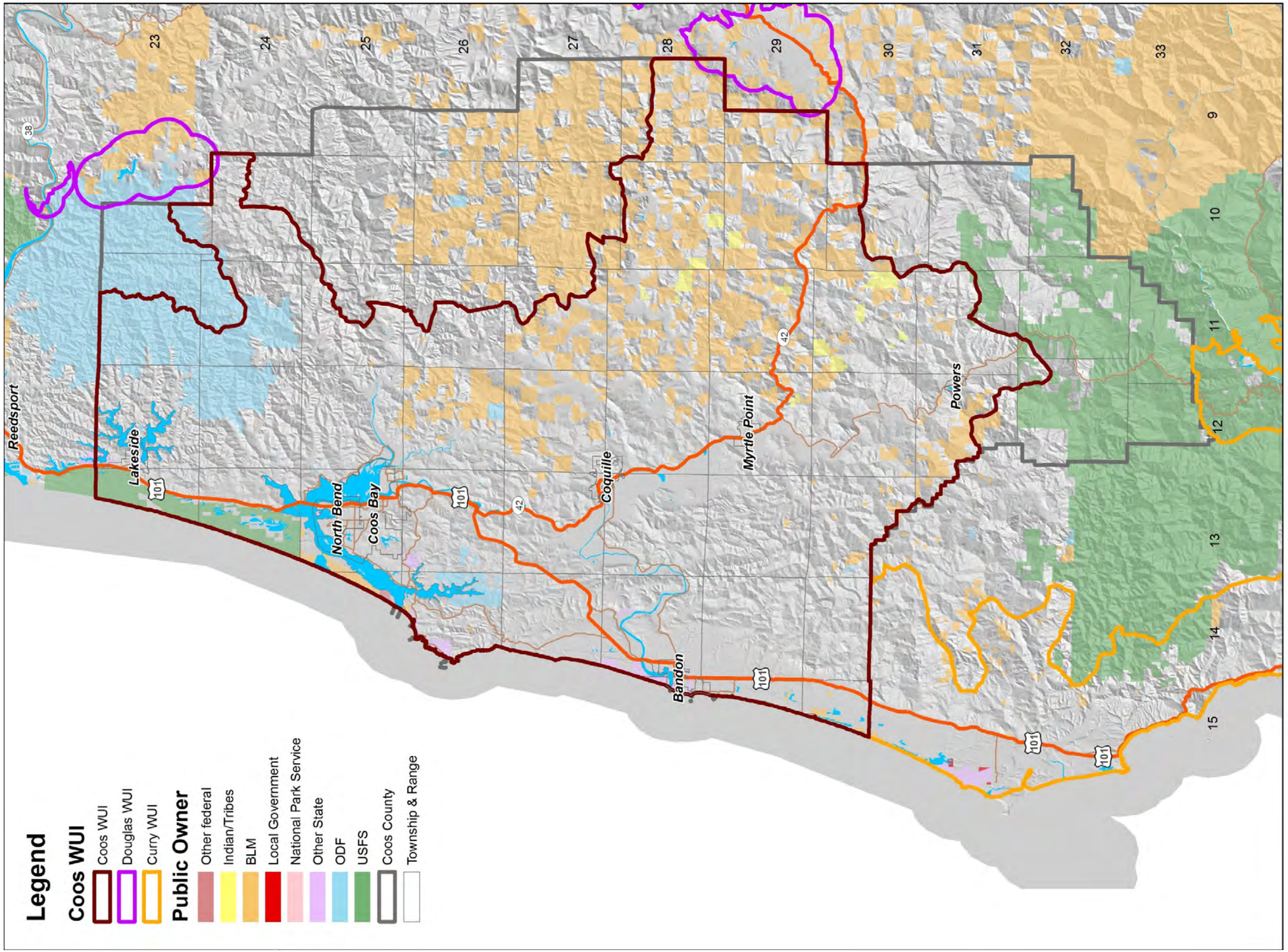
The information in this map for general interest purposes only. The information is provided without warranties of any kind, expressed or implied, and should not be used to support any purchase or other investment. The CCCWPP partners will not accept responsibility for any errors or inaccuracies in the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

N
W E
S

0 2 4 8 Miles

Historic Fire Perimeters (surveyed burned areas) for Coos County

Map A.3: Coos County Wildland Urban Interface Boundary



Wildland Urban interface (WUI) for Coos County

N
W
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0 3 6 12 Miles

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.

Risk Assessment Methodology

Overview

The Coos County CWPP wildfire risk assessment used state-of-the-art methods, tools, and fire spread models supported by the Western Wildland Environmental Threat Assessment Center [4] (WWETAC) to assess the likelihood of harm or loss to specific values impacted designated in the CCCWPP. The assessment combines three main components to generate wildfire risk outputs, namely (1) threat (burn probability generated from wildfire simulations), (2) spatially identified values at risk, and (3) response functions that describe the impact.

Wildfire Threat

The risk assessment was conducted on a pixilated landscape made up of 30-meter by 30-meter pixels. Fire simulation was used to produce estimates of burn probabilities and fire intensity distributions. Specifically, the wildfire simulation program RANDIG was used to estimate relative burn probability and intensity for each 90-meter by 90-meter (or approximately 2-acre) pixel.

The RANDIG program features:

- effect of fuels and topography on large fire spread;
- spatial effects of fuel treatments on local and offsite values; and
- fire intensity distributions that reflect both weather and fire spread variations from multiple ignition sources, which are essential to estimating fire effects.

Approximately one million fires were modeled using fuel moisture and wind conditions typical of problem fires in Coos County. RANDIG tallied both the number of fires that impact each 2-acre pixel and their intensity. *ArcFuels*, a tool developed by the WWETAC, was used to map both burn probability and the Probability of Loss based upon flame length and an assigned percent of loss for each flame length. The simulation was run for all the watersheds (HUC10) that were within one mile of the county boundary so account for spread of fires into the WUI.

Table A.2 shows the percentage of loss values used in the *ArcFuels* "Expected Loss" tool to generate Threat (Probability of Loss).

Table A.2 - Expected Loss Values

Flame Length (meters)	% Loss to a Value
0 - 0.5	25%
0.5 - 1	50%
1 - 1.5	75%
1.5 +	100%

Source: ArcFuels

[4] http://www.fs.fed.us/wwetac/

The Threat (Probability of Loss) map (Map A.4 below) was validated by a comparison with historic record of fires over 50 acres.

Fire Model Inputs

Vegetative Fuels

The RANDIG program requires five vegetative inputs to run: surface fuel model, crown closure, crown bulk density, crown base height, and stand height. The steering committee evaluated several versions of LANDFIRE[5] (also known as Landscape Fire and Resource Management Planning Tools) data including National Map, Rapid Refresh, 01 Improvements (May 2010) and Improvements (September 2010). The most recent Improvements data was used as a base for all inputs except canopy base height, where the Rapid Fresh later was determine to best reflect burning conditions produced by the fire models. The Anderson (13) set was used for surface fuel model.

These data were assessed and following adjustments were made:

- Corrections to LANDFIRE fuels assignments:
    - Non-Burnable: Harvest units logged soon before the 2001-2 imagery was taken were incorrectly classed as Non-Burnable barren in LANDFIRE data. These areas were identified and the fuel model was corrected to reflect what are now are now likely 10-12 year old plantations (FBFM 5).
    - Tidal areas: Tidal areas used for agriculture that are flat and near sea level were classified by LANDFIRE as FBFM 2 and 5, generating rapid rate of spread and moderate to high flame length. These areas were identified and the fuel model was changed to non-burnable agriculture (FBFM 93). Note: these can burn when dry; however the committee felt that they did not pose a significant threat.
    - Slash: About 3.5% of the county, mostly within 5 miles of the coast, was classified as light slash (FBFM 11). While this assignment was based upon input from fuels specialists during calibration workshops conducted by LANDFIRE where Sitka Spruce exists, the steering committee felt it didn't represent conditions in Coos County, especial in plantations. The fuel model was changes in areas with an existing vegetation type of hyper-maritime Sitka spruce with a canopy closure of 0 to 25% to FBFM 5.
- Updates to LANDFIRE data. LANDFIRE data was developed using satellite imagery from 2001-02. The following process was used to update the data for large disturbances sense then:
    - Large Fire: A portion of the Blossom Fire burned in the south tip of Coos County. Rapid Refresh version of LANDFIRE made adjustments

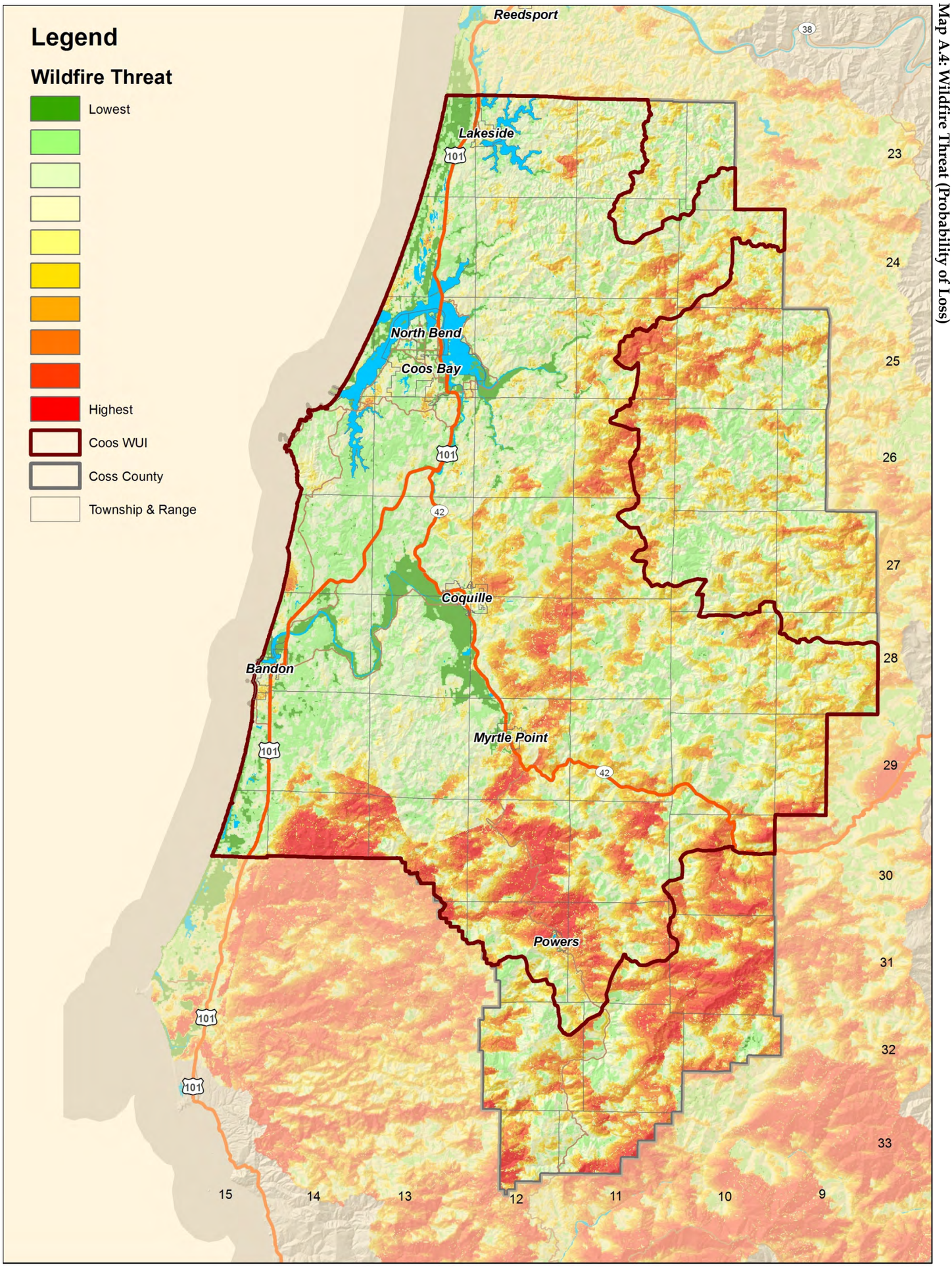
[5] www.landfire.gov

for this and these data were used to update FBFM and canopy characteristics within the fire perimeter.

- Logging: The following two polygon data sets available from the Oregon Department of Forestry were used to update the fuel model and canopy layers:
  - Remotely sensed change detection (called Change) showed areas where the canopy was reduced greater than 50% by logging 2000-2002 and 2002-2004. In these areas, fuel model was changed to FBFM 5, and canopy values were changed to "0".
  - Commercial forest operations polygons 2006-2009 based upon Notifications of Operations submitted to ODF by operation type and year. In areas identified in the data as clearcut (1b), fuel model was changed to FBFM 5, and canopy values were changed to "0".

Important note: Gorse is a highly flammable invasive brush species that primarily exists near the coast between Cape Arago and the southern county line. There is no comprehensive map of the gorse presence, so no correction could be made for gorse.

Map A.5 shows the adjusted fuels models used for the fire modeling.



Map A.4: Wildfire Threat (Probability of Loss)

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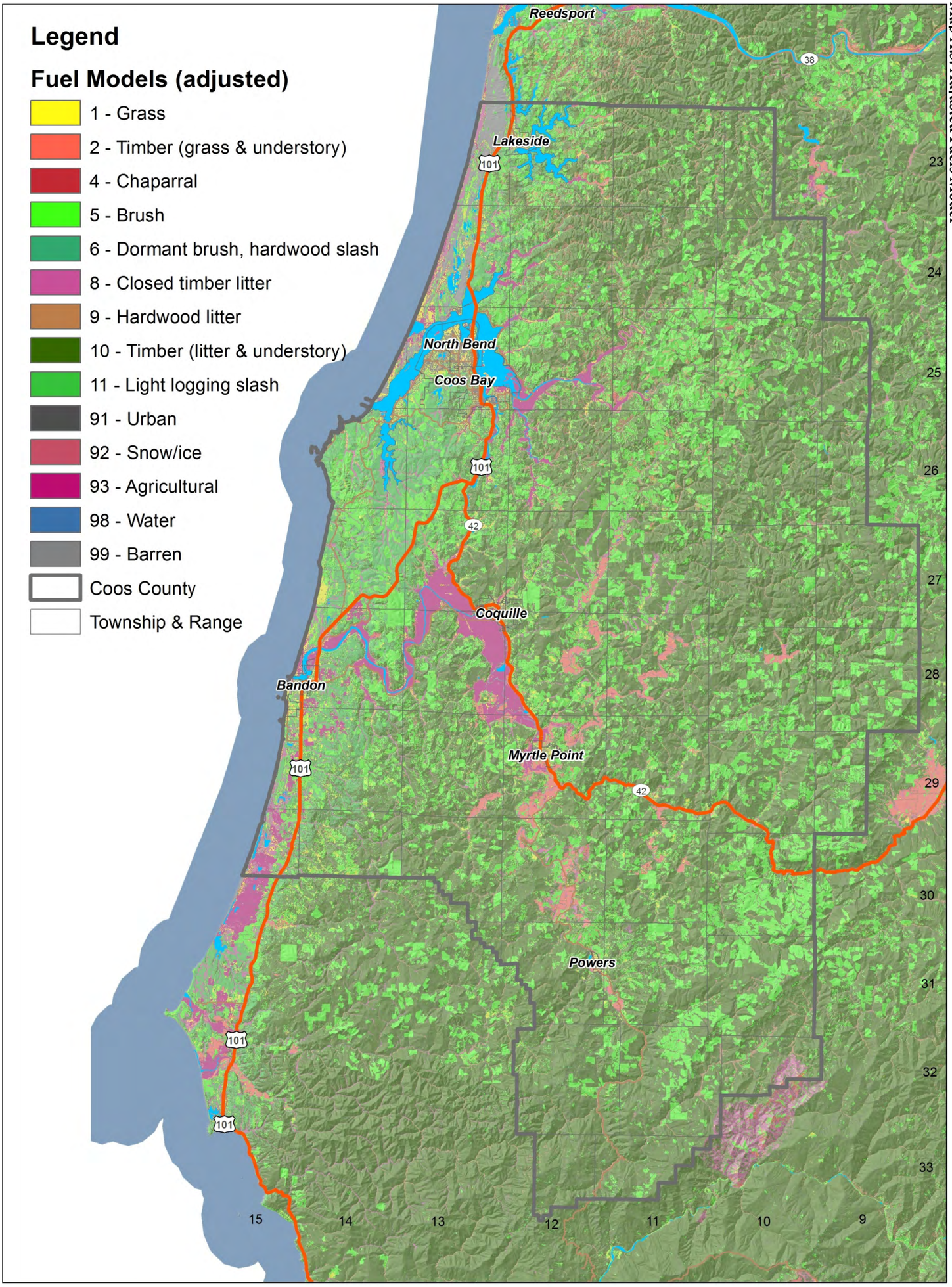
Wildfire Threat (Probability of Loss) for Coos County



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Fire Behavior Fuel Models for Coos County

Topography

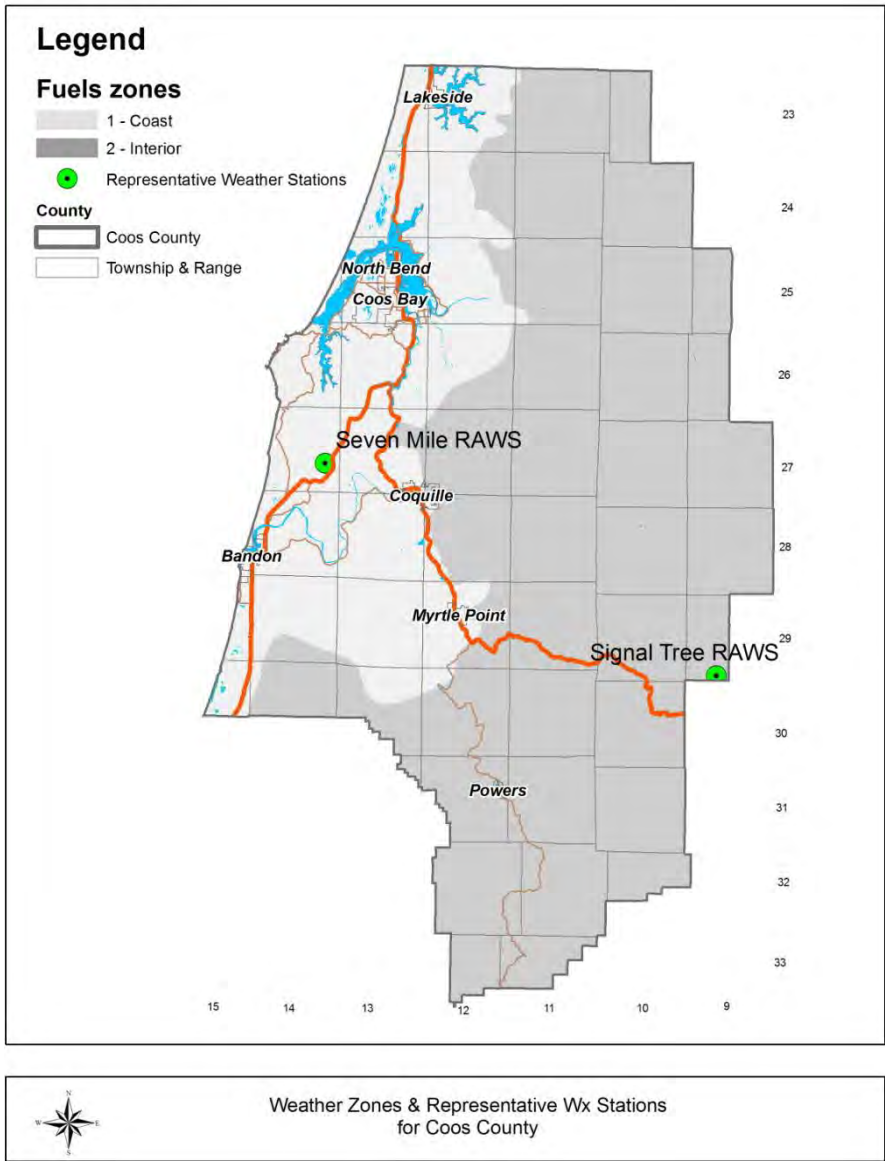
RANDIG requires three topographic inputs to run: slope, aspect, and elevation. These were included in the LANDFIRE data.

Weather

Weather and fuel conditions can vary significantly across Coos County. To account for this variation, fire behavior was calculated for two geographic zones – coastal and interior (mountains) - derived from eco-region data for the State of Oregon.

Map A.6 below shows the zones used for the assessment and the local of the representative weather stations.

Map A.6 – Coos County Weather Zones



Weather Zones & Representative Wx Stations for Coos County

Source: Western Regional Climate Center; Mapping by Jim Wolf

Weather stations were identified for each zone and data obtained and analyzed from the Western Regional Climate Center (WRCC).[6] An assessment of the data, as well as local knowledge, was used to identify one weather station to represent each of the two climate zones. Ninetieth percentile Burning Index fuel moistures were determined for each zone using FireFamily Plus 4 for a period from July to September. Table A.3 identifies the weather stations used by region; Table A.4 shows the fuel moisture values utilized in the assessment.

Table A.3: Weather Data Sources

Wildfire Assessment Zone	Coast	Interior
Eco-Region	Coastal lowlands, coastal uplands	Southern Oregon coast mountains
Weather Station Used	Seven Mile Creek (2006-2010)	Signal Tree (2001-2010)

Source: Western Regional Climate Center

Table A.4: Fuel Moisture Values

Fuel Moisture (FM) Category	Fuel Moisture Values	
	Coast	Interior
1-Hour FM	10	6
10-Hour FM	11	7
100-Hour FM	16	11
Herbaceous FM	130	45
Woody FM	140	100

Source: FireFamily Plus 4

For each simulated fire, RANDIG uses a probability table to determine the wind speed and direction, as well as burn duration for the fire. This feature allows the assessment to account for the fact that not all problem fires are driven by the same wind speeds and direction. Ninetieth percentile wind speed and direction probabilities were determined by an analysis of hourly weather comparing the midpoint between the 10-minute average winds and gusts. Table A.5 shows a summary of the variables utilized.

