Change Record

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JACKSON COUNTY INTEGRATED FIRE PLAN MAPS

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Chapter 1: Introduction

ARE YOU PREPARED?

Mission and Purpose of the Plan

The development of the Jackson County Integrated Fire Plan (JaCIFP) began in January of 2005, building on an active foundation of wildfire protection work in Jackson County. The county recognized an overwhelming need for increased coordination among wildfire management agencies and a need for a greater understanding of and responsibility for wildfire safety among residents of Jackson County. Since the creation of the National Fire Plan in 2000 and passage of the Healthy Forests Restoration Act in 2003, communities have an increased opportunity to participate in fuels management planning, to receive funding for fuels management on private lands, and to be active participants in reducing wildfire risk throughout the county.

The increasing impact of wildfires on forests[1] and the resulting loss of life and property each year in the United States is a cause of concern to Jackson County commissioners. Recent catastrophic disasters in the United States, such as Hurricane Katrina, are exposing unprepared governments and citizens. With lessons learned from recent disasters, the Jackson County Integrated Fire Plan creates opportunities for citizens and agencies to increase preparedness for wildfire and other emergencies. The Jackson County Integrated Fire Plan Mission Statement reflects the need for increased preparedness and coordination:

> *"Reduce the risk of wildfire to life, property and natural resources in Jackson County by coordinating public agencies, community organizations, private landowners, and the public to increase their awareness of and responsibility for fire issues."*
>
> ***-JaCIFP Mission Statement***

In order to access federal funds and/or participate in wildfire fuels management and planning on adjacent federal lands, a Community Wildfire Protection Plan *(*CWPP*)* is necessary. There is an overwhelming need for Jackson County residents to be better prepared for wildfires. The JaCIFP provides an opportunity for public agencies, community groups, and citizens to come together to identify a wide range of risk reduction activities, including emergency management, education and outreach, and fuels reduction. Because the JaCIFP is a county-wide CWPP, communities in the county at risk from wildfire also have an opportunity to apply for wildfire mitigation funding through the National Fire Plan. Josephine County completed a similar plan in the summer of 2005 that served as a framework and motivating factor for Jackson County. Josephine County's success in educating citizens, securing funds, and helping their special needs population provided a unique learning opportunity in Jackson County, and information sharing between the two counties continues to occur.

The CWPP draws in all elements of wildfire safety and charts a path toward a more prepared Jackson County. Every citizen of Jackson County shares the responsibility in one way or another. Local, county, state, and federal governments carry only part of the responsibility for fire protection through planning, public education, fuels mitigation and forest management, and emergency operations. An equally high degree of responsibility for fire protection resides with citizens in wildfire risk areas, as well as the local, state, and federal agencies. Armed with knowledge and motivation, landowners and citizens are essential partners in preventing loss of life, property, and natural and economic resources before a wildfire happens.

The Plan's Mission, Goals, and Objectives will be accomplished through the implementation of action

[1] Agee, J. K. 1993. Fire Ecology of Pacific Northwest Forests. Island Press, Washington, DC. 493 p.

items, timelines, responsible parties, and funding opportunities (see Planning Process, pg. 10). The planning process is a result of the collaborative effort between the public, local fire districts, community organizations, business and industry, and state and federal agencies. The process also helped establish trust and strong working relationships between partners. The action items and increased capacity resulting from the development of this plan will help agencies, organizations, and the public better protect homes and resources from wildfire. The goals of the plan are to:

1. Ensure the Sustainability and Viability of the Jackson County Integrated Fire Plan
2. Promote Collaboration and Build Community Involvement.
3. Improve Fuel Conditions in Forests and in the Wildland Urban Interface
4. Promote Coordinated Fire Protection and Suppression.
5. Promote Countywide Coordinated Emergency Management Effective Communication
6. Promote Wildfire Education, Awareness, and Prevention among citizens and public and private partners in Jackson County.
7. Promote Local Economic Opportunities While Addressing Forest Fuel and Forest Health Conditions and Debris Removal Needs

The objectives are outlined in further detail at the end of this chapter.

Several communities in the county already have CWPPs, and more may adopt them in the future. The JaCIFP is intended to assist communities by creating the opportunity to share efforts, pool resources, and eliminate duplicate efforts, and not to supersede any preexisting or future CWPPs. Examples of this kind of coordination include a coordinated spring wildfire safety campaign, streamlined grant applications for fuels reduction grants, a wildfire risk assessment and wildland urban interface designation, prioritized fuels management zones, and increased communication with federal land managers. Communities who may not have the opportunity to engage in fire planning at the local level are represented in the Jackson County Plan and will have greater opportunity to assist their residents reduce fire risk, engage in countywide fire protection activities, and compete for grant funds.

What is a Community Wildfire Protection Plan?

Community plans can take many shapes and sizes, but there are certain requirements if a community wants to qualify for federal funding or participate in fuels planning efforts on adjacent federal land. Community plans can address everything from evacuation to wildfire building codes. To develop a comprehensive resource, plans should involve a wide representation of the population the plan will serve. The planning process should also include a strong emphasis on strategies for implementation to ensure the long-term success of the plan.

The Healthy Forests Restoration Act (HFRA) includes a series of requirements for CWPPs as described below. Community fire plans meeting these requirements may be eligible for funds through the National Fire Plan and will have more of an opportunity to engage in fuels management planning with the federal agencies. To meet the HFRA requirements, a plan must be developed in collaboration with interested parties and local federal officials, signed by the local government, local fire department, and state forestry agency, identify and prioritize fuels reduction areas in and around the community, and recommend ways to make homes less flammable. A Community Wildfire Protection Plan is defined in the Healthy Forests Restoration Act:[2]

> *is developed within the context of the collaborative agreements and the guidance established by the Wildland Fire Leadership Council and agreed to by the applicable local government, local fire department, and State agency responsible for forest management, in consultation with interested parties and the Federal land management agencies managing land in the*

[2] Healthy Forests Restoration Act of 2003.

vicinity of the at-risk community;

identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment on Federal and non-Federal land that will protect 1 or more at-risk communities and essential infrastructure; and

recommends measures to reduce structural ignitability throughout the at-risk community.

How does a CWPP benefit Jackson County?

At the state level, Jackson County ranks in the "extreme" category for wildfire hazard (see Chap.5). Lessons learned from past wildfires in Oregon and across the country are a good indicator of the potential for loss of life and damage to property in Jackson County. Foremost, a CWPP is written documentation of the risk to life and property, and how fire and land management agencies, county government, and private landowners can take measured steps to reduce the risk. Part of wildfire safety mitigation measures is securing funds for personnel and projects. One driver for creating a CWPP is to meet the requirements of the various funding sources and to gain a leg up in the competition for limited funding.

Under the Healthy Forests Restoration Act, the JaCIFP meets the requirements of a CWPP to have standing with the appropriate federal agency. A CWPP also lends strength to the County's chance of receiving Federal Emergency Management Agency pre-disaster mitigation funds.

By having an adopted county-wide CWPP, all communities in Jackson County may be eligible for federal funds for fuels reduction in the community through the National Fire Plan grant process. Communities also benefit from adjoining fuels reduction projects as having a CWPP can result in receiving higher priority in the federal agency's planning and budgeting process on adjacent federal lands.

A community with a CWPP may also benefit if fuels reduction proposed on federal land in the community's wildland urban interface (WUI) zone does not meet the "general location or method of treatments" as written in the CWPP. [3] In this case, the federal agency shall analyze the community's plan as a second alternative during the environmental analysis of the project.

Designation of the community's WUI zone is one way in which communities can direct federal land managers to concentrate fuels reduction efforts in the area most important to the local community. Although a WUI line has been designated in the JaCIFP (Chap. 5), local communities can still adopt their own CWPP and WUI line if they feel a local interpretation would better suit the community. The Jackson County Integrated Fire Plan provides a baseline of data along with protocols that will aid any community in Jackson County that wants to create a localized CWPP.

The JaCIFP also meets the Federal Emergency Management Agency (FEMA) requirements under Title 44 CFR Part 201 of the Disaster Mitigation Act of 2000. In combination with Jackson County's recently approved Natural Hazard Mitigation Plan (wildfire is one of the hazards listed), Jackson County can qualify for funding to defray management costs, information dissemination, planning, technical assistance, and mitigation projects.

Planning Area Boundaries

Jackson County occupies the upper Rogue River Valley in southwestern Oregon, covering 2,785 square miles and touching the California border to the south[4]. Within Jackson County, the plan will directly

[3] Ibid.

[4] U.S. Census Bureau, 2000.

benefit fire management agencies and residents and property owners in the Wildland Urban Interface (WUI) zone (*see Map 1*). The WUI is the area or zone where structures and other human development meet or intermingle with wildland or vegetative fuels.[5] Participants in the JaCIFP process adopted the Jackson County WUI boundary. Residents of cities and rural areas alike are addressed in the plan. A map and description of the WUI designation process and its significance can be found in Chapter 5.

Partners Involved in the Plan

The JaCIFP has received support from many organizations and individuals. Dedicated staff and volunteers created the JaCIFP and will carry forth these efforts into the future. The partners include:

- The Applegate Partnership
- Applegate Valley Rural Fire District #9
- Ashland Fire and Rescue
- Bureau of Land Management (BLM), Medford District
- Evans Valley Fire District #6
- Friends of the Greensprings
- Jackson County:
    - *Economic and Special Development*
    - *Roads, Parks, & Planning Services*
    - *Office of Emergency Operations*
    - *Geographic Information Services (GIS)*
- Jackson County Fire District #3
- Jackson County Fire District #4
- Jackson County Fire District #5
- Jacksonville Fire Department
- The Little Butte Creek Watershed Council
- Medford Fire and Rescue
- The Nature Conservancy
- Office of the Oregon State Fire Marshal
- Oregon Department of Forestry
- Rogue River Fire Department
- Rogue River-Siskiyou National Forest
- Rogue Valley Fire Chief's Association
- Rogue Valley Fire Prevention Co-op
- Seven Basins Watershed Council
- Small Woodland Services, Inc.
- Southern Oregon Timber Industries Association
- Southern Oregon University

Planning Process

Although the action plans and implementation will be the yardstick by which the JaCIFP is measured, the planning process cannot be undervalued. The JaCIFP was overseen by Jackson County, coordinated by a consulting team, and brought to life through the efforts of the plan participants. The plan's structure consists of Mission, Goals, and Objectives (MGOs), which were translated into an action plan aimed at improving public safety and increasing agency coordination.

[5] State of Oregon Natural Hazards Mitigation Plan, 2004.

Executive Committee and Mission, Goals, and Objectives

As the driver behind the fire plan effort, Jackson County dedicated staff time and funding for the JaCIFP. The County hired a planning team to coordinate meetings, structure the plan, gather input, and produce the document. The planning team divided the process into phases, including community outreach, strategic planning, multiple plan reviews, approval by the Board of County Commissioners, and publishing. The planning team facilitated identification of Executive Committee (EC) members. The Executive Committee provided guidance throughout the planning process and assisted in creating the plan Mission, Goals, and Objectives (MGOs). The MGOs are the heart and soul of the plan. The MGOs drove development of action items in the sub-committees, which will generate the desired outcomes from the plan through efforts in policy, fuels reduction, emergency management, public outreach and education, funding, and monitoring.

Function of sub-committees: Action planning

The planning team developed six sub-committees to address the MGOs and develop specific action items and implementation strategies. The sub-committees included outreach and education, fuels reduction, risk assessment, emergency management, finance, and biomass utilization. Four sub-committees reviewed the MGO's and selected the goals and objectives applicable to that committee and used them to identify specific action items. The action plan format establishes specific tasks with responsible parties, funding opportunities, a timeline, and a monitoring plan. The action items are the basis for directed work leading to changes in behaviors or conditions that will improve wildfire safety in Jackson County.

Discussions during committee meetings initially focused on how existing programs met the committee's goals and objectives. The committees then looked at the goals and objectives that had not been addressed and considered action items to meet the remaining goals. An example is woody debris disposal day, which was a pre-existing program in Jackson and Josephine counties. The Outreach and Education committee discussed how best to perpetuate and improve this program. Woody Debris Disposal Day was put into action plan form and is now included in the JaCIFP. The Outreach and Education committee also developed several new action items, including the formation of a wildfire safety speaker's bureau and local fire prevention teams.

The interactions between the plan participants and agencies were among the most important outcomes from the planning process and resulted in collaborative working relationships that will continue during the long-term implementation of the JaCIFP.

Action Items Addressing Goals and Objectives

The table below illustrates the structure of the JaCIFP goals and objectives and demonstrates how sub-committees addressed each of these through the designation of specific action items.

1. GOAL: Ensure the Sustainability and Viability of the Jackson County Integrated Fire Plan

#	Objectives	Action Plan # and Committee
1.a.	Assess strengths, weaknesses and gaps in countywide fire protection and wildfire related programs to provide guidance as the plan is developed.	All committees did this as part of the planning process.

#	Objectives	Action Plan # and Committee
1.b.	Create and maintain awareness that everyone in Jackson County has a role and a responsibility to implement the fire plan. . I'd like to see an Action item added to this item addressing getting the County to adopt Firewise principles in their planning and development and building decisions.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E OE#3: Spring Campaign OE#4- Speaker's Bureau EM#5- More agency and public contact.
1.c.	Foster public and private landowner stewardship to implement and sustain efforts for fuels reduction.	OE#1: Local Fire Prevention Team OE#6: Home Assessment Training FR#1: Track Fuels Reduction Projects
1.d.	Set realistic goals that can be implemented to reduce wildfire hazard and risk.	WUI Designation FR#4: Public & Private Fuels Reduction Projects Coordination
1.e.	Integrate fire plan implementation and fire-related programs into the on-going function and mission of partner agencies and organizations.	FR#1: Track Fuels Reduction Projects FR#4: Public & Private Fuels Reduction Projects Coordination EM#2, #3, #4 - Evacuation
1.f.	Ensure that all partners are aware of (and able to meet requirements for) state and federal grant funds for fire protection, fuels reduction, equipment, etc. to assist partners in becoming more competitive for grant funds.	FR#3: Coordinate NFP grant applications
1.g.	Monitor the changing conditions of wildfire hazard and risk, as well as public perception and action to reduce wildfire risk over time through collaborative evaluation and updates of the Fire Plan.	OE#5: Public Education Effectiveness RA#1: Annual Review of Risk Assessment FR#1: Track Fuels Reduction Projects FR#4: Public & Private Fuels Reduction Projects Coordination
1.h.	Explore funding opportunities that support implementation of the Jackson County Integrated Fire Plan.	Small Diameter Collaborative

2. GOAL: Promote Collaboration and Build Community Involvement.

2.a.	Work towards active support and participation by all Fire Protection Districts, private landowners, citizens, cities and local government, business and industry, community organizations, educators, environmental organizations, and federal, state and local agencies.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E OE#6: Home Assessment Training WUI Designation FR#1: Track Fuels Reduction Projects FR#: 3 Coordination of NFP Grants FR#4: Public & Private Fuels Reduction Projects Coordination EM#4: Coordinated emergency response EM#5: Links between agencies and public
2.a.1.	Coordinate the fire planning process and implementation with efforts in adjacent counties and in Northern California as applicable, including sharing sub-committees with the Josephine County Integrated Fire Plan.	OE#2: 2 County Coordinated O&E OE#3: Spring Campaign OE#6: Home Assessment Training FR#1: Track Fuels Reduction Projects FR#: 3 Coordination of NFP Grants FR#4: Public & Private Fuels Reduction Projects Coordination

#	Objectives	Action Plan # and Committee
2.b.	Think collaboratively and be adaptable: include non-traditional partners (community health, citizens with special needs, transportation agencies, etc.) whenever possible.	OE#2: 2 County Coordinated O&E OE#3: Spring Campaign OE#4- Speaker's Bureau FR#1: Track Fuels Reduction Projects FR#: 3 Coordination of NFP Grants FR#4: Public & Private Fuels Reduction Projects Coordination Various Special Needs action items
2.b.1.	Develop a plan that addresses the needs of the public and private partners, as well as state and local policy, so that it can be implemented.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E WUI Designation Risk Assessment EM#2: Evacuation logistical plan EM#3: Evacuation protocol
2.b.2	Integrate existing Community Wildfire Protection Plans with the master fire plan.	OE#2: 2 County Coordinated O&E FR#1: Track Fuels Reduction Projects FR#: 3 Coordination of NFP Grants FR#4: Public & Private Fuels Reduction Projects Coordination
2.b.3.	Recognize and address the unique characteristics of individual communities, organizations, residents and landscapes, and provide alternatives for a range of approaches.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E WUI Designation Risk Assessment EM#2:Evacuation logistical plan

3. GOAL: Improve Fuel Conditions in Forests and in the Wildland Urban Interface

3.a.	Conduct a comprehensive risk assessment to identify the wildland urban interface, communities at risk, and high risk areas in the county.	Risk Assessment
3.b.	Use the Risk Assessment to develop a prioritized list of fuel hazard reduction projects across the County that addresses both short term (reduce fire risks in the WUI) and long term (forest health, ecosystem restoration and large scale landscape fire management) goals and strategies.	FR#4: Public & Private Fuels Reduction Projects Coordination
3.c.	Increase public support for fuels treatment on public and private lands in the Wildland Urban Interface and Communities at Risk.	OE#1: Local Fire Prevention Team OE#3: Spring Campaign OE#4- Speaker's Bureau WUI Designation Small diameter collaborative community meetings
3.d.	Ensure long-term maintenance of fuels treatments through increased efficiency that leads to reduced costs, ecological restoration, utilization of biomass and landowner responsibility and stewardship.	OE#3: Spring Campaign WUI Designation Risk Assessment FR#1: Track Fuels Reduction Projects Small Diameter collaborative activities Web-based model for forest management

4. GOAL: Promote Coordinated Fire Protection and Suppression.

#	Objectives	Action Plan # and Committee
4.a.	Increase awareness of the roles of structural and wildland fire agencies to strengthen public understanding and cooperation during an event.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E OE#4- Speaker's Bureau EM#1: Evacuation notification EM#5: Agency and public relations
4.b.	Promote operational and management actions to improve coordination of fire protection and increased fire fighter safety.	EM#3: Evacuation protocol EM#2: Evacuation logistical plan EM#4: Coordinated Emerg. Response EM#6: GIS mapping during fires.
4.c.	Utilize the 'window of opportunity' after a fire event to mobilize residents and other partners to provide education and develop strategies to reduce wildfire risk.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E OE#4- Speaker's Bureau
4.d.	Support increased coordination between structural and wildland agencies to develop strategies that enhance or promote fire protection for Wildland Urban Interface areas.	WUI Designation Risk Assessment EM#1: Evacuation notification EM#2: Evacuation logistical plan EM#3: Evacuation protocol EM#4: Coordinated emergency response

5. GOAL: Promote Countywide Coordinated Emergency Management Effective Communication

5.a.	Provide education and opportunities for all wildland urban interface residents to protect their homes prior to an event and become self sufficient in an emergency situation.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E OE#4- Speaker's Bureau
5.b.	Develop and promote multiple levels of emergency communication throughout the County.	OE#1: Local Fire Prevention Team OE#2: 2 County Coordinated O&E WUI Designation EM#1: Evacuation notification EM#4: Coordinated emergency response
5.c.	Promote Incident Command Training for public employees and other agencies and organizations	EM#4: Coordinated emergency response
5.d.	Address other natural hazard scenarios within the coordination occurring through the fire plan.	EM#1: Evacuation notification EM#2: Evacuation logistical plan EM#6: Utilize GIS during emergency responses.

6. GOAL: Promote Wildfire Education, Awareness, and Prevention among citizens and public and private partners in Jackson County.

6.a.	Sustain a long-term educational program for private landowners and residents that provides timely information and current updates on fire and forest health	OE#1: Local Fire Prevention Team OE#2:2 County Coordinated O&E Coordination OE#4- Speaker's Bureau OE#6: Home Assessment Training

#	Objectives	Action Plan # and Committee
6.a.1.	Increase awareness of fire issues with the public at large to decrease the number of human-caused wildfires.	OE#2:2 County Coordinated O&E OE#4- Speaker's Bureau
6.a.2.	Raise awareness and promote a cultural shift among all residents in Jackson County about "living with wildfire," the role of fire as a natural process, and the opportunities to integrate ecosystem restoration as part of community fire protection efforts.	OE#2:2 County Coordinated O&E OE#4- Speaker's Bureau OE#7: School Kits WUI Designation Small Diameter collaborative Web-based model showing forest management
6.a.3.	Educate residents on the efforts that they can take to improve structural survivability, and the importance of the public's role in taking responsibility for fire prevention and safety.	OE#1: Local Fire Prevention Team OE#2:2 County Coordinated O&E OE#4- Speaker's Bureau
6.a.4.	Inform the general public about the roles, capabilities and duties of fire protection districts and other fire agencies.	OE#1: Local Fire Prevention Team OE#2:2 County Coordinated O&E OE#4- Speaker's Bureau OE#6: Home Assessment Training EM#5: Link between agencies and public
6.a.5.	Raise awareness of the role that community development, land use planning and building codes play in reducing wildfire risk.	OE#2:2 County Coordinated O&E WUI Designation Risk Assessment
6.b.	Integrate the news media and education professionals as partners in the public education and awareness process that results from the Fire Plan.	OE#1: Local Fire Prevention Team OE#2:2 County Coordinated O&E OE#4- Speaker's Bureau
6.c.	Promote Links between Fire Districts and Communities to improve agency and public collaboration.	OE#1: Local Fire Prevention Team OE#2:2 County Coordinated O&E OE#4- Speaker's Bureau OE#6: Home Assessment Training EM#5: Links between public and agencies
6.d.	Support the Rogue Valley Fire Prevention Cooperative as a way of implementing education related activities through the Jackson County Integrated Fire Plan.	OE#1: Local Fire Prevention Team OE#2:2 County Coordinated O&E WUI Designation Risk Assessment
6.e.	Provide support to fire districts, community organizations and agencies to promote and implement demonstrations of fuels reduction sites and other visible projects.	OE#3: Spring Campaign OE#6: Home Assessment Training WUI Designation Risk Assessment FR#4: Public & Private Fuels Reduction Projects Coordination

7. GOAL: Promote Local Economic Opportunities While Addressing Forest Fuel and Forest Health Conditions and Debris Removal Needs

7.a.	Support efforts to improve financial viability of fuels reduction work through biomass and small log utilization.	Rogue Small Diameter Collaborative Web-based model showing forest management
7.b.	Work with state and local agencies to address smoke management issues related to burning; educate the public at large on these issues.	OE#2:2 County Coordinated O&E

7.c.	Provide contractor education and training opportunities; promote opportunities for cottage industries.	FR#2: Control Noxious Weeds OSU Extension Service. Rogue Small Diameter Collaborative
7.c.1.	Provide information on workers compensation and liability for the potential workforce, as well as federal contracting conditions.	OSU Extension Service.

Collaboration: A Planning Tool

The nature of wildfires and the significant number of fire agencies in Jackson County necessitate a collaborative approach to planning. Wildfires burn across multiple ownerships, involving different neighborhoods, communities, fire districts, and government agency jurisdictions. The need to increase cooperation across these boundaries was fueled by the success of communities like the Applegate Valley and in Josephine County where fuels reduction projects have been coordinated across BLM, Forest Service, and private lands as a direct result of collaborative planning. Growing acceptance of the role that homeowners play in preventing home ignitions has increased the need for an effective partnership between fire services, land management agencies, and the public.

Collaboration is an essential component of public process at multiple levels of government. Federal policies like the Healthy Forests Restoration Act of 2003 have mandated collaboration as a process to bring in diverse interests, make decisions, and implement projects on the ground in a way that decreases litigation and fosters community cooperation. Stimulated by the need to develop a CWPP as outlined in the HFRA, many communities and counties across the country have engaged in collaboration as a means to find common ground while protecting lives and property.

The Applegate Partnership in Jackson and Josephine Counties initiated one of the first efforts aimed at multi-stakeholder, collaborative management of a large landscape. Widely viewed as successful, the Applegate Partnership and many other forerunners have paved the way for many more collaborative efforts surrounding community fire protection and forest restoration. Collaboration is now seen as the expected mode of interaction, but what is true collaboration? A working paper from the Ecological Restoration Institute of Northern Arizona University offers this definition of a collaborative process:

> *"In a collaborative process, all stakeholders participate directly in identifying issues of concern, developing proposed actions, and reviewing alternatives.*[6]*"*

The formation of the JaCIFP Executive Committee in January of 2005 was the first step in a long process of collaborative efforts leading to the completion of the JaCIFP. The composition of this committee included a diverse group of agencies, fire districts, community organizations, industry, and citizens. The intentionally wide scope of the Executive Committee membership was intended to bring together stakeholders throughout the county who would bring different perspectives to the table. For those members who had never met, meetings provided an opportunity to network and exchange ideas, while those who had worked together formed better working relationships. A better understanding of each other's roles and personalities will pay off during future education campaigns, planning efforts, public involvement, and during wildfire events.

[6] Lowe, Kimberly and A. Moote. 2005. Working Paper 11: Collaboration as a Tool in Forest Restoration. Working Paper Series. Ecological Restoration Institute, NAU, Flagstaff, AZ. 5pp.

Public Involvement

A major thrust of the JaCIFP is to forge better relationships with the public through outreach and education. Former ODF Southwest Oregon District Forester and JaCIFP contractor Jeff Schwanke said,

> "*...what we are attempting to develop is a relationship with the public, not simply gather input from them.*"

The planning team and Executive Committee coordinated six public meetings and provided opportunities for the public to interact with local and regional fire representatives, including fire chiefs and Forest Service District Rangers. An important part of the collaboration was an opportunity for fire service personnel and agency land managers to listen to members of the public and understand their concerns. Many appointments and projects resulted from these interactions that might not have occurred without the public meetings.

The planning team and committees reviewed comments recorded during the meetings to make sure that the issues most important to the public are addressed in the plan either through existing programs or Action Items. The public is an equal partner in the prevention of wildfires and the mitigation of fire's effects on communities. The collaborative process that took place as part of this plan will hopefully serve as a foundation for future community fire planning efforts such as telephone trees, coordinated fuels reduction, and evacuation plans. Many of the action items in the following chapters rely on public and agency collaboration to change the way Jackson County prepares for wildfires.

Plan Committees and Objectives

Executive Committee

- Randy Iverson - Fire District #3 (retired) – ***Committee Chair***
- Greg Alexander - Oregon Department of Forestry
- Lu Anthony – Little Butte Creek Watershed
- Lin Bernhardt – Jackson County
- Chris Chambers – Ashland Fire and Rescue
- Erin Connelly – U. S. Forest Service
- Mike Curry – Jackson County
- Linda Duffy – U.S. Forest Service
- Brett Fillis – Applegate Fire District #9
- William Fuller - Evans Valley Fire District 6
- John Gerritsma, Bureau of Land Management
- Bob Miller – Fire District #4
- Marty Main – Small Woodland Services, Inc.
- Dan Marshall – Fire District #5
- Bruno Meyer - Industry
- Tom Murphy, Bureau of Land Management
- Dan Patterson - Medford Rural District #2
- Gail Perrotti – Seven Basins Watershed
- Ben Ramsey – Rogue River Fire District
- Sandy Shaffer – Applegate Resident
- Tracy Shaw – Jacksonville Fire Department
- Michelle Stevens – State Fire Marshall Office
- Vicky Sturtevant – Southern Oregon University
- Dan Thorpe – Oregon Department of Forestry

The Executive Committee began meeting in February of 2005 and established the plan's Missions, Goals, and Objectives (MGO's) and led development of the plan. The Executive Committee also reviewed and approved the content of the JaCIFP during formulation of the plan outline and through internal editing of the draft plan.

Risk Assessment Committee

- Darren Borgias – The Nature Conservancy
- Brett Fillis – Applegate Fire District #9
- Gary Gnauck – Applegate Partnership
- Randy Iverson – Fire District 3 (retired)
- Ken Johnson – Fire District 3
- Charley Martin – Bureau of Land Management
- Keith Massie– Jackson County – ***Committee Chair***
- Gail Perrotti – Seven Basins Watershed
- Charlie Phenix – U.S. Forest Service (retired)
- Ed Reilly – Bureau of Land Management
- Teresa Vonn - Oregon Department of Forestry
- Jim Wolf – Oregon Department of Forestry
- Cody Zook – Josephine County GIS

The Risk Assessment Committee's primary responsibility was the production of a county-wide wildfire risk assessment. The assessment is explained in detail in Chapter 5. The committee's tasks included understanding the elements of a risk assessment, assessing the data available for the risk model, identifying the county's wildland urban interface boundary, and producing a composite of the county's wildfire risk rating. The risk assessment map is the basis for the fuels reduction committee's work of prioritizing strategic planning units throughout the county.

Fuels Reduction Committee

- Chris Chambers – Ashland Fire and Rescue
- Bill Collins - Seven Basins Resident
- Dennis Delack – U.S. Forest Service (retired)
- Rita Dyer – U.S. Forest Service
- Rich Fairbanks – Resident and Forester
- Brett Fillis – Applegate Fire District #9
- Paul Kangas - Forester
- Leanne Mruzik – Bureau of Land Management – ***Committee Chair***
- Gail Perrotti – Seven Basins Watershed
- Dave Schott – Southern Oregon Timber Industries Association
- Sandy Shaffer – Applegate Resident
- Teresa Vonn –Oregon Department of Forestry
- John Ward – Friends of the Greensprings

The Fuels Reduction Committee prioritized fuels reduction treatments across private and federal land in Jackson County, coordinated 2006 National Fire Plan fuels reduction grant applications, developed fuels reduction monitoring and tracking strategies, and listed noxious weed control as a priority during fuels management.

Small Diameter and Biomass Committee

Both small trees and woody biomass (brush, branches, etc.) are often by-products of fuels reduction and forest restoration projects. Much of this biomass is burned each year in piles or chipped/mulched by machines. Past efforts have explored the viability of small diameter tree and woody biomass utilization in Southern Oregon, furthering the effort toward a viable economy based on small trees and biomass. However, no one effort has truly developed into a regional solution addressing the economic, social, political, and ecological issues surrounding small diameter and biomass harvest and utilization.

The JaCIFP contracting team looked at several options for a small diameter and biomass committee, including existing groups and forming a new committee. The Rogue Basin Small Diameter Collaborative had been gaining support from federal agencies and local communities in 2005, and was chosen as the JaCIFP's committee on small diameter and biomass utilization.