Table A.5: Coos County Wind Probability Variables

Variables	Coast			Interior	
Wind Speed (mph)	18	18	18	16	16
Wind Direction (degrees)	001 (N)	030 (NNE)	210 (SW)	060 (ENE)	270 (W)
Burn Duration (minutes)	240	240	240	240	240
Probability	50%	40%	10%	80%	20%

Source: Western Regional Climate Center; Analysis by Jim Wolf

[6] Western Regional Climate Center Remote Automated Weather Station data download site http://www.raws.dri.edu/wraws/orF.html

Values Impacted

Life

The steering committee identified two items under the category of life: 1) Home Density and 2) Parks

Homes Density

Home Density were determined using the same data as for identifying the Communities At Risk - the State of Oregon's designated *Communities at Risk (CAR) Assessment (updated 2006)*. The *Populated Jurisdictions*[7] layer from that assessment represents areas with at least 1 home per 40 acres.

Table A.6: Home Density Classification

Home Density - Homes per 40 acres	Class
20+	3
1-19.9	2
<1	1

Source: Oregon CAR Assessment

Parks

The steering committee identified state, county, and federal parks with overnight camping that have potential public health and safety issues from a wildfires.

Table A.7: Parks Classification

Park Categories	Class
Parks identified as "Recreation Sites in Coos County that could have potential public health and safety issues from a wildfire"	3
Parks with a designed use of "Camping" that were not assigned a 3 above	2
Other park lands	1

Source: Coos County CWPP Steering Committee

Map A.7 shows the Life classifications. The parks are labeled; use Map A.1 – Communities at Risk to identify the names of the communities.

Public Surface Drinking Water

Watersheds that are a source for public surface water system watersheds were identified by using the SW_DWSA data[8] from the Oregon Department of Environment Quality. The data was compiled in cooperative effort between Oregon Dept. of Environmental Quality/Water Quality Division, Drinking Water Protection Program and Oregon Dept. of Human Resources/Drinking Water Program. By definition, a community PWS

[7] http://gis.oregon.gov/DAS/EISPD/GEO/alphalist.shtml#W

[8] http://oregon.gov/DAS/EISPD/GEO/docs/metadata/OR_SW_DWSA.shp.xml

regularly serves at least 25 year-round residents or serves at least 15 service connections used by year-round residents. This data is for community (C) and non-transient non-community (NTNC) public water systems (PWS) only.

The steering committee added two additional areas: 1) Coos Bay – North Bend Water Board's Joe Ney Slough intake and upslope watershed and 2) area immediately surrounding the Bridge Water District's intake adjacent to Salmon Creek.

Small watersheds (less than 10 square miles) were designated as the most critical due to the potential for a wildfire to impact the entire watershed.

Table A.8 Public Surface Drinking Water classification

Public Surface Drinking Water	Class
Small public drinking watershed	3
Large public drinking watershed - greater than 100 square miles -	2
No public drinking watershed	1

Source: Oregon DEQ - SW_DWSA

Map A.8 shows the location of public surface water system watersheds.

Critical Infrastructure

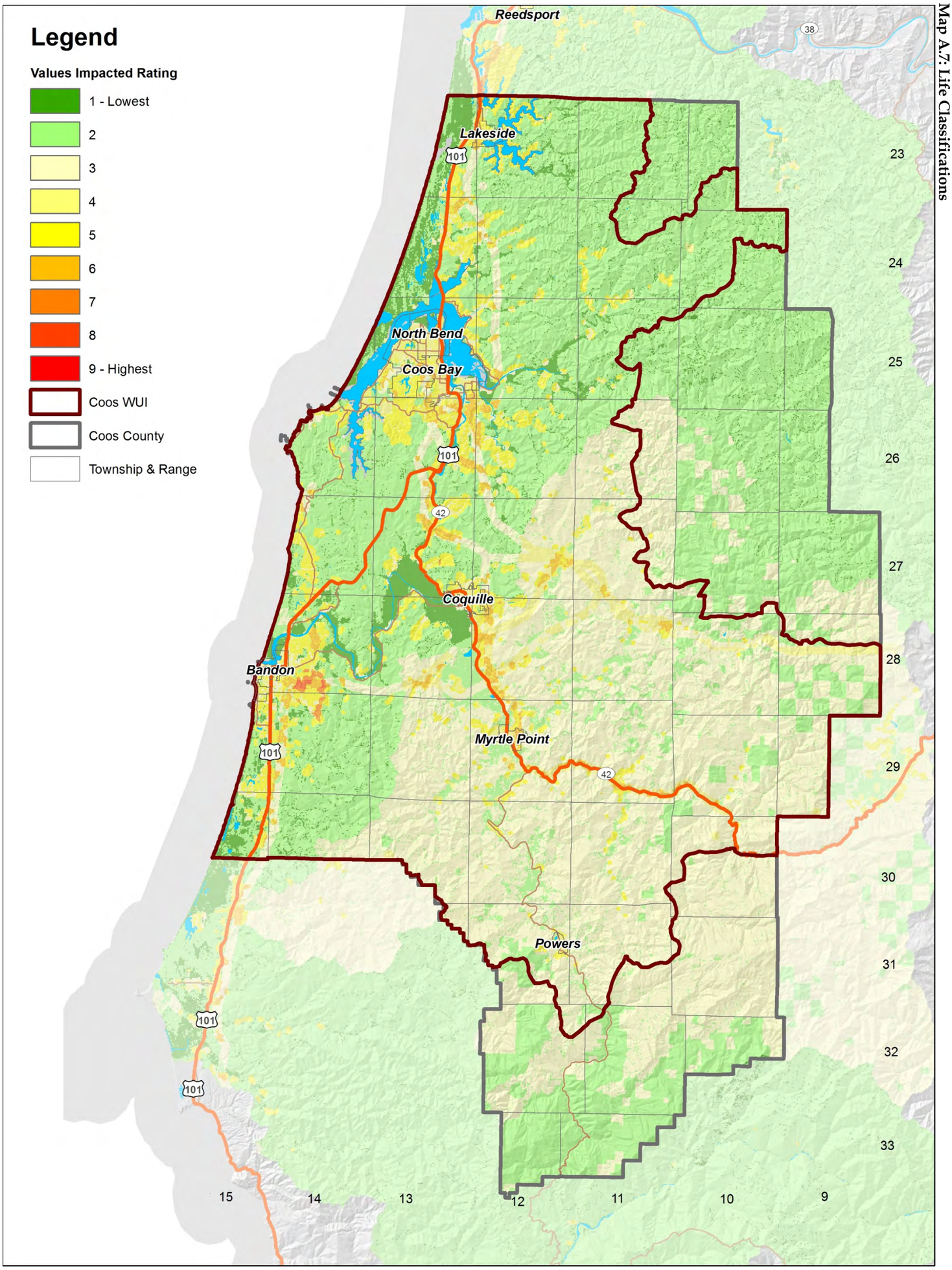
The steering committee identified two items under critical infrastructure: 1) communications sites that serve 911 emergency communications were identified using FCC data and local knowledge and 2) power transmission lines. These and other critical infrastructure categories classification is presented in Table A.9 below.

Table A.9 Critical Infrastructure classification

Critical Infrastructure	Class
Critical 911 communications sites* and Power Transmission Lines	3
Dean Mountain communications site	2
Other	1
* Bennett Butte, Blue Ridge, Shutters Landing, Slide Creek, Blossom Hill, Kenyon Mountain/Signal Tree	

Source: Coos County CWPP Steering Committee

Map A.9 shows the critical communication infrastructure. In accordance with local, state and federal security policy, power transmission lines are not displayed on the map.



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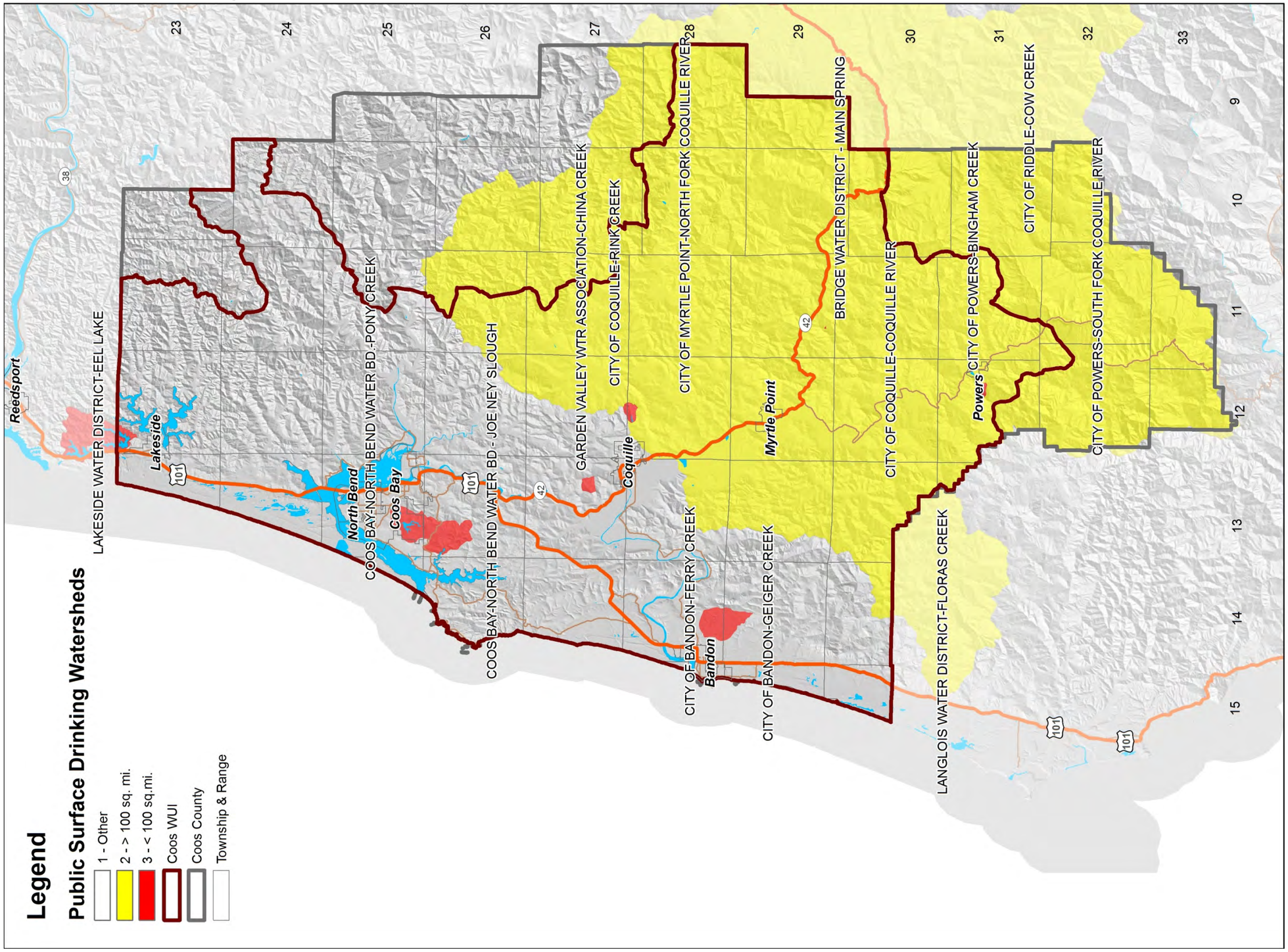
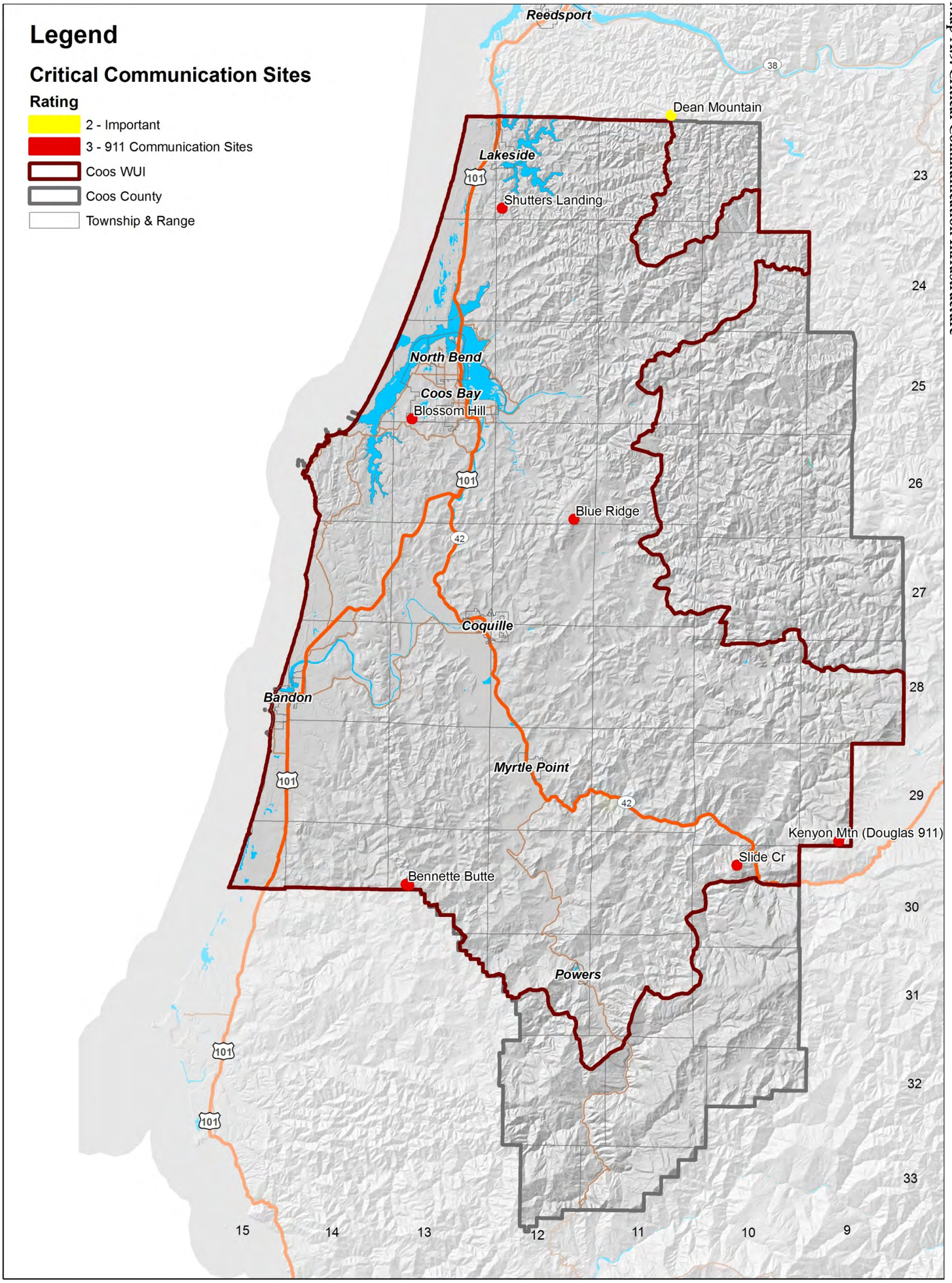
Value Impacted Rating for Coos County

Map A.8: Public Surface Drinking Water





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Values Impacted Critical Infrastructure* for Coos County

* Power transmission lines not displayed

Forest

A new GIS data layer was created 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 described below.

Table A.10 Forest classification

Forest	Class
Forest - Private	4
Forest - Federal matrix, not designated, ODF,BIA, and local government	3
Forest - Federal withdrawn or reserved, ODSL, OPRD	2
Non-Forest	1

Source: Coos County CWPP Steering Committee

Map A.10 shows the location of the forest values.

Valuing and Weighting of Values Impacted Components

Each Value Impacted factor was categorized into 3 or 4 classes described above. The steering committee designated a 1-9 Value to each of these classes to assign relative importance within that factor. Finally, a percent influence was assigned between the four factors to generate a map of overall Values Impacted.

Table A.11: Values Impacted weights and ratings

Factor	Class	Value	Influence
Life			
Home Density - Homes per 40 acres			
20+	3	9	
1-19.9	2	5	
<1	1	1	
Parks			40%
Parks identified as "Recreation Sites in Coos County that could have potential public health and safety issues from a wildfire"	3	6	
Parks with a designed use of "Camping" that were not assigned a 3 above	2	3	
Other	1	1	
Public Surface Drinking Water			
Small public drinking watershed	3	9	30%
Large public drinking watershed - greater than 100 square miles -	2	5	
No public drinking watershed	1	1	
Critical Infrastructure			
Critical 911 communications sites (Bennett Butte, Blue Ridge, Shutters Landing, Slide Creek, Blossom Hill, Kenyon Mountain/Signal Tree) and Power Transmission Line	3	9	15%
Dean Mountain communications site	2	5	
Other	1	1	
Forest			
Forest - Private	4	9	
Forest - Federal matrix, not designated, ODF,BIA, and local government	3	9	15%
Forest - Federal withdrawn or reserved, ODSL, OPRD	2	5	
Non-Forest	1	1	

Source: Coos County CWPP Steering Committee

Map A.11 shows the weighted Value Impacted layer for life, public surface drinking water, critical infrastructure, and forest using the value and percent influence listed in Table A.11 above.

Protection Capability

A new protection capability layer was generated using structure protection district coverage and distance from roads. Data for an annexation to the Myrtle Point Fire District was unavailable at the time of the assessment and is not included.

Table A.12: Protection Capability Categories

Factor	Class	Value
Inside a fire district, <=660 feet to road	1	1
Inside a fire district, >660 feet to road	2	5
Outside a fire district, <=660 feet to road	3	5
Outside a fire district, >660 feet to road	4	9

Source: Coos County

Map A.12 shows the Protection Capability risk for Coos County.

The Wildfire Risk Model

As stated earlier, risk is defined as the likelihood of loss or harm. Two products were produced by this assessment: 1) a risk map that highlights the areas of most concern and 2) an assessment of Threat (Probability of Loss) for each identified Values Impacted.

Risk Map

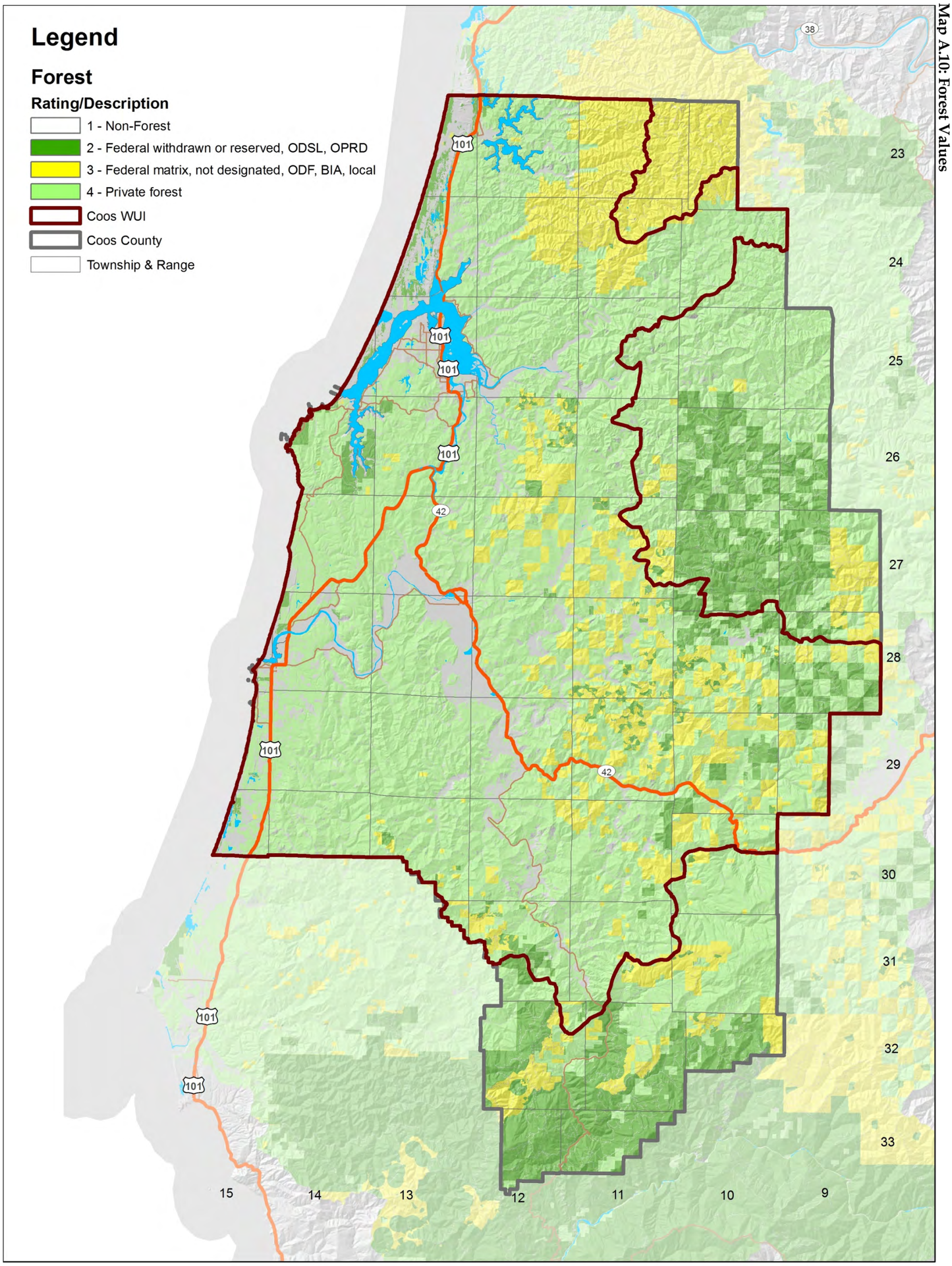
The purpose of the Risk Map is draw attention to areas of highest concern due to a high Threat and one or more significant Fire Effects. The following model was used to generate an Overall Wildfire Risk map using the data described above: Wildfire Threat, Values Impacted, and Protection Capability.

Risk was modeled mathematically as Threat times Fire Effect (R =T * FE). Fire Effect was generated using a weighted overlay of Values Impacted and Protection Capability. The Fire Effect layer combines the effect of loss or values as well as suppression effectiveness and costs. Table A.13 shows the fire effect weighting used; Figure A.1 shows the overall schema used in determining risk.

Table A.13 Fire Effect Weighting

Layer	Weight
Values Impacted	75%
Protection Capability	25%

Source: Jim Wolf



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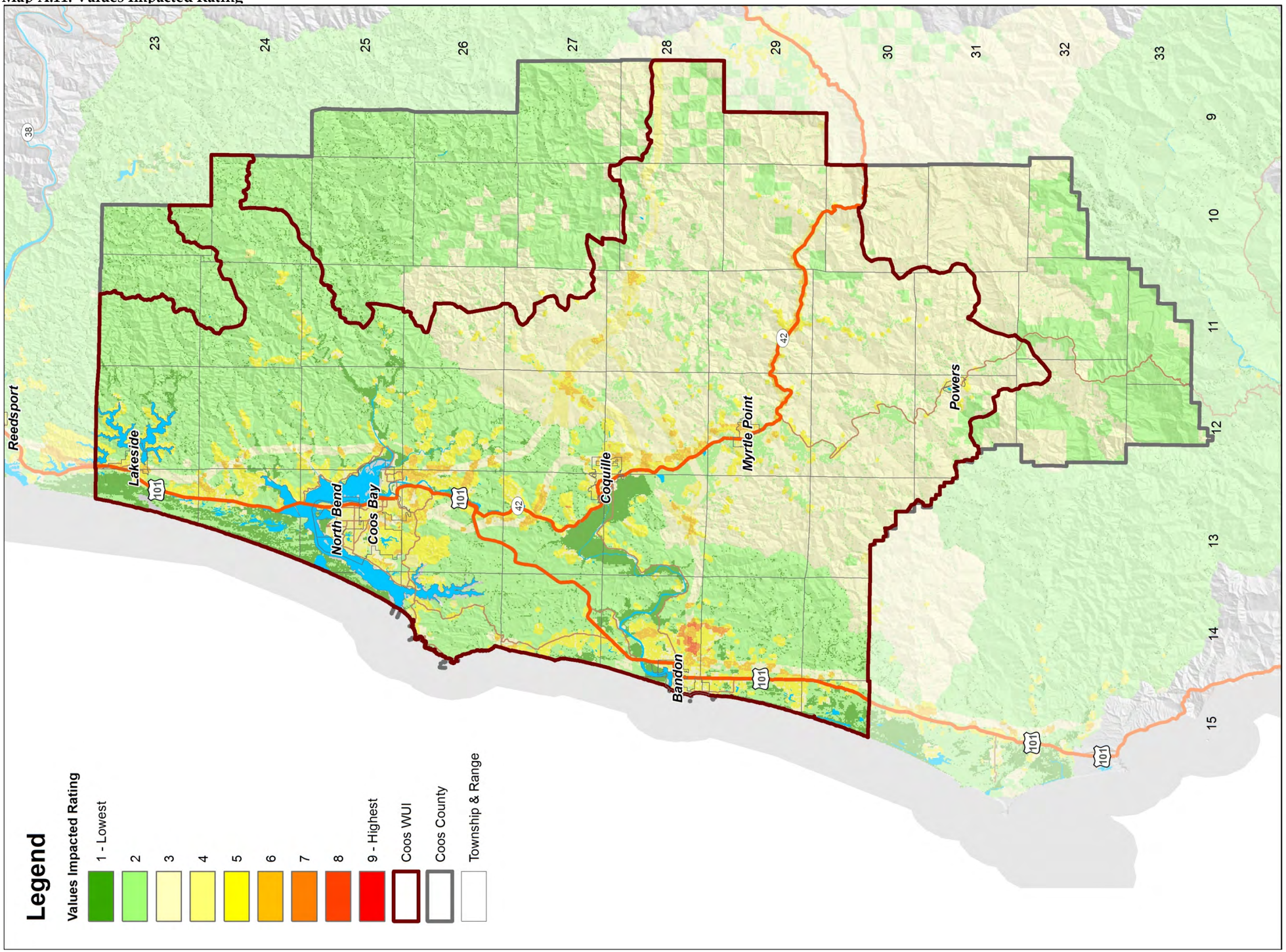
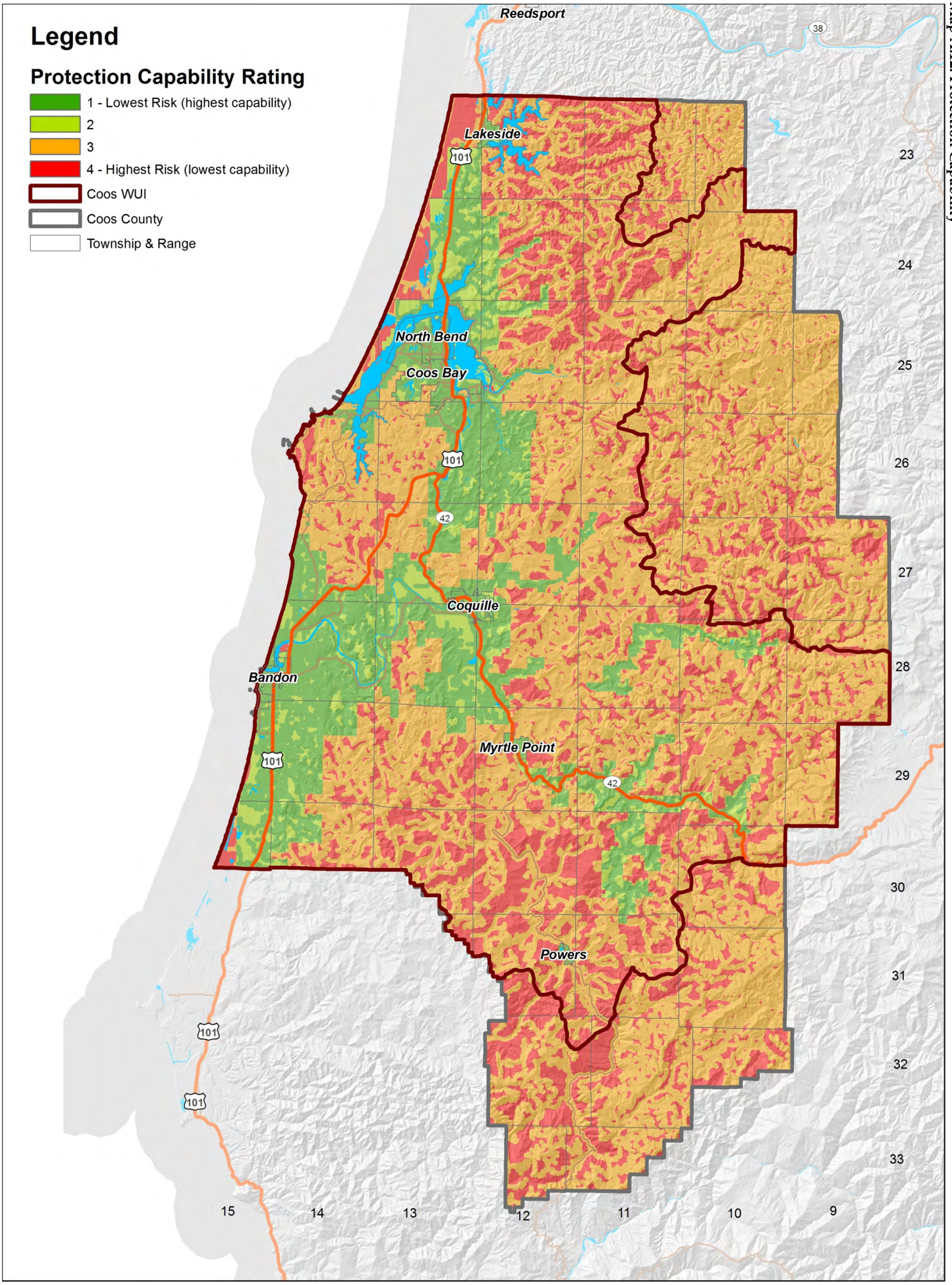
Values Impacted Forest for Coos County

Map A.11: Values Impacted Rating





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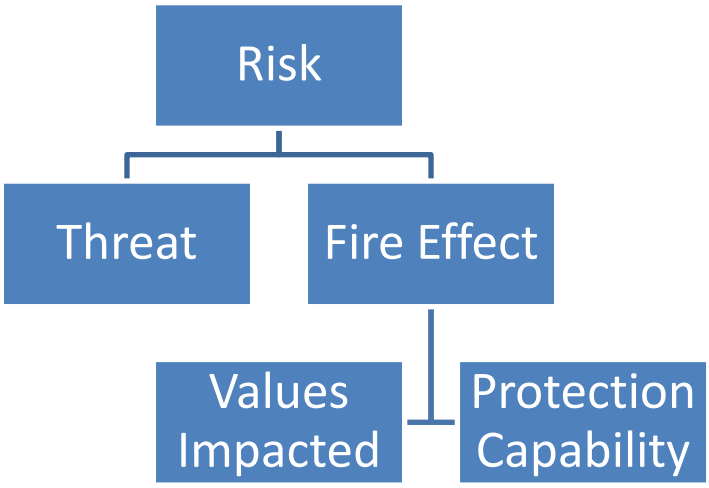
Protection Capability Rating for Coos County

Does not inlcude new annexation to Myrtle Point Fire Dist

Figure A.1: Schematic diagram of the Coos County risk model



Source: Jim Wolf

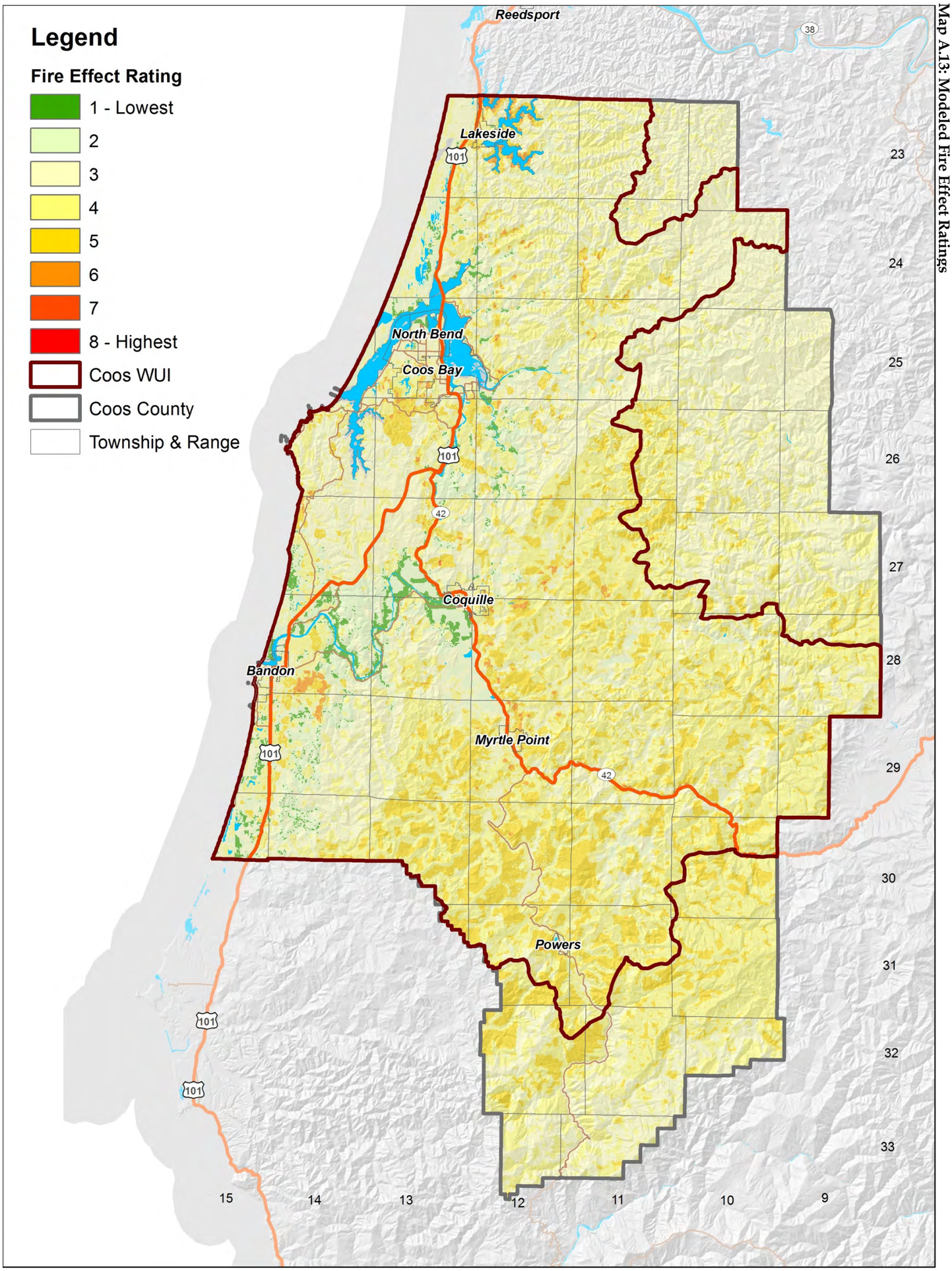
Map A.13 shows modeled Fire Effect Rating (if a damaging fire were to occur) by combining the Values Impacted Rating with Protection Capability Rating as shown above.

Map A.14 shows the Wildfire Threat based upon the relative probability of a damaging fire as calculated by the RANDIG runs described earlier.

Map A.15 shows the Overall Wildfire Risk Rating, by multiplying the Wildfire Threat by Fire Effect.

Risk Assessment to Specific Values Impacted

The purpose of assessing the Threat for each specific Value Impacted is to prioritize specific communities, parks, communication sites, watersheds, etc for potential fuels reduction projects. Both maximum and mean Threat values were calculated for each Value Impacted. The ranking of Values Impacted in the Findings Section below are based upon these results.



Map A.13: Modeled Fire Effect Ratings

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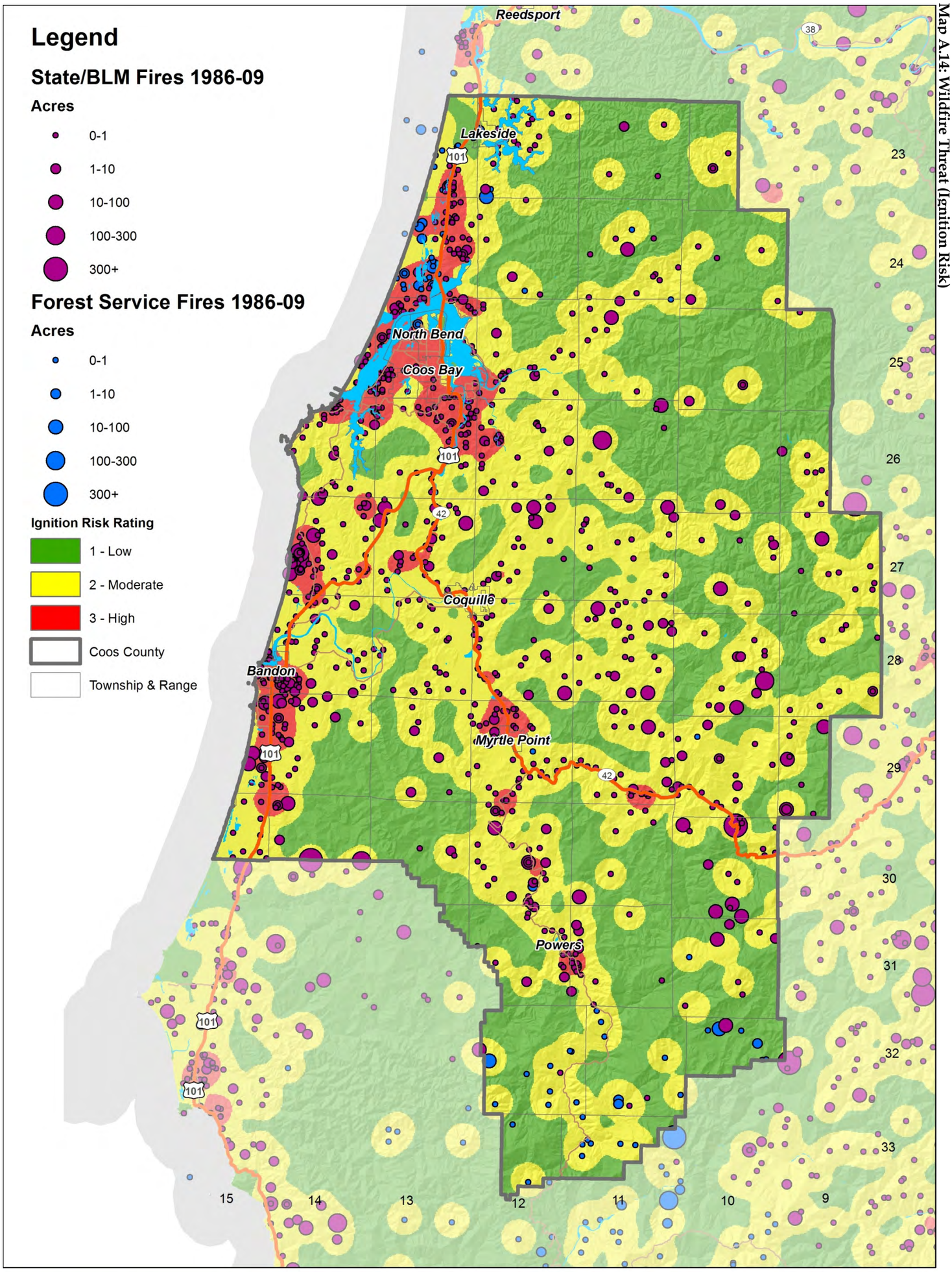
Fire Effect Rating for Coos County



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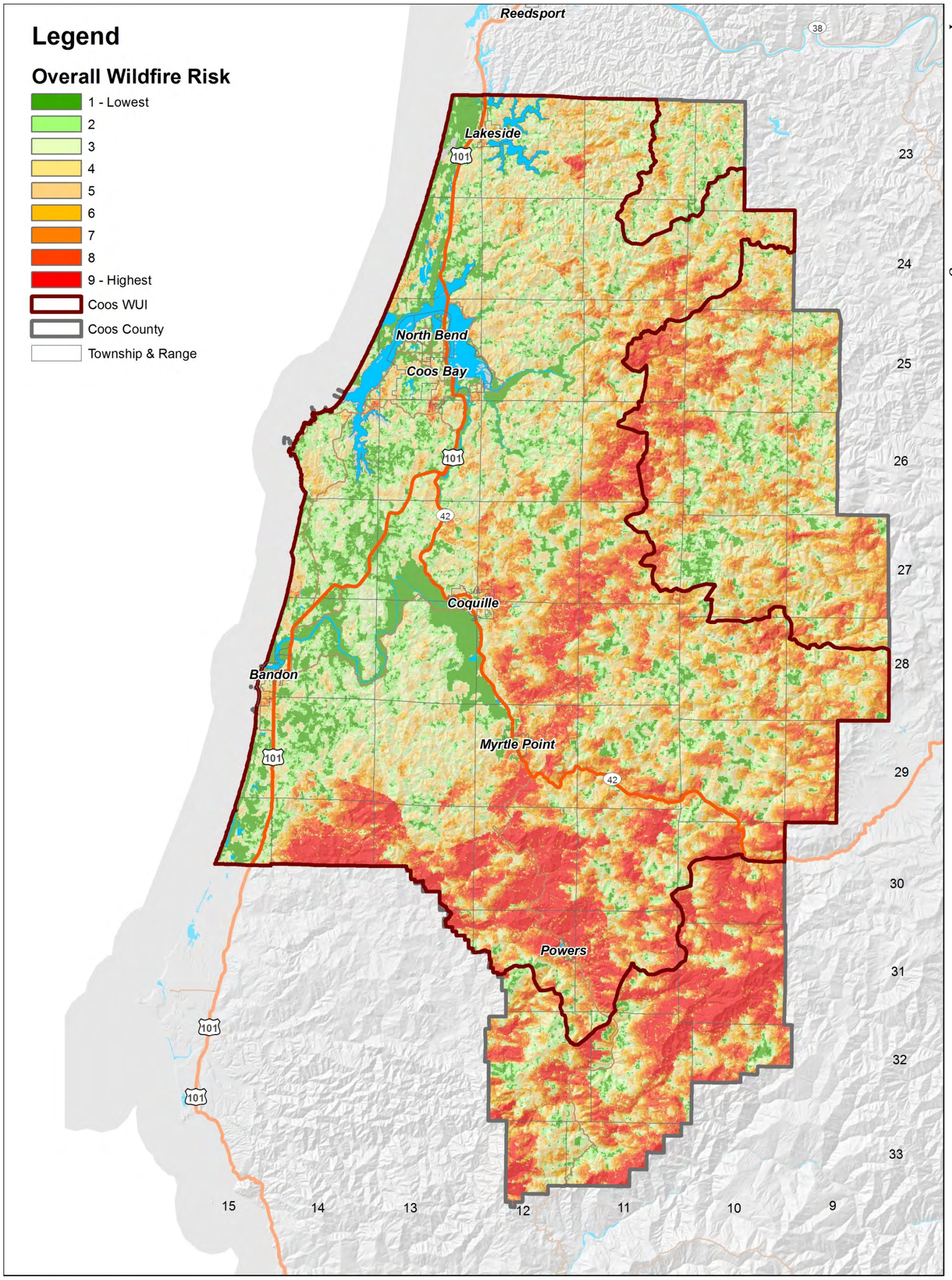
Wildfire Ignition Risk for Coos County



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Overall Wildfire Risk for Coos County

Scale, Use, Limitations and Other Information

Scale and Use

This assessment was completed using data from multiple sources using a wide range of scales. It's important to understand that although the LANDFIRE data used for the fire modeling is viewable and used at a 30-meter scale, it is intended to be used for large landscape level planning for wildland fire management activities and to support land management decisions to identify wildfire risk and vulnerability for local communities. It is NOT intended to be used for project level planning.

Limitations

As previously described, **this assessment was unable to account for the significant fire hazard associated with the presence of Gorse,** a highly flammable invasive brush species that exists near the coast between Cape Arago and the southern county line. It is known to burn similar the California chaparral. As a result, users of this assessment need to recognize that it may underestimate risk of wildfire in these areas.

Ignition Risk

Ignition risk, while important for prevention and fire response planning, was not used in this assessment model. Map A.13 shows fire ignition locations by size class from 1986-2009 for both State/BLM (Coos Forest Protective Association) and U.S. Forest Service protection responsibility areas, as well as the Ignition Risk Rating from Oregon's *Communities at Risk (CAR) Assessment.* The ignition pattern of all fires and associated Ignition Risk Rating is concentrated near where people live and major transportation corridors. However, the ignition location of larger fires is much more random and is generally aligned with the Threat map (Map A.4) calculated by the RANDIG program using random ignition locations.

Findings

The CCCWPP steering committee used findings from the quantitative risk assessment, plus input from the public, and their local knowledge to prioritize potential sites for fuel reduction projects. These finding are the first step in conducting fuels reduction work. Further work is needed to scope the project on the ground, complete any necessary environment assessments and discuss treatment options with impacted community members prior to implementing any of these projects.