The Rogue Basin Small Diameter Collaborative formed in the winter of 2004 (before the JaCIFP process began) to address small diameter and biomass by first addressing community involvement, ecological sustainability, and economic viability. Their goal is to work with the BLM and Forest Service to create a stable supply of woody biomass that meets the "Productive Harmony Standards"- a term used in the National Environmental Policy Act (NEPA) of 1964. These standards are being developed by the group as the foundation upon which a small diameter economy in the upper Rogue River Basin will be built.

Outreach and Education Committee

- Lu Anthony – Little Butte Creek Watershed
- Brian Ballou – Oregon Department of Forestry
- Chris Chambers – Ashland Fire and Rescue
- Mary Ann Ceglia- U.S. Forest Service
- Rita Dyer – U.S. Forest Service
- Jean Gallagher – U.S. Forest Service
- Julia Genre – U.S. Forest Service
- John Gerritsma –Bureau of Land Management
- Brad Inman – Friends of the Greensprings
- Mark Moran – District #3
- Dan Patterson – Medford Rural Fire District #2
- Gail Perrotti – Seven Basins Watershed
- Sandy Shaffer – Applegate Resident
- Jenna Stanke – Jackson County – ***Committee Chair***
- John Ward – Friends of the Greensprings

The Outreach and Education committee's primary goal was to develop action items that help to communicate the JaCIFP's goals and action items to the public. The Outreach and Education committee also met quarterly with members of its sister committee in Josephine County and the Rogue Valley Fire Prevention Co-op to coordinate efforts on a regional scale.

Emergency Management Committee

- Greg Alexander - Oregon Department of Forestry
- Brett Fillis – Applegate Fire District #9
- Randy Iverson – District #3
- Tom Murphy – Bureau of Land Management
- Jeff Schwanke - Consultant
- Dennis Turco – District #3
- Jim Wolf – Oregon Department of Forestry

The Executive Committee appointed an ad-hoc committee to work on elements of the plan related to emergency management. This ad-hoc group coordinated with the pre-existing Jackson County Emergency Management Advisory Council (JCEMAC). The ad-hoc committee addressed wildfire evacuation and communication issues.

Finance Committee

- Lin Bernhardt- Jackson County
- Paul Galloway – U.S. Forest Service
- Tom Murphy – Bureau of Land Management
- Gail Perrotti – Seven Basins Watershed
- Jenna Stanke – Jackson County
- Teresa Vonn – Oregon Department of Forestry

Funding outreach and education, fuels reduction, plan monitoring, data collection, and staff time is a major challenge in keeping the JaCIFP vital and useful for years to come. The Finance Committee was responsible for identifying potential funding sources and suggesting avenues of leveraging resources among JaCIFP participants. The committee will continue to explore grant funding and opportunities for participating agencies to assist in implementing the JaCIFP.

Chapter 2: Jackson County Profile

History of Jackson County

Formed from the southwest portion of Lane County in the year 1852, Jackson County was named after President Andrew Jackson. The borders of Jackson County originally ran south to California, west to the Pacific Ocean, east to Lane County, and north to Douglas and Umpqua counties. The borders have changed over the years, which led to the creation of Coos, Curry, Josephine, Klamath, Lake, and Wasco Counties.[7] Jackson County now covers 2,182 square miles, or 1,802,880 acres.

Several Native American tribes are indigenous to Jackson County, including: Modoc, Shasta, Rogue River, and Umpqua tribes. In the early 1850s, both the Klickitats from the north and the Deschutes from the south raided and settled the area.[8] Native American land management practices have left a mark on the ecological makeup of the county's forests (see chapter 4). The discovery of gold in the Illinois Valley in the 1850's began an era of population and ecological change in Jackson County. Completion of a wagon road connecting Jackson County to the south and north led to Euro-Americans settlement in the county and the eventual end of traditional Native American life, including burning practices.[9]

Jacksonville was the first county seat, designated in 1853. However, declining gold returns and the construction of the Oregon-California railroad through Medford led to the eventual selection of Medford as the county seat in 1927. Jackson County government began in 1853 with the selection of three county commissioners, a county clerk, a sheriff, an attorney, and a treasurer. Today's Jackson County government consists of a board of three commissioners, who are the county's primary legislative and policy making body of the county and are elected to alternating four year terms. The commissioners also oversee the administrative affairs of the county and appoint a county administrator. The commissioners, sheriff, county clerk, assessor, surveyor, and treasurer are elected positions within the county.[10]

Land Ownership

Forests of various compositions cover about 84% of Jackson County, of which roughly two-thirds are public lands administered by either the U.S. Forest Service or the Bureau of Land Management, with the balance in private industrial and non-industrial ownerships.[11] The pattern of federal land ownership in many rural parts of the County is often referred to as a "checkerboard" due to the Oregon and California railroad lands deeded to the Bureau of Land Management (*see Map 1*). This pattern of ownership creates a high degree of interface between public and private land in Jackson County. Wildfire and fuels management are challenging because of the diversity of private owners surrounding public lands. U.S. Forest Service lands tend to be in the foothills and more mountainous regions of the county, away from the population centers. The smaller community of Prospect shares boundaries with Forest Service lands, as does the city of Ashland. The Forest Service also manages two major municipal watersheds, Big Butte Springs (Medford Water Commission) and the Ashland watershed, which serve many tens of thousands of Jackson County residents. Medford and Ashland municipalities both own small pieces of their watersheds and manage the lands for forest health and high-quality drinking water.

[7] Oregon State Archives, Oregon Historical County Records Guide. Online: http://arcweb.sos.state.or.us/county/cpjacksonhome.html
[8] Ibid.
[9] Ibid
[10] Ibid.
[11] Bennett, M., G. Perrotti, et al. 2005. Community Wildfire Protection Plan for the Seven Basins Watershed. Seven Basins Neighborhood Fire Planning Project. Central Point, OR. 90p.

Political Geography

U.S. Congressional District

Jackson County is contained in Oregon's 2nd U.S. Congressional District.

State of Oregon House and Senate

At the State level, Jackson County is included within Oregon House of Representatives districts 2, 4, 5, 6, and 55. Oregon State Senate districts represented in Jackson County include 1, 2, 3, and 28.

County Government

The makeup and election of the Board of Commissioners (BOC) is explained on page 17. Below the BOC there are advisory committees composed of citizens who consider issues and make recommendations to the BOC. The committees have no decision power. Most closely related to the wildfire issue is the Natural Resource Advisory Committee. The Natural Resource Advisory Committee's purpose is to *"... advise the Jackson County Board of Commissioners on matter regarding local, state, federal and tribal natural resource issues that directly or indirectly affect Jackson County land and the citizens of Jackson County[12]."* Members of the committee are appointed by the Board of Commissioners, each to four year terms that may run successively. The committee can have as many as 21 members with no more than two persons representing each of (but not limited to) these groups: forest management, small woodlands resources, water resources, agricultural lands, grazing, mining/aggregate resources, fish and wildlife resources, natural resource sciences, environment at large, city and county representatives at large, watershed councils, and commerce.

Cultural Resources

Jackson County is known for its natural beauty, creating a recreation wonderland for residents and visitors. The Mt. Ashland ski area attracts snow sports enthusiasts November through March, lakes dot the landscape, the Rogue River provides many fishing and whitewater rafting opportunities, the Pacific Crest trail beckons to hikers, and hunting abounds in the forests of the county. The world-renowned Oregon Shakespeare Festival attracts thousands of visitors to Ashland. The Britt Festival in Jacksonville attracts many famous musical acts each summer. A National Historic Landmark[13] Jacksonville's downtown and museum hearken back to the gold rush days of the 1800's. Many events and holidays throughout the year bring crowds to celebrations in Jackson County. The Pear Blossom parade, Fourth of July parades, the Wildflower parade, the Rooster Crow, Pioneer Days, the Jackson County Fair, and even a parade in honor of Spam bring county residents out by the hundreds. In between events, there are many award-winning wineries to visit throughout the Rogue and Applegate Valleys.

The county is home to Southern Oregon University, located in Ashland, as well as Rogue Community College's Medford campus.

Natural Resources

Land forms in Jackson County include bottomland, low foothills and valley terraces, the Klamath Mountains, and the Cascade slopes and mountains. The bottomlands are the most populated area of the county, containing the richest agricultural soils in the Rogue River, Applegate River, Bear Creek, Little Butte Creek, and Evans Creek basins. The low foothills and valley terraces lie along the bottomland rims and in pockets along river corridors. Generally below two thousand feet in elevation, the low foothills and valley terraces are less productive agricultural soils and precipitation averaging 20 inches or less.

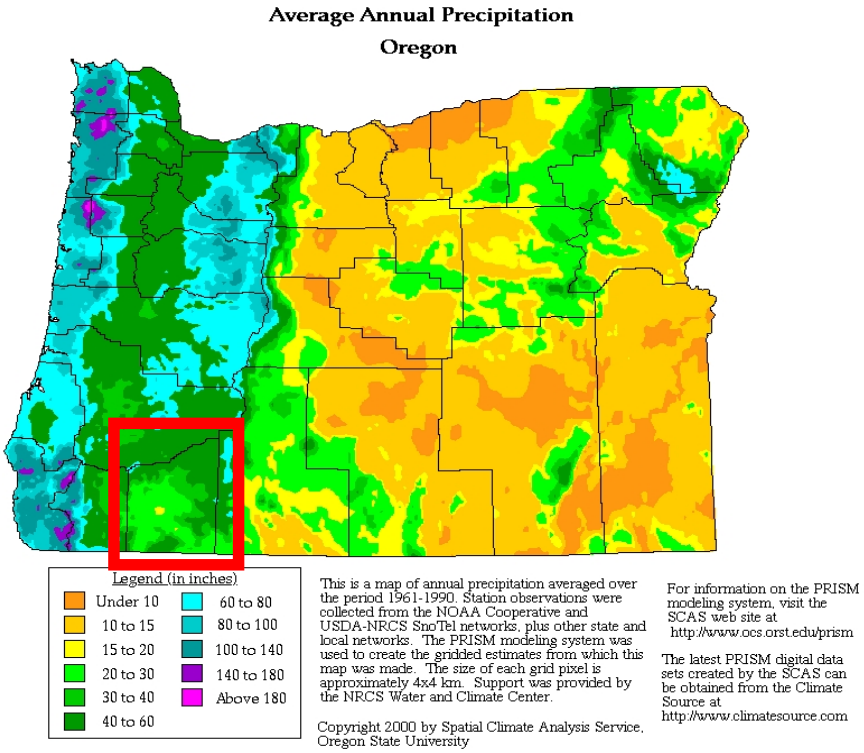
[12] Jackson County Natural Resource Committee Bylaws, Jackson County.
[13] Jacksonville website. Online: www.jacksonvilleoregon.org

Natural vegetation is composed of oak/pine savannah, grasslands, chaparral shrubs, madrone, and Douglas-fir on the moist sites. The Klamath and Siskiyou Mountains include all the upland areas west of Bear Creek and Sam's Creek. These mountains are characterized by steeply dissected slopes ranging from 1500 to 7500 feet. Coniferous forests cover much of the mountainous terrain, from Douglas-fir dominated forests at lower to mid elevations grading into white fir, Shasta red fir, and mountain hemlock at higher elevations. The Siskiyou Mountains are known for their plant biodiversity on a global scale. The younger Cascade Mountains grace the eastern boundary of Jackson County, providing recreational and timber management opportunities. Precipitation varies widely in the Cascades from 20 to over 70 inches at the highest elevations. Mt. McLoughlin is the highest peak in Jackson County at 9,495 feet.[14]

Climate

Jackson County has a wide range of weather conditions, which impact the frequency, severity, and behavior of wildfires. At a statewide scale (See Map 2.1) Jackson County (within red box) is the driest county west of the Cascade Mountains, but moister than most of Eastern Oregon. Jackson County is located in the "perfect storm" for wildfire conditions: long, hot, and dry summers combined with wet winters that feed the growth of vegetation. Throughout the county, there are four distinct seasons with a dry summer and early fall season when the wildfire danger often reaches "extreme". In fact, during drought years there have been wildfires in spring and even winter. However, variations in elevation, aspect, and mountain range orientation greatly affect weather patterns between places relatively close together on the landscape. For example, the city of Ashland receives an average of 18.87 inches of rainfall per year while the average just 8 miles south and 5,500 feet up on Mt. Ashland is over 60 inches.[15] These differences in climate lead to variations in fire history, fire behavior, and pre-fire management options.

Fig. 2.1 State Climate Map



[14] Ibid.

[15] Bear Creek Watershed assessment: Phase II - Bear Creek tributary assessment (Summary and Part I)Author(s): Bear Creek

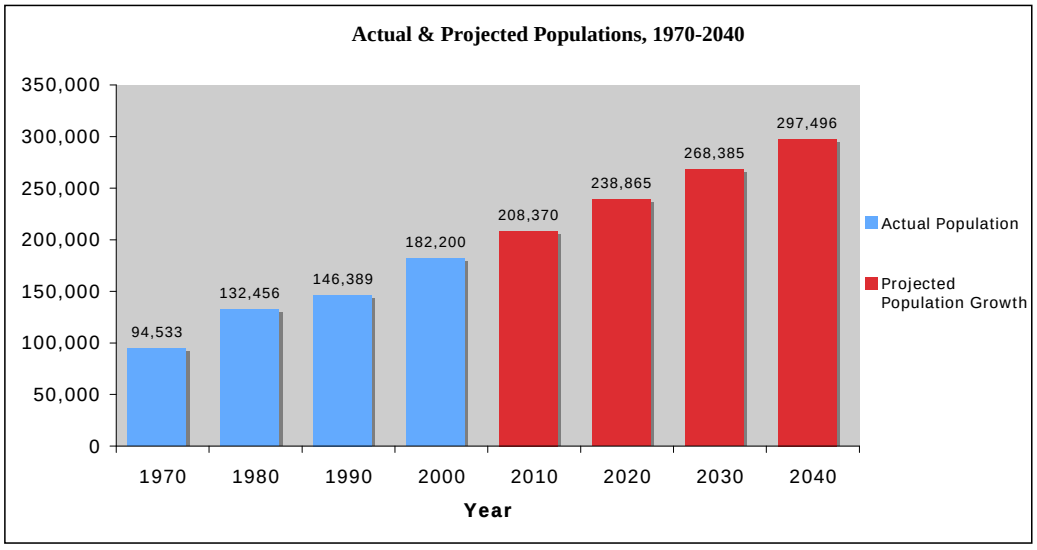
Demographic Profile

Jackson County faces extreme risk from wildfire. Yet many of its citizens lack the resources or capacity to reduce their risk from a wildfire event. The demographic profile includes information on the general population in Jackson County, and highlights citizens with special needs. In the context of the Jackson County Fire Plan, special needs citizens are those people that lack the physical or financial capability to take measures to prepare for, respond to, or recover from a wildfire event, including elderly, disabled, minority, low-income and youth populations. Understanding the diverse needs of local citizens will help the county identify strategies to communicate with the special needs population about reducing their risk from wildfire. This section provides an overview of the demographic profile of Jackson County, as well as specific information on the special needs population.

Population

As indicated by the 2004 Census, there are 192,992 people in Jackson County, representing a 6.5% increase between April 1, 2000 and July 1, 2004, while Oregon as a whole increased by 5.1%.[16] In 2000, there were 71,532 households and 48,423 families residing in the county. Population growth projections developed by the Office of Economic Analysis are illustrated in Figure 2.2 below.

Figure 2.2. Jackson County Actual and Projected Population Growth, 1970-2040.



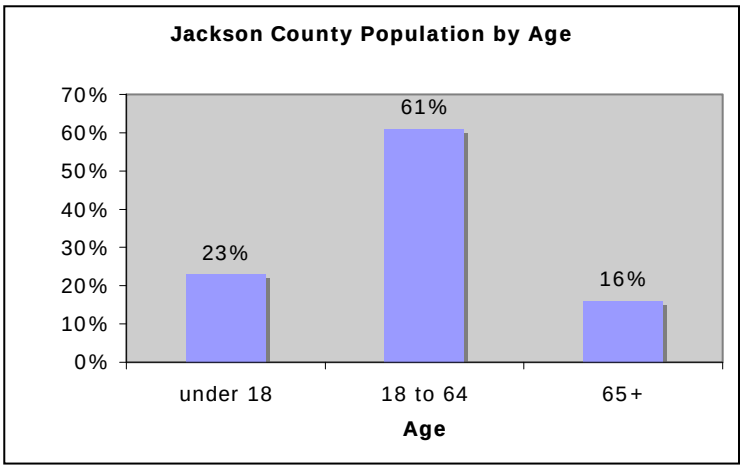
Sources: US Census, County Population Census Counts 1900-2000, March 1995; Oregon Office of Economic Analysis, Long-Term Population Forecasts for Oregon, April 2004.

Thirty-nine percent of the population is either under 18 years of age or 65 and older. Figure 2.3 illustrates the County population by age.

Watershed Council Rogue Valley Council of Governments, 1995.

[16] US Census Bureau, 2004 (http://factfinder.census.gov/)

Figure 2.3. Jackson County Population by Age



Source: Northwest Area Foundation (NWAF) Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

Approximately 68% of Jackson County residents live in the eleven incorporated cities, which include Ashland, Butte Falls, Central Point, Eagle Point, Gold Hill, Jacksonville, Medford, Phoenix, Rogue River, Shady Cove, and Talent. The remaining residents live in the unincorporated areas of the county.

Net migration, or the difference between how many people move in and how many move out of the county, is one part of population change. The other part is natural change, or the difference between births and deaths. Between 2003 and 2004, Jackson County has a net migration rate of 1.3%, as compared with Oregon's rate of 0.5%.

Between 2003 and 2004, the county's population increased by over 1%, due almost entirely to net migration. Jackson County has the 8th fastest growing population of the 36 counties in Oregon, with a 49% increase in population since 1970.[17]

The 2000 US Census Bureau reported that in Jackson County 91.6% of the population was white, 7.9% Hispanic, 1.1% Native American, 1.1% Asian, 0.4% Black, and 2.9% another race other than white. All minority races are steadily growing each year. According to census block and track level statistics, most residents who speak little or no English live in the Medford area and near the I-5 corridor in the central part of the county.[18] The proportion of Hispanic residents in Jackson County grew from 3% in 1980 to 7.9% in 2004.

Table 2.1. Percent of Hispanic Residents, 2004.

Jackson Co.	7.90%
Oregon	9.50%
U.S.	14.10%

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004.
http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

[17] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

[18] Dataplace Website, 2006. http://www.dataplace.org/area_overview/index.html?place=p26.14:41029&z=1

Household Populations

Family households made up 67.7% of the total in 2000, compared to 65.8% in Oregon and 68.1% in the U.S. Since 1980, family households have decreased as a proportion of the total. Together, single women with children and adults age 65 or older made up 18% of all households in 2000.

Table 2.2. Selected Households by Type, 2000.

	Jackson County	Oregon	United States
Family households	68%	66%	68%
Single women with kids	7%	6%	7%
Non-family households	32%	34%	32%
Adults 65 and over living alone	11%	9%	9%

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004.
http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

Citizens with Special Needs

The 2000 Census also collected data on special needs populations for the first time. The Census considers this population as those with the following conditions: (a) blindness, deafness, or a severe vision or hearing impairment (sensory disability) and (b) a condition that substantially limits one or more basic physical activities, such as walking, climbing stairs, reaching, lifting, or carrying (physical disability). According to the 2000 Census, the Disability Status for residents 5 years or older was 20.2%. Table 2.3 illustrates the Census defined special needs population by age. This table represents further indication that there are citizens in Jackson County who may need extra resources and assistance in addressing risks from wildfire (and other natural hazards).

Table 2.3. Census Defined Special Needs Population by Age in Jackson County

Age Range	# of Residents	% of Population
5 to 20 years	3,306	8.2%
21 to 64 years	19,167	19.1%
65 years and older	11,558	41%

Source: US Census Bureau, 2004 (http://www.factfinder.census.gov/)

In 2005, Jackson County formed a Special Needs Committee, which defines people with special needs as, "Frail elders and adults with disabilities." Jackson County may see more people with special needs as the population grows older. Currently, the fastest growing percent of the population is people over 85 years old—nationwide this accounts for 19% of the population[19].

Poverty

The poverty rate is the percentage of people living below the poverty level or "threshold." Each year, the U.S. Office of Management and Budget establishes a series of poverty thresholds for different family sizes and ages of household heads. Table 2.4 illustrates the percentage of people living below the poverty line in Jackson County over the last decade.

[19] US Census Bureau, 2000. http://www.census.gov

Table 2.4. Populations in Jackson County below Poverty Line

	1989	1999	2002
Pop. (individuals) below poverty line	13.2%	12.5%	13.1%
Under age 18 below poverty line	17.5%	16.3%	17.8%
65 and over under poverty line	9.9%	6.9%	X
Families below poverty line	X	8.9%	X

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004.
http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

Jackson County has the 14th highest poverty rate in Oregon out of the 36 counties in Oregon, and slightly higher than Oregon's average poverty rate of 12%.[20] In 1999, Jackson County ranked the 10th highest county in Oregon for resident's aged 65 and over who were under poverty line.[21]

National School Lunch Program

The percent of students eligible for free or reduced-price lunches is often used as a measure of children's economic well-being. Higher percentages mean more children live in low-income families, and vice versa. The percent is calculated by dividing the number of eligible students (based on the criteria listed above) by the number of students enrolled. Not all schools participate in the program.

The National School Lunch Program provides low cost or free lunches to students, based on the student's family size and income. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those with incomes between 130 and 185 percent of the poverty level are eligible for reduced-price meals.[22]

Looking at the percent of students eligible for the National School Lunch Program is a good indicator of children and families below the poverty level. For the 2003-2004 school year, 42.6% of students in Jackson County were eligible for free or reduced-price lunches. This measurement can also help identify and compare different levels of poverty in the County. The Butte Falls and Eagle Point School Districts have higher percentages of eligible students. The national average of students eligible for the National School Lunch Program in 2003-2004 was 59%.[23] In 2002, 32% of Oregon students were eligible for the School Lunch Program.

Table 2.5. Percent of Students Eligible for Free or Reduced-Price Lunches in Jackson County Schools

	99-'00	00-'01	01-'02	02-'03	03-'04	Difference between '99-'00 and '03-'04
Ashland School District 005	20.8	19.5	23.2	23	25.4	4.6
Butte Falls School District 091	48.5	52.1	53.9	53.1	57.2	8.7
Central Point School District 006	35.1	35	37.8	33.6	36.8	1.7
Eagle Point School District 009	47.3	55.6	52.7	51	54.9	7.6
Medford School District 549	37.4	31.7	34	35.8	39.2	1.8
Phoenix-Talent School District 004	33.2	40.6	46.1	47.4	47.6	14.4
Pinehurst School District 094	27.6	31	33.3	51.7	29.7	2.1
Prospect School District 059	36.5	43.5	44.8	38.9	51.1	14.6
Rogue River School District 035	47.5	52.2	45.7	47.6	41.9	-5.6

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org

[20] US Census Bureau. http://www.census.gov Small Area Income & Poverty stimates, 2002.
[21] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org
[22] Ibid.
[23] (http://www.fns.usda.gov/pd/slmonthly.htm)

Education

A recent study states that, "…although other factors in addition to educational attainment are involved in determining poverty status, evidence [proves] that there is a strong correlation between educational attainment and poverty level."[24] Jackson County's educational attainment levels are on average with Oregon and the U.S.

Table 2.6. Levels of Education, 2000.

	Jackson Co.	Oregon	U.S.
Pop. 25 years or older w/ no high school diploma	15%	14.9%	19.6%
Pop. W/bachelor's degree or higher	22.3%	25.1%	24.4%

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004.
http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

Housing and Development

The Census Bureau defines a housing unit as a house, an apartment, a mobile home or trailer, a group of rooms, or a single room occupied as separate living quarters (or if vacant, intended as separate living quarters). Housing units are classified as being occupied – either by owners or renters – or vacant.[25]

Of the 75,737 housing units in Jackson County, 94% are occupied and 6% are vacant. 66.5% of the occupied housing units are owner-occupied, leaving 33.5% renter-occupied, almost identical to U.S. averages (66.2% owner-occupied; 33.8% renter-occupied) (2000, US Census Bureau). The number of estimated housing units for 2004 is 82,297.[26]

The number of housing units in Jackson County increased by 44.9% from 1980 to 2000, while Oregon as a whole increased its housing units by 34.1%.[27]

Table 2.7. Housing Unit Building Permits Per Year, Jackson County

	1980	1990	2000	2004
Total Units	1,018	1,511	1,351	2,099
Units in Single-Family Structures	774	933	1,140	1,791
Units in All Multi-Family Structures	244	578	211	308
Units in 2-unit Multi-Family Structures	56	20	32	58
Units in 3- and 4-unit Multi-Family Structures	64	58	52	194
Units in 5+ Unit Multi-Family Structures	124	500	127	56

Source: HUD, SOCDS building permits database, http://socds.huduser.org/permits/index.html

Housing costs (value) vs. income (housing cost burden)

The value of owner occupied housing is the census respondent's estimate of how much the property (house and lot, mobile home and lot, or condominium unit) would sell for if it were for sale. Below is data on the real median value of housing units in Jackson County (adjusted for inflation).

[24] U.S. Census, 2000 (http://www.census.gov/hhes/income/earnings/earnings.html)
[25] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org
[26] Dataplace Website, 2006. http://www.dataplace.org/area_overview/index.html?place=p26.14:41029&z=1
[27] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org

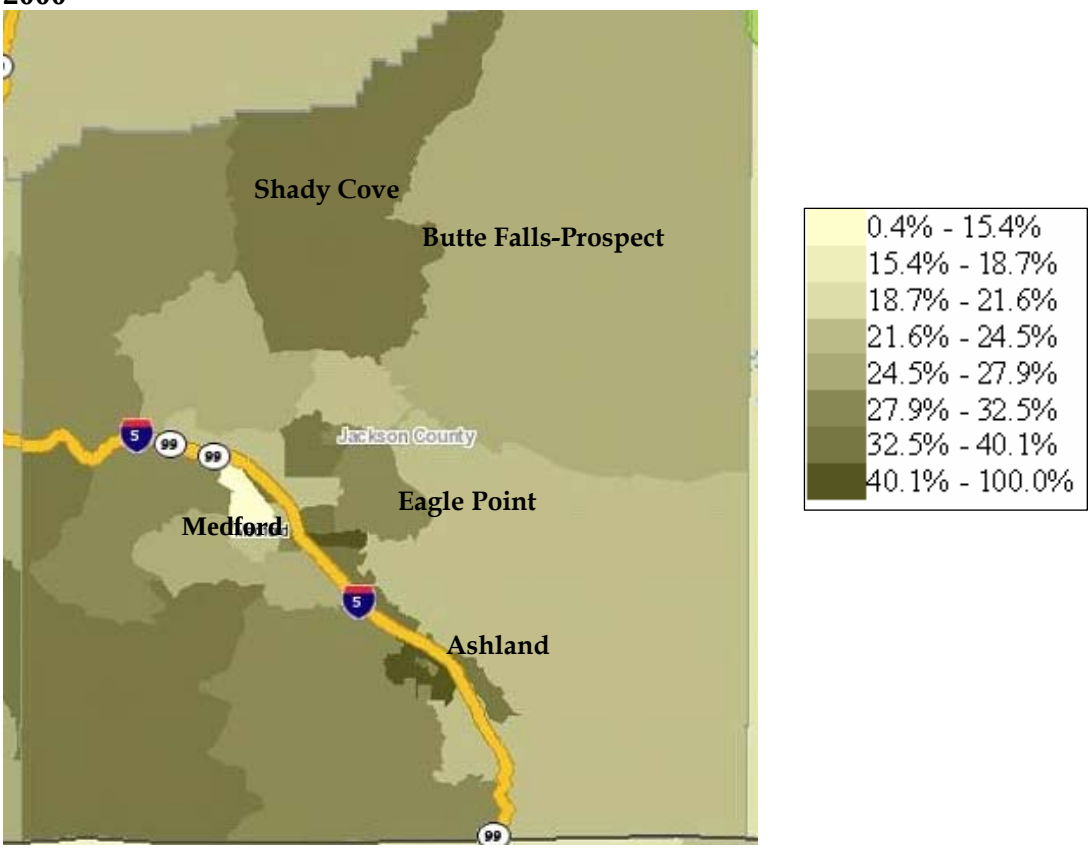
Table 2.8. The median value of an owner-occupied housing unit in Jackson County, 2000

Jackson County	$143,988
Oregon	$156,433
U.S.	$123,007

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org

The median value of homes increased by 12.4% between 1980 and 2000 in Jackson County while Oregon saw an increase of 23.4% and the U.S. increased by 21%.[28] Jackson County was one of two counties in Oregon that had the highest increase in median sales price, up 24% between 2004 and 2005, while Oregon as a whole increased by 15%.[29]

Figure 2.4. Percent of households with income 0-80% of area median with severe cost burden, 2000



Source: Dataplace Website, 2006. http://www.dataplace.org/area_overview/index.html?place=p26.14:41029&z=1
Comprehensive Housing Affordability Strategy special tabulation, 2000 (U.S. Census Bureau)

Housing Cost Burden

A household has a "housing cost burden" if it spends 30% or more of its income on housing costs. A household has a "severe housing cost burden" if it spends 50% or more of its income on housing.

In 2000 58% of households in Jackson County had a housing cost burden, while 31.2% of households had a severe housing cost burden (income 0-80% of area median).[30]

[28] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

[29] http://www.huduser.org/periodicals/ushmc/fall05/USHMC_05Q3.pdf

[30] Dataplace Website, 2006. http://www.dataplace.org/area_overview/index.html?place=p26.14:41029&z=1

Urban Growth Boundaries

Oregon's land use planning system supports development through an urban-centered growth program. Statewide planning Goal 14, "Urbanization," encourages urban-centered growth by requiring urban growth boundaries (UGB) around existing urban areas. UGBs allow urbanization within the boundaries and limit the spread of urban development into rural areas.

State law requires cities to provide for a 20-year supply of developable land within the UGB. An expansion of an UGB may only be implemented after analyses of growth rates and inventories of vacant land have been completed. A public review processes must also be carried out at both the city and county level, prior to adopting an amendment to a UGB.

When a city expands their UGB, the new area within the UGB is typically annexed into the city. Once annexed, the properties are under the control of the new jurisdiction and the city's land use and building codes apply; land outside the city limits remain under the control and management of the county. Consequently, each city is responsible for adopting and implementing wildfire safety standards within their jurisdiction.