Assessment Findings and Fuels Reduction Priority

For each of the five categories of important values considered in this assessment, a table is provided that lists the specific areas from highest Threat to lowest (based on the **mean** calculated Threat). In some cases, there were portions of the identified area that had a significantly high level of risk in relation to the entire area. Those areas are noted. A priority is assigned for fuels reduction based upon the level of risk.

Communities

Table A.14: Communities

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
Sumner (RFPD)	Low
Greenacres (RFPD)	Low
Charleston (RFPD)	Low, some portions High
Bandon (City)	Low, some portions Moderate
Timber Park (RFPD)	Low
Millington (RFPD)	Low
Hauser (RFPD)	Low, some portions Moderate
North Bay (RFPD)	Low
Coos Bay (City)	Low
Bandon (RFPD)*	Low, some portions High
Bunker Hill (RFPD)	Low
North Bend (City)	Low
Coos, Lower Umpqua, and Siuslaw (Reservation)	Low
*Overall under estimates risk due to lack of gorse in assessment.	

Source: Coos CWPP Risk Assessment

Parks

Parks noted with an * were identified by the steering committee as having potential public health and safety issues from a wildfire.

Table A.15 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 Drinking Water Watersheds

Table A.16: 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

Table A.17: Critical 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

Forests

Note: This information is too broad for project planning, however it does show which forests are generally at greatest risk.

Table A.18: Forests categorized by owner/land use allocation

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	

Source: Coos CWPP Risk Assessment

Priority Fuels Reduction Projects

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 uses the priorities listed above along with adjacency to federal ownership, land use allocation, past and planned projects to identify and prioritize potential projects and funding sources. Table A.19 presents a list of priority projects.

Table A.19: Priority Fuel Reduction Projects

Project Name	Description/objective	Value Addressed	Key Partners
North			
Blue Ridge Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project).	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Golden & Silver Falls	Improve fire access including communication of fire threat and evacuation routes	Parks	Roads and Parks Departments
Coquille Indian Reservation	Fuels reduction project(s) to reduce wildfire threat to reservation lands, Charleston, and adjacent municipal watershed	Life, Water	Coos Bay-North Bend Water Board
City of Coquille	Defensible space fuel projects and education to reduce wildfire threat community and adjacent municipal watershed	Life, Water	City of Coquille Fire, Coquille RFD, Coquille Watershed Association
Fairview RFD	Four Corners, defensible space fuels project to protect large power substation. Improve evacuation routes.	Critical Infrastructure, Life	Fairview RFD, BPA/PPL
Shutter Creek Correctional Institution	Use inmate crews to treat fuels adjacent to camp and improve limited access to summer cabins.	Life	Oregon Department of Corrections
Southeast			
Signal Tree Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications (Note: BLM has already initiated this project in conjunction with CFPA lookout and communication tower replacement project).	Critical Infrastructure	BLM, ODF, CFPA, ODOT, private communication providers (e.g. AT&T, KVAL, US Cellular, etc.)
Slide Creek Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, Plum Creek Timber Company
Bridge RFD	Education and defensible space to reduce threat to community and watershed	Life, Water	Bridge RFD, Coquille Watershed Association
City of Powers	Education and defensible space to reduce threat to community and watershed	Life, Water	Powers Volunteer Fire Department, Coquille Watershed Association
BPA/PPL	Communication and collaboration, long term issues surrounding access (improve transportation)	Critical Infrastructure	BPA/PPL
Southwest			
Bennett Butte Communications Site	Treat fuels to reduce the threat of wildfire to 911 communications	Critical Infrastructure	BLM, private communication providers (e.g. Frontier, AT&T)
Resort Area (W. of 101) golf course	Significant amount of gorse, likely treat with defensible space and fuels.	Life	Roads Department, Bandon Dunes Resort
City of Bandon	Fuels treatment and defensible space to reduce threat to community, watershed and power lines	Life, Water, Critical Infrastructure	City of Bandon Public Works, BPA
Okie Town	Partner with Curry County Fire Plan efforts to treat fuels to reduce threat to homes in Curry County and Langlois Watershed	Life, Water	Curry County
Gorse Eradication	Remove gorse all along southern coast	Life, Water, Critical Infrastructure, Parks	CFPA, Roads Department
Additional Projects Identify by Community Members During Community Forums			
Remote homes	Egress of remote homes west of Myrtle Point	Life	CFPA, Homeowners
Gorse removal	Remove gorse along coast	Life	CFPA, Roads Department
Gorse removal	Gorse removal along coast south of Cape Arago	Life	CFPA, Roads Department
Gorse removal	Gorse treatment from Old Seven Devils Road to Whisky Run Road	Life	CFPA, Roads Department
Roadside brushing	Sumner Rural Fire Protection District - Road brushing and fuel reduction	Life	Roads Department

Source: Coos CWPP Risk Assessment

Appendix B: Household Survey Summary

Introduction

In January 2011, the University of Oregon's Community Service Center (CSC) administered a household survey to property owners within the Coos County wildland/urban interface (WUI). The survey collected information on homeowner perceptions of wildfire risk and attitudes toward measures homeowners and communities could take to reduce the ignitability of structures. As a critical component of the public outreach process, the survey afforded a wide range of property owners the opportunity to provide important information specific to the wildfire preparedness within the WUI.

Once administered, the CSC analyzed the survey results to assess homeowner preparedness, perception of risk, and attitudes towards the implementation of measures to reduce the ignitability of homes and structures. Data analysis techniques are described in further detail in the methods section below. The CSC examined many of the issues raised by survey respondents through subsequent public forums and stakeholder interviews. Specifically, the survey results helped the CSC focus the public forum breakout sessions on specific areas of concern and also informed the preliminary recommendations for priority projects and the implementation strategies.

A copy of the survey instrument is included as Attachment A of this Appendix. Raw survey results and statistical analysis is included as Attachment B.

Purpose

The purpose of the Coos County Household Wildfire Preparedness Survey was to gauge homeowner knowledge and opinions related to wildfire risk. It focused on *wildfire preparedness*; in particular, the risk reduction and hazard mitigation activities of individual property owners and of the community at large. Wildfire preparedness involves taking steps to reduce the risk of life and property losses caused by wildfires. By protecting the home and its immediate surroundings, property owners can greatly reduce the threat of wildfire damage to their property.[1]

The survey organized questions into four sections: (1) wildfire awareness and communication, (2) fire preparedness and protection strategies, (3) reducing community risk to wildfire, and (4) general homeowner information. More specifically, the questions determined the current level of wildfire education and preferred methods for receiving

[1] Cohen, Jack (2008). *The Wildland/Urban Interface Fire Problem: A consequence of the fire exclusion paradigm*. Forest History Today, Fall 2008, pp 20-26. http://www.foresthistory.org/Publications/FHT/FHTFall2008/Cohen.pdf, viewed May 8, 2011

information; how well and what steps homeowners took to protect their properties from wildfire; and homeowner perspectives on priority projects and public aid.

Methods

The CSC obtained permission to implement the survey from the Office for Protection of Human Subjects and the Institutional Review Board at the University of Oregon (UO). This board protects the rights and welfare of subjects participating in UO research.[2] After completing the Human Subjects certification process, the CSC initiated a survey design process that resulted in a draft survey instrument. The Steering Committee and a paid wildfire planning process expert reviewed the draft survey and provided feedback. The CSC incorporated the feedback received and prepared and printed the final survey instrument for mailing. A member of the Coos County Commission signed the cover letter that accompanied the survey as a way to help garner community support for the CWPP outreach process. The CSC mailed the survey in January, 2011 to 1,500 randomly selected residents with property located within the Coos County WUI. Forty surveys were returned non-deliverable, which resulted in a total sample of 1,460. Respondents had four weeks to complete and return the survey. In an effort to increase the survey response rate, the CSC sent out reminder postcards two weeks after mailing the survey.

The survey began with a statement clearly informing respondents that participation in the survey was voluntary; all individual survey responses were strictly confidential. There were three types of questions utilized in the survey: multiple choice, rating scale, and long answer. The multiple choice and rating scale questions were designed to give researchers a sense of homeowner preparedness and knowledge of wildfire mitigation efforts. The long answer questions were designed to give homeowners the opportunity to express concerns and visions for future wildfire planning efforts. A copy of the survey instrument can be found at the end of this report. Analysis of the survey is presented in the pages that follow.

Survey Analysis

In order for the survey data analysis to achieve statistical validity, the CSC required a minimum 10% return of the completed surveys. Fortunately, 271 surveys were returned, which resulted in a 19% return rate. As a result, the survey results retained a confidence interval of 95% and a margin of error of +/- 6%. This margin of error indicates that if the survey were repeated many times with different sample populations in Coos County, the respondents would respond the same way +/- 6%, 95% of the time.[3] The following results are divided between short answer responses of questions one through 16 and the written responses requested by question 17.

The survey results and analysis are organized into the following sections:

[2] University of Oregon, Office for Protection of Human Subjects, http://humansubjects. uoregon.edu/, viewed 05/10/11

[3] StatTrek.com © 2011, Confidence Interval, Statistics and Probability Glossary, http://stattrek.com/Help/Glossary.aspx?Target=Confidence%20interval, viewed 05/10/11

Survey Response Rate

This section presents the percentage of total survey returned. Further, it details some of the characteristics of those who participated in the survey.

Survey Respondent Characteristics

This section reports information about respondent characteristics including: age, gender, educational attainment, length of property ownership, use of property, and zip codes.

Short Answer Survey Question Results

This section describes the respondents' perception of wildfire risk, personal experience with wildfire, motivations to protect property, wildfire protection information source preferences, and the status of community wildfire protection.

Written Responses to Open-Ended Questions

This section includes summaries of the responses to the open-ended question.

Discussion

This section summarizes the opinions, recommendations, and trends expressed in both the short answer and open-ended written responses.

Survey Response Rate

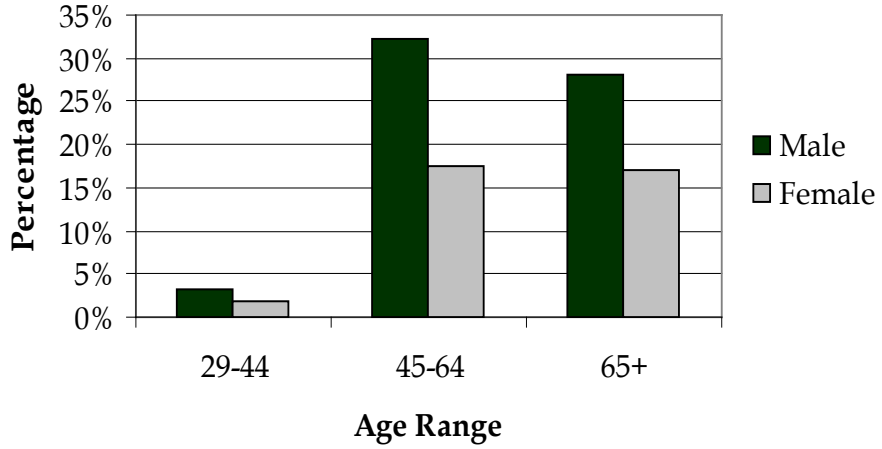
Out of the 1,500 surveys sent, the CSC received 271 valid surveys returned resulting in a 19% return rate. In order for the survey data analysis to achieve statistical validity, the CSC required a minimum 10% return of the completed surveys. Given the response rate, the survey met the statistical validity requirement with a confidence interval of 95% and a margin of error of +/- 6%. This margin of error indicates that if the survey were repeated many times with different sample populations in Coos County, the respondents would respond the same way +/- 6%, 95% of the time.[4]

Survey Respondent Characteristics

The majority of the respondents were male (63.5%). The average age of the 259 homeowners that provided it was 64 years old. Ages ranged from 29 to 97 years old. It is unclear whether the general age of homeowners in the WUI is comparable with the average age indicated by survey respondents, or if this is only reflective of a subsector of homeowners who were willing to respond to the survey. Figure B.1 shows the distribution of age and gender across respondents

[4] StatTrek.com © 2011, Confidence Interval, Statistics and Probability Glossary, http://stattrek.com/Help/Glossary.aspx?Target=Confidence%20interval, viewed 05/10/11

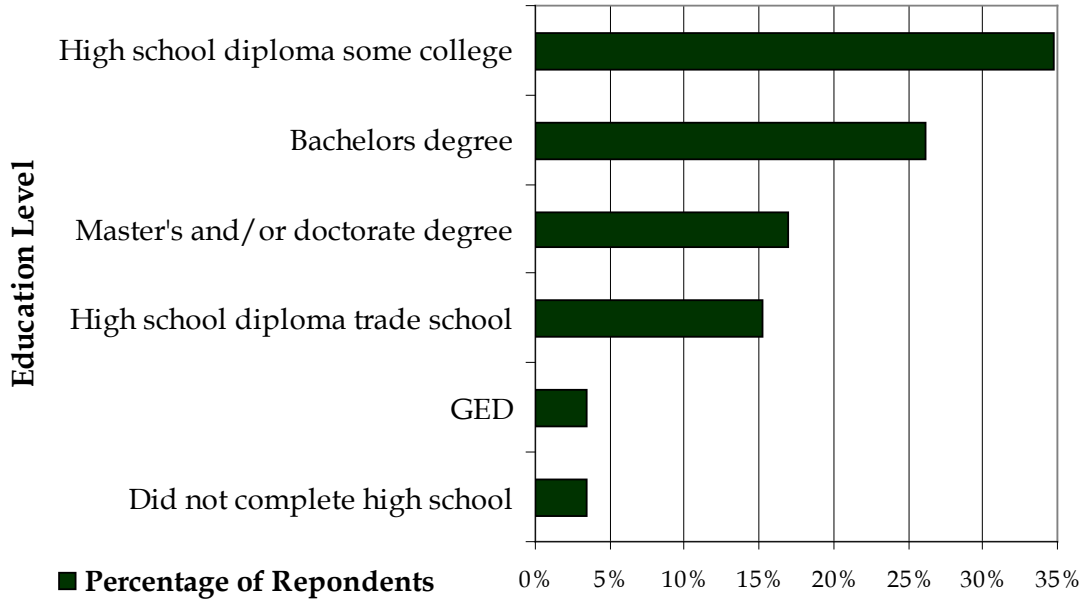
Figure B.1: Survey Respondent Age and Gender



Source: Coos County Household Fire Preparedness Survey, February 2011

Educational attainment was slightly higher than the state average with 90% of the respondents having received a high school diploma or above.

Figure B.2: Level of Educational Attainment



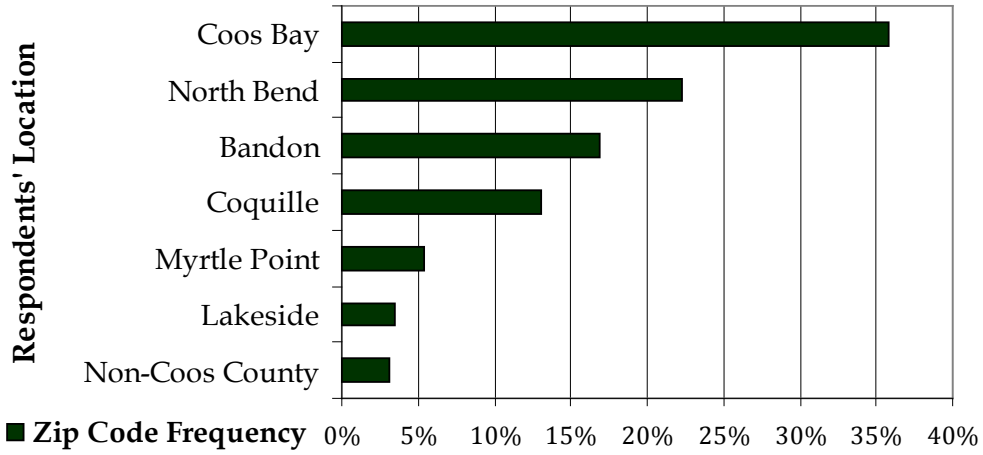
Source: Coos County Homeowner Survey, February 2011

The average length of property ownership of those that responded to Question 12 (n=266) was 20 years. New residents, with ownership tenure of 10 years or less, are of highest priority for receiving fire protection information for their property. These new residents are more likely to not be familiar with defensible space practices and the maintenance needs of the surrounding landscape to prepare for and prevent wildfire events.

Regarding property use, only 5% of the respondents used their property for a business. Of the 95% homeowners who are not using their property for a business, 88% permanently reside on their property, 8% seasonally live there, and 4% do not use their property as a permanent or a seasonal residence.

The respondents returned their surveys from a wide variety of zip codes. The majority (over 95%) were from within Coos County, while almost 5% were from outside of Coos County. Of these "Other" Oregon zip codes the cities included: Hillsboro, Independence, Cottage Grove, Roseburg, Medford, Ashland, Eagle Point, and Adel. Figure B.3 shows the geographic distribution of responses; zip codes were tied to the nearest city for ease of display.[5] Notably, nearly 60% of responses came from residents living in and around Coos Bay/North Bend.

Figure B.3: Survey responses by area



Source: Coos County Homeowner Survey, February 2011

SUMMARY

The following is a summary of information gathered from the homeowner survey. The answers to the survey questions varied, but still offered valuable information to consider when developing the Coos County Community Wildfire Protection Plan.

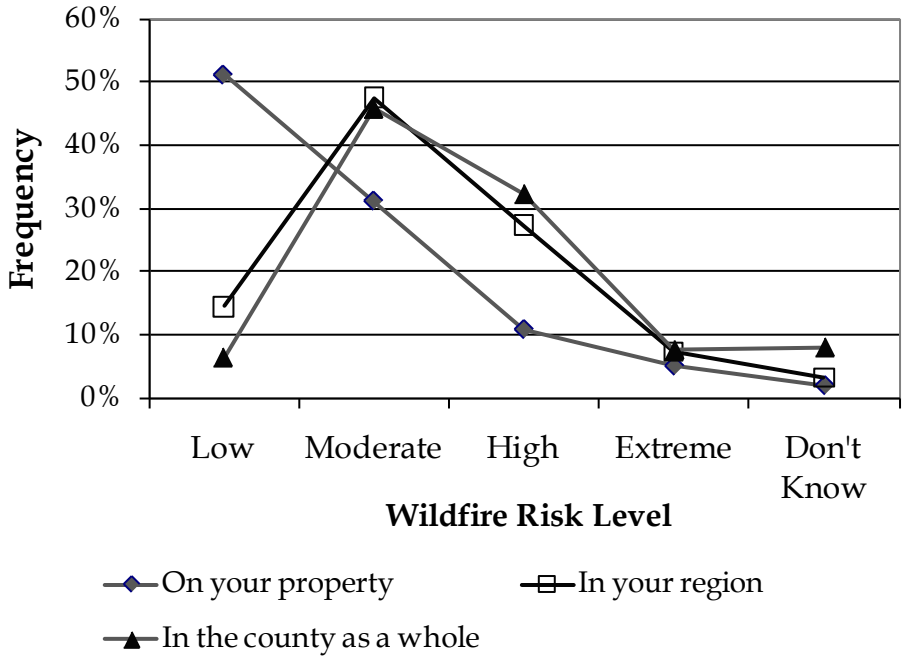
Short Answer Survey Question Results

Question 1 asked, *"During fire season, what do you perceive the risk of wildfire to be?"* The responses helped to gauge the homeowners' perceptions of wildfire risk based on three scales of geography: (1) on their property, (2) in their region, and (3) in Coos County as a whole. Figure B.4 shows that respondents generally perceived a moderate risk of wildfire in their region and in Coos County as a whole, with a low perception of risk directly around their property. This indicates that while survey respondents feel

[5] Briefly describe how the zip codes were aggregated into these city categories. Presumably, many of these respondents live outside the named city limits, so we need to be clear about what we're actually presenting.

sufficient steps have been taken to protect their personal property, they do not feel that the adjacent region or the county as a whole is maintaining the same quality of protection.

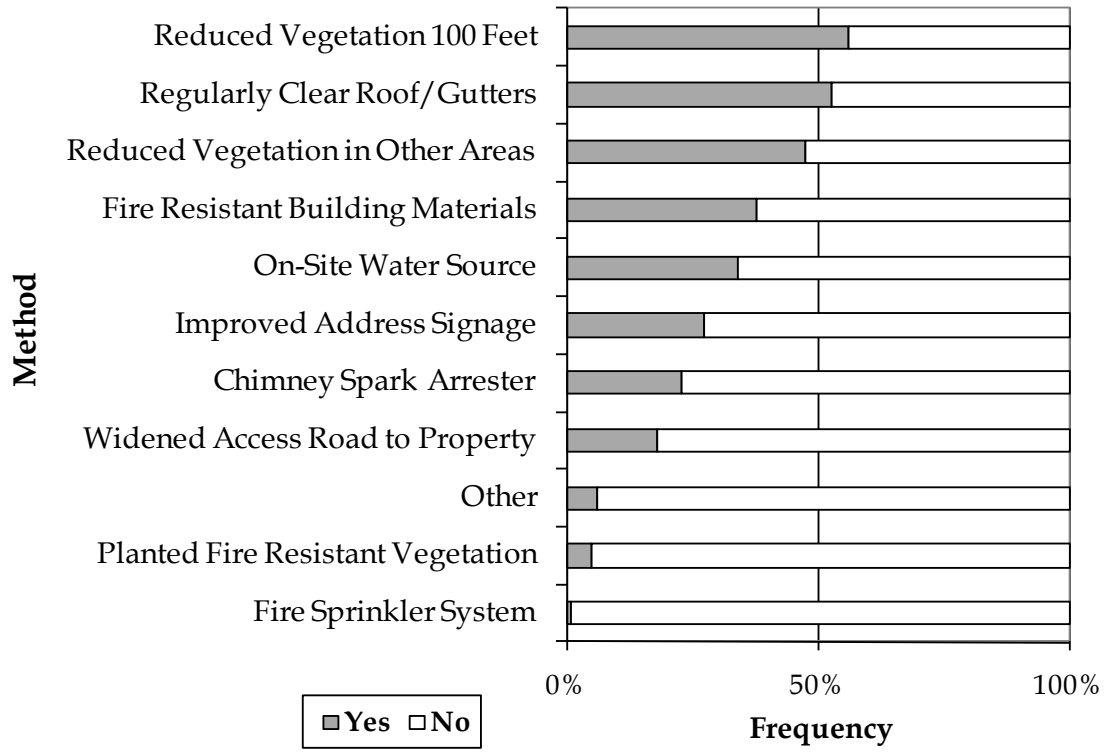
Figure B.4: Perception of Wildfire Risk in Coos County



Source: Coos County Homeowner Survey, February 2011

Wildfire perception is closely tied to the responses from question 6, which asked, "*Have you taken any actions to reduce the potential for fire losses on your property?*" A majority of the respondents (83%) indicated that they have taken steps to protect their property from wildfire damage; 17% have not. A follow up question asked those who responded "Yes" to check the boxes which identified the actions that had been performed. As shown in Figure B.5, the top three actions most often performed were (1) Reduced Vegetation 100 Feet from Structure on Property (152 responses), (2) Regularly Cleared Roof/Gutters (144 responses), and (3) Reduced Vegetation in Other Areas on Property (130 responses). A fire sprinkler system and fire resistant landscaping were the least likely of the actions to have been performed. There was also an "Other" option if an action was not provided in the list.