Urbanization and Forest Land

Expanding growth boundaries into forested land places a higher density of structures and lives into an area of wildfire risk. Without proper precautions, homes will be at-risk if a wildfire threatens. Although cities often have wildfire safety codes, cities do not control conditions on forested lands directly adjacent to the city limits. For example, a home setback 30 feet from the property line could be at high risk due to a neighboring property outside city limits. Wildfire codes often require fuel breaks at the time of construction, but do not require owners to maintain the fuel break over time.

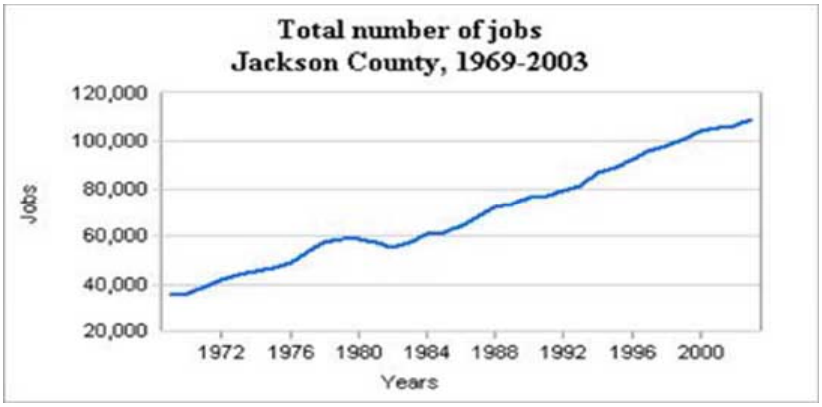
With some forethought, cities can mitigate the impact of urban development into wildfire hazard areas. Adoption of strict codes and standards, education, fuels reduction grant programs, and sound land use planning can all play a part in the solution. See Chapter 7 for principles on wildfire home safety and Chapter 6 for fuel reduction strategies.

Employment and Industry

Employment and unemployment rates help identify populations who may have financial needs. 109,109 jobs existed in Jackson County in 2003, with the principle industries being lumber, agriculture, manufacturing, and recreation. The number of jobs increased by 42.7% between 1990 and 2003, compared to an increase of 28% in Oregon and an increase of 20% in the U.S.[31]

[31] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org

Figure 2.5. Total number of Jobs in Jackson County, 1969-2003



Income

Jackson County's annual average wage per job (average annual wage divided by the number of jobs and adjusted for inflation) was $28,388 in 2003, an increase of $2,257 from 1993, but lower than Oregon and the U.S.'s averages for both years. Jackson County ranked 16th for the lowest income earnings out of 36 counties in Oregon.[32]

Table 2.9. Jackson County Median Household Income (adjusted for inflation)

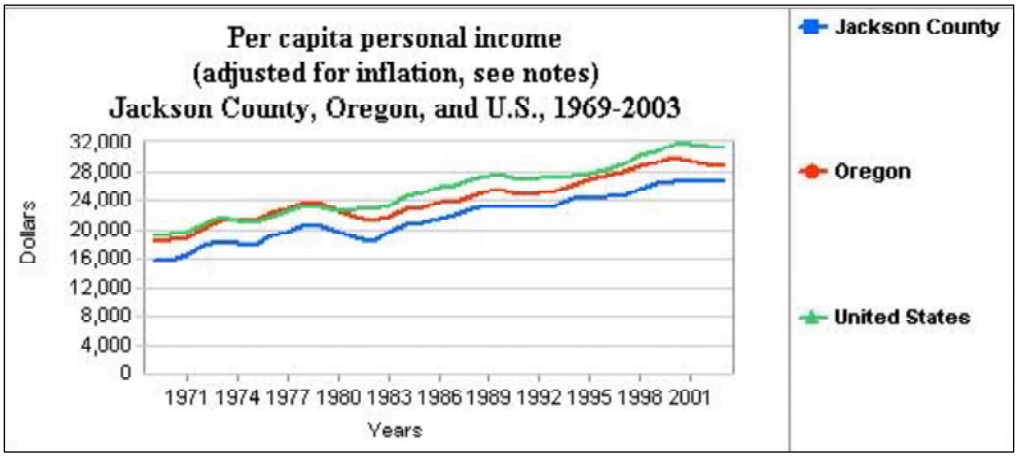
	1989	1999	2003
Jackson Co.	$36,370	$39,372	$36,670
Oregon	$40,436	$45,191	$42,593
U.S.	$44,600	$46,382	$43,318

Source: NWAF Indicator Website, Indicators for Jackson County, OR, 2004.
http://www.indicators.nwaf.org/ShowOneRegion.asp?FIPS=41029&

Jackson County ranked 15th of 36 counties in Oregon for lowest median household income in 2002.[33]
Men have a median income of $32,720, while women have a median income is $23,690.[34]
The per capita income is the average income received by individuals, that is, total income divided by total number of people.

Figure 2.6. Per Capita Income, Jackson County, Oregon, and U.S. 1969-2003

Source: 1969-2003: Bureau of Economic Analysis, Regional Economic Data, Local Area Personal Income, Table CA1-3,



(http://www.bea.gov/bea/regional/reis/)

[32] Ibid.
[33] Ibid.
[34] US Census Bureau, 2000. http://www.factfinder.census.gov

The per capita income (adjusted for inflation) was $26,617 in 2003, while Oregon's was $28,734 and the U.S. was $31,472. Jackson County's per capita income has grown by 68.8% since 1969 and was ranked 7th highest of 36 counties in 2003.[35]

Unemployment Rate

The unemployment rate (the number of unemployed as a percent of the entire labor force) is an indicator of an area's economic vitality and the economic situation of its residents. An unemployment rate of about 4%-6% is considered "healthy".[36]
Jackson County's average annual unemployment rate in 2004 was 7.1%, compared to 7.3% in 2003, lower than the rate for Oregon as a whole and higher than that for the U.S. Jackson County's unemployment rate ranked 9th (from lowest to highest) out of Oregon's 36 counties.

Transportation

Jackson County has many thousands of miles of transportation corridors including roads and railways, plus air transportation facilities. There are seven heliports and 16 airports serving the county, the largest of which is the Rogue Valley International-Medford Airport. The Medford airport is also home to the air tanker base where fire retardant planes are at the ready through fire season.

Jackson County's Road System

The road system in Jackson County serves private and commercial motor vehicle traffic, pedestrians, and bicyclists. The road system connects commercial rail and air transportation to destinations in the county and beyond. Transportation corridors are key aspects of wildfire safety and suppression because they are the primary routes used for evacuation of residents and ingress of fire crews and can be used as fuel breaks or as anchor points for backburning during major fire. The road system is operated by the following agencies[37]:

- The U.S. Forest Service controls approximately 2,500 miles of roadway in the Rogue River National Forest, most of which is located within Jackson County. Small portions of Umpqua and Klamath National Forest roads are also located in Jackson County.

- The Bureau of Land Management maintains approximately 2,500 miles of road in the County.

- The Oregon Department of Transportation operates 306 miles of roadway within the County, including some of the most heavily traveled.

- Jackson County oversees 1,105 miles of roadway, including some roadways within incorporated cities. Most of the County's higher order roads provide access to rural properties and recreation and tourist destinations, make connections to local roads, and serve as market roads for agriculture, forestry, and mining.

- Local cities own most of the remaining public roadways.

[35] NWAF Indicator Website, Indicators for Jackson County, OR, 2004. http://www.indicators.nwaf.org
[36] http://www.moneychimp.com/glossary/unemployment_rate.htm
[37] Kittleson and Associates, 2005. *Jackson County Transportation System Plan*. Online: http://www.co.jackson.or.us/Files/Jackson%20County%20Transportation%20System%20Plan.pdf

Functional Classification
A roadway's *functional classification* determines its intended purpose, the amount and kind of traffic (local or through) it is expected to carry, and its design standards. The following functional classifications are defined in the County's existing Road System Plan[38]:

- **Arterials** provide the greatest mobility at the highest speeds and generally the shortest distances for through traffic. There is little or no access to local property on an arterial.

- **Collectors** provide both for the mobility of through traffic and for land access. Collectors provide essential connections between arterials and local streets.

- **Local roads** and streets are primarily for access to land rather than mobility.

The functional classification of roads was used to designate wildfire evacuation routes in the template designed for community wildfire evacuation planning in Chapter 8. A similar approach was used in the City of Ashland's evacuation planning as well.

Railway System
Jackson County has only freight rail service. Passenger service stations are located north, south, and east of the valley. The Central Oregon & Pacific Railroad (CORP) serves the I-5 corridor, connecting to the south with the Union Pacific Railroad at Black Butte, California and to the north at the Springfield Junction near Eugene, Oregon. Daily freight service is provided five days a week, one trip each way between Medford and Grants Pass; Medford and Glendale; Medford and Black Butte; and Medford and White City. Most of the traffic originating in Medford heads south to California over one of the most rugged rail lines in the western United States. The White City Terminal Railroad (WCTR) operates in the White City industrial area, and connects to the CORP system. The major commodities moved by WCTR are chemicals and wood products[39].

Railways are not critical for fire management, but are a potential source of ignitions, although the number of fire starts from railroads has dropped over time.[40]

Jackson County Rural Fire Protection Districts

Rogue River Fire District #1
The Rogue River Fire District serves a population of approximately 14,000, and protects a 77 square mile fire district and a 200 square mile ambulance service area in Southern Oregon. The Fire District's staff is comprised of a Fire Chief, 3 Captains, 8 Firefighters, 1 Finance Manager, 2 Administrative Assistants, and 20 Volunteers. Of the more than 1,500 alarms per year, 85% are medically related. Personnel respond out of a single fire station housing 3 engines, 2 tender, 3 ALS ambulances, and 1 brush unit. http://www.rogueriverfd.com/

Medford Rural District #2
Housed under Medford Fire and Rescue, District #2 serves the suburban neighborhoods and rural portions of Medford.

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[38] Ibid.
[39] Kittleson and Associates, 2005. *Jackson County Transportation System Plan*. Online: http://www.co.jackson.or.us/Files/Jackson%20County%20Transportation%20System%20Plan.pdf
[40] Oregon Department of Forestry Southwest Oregon Office Data. *Fire Starts: 1960-2005*. Unpublished.

Jackson County Fire District No. 3

The District was formed in 1952 as Central Point Rural Fire Protection District and changed its name to Jackson County Fire District No. 3 in 1975. It currently protects 167 square miles in the center of Jackson County, Oregon with seven stations. The Eagle Point, Central Point, and White City stations are staffed with full time paid personnel. The Sam's Valley, Dodge Bridge, Agate Lake, and Gold Hill stations rely on volunteer firefighters. A five member elected Board of Directors governs the District. The District is staffed with 51 paid personnel and approximately 60 volunteers.

The District is organized into three main divisions: Administration, Operations, and Fire and Life Safety. The 2003/04 operating budget was approximately $5.2 million. The assessed value of the District is $1.2 billion. Key services include fire suppression, basic and advance life support, medical response, rescue services, public education, code enforcement, and investigation. The district's annual alarm volume is approximately 4000 incidents per year, 60% to 70% of which are medical and/or rescue related. www.jcfd3.com/

Jackson County Fire District #4

Since 1956, Jackson County Fire District #4 has been providing emergency fire and medical Response, swift water rescue and high angle rescue services to the cities of Shady Cove and Trail. District #4 is a public department with a combination of four paid staff (one Fire Chief and three Fire Captains) and 18 volunteers governed by an elected Board of Directors.

District #4 serves and protects approximately 6,500 residents living in a rural/residential area of 55 square miles along the Rogue River in the Rogue Valley of southern Oregon from Highway 234 to Lost Creek Lake along Highway 62, and seven miles up Highway 227 from Highway 62. In addition to the main Fire Station in Shady Cove, Jackson County Fire District #4 also maintains a substation at 550 Takelma Drive near Lost Creek Lake in the community of Trail.

In addition to fire, rescue and first response emergency medical services, J.C. Fire District #4 also provides many services to the community on an on-going basis as well as attending and sponsoring numerous community events. http://jcfd4.org/

Jackson County Fire District #5

5811 S Pacific Hwy. Phoenix, OR 97535 - Phone: 535-4222

Thanks to Chief Dan Marshall for the following narrative:

"The mission of Jackson County Fire District 5 is to deliver quality and professional services that promote community life safety and property conservation."

Fire District #5 was incorporated in 1963 and was originally named Talent Rural Fire Protection District. The area served consisted primarily of the rural areas of the city of Talent. In the late 1960's, Talent Rural annexed Barron Rural Fire District which was located southeast of Ashland near Emigrant Lake. By the mid 1970's Talent Rural Fire Protection District became known as Jackson County Fire District #5. In July1999, the city of Talent was also annexed to the fire district.

Jackson County Fire District #5 is organized as a rural fire district pursuant to ORS 198.705 to 198.755. The district is governed by a Board of five elected directors. A director may be an elector living in, or the owner of real property within the boundaries of the district. Fire District #5 provides fire and life safety services and encompasses approximately 110 square miles, including twenty-four miles of Interstate 5. Fire District #5 also provides automatic aid to the cities of Phoenix and Ashland as well as mutual aid to fire agencies throughout Jackson and Josephine counties on a request basis.

The assessed value of real property within Fire District 5 is approximately 820 million dollars. The population is approximately 15,000 to 17, 000 and during 2004, Fire District 5 responded to 1500 calls for service. Of these requests for service, 56% were Emergency Medical Services, 6% were responses to fires, and 38% were non-fire public service incidents.

Fire District 5 is a combination fire department with twenty-two career personnel and thirty-five volunteer personnel. Operating out of two stations, Fire District 5 provides fire prevention, public education, fire suppression and emergency medical services. Fire District 5 operates as a semi-military operation. Staff includes a Fire Chief, Division Chief, 6 Captains, 6 Engineers, 6 Firefighters, and 35 Volunteer Firefighters.

Evans Valley Fire District #6

The EVFD #6 staff and volunteers protect approximately 4000 people living in a 26 square mile area known as the Evans Valley (Wimer). The Fire District operates out of one station and employs two full time staff and one seasonal summer firefighter. The bulk of the fire district force comes from volunteer support. http://www.evfire.org/

Fire District #8 - Lake Creek

1584 S Fork Little Butte Creek Rd. Eagle Point, OR 97524 Phone: 826-2538

Applegate Valley Fire District #9

The Applegate Valley Fire District serves an area of 181 square miles west of Medford, southeast of Grants Pass, and extends south to the California/Oregon border. It is an area of mountains and valleys, with a population of 10,000 residents. On average, the district has about 48 volunteers who respond to alarms for fires, medical calls, motor vehicle accidents, or natural disasters.

Applegate Fire District offers wildland and structure fire protection and 24 hour emergency medical coverage to the citizens of our community. The District also has extrication capabilities and a special technical rescue team, which includes swift water rescue and high angle rescue techniques.
http://www.applegatefd.com/

Ashland Fire and Rescue

The mission of Ashland Fire and Rescue revolves around the principle of service to community. The city of Ashland receives prompt and efficient emergency fire and medical services from two fire station sites, strategically located within the city.

In addition to the provision of emergency services to the citizens of Ashland, the department maintains a strong reciprocal response agreement with surrounding agencies. Ashland Fire and Rescue provides ambulance services for approximately 650 square miles within southern Jackson County, which encompasses the communities of Ashland and Talent. Staff consists of twenty-seven paramedics and one EMT Basic, all trained structural firefighters. All of Ashland Fire and Rescue personnel are trained to a minimum of Wildland Urban Interface Firefighter and most are trained above this level. Each Spring all employees go through a two day annual refresher training to practice their skills and prepare for the upcoming fire season. Emergency medical services are provided by two 24 hour staffed ALS (Advanced Life Support) Rescue units housed in the two city fire stations. Ashland recently purchased a specialized urban interface engine with a 500-gallon capacity that can access areas of the City's urban interface not accessible to larger structural engines. Ashland Fire and Rescue also maintains two brush units for wildfire response.
www.ashland.or.us

Butte Falls Volunteer Fire District

The Butte Falls Volunteer Fire District currently has 17 active fire fighters. The District's fire equipment includes two one-thousand gallon structure engines, a one thousand gallon brush engine, a five hundred gallon brush engine with rescue and extrication equipment, a two hundred gallon brush engine, and a two thousand gallon tender. The District is primarily a structure fire department but is trained and capable of wildland, rescue, and extrication response. The District has mutual aid agreements with the Oregon Department of Forestry and adjacent fire districts. The Butte Falls VFD is not a tax base district, it has an area known as a fire protection subscriber area (FPSA). This area covers approximately 60 square miles. Residents living in this area need to pay a yearly fee of $125-for fire service, which makes up the department's budget. The 2005 budget is just under $34,000. The department offers free fire safe inspections for in and around homes, and every year puts on a presentation for the Butte Falls School District during National Fire Prevention Week. *Information provided by Jeff Gorman, Fire Chief*

Colestin Rural Fire District

The Colestin Rural Fire District is located just inside Oregon, above the Oregon-California border. The 17-square-mile area that the District protects is approximately halfway inland from the coast at the top of California, and to the immediate west of Interstate-5. Road access into the top end of the district is at the Mount Ashland Ski Road exit from Interstate-5 just north of the Siskiyou Summit in Oregon, and at the lower end, at the Hilt exit from I-5 in California. Old Highway 99 South, the old route over the Siskiyous, also provides local access to the Mt. Ashland Ski Road and connects to I-5 near Hilt. Both the Mt. Ashland Ski Road and the Hilt-Hungry Creek Road connect with Colestin Road, which runs through the center of the district.

The Colestin Fire District protects 143 homes and has 20 trained individuals available (including a chief and assistants) for wildland firefighting, with limited structure fire training and equipment capabilities. All firefighters are equipped with basic firefighting turnout gear. The District has limited capabilities to fight structure fire, due to the needs and requirements for fire equipment and professional training. http://www.crfd.org/

Prospect Fire District

The Prospect Fire District serves the town of Prospect, located along the upper Rogue River on Highway 62.

Critical Facilities and Infrastructure

Critical facilities are essential in emergencies. For example, road maintenance is critical after a flood, or designation of schools and other shelters for evacuation. In the event of wildfire, critical facilities and infrastructure can be at direct risk, including communications towers on forested mountain tops. Other critical facilities include police and fire stations, schools, hospitals, bridges, water and sewer, public works facilities, communications equipment, emergency operations centers, 911 centers, and shelters.

Chapter 3: Existing Efforts, Policies, Plans, & Codes

CHAPTER 3: EXISTING EFFORTS, POLICIES, PLANS, & CODES

There are a number of planning documents, policies, and programs at all levels of government that pertain to wildfire prevention, response, and mitigation efforts. This chapter covers ongoing work related to a local grant coordination group, county land use planning, emergency operations plans, regional fire plans, existing community wildfire protection plans, and wildfire policies and programs.

Existing Efforts

Josephine-Jackson (County) Local Coordinating Group

Understanding Local Coordination Groups

Grant applications have become more and more competitive for scarce appropriations within Jackson County, throughout Southern Oregon, and in the Oregon/Washington region. Given the increasingly competitive nature of National Fire Plan grants, National Fire Plan officials in Oregon and Washington encouraged the formation of Local Coordination Groups (LCGs). The LCGs evaluate all National Fire Plan grant applications originating in the local area (Jackson and Josephine Counties in this case) and submit a prioritized ranking of the grants based on past performance on grants and existing need.

The Pacific Northwest Wildfire Coordinating Group (representing all federal land management agencies) use the ranking to make grant awards based on available funds. By getting input from the LCG's, regional decision makers are better informed about grants in areas they may not be familiar with. On a regional scale, the LCG ranking assures that limited funds are being spent in the highest priority areas at risk to wildfire. Also, the grant process at the local level can benefit by improving local grant applications, bringing areas together with similar goals, and reducing competition. Depending on local needs, the LCG can take on duties beyond coordination of grant applications.

The Josephine Jackson Local Coordination Group (JJLCG)
The Jackson Josephine LCG tracks fuels reduction projects and promotes coordination between the county fire plans and federal agencies. Due to the proximity of many Jackson County communities to federal land, the benefit of extending fuels reduction across boundaries can be vital to community wildfire safety.

Jackson County commissioners sanctioned the role of the JJLCG during a November 2003 meeting of the Board of Commissioners. The JJLCG includes representatives from Jackson County, Josephine County, the Rogue Valley Fire Chief's Association, Southern Oregon Regional Economic Development, Inc., Oregon Department of Forestry, Medford District BLM, and the Rogue River-Siskiyou National Forest. A coordinator position was funded from Title II funds for the first two years of the JJLCG. There is currently money from all participating organizations to hire another coordinator but the position remains vacant as of May 2006. The group meets quarterly to discuss National Fire Plan grant issues and ways to increase collaboration and participation among communities, agencies, and other stakeholders in the two-county area.

The regional Pacific Northwest Wildfire Coordinating Group establishes timelines for grant review. All Oregon and Washington LCG's have between late-February and mid-March of a given year to review local grant applications and submit a prioritized ranking to the regional office. Before the beginning of the grant review process, the regional office makes every effort to let the JJLCG know which applications have been received in the 2-county area. Reviewers can then access a website and download the applications for the review process. Chapter 6 includes more information on filing a National Fire Plan grant application, including what criteria are used by the JJLCG to evaluate grants.

Studies

Wildland Fire Resource and Inventory Study for Five Southwestern Oregon Counties

Jackson County Commissioner Jack Walker, on behalf of the O&C Counties Association initiated development of a five county wildland fire resource and inventory. Raymond and Associates of Medford, OR conducted the inventory in 2002. The inventory included local, state, federal, and private wildland fire agencies who work on wildland fires in Jackson, Josephine, Douglas, Coos, and Curry counties. The study also identified gaps in wildfire management policy, rules, procedures, personnel, and resources.

The five county inventory concluded that, in general, the wildfire management services "work well together". Work is accomplished in a professional manner and gaps, or "glitches" are due to differences in agency policies and safety rules. The inventory noted problems in conflicting safety rules during fire operations, initial attack decisions, and crew definition. Raymond and Associates found a major lack of coordination in the use of Geographic Information Systems (GIS) for mapping among the counties and agencies. GIS can be a critical tool for fire management and information.

Key recommendations for improving the effectiveness of wildfire management in the 5-county area included the following:

1. Address differences in policies and procedures;
2. Create uniformity in safety rules during fires for all fire services;
3. Improve communication to cover the whole area as well as between agencies;
4. Update county commissioners on the role of the Incident Command System;
5. Track availability of crews through a website;
6. Electronically track paperwork related to wildfire;
7. Improve county level understanding of fire management funding;
8. Form a GIS consortium to coordinate information and work in the five counties
9. Create a 5 county website to share information and agreements.

Planning Documents and Codes

Jackson County Comprehensive Plan

The Jackson County Comprehensive Plan was first adopted in 1972 and has been most recently amended in 1994. The Comprehensive Plan is the guiding policy document for county land-use designations and decisions. The Plan has 8 major functions:[41]

1. Guides all units of government and affected agencies in the County in developing and implementing activities which relate to the County's public planning process;
2. Establishes the means for consistent policy basis and planning decisions among all affected public and quasi-public agencies for a general, comprehensive, and long-range approach to the provision of public facilities and services needed for future development throughout the County;
3. Makes planning information available to assist citizens to better understand the basis for public and/or private planning related decisions and encourages their participation in the

[41] Jackson County Comprehensive Plan, 1994. Online: www.jacksoncounty.org

process;
4. Provides the general public with a guideline for individual planning decisions;
5. Assists citizens in measuring the progress of the County and its elected officials in achieving the Plan's goals, policies, and implementation strategies;
6. Provides continuity in the planning and land development process over an extended period of time;
7. Serves as a general comprehensive planning framework to be augmented, as needed, by more detailed planning programs to meet the specific needs of the various units of local government, special districts, and affected agencies.
8. Provides a basis for public decisions on specific issues balanced with long-range needs and objectives.

The Comprehensive Plan was developed in accordance with the Oregon Statewide Planning Goals as required by state law (ORS 197.175). The plan addresses each of the Statewide Planning Goals as well as local goals, and contains policies and implementation strategies aimed at compliance with these goals.

Jackson County Land Development Ordinance Chapter 8.7: Wildfire Safety

Jackson County requires wildfire safety measures for new construction in the designated wildfire areas of the County. Requirements are in place to protect residents, firefighters, and property. The county code specifies fuel break distances, access standards for emergency vehicles, address signs, bridges, roof coverings, and fire protection. Re-roofing more than 50% of the area on a home also triggers a requirement for fire resistant roofing. Although fire-resistant siding and decks are not a current requirement, it is highly recommended that homeowners consider non-flammable materials for all building coverings in a wildfire area.

The County is in the process of updating the "Wildfire Area Map" and the wildfire code. *The current codes are in Resource B and current map is Map 2* . Please call Jackson County Planning to get the current requirements when planning to build. See Resource E for contact information.
The County has funded a site inspector since 2003 to enforce the wildfire building and siting codes. The position is partially funded out of Title III grant money, part of the Secure Rural Schools and Community Self Determination Act of 1996.

Local Ordinances and Codes

Local municipalities may have specific codes related to wildfire safety. Builders and owners should check with their local jurisdiction for building code requirements related to wildfire safety.

Jackson County Emergency Operations Plan

The 2004 Jackson County Emergency Operations Plan (EOP) is a key management tool for use in Jackson County during an emergency. A wildfire emergency scenario could serve to activate the EOP. The purpose and function of the EOP are described below.
"This plan provides county officials and emergency responders with a framework for preparing for, responding to, and recovering from major emergencies and disasters. When the plan is activated, emergency response agencies are integrated into a common emergency management organization. This plan is a guide and does not carry the force of law. It is a management statement intended to define the interlocking roles of county personnel and to encourage cooperation and coordination among multiple jurisdictions. Nothing in this plan is intended to discourage field personnel from exercising discretionary authority in problem solving. The overarching goal of this plan is to reduce the vulnerability of the citizens of Jackson County to the human suffering, property damage, and financial losses that can result from emergencies."

-Jackson County Emergency Operations Plan (2004)

Jackson County Natural Hazard Mitigation Plan

The Jackson County Natural Hazard Mitigation Plan was accepted by the Federal Emergency Management Agency and then approved by Jackson County Commissioners on January 31, 2006. The Plan **"**includes resources and information that will assist county residents, public and private sector organizations and other interested people in participating in natural hazard mitigation activities[42]." The mission of the Natural Hazards Mitigation Plan Actions is to:

"*reduce risk, prevent loss and protect life, property and the environment from natural hazard events through coordination and cooperation among public and private partners."*

- Jackson County Natural Hazards Mitigation Action Plan Mission Statement

The natural hazards mitigation plan includes seven goals that the County can implement or coordinate to help residents become less susceptible to a natural disaster. The key to implementing the seven goals is a five-year action plan. The seven goals are related to:

1. Property protection
2. Education and outreach
3. Prevention
4. Partnership and coordination
5. Structural projects
6. Natural resource protection
7. Emergency services

State of Oregon Policies

Oregon Forestland-Urban Interface Fire Protection Act (SB 360)

The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB 360) is intended to facilitate development of an effective WUI protection system in Oregon by:

- Establishing policies regarding WUI protection;
- Defining the WUI in Oregon and establishing a process and system for classifying the interface;
- Establishing fuel-reduction standards for WUI property owners so they can manage or minimize fire hazards and risks; and
- Providing the means for establishing adequate, integrated fire protections systems in WUI areas, including education and prevention efforts.

To date, the act has been implemented in Deschutes, Jackson, Klamath and Umatilla counties. Josephine, Douglas, Wasco, Jefferson, Crook and Hood River counties are next on the state's list for implementation.

Oregon Statewide Land Use Planning Goal 7

The intent of Oregon Statewide Land Use Planning Goal 7 for Areas Subject to Natural Hazards is to protect people and property from natural hazards. Goal 7 directs local governments to adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards. Goal 7 also indicates that new hazard inventory information provided by federal and state agencies shall be reviewed by the Oregon Department of Land Conservation and

[42] Jackson County. 2006. *Jackson County Natural Hazard Mitigation Plan*. http://www.co.jackson.or.us/Page.asp?NavID=1514

Development (DLCD) in consultation with affected state and local government representatives. After such consultation, the DLCD shall notify local governments if the new hazard information requires a local response. Local governments shall respond to new inventory information on natural hazards within 36 months after being notified by the DLCD, unless extended by the Department. – (http://www.lcd.state.or.us/goalpdfs/goal07.pdf. *In relationship to ODF, as new data is identified, and particularly high hazard areas identified through Senate Bill 360, local governments will need to address the provisions of Goal 7.)*

Federal Policies and Plans

Healthy Forest Restoration Act / Healthy Forest Initiative

In 2002 the President announced the Healthy Forest Initiative (HFI) designed to identify and remove barriers to the implementation of projects that were developed to restore the health of the nation's forests. HFI was focused on renewed efforts to be more effective and efficient in carrying out restoration projects. Under HFI, new categorical exclusions were developed to allow the federal agencies to move quickly through NEPA under appropriate circumstances, streamlined administrative review processes for NEPA, and created new regulations under the Endangered Species Act for National Fire Plan projects to streamline consultation with federal regulatory agencies. It also set the stage for extensive discussion between the administration and Congress that resulted in new legislation addressing forest health.

Congress enacted the Healthy Forest Restoration Act in November 2003. It provides new tools and additional authorities to treat more federally-managed acres more quickly to expedite our restoration goal. It strengthens public participation and provides incentives for local communities to develop community wildfire protection plans. It limits the complexity of environmental analysis for fuel hazard reduction projects, provides a more effective appeal process and instructs the Courts that are being asked to halt projects, to balance the short-term affects of implementing the projects against the harm from undue delay and long term benefits of a restored forest.

Title I of the HFRA addresses vegetation treatments on certain types of National Forest System and Bureau of Land Management lands that are at risk of wildland fire or insect and disease epidemics. This title:

- Encourages streamlined environmental analysis of HFRA projects;
- Provides for administrative review of proposed HFRA projects on National Forest System lands before decisions are issued;
- Contains requirements governing the maintenance and restoration of old-growth forest stands when the Forest Service and BLM conduct HFRA projects in such stands;
- Requires HFRA projects in the Forest Service and BLM to maximize retention of larger trees in areas other than old-growth stands, consistent with the objective of restoring fire-resilient stands and protecting at-risk communities and Federal lands;
- Encourages collaboration between Federal agencies and local communities when community wildland fire protection plans are prepared;
- Requires using at least 50% of the dollars allocated to HFRA projects to protect communities at risk of wildland fire;
- Requires performance to be monitored when agencies conduct hazardous-fuel reduction projects and encourages multi-party monitoring that includes communities and other stakeholders; and
- Encourages courts that consider a request for an injunction on an HFRA-authorized project to balance environmental effects of undertaking the project against the effects of failing to do so.

Title III of the Act also encourages the development of Community Wildfire Protection Plans under

which communities will designate their WUIs, where HFRA projects may take place. Half of all fuel reduction projects under the HFRA will occur in the community protection zone as defined by HFRA. HFRA also encourages biomass energy production through grants and assistance to local communities to create market incentives for removal of otherwise valueless forest material.

National Fire Plan and 10-Year Comprehensive Strategy

The National Fire Plan (NFP) was established after a landmark fire season in 2000 with the intent of actively responding to severe wildland fires and their impacts to communities while assuring sufficient firefighting capacity for the future. The NFP is a long-term commitment intended to help protect human lives, communities and natural resources, while fostering cooperation and communication among federal agencies, states, local governments, tribes and interested publics. The NFP focuses on 1) fire suppression and protection, 2) restoration/rehabilitation, 3) hazardous fuels reduction, 4) community assistance, and 5) accountability. The Oregon and Washington NFP Strategy Team sees reduction of unnatural hazardous fuel levels that threaten communities and wildland ecosystems as the foundation principle for dealing with fire risks (NFP Strategy Team 2002). Most NFP funding in Oregon goes to wildfire preparedness and hazardous fuel treatment (USDI and USDA 2003).

The National Fire Plan is a long-term investment that will help protect communities and natural resources, and most importantly, the lives of firefighters and the public. It is a long-term commitment based on cooperation, and collaboration, communication among federal agencies, states, local governments, tribes and interested publics. The federal wildland fire management agencies and state governors worked closely with these partners to prepare a 10-Year Comprehensive Strategy, completed in August 2001. The primary goals of the 10-Year Comprehensive Strategy are:

1. Improve Prevention and Suppression
2. Reduce Hazardous Fuels
3. Restore Fire Adapted Ecosystems
4. Promote Community Assistance

A subsequent implementation plan was developed in May 2002 to provide consistent and standard direction to implement the common purposes articulated in the Strategy and the National Fire Plan (NFP). The NFP calls for development of community fire plans to aid in effectively implementing NFP goals.

Federal Emergency Management Agency, Disaster Mitigation Act of 2000

Federal Emergency Management Agency Title 44 CFR Part 201 of the Disaster Mitigation Act of 2000 is legislation that specifies criteria for state and local hazard mitigation planning which require local and Indian tribal governments applying for Pre-Disaster Mitigation (PDM) funds to have an approved local mitigation plan. These may include county-wide or multi-jurisdictional plans as long as all jurisdictions adopt the plan. Activities eligible for funding include management costs, information dissemination, planning, technical assistance and mitigation projects.

Southwest Oregon Fire Management Plan

The Southwest Oregon Fire Management Plan (SWOFMP) was completed in 2004 and is still undergoing minor changes as of 2006. The plan is designed to provide Southwest Oregon with an "integrated concept in coordinated wildland fire planning and protection among Federal, State, local government entities and citizen initiatives." Southwest Oregon is defined as the area under the jurisdiction of the Rogue River-Siskiyou National Forest, Medford and Coos Bay BLM Districts, Oregon Department of Forestry Southwest Oregon District, Coos Forest Protective Association, and the National Park Service's Oregon Caves National Monument. All of Jackson County is within the

designated Fire Planning Unit (FPU), a term used to refer to the plan area in Southwest Oregon.

The SWOFMP is primarily a document for the wildfire and land management agencies centered on wildfire policy and laws, wildfire response and suppression, fuels reduction, funding of activities and personnel, and community collaboration. The FMP satisfies the requirements of the Federal Wildland Fire Policy of 1995 and its Revision of 2001 to describe fire management activities for every burnable acre of federal land, while recognizing the ecological importance of fire on these landscapes.

One of the important implications of the SWOFMP on Jackson County was the designation of a wildland-urban interface zone for the FPU. As mentioned in chapter one of the JaCIFP, designation of the WUI is a major component of a Community Wildfire Protection Plan. The adopted WUI in the JaCIFP is largely based on the SWOFMP wildland urban interface designation. The implications of this decision are discussed in Chapter 5.

Existing Community Wildfire Protection Plans

One of the Jackson County Integrated Fire Plan's goals is to augment the efforts of communities that have existing wildfire planning efforts and provide support for those that do not. The existence of the JaCIFP does not preclude any community from writing their own CWPP. In fact, there are communities in Jackson County that have approved CWPP's prior to the development of the JaCIFP. Per the Healthy Forests Restoration Act of 2003, any community may submit alternate methods and locations of fuels reduction treatments on federal lands adjacent to their community if they have a CWPP. The community's input can then be analyzed as a separate alternative in the environmental impact analysis. The JaCIFP serves as an overarching plan that allows communities to participate in this process. The JaCIFP does not identify specific treatments or methods for every community in the county. It is up to individual communities to develop localized fuels reduction priorities if they decide to submit an alternative to a proposed HFRA project on adjacent public land. Communities can benefit by having localized fuels reduction priorities that local BLM and Forest Service managers can reference during annual fuels planning for adjacent federal lands. Federal agencies can use fuels reduction priorities as a planning tool, even if the community isn't submitting an alternative to be included in the formal environmental analysis process. Finally, local CWPPs can help communities engage local citizens to be active participants in reducing wildfire risk through education and outreach, emergency management, and fuels reduction.

At the time this plan was written, CWPP's had been developed in Ashland (2004), the Colestin Valley (2005), the Applegate Valley (2001), and the Seven Basins watersheds (2005). Another plan of significance is the Josephine County Integrated Fire Plan. The Josephine county plan was completed in 2004 and served as an important template for Jackson county's plan. Many efforts are shared across county lines and the two fire plans will work in harmony where jurisdictions and funding allow a coordinated two-county effort. Other Jackson county communities have engaged in fire planning at different levels, but do not have a written plan at this time. These communities include the Greensprings, Battle Mountain, Foots Creek, and Dark Hollow areas.

Applegate Fire Plan

One of the Nation's first community fire plans, the Applegate Fire Plan process began in 2001 when residents of the Applegate Valley discussed the high fire danger throughout the Applegate with local Forest Service and BLM land managers. A watershed-wide community fire plan was initiated through a grant supplied by the National Fire Plan and coordinated by the non-profit Applegate Partnership. The Applegate Fire Plan, completed in August, 2002, is about "concepts, strategies, and goals," which is what seemed most appropriate, given the watershed scale and the high degree of ecological, social, and

ownership diversity in the Applegate Valley. The four goals of the Applegate Fire Plan are:[43]

- To improve community awareness of our stewardship of the land and foster a respect for ecosystems and the processes that maintain them.
- To develop a wide array of strategies for fuel reduction and fire suppression that Applegate residents can accept as sensible precautions against catastrophic fire and that the agencies that manage land in the Applegate can incorporate into their current management practices.
- To develop a system of emergency communications for the Applegate neighborhoods.
- To restore fire-adaptive species in the ecosystems, thereby encouraging more fire-resilient forests.

Three years after the Applegate Fire Plan was printed, more than half of the hazardous fuel reduction strategies that were outlined in the Fire Plan have either been completed or are in the federal planning stages. These treatments have already been tested and found to alter or slow wildfire behavior. As well, over 90% of the Applegate Valley Fire District's homes have completed defensible space.

Ashland Community Wildfire Protection Plan

The Ashland Community Wildfire Protection Plan was formulated in the summer of 2004, primarily in response to a planning proposal put forth by the Ashland Ranger District to contain fires and restore forests in the Ashland Creek watershed, source of the city's drinking water. This proposal, called the Ashland Forest Resiliency Project, was made under the Healthy Forests Restoration Act of 2003. The Ashland CWPP primarily addresses the watershed plans by proposing an alternative treatment option, but also recaps all wildfire planning, prevention, and response efforts in Ashland. In response to the availability of National Fire Plan grant funds for fuels mitigation, the City commissioned a WUI risk assessment in 2001. This document is titled the Ashland Wildland Urban Interface Wildfire Management Inventory. This inventory is in the appendix of the CWPP. All of the Ashland CWPP is viewable on-line at www.ashland.or.us/cwpp.

Colestin Community Wildfire Protection Plan

http://www.crfd.org/community-fire-safety-plan.htm

The Colestin Plan process began in May of 2004, leading to a completed Community Wildfire Protection Plan (CWPP) in June of 2005. Colestin used community surveys to develop a list of community values at risk and significant issues. Several key issues have been or are being addressed by the Colestin Community including: emergency communications, road and address signage, and community emergency response teams. The Colestin CWPP states *"Our mission is to develop a CWPP that leads to increased fire preparedness and enhanced response by outlining specific projects to be accomplished by CRFD, HVFC and their residents. We recognize that fire is a natural and important influence on local landscapes. Nonetheless, people living in the Wildland-Urban Interface seek to protect ourselves, our homes and property, and the natural environment from the extreme destruction of high intensity fires. It is hoped that by working to reduce potential for such catastrophic fires we may even derive some ecological benefit from lower intensity fires that may burn.[44]"*

Seven Basins Community Wildfire Protection Plan

http://extension.oregonstate.edu/sorec/Forestry/SEVENBASINSCOMMUNITYWILDFIREPROTECTIONPLAN.php

The Seven Basins CWPP grew out of an effort called the Seven Basins Neighborhood Fire Planning Project (SBNFPP).[45] The SBNFPP was funded through National Fire Plan and Jackson County Title III

[43] Applegate Communities' Collaborative Fire Protection Strategy, 2002.

[44] Colestin Valley Community Wildfire Protection Plan. 2005. http://www.crfd.org/community-fire-safety-plan.htm

[45] Bennett, M.G., Perrotti, et al. 2005. *Community Wildfire Protection Plan for the Seven Basins Watershed*. Seven Basins Neighborhood Fire Planning Project. Central Point, OR. Pg.4

grants. Funding paid a half-time employee guided by a steering committee. The SBNFPP had four goals:

1. improve community awareness of wildfire issues;
2. reduce fire and safety risks to individuals, communities, and wildland firefighters through strategic hazardous fuels reduction;
3. promote and maintain active community involvement; and
4. continue collaborative efforts with federal, state, and local agencies and communities.

The SBNFPP promotes strong community involvement, support, and ownership for fire planning and fuels reduction in the watershed. They recognized the need for a CWPP in order to:

I. Facilitate a more strategic approach to fuels reduction in the watershed;
II. Improve interagency coordination and collaboration with private organizations and individuals; and
III. Increase proficiency in securing fuels reduction grants through the National Fire Plan and other sources.

The Seven Basins CWPP includes a risk assessment, a summary of current fuels reduction efforts, recommendations to reduce structural ignitability, and priorities for fuels reduction at large and neighborhood scales. A wildland urban interface (WUI) line is designated in the SBCWPP with the caveat of updating the line to match the Jackson County WUI line once the County's fire plan is adopted.

Josephine County Integrated Fire Plan

Josephine County developed their integrated fire plan in response to the 2002 Biscuit Fire, which burned over 500,000 acres and costs over 150 million dollars. Lessons learned from the fire helped agency and community partners in the County recognize the need for integrated planning and coordination among diverse agencies and organizations to address wildfire risk, hazardous fuels reduction, emergency management and education.

In 2003, Josephine County initiated a collaborative process with local fire districts, county departments, state and federal land management agencies, community organizations, and citizen volunteers to develop a county-wide fire plan. Representatives from these groups dedicated significant time to attend meetings and join committees to develop goals and objectives for the fire plan, identify needs, and develop recommendations to reduce wildfire risk in the county. On November 8th, 2004 the Josephine County (OR) Board of County Commissioners adopted the Josephine County Integrated Fire Plan (JCIFP). Since that time, public and private partners have been implementing activities related to:

- Strengthening risk assessment through data collection and analysis;
- Increasing coordination of emergency management activities;
- Fostering public education, outreach, and citizen participation in reducing wildfire risk;
- Conducting landscape fuels reduction treatment on public and private land; and
- Pursuing economic opportunities including stewardship contracting and biomass utilization to sustain fuels reduction and reinvest in local communities.

The Josephine County Integrated Fire Plan provided a framework for the planning process to develop the Jackson County Integrated Fire Plan. Jackson County wanted to utilize existing information and knowledge and build on the lessons learned by Josephine County. One of the first elements Jackson County utilized was the wildfire risk assessment that Josephine County initially piloted with the Oregon Department of Forestry. The assessment methodology used data on risk, hazard, values, protection capability, and structural vulnerability. ODF has used the methodology to conduct a statewide assessment of communities at risk, and many communities and counties have also implemented the assessment as part of their community wildfire protection plans. The Josephine County Integrated Fire

Plan can be downloaded at: http://www.co.josephine.or.us/SectionIndex.asp?SectionID=158. Information on current activities related to the JCIFP can also be found on this website.

Chapter 4: Forest Conditions and Wildfire

Southwest Oregon Forests - Unique and Challenging

Used with permission from Tom Sensenig, Ph.D., U.S. Forest Service, Ecologist. Excerpted from *Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization*

Southwestern Oregon forests exhibit extraordinary species diversity, ranking amongst the most diverse of all northern temperate forests. All northwestern plant formations dominated by trees occur in this area. The climate of southwestern Oregon is cool and wet in the winter and among the hottest and driest in the western Cascades in the summer. Because of this relatively dry climate and historically frequent fire events, the plant communities of southwestern Oregon tend to be found in smaller assemblages than in wetter environments found elsewhere in the northwest. This is partly due to the fact that resources, such as nutrients and growing season, are often limited, leading to abrupt environmental gradients. Slight variations in aspect and elevation can improve growing conditions sufficiently to influence which vegetative community will persist. This is also true at higher elevations where abrupt shifts in tree species composition are frequently observed. As a result of these and other factors, the forests in southwestern Oregon tend to exhibit great variability and exist in patches, varying in size and species composition. Managing such diverse forest landscapes is complex and presents a whole host of challenges both ecologically and administratively.

Current Situation

In recent years, forests throughout the southwestern region of Oregon have been observed to be under extreme environmental stress. This stress is due in part to unnaturally high tree densities as a result of fire exclusion. Although forests of all ages are exhibiting symptoms of stress, mortality has been most prevalent in older forests among large trees. Exacerbated by extended periods of low precipitation, many forests have lost and are continuing to lose a relatively high proportion of the older trees to density-induced mortality. This is cause for concern given that, in part, the Bureau of Land Management's (and Forest Service's) goal and mission is to restore and promote healthy forest ecosystems and habitats that include large trees.

Fire suppression efforts have clearly been effective in southwestern Oregon. Since 1920, over 5,265 lightning ignited wildfires have been extinguished by suppression personnel on lands administered by the Medford District BLM and the surrounding National Forests. The average size of these fires reached only about 15 acres, and less than 6% attained a size greater 1000 acres. It is presumed that historically, fires like these would have continued to burn across the landscape, perhaps throughout the entire dry season (June-October) until extinguished by fall precipitation. Even during summer thunderstorms, it is likely that parts of the landscape would escape precipitation, allowing for continued burning across a large region.

Prior to fire exclusion and in the absence of influences such as roads, farmland and European settlement, fires likely meandered throughout the forests year after year, modifying the forest vegetation and structure with every pass. In time, only ecological processes and species able to persist in the presence of frequent fire prospered, creating forest ecosystems that were not only adapted to frequent fire but dependant upon it. In the absence of frequent fire, ponderosa pine trees that thrived in fire prone environments became out-competed by more shade tolerant species, most commonly Douglas-fir. As a result, ponderosa and sugar pine trees, which are ecologically important for their contribution to the region's biological diversity and habitats, are rapidly declining in abundance throughout southwestern Oregon, creating landscapes of more homogenous and fire susceptible Douglas-fir. In addition, in the absence of frequent fire, organic material has been accumulating on the forest floor at unprecedented

levels, creating the potential for fires of greater and uncharacteristic intensity. High intensity fires are much more likely to reduce seed bank propagules, diminish soil structure, and cause extensive tree mortality and loss of habitat.

Both young and old forests throughout southwestern Oregon are becoming increasingly at risk of encountering fires of greater intensity. Even in old-growth stands, fire exclusion has facilitated an increase in under story vegetation, creating ladder fuels, and increasing the potential for canopy damage and stand mortality in the event of a fire.

The basic principle of forest ecosystem restoration is to identify the natural processes that historically sustained forest productivity, and then manage the existing resources utilizing an understanding of these processes. Therefore, silvicultural techniques including harvesting, thinning and prescribed burning must be utilized across the landscape to restore or partially mimic the historic role that fire once played.

Traditional Use of Fire and Native American Tribes

Archaeological evidence shows that Native American tribes arrived in Southern Oregon roughly 11,000 years ago.[46] Native tribes inhabited the lowland areas of the Rogue Valley year-round and used mid and upper elevations seasonally for hunting and gathering.[47] Major village sites were located along lower Ashland Creek, the Little Applegate, near Gold Hill, Prospect, and many smaller sites along the lower drainages of Jackson County watersheds.[48] During the end of the last ice age, the vegetation and fauna of Jackson County would have been greatly different than it is today. Evidence in the Upper Rogue River indicates that native peoples would have hunted now-extinct giant bison and mammoth. As the climate and vegetation changed over the next several thousand years, the types of food gathered and hunted by native people changed along with techniques to enhance these food sources.[49]

Fire was a major tool used by many tribes to influence the production of certain plants, maintain habitats, and during hunting. Many of the primary food producing plants such as huckleberry, serviceberry (Saskatoon), bulbs, blackberries, acorns, hazelnuts, sugar pine, chinquapin, and madrone are primarily early seral species that respond positively to burning. Frequent burning ensured that adequate resources (sunlight, water, nutrients) were available for these favored food plants. Fire was also used in hunting to "round up" game, making it easier for hunters to capture or shoot (with bows) the animals. Although hunting pressures on game may have been locally intense, frequent fires would have favored species and habitats that game would have found favorable, therefore balancing the hunting pressures on the population.[50]

Oregon/Northwest Fire and Fire Management History

The Pacific northwest has a long fire history beginning in prehistoric times when conditions first permitted lightning and terrestrial vegetation to co-exist, through the settling of this area and use of fire by Native Americans, and finally through changes in wildfire regimes brought on by Euro-American settlement throughout the area.

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[46] LaLande, Jeffrey M. 1997. *Environmental history: historic human processes influencing the Little Butte Creek Watershed.* Prepared for the Rogue River National Forest and Medford District BLM.

[47] LaLande, Jeffrey M. 1980. *Prehistory and history of the Rogue River National Forest: a cultural resource overview.* Rogue River National Forest. http://soda.sou.edu:8080/soda/main.jsp?flag=browse&smd=3&awdid=19

[48] Ibid.

[49] LaLande, Jeffrey M. 1997. *Environmental history : historic human processes influencing the Little Butte Creek Watershed.* Prepared for the Rogue River National Forest and Medford District BLM. http://soda.sou.edu:8080/soda/main.jsp?flag=browse&smd=3&awdid=12

[50] LaLande, Jeffrey M. 1997. *Environmental history : historic human processes influencing the Little Butte Creek Watershed.* Prepared for the Rogue River National Forest and Medford District BLM. Online: http://soda.sou.edu:8080/soda/main.jsp?flag=browse&smd=3&awdid=12

As European explorers came to Oregon, they noted the presence of smoke and burned vegetation. David Douglas (whose name was given to Oregon's state tree, the Douglas-fir) described the charred landscape, largely due to Native American burning practices, as he made his way south through the Willamette Valley into the Umpqua basin in 1826. Douglas's party often found it difficult to camp, find forage for horses, and walk on the stubble left behind by recent fires.[51] Native American burning practices were similar in the Rogue River basin and Jackson County, as noted later in this chapter.

Euro-American settlement of Oregon's valleys began a drastic change in the relationship between man, fire, and forests[52]. As agriculture replaced hunting and gathering as the predominant land use, fire was a commonly relied up tool. Just as Native Americans had done, the first settlers used fire to clear land. It was likely a mix of settlers and indigenous peoples who set fires in the late 1840's that burned nearly a million of acres over multiple years near the Siuslaw and Siletz rivers. Interestingly, as settlements became permanent towns and cities, the largest complaint was not fire itself, but the smoke. Smoke was so thick along the Columbia River that officials almost put up lighthouses to help ships navigate in the smoke. 1868 was another particularly active fire season in Oregon's history. It's estimated that over 1 million acres burned that year along the Pacific coastline. Driven by strong east winds, major fires near the mouth of the Columbia River and Coos Bay cast large parts of the state under a veil of smoke. Property damage was limited due to the unsettled nature of the area. The history of fire in Oregon and the northwest was only heating up in the late 1800's as settlers poured into the area and logging, mining, and grazing took hold as dominant land uses and all as causes of fires.

It was during this time that the tide of flames began to change, albeit slowly. The model of modern firefighting was being created in New York's Adirondack and Catskill Forest Reserves, where the deep roots of fire protection ran back to at least 1760, when a fire warden system was adopted among several counties. This system was bolstered over time and led to fire protection sponsored by the State of New York in conjunction will local governments. It was both in New York and in Yellowstone Park where firefighting policy changed from a defensive strategy to successful attack on fires over a large part of a landscape. This policy of total fire suppression was to be further legitimated as timber management on a large scale spread into the forests of the nation, creating a value to protect and motivation to invest in fire management.[53]

The creation of federal forest reserves started in 1891 when Congress passed the Land Revision Act, giving the president power to reserve forest lands. Lands throughout Oregon were set aside in 1892-1893, including the Cascade and Ashland Forest Reserves.[54] The creation of the reserves allowed the federal government to patrol and suppress fires as a matter of policy for the first time. Despite the early suppression efforts, fires still burned as evidenced by this quote from an Ashland Forest Ranger:

"The fiercest timber fire that has ever taken place close to Ashland has been raging along the hillsides of the Ashland Creek Canyon for the past three days, and its work of destruction was only placed under control last evening"

-Ranger W. Kripke. August 26, 1901[55].

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[51] Stephen J. Pyne. *Fire in America: A Cultural History of Wildland and Rural Fire.* 1982. Princeton University Press, New Jersey. Pg 335.

[52] Ibid. 336.

[53] Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire.* 1982. Princeton University Press, New Jersey. Pg. 225.

[54] Wilma, David. February 28, 2003. "Congress establishes the first federal forest reserves on March 3, 1891", Online Encyclopedia of Washington State History. *http://www.historylink.org/*

[55] McCormick, R.J., et. al. 1992. *Ashland Forest Plan.*. City of Ashalnd. Online: *http://www.ashland.or.us/Files/Forest%20Plan%201992..pdf*

Timber companies became part of the battle after realizing losses in timber supply to large fires. Federal forest rangers and industry sponsored fire patrols began to gain ground on careless land-users from campers to sheep grazers, but not necessarily on fires themselves. Another summer and fall of widespread fire and smoke in 1902 spurred more common use of fire patrols in the following years. Cooperative fire patrols were popping up all over the country and the Pacific states were no exception. By 1909, cooperative fire protection had evolved into the Western Forestry and Conservation Association[56], which ironically proceeded one of the most noteworthy years in wildfire history, 1910. Five million acres of national forests burned and eighty-five people died in fires in 1910, nearly all firefighters.[57] The U.S. Forest Service was created just prior to this period, and the fires of 1910 put the Forest Service at the forefront of forest fire policy and suppression.

Although protection and prevention efforts continued, major fires burned Oregon's forests through the early part of the 20th century, but none like the legendary Tillamook Burn. Actually a series of fires, the first of the legendary Tillamook Burns, swept through prime forestland in Tillamook County in 1933. The 1933 fire was the largest, consuming 239,695 acres, nearly 200,000 of those acres in one twenty-hour period.[58] Subsequent fires in 1939, 1945, and 1951 burned an additional 402,490 acres, some re-burning the same acres two or three times over.[59] The Tillamook burns rallied communities, bringing out hundreds of workers to plant millions of trees in the years following. Interestingly, the Tillamook burn pioneered the use of large, organized crews of firefighters from the Civilian Conservation Corps (CCC), which were later on the Siskiyou National Forest in the 1940's.[60] Another modern firefighting mainstay, the smokejumpers, were given the first test in Washington State soon after the CCC experience at Tillamook.

World War II altered the nation's view of wildfire. The association of fire with the destruction of many European cities and with the atomic bomb cemented forest fire suppression in a deeply militaristic mode. The technology and capacity created during the wartime effort was put to use creating a fire fighting army. Although aircraft were used for fire detection as early as the 1920s, the use of planes to drop retardant on fires didn't happen until 1956.[61] A helicopter attack program was developed in a partnership with the Forest Service and the Army Corps of Engineers. A major triumph was made in 1966 when the Oxbow fire (in Oregon) was stopped in the face of a strong east wind, which was notorious for fanning conflagrations such as the Tillamook Burn. A milestone policy resulted from the success of mechanized fire suppression. The "10 a.m. Policy" was adopted, where crews intended to extinguish all fires by 10 a.m. the following morning. Although this policy was eventually modified, the legacy of this policy remains. Despite the increased success at putting out fires with modern technology, forests and communities have continued to burn during the modern history of wildfire suppression.

Although fires were controlled and suppressed with increasing success, large fires continued to burn across the region, including Jackson County. The Ashland Watershed fire of 1959 nearly burned all of the Ashland Watershed, and another fire in 1973 almost did the same from the opposite side of the town. Recent wildfires in Jackson County include: the 1994 Hull Mountain fire which burned 8,000 acres; the 2001 Quartz Mountain fire which burned 6,300 acres; the 2002 Squires Peak fire which burned 2,000 acres and threatened many homes, and the 2002 Timbered Rock fire which encompassed 27,000 acres[62]

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[56] Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire.* 1982. Princeton University Press, New Jersey. Pg. 339.

[57] Ibid. pg 241

[58] Ibid. pg 339.

[59] Tillamook county website http://www.tillamoo.com/burn.html.

[60] Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire.* 1982. Princeton University Press, New Jersey. Pg. 341.

[61] Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire.* 1982. Princeton University Press, New Jersey. Pg. 443.

[62] Jackson County Emergency Operations Plan. 2004. Jackson County, Oregon. Online:

Wildland-Urban Interface Fires in Oregon

The history of wildland urban interface fires is an important reference point for current wildfire safety efforts. Interestingly, many of the catastrophic fires in Oregon's history affected the coastal towns and forests, regions not typically associated with fires in more recent history (see table 4.1). During the settlement of Oregon (mid 1800's), human caused fires ravaged the forests and settlers. In 1864, the State passed a law that protected settler's homes from fires set by other settlers.[63] However, it was little heeded or enforced and fires continued to affect homes and towns. The largest losses of structures and life occurred in the coastal towns of Bandon and Astoria. Bandon literally burned to the ground in 1914 and again in 1936, when 11 people perished in the fire. Only 16 out of 500 buildings made it through the fire.[64]

"Carried by an east wind of gale-like force, a forest fire swept into the town of Bandon late on the evening of September 26, practically wiping out the town and resulting in the death of 11 persons."
- The Forest Log, the Oregon Department of Forestry's newsletter[65]

Many communities throughout Oregon had close calls with wildfires in 1936. Homes were lost, but the towns of Myrtle Point, Yachats, Lincoln City, Alsea, Depoe Bay, Estacada, Detroit, Niagara, and Mill City managed to avoid the flames through a mixture of luck and aggressive fire-fighting techniques.

In the post World War II era as urban and suburban areas became populated and incomes rose, more and more people fled the cities and settled in the forested areas of Oregon. Some found out the hard way that they had moved into high risk areas. The term "Wildland Urban Interface" gained popularity to describe the new challenges of managing wildfires in a populated area.

Southwest Oregon has had its share of destructive fires. The East Evans Creek and Hull Mountain fires in Jackson County both burned homes and the Hull Mountain Fire cost a firefighter his life.[66]

Table 4.1. Oregon's Most Destructive Wildland/Urban Interface Fires

Year	Fire Name	Acres Burned	County	Structures Burned	Cost
1936	Bandon	Unknown	Coos	484	Unknown
1987	Bland Mountain	10,300	Douglas	14	Unknown
1990	Awbrey Hall	3,400	Deschutes	22	$2.2 million
1992	Sage Flat	991	Deschutes	5	$1.2 million
1992	East Evans Creek	10,135	Jackson	4	$8.2 million
1992	Lone Pine	30,727	Klamath	3	$500,00
1994	Hull Mountain	8,000	Jackson	44	$10 million
1996	Skeleton	17,700	Deschutes	17	$2 million

http://www.co.jackson.or.us/files/eop%20p1.pdf

[63] Oregon Department of Forestry. *A Short History of Wildland Urban Interface Fire in Oregon.* http://egov.oregon.gov/ODF/FIRE/SB360/wui_history.shtml

[64] Ibid.

[65] *A short history of wildland/urban interface fire in Oregon.* Oregon Department of Forestry http://egov.oregon.gov/ODF/FIRE/SB360/wui_history.shtml

[66] Ibid.

Year	Fire Name	Acres Burned	County	Structures Burned	Cost
2002	Eyerly	23,573	Jefferson	37	$10.7 million
2002	Cache Mountain	4,200	Deschutes	2	$4.3 million
2002	Sheldon Ridge	12,761	Wasco	8	$3.3 million
2002	Squires Peak	2,804	Jackson	6	$2 million
2002	Biscuit	499,965	Josephine/Curry	14	$150 million

Sources: Forest Log, National Interagency Coordination Center situation reports

The wildland-urban interface is a challenge yet to be conquered. Homes continue to burn in WUI fires across the country and in Jackson County. Looking back, the lessons learned by communities, homeowners, and fire agencies can be used to inform and improve current level of preparedness. Chapter 7 of the JaCIFP contains important information for homeowners and fire services about home fire safety. History proves that the saying "It won't happen to me" is not necessarily true. Wildfire *does happen* to residents in Jackson County.

Wildfire Causes

The Oregon Department of Forestry (ODF) Southwest Oregon unit has kept fire records since 1960. The causes of wildfires have not changed much over time but the causes have illustrated trends. There have been notable declines in fires caused by smoking and railroads. Notable increases in fire starts during this time period are attributed to recreationists and equipment. The highest number of fire starts, most costly fires, and most acres burned are due to lightning strikes. Lightning fires outnumber the second most common cause by a margin of two to one (see Table 4.2).