Figure B.5: Actions Taken to Reduce Fire Losses on Property

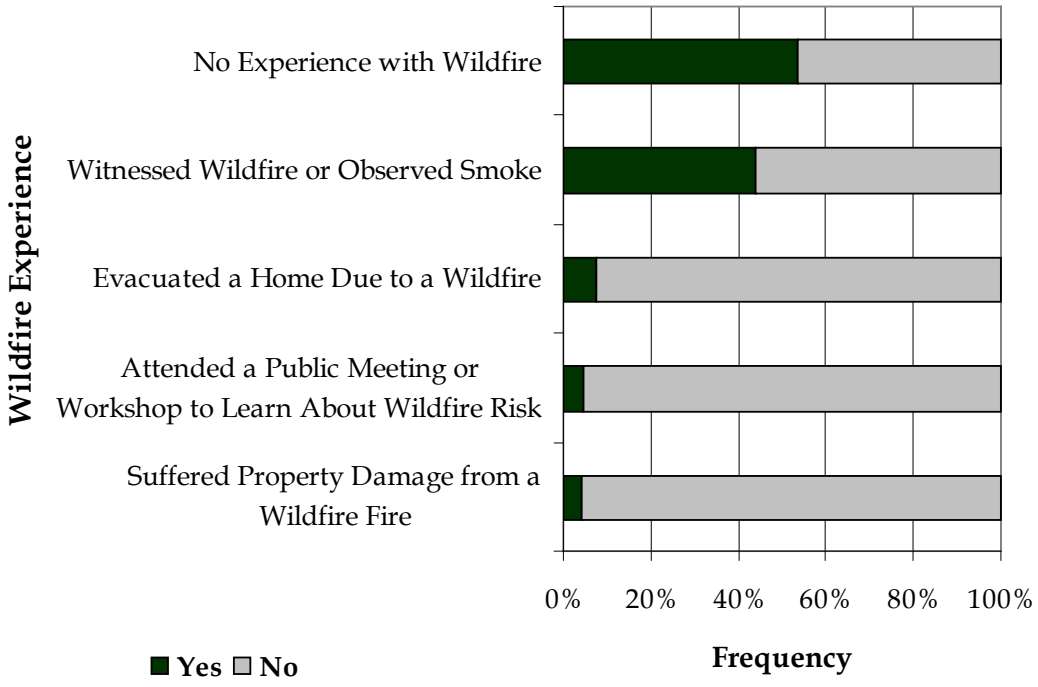


Source: Coos County Homeowner Survey, February 2011

According to the "Other" responses, vegetation reduction was the most common technique used to reduce the threat of fire damage on personal property. The installation of fire alarms and improved driveway access were the second most common. Having available on-site water sources and fire extinguishers were also identified as actions taken by property owners and one respondent indicated the use of burning permits.

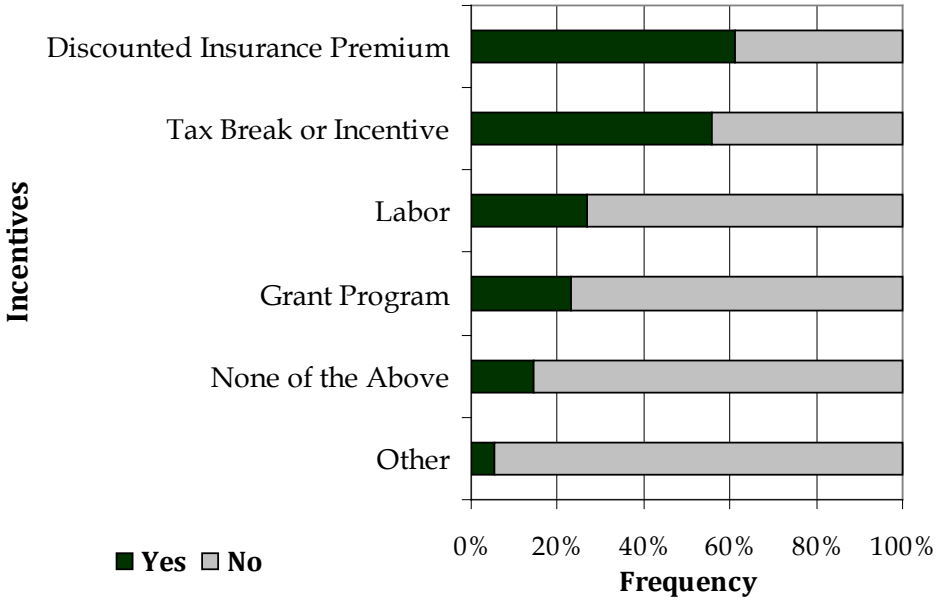
The wildfire protection actions from Question 6 did not seem strongly influenced by personal experiences with previous wildfires shown in Figure B.6. Over half of the respondents had no experience with wildfire. However, more than 40% had witnessed wildfire or observed wildfire smoke. Fewer than 10% of the respondents had evacuated a home due to a wildfire, attended a public meeting or workshop to learn about wildfire risk, or suffered property damage from a wildfire. When asked about what incentives would be most effective in increasing property protection from wildfires, "tax breaks or incentives" and "discounted insurance premiums" were the top choices with 61% and 56% of respondents selecting those options respectively(see Figure B.7).

Figure B.6: Personal experience with wildfire, Coos County



Source: Coos County Homeowner Survey, February 2011

Figure B.7: Motivations to protect property, Coos County



Source: Coos County Homeowner Survey, February 2011

Of the "Other" responses, assistance in various forms was the most in demand. Free or low cost vegetation debris pick-up multiple times a year would be motivating for

several respondents, while others were physically or financially unable to take any fire protection actions. Of those who reported limited ability to take action, many requested financial assistance or volunteer help to clear and remove vegetation. Two of 13 respondents felt there was no assistance needed and one person would not be motivated without a community crisis.

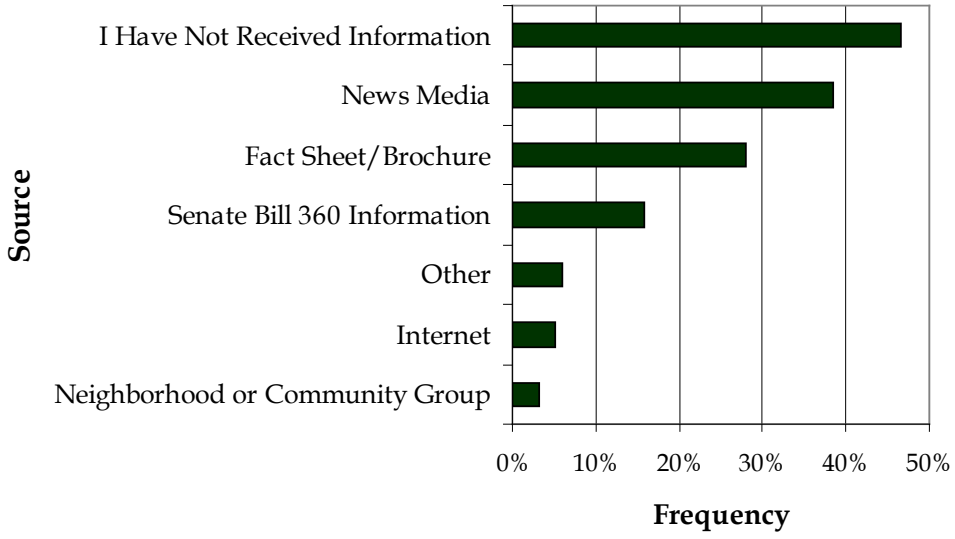
Receiving Wildfire Protection Information

When asked how wildfire protection information has been received in the past, respondents checked the box stating, "I have not received information" over 45% of the time (See Figure B.8). When information was received, the boxes indicating news media and factsheets or brochures were checked 38% and 28% of the time respectively. Senate Bill 360 Information was the next most frequently marked option.

Most information received by respondents from their neighborhood or community group included professional fire protection agencies or groups. Several respondents noted a reliance on the Coos Forest Protective Association to provide information to the community about property protection. Other respondents received information from their local fire department, volunteer fire fighters, or community emergency response team. One person was professionally trained as a fire fighter.

Most respondents who marked "Other" received their information about wildfire property protection from previous work experience, firefighter training, or interaction with the Coos Forest Protective Association. Additional information sources included the state or county fair, workshops, signs, zoning, insurance companies, magazine articles, or road signs during high fire season.

Figure B.8. Current Wildfire Information Sources in Coos County

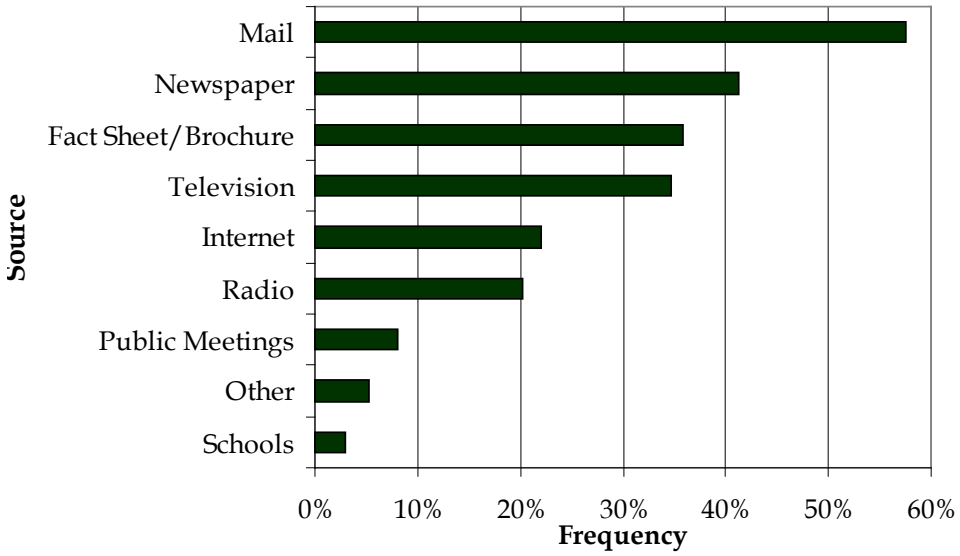


Source: Coos County Homeowner Survey, February 2011

Figure B.9 shows that along with newspapers, factsheets/brochures, television, internet, and radio, receiving the information by mail was the most highly preferred by the

respondents. Public meetings, "Other", and schools were the options least frequently preferred.

Figure B.9. Wildfire Information Preferences in Coos County



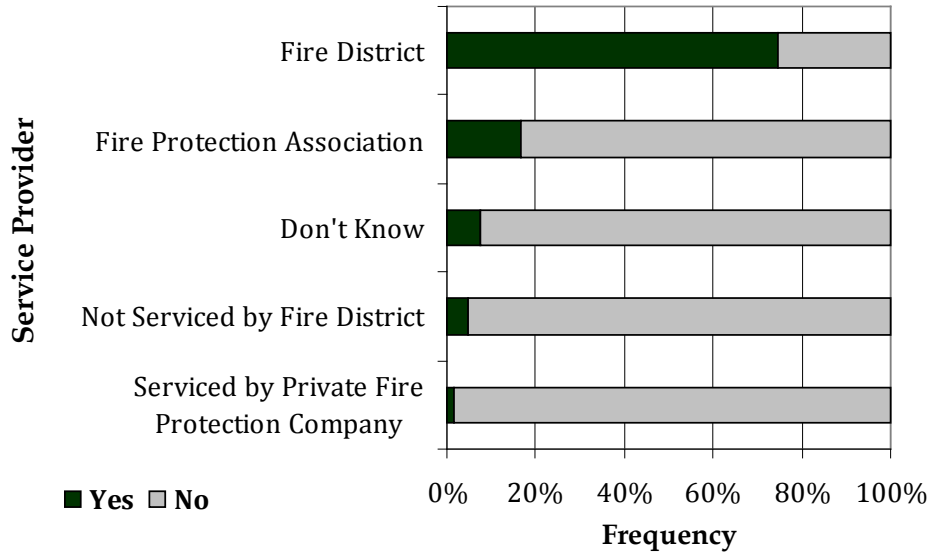
Source: Coos County Homeowner Survey, February 2011

Generally "Other" wildfire protection information options included personal communications with personnel from the local fire department, forest protection agency, or the wildfire district in the form of property visits and one-on-one contacts. Additionally those who marked "Other" were interested in receiving fact sheets by mail or viewing postings. Two of the thirteen "other" responses were "not interested" and "no preference".

Community Wildfire Protection

Respondents were also asked who provided the fire protection services to their property. This highlighted a potential issue, because 13% of the respondents stated that they did not know or that they were not serviced by a fire district. The remaining 87%, or 230, respondents are protected by a fire district, a fire protection association, or a private fire protection company (see Figure B.10).

Figure B.10: Fire Protection Service Provider in Coos County



Source: Coos County Homeowner Survey, February 2011

Question 8 asked respondents to prioritize wildfire planning efforts by indicating how important or unimportant certain categoriesof wildfire protection planning were. "Protecting critical infrastructure (e.g. roads, hospitals, communication sites)" was the category most frequently identified as "very important" at 81%. Private residential property, wildfire education, emergency services, and public property were also highlighted as "very important" (by 64%, 56%, 53%, and 51% of respondents respectively). Regulating development was identified as the least important.

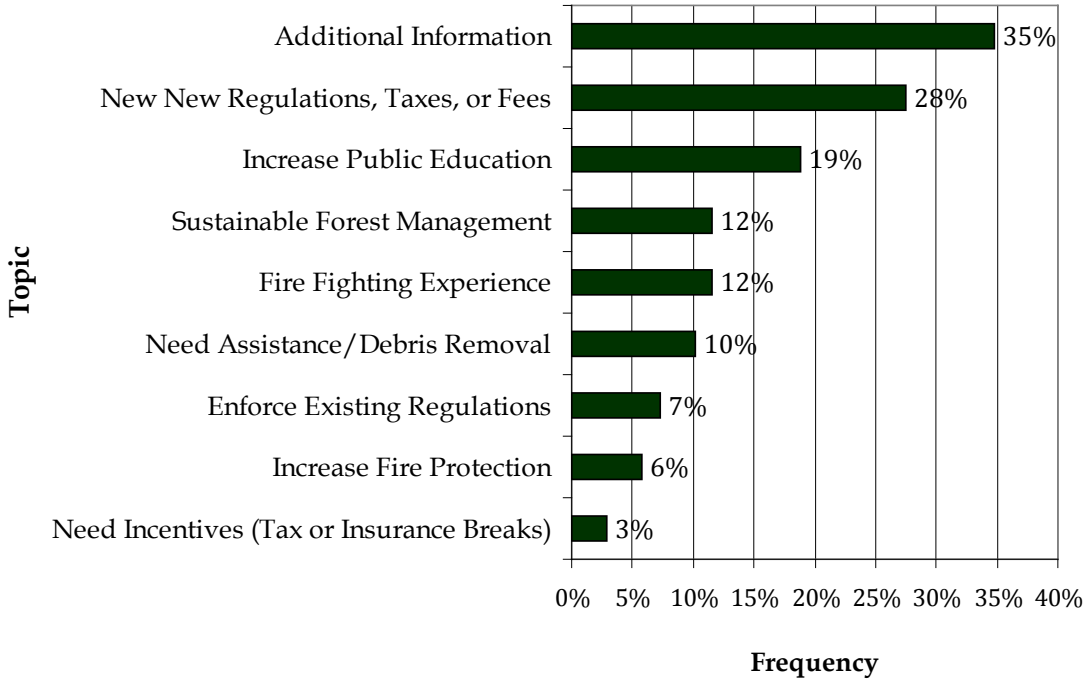
Question 9 asked respondents to identify what regulatory and non-regulatory activities aimed at reducing the community's risk to wildfire they would support. An increase in citizen action was the most strongly supported action with 61% of the responses being "very supportive." Education of construction contractors and developers about wildfire protection measures and construction design guidelines were the next most strongly supported with 46% and 43% (respectively) of the respondents being "very supportive." Public purchase of land, restrictions on new development within the WUI, and ignition zone maintenance received the lowest percentage of "very supportive" responses (18%, 20%, and 34% of respondents respectively).

Written Responses to Open-Ended Question

There were several trends exhibited in the written responses to Question 17. This open-ended question asked respondents to provide any additional comments they wished. Sixty-nine respondents provided comments. The strongest trend among those that responded was related to the provision of "Additional Information." The second-strongest trend was against the implementation of any new regulations, taxes, or fees. Additional information included descriptions of property locations, project ideas, critiques of the survey, and general frustrations.

Figure B.11 provides an overview of specific suggestions and opinions voiced in each category by frequency; beginning with the highest frequency category and ending with the least frequently mentioned category.

Figure B.11: Respondent Suggestions for Wildfire Planning in Coos County



Source: Coos County Homeowner Survey, February 2011

No New Regulations, Taxes, or Government Spending

There was a strong sentiment for no new increases in regulations, taxes, or government spending. Public education was supported as long as existing programs were used and it did not require additional funding. Some respondents felt that they were being taxed off of their property and were concerned that the Community Wildfire Protection Plan would need a new agency (and additional taxpayer funding) to implement it.

Increase Public Education

Public education was requested by a majority of the respondents. It was seen as more effective than regulations and incentives. The responses demonstrated a desire for independence from governmental agencies and from personal infringement. Property owners preferred to make educated decisions regarding their property fire protection measures rather than being required to perform them.

Fire Fighting Experience

Several respondents had previous work experience either for the Oregon Department of Forestry, a fire department or as a volunteer fire fighter. Others had experienced the Oxbow fire of 1966 or the Bandon fire of 1936.

Sustainable Forest Management

There was notable conflict of opinion in terms of proper forest management strategies. Some respondents were unhappy with the current forest management in Coos County and Oregon. One person requested controlled burns similar to those performed by the Native Americans of the Pacific Northwest, while another felt that the trees planted after clear cutting were placed too close together. Underbrush and gorse were highlighted as vegetation the most in need of removal from forests and the community. However, one respondent felt underbrush removal detracted from the beauty of the forest and would damage the ecosystem.

Need Assistance/Debris Removal

Many respondents expressed a desire to improve the fire protection of their property and home, but were unable to due to physical or financial restrictions. Some solutions offered by respondents were to have help, funding, or programs available for seniors or people with disabilities.

Increase Fire Protection

One person felt that every resident, rural or not, should be serviced by the nearest fire department even if more fire departments need to be established. Another person lives on a dead-end road with no alternate escape route within a forest canyon and is very worried about wildfires. This highlights a need to identify other properties located in similar areas outside of fire service districts and if improvements to road access cannot be funded, then there is also a need for each homeowner to create a defensible space around their homes and structures.

Enforce Existing Regulations

Existing regulations were highlighted by respondents, such as state fire laws and primary and secondary setbacks for structures in forested areas. Some residents had observed neighbors performing open burns in late summer and private properties with overgrown vegetation and gorse. There was concern, that while one person may take steps to protect their own property, another person may not, which could jeopardize the rest of the neighborhood.

Need Incentives (Tax or Insurance Breaks)

Two respondents were in favor of tax or insurance breaks as an incentive for homeowners to implement fire protection measures around their property. Both of these respondents were also supportive of increased public education about wildfire safety.

Discussion

The following section summarizes reappearing themes in the survey. First, this section will outline concerns of regulations and taxation, then transition into a discussion on personal empowerment and information access. Finally, the section will conclude with a summary of specific strategies noted by respondents including debris removal and pick up assistance, building protection strategies, and government agency protection services.

There is a distinct misunderstanding regarding the purpose of the Coos County CWPP. Almost a third of the open-ended responses indicated a perception that the CWPP had the power to implement new regulations, taxes, or fees on county property owners. Increased regulations, taxes, and fees were strongly discouraged. However, tax or insurance incentives were an acceptable means of motivating property owners to implement wildfire protection measures. Any future outreach or interactions with the public must clarify that the CWPP is a non-regulatory plan and that its primary purpose is to obtain federal and grant funding for locally chosen priority fuel reduction projects.

In place of regulations, many respondents strongly desired personal empowerment to protect their own properties and neighborhoods from wildfire damage. This may suggest a multi-faceted approach of increased community awareness, the formation of citizen action groups, and community service assistance. Homeowner empowerment could stem in part from information provided via mailed factsheets/brochures, the mass media, or from personal contact with a local fire service provider.

While personal empowerment was preferred over additional regulations, fees, and taxation, the protection of critical infrastructure and private property by government agencies was highlighted as the most important area for the focus of priority projects. The fuel treatments and maintenance of critical infrastructure cannot be addressed using homeowner empowerment alone. Respondents indicated a general sense of wildfire safety on personal property, but a moderate concern for the region around their personal property and Coos County as a whole. This indicated that homeowners are not as confident in the steps being taken to protect other properties than their own. Existing fuel treatment strategies should be advertised and priority projects must ensure the protection of critical services such as drinking water, electricity, first aid, evacuation routes, and telecommunication capabilities.

Physical or financial assistance was requested by respondents who indicated that their age and fixed income prevented them from being able to protect their property from wildfire. In contrast with households interested in personal empowerment, these respondents identified a clear need for outside assistance. To address these concerns in the future, debris removal and pick up services could be organized if not currently available. Important next steps are to identify debris removal programs throughout the county and determine if it is possible to expand those services. Community service organizations could also be organized and invited to provide free brush and debris removal to properties that qualify. These properties could be prioritized by the fire hazard vulnerability potential and the physical or financial capabilities of the property owner. This type of service benefits the whole community while also relieving a specific population from worrying about the safety of their property.