Table 4.2. ODF Central Point Office Wildfires by Cause 1960-2005[67]

Wildfire Causes 1960-2005	Percent of all fires	Trend
Lightning	33.7%	Stable
Equipment	16.81%	Increase
Miscellaneous	10.59%	Stable
Debris Burning	9.87%	Stable
Smoker	9.65%	Decrease
Arson	7.16%	Stable
Juvenile	5.95%	Decrease
Recreationist	4.52%	Increase
Railroad	1.74%	Decrease

Fire Regime Condition Class

A **fire regime** is the characteristic fire occurrence, size, severity, and fire effects in a given area or ecosystem assuming no human intervention except Native American use of fire.[68] Fire regimes are characterized by the intensity of the disturbance to the forest and how often the characteristic disturbance occurs. Fire regimes include the following:

I. 0-35 years Low severity to mixed severity - Low severity is characterized by frequent ground fires

[67] Oregon Department of Forestry, Central Point. Fire Cause Data 1960-2005. Unpublished.

[68] Agee, J.K. 1993. *Fire Ecology of the Pacific Northwest Forests.* Island Press. Washington, D.C.

and relatively low mortality of trees. Mixed severity is characterized by less than 75% overstory mortality in relatively small areas;

II. – 0-35 year frequency and high (stand replacement) severity – Greater than 75% of the dominant overstory vegetation replaced;

III. – 35-100+ year frequency and mixed severity - Less than 75% of the dominant overstory vegetation replaced;

IV. – 35-100+ year frequency and high (stand replacement) severity - Greater than 75% of the dominant overstory vegetation replaced;

V. – 200+ year frequency and high (stand replacement) severity - Greater than 75% of the dominant overstory vegetation replaced.

Condition class is a particular area's departure from its historic fire regime.[69] Departure from an historical fire regime can result from an altered frequency or severity of fire when compared with the historical natural range of variation in the ecosystem. The following table shows the three major categories of condition class with a brief description of implications.[70]

Table 4.1 Three Categories of Fire Regime Condition Class

Condition Class	Description	Potential Risks
Condition Class 1	Within the natural (historical) range of variability of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances	Fire behavior, effects, and other associated disturbances are similar to those that occurred prior to fire exclusion (suppression) and other types of management that do not mimic the natural fire regime and associated vegetation and fuel characteristics. Composition and structure of vegetation and fuels are similar to the natural (historical) regime. Risk of loss of key ecosystem components (e.g. Native species, large trees, and soil) is low.
Condition Class 2	Moderate departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances	Fire behavior, effects, and other associated disturbances are moderately departed (more or less severe). Composition and structure of vegetation and fuel are moderately altered. Uncharacteristic conditions range from low to moderate; Risk of loss of key ecosystem components is moderate.
Condition Class 3	High departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.	Fire behavior, effects, and other associated disturbances are highly departed (more or less severe). Composition and structure of vegetation and fuel are highly altered. Uncharacteristic conditions range from moderate to high. Risk of loss of key ecosystem components is high.

[69] Hann, W.J., Bunnell, D.L. 2001. Fire and land management planning and implementation across multiple scales. Int. Wildland Fire. 10:389-403. Online: www.frcc.gov

[70] Hardy, C.C., Schmidt, K.M., Menakis, J.M., Samson, N.R. 2001. Spatial data for national fire planning and fuel management. International Journal of Wildland Fire 10:353-372. Online: www.frcc.gov

Fire and Fuels Management Implications

Fire regimes and condition class are commonly used by federal land managers to identify and prioritize projects for restoration and hazardous fuels mitigation treatments. Condition Class is mentioned specifically in the 2003 Healthy Forests Restoration Act as a means of prioritizing and tracking fuels reduction and forest restoration work across federal lands. Fire regime and condition class are reported for all projects and the data feeds into the National Fire Plan Operating and Reporting System (NFPORS). Changes in condition class are recorded as the potential fire effects are lessened by restoration and fuels reduction treatments.

Fire Suppression

Wildfire suppression in Jackson County falls under the responsibility of multiple fire agencies at various levels of government. At the federal level, the U.S. Forest Service (Rogue River-Siskiyou National Forest) maintains fire fighting crews and equipment on staff and can hire contract resources during a fire to augment federal resources. The Rogue River Hot Shots, a highly trained (Type 1) 20-person crew, is based out of the Prospect Ranger District. A key resource maintained in Medford is the air tanker base. The tanker base is funded and operated through State of Oregon severity funding, U.S. Forest Service funds, County grant funding, and by operational funds dedicated during a wildfire incident[71]. Other aerial resources include a Rogue-Siskiyou National Forest helicopter rappel team stationed in Merlin and helicopters for aerial surveillance and suppression of fires.

The Medford District BLM contracts wildfire protection duties to the Oregon Department of Forestry, but also maintains a staff of approximately 140-160 firefighters trained in fire fighting and the various sections of the Incident Command System (operations, planning, finance, and logistics). BLM employees can be called on by ODF and Forest Service to work on a fire in a variety of roles. The contract with ODF is for direct suppression activities and overhead management of suppression although there are BLM overhead trained personnel who often manage a fire to free up ODF personnel for other fires or initial attack responsibilities. The BLM district manager maintains land management responsibility and BLM representatives serve on multi-agency coordinating groups and as part of unified command. A representative from BLM, including a resource advisor, is appointed to each fire to assist with land management issues related to the fire. The BLM jointly participates in agreements for aerial firefighting.[72]

Oregon Department of Forestry

The Oregon Department of Forestry (ODF) is the agency responsible for wildfire protection on private, county, state, and BLM administered lands in Jackson County. During fire season, ODF provides this protection by staffing ten fire engines at stations scattered throughout the county, and 3 engines, one small hand crew, and one bulldozer in Central Point. ODF has mutual aid agreements with all of the rural fire agencies in Jackson County, and maintains close cooperation with the U.S. Forest Service, BLM, adjoining ODF units, and industrial forestry landowners. In addition, when fires burn beyond initial attack, ODF is geared up to obtain fire overhead teams, bull dozers, hand crews, fire engines, helicopters, retardant planes and any other fire fighting resources necessary to control wildfires.[73]

Cooperation with the rural fire agencies allows for effective initial attack on many fires in the interface area because any fire agency can take initial attack actions to stop the spread of wildland fires. This cooperation is promoted by working under the incident command system, which allows for a coordinated, structured effort between fire agencies from initial attack through extended attack. ODF's priorities are life, resources and property. ODF is not trained, funded or equipped to fight structure fires.

[71] Greg Alexander, Oregon Department of Forestry Unit Forester. Pers. Comm. 2006.
[72] Tom Murphy, Medford District BLM. Pers Comm. 2006.
[73] Greg Alexander, SW Oregon Unit Forester, Oregon Department of Forestry. Pers. Comm.

Rogue Valley Fire Chief's Association Structural Protection Task Force

During a wildfire incident in Josephine or Jackson counties, incident commanders can call on a special task force that mobilizes fire engines and personnel from fire departments in the two counties. This agreement between the fire departments allows for an increased ability to protect homes or other structures during a wildfire, far beyond what local fire departments could accomplish without the task force.

State of Oregon Conflagration Act

"The Conflagration Act was developed in 1940 as a civil defense measure and can be invoked only by the Governor. The act allows the State Fire Marshal to mobilize firefighters and equipment from around the state and provides for the funding of resources through state funds. The Conflagration Act is **only** used for fires that involve or **threaten life and structures**.

How is the Conflagration Act invoked?

The local fire chief and county fire defense chief assess the incident status with the following kinds of questions in mind.

- Are there structure fires not controlled due to sheer size and/or speed of the fire?
- Is a wildland fire threatening structures?
- Have all local and mutual aid resources been depleted?
- Would mobile support resources be effective?

If the answers are yes, then the county fire defense chief notifies the state fire marshal through the Oregon Emergency Response System. The state fire marshal decides, in discussion with the county fire defense chief, if the situation warrants Conflagration Act implementation. Once decided, the state fire marshal notifies the governor, who authorizes the act to be invoked. At this point, the *Fire Service Mobilization Plan* becomes effective[74]."

The Fire Service Mobilization Plan

"The Fire Service Mobilization Plan[75] is a guide for OSFM personnel and emergency responders to use during times of emergency. The plan establishes operating procedures for the most practical utilization of state firefighting resources for emergencies, which are beyond the capabilities of the local fire service resources. It assumes the prior existence of mutual aid agreements, which organize district and regional firefighting forces to cope with local emergencies.[76]"

Commercial Logging Practices

Commercial logging practices on non-federal lands in Oregon are guided by the Oregon Forest Practices Act, Oregon Administrative Rules Chapter 629. The rules are enforced by the Oregon Department of Forestry. State rules include chapters on wildfire prevention during timber harvests, including the system of precaution levels and fire restrictions placed on forest equipment operators each year during fire season. The Industrial Fire Precaution Level (IFPL) restrictions are in Resource B.

Commercial logging practices on federal lands in Jackson County are governed by the Northwest Forest Plan of 1994, the local Forest Service or BLM District's land management plan, and the Record of Decision made for an individual logging project involving federal land. The Forest Service has a set of regulations that apply to forest equipment operators during fire season.

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[74] Office of State Fire Marshall website. Online: http://www.oregon.gov/OOHS/SFM/Conflagration_FAQs.shtml
[75] Oregon State Fire Marshall. Online: http://www.oregon.gov/OOHS/SFM/Emergency_Mob_Plan_Index.shtml
[76] Ibid.

Chapter 5: Wildfire Risk Assessment

CHAPTER 5: WILDFIRE RISK ASSESSMENT

Risk Assessment Objectives and Definitions

The Risk Assessment committee's objective was to create a wildfire risk assessment for Jackson County, including designation of the county's wildland urban interface zone. The risk assessment is a key element of the Jackson County Integrated Fire Plan (JaCIFP) 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."

During the implementation phase of the JaCIFP, the risk assessment committee will update the risk assessment and the boundaries of the wildland urban interface at appropriate intervals.

Overview

What is a Wildfire Risk Assessment?

Natural resource agencies, fire service professionals, and communities facing the threat of wildfires recognize the need for 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.

The JaCIFP wildfire risk assessment establishes the Wildland Urban Interface (WUI) and assesses wildfire risks for communities throughout Jackson County. The JaCIFP Fuels Committee will use this assessment to develop a prioritized list of fuel hazard reduction areas across the county. This assessment fulfills the requirements and guidelines included in the Healthy Forest Restoration Act (HFRA), FEMA Disaster Mitigation Act of 2000, and Oregon's Wildland Urban Interface Fire Protection Act (Senate Bill 360). A number of communities in Jackson County began developing local CWPPs prior to or during the development of the JaCIFP. HFRA allows any local community to declare themselves "at risk" and develop a CWPP, and local plans, assessments and priorities take precedence over the county plan. The Applegate watershed developed a community fire plan that provided the above CWPP requirements prior to HFRA, and that community is well into implementation of their plan. Ashland was one of the first communities in the state to complete a recognized CWPP, followed by the Colestin Fire Department, and the Seven Basins Neighborhood Fire Plan.

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.[77] A wildfire risk assessment is essential for developing a useful and comprehensive wildfire protection strategy and plan at all scales – state, county, and community. A statewide task force recently

[77] Healthy Forest Restoration Act, 2003.

completed Oregon's *Communities At Risk Assessment*, which will affect state and regional level decisions and prioritization. This supports fulfillment of the Memorandum of Understanding (MOU) between the National Association of State Foresters (NASF) and federal agencies, as well as Task E in Goal 4 of the *Implementation Plan for the 10-Year Comprehensive Strategy,* requiring states to identify and assess communities at risk within the state. The statewide *Communities At Risk* assessment also designates community boundaries that are used to establish the WUI boundaries in the absence of a CWPP, and provides guidance for communities in the process of developing or updating local risk assessments to align with the state methodology.

Designating the Wildland Urban Interface Zone

The WUI is defined as the area or zone where structures and other human development meet or intermingle with wildland or vegetative fuels.[78] The Healthy Forests Restoration Act 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; or

(B) in the case of any area for which a community wildfire protection plan is not in effect—

i. an area extending 1½-mile from the boundary of an at-risk community;

ii. an area within 1½ miles of the boundary of an at-risk community, including any land that—

I. has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community;

II. has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or

III. is in condition class 3, as documented by the Secretary in the project-specific environmental analysis; and

iii. an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community.[79]

The Risk Assessment committee considered several options for designating the WUI in Jackson County. The most thorough approach would be to engage all public and private stakeholders with an interest in the wildland urban interface in a process to identify a WUI boundary for individual communities throughout Jackson County. This approach wasn't feasible due to the complexity of the task in a short time frame and with limited funding. However, there is always the opportunity for individual communities to develop local WUI boundaries through the development of their own local Community Wildfire Protection Plans. In the context of the countywide fire plan, the committee looked to existing designations of the WUI and communities-at-risk as a starting point.

The State of Oregon's designated *Communities at Risk (CAR) Assessment* was considered as one starting point for the JaCIFP WUI designation but abandoned by the committee. The State's boundary is useful at a statewide scale, but it did not necessarily represent strategically defensible positions for wildfire suppression at the county level. To address fire management objectives, the committee used the 2004 Southwest Oregon Interagency Fire Management Plan (SWOFMP) as a starting point for defining the Jackson County WUI. The WUI boundary was located around areas where people live or could live (based upon zoning) on strategically superior tactical ground aimed at stopping the progress of a landscape-scale fire while protecting public and firefighter safety. The risk committee, with the assistance of fire behavior analysts, considered the size, location and spread direction of historic large

[78] State of Oregon Natural Hazards Mitigation Plan, 2004.
[79] Healthy Forests Restoration Act of 2003.

fires, as well as strategic geographic boundaries based upon watershed ridge breaks, roads, rivers, etc. They found that the arbitrary boundaries of ½ and 1½ miles used in the CAR designations do not offer adequate fuel treatment opportunities to protect communities from large fires.

Fuels management of public and private land in the WUI is key to the survival of homes during a wildfire event. The importance of this is reflected in forest policy at the federal level, with the Healthy Forest Restoration Act (HFRA) requiring that federal land management agencies spend at least fifty percent of their fuels reduction funds on projects in the WUI.

The committee adopted the WUI line established in the SWOFMP for the JaCIFP, with seven minor changes:

1. Add the area around Union Creek, located just north of Prospect on Highway 62. Homes, infrastructure, and transportation route along Hwy 62 were included.
2. Add the developed areas surrounding Fish Lake and the transportation corridor surrounding Hwy 140. Seasonal cabins, a store, and major transportation route were included.
3. Add the area along Copco road, including strategic suppression zones along the east side of Jenny Creek, including a small subdivision.
4. Add an area west and southwest of Howard Prairie Lake that connects the SWOFMP WUI line, which goes just beyond Hyatt Lake, connecting it to the boundary of Howard Prairie Lake. Includes a new subdivision, recreation infrastructure, and area of high use.
5. Add an area along Dead Indian road in the vicinity of the Keno Access Road surrounding Dead Indian Road to include an area of smaller parcel private ownership where new homes are being built.
6. Adjust the line on the eastern side of Applegate Lake to include a highly used recreation area and scattered homes in French Gulch.
7. To maintain consistency with the watershed boundary concept., add an area including the upper reaches of the West Fork of Trail Creek that was outside the SWOFMP jurisdiction (Umpqua National Forest).

There are two other existing designations for wildfire hazard areas in Jackson County. The County has a designated "wildfire zone" in which the county's wildfire codes apply to new development. In 2006, County staff proposed to reduce the area where the county's wildfire safety code applies (*see Map 6*). The state of Oregon has designated another boundary based on Senate Bill 360 (described in chapter 3). The Senate Bill 360 forest-urban interface boundary was drawn according to density requirements set by the state legislature (*See Map 4*).

The risk committee also considered funding for fuels reduction projects on both private and federal lands within the WUI. On private lands, federal agencies prioritize National Fire Plan projects submitted by communities according to the existence of an accepted CWPP, the designation of a Community at Risk, and adjacency of the proposed project to federal lands at high risk from wildfire. On federal lands, agencies prioritize fuels funds for projects in the WUI, in municipal watersheds, near endangered species habitat, and on Condition Class III lands (defined in Chapter 4). Projects that link private and public fuels reduction efforts are also given high priority. Because communities with an adopted CWPP can submit locations and methods for fuels reduction projects on adjacent federal lands, the JaCIFP WUI line needed to include enough area around each CAR for a community to identify local priorities within the JaCIFP.

Local WUI Boundaries and Countywide WUI Boundaries

Jackson County intends to honor decisions made by communities in locally-adopted CWPPs. County-level decisions do not encompass the same issues (political, social, or ecological) or the same scale of

reference as a local plan. There are two adopted CWPPs in Jackson County where local level WUI designations are different from the adopted WUI boundary in the JaCIFP. Ashland's WUI line differs significantly from the County's designated WUI boundary (see discussion below), and the Seven Basins CWPP urban interface designation differs from the JaCIFP line, but may be adjusted to match the JaCIFP line after it is finalized (*See Map 7*). The Applegate Fire Plan did not designate a WUI, so the JaCIFP WUI boundary was adjusted to meet that community's needs and goals.

Designation of the Ashland WUI Line

The pre-existing Ashland WUI line presented a unique challenge for the Risk Assessment committee during this process. Created in 2004 and accepted by the Forest Service, the Ashland WUI boundary addressed the community-scale, taking into account local issues and values. The Ashland WUI line was drawn much closer to town than the SWOFMP and Jackson County WUI line. The discussion in Ashland addressed fire behavior and community safety, as well as ecological conditions, political implications, and the delicate nature of Ashland's municipal watershed. The discussion in Ashland also addressed how the federal agency would interpret and implement treatments based on the WUI designation.

Some members of the community expressed a concern that management actions inside a WUI necessitate a higher intensity of disturbance that may not be appropriate in a complex and delicate ecosystem. The watershed is home to an endangered species, is the source of the city's drinking water, and is designated as late-successional reserve under the Northwest Forest Plan. The Ashland CWPP allows for more intensive and extensive work in the WUI, but also outlines an ecologically driven strategy for fuels reduction and forest restoration treatments outside the WUI in the upper Ashland Watershed. These treatments may provide strategic fire suppression opportunities similar to the goals previously discussed in the Jackson County and SWOFMP WUI designation. Members of the Ashland community were also concerned about the project funding implications inherent in the WUI designation, and some advocated for a larger WUI to increase the watershed's priority ranking for funding. The HFRA establishes municipal watersheds and lands immediately surrounding as a high priority for funding.

It is important to understand that the Ashland CWPP was only for Ashland; surrounding Communities-at-Risk that border the watershed (upper Wagner Creek and upper Neil Creek) may border part of the Ashland watershed not designated as WUI, but are still included by the larger JaCIFP WUI designation. The risk committee agreed that adjacent communities should have an equal chance for funding if using the JaCIFP WUI in their justifications for grant funding. Finally, committee members expressed concern regarding the extent of the WUI line proposed for adoption in the JaCIFP and how that might affect areas not commonly interpreted as urban interface, such as late successional reserves, roadless areas, and critical habitats across the county. The following points address concerns over the extent of the WUI:

- No matter how large or small the WUI designation, federal agencies are still required to manage areas under their land designations in the Northwest Forest Plan. For example, if late successional reserves are within WUI lines, the habitat is still managed for late successional values as outlined in the Northwest Forest Plan.
- In the SWOFMP, Late Successional Reserves, wilderness areas, and other special designation lands, although not withdrawn from the WUI classification, will need to have their objectives considered by firefighting resources and agency administrators during fire responses, but the protection of life over-rides these objectives. This would hold true on federal lands in the JaCIFP WUI boundary as well.

Risk Assessment Methodology

The Jackson County wildfire risk assessment used the state methodology developed by ODF as a guide for the local assessment. The assessment includes the risk of wildfire occurrence, fuel hazards, wildfire protection capabilities of the communities, and human and natural values threatened by wildfire.

The maps produced by this risk assessment provide a landscape level analysis appropriate for comparing landscapes (watersheds/neighborhoods) throughout Jackson County. Site-specific assessments will be needed to plan at a project level (within smaller communities and neighborhoods).

The JaCIFP risk assessment evaluates the factors listed below using more than 20 data sources. The Risk Assessment committee developed the evaluation criteria and the weight or importance given to each of these individual factors. Each data layer was placed in a mapping model that compared weighting options, and that will be able to process future data up-dates, and documentation of the methodology.

1. Ignition Risk Map: The likelihood of a fire occurring.

This map assesses the likelihood of a fire occurring in any given area, based upon historic wildfire ignition locations from the Oregon Department of Forestry (ODF), Bureau of Land Management, and US Forest Service. Eighteen years of data (1986-2003) was used. A density grid was created using the ignition points and converted to fires per 1,000 acres per 10 years. Finally, this layer was normalized to a 1-10 scale (lowest to highest risk). *See Map 6.*

2. Hazard Map: Resistance to control once a wildfire starts (weather, topography, and fuel that adversely affects suppression efforts).

This map identifies areas where the condition of vegetative fuels is such that, if ignited, they would pose a significant threat to the community, its essential community infrastructure, or other resources. Four factors are evaluated and weighted as described below, and normalized to a 1- 10 scale (lowest to highest risk). *See Map 7.*

Factor	Factor Weight
Vegetative Fuels	32%
Crown Fire Potential	10%
Topography	32%
Insect and Disease Mortality	26%

Vegetative Fuels: This layer evaluates the vegetative fuels on federal and nonfederal land. The vegetation and related fire-potential data used to determine both surface fire behavior and crown fire potential are inferred from 1996 satellite imagery (source: IVMP), using the same data and process as the neighboring Josephine County Integrated Fire Plan. (There was considerable discussion by the Risk Assessment committee on the lack of brush fields in this layer. Because this is a significant source of fuels in the county, it was determined that new data from the LANDFIRE mapping project must be utilized as soon as it is available to update this layer.) Four classes resulted in this assessment based upon the percentage of vegetative cover (trees and shrubs):

Rating	% Vegetative Cover
(0) None	Water, Urban
(1) Low	0-30%
(2) Moderate	30-70%
(3) High	70-100%

Crown Fire Potential: This layer evaluates the potential for crown fire, the most destructive and difficult to control fire type (as compared with to surface fires) using the same data source and process as the Josephine County Integrated Fire Plan. It first isolates areas with coniferous trees diameter at breast height (DBH) greater than five (5) inches. These areas are then classified by percent conifer cover as follows:

Rating	% Conifer Cover with DBH > 5"
(1) Low	0-30%
(2) Moderate	30-70%
(3) High	70-100%

Weather (climate): This layer, which is part of the statewide assessment methodology, was NOT used in the final assessment option approved by the *Risk Assessment Committee.* Its purpose is to assess the affect of weather on fuels. However, the state rating is the same for the entire county. Local effects of climate are adequately assessed in the topography factor below.

Topography: Three factors are used to assess the effect of topography on fuels - slope, aspect, and elevation .

Rating	Slope	Aspect	Elevation (ASL)
(1) Low	0-25%	N, NW, NE	5001+ feet
(2) Moderate	26-40%	W, E	3501-5000 feet
(3) High	>40%	S, SW, SE	0-3500 feet

Insect and Disease: This layer identifies areas affected by insect and disease epidemics where fuels treatment would reduce wildfire risks to communities and/or their essential infrastructure. Aerial surveys from 1990-2005 are used (source: ODF Communities At Risk Assessment). This data was recognized as one of the most recent and valuable sets available.

Rating	Dead Trees per Acre (TPA)
0 TPA total damage	0 TPA total damage
.1-.9 TPA total damage	.1-.9 TPA total damage
1-2.9 TPA total damage	1-2.9 TPA total damage
3+ TPA total damage or 3 years of spruce budworm defoliation	3+ TPA total damage or 3 years of spruce budworm defoliation

3. Protection Capability Map

This layer illustrates the capability of fire districts or communities to respond to wildfires based on the response times of structural and wildland agencies and the existence of a structural fire protection

agency. The data was derived from local 9-1-1 dispatch records. (Other factors related to the level of a community's emergency preparedness, including evacuation planning, safety zones, and fire assistance agreements, as well as the response capability of community and cooperating fire protection agencies are addressed in the plan, but are not part of the risk assessment at this time.) Two factors are evaluated and weighted as described below and normalized to a 1- 10 scale (lowest to highest risk). *See Map 8.*

Factor	Factor Weight
Dispatch Response Time	75%
Fire District	25%

Dispatch Response Times: This layer evaluates the time it takes for the first fire service responder to reach an incident. Response data (all fire department responses, 2002-2004) from the Southern Oregon Regional Communications Center (SORC) are assigned to address locations using a geocoding process. Areas within with 660 feet of U.S. and state highways and county maintained roads are classified into three classes, described below based upon the time from call entry to on-scene.

Rating	Response Time (minutes)
(1) Low	0-10
(2) Moderate	10-20
(3) High	20+

Fire District: This layer evaluates the benefits of being within a structural fire protection district.

Rating	Within a structural fire protection district.
(1) Low	Yes
(2) High	No

4. Values At Risk Map

The values-at-risk map illustrates human and economic values associated with communities or landscapes. This map identifies specific human improvements and other values within or adjacent to the community, such as homes, businesses, and essential infrastructure that would be adversely impacted by wildfire. Four factors are evaluated and weighted as described below, and normalized to a 1- 10 scale (lowest to highest risk). *See Map 9.*

Factor	Factor Weight
Residential Housing	65%
Critical Infrastructure and Habitat	10%
Municipal Watersheds	20%
Commercial Forests	5%

Residential Housing: This layer evaluates the density of residential structures. A density grid was created from point locations of residences (source: Jackson County GIS) and converted to residences per square mile. Finally, this layer was normalized to a 1- 10 scale (lowest to highest risk).

Critical Infrastructure and Habitat: This layer identifies the following values – schools, fire stations, antenna sites, substations, airports/helispots, hospitals, dams, and critical habitat. Each point was buffered ¼ mile. The buffered areas for each type was converted to a grid and added together.

Municipal Watersheds: This layer identifies the presence of watersheds important for municipal water supply. The Ashland watershed and Medford's Big Butte Springs are mapped.

Commercial Forests: This layer evaluates potential economic loss of commercial forests based upon use (source: ODF)

Rating	Potential Forest Use
(1) Low	Non-Forest Or Reserve
(2) Moderate	Multi-Resource Managed Forests
(3) High	Private Production Forests

5. Composite Rating Map

This map reflects a composite rating of all four factors based upon the following weighting table. The composite rating was normalized 1-5 (lowest to highest risk). It is important to note that while there is value in utilizing a composite map for setting priorities, using the maps with each individual element is also necessary for planning. *See Map 10.*

Factor	Factor Weight
Ignition Risk	15%
Hazard	35%
Protection Capability	15%
Values At Risk	35%

Strategic Planning Units

Development and evaluation of Strategic Planning Units (SPU) is useful for prioritizing treatment on landscapes by aggregating data and sorting factors such as the number of at-risk residences (residences within ¼ mile of a composite rating of 3-5), average composite scores, and acres of federal land. The SPU boundaries (*see map 11*) are based primarily upon 6th field watersheds to reflect firesheds, but were modified as follows:

- Non-forest areas (proposed areas to be excluded from the county wildfire siting standards) are separated out and named based upon the fire jurisdiction. This is done to reduce the effect of aggregating scores for non-forest areas into otherwise high hazard SPU's.
- Watersheds split by these non-forest areas (above) or major highways are identified separately IF evaluation factors appeared to be significantly different between the two areas.
- The WUI boundary split some watersheds. Areas inside the WUI are identified separately from the portions outside.
- The above actions created small SPU's (less than approximately 1,000 acres).
- Some SPU's were evaluated and merged with others as seemed appropriate. For example, in the initial analysis, the community of Union Creek was split into at least three watersheds. These were merged and renamed Union Creek.

The table below lists the SPU's and aggregate information. The SPU rating is based upon the number of At-Risk residences within the SPU. The table is sorted by this number. The rating used in the SPU map is based upon the following criteria:

Rating	# of At Risk Homes
(1) Moderate	< 25
(2) High	25-150
(3) Extreme	>150

See Resource D for a list of all Jackson county SPUs with acreages, numbers of homes, and ratings.

Challenges

Data

The Risk Assessment Committee developed data products that have not been available in the past. Every effort was made to use the best data available statewide. However, in evaluating best available data, some data gaps have been exposed. The most significant gaps have been identified and will hopefully be filled over the next two years. This assessment has some data limitations users need to be aware of:

1. *The vegetation and related fire-potential data* used to determine fire characteristics are inferred from 1996 satellite imagery using a simple crosswalk developed through expert opinion. The data has no information about the understory, ground fuels, or stand structure important for assessment fire behavior. However, local fire scientists felt that the existing information has value in the assessment. They have not been field verified in many locations. Existing data was not available to adequately identify hazardous brush fields. These areas are generally under-rated in this assessment. The committee increased the weighting of the topography layer to help compensate for this limitation by increasing the score of low elevation south facing slopes where brush fields primarily exist.

2. *Protection response capability data* are based primarily upon response times. The assessment does not evaluate the capacity of the responding agency to prevent or suppress wildfires. Access problems that may prevent a response in a major wildfire (dead end roads, low capacity bridges, etc), are not currently included in the assessment.

3. *Structural vulnerability*, the likelihood of a structure igniting from a wildfire, is a primary factor necessary to protect communities from wildfires. It is not included in the assessment model at this time due to lack of data. Three elements related to a structure's likelihood to ignite and be destroyed by a wildfire include roof type, defensible space, and firefighter access. Currently, countywide data only exists for roof type. A map of roof type will help guide structure ignition education efforts, also a requirement of a CWPP. Additional data from homeowners certifying their defensible space under SB360 and further inventory of road access should be available in the future to improve the assessment of structure vulnerability.

4. *Risk of wildfire may be exacerbated by the socioeconomic conditions* of communities and individuals. The assessment does not include socioeconomic indicators of risk, but a map is included to inform planners about the relationship between high poverty areas and wildfire risk.

Weighting and Ranking

The risk assessment committee started with the weighting and ranking criteria developed by the statewide committee. It was clear to the committee that results using these weights were not useful for the project. The committee evaluated five alternatives using the *Model Builder* program before choosing the final weighting. Selection of the final weighting was a significant challenge for the committee.

Many iterations of the risk assessment were evaluated before the final weighting, option F, was chosen. *See Resource D to see the final weighting (option F).*

Landscape Level Assessment vs. Site-Specific Assessment

The scale of any assessment is an important consideration and needs to match the intended use. Wildfires that threaten communities are generally landscape level events. At the county level, the assessment needs to point planners to the highest priority areas or firesheds. Within these areas, site-specific assessments are needed for project level planning. The resolution of this assessment is not adequate to prioritize projects within a group of homes or neighborhood.

Risk Assessment Action Plan

RA Action Item #1: Monitor Risk Assessment data annually to include LANDFIRE vegetation data and other updated data sources

The risk assessment committee plans to improve the risk assessment model over time by updating the data as new data become available. A joint effort between Jackson and Josephine counties will better inform risk assessments in both counties by updating the vegetation data used in the models. This new data is already being collected and analyzed and will be the first major update needed in the next year. Updates to the risk assessment will be useful to land managers and communities who are prioritizing fuels reduction work on the Jackson County landscape.

Outcome	Up-to-date risk assessment for use in fuels planning.
Timeline	Semi-annual meetings in November and May of each year (with Josephine County)
Strategy	Identify new data sets usable in the risk assessment, plan to update older data based on need and available resources. Title III grant for 2007 is being pursued for first major update of data by Jackson County GIS office.
Lead	Risk Assessment Committee Chair and agency GIS specialists

RA Action Item #2: Update the Wildland Urban Interface Boundary

City limits, urban growth boundaries, and communities are constantly changing throughout Jackson County. Future home construction in the wildland urban interface areas of the county will undoubtedly require the Risk Assessment committee to expand the WUI boundaries in the coming years. An annual review of the boundary will allow expanding communities to be incorporated in the County's wildland urban interface zone.

Outcome	Updated WUI map including new developments each year.
Timeline	As needed. Coordinate review with data updates in RA action #1 above.
Strategy	Update housing data for county; identify new development inside the WUI zone. Communicate with county fire safety inspector regarding location of new development and need for expansion of the WUI line. Coordinate review with data updates in RA action #1 above.
Lead	Risk Assessment Committee Chair and agency GIS specialists

Monitoring Risk Assessment Actions

Monitoring risk assessment action items will happen in the course of the Executive Committee's annual review of action items. Both actions are scheduled to happen every year so monitoring the completion of the actions will be a relatively simple task.

Chapter 6: Hazardous Fuels Reduction

CHAPTER 6: HAZARDOUS FUELS REDUCTION

Objectives

The JaCIFP fuels reduction committee prioritized strategic planning units (SPUs) in Jackson County's WUI based on the countywide risk assessment. SPUs will be used by the fuels committee, local agencies, and communities to focus grant-funded fuels reduction activities on the highest risk areas in the county. The committee also addressed monitoring and tracking of fuels reduction projects, spread of invasive weeds, and grant coordination.

Current Activities and Programs

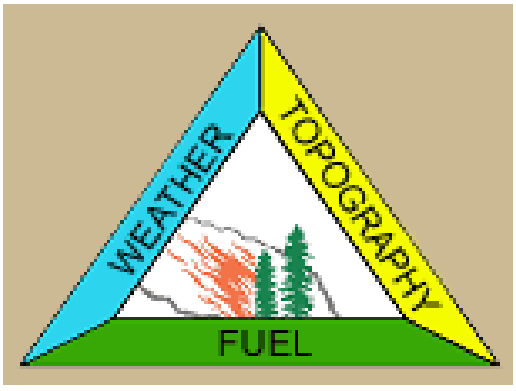
Historic Fuels Reduction Efforts

Fuels reduction as a practice goes back many decades if not hundreds of years. Native Americans cleared underbrush using fire as a tool (see chapter 4), settlers cleared land for agriculture and home sites[80], and cautious homeowners have cleared flammable vegetation to safeguard rural houses for many years. Fire management agencies have been encouraging homeowners to clear around their homes for a number of years. As an example, the U.S. Forest Service and local fire department canvassed Ashland urban interface neighborhoods with wildfire safety information in the 1970's.[81] It was not until the adoption of the National Fire Plan in 2000 and the availability of grant funding that fuels reduction became a priority at the national and local level. Hazardous fuel reduction is one of the four goals of the National Fire Plan's 10-year Comprehensive Strategy agreed to by Congress, federal agencies, and the Western Governors Association. The 10-year Comprehensive Strategy's intended outcome for hazardous fuels reduction reads as follows:

> *"Hazardous fuels are treated, using appropriate tools, to reduce the risk of unplanned and unwanted wildland fire to communities and to the environment.* [82]*"*

Fuels take such a high priority because they are the one component of the fire behavior triangle that can be managed. Weather and topography both affect how fires burn but neither can be affected by short-term human management actions.

Fig. 6.1. Factors affecting fire behavior[83]



[80] Stephen J. Pyne. *Fire in America: A Cultural History of Wildland and Rural Fire.* 1982. Princeton University Press, New Jersey. Pg 337.

[81] Neil Benson, U.S. Forest Service, Ashland Ranger District, (retired), 2006. Pers. Comm.

[82] A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan. 2002. http://www.fireplan.gov/reports/11-23-en.pdf Pg. 12.

[83] USDA Forest Service. Online: http://www.na.fs.fed.us/fire_poster/science_of_fire.htm

Changes in fire behavior through fuels management can either change the distribution of fuels (standing versus on the ground), or remove them from the equation through the use of prescribed fire and/or mechanical means. Fuels reduction costs can range from a few hundred dollars to over a thousand dollars per acre depending on the methods involved and access, fuel density, and steepness of the project area. Grant programs are an especially successful means of accomplishing fuels reduction projects on private land in and around communities-at-risk.

Since 2001, the National Fire Plan community assistance grant program has helped to subsidize fuels reduction efforts in Jackson County. However, grant funding is decreasing in availability in the Oregon/Washington region (table 6.1). Additionally, the need for hazardous fuels reduction across the landscape exceeds the limited amount of assistance available through federal programs. Prioritization of high-risk areas for fuels reduction is the best strategy to protect communities and values at risk from wildfire.

Table 6.1 National Fire Plan WUI fuels grants awarded 2001-2005[84]

Year	Total Interagency Amount Awarded	Total # of Applications	Total Dollars Requested	Total # of Grants Funded	Percent of Requested Dollar Amount Funded
2001	$7 million	179	$27,572,737	60	25%
2002	$6.4 million	149	$18,431,105	73	35%
2003	$6.5 million	147	$20,249,842	47	32%
2004	$6.5 million	142	$23,537,952	49	28%
2005	$4.3 million	172	$24,985,100	36	17%

Large fires in the summer of 2000, and an enormous bill for fire suppression, plus the increasing acreage and intensity of wildfires served as a catalyst to the development of the National Fire Plan and pursuant federal funding which made grant assistance available for fuels reduction activities.[85] According to federal officials at a press conference held in Bend, Oregon in 2004, the Forest Service and BLM completed 3 times more acres of fuels work in 2004 than in the year 2000, due to the National Fire Plan. Jackson County was no exception to this trend. The Applegate Fire Plan and completion of a risk assessment in Ashland in 2001 stimulated grant awards for both communities. Grant money continued to come into Jackson County between 2002 and the present, helping residents in the Seven Basins, Greensprings, upper Wagner Creek, Wright's Creek (Wildcat Canyon), and Jacksonville. The Oregon Department of Forestry (ODF) coordinated many of these grants.

The Medford District BLM also increased fuels reduction efforts across Southern Oregon, in part due to increased funds, but also as a result of the Healthy Forests Initiative of 2002 and the strong interest shown by local communities. The BLM has a disproportionate amount of wildland urban interface due to the checkerboard ownership pattern in the lower elevation zones of the Rogue Valley (*see map 1*) where the vast majority of the county's population lives.

[84] Pacific Northwest National Fire Plan. Community Assistance Grants Program in Oregon and Washington. Online: http://199.134.225.81/CommunityAsst.htm

[85] National Fire Plan, 2000. Online: http://www.fireplan.gov/overview/whatis.html

Planned/Current Fuel Reduction Efforts

Current fuels reduction grants for work on private land are active in Ashland, the Applegate Valley, Jacksonville, and the Seven Basins watershed.

The Applegate Fire Plan has resulted in a 93% participation rate for homeowners creating defensible space and safe driveway access to date.[86] Fuels reduction work in the Applegate Valle continues, with Applegate Fire District #9 coordinating grant funding for homes, driveways, and strategic fuels reduction areas. The BLM and Forest Service partners in the Applegate are implementing fuels projects on federal lands adjacent to high risk private lands in collaboration with local Applegate partners. The Applegate Valley is an excellent example of collaboration on a landscape scale between multiple interests. The results are impressive:

Table 6.2 Applegate Fuels Treatments: Public and Private Lands Since Applegate Fire Plan[87]

Land Ownership	Year	Acres Treated	Total Acres Treated
Private Land – Jackson County	2002	224	1590.7
	2003	376	
	2004	364.7	
	2005 (1/2 year only)	626	
Private Land – Josephine County	2002	303	634.5
	2003	245	
	2004	70	
	2005 (1/2 year only)	16.5	
Bureau of Land Management	2002	5053	18,084
	2003	7059	
	2004	4697	
	2005 (1/2 year only)	1275	
Rogue River-Siskiyou National Forest	2002	3600	6306
	2003	999	
	2004	1010	
	2005 (1/2 year only)	0	
	Total Applegate Acres Treated 2002-2005:		**26,615.2**

In Ashland, private and municipal land continues to be thinned along with home sites and strategic fire suppression zones. In the Ashland Watershed, the Forest Service is completing the Ashland Watershed Protection Project, a 1,400 acre strategic fuels reduction plan. The Ashland Forest Resiliency Project, planned under the Healthy Forests Restoration Act, is in the last stages of environmental analysis before beginning work on an additional several thousand acres in the watershed. Jackson County remains an active setting for fuels reduction work on both private and federal land (See Table 6.2 below).

[86] Bret Fillis, Fire Chief Applegate Rural Fire District. pers comm., 2006.
[87] Sandy Shaffer, Applegate Resident, pers. Comm.., 2006.

Table 6.2 Fuels Reduction Grant Projects in Jackson County[88]

Grant	Cooperators	Location	Description
Ashland Community Fuel Break - NFP 449905-14 Ashland Fuel Mitigation -NFP 449920-01 USDA Grant ONFP04-004	Private landowners Residents Fire Districts ODF	Ashland	Provide Landowners incentives through Cost-share agreements that encourage The creation of defensible space around houses and fuel reduction on adjoining land.
Friends of the Greensprings NFP 449909-08	Private landowners Residents Community groups ODF	Greensprings	Provide Landowners incentives through Cost-share agreements that encourage The creation of defensible space around houses and fuel reduction on adjoining land.
Seven Basins Fuels Reduction NFP 449927-05	Private landowners Residents Community groups Watershed Councils Fire Districts, ODF	Sam's Valley	Provide Landowners incentives through Cost-share agreements that encourage The creation of defensible space around houses and fuel reduction on adjoining land.
Applegate Watershed Fuels Reduction NFP 449928-04 NFP 449909-04	Landowners, ODF Residents, Community groups, Watershed Councils, Fire District#9, BLM, RR-S NF	Applegate	Provide Landowners incentives through Cost-share agreements that encourage The creation of defensible space around houses and fuel reduction on adjoining land that compliments federal fuel reduction work, thereby creating large, strategic fuel breaks..
Jackson County fuels reduction - NFP 449905-08 NFP 449927-04, NFP 449909-05	Private landowners Residents, ODF Local Government	County- Wide	Provide Landowners incentives through Cost-share agreements that encourage The creation of defensible space around houses and fuel reduction on adjoining land.
Sterling Creek Backyard Project	Private landowners Residents BLM Volunteers	Sterling Creek Rd./Little Applegate Rd. above Buncom	Citizen alternative developed for treatment on adjacent BLM parcel may be completed as a stewardship contract. Fuel reduction work will utilize small diameter material, and will also enhance work on adjacent private properties. There is no funding for this as yet-not sure if it should be included.
Strategic Fuel Breaks	Private landowners Residents, Timber companies, Fire Districts, Local Government, ODF, BLM	Jacksonville Area	Completed fuel breaks on several major boundaries on Jackson Creek watershed. One project underway. Acreage tally and map being completed.
Chipping fuels from a pre-commercial thinning project	Local Government ODF, BLM	Jacksonville Area	Approx. 75 acres of chipping
Jackson Creek Fuel Reduction	Fire Districts, Local Government, ODF, BLM	Jacksonville Area	Completed fuel breaks along all major roads in the north fork of Jackson Creek. Acreage tally and map being completed.

[88] Jackson County Integrated Fire Plan Organizational Summary. 2005.

Grant	Cooperators	Location	Description
Covered Bridge Fuel Reduction Project	Private landowners Residents, ODF, Volunteers, Business, Industry Fire Districts	William M. Fuller	Mitigate fuels along the 700-900 Block of Covered Bridge Road. (Roadway)
NFP 03 Fuel Reduction	Private landowners Residents	Applegate Valley (Applegate Fire Dist. #9)	$ 291,000 grant, 88% completed to date, will complete in fall 2005. Completed 67 acres roadside FR Completed 213 acres landscape 40 acres left to treat – fall 05 62 acres left to burn – fall 05 (piles)
Title 2 – USFS Fuel Reduction Grant	Private landowners/ Residents, AVFD#9, BLM, USFS	Applegate Valley: China Gulch area	$ 24,500 grant 100% complete – accomplished in 05 Completed 47 acres landscape
Title 2 – BLM Fuel Reduction Grant	Private landowners Residents	Applegate Valley (Applegate Fire Dist. #9)	$ 43,000 grant Planned 05-06 Proposed 104 acres of defensible & extended defensible space Approved – Almost complete
NFP 05 – Fuel Reduction Need to ID these grants – I believe he's already spent $$ on this one!	Private landowners Residents AVFD#9 BLM RR-S NF	Applegate Valley Upper Applegate Rd corridor	$ 249,480 grant Planned 05-07 Planned 273 acres – 20 acres defensible space 253 acres landscape Approved – awaiting signed agreements
NFP 05 – Fuel Reduction	Private landowners Residents (Applegate Fire Dist. #9)	Applegate Valley	$ 117,150 grant Planned for 06-07 Planned 300 acres of defensible & extended defensible space Approved – awaiting signed agreements

Identification and Prioritization of Fuels Reduction Projects

In order to meet the Healthy Forest Restoration Act requirement for prioritization of fuels reduction on both private and public lands, the Fuels and Risk Assessment Committees designated Strategic Planning Units (SPUs, see Chapter 5) as a starting point to this process**.**

The Fuels Committee will convene an ongoing collaborative process (beginning July 2006) between JaCIFP partners and local communities to prioritize fuels reduction projects on public and private lands (Fuels Reduction Action Item #1). The committee will contact local fire districts, watershed groups, existing communities with CWPPs, and local citizens as part of the collaborative fuels reduction prioritization process. Federal agencies will participate as partners in the collaborative prioritization effort and consult the prioritized list of projects and the JaCIFP risk assessment map as they conduct agency planning for fuels treatment projects. This priority list will then be forwarded to the Josephine/Jackson Local Coordinating Group (JJLCG) for their approval and ultimate incorporation into the annual JJLCG priority criteria for National Fire Plan grants. All stakeholders will use this list in conjunction with National Fire Plan and other grant programs.

[JacIFP Short Term Fuels Prioritization Strategy

The short-term fuels reduction strategy identifies priorities based on existing data, focusing fuels reduction efforts on defensible space around homes and tactically achievable treatments (i.e. access/egress, community infrastructure, escape routes). The timeline identified by the risk/fuels committee for the short term strategy would include the grant cycles for fiscal year 2007 and 2008.

Using the current data compiled during the risk assessment, and after several modified runs utilizing the Multi-scale Resource Integration Tool (MRIT), the Fuels Committee compiled a final listing of 84 Strategic Planning Units (SPU's). All 84 SPU's are to be considered high at this time.

In addition, other factors or criteria were identified by the committee to further differentiate projects within each of the SPU's, these included:

- *The amount of community and local fire department interest in the development and implementation of fuels reduction projects.*
- *The location of federal fuels reduction treatment projects planned for fiscal year 2007 thru 2009, as well as, those projects which have been completed on federal lands within the last five years, that are adjacent to communities at risk from wildfire. In addition, the committee would look at how any proposed project within a SPU would "tie- in" with the planned or completed federal projects to provide strategic suppression or tactical opportunities.*
- *The priorities already set forth in local CWPP's completed within Jackson County and how these priorities match up within the identified 84 high SPU's.]* [89]

By designating landscape scale priorities through strategic planning units and the risk assessment, local communities and neighborhoods will have a chance to refine their priorities and identify specific projects for treatment on public and private land that will address the county's highest rated Strategic Planning Units. All wildland urban interface communities in Jackson County can designate and prioritize fuels projects on both private land and federal land under the JaCIFP within the defined wildland urban interface (*Map 5*).

Collaboratively developed fuels reduction treatments that connect across public and private boundaries will help communities and agencies develop strategic wildfire suppression opportunities and will also give communities and agencies the best chances to receive project funding.

Guidance for Designating Community Priorities within a Strategic Planning Unit

The purpose of this guidance is to assist partners involved in the Jackson County Integrated Fire Plan and local communities to prioritize fuels reduction projects. The JaCIFP designates Strategic Planning Units (SPUs), but a process is needed for local communities to prioritize and design projects within a SPU before or during the collaborative process mentioned in the previous section. The methods below apply to local communities, non-profits, and fire districts, and will be helpful across property boundaries as a tool to help federal land management agencies develop and implement plans that build on community-driven projects.

Background
A multi-partner Risk Assessment committee identified the WUI area for the JaCIFP in order to provide fuels treatments for home defensible space, tactical wildfire protection actions within the WUI, along

[89] Italicized section in brackets added after approval of the Executive Committee on February 6, 2007

wildfire escape routes, and on strategically superior ground that will help protect communities at risk from large wildfires coming from outside the WUI. Therefore, fuels treatment projects inside the WUI will usually offer the most protection for communities at risk.

The Healthy Forest Restoration Act (HFRA) directed federal land management agencies to spend 50% of their fuels management funding in the WUI, although the actual amount is much higher at the local level.

Methods

1. *Start with the Assessment.* The JaCIFP Risk Assessment committee divided the area inside the WUI into Strategic Planning Units (SPUs). The SPUs have a wildfire risk rating based on the countywide wildfire risk assessment. The SPUs are rated extreme, high, or moderate. There are no SPUs in the Jackson County WUI at low risk to wildfire.

2. *Consider priorities for fuels treatment and planning.* Fuels treatment and planning in a community or neighborhood area should focus on defensible space around homes and treatments along wildfire escape routes as a first priority. Critical community infrastructure and other values-at-risk should be given high priority as well. Tactical strategic landscape treatments can connect past projects, strengthen the protection of the entire area, and create multiple opportunities for fire suppression across a large landscape.

3. *Review past and planned treatments.* Look at past and planned fuels treatments across the landscape (including historical wildfires) to see where additional treatments can create tactical and strategic protection, such as a fuels reduction treatment on a ridge to mitigate the intensity of a wildfire near a community at risk. Discussing these areas with adjacent federal land management (US Forest Service or Bureau of Land Management) neighbors can help identify complimentary projects on federal lands. Compare the locations of existing treatments and areas proposed for treatment with the likely spread direction of a fire. This can be based on historic fires or local weather patterns. Collaboratively developed fuels reduction projects are now a required element of National Fire Plan grants.

4. *Collaborate with local partners.* A key to successful fuels treatment planning is to partner with the fire district. In recent surveys, fire districts received the highest ratings in terms of the public's trust of various government agencies and other resources. The JaCIFP public survey shows that fire districts are the first place that the public generally goes for fire advice (*see Resource D for survey results*). Federal funds and grants are often predicated on the existence of collaborative relationships among owners, fire agencies, and land managers. Community interest in participating in a fuels treatment project helps agencies prioritize what areas to treat.

Other considerations in fuels treatment prioritization include the protection of critical infrastructure, the use of the treatment area as a demonstration site, protection of special needs populations, and protection of critical habitat and natural resources. Last, a professional evaluation of vegetation types in a proposed treatment area can help prioritize where money will be best spent and will require the least amount of maintenance over time. Professional advice can also cut initial costs on the type of treatment planned. See *Resource C* for contracting contacts.

Accessing Fuels Reduction Grant Funds

Fuels reduction funds are distributed mainly through the National Fire Plan grant process. *See Resource E for contacts and the Pacific Northwest website for grants.* The Josephine-Jackson County Local Coordinating Group prioritizes National Fire Plan fuels projects based on the following criteria:

1. Does the project implement recommendations in a Community Wildfire Protection Plan (CWPP)?
2. Has the treatment/project been coordinated with adjacent landowners and local/state/Tribal/Federal agencies?
3. How will the proposed fuels treatments be maintained in the future?

Completion of the Jackson County Integrated Fire Plan will greatly increase the opportunities to receive fuels reduction grants for communities in Jackson County. Communities can use the risk assessment map, strategic planning units, and resources in this plan to help apply for and receive grant funds. Jackson County communities without CWPP's had no chance to receive funds in federal fiscal year 2007, and chose not to pursue applications in winter of 2006. Contact numbers for grants from federal agencies, the Oregon Department of Forestry, and Jackson County are included in *Resource E*.

Tools for Reducing Hazardous Fuels

Property owners in Jackson County have abundant resources for reducing hazardous fuels on their properties. Fire management agencies, Oregon State University Extension Service, Jackson County Small Woodland Owner's Association, local fire districts, and contractors can all be of assistance in providing information on the type of treatment that should occur, or even providing services. The JaCIFP contains information to assist landowners with debris disposal and biomass utilization (Chapter 7) and fuels reduction (Chapter 6). *See Resource C for contractor information and Resource E for agency contact information.*

Contractors and Certification

The Oregon Department of Forestry maintains a list of contractors, loggers and forestry consultants. These lists do not specifically address fuels reduction. but some companies have these skills. For any contractor, it is important to ask for references, proof of insurance, and an applicable license. *See Resource C: Contractors and Related Resources* for the ODF lists. Please note that the lists do not guarantee that the contractor is licensed or has the proper insurance.

The Oregon State University County Extension Service in Central Point is currently working on a certification program for forestry workers. This program will provide owners with an easier and more reliable way to contact a local contractor for fuels reduction work.

Fuels Reduction Action Plan

Fuels Action Item #1: Prioritize Fuels Reduction Projects on Private and Public Lands

In order to meet the Healthy Forest Restoration Act requirement for prioritization of fuels reduction on both private and public lands, the Fuels and Risk Assessment Committees designated Strategic Planning Units (SPUs, see Chapter 5) and will lead an ongoing prioritization of fuels reduction projects (beginning in July 2006) on public and private land. The Fuels and Risk Committee will assist local communities with National Fire Plan grant applications and submit the prioritized list of projects to the Josephine-Jackson County Local Coordinating Group.

Outcome	An annual detailed list of prioritized fuels reduction projects across public and private lands that will be utilized by federal agencies and for National Fire Plan and other relevant grant applications. Projects will be more competitive for funding sources.

Timeline	Ongoing (beginning in July 2006) and in conjunction with timelines used by federal agencies for fuels planning. Each year, priorities will be collaboratively designated by December 1st in conjunction with the JaCIFP annual report. This will help agencies and communities meeting timelines for federal allocation processes and National Fire Plan and other grant deadlines.
Strategy	The Fuels Committee will convene an ongoing collaborative process (beginning July 2006) between JaCIFP partners and local communities to prioritize fuels reduction projects on public and private lands (Fuels Reduction Action Item #1). The committee will contact local fire districts, watershed groups, and local citizens as part of the collaborative fuels reduction prioritization process. Federal agencies will participate as partners in the collaborative prioritization effort and consult the prioritized list of projects as they conduct agency planning for fuels treatment projects. This priority list will then be forwarded to the Josephine/Jackson Local Coordinating Group (JJLCG) for their approval and ultimate incorporation into the annual JJLCG priority criteria for National Fire Plan grants. The Fuels and Risk Committee will convene a meeting before each year's National Fire Plan grant deadline to assist with the grant application process. All stakeholders will use this list in conjunction with National Fire Plan and other grant programs.
Lead	Fuels Reduction Committee Chair, Fire Districts, Agency Fuels Specialists, Interested community and plan partners.

Fuels Action Item #2: Track and monitor Fuels Reduction Projects to assess effectiveness and track fuels reduction projects.

The intended outcome of this action is a commonly used protocol that allows data to be shared between agencies and communities involved in fuels reduction projects. The shared data will allow plan partners to:

a.) track basic information and locations of private and public land projects; and
b.) to assess the effectiveness of the treatments through site data collection and landscape level fire modeling.

Standards are non-existent for sharing fuels reduction Geographic Information System (GIS) fuels project data across ownerships and agencies. Lack of a protocol makes tracking and reporting difficult. Tracking will be critical to a follow-up fuels maintenance plan and to future project planning. Reporting should also be made a requirement for all fuels grants through the funding agency.

Outcome	Complete update of past efforts and establishment of a common protocol for fuels reduction data collection and reporting.
Timeline	Data collection protocol by Fire season of 2006. First update fall of 2006. Regular updates quarterly.

Strategy	a.) Create a protocol for gathering basic information about fuels reduction projects to be tracked through GIS. b.) Develop effectiveness monitoring for fuels reduction projects. A form has been developed in Josephine County that can be adopted. Consider requiring monitoring and reporting as a condition of the grant award through the granting agency. Bring JJLCG the fuels monitoring form and mapping requirement for fuels projects as a NFP grant criteria. Fuels treatment grant recipients can provide updates on fuels reduction projects via the Firemaps.org website.
Lead	a.) ODF (Greg Alexander and Teresa Vonn); BLM, USFS, Jackson County GIS b.) To be determined by JaCIFP Fuels Committee

Fuels Action Item #3: Control Noxious Weeds and coordinate with Jackson County Weed Control Committee

The purpose of this action is to increase awareness among community groups and contractors engaged in fuels work of noxious weed protocols. Noxious weeds can be spread during fuels reduction projects or existing populations can increase due to disturbance and increased sunlight.

Outcome	Increase awareness among community groups and contractors engaged in fuels work of noxious weed protocols
Timeline	Long term dependent on establishment on of the Jackson County Weed Control Committee (proposed as of spring 2006).
Strategy	Collect information on weeds and agency protocols for preventing and treating weeds and distribute.
Lead	Jackson County Weed Control Committee.

Fuels Action Item #4: Increase Coordination of fuels reduction on public and private lands

One of the public comments at the JaCIFP meetings in the fall of 2005 asked about fuels reduction along County road right of ways and around electrical lines. The fuels committee would like to see better coordination among State and local departments and companies responsible for maintenance of critical infrastructure in the wildfire zone.

Outcome	Long-term outreach and communication between partners.
Timeline	Ongoing
Strategy	Talk with all probable partners about maintaining critical infrastructure at fire safety standards
Lead	Fuels Reduction Committee Chair

Fuels Action Item #5: Coordinate biomass utilization efforts with the Fuels and Risk Assessment committees.

Outcome	Coordination of biomass utilization goals with fuels reduction priorities and goals.
Timeline	Ongoing
Strategy	Look at road systems on private and public lands to design a fire safety and biomass utilization strategy. Coordination between County, industry, BLM, and Forest Service. Make contact with SW Oregon Provincial Advisory Committee (Lu Anthony is a member). This committee will be focusing on federal lands biomass issues. Coordinate with future agency efforts to develop a two county fire spread model that will help prioritize optimum fuels reduction project locations. Share information between JaCIFP committees and "outside" biomass efforts
Lead	Fuels Reduction and Risk Assessment Committee Chair, Southern Oregon Small Diameter Collaborative. Communication will be coordinated by the Jackson County Fire Plan Implementation Coordinator

Monitoring Fuels Reduction Actions

Jackson County GIS secured a Title III grant award in 2005-2006 to take fuels treatment data from Federal agencies, ODF, and communities and compile a treated fuels data layer for Jackson County. An important aspect of this grant is establishing a formal means for the various fuels managers and GIS technicians to submit completed fuels treatment areas to a single source clearinghouse (potentially within the County or the Oregon Department of Forestry). The subsequent data layer will be a useful resource for fire management and response. This data will also be key to planning follow-up treatments to maintain fuel reduction areas as well as planning new fuels treatments that will link together existing projects.

Monitoring fuels reduction projects in Southern Oregon can be difficult due to the wide diversity of vegetation types. One acre of fuels reduction can have very different outcomes in terms of fire behavior, forest health, and long-term maintenance. For example, in order to maintain a fire safe condition in vegetation dominated by brush and stump sprouting species, a 5-7 year maintenance cycle might be needed. A similar investment in a stand of mature trees may require maintenance every 10-15 years.

For fire managers, having a circle on a map may have little meaning when faced with an oncoming fire. Further information about the type of vegetation and photos of a characteristic spot can aid in future fuels planning efforts, establishing maintenance schedules, and possibly help during a fire response. Currently, the Oregon Department of Forestry, Medford BLM, and Rogue River-Siskiyou National Forest are working to gather data that will normalize how fuels projects are tracked and evaluated. The data form *(See Resource D)* is completed in the field both before and after a fuels reduction project is completed. The data will then be used for monitoring the effectiveness of fuels treatments and tracking them over time.

Chapter 7: The Private Landowner's Role

CHAPTER 7: THE PRIVATE LANDOWNER'S ROLE

The private landowner in Jackson County is an important stakeholder in reducing wildfire risk for several reasons. Approximately 33% of all forested land in the county is privately owned – a noteworthy amount considering how quickly a brush fire can move across hundreds of acres during the right weather conditions. More significant is the fact that humans cause 75% of all wildfires in southwestern Oregon.

Fire prevention is, therefore, a very important part of a community wildfire protection plan, and some of this is addressed in Chapter 10, Outreach and Education. However, fire preparedness is also a component of fire prevention, and there is a great deal private landowners can do to make their home more fire-resistant. Living in the wildland urban interface is a personal and community responsibility for all citizens.

Defensible Space

Defensible space refers to an area around a structure in which natural and man-made fuels are reduced, and where firefighting may effectively and safely take place. In the event that a home does not receive fire protection during a fire, the existence of defensible space and the home's flammability may determine the fate of the home. Houses can survive forest fires without fire suppression, if planned for ahead of time. Recent studies and post-fire inspections have documented the fact that creating and maintaining a defensible space around a home can be very effective in surviving a wildfire.

In Jackson County, the recommended size of a defensible space zone varies according to the slope of the land around the home, the vegetation type and height, the home's construction, and topography in the greater area. Because of the complex variables associated with wildfire behavior, it is advisable to consult with your local fire district or the Oregon Department of Forestry for specific site needs. Because Jackson County is a fire-friendly environment, in which natural fuel, weather and topography combine to stimulate aggressive wildfires, proper defensible space is vital. Measure the fuel break zone distance from the furthest extension of a structure (e.g. the edge of the roof eave, or the outside edge of a deck that is connected to a house).