A majority of the property owners indicated that they had taken steps to protect their homes from wildfire. The steps cited most frequently were vegetation removal and the clearing of debris from roofs and gutters. This is likely because the removal of vegetation around a structure is a traditional method used to create usable spaces for turf areas, landscaping, play areas for children, gardening, and pastures. Clogged gutters are also part of the standard annual home maintenance routine. These types of techniques are excellent for all homes, but benefit those located outside of fire protection

districts in particular. However, fuel treatments can only protect a structure to a certain point. Once a building is built it is difficult for homeowners to make significant changes to structural materials.

Recommended solutions to building structure vulnerability were to develop construction design guidelines and establish education programs for contractors and construction companies in structural wildfire protection measures. In this way new structures would inherently be less vulnerable to wildfire. Additionally, respondents indicated concern for homes located in areas without fire protection services. These homes should be identified using GIS and if possible, included in existing fire service districts. Where district expansion is unavailable, an adjacent service provider or representative should visit each property and provide the owner with sufficient information to protect their property.

Conclusion

Survey respondents were most concerned with gaining sufficient knowledge to protect their property and their community from wildfire damage. The preferred method for receiving this information was in the mail or from professional site visits. For tasks such as the protection of critical infrastructure and the provision of wildfire protection services, respondents looked to local governments and agencies for assistance. Assistance was also requested for debris removal and pickup. There was an overall low to moderate level of concern for wildfire in Coos County. Respondents felt that sufficient protection could be provided through non-regulatory means.

Appendix C: Informational Interviews Summary

Introduction

The CSC used stakeholder interviews as one of three community engagement techniques develop the Coos County Community Wildfire Protection Plan (CWPP). In addition to addressing the collaboration requirement contained in the Healthy Forest Restoration Act (HFRA), the primary purpose of conducting stakeholder interviews was 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. The University of Oregon Community Service Center (CSC) conducted 21 interviews with a variety of stakeholders. The project Steering Committee selected stakeholders based on their knowledge of wildfire planning in relation to the four Values at Risk; preservation of life, drinking water sources, forests, and critical infrastructure. This appendix presents the interview methodology, common themes regarding wildfire risk that arose from interviews, and potential action items identified by stakeholders.

Methods

The CSC obtained permission to implement the stakeholder interviews from the Office for Protection of Human Subjects and the Institutional Review Board (IRB) at the University of Oregon (UO). The IRB protects the rights and welfare of subjects participating in UO research.[1] After completing the Human Subjects certification process, the CSC developed a draft stakeholder interview script and set of interview questions. The Steering Committee and a paid wildfire planning process expert reviewed the draft script and questions and provided feedback. The CSC incorporated the feedback received and prepared a final interview script and set of interview questions.

Due to the breadth and depth of questions and in an effort to streamline the interview process, the interview team and Steering Committee directed the CSC to divide the interview questions into four parts according to the "values at risk" identified during the risk assessment process. Similarly, the team categorized each potential interviewee based on the "value at risk" he or she represented (e.g. a fire chief would be listed in the "life" category and a county forester would be listed in the "forests" category).

[1] University of Oregon, Office for Protection of Human Subjects, http://humansubjects. uoregon.edu/, viewed 05/10/11

To view the interview script, questions and notes, please refer to Attachments A, B and C respectively.

Four University of Oregon graduate students conducted the stakeholder interviews. Each student spoke with five to six stakeholders over the phone between March 2011 and May 2011. When conducting the interviews, the students asked each interviewee the same set of general questions followed by specific questions targeted toward the value at risk reflected by their area of expertise. The following subsection presents additional information on the stakeholder selection and interview process.

Interview Process

At their meeting on January 27, 2011, the Steering Committee developed a preliminary list of stakeholders. The CSC subsequently refined the list and requested additional stakeholder recommendations from the Steering Committee via e-mail communication.

Once they complete the final stakeholder list, the CSC used a two-step approach to conduct the stakeholder interviews. First, several members of the Steering Committee who had established relationships with the individuals on the stakeholder list called these individuals to request their participation. Once a stakeholder agreed to participate, the student interviewers followed-up to secure an interview time and also provided them with a one-page description of the project and an interview script. This enabled the Steering Committee to be heavily involved in the selection process and ensure that interviewees were knowledgeable and willing to participate. The CSC conducted the 22 interviews by phone with the following stakeholders (next page):

Table C.1 List of Interviewed Stakeholders

Stakeholder	Organization	Interview Date
Mary Geddry	Concerned Citizens of Coquille	4/12/2011
Judy McMakin	Coos County Commission on Children and Families	4/14/2011
Jim Aldrich	North Bay Fire Chief	4/11/2011
Drew Solomon	Millington Fire Chief	4/11/2011
Hank Hickox	Kemper Sports/Bandon Dunes Resort	4/14/2011
Mike Robison	Coos Forest Protective Association (CFPA)	4/11/2011
Frances Smith	Coos County Public Health Department	4/11/2011
Craig Leech	Oregon State Forester	4/12/2011
James Nielsen	Coquille Watershed Association	4/14/2011
Rob Schab	Coos Bay-North Bend Water Boarc	2/22/2011
Paul Rodriquez	ureau of Land Management (BLM	3/10/2011
Bob Braddock	Jordan Cove Energy Project, L.P.	3/1/2011
Pat Downing	Coos County Sherriff's Office	4/8/2011
Martin Callery	Port of Coos Bay	4/12/2011
Roger Meader	Coos Curry Electric Cooperative	2/26/2011
Bob Wallis	Weyerhauser-Dellwood Logging	3/3/2011
Jim Carr	Menasha-Campbell, LLP	3/8/2011
Joseph Partridge	PacifiCorp	4/14/2011
Bob Laport	BLM	3/1/2011
Tristan Huff	OSU Extension Program	4/14/2011
Steve Wickham	Plum Creek Timberlands, LLP	3/15/2011

Interview Content

Each interviewee answered approximately ten questions with all interviewees answering the first sour questions. These questions asked about wildfire knowledge and preparation at a general level, as well as specific goals and actions the interviewees would like to see included in the plan. For the remainder of the questions, interviewees answered category specific questions based on their expertise (as noted previously the four categories were the "values at risk" identified during the risk assessment process).

Interview results

The following summarizes the major themes and trends from the stakeholder interviews. Part 1 summarizes questions answered by all interviewees on the CWPP planning process and on wildfire concern. Part II is divided into the four values at risk categories and summarizes key themes and priority projects specified by interviewees representing each of these four categories.

Part 1: Questions for all interviewees

The following is an overview of questions posed to all 21 interviewees.

CWPP Planning Process

For this section, the CSC asked interviewees about their general knowledge of wildfire planning efforts in Coos County as well as about the CWPP planning effort specifically. It is interesting to note that very few respondents were informed of the Coos CWPP planning process prior to initial contact they received from a member of the Steering Committee. In addition, the majority of interviewee respondents had limited firsthand experience with wildfires or direct observation of Coos County's wildfire protection strategies.

Wildfire Risk

For the 'wildfire risk' section, the CSC asked interviewees to share their general concerns about wildfire in Coos County as well as a few goals and actions they would like to see included in the Coos County CWPP.

Seven themes arose from the interview responses analysis. Stakeholders' major concerns regarding wildfire include (listed in order of from most to least mentioned): public education, noxious weed abatement, interagency collaboration, road maintenance, high-use recreation areas, logging activity management, and natural resource protection. The remainder of this section explains each theme in detail.

Public Education

Across interviews, community education was the dominant theme. Over half of the stakeholders interviewed noted the need for increased outreach and public education efforts. Interviewees identified two primary purposes that public education should fulfill: (1) to foster personal responsibility and empower local residents and (2) to increase awareness of fuels reduction techniques. Respondents identified rural residents without Fire District Coverage, vulnerable populations, such as the elderly, and new homeowners (0-5 years) in the WUI as the primary target audiences for wildfire education.

Noxious Weed Abatement

Seven stakeholders pointed to noxious weed abatement as a critical part of effective wildfire management. The most invasive weed in the County is gorse. Widespread gorse infestation is a serious concern because of its concentration of fuels, especially in rural areas. Interviewees noted a need for updates to city and county codes on how to treat invasive species.

Interagency Collaboration

For effective wildfire management, interviewees noted the importance of interagency collaboration. Interagency collaboration should be improved between fire districts, fire departments, water boards, and other public agencies. Specific ideas for improvements included:

- Better information sharing: interviewees indicated that there is a need for the same wildfire management documents to be available to the public and appropriate agencies. These include maps, best practices for wildfire management, land boundary information (including what agency responds inside each boundary), and address information.
- Better definition of responsibilities between the private sector and public sector: respondents noted the necessity of distinguishing the agency responsible for protection of property with intermingling land boundaries (including land that has an unclear boundary and boundaries that change often in small areas) and also to clarify areas where there is an overlap of responsibilities on some homeowners' and other borders.
- Improved regulations: respondents indicated that new structures built inside the WUI need to be regulated to ensure they include defensible space, and that new landowners are education on wildfire prevention. There was also mention of increased regulation for burning on private land, because of the potential for fire to jump land boundaries.

Road Maintenance

Interviewees identified access as the primary area of concern related to road maintenance. Interviewees noted the importance of repairing neglected roads, especially in rural areas, and of ensuring access to properties for wildfire management teams. In addition, a few interviewees noted the importance of identifying and improving evacuation routes.

High Use Recreation Areas

Because the majority of wildfires are started by humans, high use recreation areas can pose significant threat to wildfire spread. A few interviewees noted that the summer season poses the highest risk because it is hot and dry, and there are generally more people recreating at this time.

Logging Activity Management

The primary concern amongst interviewees in regards to logging management was a lack of regulations on private logging companies. There is significant fuel build up on land that has been logged in the past 20-25 years, as well as a general lack of water resources surrounding logging sites. Another area of concern noted by one respondent was that air quality restrictions hinder debris clearing by logging companies, making the lands more susceptible to fire.

Natural Resources

In terms of natural resources, a number of interviewees noted that natural habitats take many years to recover from loss, and therefore should be protected. One interviewee

also noted that springs are vulnerable to fire throughout the county and should also be protected.

Part II: Values at Risk

As noted previously, the second portion of the interview script asked interviewees to answer category specific questions based on their expertise (as noted previously the four categories were the "values at risk" identified during the risk assessment process). The following is a summary of the subject matter discussed by the stakeholders in each category, as well as a list of actions that emerged for each value.

Life

Because the value *life* accounted for the greatest quantity of respondents and encompasses the greatest diversity of interests and backgrounds, the life questions catered to four separate audiences. One script focused on questions for fire fighters, another focused on questions for tribal fire departments, another on individuals affiliated with the school system, and the last on community members.

Stakeholders in the life category tended to be more concerned than other stakeholders with issues such as access and the need for people to take personal responsibility to protect their property and ensure their own safety. There were three primary subjects that stakeholders in the Life category identified. Half of Life stakeholders discussed the need for more education on wildfire management for Coos County residents. There were equal mentions of road maintenance issues, specifically in rural areas, and the need for specific planning for vulnerable and at-risk communities, including the elderly and care facilities for people with disabilities. Five stakeholders, primarily from public agencies such as fire departments, noted that there needs to be an increase in collaboration between private and public agencies that deal with wildfire management. Other topics covered included: protecting natural habitats, summer fire conditions, lack of resources for wildfire management teams, evacuation routes, updated maps of at-risk areas, and noxious weed abatement. The following is a list of goals and actions identified by individuals in the life category:

Goals and Actions:

- Interagency Collaboration
- Provide same planning documents to agencies and public
- Provide public with map of at-risk communities and areas; allows communities members to see property risk level
- Link wildfire planning to tsunami (and other disaster) planning
- Education and outreach
- CFPA Heavily relied on by private and public organizations to perform outreach and education
- CFPA could benefit from more resources to effectively perform outreach efforts

- Create and share updated maps of fuels build-up and vulnerable populations
- Generate an inventory database (of?) accessible to all agencies
- Develop fuels reduction techniques standardized across agencies and boundaries

Water

Questions in the water category asked respondents to discuss locations of critical drinking water and the risk of these facilities being disrupted due to a wildfire. A few questions also addressed environmental concerns such as endangered aquatic species near drinking water sources and issues surrounding runoff.

Both of the stakeholders in the water category discussed the need for increased community collaboration when it comes to wildfire management. Other topics covered included: increased community education and the protection of springs that were vulnerable to destruction by wildfires.

Respondents in to the water questions did not identify any specific goals or actions.

Critical Infrastructure

Questions for the critical infrastructure category asked respondents about the existing condition of highways, roads, and communication towers, how critical infrastructure may fair in a wildfire, and what improvements should be made to improve the condition of existing infrastructure.

The stakeholders in the critical infrastructure category were fairly split on the topics they discussed. The primary subject discussed, cited by just under half of critical infrastructure stakeholders, was the need for interagency collaboration. This was especially important for stakeholders in this category that dealt with critical infrastructure that crosses private and public land boundaries. Other topics covered included: road maintenance, public land upkeep, community education, removal of debris from power lines and communication sites, and fuels reduction on private timberlands. The following is a list of actions highlighted by individuals in the critical infrastructure category.

Actions:

- Install cameras on communication sites, allowing for general security and faster notification in case of wildfire
- Trim brush around power lines (and other areas where there is a risk of electrical fire)
- Protect two main power lines which, if lost, could result in long-term, widespread blackout

- Employ inmate crews for fuels reduction, road maintenance, or noxious weed abatement
- Increase rural road maintenance
- Emphasize risk of gas pipelines

Forests

The Steering Committee composed two separate sets of questions for the forest category. The first set asked agency members about public land management techniques and perceived risks of wildfire. The second set of questions targeted individuals natural resources management positions; this group included private timber representatives.

Three primary topics arose from interviews with stakeholders in the forests category. Half of the stakeholders in the Forest category mentioned each of these issues. The first topic was high recreation areas. There are a number of popular recreation areas throughout Coos County, and, according to stakeholders in the forest category, are at-risk areas primarily because of human-made campfires. The second topic was noxious weed abatement. Specifically, there were many references to the gorse infestation along the coast and throughout the county. Finally, as with stakeholders in the Life category, half of the stakeholders in the Forest category cited the need for increased community education regarding what Coos County residents can do to protect themselves from wildfire. Other topics covered included: regulating logging companies debris removal practices, road maintenance, human started fires, landscape-scale planning efforts, and public/private land boundary confusion. The following is a list of actions noted by individuals in the forest category:

Actions:

- Need to develop landscape scale projects that cross boundaries
- Develop city/county codes on how to manage invasive species

Summary of Findings

Overall, there was not a wide array of concerns regarding wildfire among stakeholders interviewed. Interviewees made similar statement in terms of the importance of protection of life and the importance of public education campaigns. The primary exception to this is increased resources for the Coos Forest Protective Association (CFPA). A few stakeholders recommended this action outright, while many implied it by discussing the many and various ways that the CFPA is relied upon, including providing the primary outreach efforts to community members. This is directly related to the primary finding that resulted from the stakeholder interviews: the need for increased public education and awareness of wildfire safety practices. Over half of those interviewed discussed this need, and thus it is a primary goal addressed by the CWPP.

Appendix D:
Public Forums Summary

Introduction

The CSC conducted public forums as one of three community engagement techniques develop the Coos County Community Wildfire Protection Plan (CWPP). In addition to addressing the collaboration requirement contained in the Healthy Forest Restoration Act (HFRA), the primary purpose of the forums was to gather additional input from community members, discuss community issues, and provide input on goals and priority projects. This process was essential to establish collaboration between agency representatives and community stakeholders. The forums were held in Coos County in spring of 2011, the first convened in North Bend, the second in Coquille, and the third in Bandon. Attendees included members of the Coos County CWPP Steering Committee, County residents, and public agency representatives. The following report presents the forum methodology and a summary of common themes and actions that arose from each of the three activities during the forum breakout sessions.

Methods

The CWPP Steering Committee selected three geographically representative population centers for the three public forums. The CSC modeled organization and hosting techniques of the forums after the Curry County CWPP process, which hosted three forums. The Curry County CWPP was especially helpful as a reference tool because it is an adjacent county to Coos County and was completed in February 2008.

Prior to the public forums, the CSC used a variety of marketing techniques to notify the community of these public events. The Steering Committee and community volunteers posted posters with time and date information throughout the community in visible locations such as grocery stores, feed stores, coffee shops, bulletin boards, and schools. Local radio and television stations broadcasted the forum times and locations. Local newspapers also printed public service announcements.

At each of the three Coos County public forums, a CSC representative greeted attendees, provided a name tag and informational handouts, and asked attendees to sign-in. In addition, each attendee placed a marker on a Coos County map to show where they were from or what area they were representing.

To begin the forum, the CSC provided an overview of the CWPP process and purpose, the Values At Risk, the Risk Assessment, defensible space techniques, and CWPP process next steps. Next, the group transitioned into breakout sessions (discussed further below) in which CSC graduate students facilitated a combination of

brainstorming and hands on mapping exercises giving attendees the opportunity to voice specific concerns and highlight priority projects. The forums ended with an open house to provide the attendees with an opportunity to ask additional questions, meet Steering Committee representatives, fire chiefs, and Coos Fire Protection Association staff, and view the Coos County maps in more detail.

Breakout Sessions

The breakout session consisted of three parts. Each session began with a brainstorming exercise where participants focused on their biggest concerns regarding the Values at Risk during a wildfire and to develop goals for the CWPP. During the second portion of the session participants physically mark priority project areas on a map of Coos County. Informational maps generated from the Coos County Risk Assessment (Communities at Risk Map, Historic Wildfires Map and Ignition Risk Map) were placed on the wall next to each breakout session worktable. The section below describes each of the activities used during the breakout sessions.

Activity #1 – Values at Risk

Question: In case of a severe wildfire, what would be your immediate and long-term concerns? OR What goals would you like to see included in the CWPP or what broad issues should it address?

- Each participant recorded as many answers as he/she could think of on small slips of paper. They then worked together to place under the appropriate "Values at Risk" category (Life, Infrastructure, Water, and Forest).
    - Example: Highlight Values at Risk that have not been addressed.
- Each participant had a chance to speak and share his/her answers and why they felt the answers were significant.

Activity #2 – Mapping

Question: What areas of your community do you most value and want to see protected from wildfire?

- Community members used different colored markers to identify locations on county maps that related to corresponding topics of discussion. This color-coding method helped with quick identification of areas at risk and areas with sufficient protection capabilities.
- The CSC asked each participant to identify what he/she felt was the most important to protect from wildfire on the map. Facilitators encouraged participants to use color-coding when drawing on the map (Infrastructure - black, Life - red, Forest - green, and Water - blue), however this was somewhat flexible.
    - Examples: Schools, event centers, parks, churches, hospitals, rare/endangered species habitat, power substations and corridors, factories, drinking water sources etc.

Question: Where are potential causes of wildfires? Where are fire protection holes?

- Each participant identified areas at the greatest risk of causing wildfire on the map.
    - Examples: Dense dead vegetation buildup, fuel storage areas, abandoned structures, party spots, etc.

Activity #3 – Priority Projects

Question: Based on the mapping exercise, what projects are of the highest priority?

- Each participant identified their top projects on paper cards. The cards were then organized by the group on the wall according to priority (High, Medium, and Low).

Data Collection

The CSC entered the information gathered during the breakout sessions into an Excel worksheet. The CSC generated Tables for Activities #1 and #3 (see below) based on the frequency that an issue or project was discussed by community members. For Activity 2, the CSC transferred mapped priority projects to a Geographic Information Systems (GIS) data library and were used to inform a second run of the Risk Assessment.

Results

The following table shows that the forums received only limited public participation. While these data are important and provide valuable information for further review, given the overall lack of public participation in the forums, specific conclusions should not be made from these data. Furthermore, the technical advisors to the project determined that because of the lack of consistency and strong potential for response bias, the results were not suited for use in the risk assessment.

Table D.1 Forum Participation Rates

	North Bend	Coquille	Bandon
Agency Reps.	9	8	9
Community Members	2	1	3
Total	**11**	**9**	**12**

The North Bend forum had two members of the public and eleven attendees total. The Coquille forum had one member of the public and nine attendees total. The Bandon forum had three members of the public and twelve attendees total. The following is a summary of each activity.

Activity #1

Question: In case of a severe wildfire, what would be your immediate and long-term concerns? OR What goals would you like to see included in the CWPP or what broad issues should it address?

The CSC organized information for Activity #1 based on the Values at Risk (Life, Critical Infrastructure, Water, and Forest).

Life

This category contained the most issues of concern compared to the other Values at Risk. Half of all suggestions by participants concerned issues of life. Participants noted loss of home, property, and life most frequently during this exercise. Concerns about the control of noxious weeds, increasing community awareness of wildfire protection methods, and ensuring access to care facilities during and after a wildfire event garnered the next most frequent mentions. Concern also arose around the protection of pets and livestock. For additional issues of concern see Table C.1.

Critical Infrastructure

Critical infrastructure followed Life as the next most highly populated Value at Risk. Participants most frequently mentioned the need for road access for fire trucks, road signage, homeowner evacuation routes, and evacuation traffic control. They also felt these abilities should be supported by the protection of communication capabilities and the establishment of emergency communication plans. Participants desired protection of critical infrastructure amenities, such as fire stations, ambulance services, hospitals, drinking water, and electrical power. Additionally, they identified the preservation of electrical power as a separate concern by recommending the enforcement of fuel breaks around power and transmission lines. For the purpose of this exercise, the critical infrastructure category also included loss of jobs, forest resources, property, and money. For additional issues of concern see Table C.1.

Water

This Value at Risk had five main issues of concern. Participants mentioned the protection of watersheds, and specifically watersheds that provide drinking water for local cities, most frequently. Issues mentioned once included riparian habitat protection for water quality and ecological benefits, helipond ingress and egress, and property boundaries protocols. Heliponds are large pools maintained along rivers and creeks as sources of water for helicopters to collect and fight wildfires with. Property boundary protocols are important for the streamlining of protection activities across properties that are owned by federal, state, local government agencies or private individuals.

Forest

The Forest Value at Risk had the same total frequency of concerns as water. Participants most frequently identified the protection of commercial timber, natural resources, and recreation lands. Recreation lands consisted of camping, hunting, and hiking areas. Additional items of concern included the protection of unique habitats and the prevention of soil erosion.

Activity #2

Question: What areas of your community do you most value and want to see protected from wildfire?