An effective defensible space zone should have these features:

- Green, healthy, fire-resistant plants
- Native grass cut to a height no greater than six inches
- No dead vegetation
- Brush and trees are thinned so that fire won't transfer from plant-to-plant
- Limbs pruned & underbrush removed to eliminate "ladder fuels," so that fire won't transfer from the ground into tree crowns
- Firewood and lumber piles stored in a fully enclosed structure, or moved at least 30 feet from a home or any other building
- No flammable material beneath decks and exterior stairways
- Metal mesh screens behind all exterior vents
- No vegetation or other flammable material within 10 feet of chimneys

Regulations Regarding Defensible Space

New homes and re-constructed homes in Jackson County may be subject to the county's defensible space and road access standards. Contact the Jackson County Planning Dept. at (541) 774-6900 or go on-line to www.jacksoncounty.org and click on "Wildfire Safety" for more information. Code requirements are included in *Resource B* of this fire plan as well.

Oregon Forestland-Urban Interface Fire Protection Act of 1997
Jackson County residents should also be aware of the Oregon Forestland-Urban Interface Fire Protection Act of 1997, and how the Act may affect their property.

The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (often referred to as Senate Bill 360) enlists the aid of property owners toward the goal of turning fire-vulnerable subdivisions and neighborhoods into less-volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation, which may fuel a fire, around structures and along driveways.
The Oregon Department of Forestry supplies information about the Act's fuel-reduction standards to forestland-urban interface property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel-reduction standards have been met. Returning this card to ODF is an important step.

Certification relieves a property owner from the act's fire cost-recovery liability. This takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by the Department of Forestry. In these situations, the state of Oregon may, at its discretion, seek fire cost reimbursement from a property owner if a fire occurs on the property, and the state has to spend more than what is budgeted for a routine fire-suppression response. For example, if an air tanker is used to suppress a fire on forestland-urban interface property that is not certified, the property owner may get a bill from the Department of Forestry for the cost of the air tanker. The cost-recovery liability under the Forestland-Urban Interface Fire Protection Act is capped at $100,000.

Five years after property owners receive their fuel-reduction standards information and certification cards from the Department of Forestry, all certification cards will become void and new cards will be mailed to each property owner. The process is renewed every five years thereafter. The only exception is on properties that are sold, and on properties on which a structure is added. At these times, a new certification card is required to be requested from the Department of Forestry, and then signed by the property owner and returned to the department when the fuel-reduction standards are met.

For information about the Oregon Forestland-Urban Interface Fire Protection Act and what it means to Jackson County residents, call the Oregon Department of Forestry's Medford Unit at (541) 665-0662, or visit the office at 5286 Table Rock Rd. Information is also available online at http://oregon.gov/ODF/FIELD/SWO/aboutus.shtml.

International Urban-Wildland Interface Code 2003
This code is part of the Uniform Fire Code adopted by most fire service agencies statewide. This code, like the Uniform Code, can be changed to meet local needs and adopted locally with amendments. The code is available at local fire district offices or can be purchased on-line.

Landowners unable to perform fuels thinning work around their homes may consider engaging the assistance of a forest consultant. Information on local forest workers and what to consider in hiring a contractor can be obtained from the Oregon State University Extension Service, 776-7371 or the Oregon Department of Forestry, 664-3328. Listings of local contractors can also be found in Appendix C of this fire plan.

Fire-Safe Structures

When constructing, renovating, or adding to a home, consider the following:

Location:

- Build on the most level portion of the land because fire spreads more rapidly on slopes.
- Site a single-story structure at least 30 feet back from any ridge or cliff; increase the distance if the structure will be taller than one story.

Fire-resistant building materials:

- Use fire-resistant or noncombustible construction materials. Examples are stucco and masonry siding. Vinyl-clad materials may not be a good choice in fire-prone areas; vinyl distorts when exposed to high levels of heat.
- Select roofing materials that are Class A or B rated. This includes most asphalt shingles, slate or clay tiles, metal, cement and concrete products.
- Installing fire-resistant sub-roofing material can add protection.
- Windows: Small panes hold up better when exposed to high heat than larger ones. Double-pane glass and tempered glass are more reliable and effective heat barriers than single-pane glass. Plastic skylights can melt.
- Install nonflammable shutters on windows and skylights.
- Cover exterior attic and foundation vents with wire screening no larger than 1/8-inch mesh.

Driveway standards for good emergency vehicle access and a good escape route are also delineated by Jackson County or local municipal governments. These standards apply to all new construction. Please refer to the Jackson County Land Development Ordinance at www.jacksoncounty.org, Chapter 9.5.4, Emergency Vehicle Access, for specifications on roads, gates, bridges, culverts and clearances. These standards are also listed in Resource B.

- Clear tree branches and brush away from the driving surface. A fire truck needs 12 feet of horizontal clearance and 15 feet of vertical clearance.
- Clearly mark the foot of the driveway with a house number sign that is reflective.
- Ensure that there is turnaround space near the home.
- Provide easy access to water hydrants, hoses, sprinklers and pump house.
- In neighborhoods, mark escape routes with signs at every road junction.
- It is recommended, but not required, that you create a fuel break for 30 feet on each side of your driveway for safe resident evacuation and fire engine ingress. A driveway that looks safe is an invitation to fire crews, especially if the house isn't visible from the road.

Other considerations:

- Keep gutters, eaves, and roofs clear of leaves and other debris.
- Make periodic inspections of your home, looking for deterioration such as breaks and spaces between roof tiles, warped wood, or cracks and crevices in the structure.
- An all-wood fence can transfer fire to a house. Use masonry or metal as a protective barrier between the fence and house.
- Use metal when constructing a trellis, and cover it with high-moisture, low flammability vegetation.
- Prevent combustible materials and debris from accumulating beneath patio decks or elevated porches. Screen or box-in areas below patios and decks with wire screen no larger than 1/8-inch mesh.
- Establish a safe disposal site for hot ashes from fireplaces, wood stoves and charcoal

barbecues.

- Ignite burn piles and burn barrels only when fire season is not in effect, on declared open-burning days, and if necessary burning permits have been obtained. Also, locate piles and barrels where adjacent vegetation, structures and other flammable material will not be affected by heat and flames.
- For information on whether it is a burn day in Jackson County, call 776-7007.

Excerpted from "Firewise Construction Checklist," www.firewise.org

Forest Health Improvements on Private Lands

Private forest landowners have a responsibility to care for or manage their property for forest and watershed health as well as wildfire safety. See the discussion in Chapter 4 about forest conditions to for a better understanding of the need to restore certain forest types in Jackson County to a healthier state. Forest health and fuels reduction work can provide fire crews a better opportunity to stop an advancing wildfire, decrease the likelihood of insect and disease attacks, and increase the chances a forest will survive a wildfire. Many forest dwellers consider their "woods" to be just as important as their house. All of these goals should be carefully balanced with the need for diverse wildlife habitat, preventing soil erosion and landslides, and the landowner's economic situation. Consulting with a forester, extension agent, or an experienced neighbor is a good idea for any forestland owner considering how to proceed. The Oregon Department of Forestry can also help owners with the requirements of a forest stewardship plan, which is a good way to plan forestland management. See the resources below for assistance.

Tools for Reducing Hazardous Fuels and Creating Defensible Space

Property owners in Jackson County have abundant resources for reducing hazardous fuels on their properties. Fire management agencies, Oregon State University Extension Service, Jackson Small Woodland Owner's Association, local fire districts, and contractors can all be of assistance in providing information on the types of treatment that should occur, or even providing services. *See Resources C and E for contact information.*

Fuels Reduction Publications

There are a number of local publications to assist landowners in planning and carrying out fuels reduction work. Following is a short list of what is out there and where to get it:

2005 Forest Landowner Resource Guide

This guide is published by the Southwest Oregon Resource Conservation and Development (RC&D) Council and OSU Extension Service. Funded in part by a National Fire Plan grant, this booklet was mailed in January of 2006 to every landowner in Jackson and Josephine Counties with more than 10 acres of forestland. The guide describes thinning brush and forestland for forest health and fuels reduction, and includes do-it-yourself techniques and a process for hiring a contractor. The guide emphasizes utilization of woody biomass generated as a by-product of fuels reduction or forest restoration work. For more information contact Amy Wilson of the RC&D Council at 476-5906. The guide can be viewed on-line at: http://www.pacrimrcd.org/page.asp?navid=293.

Living with Fire

Living with Fire is a newspaper insert adapted for Southern Oregon and sent out to residents in Jackson County in 2003. *Living with Fire* is a great resource that includes a step-by-step guide to creating

defensible space, suggestions about thinning vegetation, and a description of fire's role in an ecosystem. *Living with Fire* is easy to understand with photos and diagrams. There are copies available at the Oregon Department of Forestry office in Central Point. The original publication is available on-line at: http://www.fs.fed.us/r3/publications/documents/livingwithfire.pdf

Oregon Forestland-Urban Interface Fire Protection Act Property Evaluation & Self-Certification Guide
Homeowners at risk to wildfire in Jackson County are subject to regulations known as the *Oregon Forestland-Urban Interface Fire Protection Act (*Senate Bill 360). *For a description of the Act see Chapter 3.* The enactment of Senate Bill 360 included a high level of education for homeowners to understand the principles behind fire safety as well as how to meet the intent of the legislation. The Oregon Department of Forestry produced a detailed guide for homeowners about the regulations and fire safety standards. For a copy or to get more information about Senate Bill 360, call the Oregon Department of Forestry Central Point office - 664-3328. The publication is available on-line at: http://egov.oregon.gov/ODF/FIRE/SB360/sb360_forms.shtml

Firewise Program: www.firewise.org
The National Wildland Urban Interface Fire Program hosts the Firewise website. The site has instructional videos, downloadable information, and links to web resources on all aspects of wildfire safety.

Living With Wildfire: Choosing a Future for Jackson County Forests
The Jackson County small diameter tree utilization committee enlisted the help of Dr. John Sessions from the Oregon State University's College of Forestry to design a computer model that would show the effects of wildfire burning through a particular forested area. Users can look at the results of the forest condition following a simulated wildfire. In the future, landowners will be able to access this model through a county website, select a forest type that matches their land, and choose a course of action that would demonstrate the results of various management techniques, including: no management, light thinning, or heavy thinning. Other variables in the model include wind speed, temperature, etc. The computer model will then show how fire has affected the forest under varying conditions. The model is intended to motivate landowners to manage their forests in a way that encourages healthy land and safer forests. The group consists of mostly public agency staff, as well as representatives from private industry, an environmental group, and economic development. The group also produced a DVD and thirty-second television spot in conjunction with the Oregon State University College of Forestry media center. The next effort will focus on getting the computer model into the hands of landowners via the website. To get a copy of the DVD, contact Lin Bernhardt at Jackson County. Visit the Living with Wildfire website at: http://www.firemaps.org/fuels/index.htm

Miscellaneous Resources

There are many local and regional resources available at local fire districts, community organizations, and on the internet. The Seven Basins Fire Plan has distributed a newsletter, the Applegate newspaper "*The Applegator*" runs articles on fuels reduction, the Applegate Fire Plan, available free at Fire District #9 Headquarters in Ruch (899-1050), has a multitude of information for homeowners, and, Headwaters environmental center in Ashland produced a pamphlet and newspaper insert on home fire safety in 2005.

The Oregon State University Extension Service in Central Point is an excellent resource for woodland owners. The Extension Forester coordinates Tree School South, an opportunity to combine education and hands on experience. OSU Extension also published a series of how-to guides for fuels reduction projects. See contact information in Resource E.

Jackson County Rural Living Handbook
The Rural Living Handbook was published by the Jackson Soil and Water Conservation District and

covers many aspects of rural living, including wildfire safety and forest management. Copies are available through the County at the courthouse in downtown Medford. Contact Lin Bernhardt.

Jackson County Wildfire Safety Regulations. Jackson County. This document is available in *Resource B* or online at www.jacksoncounty.org.

Fire-Resistant Plants and Landscaping Techniques

Any plant can burn if not maintained free of dead material and watered regularly. Jackson County's climate does not lend itself well to water loving species. Choose species that are drought tolerant for places where you don't water and be conscious of those plants that deer are attracted to. Placement of landscaping plants is extremely important for wildfire safety. Trees should be planted to maintain 10 to 30 feet (more for steeper ground) of space around the canopy *at maturity.* Shrubs and trees should not be placed to form ladders of fuel, which can let fire move from ground level to trees or the house. A good rule of thumb is to keep tree branches pruned at least three times the height of the available fuel beneath the tree. Foundation plantings should be extremely fire resistant and planted away from flammable wood siding. Maintain at least 3 feet of fuel free space around your home, decks, and wooden stairs. Finally, keep plants at least 2 feet below windows. It's best to plant something that will stay small rather than require constant maintenance to control flammability.

Virtually all annual flowers and bulbs in a bed are fire-resistant species. When making flowerbeds, use care to keep wood mulch or bark away from flammable siding, decks, and fences.
Some fire-resistant plants that do well in Southern Oregon are listed below by plant type:

Groundcovers
(*Scientific name* - common name)
Ajuga reptans- carpet bugleweed
Arctostaphylos uva-ursi - kinnikinnick
Ceanothus prostratus - squaw carpet
Ceanothus griseus horizontalis - Carmel creeper
Cerastium tomentosum - snow-in-summer
Delosperma nubigenum - yellow iceplant
Delosperma cooperi - purple/pink iceplant
Duchesnea indica - mock strawberry
Echeveria species -hens and chicks
Festuca species - fescue bunchgrass
Fragaria species - wild strawberry
Helianthemum species - rock rose
Mahonia repens - Oregon grape (creeping)
Pachysandra terminalis - Japanese pachysandra
Phlox subulata - creeping phlox
**Rosmarinus 'Huntington carpet' or prostratus* - creeping rosemary
Sedum species - sedum or stonecrops
Thymus praecox - creeping or woolly thyme

* Rosemary is inherently a flammable plant because of abundant oils (hence the nice aroma). Use caution and don't plant rosemary near flammable siding, decks, or wooden fences. Rosemary used as a groundcover should not form a solid carpet over large areas.

Perrenials 18" and taller
(*Scientific name* - common name)
Achillea species - yarrow
Allium schoenoprasum- chives
Armeria maritima - sea thrift
Aurinia saxatilis - basket-of-Gold
Bergenia cordifolia - heartleaf bergenia
Carex species - sedges
*Coreopsi*s species - coreopsis
Hemorocallis hybrids - daylilies
Heuchera species - coral bells
Hosta species - hosta lilies
Iris species - iris
Kniphofia uvaria - red-hot poker
Linum perenne - blue flax
Lupinus species - lupine
Epilobium angustifolium - fireweed
Oenothera missouriensis - evening primrose
Geranium species - cranesbill
Penstemon species - penstemon
Helianthemum nummularium - sun rose
Stachys byzantina - lamb's ear

Evergreen Shrubs
(*Scientific name* - common name)
Arbutus unedo – strawberry tree
Baccharis pilularis - dwarf coyote bush
Berberis piperi - Barberry
Chrysothamnus species - rabbit-brush
Cotoneaster species - cotoneaster
Daphne x burkwoodii var. 'Carol Mackie' - Carol Mackie daphne
Gaultheria shallon - salal
Lavandula species - lavender
Ligustrum species - privet
Lonicera pileata or nitida - privet honeysuckle
Mahonia aquifolium - Oregon grape
Mahonia nervosa - Long leaf Oregon grape
Pachystima myrsinites - Oregon boxwood
Rhamnus fragula - buckthorn
Rhododendron macrophyllum - Pacific rhododendron
Rhododendron occidentale - western azalea
Rosa species- roses
Viburnum davidii – David viburnum
Yucca species - yucca

Deciduous Shrubs
(*Scientific name* - common name)
Abelia grandiflora – glossy abelia
Acer glabrum - Rocky Mountain maple
Buddleia davidii - butterfly bush (invasive, be careful)
Caryopteris x clandonensis - blue-mist spirea

Cornus stolonifera - red osier dogwood
Euonymus alatus- burning bush
Holodiscus discolor - oceanspray
Philadelphus species – western mock orange
Rhus species -sumac
Ribes species - flowering currant or gooseberries
Rosa woodsii - Wood's rose
Salix species - willow
Spiraea x bumalda - Spirea species
Spiraea douglasii - western spirea
Symphoricarpos species - Snowberry
Syringa species - lilac

Deciduous Trees
(*Scientific name* - common name)
Acer circinatum - vine maple
Acer macrophyllum - bigleaf maple
Acer platanoides - Norway maple
Acer palmatum – Japanese maple
Acer rubrum var. Sunset - sunset maple
Aesculus hippocastanum- horsechestnut
Alnus rubra- red alder
Amelanchier alnifolia - serviceberry
Betula species- birch
Catalpa speciosa- northern catalpa
Cercis canadensis- eastern redbud
Celtis occidentalis- hackberry
Cornus species- dogwood
Fagus species- beech
Fraxinus species- ash (not drought tolerant)
Gleditsia triacanthos - honeylocust
Gymnocladus dioicus - Kentucky coffee tree
Juglans species - walnut
Liquidambar styraciflua- sweetgum
Populus species- cottonwood, aspen, poplar
Prunus species- cherry
Quercus species- oak
Robinia pseudoacacia- black locust
Salix species- willow
Sorbus species- mountain ash
Tilia species- linden or basswood

***Evergreen Trees**
(*Scientific Name* - Common Name)
Calocedrus decurrens- incense cedar
Larix occidentalis- western larch
Pinus ponderosa- ponderosa pine
Thuja plicata- western redcedar
Pinus lambertiana- sugar pine

*Caution should be used when planting evergreen trees. These trees can be very flammable, especially when young. Take care not to plant them close to your home and allow lots of room for future growing space. The practice of planting evergreens close together to form a privacy barrier between homes and along driveways is especially hazardous.

Source: *Fire-Resistant Plant Materials for Ashland.* Ashland Fire & Rescue. This document is available online at http://www.ashland.or.us/plants

Other resources

Fire-Resistant Plants for Oregon Home Landscapes. Stephen Fitzgerald and Amy Jo Waldo, OSU Extension Service. This publication is available online at: http://extension.oregonstate.edu/emergency/FireResPlants.pdf

Firewise Landscaping Checklist Firewise Website: http://www.firewise.org

Western Garden Book. Sunset Books, 2001.

Western Landscaping Book. Sunset Books

Family Emergency Procedures

Every family should be prepared for an emergency. In Jackson County's recent history, wildfires and floods have displaced residents or destroyed homes. The county is also potentially at risk from destructive windstorms, ice storms, periods of extreme heat or intense cold, and earthquakes. Emergency preparedness is also useful in the event of man-made disruptions, such as power failures, water supply interruptions – even terrorist attacks.

Basic emergency preparedness revolves around having a pre-determined family evacuation plan. The whole family should discuss what to take, where to meet, how to contact each other, and how to communicate your whereabouts to other family and/or authorities. If you have livestock or pets, include their safety in your planning. There is never a guarantee of significant warning before disaster strikes, so review and update your family plan annually!

A list of valuable items to take, should evacuation become necessary, is a good idea for every family. Be sure to include medications for all members of the family (as well as pets!), insurance policies, valuable telephone numbers, and other irreplaceable mementos.

Neighborhood planning can be invaluable in a disaster. Setting up methods of communication in the event that telephone lines and power are down can help reduce losses and ease the stress that an emergency situation can bring. Working with neighbors to develop mutual plans for moving livestock or other animals can also be advantageous.

The booklet *Jackson County Emergency Preparedness Plan for Families* is available for no cost from the Jackson County Emergency Management Advisory Council. This excellent step-by-step planning guide is an essential addition to every household. Obtain a copy at the Jackson County Emergency Management Office, 10 S Oakdale, Room 214, Medford, or request a copy by phoning (541) 774-6821.

The American Red Cross also has materials to help individuals and families prepare for disaster. Publications are available at the American Red Cross office at 1174 Progress Drive in Medford. Information is also available online at http://www.redcross.org/.

Home Insurance & Wildfire

Talk to your insurance agent now about your home or rental policy coverage in the event that your home was damaged or destroyed by wildfire.

- Will your policy's coverage be adequate to replace your home and its contents?
- What if you are judged to be responsible for having caused a fire? Will your insurance cover the cost of fire suppression as well as your losses? How will the losses others may have suffered as a result of the fire affect your policy?
- Does your policy include coverage for additional living expenses incurred because of a loss? For example, if your home is destroyed, you'll need to live someplace else until it's replaced. Will your policy cover this?
- Some insurance companies require policyholders to establish defensible space fuelbreaks around homes and other structures. Does your insurance carrier require this? Are you eligible for a rate reduction if you have defensible space?
- Are you in danger of losing your insurance coverage if your home is located in a wildfire hazard zone?
- Discuss improvements you could do to make your home less vulnerable to fire damage, such as replacing a wood shake roof with nonflammable roofing, or adding a secondary water source for fire protection. Will this result in a change in the cost of your policy or your level of coverage?
- Ask about the process for making a claim. Obtain important names and phone numbers and keep them with your policy.
- Also, keep the originals of your policy, deed and mortgage papers in a secure location. If your home should burn, or be destroyed in another natural disaster, will you be able to find your policy and these other documents?

Wildfire and Insurance Coverage Resources

Your Guide to Understanding Insurance: Catastrophes. Rocky Mountain Insurance Information Association
http://www.rmiia.org/Catastrophes_and_Statistics/Wildfire.htm

Tips on Wildfire Prevention and Protection. Allstate Insurance
http://www.allstate.com/catastrophe/PageRender.asp?page=wildfire.htm

Protect Your Home Against Wildfire Damage. Institute for Business and Home Safety.
http://www.ibhs.org/publications/view.asp?id=125

Wildfire Damage. American Family Insurance
http://www.amfam.com/claims/faq_wildfire.asp

Wildfires and Insurance. Washington State Office of the Insurance Commissioner
http://www.insurance.wa.gov/factsheets/factsheet_detail.asp?FctShtRcdNum=48

Wise Choices – Oregon Homeowner's Insurance. Oregon Dept. of Consumer and Business Services, Insurance Division http://www.cbs.state.or.us/external/ins/docs/wisechoi/wchome.htm

Chapter 8: Emergency Management

CHAPTER 8: EMERGENCY MANAGEMENT

Objectives

The Emergency Management section of the Jackson County Integrated Fire Plan (JaCIFP) addresses wildfire evacuation, emergency communications, public notification, citizen disaster preparedness, and coordination among fire agencies.

Current Activities and Resources

Emergency Operations Plan

The 2004 Jackson County Emergency Operations Plan (EOP) is a key management tool for use in Jackson County during an emergency, including wildfire events that activate the EOP. The purpose and function of the EOP are described below.

> *"This plan provides county officials and emergency responders with a framework for preparing for, responding to, and recovering from major emergencies and disasters. When the plan is activated, emergency response agencies are integrated into a common emergency management organization. This plan is a guide and does not carry the force of law. It is a management statement intended to define the interlocking roles of county personnel and to encourage cooperation and coordination among multiple jurisdictions. Nothing in this plan is intended to discourage field personnel from exercising discretionary authority in problem solving. The overarching goal of this plan is to reduce the vulnerability of the citizens of Jackson County to the human suffering, property damage, and financial losses that can result from emergencies."*
>
> *-Jackson County Emergency Operations Plan (2004)*[90]

The EOP allows for the activation of the Emergency Operations Center (EOC), as well as a field EOC. The EOC is the primary place where information is reported and decisions are made during an emergency situation. Designated spots for a central EOC are located in the Jackson County Courthouse and the county Elections Center. The Sheriff's Department can also establish a mobile EOC near the scene of an emergency.

Jackson County Emergency Preparedness Plan for Families

The Jackson County Emergency Management Advisory Council created the Jackson County Emergency Preparedness Plan for families. The plan is intended to serve as a guide for residents to prepare for a number of disasters possible in Jackson County, including: fires, floods, earthquakes, winter storms, power outages, and hazardous materials accidents. The wildfire chapter of this plan encourages residents in wildfire prone areas to clear defensible space around their home, create access for fire vehicles, and have an evacuation plan. Families can use a checklist from the plan to create their own disaster preparedness kit. Jackson County emergency contact numbers are also listed throughout the plan. The citizen emergency hotline number is 541-776-7338. This number is only activated during an emergency situation. The plan, which is easy to read and only thirty-eight pages, is available through Jackson County fire districts and county government offices.

Evacuation Procedure Review

An ad-hoc committee of fire managers reviewed several scenarios for wildfire evacuation plans in Jackson County as a part of this Fire Plan process. The committee decided to create a template to assist

[90] Jackson County, Oregon. 2004. *Emergency Operations Plan*. http://www.co.jackson.or.us/Page.asp?NavID=1517

local fire districts implement evacuation plans on a local scale. Evacuation plans need to be tailored to the local landscape, involving residents and local emergency responders who know the area intimately. The evacuation template uses a classification of roads to designate primary, secondary, and arterial evacuation routes. Dead-end and dangerous roads are also designated. The road classification can be reviewed and edited at the local level to best suit the landscape in each of the county's fire districts. Local fire districts will be responsible for developing localized evacuation plans. See *Resource E* fire district contacts.

Incident Command System (ICS)

> *"The Incident Command System (ICS) is a standard, on-scene, all hazard incident management system. ICS allows users to adopt an integrated organizational structure to match the needs of single or multiple incidents*[91]*."*
>
> *- Federal Emergency Management Agency 2004*

The ICS system is used by all emergency management agencies in the county. ICS can be used for small and short responses or on prolonged dispatches (such as wildfires). The ICS establishes a chain of command and divisions for different functions of incident management.

Multi-Agency Coordination Group

The Jackson County Emergency Management Advisory Council meets each quarter to discuss emergency management issues, public safety awareness, and agency relationships. The council helped develop the Jackson County Emergency Preparedness Plan for Families discussed earlier in this chapter.

Emergency Call-Down System

The emergency call down system utilizes the 911 communications system to "reverse 911" calls to an area of the county affected by an emergency. An area can be isolated on a computer and the system will call all phone numbers registered to addresses in that specific area. A message specific to the emergency incident is played when a resident or answering machine picks up the phone. The call down system can be used in a wildfire emergency to notify residents of an evacuation. The challenges are to keep the system updated as phone numbers change and as cell phones become the primary means of communication for some residents.

Mutual Aid Agreements

Mutual Aid Agreements are made between fire management agencies to access additional emergency response resources if needed during an emergency. Mutual aid agreements allow one jurisdiction to operate in another jurisdiction and are especially needed for wildfires when a fire may be crossing multiple political boundaries.

Special Needs Disaster Registry

Senior and Disability Services of the Rogue Valley Council of Governments developed a Disaster Registry in 1999 after a flood in Jackson County. The emergency highlighted the need for responders to be able to locate vulnerable people before and during a disaster. The Registry has been successfully called into action during major wildland fires in Josephine County.[92]

The Registry includes frail elders and adults with physical, cognitive and severe mental disabilities,

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[91] Federal Emergency Management Agency. National Incident Management System, An Introduction. Self-Study Guide, August 2004.

[92] Connie Saldana, Rogue Valley Council of Governments. Pers. Comm. 2006

utilizing ArcMap GIS software. The database is kept current by a core of volunteers who phone each registrant on a quarterly basis.

Eligibility for inclusion in the Disaster Registry consists of:

- Inability to evacuate one's self;
- Inability to stay in one's home for up to three days; or
- Need of special notification of the necessity to evacuate, due to disability

An individual must complete and sign a simple one-page application. Applications can be requested by phoning 541-664-6676.

Rogue Valley Fire Chief's Association Interface Exercise

The Rogue Valley Chief's Association has organized a wildland urban interface exercise in past years. Although it did not take place in 2005, the exercise has been a valuable learning experience for local fire departments and wildland fire agencies in past years. The exercise consists of a fictitious wildfire scenario that threatens homes in a Southern Oregon community. Fire departments are dispatched according to established protocols and mutual aid agreements as if it were a real fire. The "incident" draws on resources from Jackson and Josephine counties.[93]

Jackson County Search and Rescue

The sheriff of each county has the responsibility for search and rescue activities within the county. The sheriff is responsible not only to conduct the search, but also for the people who physically do the search, rescue or recovery.

Jackson County conducts over 50 searches a year, seeking to locate persons who are missing. Those persons may be hunters, skiers, children, or elderly citizens. They may be lost, injured, or in jeopardy. The terrain may be rugged mountains, level farmland, or urban residential.

When the Jackson County Sheriff's Department is called regarding a lost or missing person, certain procedures are triggered: Key staff people are notified; a Deputy Sheriff and a Search Manager are dispatched to the scene to provide immediate assistance and gain additional information, and Search and Rescue (SAR) volunteers are notified to mobilize. SAR resources include tracking teams, ground searchers, divers, search dogs, aircraft, boats, snowmobiles, and base support equipment - whatever may be necessary to help locate the missing person.[94]

Public Emergency Communication Capability

Emergency managers have an array of public communication options during an emergency event. Mentioned above, the call-down system is a primary means of quickly contacting a specific geographical segment of the public and delivering a targeted message. Various media outlets are other sources of communication. Radio stations rate high on the public's list of information sources during an emergency situation.[95] Radios can be run on batteries and in vehicles, making them a more reliable means of communication, especially when residents are being evacuated. Television is another media source that can be used in a short time frame, but with more limited functionality for residents during an emergency evacuation. The print media is a good source of information for the public during an extended emergency situation, but is limited during the first hours or day of an emergency due to print times.

[93] Keith Woodley, Fire Chief, Ashland Fire and Rescue. Pers. Comm. 2006.
[94] Jackson County Homepage. Online: www.jacksoncounty.org
[95] Jackson County Integrated Fire Plan public survey results, 2005.

Local Community Efforts and Resources

Communities or neighborhoods may have local plans that address wildfire safety concerns. Fuels reduction plans, evacuation routes and safety zones, communication, and resources can be shared or developed at a local level. Fire districts, watershed councils, or residents who have a history in the area may know about local plans and resources. Jackson County has several examples of local efforts including pre-determined wildfire evacuation routes and an emergency radio station in Ashland, neighborhood plans in Foots Creek, telephone trees in the Applegate valley, and the fuels planning in the Dark Hollow Road area.

Emergency Management Action Plans

Emergency Management Action Plan #1: Strengthen Notification for Wildfire Evacuation

During a wildfire it can be difficult for busy incident managers to effectively communicate an evacuation order with County officials. A pre-planned process for communications between incident command and county emergency management personnel is needed. This link is essential to the success of the call down (reverse 911) system and other communication efforts.

Desired Condition	Accurate and timely county and public notification of evacuation orders.
Strategy:	A review of agency notification processes for the county EOC. Testing of new telephone system by June 2006. Long term assignments to further develop methods for implementation by 2007 fire season.
Timeline:	Fully implemented prior to 2007 fire season.
Lead:	**RVFCA,** JCEMAC, Local Fire Districts, ODF

Emergency Management Action Plan #2: Develop a Logistical Plan for Wildfire Evacuation

Designated evacuation routes can help residents and emergency responders more effectively move in and out of an area threatened by fire. Local fire districts can help residents become aware of the safest evacuation routes through public education and local mapping.