For Activity #2, the CSC divided Coos County up into three geographic areas (north, southwest, and southeast). Participants then physically marked the locations of priority projects. Different colors indicated which Value at Risk the project was related to. Based on the color coding, the planning team created a GIS database of each of the mapped

projects from all three forums to produce a map showing the frequency of each project mentioned and what Value at Risk it correlated to. Attachment A of this appendix includes a composite map showing the results from each of the three forums as well as corresponding tables identifying values and projects for consideration.

Activity #3

Question: Based on the mapping exercise, what projects are of the highest priority?

For Activity #3, participants organized priority projects based on the priority level (high, medium, and low) they deemed most appropriate. There were some concerns mentioned multiple times, but given a different priority level. For example, gorse removal is mentioned in both the high and medium categories.

High

The "high" priority column included of the total 63 projects mentioned during this exercise. Participants most frequently mentioned the improvement of wildfire protection information availability and publication to the public. In conjunction with this effort the participants wanted agency efforts to focus on defensible space techniques in the form of information to homeowners and the enforcement of its implementation. Evacuation planning, gorse removal, and fuels reduction along key corridors were each mentioned three times. Participants also highlighted communications sites, rural roads, and highly populated areas as the key corridors for fuels reduction projects. For additional priority projects see Table C.2.

Medium

The medium projects contained of the total projects. Participants most frequently mentioned the protection of communication sites, power lines, and substations in this prioritization category. Other medium priority projects included fuels reduction in general and the focusing of resources on the protection of water supply watersheds. In addition to being a high priority, gorse removal was mentioned again in this category. Participants mentioned the remaining six projects once each: (1) maintaining the viability of local hospitals, like the Coquille Valley Hospital during an extreme wildfire event, (2) identifying transients and their campfires, (3) prioritize state parks for fuels reduction, (4) update rural addresses, (5) protect homes not RFPDs, and (6) increasing community awareness about wildfire.

Low

The designation of "low" for the four projects in this list does not imply that they are unimportant. Of all the priority projects discussed during the three public forums, these topics were merely of lowest priority in comparison to the other topics mentioned. These projects included (1) providing fire protection services to homeowners in areas not in an existing protection zone, (2) protecting homes in cities, (3) performing fuel treatments on prime habitat areas, and (4) the removal of fuels buildup in recreation areas. Participants placed the provision of fire protection to areas outside of existing protection districts in the low category, because they felt the protection services have a responsibility for their district first and the areas outside of it second. This is project has also been placed in the medium priority category as "protect homes not in RFPDs." Homes in cities are

considered less likely to be affected directly by wildfire, which allowed them to be a low priority compared to homes located in the WUI. Participants highlighted the protection of life, homes, and property as a high concern in Activity #1 however, while participants considered unique habitats important they determined that they were a low priority in comparison. The removal of fuels buildup was also placed in this category, because treatments around critical infrastructure and property were deemed a higher priority.

Conclusion

Participants expressed common threads of concern throughout the three forum activities. These threads included increasing community awareness about wildfire safety and defensible space, protecting critical infrastructure, implementing gorse removal, and continuing fuel treatments. These tended to match information collected in the stakeholder interviews and community survey. In both Activity 1 and 3, evacuation planning was a key concern. This type of planning requires the anticipation of evacuation routes, inter-agency phone trees, traffic control, and ambulatory services. While participants mentioned gorse and fuels treatments frequently, they did not provide specific strategies for their removal. Participants placed the protection of homes outside of rural fire protection districts in both the low and medium priority categories. The results from the mapping exercise provided exact locations for specific priority projects and are included in the Risk Assessment.

Table C.1. Public Forums Summary Activity #1, Spring 2011

LIFE	*Frequency*	CRITICAL INFRASTRUCTURE	*Frequency*	WATER	*Frequency*	FOREST	*Frequency*
Homes/personal property	10	Roads/Access/Traffic Control	13	Watersheds	9	Commercial timber	6
Loss of life	10	Communication capabilities/plans	6	Water supply	7	Protect natural resources	4
Noxious weed control/breaks/assistance	7	Critical infrastructure (CE, Fire, Ambulance, Hospitals, Water and Power)	5	Riparian habitats	1	Recreation (incl. hunting)	4
Public education/agency	7	Power/Transmission lines	4	Heliponds (ingress and egresses)	1	Protect unique habitats	2
Care facilities (elder, health, child)	7	Lost jobs, trees, money, property	4	Property boundaries protocols	1	Prevent slope erosion	1
Pets/livestock	6	Recreation sites	3			Control invasive species	1
Recreation/Cultural/ Historic amenities	5	Substations/ Communications sites	3			Property boundaries protocols	1
Economic short/long	5	Agency interaction/data	3				
Locate evacuation points/shelters	5	Resource accessibility	1				
Communication and information	5	Sewer plant	1				
Public health and safety issues	4	Make triage area - supply depot	1				
Local rural schools	3	Waterline above ground	1				
Loss of jobs	3	Property boundaries	1				
Resources/Daily needs	3	Historic buildings/values	1				
Public health and	3	NW natural gas pipeline	1				
Businesses	2	Lack of community resources	1				
Emergency lifeline	2						
Fire protection hole identification	1						
Total Comments:	88		49		19		19

Table C.2. Public Forums Summary Activity #3, Spring 2011

HIGH	*Frequency*	MEDIUM	*Frequency*	LOW	*Frequency*
Improve Public Education/Info Access	8	Communication sites, powerline, and sub station	4	Areas not covered by a fire protection zone	1
Defensible space education/implementa	6	Fuels reduction	3	Homes in cities	1
Evacuation Planning	3	Focus of potable water sources-watersheds	2	Treatments on prime habitat areas	1
Gorse removal	3	Removal of gorse	2	Vegetation removal in recreation areas	1
Treatments around communication sites	3	Coquille Valley Hospital	1		
Fuel reduction along roads and in high	3	Transients and their campfires	1		
Post event supply/preparation	2	Prioritize state parks for fuels reduction	1		
Protect citizens in WUI	2	Update rural addresses	1		
Inter-agency	2	Homes not RFPDs	1		
Map/data upgrades	2	education	1		
Home/road	2				
High recreations areas/abandoned	1				
Public water system East Bay Road from	1				
Communication Plans/Phone chains	1				
Emergency Vehicle	1				
Grant/funding	1				
Access to water supplies for suppression	1				
Total Comments:	42		17		4

Appendix E: Action Item Forms

The Action Item form is intended to include critical information on the rationale or fact base for actions proposed in the Coos County CWPP. The form includes sections on ideas for implementation, coordinating and partner organizations, timeline, and plan goals addressed. This approach, developed by the Oregon Partnership for Disaster Resilience at the University of Oregon, provides comprehensive documentation of proposed actions and compiles all of the essential information needed to implement the action in one place. Community stakeholders are encouraged to introduce action items both during and after the planning process by simply filling out the form and submitting it to the steering committee or implementation committee for review and approval.

This appendix includes a blank action item form and completed action item proposals for the 2011 Coos County CWPP.

CWPP Action Item Proposal Form[1]

Proposed Action Item:	Alignment with Plan Goals:

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:

Ideas for Implementation:

Coordinating Organization:	

Internal Partners:	External Partners:

Potential Funding Sources:	Estimated cost:	Timeline:
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	
Action Item Status:	

[1] The form should include critical information on the rationale or fact base for the proposed action, ideas for implementation, coordinating and partner organizations, timeline, and plan goals addressed. This approach, developed by the Oregon Partnership for Disaster Resilience at the University of Oregon provides better documentation of the proposed action and keeps together all of the essential information needed to implement the action. Community stakeholders are able to introduce action items both during and after the planning process by simply filling out the form and submitting it to the steering committee for review and inclusion into the plan.

Form Definitions

Proposed Action Title:

Include a brief description of the proposed action.

Alignment with Plan Goals:

The plan goals addressed by each action item are identified as a means for monitoring and evaluating how well the mitigation plan is achieving its goals following implementation.

Alignment with Existing Plans/Policies:

Identify any existing community plans and policies where the action item can be incorporated. Incorporating the mitigation action into existing plans and policies, such as comprehensive plans, will increase the likelihood that it will be implemented.

Rationale or Key Issues Addressed:

The rationale describes the critical issues that the action item will address. It presents the logic and the fact base behind the action item: why is it important that this action item be implemented?

Ideas for Implementation:

For each action item, the form asks for some ideas for implementation, which serve as the starting point for taking action. This information offers a transition from theory to practice. Ideas for implementation could include: (1) collaboration with relevant organizations, (2) alignment with the community priority areas, and (3) applications to new grant programs.

The ideas for implementation are just that: ideas. They do not necessarily prescribe the exact steps that the County or its partners should take to implement a particular action item. When an action is implemented, more work will probably be needed to determine the exact course of action.

Coordinating Organization:

The coordinating organization is the public agency with authority to implement the identified action. It can also be an agency that is willing and able to organize resources, find appropriate funding, or oversee activity implementation, monitoring, and evaluation.

Internal Partners:

Internal partner organizations are departments within the jurisdiction that may be able to assist in the implementation of an action item by providing relevant resources (time, budget, staff, data, etc.) to the coordinating organization.

External Partners:

External partner organizations or jurisdictions can assist the jurisdiction in implementing the action items in various functions. They may include local, regional, state, or federal agencies, as well as local and regional public and private sector organizations.

Potential Funding Sources:

Where possible, identify potential funding sources for the action item. Example funding sources can include: the federal Pre-Disaster Mitigation and Flood Mitigation Assistance Programs; state funding sources such as the Oregon Seismic Rehabilitation Grant Program; or local funding sources such as capital improvement or general funds. An action item may also have multiple funding sources.

Estimated Cost:

Include an estimate of the cost for implementing the action item.

Timeline:

Action items include both short- and long-term activities. Each action item includes an estimate of the timeline for implementation. *Short-term action items* (ST) are activities that the jurisdiction's departments may implement with existing resources and authorities within one to two years. *Long-term action items* (LT) may require new or additional resources and/or authorities, and may take more than two years to implement.

Status:

As action items are implemented or new ones are created during the plan maintenance process, it is important to indicate the status of the action item—whether it is new, ongoing, or complete. Documenting the status of the action will make reviewing and updating mitigation plan easier during the plan's five-year update, and can be used as a benchmark for progress.

CWPP Action Item Proposal Form: Action 1.1

Proposed Action Item:	**Alignment with Plan Goals:**
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.	*Goal One: Wildfire Awareness and Safety*

Alignment with Existing Plans/Policies:
Coos NHMP Goals 4 and 5; Coos NHMP Action Multi-Hazard #8
Rationale for Proposed Action Item:
Coos County has a number of federal, state and local agencies involved in wildfire education, awareness and prevention programs. Creating this position would enable a "centralized command" of all community education campaigns related to wildfire in Coos County. Through centralization, this position will result in better collaboration and more efficient use of resources. In addition, this position could take some of the pressure off of wildfire management teams to oversee the planning of community wildfire education campaigns, thereby allowing them to focus limited time and resources on education and outreach implementation.
Ideas for Implementation:
There are a number of options for creating the position of Wildfire Education and Outreach Coordinator. Two potential strategies are: Create and fund a full or part-time Wildfire Education and Outreach Coordinator position. The position could be housed within an existing agency (e.g. Coos County Emergency Management, CFPA, etc.) or could be an independent contractor. Agencies should consider pooling resources to fund the position. If funding is not available, a second strategy could be form a three-person sub-committee. The sub-committee would be made up of individuals serving on the CWPP Implementation Committee and would be responsible for coordinating and overseeing the CWPP education and outreach program as outlined in the remaining education and outreach action items. Ideally, this position would be under the county's Emergency Management Department, and would also work closely with the Coos Forest Protective Association, who is currently the primary outreach agent in the county.

Coordinating Organization:	CWPP Implementation committee

Internal Partners:	**External Partners:**
Coos County Emergency management, RFD's	Coos Forest Protective Association, BLM, Watershed Councils

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Grant funds, pooled resources, Title III funding	$30-45K/year?	☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 1.2

Proposed Action Item:	**Alignment with Plan Goals:**
Develop a countywide education and outreach initiative based on the literature and landscaping projects offered by FireWise.	*Goal One: Wildfire Safety and Awareness*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
FireWise is an established program and already has literature available. Using the program's existing literature means Coos County agencies would not have to spend resources recreating this literature. The FireWise program also has neighborhood level project ideas that could be used by the Education Liaison.

Ideas for Implementation:
New homeowners and builders/developers would be targeted in this program, because they have the greatest ability to implement wildfire mitigation strategies (such as creating defensible space around their structure) on private property. The Wildfire Education and Outreach Coordinator should team with homeowners, neighborhood associations and fire protection agencies to plan fire-safe landscaping and fuels reduction projects. FireWise has a program in which communities can be "certified" as FireWise communities. This should be the goal when developing this campaign in collaboration with homeowners and neighborhood associations.

Coordinating Organization:	Wildfire Education and Outreach Coordinator

Internal Partners:	**External Partners:**
County Planning and Building Departments	CFPA, homebuilder's associations, neighborhood associations

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 1.3

Proposed Action Item:	**Alignment with Plan Goals:**
Develop and implement a public education series in which private and public agencies collaborate to educate community members on hazard mitigation efforts.	*Goal One: Wildfire Safety and Awareness*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
Responsibility for wildfire awareness and preparedness is shared by many public and private entities. Combining the resources of public and private agencies would result in more effective outreach efforts on wildfire safety and awareness. Also, messages about the importance of preparation for a wildfire would be more effective if people could see the many effects a wildfire could have on their livelihood. These multidimensional messages could include information on insurance rates, job losses, habitat or recreational losses, etc.

Ideas for Implementation:
Wildfire Education and Outreach Coordinator is responsible for identifying and contacting relevant stakeholders from both the private and public sectors. These could include members of watershed councils, insurance agents, electric cooperative members, police officers, etc. The primary way to present this information would be through small-scale community workshops, held throughout the county. The goal should be to hold these workshops on a regular basis, so that people can come to rely on them. However, the number of workshops offered will depend upon the number of agencies interested in hosting. The content of the workshops will depend on the presenters. For example, police officers could discuss proper evacuation procedures in case of an emergency; watershed council members could teach people show where there are vulnerable springs and what people can do to help ensure they are protected. The participating insurance agency(ies) and the process for receiving this discount should be advertised during the workshops. The "series" should also be advertised at county events, in order to attract both participants and hosts. Additional ideas include conducting outreach to realtors and insurance agents.

Coordinating Organization:	Wildfire Education and Outreach Coordinator

Internal Partners:	**External Partners:**
RFPDs	CFPA, BLM, All private/public agencies that have a stake in wildfire management and hazard mitigation (using a broad definition). Ex: Police officers, watershed council members, firefighters, social service agents, etc.

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 1.4

Proposed Action Item:	**Alignment with Plan Goals:**
Package and distribute risk assessment maps and other relevant wildfire risk and protection information for public use.	*Goal One: Wildfire Safety and Awareness*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
In order to adequately protect themselves from wildfire, community members need to understand both their risk and the measures they can take to mitigate that risk. Community members should have ready access to digital and hard copy maps that display high-risk areas throughout the county, so that they can see if their property is in a danger zone. Ensuring that community members have access to this information could act as a catalyst to get more people to care about creating defensible space around their homes, reducing fuels, ensuring they have adequate emergency access and keeping up-to-date on wildfire planning efforts in general.

Ideas for Implementation:
In conjunction with Goal 2, the Wildfire Education and Outreach Coordinator should develop a packaging and distribution strategy for updated maps and information that comes from new data collection. Distribution does not necessarily mean handing out paper copies of maps etc. Instead, a variety of tools should be identified to ensure that all residents of the county can easily access the information. Strategies could include: links on relevant websites, providing copies for distribution by various agencies, and handouts available at relevant events. Maps could also be displayed in RFPDs, Planning/Permit Departments, and schools. Private parties should be engaged and provided with maps to post. These partners could include insurance agents, building supply stores, and contractors' offices. Wildfire Education and Outreach Coordinator should ensure that the information available to the public reflects the most up-to-date information available.

Coordinating Organization:	Wildfire Education and Outreach Coordinator

Internal Partners:	**External Partners:**
RFPDs, County Planning/Building, County GIS	CFPA, Schools, state agencies

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 1.5

Proposed Action Item:	**Alignment with Plan Goals:**
Develop campaign that identifies and communicates evacuation routes to county residents.	*Goal One: Wildfire Safety and Awareness*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:

Evacuation routes are a crucial part of wildfire preparation. However, these routes need to be communicated to residents in order for them to be effective in the case of an emergency.

Ideas for Implementation:

Plan for campaign will be left up to the Wildfire Education and Outreach Coordinator, but should include the following elements:

- Coordinate with all county emergency response agencies, 9-1-1 PSAP and secondary PSAP's, and emergency medical responders to create an evacuation map and a list of help-line numbers for at-risk communities.
- Provide informational videos catering to at-risk communities for local government access TV as well as local TV Stations.
- Provide weekly fire prevention articles about safety, evacuation, and help-line information in local print media during fire season.
- Develop wildfire evacuation signage to be posted (in similar manner to tsunami signage).

This campaign should also place special focus on planning for vulnerable populations and at-risk communities.

Literature provided through the evacuation plans campaign should incorporate the most up-to-date information available, in conjunction with Goal Two of the Coos County CWPP.

Coordinating Organization:	Wildfire Education and Outreach Coordinator

Internal Partners:	**External Partners:**	
Emergency Management Department, RFPDs	CFPA	
Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Title III Funds, Grant funds, general fund		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 1.6

Proposed Action Item:	**Alignment with Plan Goals:**
Assess and improve wildfire education currently provided in Coos County public schools.	*Goal One: Wildfire Safety and Awareness*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
Educating youth is an effective way of increasing wildfire prevention and protection literacy throughout the county. The CFPA already goes into schools throughout the county and provides students with information regarding wildfire safety. This seems to be an ad hoc program that needs to be assessed and, if necessary, built upon and formally structured.

Ideas for Implementation:
Wildfire Education and Outreach Coordinator should do a SWOT analysis of the CFPA's outreach efforts in the schools. This should include interviews with CFPA members who have participated in this outreach, principles at schools that have hosted the CFPA and youth that have participated in the education efforts. Once the assessment has been completed and gaps identified, a program should be developed, with objectives aimed at closing those gaps and building on existing program infrastructure. One idea that should be considered is a "train the trainer" program, in which the CFPA trains high school students in wildfire management, and the high school students do outreach for younger children.

Coordinating Organization:	Wildfire Education and Outreach Coordinator

Internal Partners:	**External Partners:**
School board	CFPA

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form : Action 2.1

Proposed Action Item:	**Alignment with Plan Goals:**
Coos Forest Protective Association in partnership with Coos County Emergency Management and the Coos County CWPP Implementation Committee will re-run and update the Risk Assessment using best available data at least every five-years or as conditions change.	***Goal 2: Hazard Assessment & Inventory – Objective 1***

Alignment with Existing Plans/Policies:

Coos County Natural Hazard Mitigation Plan (2010)

Rationale for Proposed Action Item:

As priority projects are completed and conditions change within Coos County, data becomes quickly out of date. To ensure that Coos County can maintain a current list of high priority fuels reduction projects, the county should update the risk assessment on an annual basis. This will also allow the county to track progress in the completion of priority fuels reduction projects. Specifically, the Risk Assessment should be updated to reflect current access, structural ignitability, protection capability, vegetation cover, development and other related conditions to effectively and efficiently to inform fuels projects.

Ideas for Implementation:

Implementation should start with determining a lead agency (or external consultant) to coordinate and process the risk assessment. The lead agency must be proficient in wildfire risk assessment methods and must have adequate GIS capability. Additional tasks include identification of parties responsible for the annual collection of up-to-date Risk Assessment data (e.g. Coos Forest Protective Association, Oregon Department of Forestry, Coos County Road Department, the Bureau of Land Management, and Industrial Partners, etc.). All data collection should be standardized and should be based on best available methods identified by the Western Wildland Environmental Threat Assessment Center (WWETAC) and other relevant sources. Once the parties responsible for gathering the Risk Assessment data have been identified, the following action components should be completed:

- Establish an annual deadline for updated data Risk Assessment data.
- Amend the Risk Assessment annually to reflect most up-to-date data collected, where/ if needed.
- Ensure all data gathered (specifically GIS data) is made available to all Coos County fire protection agencies.

Coordinating Organization:	Coos Forest Protective Association

Internal Partners:	**External Partners:**
• Coos County Road Department • Rural Fire Departments • Coos County Emergency Management	• Bureau of Land Management • Industrial Partners • Oregon Department of Forestry

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Title III funds, CWPP Grant Funding, CFPA, other sources?		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 2.2

Proposed Action Item:	**Alignment with Plan Goals:**
The Coos County CWPP Implementation Committee will use the past priority project lists together with any updated risk assessment information to annually create a reflective new list of priority fuels reduction projects on both public and private lands.	***Goal 2: Hazard Assessment & Inventory – Objective 2***

Alignment with Existing Plans/Policies:
Coos Natural Hazards Mitigation Plan (2010)

Rationale for Proposed Action Item:
As fuels reduction priority projects are completed and Risk Assessment data changes within Coos County, future priority projects may be jeopardized if a new list is not created based on data changes. Creating a new list of priority projects will help insure that Coos County is on schedule with fuel reduction projects on both public and private lands. Data from the annually updated Risk Assessment, in addition to data from an assessment of past completed fuel reduction projects conducted by Coos Forest Protective Association, should be utilized by the Coos County CWPP Implementation Committee to annually update the list of fuel reduction priority projects.

Ideas for Implementation:
Implementation should start with an annual assessment of completed fuel reduction projects on private and public lands. This assessment, along with the annually updated Risk Assessment, should be reviewed by the Coos County CWPP Implementation committee to inform an updated list of fuel reduction priority projects. The Coos County CWPP Implementation committee will also work with appropriate parties to ensure that all private landowner addresses are up to date and entered into a multi-agency accessible database. This will help inform and insure initiation of priority fuels reduction efforts on private lands.

Coordinating Organization:	Coos Forest Protective Association and the Coos County CWPP Implementation Committee

Internal Partners:	**External Partners:**
• Coos County Road Department • Industrial Partners • Rural Fire Departments • Coos County Emergency Management	• Bureau of Land Management • Oregon Department of Forestry

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
CWPP Grant Funding, CFPA, other sources?		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 2.3

Proposed Action Item:	**Alignment with Plan Goals:**
Conduct specific hazard identification, documentation and inventory surveys within the Coos County Community Wildfire Protection Plan (CWPP) area to aid in determination of fuel reduction project needs and prioritization.	***Goal 2: Hazard Assessment & Inventory – Objective 3***

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
The CWPP risk assessment provides a generalized understanding of high priority mitigation areas within the county. However, additional assessment within those areas is needed to identify specific, scale-appropriate wildfire mitigation projects.

Ideas for Implementation:
Conduct in-field assessment within high-priority areas to identify area specific projects for review, prioritization and completion.

Coordinating Organization:	Coos County CWPP Implementation committee

Internal Partners:	**External Partners:**
• Rural Fire Departments • Coos County Emergency Management • CFPA	• Oregon Department of Forestry • Bureau of Land Management • Homeowners

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
CFPA		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 3.1

Proposed Action Item:	**Alignment with Plan Goals:**
Establish a semi-annual woody debris disposal campaign to facilitate the removal of excess vegetation and biomass on private property.	*Goal 3: Fuels Reduction*

Alignment with Existing Plans/Policies:
Natural Hazard Mitigation Plan, Oregon Senate Bill 360, Coos County CWPP

Rationale for Proposed Action Item:
Introduce a public debris disposal campaign to assist citizens who lack the capabilities to remove vegetation from their property. This will help landowners to create a defensible space around their property and thus reduce the chance of structure damage or loss. This action item is linked to the Goal 2 objective that focuses on coordinating organizations to reduce fuel build up and to identify fuel reduction projects.

Ideas for Implementation:
Coos Forest Protective Association will work with area partners (e.g. rural fire departments, timber companies, Oregon Youth Conservation Corps, etc.) to assist private property owners with the disposal of woody debris. The CFPA will organize, promote and advertise the disposal campaigns. Campaign efforts will focus on CAR near the wildland urban interface and on homes outside of RFD protection. The CFPA will coordinate with federal and state agencies to increase campaign effects.

Coordinating Organization:	CWPP implementation committee

Internal Partners:	**External Partners:**
CFPA, Local trash collection service, Rural Fire Districts	ODF, USFS, BLM, OYCC

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
CFPA, Federal Grants		☐ Short Term (0-2 years) x Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	CWPP Steering Committee
Action Item Status:	

CWPP Action Item Proposal Form: Action 3.2

Proposed Action Item:	**Alignment with Plan Goals:**
Remove vegetation and other fuels from around critical infrastructure sites including power lines, communication sites, roads, and natural gas pipelines.	Goal 3: Fuel Reduction

Alignment with Existing Plans/Policies:
Natural Hazard Mitigation Plan, Oregon Senate Bill 360, Healthy Forest Restoration Act, National Fire Plan

Rationale for Proposed Action Item:
The rational for the proposed action item is to remove vegetation and fuels from around critical communication sites in Coos County. This will protect critical infrastructure and ensure effective communication and coordination in the event of a wildfire. This will also mitigate the probability of wildfire occurrence as most communication sites are high elevation sites and have great potential as points of ignition. This action addresses Goal 3, Objective 1 that calls for the protection of Critical Infrastructure as one of the Steering Committee identified Values at Risk.

Ideas for Implementation:
Coos County CWPP Implementation committee will organize crews from State and Federal agencies to perform and conduct regular annual evaluation and reduction of fuels around sites. The crews will coordinate with public utilities to reduce fuels on private utility communication sites. This action item will require three fire knowledgeable agency employees to spend two weeks twice per year assessing and removing vegetation from around high priority communication sites in towns where sites are located.

Coordinating Organization:	Coos Forest Protective Association

Internal Partners:	**External Partners:**
Coos County Board of Commissioners, Coos Forest Protective Association, Rural Fire Districts	ODF, USFS, BLM, Rural Fire Districts, Coos Forest Protective Association

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Federal grants, respective agencies		☐ Short Term (0-2 years) X Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 3.3

Proposed Action Item:	**Alignment with Plan Goals:**
Twice per year (spring/fall) RFPDs host a "Treatment Day" to assist homeowners with creating defensible space.	Goal 3: Fuels Reduction

Alignment with Existing Plans/Policies:
Oregon Senate Bill 360, Oregon Natural Hazard Mitigation Plan

Rationale for Proposed Action Item:
This action item spans a few goals, including fuels reduction, interagency collaboration and community awareness. Having RFPD members go out in the community and help homeowners create defensible space around their homes is a surefire way to get the conversation about preparing for a wildfire started. And making it a city-wide or countywide event ensures that many people will gain wildfire knowledge, and that practical fuels reduction throughout the county will be accomplished.

Ideas for Implementation:
Dedicate a portion of two implementation committee meeting agendas to developing the "Treatment Day" concept and to nominating a "Treatment Day" coordinator. This person, with guidance from the CFPA, is responsible for choosing the dates for treatment day, developing the logistics (including what each RFPD will be responsible in their area), an advertising campaign, and developing schedule of next year's events (whether or not he or she will be continuing as coordinator). This person should involve as many community organizations as possible, including neighborhood associations, schools, watershed councils, etc.

Coordinating Organization:	RFPD chiefs

Internal Partners:	**External Partners:**
CFPA, BLM	Schools, watershed councils, neighborhood associations

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
FEMA Hazard Mitigation Grant Program, Coos Forest Protective Association		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 3.4

Proposed Action Item:	**Alignment with Plan Goals:**
Survey insurance provider in Coos County to determine which companies offer policy incentives to property owners for conducting fuel treatments or other wildfire mitigation measures (i.e. maintaining defensible space) and promote and publicize list.	*Goal 3: Fuels Reduction*

Alignment with Existing Plans/Policies:
Natural Hazard Mitigation Plan, Oregon Senate Bill 360

Rationale for Proposed Action Item:
Providing a clear monetary incentive could encourage property owners (residential and business) to reduce fuels and maintain defensible space around their property thereby reducing the chance of structure damage or loss. According to the Oregon Insurance Division, some insurance carriers already provide such incentives through existing insurance policy instruments. This action item is linked to the Goal 3 Objective that focuses on coordinating organizations to reduce fuel build up and to identify fuel reduction projects.

Ideas for Implementation:
Identify a volunteer to contact local insurance companies/agents and request information about defensible space/fuel reduction incentives/programs they offer. Staff at the Insurance Services Office (http://www.iso.com), the Independent Agents Association of Oregon (http://www.iiaba.net/OR/) and the Oregon Insurance Division (http://www4.cbs.state.or.us/ex/ins/inslic/agent/index.cfm) may be able to assist. Once the research is complete, the volunteer should report back to the CWPP committee with a strategy for publicizing the information. Information should be promoted and made public in an effort to incentivize fuel reduction and defensible space projects. This action item should be tied to any community outreach efforts such as the workshops described in Action Item 1.3.

Coordinating Organization:	CWPP committee

Internal Partners:	**External Partners:**
CFPA, Rural Fire Districts	Local Insurance Agents, Oregon Insurance Division (Cece Newell); ISO, IAAO

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		X Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 3.5

Proposed Action Item:	**Alignment with Plan Goals:**
Incorporate annual BLM priority fuels reduction list into the CWPP.	*Goal 3: Fuels Reduction*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
The BLM prepares an annual list of fuels reduction projects. Inclusion within the CWPP will encourage coordination and ensure a wide range of funding options are available for fuels reduction projects.

Ideas for Implementation:
BLM staff present a list of projects to the steering committee on an annual basis.

Coordinating Organization:	BLM

Internal Partners:	**External Partners:**
CFPA, Coos County	

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		X Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 4.1

Proposed Action Item:	**Alignment with Plan Goals:**
Conduct quarterly interagency communication meetings with representatives from fire protection agencies serving Coos County	*Goal 4: Interagency Communication*

Alignment with Existing Plans/Policies:
Coos County Multi-Jurisdictional Natural Hazard Mitigation Plan

Rationale for Proposed Action Item:
This action item will help leaders of agencies and organizations stay informed and up to date with recent findings and information. It will help leaders to coordinate and communicate with other agencies and organizations. As leaders stay informed, they will be able to debrief their respective groups and therefore keep their agency or organization updated about current county conditions. This action will also help to coordinate county wide fire suppression exercises and emergency response.

Ideas for Implementation:
Initially, the implementation committee will invite all organizations that are involved in fire suppression, fuels reduction and/or wildfire mitigation to participate. Once agencies are committed, one agency will be appointed as the first meeting host. Meeting host and agenda responsibilities shall rotate among the participating agencies. Host will provide meeting agenda, will coordinate with other agencies to determine feasible day and time, and will provide meeting location. Each agency leader will report to the group strategies for agency coordination in the fire fighting process and new fire fighting techniques. Meetings will occur four times a year for two hours. These meetings will also inform the training for fire management professionals described in Action Item 4.5.

Coordinating Organization:	CWPP Implementation committee

Internal Partners:	**External Partners:**
RFPD's, VFD's, City Fire Departments	BLM, ODF, USFS, CFPA

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Individual Organizations	Annually, eight hours of staff time per agency plus travel	☐ Short Term (0-2 years) X Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 4.2

Proposed Action Item:	**Alignment with Plan Goals:**
Nominate a member of the CWPP Implementation committee to serve as a liaison to the Coos County Natural Hazard Plan Mitigation Steering Committee	*Goal 4: Interagency Communication*

Alignment with Existing Plans/Policies:
Oregon Coast Tsunami Hazards Program, Coos County Emergency Operations Plan, Coos County Multi-Jurisdictional Natural Hazards Mitigation Plan

Rationale for Proposed Action Item:
Coos County has an established natural hazard mitigation plan (NHMP). The NHMP addresses all known natural hazards in the county. The NHMP includes action items, policies, or recommendations related to wildfire protection since all of these events pose fire risks to the community and are coordinated by a Mitigation Steering Committee. In order to maximize time and efficiency and ensure active coordination of hazard mitigation activities, CWPP representation on the NHMP Steering Committee is advised. Any publications or events discussing natural hazards should include information about the CWPP.

Ideas for Implementation:
The CWPP implementation committee shall nominate a member to serve as a liaison to the Coos County NHMP Steering Committee. The liaison shall attend all NHMP mitigation steering committee meetings and shall report back.

Coordinating Organization:	Implementation committee

Internal Partners:	**External Partners:**
Coos County Emergency Management	

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Representative agencies	Annually, six hours plus travel	☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 4.3

Proposed Action Item:	**Alignment with Plan Goals:**
Provide the Coos County Commission with an annual update on CWPP implementation progress and resource needs.	*Goal 4: Interagency Communication*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
Decision makers in the county need to be kept informed on wildfire hazard planning and implementation activities.

Ideas for Implementation:
Report CWPP progress and activities to the Board of County Commissioners on an annual basis.

Coordinating Organization:	Implementation Committee

Internal Partners:	**External Partners:**
Coos County Board of Commissioners	

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	CWPP Steering Committee
Action Item Status:	

CWPP Action Item Proposal Form: Action 4.4

Proposed Action Item:	**Alignment with Plan Goals:**
Hire part-time CWPP Database Manager (or designate duties as part of existing position) to administer responsibilities described in Action Item 4.5	*Goal 4: Interagency Communication*

Alignment with Existing Plans/Policies:
Coos County Multi-Jurisdictional Natural Hazards Mitigation Plan, Healthy Forests Restoration Act 2003, National Fire Plan

Rationale for Proposed Action Item:
At present, there is no individual responsible for coordinating and maintaining wildfire related data in the county. The Database Manager will help keep fire suppression organizations informed about where and what prioritization level individual projects are throughout the county. This individual will also help keep organizations aware of potential areas of fire concern and therefore help to coordinate prevention and suppression strategies.

Ideas for Implementation:
Implementation committee will determine which agency shall be responsible for hiring this new position or adapting a current employee's tasks to the needs of this position. The responsibilities of the CWPP Database Manager will be approximately equivalent to a FTA 0.25 position. This person will establish a password protected website and ensure all fire protection agencies have access. The Manager shall coordinate with each fire protection agency to obtain fire protection data, surveys, and public outreach materials. This action item will require the Manager to spend 10 hours/ week collecting data and maintaining an active database that can be accessed by any Coos County fire protection agency or organization with the proper username and password. For additional responsibilities see Action Item 4.5.

Coordinating Organization:	Implementation committee, then CWPP Database Manager

Internal Partners:	**External Partners:**
Rural Fire Departments, Coos County Commissioners	CFPA,USFS, BLM, ODF

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Staff member's agency, grant monies	~10 hours per/ week	X Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 4.5

Proposed Action Item:	**Alignment with Plan Goals:**
Develop centralized database and website accessible to all agencies (to share collected maps, wildfire protection techniques, GIS data, etc.)	*Goal 4: Interagency Communication*

Alignment with Existing Plans/Policies:
Coos County Multi-Jurisdictional Natural Hazards Mitigation Plan, Healthy Forests Restoration Act 2003, National Fire Plan

Rationale for Proposed Action Item:
Collaboration requires equal access by all agencies to the same information. At present, there is no coordinated method or central (county-wide) storing house for information related to wildfire suppression, treatment and mitigation data. Any GIS, fire fighting or preparation techniques, policies, or procedures must be transparent between agencies to build trust and to streamline the protection of Coos County from wildfire devastation.

Ideas for Implementation:
Use the 0.25 FTE CWPP Database Manager to collect the data. Manager must develop a centralized website or FTP site available to all agencies for uploading and downloading data. GIS data will be collected from the Noxious Weed Abatement Analyst (Action Item 5.1), agencies performing priority projects, and the risk assessment annual update, and placed on the website annually. Manager should be or should identify a webmaster and purchase or use an existing server to sort and store information. Establish a process for each agency to upload their newest information onto the site. Workshops should be held periodically to review any updated information as described by Action Item 4.1.

Coordinating Organization:	Implementation committee

Internal Partners:	**External Partners:**
Coos County Commissioners	BLM, Department of Forestry, CFPA

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Manager's agency, grant monies		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 5.1

Proposed Action Item:	**Alignment with Plan Goals:**
Hire Part-Time Noxious Weed Abatement Analyst.	*Goal 5: Noxious Weed Control*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
The spread of noxious weeds, such as gorse, pose a dangerous threat to many communities throughout Coos County. Gorse was frequently identified as a concern throughout the surveys, interviews, and focus groups. The Steering Committee has also identified noxious weed abatement as a priority project. Currently there is a lack of data regarding the location and spread of noxious weeds. The Coos County Noxious Weed Advisory Board has been interested in hiring a part-time noxious weed coordinator, but has not been able to secure the necessary grant funds. There is still a possibility for using the NRCS office as a central hub for the position.

Ideas for Implementation:
The new responsibilities will be equivalent to a 0.25 to .5 FTE position. Responsibilities are described in full by Action Items 5.2, 5.3, and 5.4. Generally they include synthesizing existing gorse maps, embarking on new GIS gorse location data information, and targeted distribution of gorse danger and removal techniques.

Coordinating Organization:	Coos County Noxious Weed Board

Internal Partners:	**External Partners:**
Coos County Commission, County Roads Department	CFPA, NRCS, State Parks

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Title III		X Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 5.2

Proposed Action Item:	**Alignment with Plan Goals:**
Within two years, survey and geocode gorse locations throughout Coos County.	*Goal 5: Noxious Weed Control*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:

Gather information on gorse to contribute to annual updated risk assessment. Submit gorse GIS data to implementation committee or individual running the annual risk assessment. Use the CWPP risk assessment to identify priority areas for noxious weed abatement.

During the public outreach interviews and public forums, participants expressed knowledge of existing noxious weed maps. However, at the time of the risk assessment these maps were unavailable. Any existing noxious weed maps will be identified by Action Item 5.3. Current noxious weed (gorse) locations and spread are imperative to fire safety and the efficient eradication of these fire-prone species. Noxious weed abatement was identified as a priority project through the public outreach process.

Ideas for Implementation:

Data collection will be an ongoing effort until gorse has been eradicated or fully controlled in Coos County. The area in and around Bandon is a high priority for survey and should be focused on in year one. A gorse survey priority list should be developed by the steering committee for year's two through five of the data collection effort. New surveys of treated areas should be considered to monitor and track progress. The Noxious Weed Abatement Analyst shall obtain gorse location information in spring each year using whatever method is efficient and cost effective (example: ground surveys, LIDAR, or aerial photographs). This information will be transformed into GIS data points and added to the database created by Action Item 5.3. This database will be provided to the person or implementation committee running the annual update of the risk assessment.

Coordinating Organization:	Coos County Noxious Weed Board

Internal Partners:	**External Partners:**
CWPP implementation committee, Coos County Commissioners, County Road Department	ODF, BLM, Coos County Watershed Councils

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Grant monies, Coos Bay Bureau of Land Management Resource Advisory Committee		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 5.3

Proposed Action Item:	**Alignment with Plan Goals:**
Expand the number and reliability of area specific gorse maps county wide.	*Goal 5: Noxious Weed Control*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
Gather information on gorse to contribute to annual updated risk assessment. Submit gorse GIS data to implementation committee or individual running the annual risk assessment. Use the CWPP risk assessment to identify priority areas for noxious weed abatement.

Ideas for Implementation:
Noxious Weed Abatement Analyst should contact federal, state, and local government agencies in addition to other research methods to determine what GIS data or maps are already available that identify the locations of gorse in Coos County (e.g. Department of Geology and Mineral Industries maintains LIDAR data for Coos County and is interested in developing a methodology to identify gorse locations using vegetative analysis of the LIDAR data). This information shall by synthesized into one GIS database and be updated annually by the newly gathered data process described in Action Item 5.2.

Coordinating Organization:	Coos County Noxious Weed Board

Internal Partners:	**External Partners:**
CWPP Implementation committee, Coos County Commissioners	ODF, BLM, Coos County Watershed Councils; Department of Geology and Mineral Industries

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Coos Bay Bureau of Land Management Resource Advisory Committee, TBA		X Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

Coos County CWPP Action Item: Goal 5.4

Proposed Action Item:	**Alignment with Plan Goals:**
Design, produce, and distribute gorse removal literature to community members.	*Goal 5: Noxious Weed Control*

Alignment with Existing Plans/Policies:

Rationale for Proposed Action Item:
Increase community awareness using community wide disbursement of literature regarding flammable noxious weeds and control methods. Noxious weeds are spreading at an unknown rate throughout Coos County and particularly in gorse-prone cities like Bandon. Residents may use gorse as a landscape plant and be unaware of the highly flammable qualities of the plant. The spread of noxious weeds covers public and private land. Without assistance from residents and private land owners, state and federal agencies will be unable to launch an effective and long-term effort to reduce the amount of noxious weeds in Coos County.

Ideas for Implementation:
Noxious Weed Abatement Analyst shall write, design, and print flyers and factsheets regarding the dangers of gorse, it's growth and spreading pattern, removal techniques, and what assistance programs are available. This information shall be disbursed via mail to homeowners who are identified to be in At Risk Communities based on the most recent risk assessment. Ideally this information should be mailed at the beginning of summer when fire danger is beginning to increase.

Coordinating Organization:	Coos County Noxious Weed Board

Internal Partners:	**External Partners:**
Implementation committee, Coos County Commissioners, RFPDs	ODF, BLM, Coos County Watershed Councils, OSU Extension Forestry Department

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Grant monies, Coos Bay Bureau of Land Management Resource Advisory Committee		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Linsey Payne
Action Item Status:	

CWPP Action Item Proposal Form: Action 5.5

Proposed Action Item:	**Alignment with Plan Goals:**
Conduct community forums, public meetings and land owner education seminars focused on the removal of gorse and other noxious and invasive weeds.	*Goal 5: Noxious Weed Control*

Alignment with Existing Plans/Policies:
Oregon hazard Mitigation Plan, Oregon Senate Bill 360

Rationale for Proposed Action Item:
Gorse and other brooms are highly flammable weeds that potentially increase the risk of fire. These weeds proliferate in areas of recent disturbance such as logging sites and roadsides. Brooms spread wildfire quickly and at high temperatures. Brooms and Himalayan Blackberry also displace many native species and hinder the regeneration of trees in an area that has been recently disturbed. Furthermore, noxious weeds are a danger to cattle and humans as they can be toxic if ingested or touched.

Ideas for Implementation:
Two agency staff members will schedule and conduct public forums about the dangers of noxious and invasive weeds in Coos Bay, Bandon, Myrtle Point, Coquille and Powers. These meetings will be held during fire season and will offer demonstrations on how to properly remove the weeds form private property and roadsides. These demonstrations can be held in conjunction with Goal 1 public outreach meetings to reduce cost.

Coordinating Organization:	Coos Forest Protective Association

Internal Partners:	**External Partners:**
CWPP Implementation committee, Coos County Commissioners, RFPDs	ODF, Coos County Watershed Councils, BLM, CFPA

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
		☐ Short Term (0-2 years) ☐ Long Term (2-4+ years) X Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	

CWPP Action Item Proposal Form: Action 5.6

Proposed Action Item:	**Alignment with Plan Goals:**
Develop a five-year plan to reduce Gorse on private property and along major roadways in the Bandon area.	*Goal 5: Noxious Weed Control*

Alignment with Existing Plans/Policies:
Oregon hazard Mitigation Plan, Oregon Senate Bill 360

Rationale for Proposed Action Item:
Gorse and other broom species are highly flammable weeds that potentially increase the risk of wildfire. These weeds proliferate in areas of recent disturbance such as logging sites and roadsides. Brooms spread wildfire quickly and at high temperatures. Brooms and Himalayan Blackberry can also displace many native species and hinder the regeneration of trees in an area that has been recently disturbed. Furthermore, noxious weeds are a danger to cattle and humans as they can be toxic if ingested or touched. A removal plan must be implemented to decrease the wildfire threat posed by noxious weeds in Coos County.

Ideas for Implementation:
In conjunction with Goal 4, Fire Supervisors from all Coos County Federal, State and Local agencies could create a five-year plan to reduce gorse county wide. An example goal could be to eliminate at least 30% of Gorse on private property and 70% of Gorse along major roadways by 2016. This action could be funded through Title III dollars (if the program continues), other relevant funding sources or through partnerships developed with the Oregon Youth Conservation Corps and/or Coos County Sheriff Road Crews. The effort should be evaluated after the five-year period to determine efficacy.

Coordinating Organization:	Coos County Noxious Weed Board

Internal Partners:	**External Partners:**
CWPP Implementation committee, Coos County Commissioners, RFPDs, Coos County Sherriff	ODF, USFS, BLM, National Parks Service; Oregon Youth Conservation Corps

Potential Funding Sources:	**Estimated cost:**	**Timeline:**
Title 3 Funds		X Short Term (0-2 years) ☐ Long Term (2-4+ years) ☐ Ongoing

Form Submitted by:	Community Service Center
Action Item Status:	