Desired Condition	WUI residents know standard evacuation routes and are informed as to their options when a wildfire approaches their home.
Strategy	Annual review by agencies to ensure coordinated process to notify county EOC. Continued public notification efforts and development of new mediums to reach more remote public.
Timeline	Completed public meetings by June of 2007.
Lead	**RVFCA,** JCEMAC, Local Fire Districts, ODF

Emergency Management Action Plan #3: Develop a Wildfire Evacuation Protocol

An evacuation protocol that is followed by fire incident command officers would ensure that evacuation notifications are timely, coordinated, and properly executed. A protocol is useful during an emergency when there may not be time to think about the details of evacuation communications.

Desired Condition	Clear and concise processes and protocols for agencies to follow when implementing evacuations.
Strategy	Follow existing protocols in county EOP and annually conduct information meetings with affected agencies. Conduct reviews of evacuations to identify things that went well and things that need improvement.
Timeline	Fully implemented prior to 2007 fire season.
Lead	**RVFCA,** JCEMAC, Local Fire Districts, ODF

Emergency Management Action Plan #4: Promote Coordinated Emergency Response

A wildfire response can involve many different agencies working together to manage the fire, evacuation, traffic, public affairs, and the media. Creating a workforce trained in the Incident Command System (ICS) will lead to a more efficient and effective implementation of a wildfire incident.

Desired Condition	A well-trained workforce and coordinated effort from all agencies involved in wildland fire protection.
Strategy	Provide training for all county and community agencies to gain widespread support for ICS. Existing training courses and opportunities need to continue to promote complete interagency coordinated emergency management efforts. Include federal agencies in the EMAC.
Timeline	Ongoing continued support of existing training offerings and coordination efforts.
Lead	JCEMAC, RVFCA, Local Fire Districts, ODF

Emergency Management Action Plan #5: Promote links between homeowners and fire management agencies.

An informed public is essential to effective wildfire prevention and protection. Fire agencies will develop relationships with local homeowners to create an informed citizenry.

Desired Condition	Landowners understand the type and level of fire protection provided for their property. Landowners know who provides protection and who to contact for prevention material, home defensible space, evacuation, and burning regulation information.
Strategy	Fire districts and wildland fire protection agencies meet with the public in local meetings to cover pertinent information. Develop other methods to deliver information to residents.
Timeline	Continued support of existing effort to involve realtors may be completed by the end of 2006. Continued efforts by the fire districts will need to be updated annually.
Lead	**RVFCA**/Local Fire Districts/ODF/JaCIFP Outreach and Education Committee

Emergency Management Action Plan #6: Utilization of GIS resources during wildfire incident operations

Geographical Information Systems (GIS) are a powerful tool for displaying and analyzing data. Jackson County has an active and innovative GIS community that could be utilized to more effectively access data before or during a wildfire incident. Examples of critical data are: roads, fuels treatments, homes and addresses, water sources, topography, and vegetation types.

Desired Condition	County GIS mapping capability is available to local fire suppression agencies during extended incident operations.
Strategy	Develop response protocol or an integration plan for use of county GIS information on actual incident responses. Identify and adopt data collection criteria for county and all cooperators to ensure data formats are compatible. Identify funding necessary to implement.
Timeline	Create data standards followed by field protocol for information sharing and GIS incident support. Ongoing timeline depends on access to funding and staff time.
Lead	County GIS and agency GIS staff.

Emergency Management Action Plan #7: Share roles and responsibilities with the Rogue Valley Fire Chief's Association (RVFCA)

The Rogue Valley Fire Chief's Association has representatives from all of the structural and wildland fire agencies and oversees activities of the Rogue Fire Prevention Cooperative. The RVFCA has been delegated certain responsibilities in the Emergency Management Action Items that need to be clearly explained to all members who have not been involved in the JaCIFP planning process.

Desired Condition	The RVFCA understands its roles and responsibilities for implementation of Emergency Management actions.
Strategy	Conduct information sharing at a Chief's Association meeting.
Timeline	As soon as possible after the JaCIFP is signed.
Lead	Jackson County staff (Jenna Stanke or Lin Bernhardt).

Emergency Management Action Plan #8: Facilitate coordinated capacity building among departments.

Desired Condition	All fire agencies share in training and grant opportunities for fire suppression and prevention capacity building
Strategy	Emergency Management committee will coordinate with Rogue Interagency Training Association (RITA) to identify training gaps and potential grant sources for equipment.
Timeline	Ongoing
Lead	**RVFCA,** RITA, JCEMAC, Local Fire Districts, ODF

Chapter 9: Biomass Utilization and Economic Development

CHAPTER 9: BIOMASS UTILIZATION AND ECONOMIC DEVELOPMENT

Biomass and Small Diameter Tree Utilization

In the past, there was an abundance of larger diameter logs and small diameter resources were routinely slashed and burned. Access to and the supply of large diameter trees has dwindled, allowing small diameter to become a viable option in the marketplace, especially in light of current forest health and fire severity issues described in Chapter 4.

The terms small diameter and biomass are used interchangeably, and in some cases they are synonymous. While small diameter trees can be converted into lumber, furniture, and dozens of other value-added products, the term "biomass" can also be used to describe tree limbs, tree tops, brush, and other material derived from forest vegetation. One viable option for biomass use is conversion to electricity or heat. This type of biomass is usually ground up and sold by the ton, rather than measured in board feet. Federal and state government programs are slowly increasing the feasibility of biomass to energy conversion especially in the face of an increasing need to rely on sustainable domestic energy sources.[96]

The definition of small diameter and the functional size of small trees is still discussed among environmentalists and industry representatives alike. No matter the definition of "small", small diameter tree utilization has been challenging for many decades in Jackson County. Many landowners and foresters alike have tried to market posts, poles, firewood, and other small diameter products in an economically viable business with limited success.

More recently the federal government has begun to give attention to the potential economic value of trees that would otherwise be piled and burned during fuels reduction projects. Small diameter pilot projects have been fielded to gauge the operational and economic feasibility of removing the smallest trees. A recent report published by the local Resource Conservation and Development Council (RC&D) outlined challenges and opportunities in developing a small diameter economy in southwest Oregon. A list of sixteen challenges to better utilization of small diameter trees included challenges in stable supply, federal forest policy, poor markets and very little market research, and on-the-ground operational difficulties.[97] The report outlined four promising products derived from small diameter trees and biomass:

- Biomass to energy, with a focus on wood-fired boilers for institutional heating applications and flexible small-scale power generation.
- Manufacture of specialized products at a molding facility, utilizing existing capacity to produce products including "inside out logs", panel stock and custom molding.
- A ton-wood facility for firewood, with sorts for post-and-pole and hog fuel markets.
- An integrated medium scale sawmilling and kiln drying facility for small diameter softwoods and regional hardwoods targeting non-commodity, value-added markets[98].

Another resource describes the state of biomass utilization in Southwest Oregon. *An Inventory and Analysis of Biomass Utilization Efforts in Southwestern Oregon* was compiled by Bill Almquist, a graduate fellow at Resource Innovations, University of Oregon. The Inventory and Analysis report

[96] U.S. Department of Energy Biomass Program. Online: http://www1.eere.energy.gov/biomass

[97] George McKinley, et al. 2005. Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization. Southwest Oregon Resource Conservation and Development Council. Online: http://www.pacrimrcd.org/page.asp?navid=288

[98] Ibid.

outlines ongoing efforts, analyzes the challenges being encountered by each group, and makes recommendations as to how the challenges might be overcome[99]. *See Resource E for more information*.

Current Activities and Programs

Rather than form a new committee, the Executive Committee chose to support the efforts of the Southern Oregon Small Diameter Collaborative, an ongoing collaborative group focused on addressing forest stewardship and utilization, to address the issue of small diameter tree and biomass utilization in the JaCIFP.

There is a history in Jackson County related to the utilization of fuels treatment and forest restoration by-products and development of economic opportunities around small diameter tree and biomass harvest in Southern Oregon. Groups engaged in utilization include the Jackson County Small Diameter Tree Committee, the Southwest Oregon Resource Conservation and Development Council, the Applegate Biomass Study Group, the Jefferson Sustainable Development Initiative, the Southern Oregon Small Diameter Collaborative, and Lomakatsi Restoration Project.

Small woodland owners and independent logging operators have cut and marketed small diameter trees for years, developing techniques and niche markets for an otherwise unusable by-product. Each effort has made headway in some aspect of this issue yet there has not been a breakthrough from small-scale projects to a landscape vision. Current work by the Southern Oregon Small Diameter Collaborative has a two-county scope (Jackson and Josephine) and is addressing the perceived root of the problem: a stable supply of ecologically harvested and economically viable material from federal lands that prioritizes local economic stability.

Jackson County Small Diameter Tree Utilization Committee

Thanks to Lin Bernhardt of Jackson County for this section.

The small diameter tree utilization committee was initially convened in 2000 by the Jackson County Board of Commissioners to study the utilization of small diameter wood. This was in response to the critical need to remove this material from local forests for the purpose of reducing insect infestation and potential catastrophic wildfires. The commissioners hoped to support initiatives that stimulated local economies by creating and expanding forest-based businesses and value-added products, while balancing it with the need to promote sound forest management practices and sustainable ecosystems.

The group became more focused on education, realizing the need for public support. The group enlisted the help of Dr. John Sessions from the Oregon State University's College of Forestry to design a computer model that would show the effects of wildfire burning through a particular forested area. Users can look at the results of the forest condition following a simulated wildfire. In the future, landowners will be able to access this model through a county website, select a forest type that matches their land, and choose a course of action that would demonstrate the results of various management techniques, including: no management, light thinning, or heavy thinning.

Other variables in the model include wind speed, temperature, etc. The computer model will then show how fire has affected the forest under varying conditions. The model is intended to motivate landowners to manage their forests in a way that encourages healthy land and safer forests. The group consists of mostly public agency staff, as well as representatives from private industry, an environmental group, and economic development. The group also produced a DVD and thirty-second television spot in

[99] Bill Almquist, 2005. *An Inventory and Analysis of Biomass Utilization Efforts in Southwestern Oregon.* Resource Innovations, University of Oregon.

conjunction with the Oregon State University College of Forestry media center. The next effort will focus on getting the computer model into the hands of landowners via the website.

Southwest Oregon Resource Conservation and Development Council

Excerpt courtesy of SWOR RC&D, Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization

The Southwest Oregon RC&D Council formed a Small Diameter Timber Advisory Group in December 2002 to evaluate the past attempts, current opportunities, and strategies to deal with the complex small diameter timber utilization issue. Group consensus was that developing and maintaining a flow of wood consistent in quality and quantity is critical to the development of products and markets for small diameter products. Localized small-scale efforts exist throughout the processing chain, but marketing and product development are needed to encourage industry growth. This project evaluated socioeconomic conditions, forest conditions, local supply and potential products utilizing raw material available in the area. Conclusions and recommendations are presented about the efficiencies of integrated systems that diversify products and utilization. An analysis of the flow of material from wood products manufacturing and local infrastructure is presented. Marketing recommendations are also presented to stimulate business development and enhance existing businesses.[100]

The report *Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization* is a comprehensive analysis of the potential for utilization of small diameter trees as a by-product of forest restoration and fuels reduction. The report lists sixteen obstacles to better use small diameter resource and then describes ways in which local businesses could utilize small diameter trees for a variety of products.[101] *See Resource E for more information on this report.*

2005 Forest Landowner Resource Guide

The Resource Conservation and Development Council, in conjunction with the Oregon State University Extension Service produced a landowner's resource guide titled "2005 Forest Landowner Resource Guide". The guide contains information about biomass and small diameter utilization for local woodland owners.

Boaz Project

Jefferson Sustainable Development Initiative released a draft report on an analysis of a BLM pilot project for small diameter utilization called the Boaz Project. The Boaz Project is located in the Applegate Valley in mixed conifer forest on steep ground. The conclusions of the Boaz Report show that small diameter utilization is a difficult but financially feasible approach to forest health improvement and fire hazard reduction on federal lands. Although some units in the project lost money, the project cost the federal government less than a similarly implemented fuels reduction project with no utilization. The benefits created by a small diameter utilization project extend beyond the site and into the community and regional economy, whereas a fuels reduction contract with no utilization has little added benefit beyond the contractor's earnings.[102]

Applegate Biomass Utilization Proposal

Southwest Oregon is one of 6 biomass incubator sites across the country designated by the U.S. Department of the Interior. The 500,000 acre Applegate Watershed has been actively involved in fuel reduction strategies identified within the Applegate Fire Plan (Applegate Communities Collaborative

[100] George McKinley, et al. 2005. Excerpted from: Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization. Southwest Oregon Resource Conservation and Development Council. Online: http://www.pacrimrcd.org/page.asp?navid=288

[101] Ibid.

[102] George McKinley, 2006. DRAFT: *Steep Ground, Dry Forest Fuels Treatment Trials: the Boaz Project.*

Fire Protection Strategy), which was completed and adopted in 2002. The Applegate Biomass Feasibility Study is the next step to addressing the excessive volume of biomass on our public and private forest lands. A feasibility study is also a requirement for granting and lending organizations to fund a biomass operation. The feasibility study for the Applegate Watershed will (1) identify a utilization model, (2) assess the quantity and availability of biofuels, and (3) investigate the characteristics of potential sites, including consideration of economics, permit requirements and site-specific design elements.

The Applegate Biomass Study Group (ABSG), an ad hoc organization jointly sponsored by the Greater Applegate Community Development Corporation and the Applegate Partnership, has applied for funding for the feasibility study, and is seeking proposals from qualified organizations to:

- identify a biomass utilization and feasibility model by assessing the quality and availability of biomass resources and investigating the characteristics of potential sites in the Applegate Watershed, including consideration of economics, permit requirements and site specific design elements (Phase 1);
- assist in the long-term development of a biomass energy project, from facility construction through actual start-up (Phase 2)[103]

Southern Oregon Small Diameter Collaborative

The Southern Oregon Small Diameter Collaborative began meeting in December of 2004. Since that time, the group has been working towards the development of a stable supply of ecologically appropriate restoration by-products from federal lands to stimulate businesses and community well- being. Comprised of representatives from many facets of Jackson County's forest-minded community, the "Knitting Circle" has developed a proposal, which is included in *Resource D*. The proposal outlines a community-driven approach starting with local workers and capital as the foundation for ecologically-driven restoration work on the ground. The group's vision begins:

> *"Community and forest health are enhanced through the creation of a dependable, sustainable and predictable harvest of small diameter trees in the Rogue Basin."*

"Productive Harmony Standards" will drive an integrated approach to economic, ecologic, and social dimensions of a developing small diameter economy. Part of the National Environmental Policy Act of 1969, Productive Harmony Standards are a set of filters developed at the local level and agreed to by federal agencies that will drive decisions during the community-level process. Monitoring will be a key component to describing baseline conditions and implementing an adaptive management approach.

The integration of ecological, social, and economic values is a formidable and ongoing challenge, but the group has already attained an endorsement from Jackson County Commissioners and the support of key stakeholders in federal agencies and local governments. In addition to the document mentioned above, sub-committees of this group are developing ecological standards, economic criteria, and social standards. A program of work was completed in the winter of 2005-2006 and the group is seeking a paid position to work in earnest on the goals laid out by the group. By inviting a range of interests to the table the group is hoping to gather support through collaboration and building support at the ground level, rather than pursuing a top down approach.

[103] Blair Moody, Medford District BLM Biomass Lead. Pers. Comm.

Current Options for Biomass Disposal

Currently, there are several options to deal with biomass in a way that generates a by-product. *See Resource E: Contacts for more information.*

Biomass One

Biomass One, located in White City, is a 25-megawatt, wood waste fired cogeneration plant which annually recovers 355,000 tons of wood waste. This recovered wood waste is converted into electricity and steam. The steam is sold locally for drying lumber and veneer. All electricity is sold to Pacific Power for distribution to their customers in the Rogue Valley. Biomass One produces enough power to satisfy the needs of over 20,000 homes. Local public and area businesses provide Biomass One with wood waste for fuel. Biomass One provides the community with a mutually beneficial and environmentally preferable means of wood waste disposal, which would otherwise fill up scarce landfill resources or pollute the air-shed through open burning.[104]

Hilton Fuel

Hilton Fuel in Central Point accepts clean woody debris with no tipping fee.

Northwest Pole Company

Northwest Pole Company purchases Douglas-fir, incense cedar, and pine poles, one inch to eight inches diameter at the top, for furniture and poles.

Rogue Valley Fuel

Rogue Valley Fuel purchases select sizes and species for firewood, posts, and poles.[105]

Local Landfills and Transfer Stations

Several of the local landfills and transfer stations take biomass to be chipped or composted. The public can call local disposal companies to find out how much it will cost to drop off biomass. Composting leaves and other yard debris at home is a safe and effective way to deal with debris. Call the Oregon State University Extension Service Master Gardner Program for advice on composting.

Biomass Utilization Action Plan

Developing a stable, economic, and ecologic supply of small diameter and biomass from federal land is perhaps the most important "action item" and is being worked on at this time. Jackson County government tries to support promising efforts by passing resolutions, using small diameter materials for County projects, and funding small diameter efforts through Title III grants.

The Southern Oregon Small Diameter Collaborative is seeking to coordinate the economic, social, and ecological aspects of small diameter utilization. Future actions being planned by the group include:

- Securing funds to hire a coordinator
- Working with Oregon Solutions, a non-profit dedicated to helping local groups stimulate local economies
- Finalizing and integrating social, economic, and ecological standards
- Working in communities to gauge the level of interest and capacity for small diameter utilization and forest restoration work.

[104] Biomass One website. Online: www.biomassone.com
[105] Southwest Oregon Resource Conservation and Development Council. *2005 Landowner Resource Guide.*

Chapter 10: Outreach and Education

Outreach and Education Goals and Objectives

Getting good information into the hands of the public and inspiring action is one of the most important goals for community wildfire protection. Jackson County landowners must take responsibility for their homes and properties in order for fires to burn with little or no damage to life, property, and resources. The Jackson County Integrated Fire Plan (JaCIFP) Outreach and Education committee set out to develop effective communication for wildfire safety issues in the county. Similar to the biomass and small diameter utilization efforts, wildfire education and outreach has been an ongoing process for many years involving diverse groups over that time period. The revitalization of regional efforts through the Josephine County Education and Outreach committee helped to create a strong foundation for the Jackson County committee. Some members of the Josephine County committee are also engaged in Jackson County efforts and the Rogue Valley Fire Prevention Co-op, bringing experience and connections to the group. The objectives of the JaCIFP Outreach and Education included:

1. Conduct outreach to gather input during the JaCIFP planning process; and
2. Develop a public outreach strategy and actions to implement in the future (action items).

Outreach and Education Committee Members

Jenna Stanke – Jackson County- *Committee Chair*
Lu Anthony – Little Butte Creek Watershed
Brian Ballou – Oregon Department of Forestry
Chris Chambers – Ashland Fire and Rescue
Mary Ann Ceglia- U.S. Forest Service
Rita Dyer – U.S. Forest Service
Jean Gallagher – U.S. Forest Service
Julia Genre – U.S. Forest Service
John Gerritsma – Bureau of Land Management
Brad Inman – Friends of the Greensprings
Mark Moran – Fire District #3
Dan Patterson – Medford Rural Fire District #2
Gail Perrotti – Seven Basins Watershed
Sandy Shaffer – Applegate Resident
John Ward – Friends of the Greensprings

Gathering Public Input: Community Meetings

Conducting public outreach through community meetings helped gain input on community perceptions of wildfire risk, community values, and it also included education for citizens about living with wildfire and the Jackson County Integrated Fire Planning process. The community meetings led to significant interaction between citizens and local fire officials. These types of meetings are often the only opportunity many people have to meet and converse with their local fire officials, as well as county, state, and federal agency representatives.

Public Meeting Strategy

The public meeting strategy built off of experiences in other communities that have developed fire plans and from a workshop on community outreach held for JaCIFP partners in May 2005. *An important note is that this strategy only addresses the public outreach events held in conjunction with the development of the plan.* The JaCIFP Outreach and Education committee helped to refine additional goals, objectives

and actions for wildfire education that include other avenues and opportunities for outreach during plan implementation.

Summary of the Fall 2005 Jackson County Integrated Fire Plan Community Meetings

The contracting team and partners involved with the JaCIFP coordinated six public outreach meetings throughout the county during the fall of 2005. Many JaCIFP partner agencies, organizations, and individuals assisted with meeting planning, marketing, and facilitation, which helped to make the public meetings a success.

Table 10.1 Fall 2005 Meeting Dates, Locations, and Attendance

Date	Community	Address	Attendance
September 27	Jacksonville Area	OSU Extension Service Auditorium 569 Hanley Road	55
October 11	Sam's Valley/Gold Hill	Sam's Valley Elementary School	62
October 18	Applegate/Ruch	Ruch School Cafeteria	54
October 25	Ashland/Greensprings	Bellview Grange 1044 Tolman Cr. Rd.	25
November 9	Rogue River/Wimer	Rogue River High School	75
November 15	Shady Cove/ Butte Falls/Prospect	Upper Rogue Community Center 22465 HWY 62	62

Meeting/Outreach Objectives

The objectives of the public meetings were to gain input on community perceptions of wildfire risk and community values, and to share information about living with wildfire and the JaCIFP process.

Partners involved with the JaCIFP identified specific objectives and information they hoped to gather from the public during the community meetings, including:

The Fire Plan

- Public input on the JaCIFP mission, goals and objectives

Perception and awareness

- The current level of public awareness
- Do they perceive a threat from wildfire?
- Do they know about local efforts to plan for wildfire (fuels work, communication strategies)?
- What do people know about entities/partners and what their roles are?

Fire safety information and defensible space

- Where did they get information about wildfire safety and is it accurate?
- Do they know what defensible space is and do they have it at their home?
- Possible sites for fuels reduction
- What resources are they aware of that may be useful in reducing wildfire risk? (e.g., water sources, evacuation routes, shelter sites, etc.)

- What is the best route to access their home?

Emergency management and communication

- Do they know about their local emergency response agency's services?
- Do they have evacuation plans in place?
- How would they get emergency information during a wildfire? If there was no electricity?

Values

- What does the public value and want to see protected from wildfire?
- Values (cultural, historical, social, environmental, etc.)
- Community Infrastructure

At each community meeting, JaCIFP partners presented the following information:

- Purpose of the fire plan
- What the plan hopes to accomplish/address
- The extent to which individuals and communities are a partner in wildfire safety
- Why wildfire risk is such a current and relevant issue
- Shared perspectives as to existing problems and issues
- Why increased collaboration is necessary
- Relevance to population changes

Partners also hoped to identify community partners and discuss partner relationships and how fire protection services provided.

Meeting Outcomes

Partners gathered information on wildfire concerns of local residents, educated residents on wildfire protection and how to live with wildfire, introduced residents to the JaCIFP process, and gained knowledge of the values that residents want to protect from wildfire.

Meeting Content

Each meeting began with an introduction from the meeting moderator followed by a welcome from local fire chiefs. The local Fire Chiefs described their district's services, the wildfire hazard in their area, and urged local residents to prepare their homes and communities for wildfire. The moderator familiarized participants with the JaCIFP process, the purpose of the plan, and the agenda of the meeting. Each meeting included an informational session and small group exercises focused on neighborhood maps.

The small group exercises were designed to glean local knowledge from residents about the community values they want to protect from wildfire, specific knowledge of local fire-related issues and resources such as bridges, water sources, road access, gates, fuel hazards, among others. *Examples of the public agendas and detailed facilitators' agendas are included in Resource D.*

Issues Raised and Information Shared at Community Meetings

One of the primary objectives of the meetings included engaging residents and providing them with an opportunity to get to know local fire officials and communicate site-specific issues in a small group setting. Issues identified in these meetings came from notes taken in the small group sessions and

through interviews with the small group facilitators. Following are the issues raised and information shared by participants:

Category #1: Defensible Space and Access

- Access to property: Specific information was shared with local fire department and passed on to emergency dispatch.
- Residents shared information on gated roads and opportunities for turnaround with the fire service.
- Concern about distance of defensible space to make sure fire does not spread from house to house.
- Roadside right of way is a hazard between county road and private property.
- Residents that do not understand easements around driveways through neighbor's property.
- Driveway clearance specifications.
- Defensible space clearance around house, is it enough?
- Slope of driveway and access to house.
- How to do defensible space fuels work in a riparian zone?
- How to do fuels treatments on property, what to thin, and how much.
- 6 owners requested home site visits to evaluate defensible space (Rogue River meeting)
- Information on how does Senate Bill 360 affects private property

Category #2: Fuels Reduction Issues

- People concerned with neighbor's fuels not being thinned. Is there any regulatory recourse to make them do the work?
- People don't have time, money, or ability to get fuels work done.
- Difficult terrain to accomplish work on
- Disposal of debris, don't know about free disposal days.
- Can a property go from High to Moderate rating just by treating the fuels?
- BLM land next door has not been treated for fuels
- Burn permits, how to get them and when is it legal to burn?

Category #3: Fire Suppression: Response and Water Availability

- Location of local water sources were identified on maps.
- Want to install a fire hydrant to allow highway access to fill up engines from a 40,000-gallon water source.
- Formation of a local fire district (Butte Falls)
- Three owners realized they have no structural fire protection after looking at maps.
- Residents volunteered for local fire district at meeting.

Category #4: Community/Neighborhood Preparation Issues

- Power line and phone line right of ways, pruning happens but not for fire safety
- Don't have a neighborhood evacuation plan
- Identified safety zones in neighborhood area for emergency use
- Neighbors met and agreed to share resources such as water sources, equipment, and to establish better neighborhood communication.
- Want to install a cell phone tower for better communication if land lines and/or electricity are out.
- What happens in a power outage? Use of generators.

How public issues are addressed in the fire plan

JaCIFP partners hoped to understand public concerns, ideas, and issues and integrate those issues within the plan. The JaCIFP planning team reviewed the public input and directed specific issues to the appropriate sub-committee. While some issues identified by the public helped refine action items in the plan, other information has be used immediately by local fire officials to help the agencies better prepare for and communicate with the public during a wildfire situation. For example, one community member mentioned an access issue where their home would be best accessed from a neighbor's driveway. This issue was passed on to emergency dispatch to be noted with the homeowner's address in the dispatch computer system. This was not passed on to a plan committee for consideration, but on a local scale was extremely important information.

Public Surveys

Beginning in the summer of 2005, members of the Outreach and Education committee developed and distributed a public survey in order to gauge public understanding and the degree of actions taken related to wildfire preparedness. JaCIFP partners distributed surveys to the fire districts, solicited at the Jackson County Fair, and handed out at all of the community meetings. The results are summarized below.

Conclusions from Public Surveys

Jackson County residents completed two hundred and twenty surveys. It is worthwhile to keep in mind that the public surveys only represent a segment of the public who attended a public meeting or the county fair. Responses from the public at large may differ significantly from responses of meeting attendees. Seventy-eight percent of the respondents said they have defensible space around their home. There is still a need to further educate the public throughout the county on the principles of home defensible space. Respondents generally lacked wildfire evacuation plans for their families and neighborhoods, indicating a significant issue needing attention across the county. People indicated that they receive good information about wildfire issues primarily from their local fire districts, a point the JaCIFP planning team and outreach and education committee will consider during future educational campaigns. Another important issue was emergency communications. Radio stations were ranked highest among sources of wildfire information for residents. *The full list of survey results are in Resource D.*

Current Activities and Programs

Rogue Valley Fire Prevention Co-op

The Rogue Valley Fire Prevention Co-op was founded in the early 1980's and includes structural and wildland fire agencies throughout Jackson and Josephine counties. The goals of the co-op are to:

1. unite agencies engaged in fire prevention and public education;
2. promote an interagency exchange of ideas, programs and resources in the area of fire prevention and public education;
3. promote, coordinate and actively support interagency participation in fire prevention activities;
4. act as a central agency for the exchange of professional information among its members;
5. obtain a reduction in the number of preventable fires within the jurisdiction of the cooperative.

The Co-op's activities currently include teaching fire safety in schools, touring with a recently purchased fire education trailer, conducting a Smokey Bear education campaign, increasing fire safety outreach among the Hispanic population, and pursuing non-profit status.

Two-County Outreach and Education Campaign

A two-county spring outreach and education campaign (coordinated between Jackson and Josephine Counties) has included a woody vegetation disposal day effort in 2005 and 2006. Jenna Stanke of Jackson County coordinated the effort in Jackson Count in both 2005 and 2006, funded by a Title III grant.

County Fair & Home Shows

The Jackson County Fair has been a historically opportune event for spreading wildfire safety messages. However, the biggest draw for fire agencies at the fair has been Smokey's Playland, which has been discontinued. There is a challenge ahead to attract more people to fire safety displays at the Jackson County Fair. The first year after Smokey's Playland discontinued, the Rogue Valley Fire Prevention Co-op secured a booth that received significantly less attention from visitors.

Local Home Shows are proving to be a valuable venue to reach homeowners regarding wildfire issues. As well, localized community events present a great opportunity to spread a message to a large group of people at a small cost. Jackson and Josephine County events (fairs, parades, etc.) are listed in Resource C.

Recognition Program

Funded through a Jackson County Title III grant, Jackson County created a recognition program for homeowners who created defensible space and driveway access to meet the county's fuels reduction standards. The fire safety planner for Jackson County coordinated the program with the help of the Rogue Valley Fire Chiefs' Association, including the development of signs that will be displayed along with the home's address at the bottom of the driveway.

The *Applegator* Newspaper

The *Applegator* is a bi-monthly newspaper that has been sponsored by the Applegate Partnership for twelve years. The newspaper often features articles on wildfire safety and fuels management issues. With a circulation of over nine thousand, the Applegator reaches thousands of urban interface dwellers in the Applegate Valley, and has proven to be an effective method of disseminating information.

Ashland City Source

The City of Ashland newsletter, called the "City Source" is sent out monthly to all Ashland residents through utility billings. An informational article about wildfire safety is sent out each May to encourage residents to prepare for wildfire season by cleaning up their yards, creating defensible space, and reducing fuel on their lots. Articles can be written and submitted to the Administration Department or Ashland Fire and Rescue for consideration.

Seven Basins Tabloid

The Seven Basins Neighborhood Fire Planning Steering Committee and Oregon State University Extension Service publish a quarterly newsletter on wildfire safety and community fire planning. The newsletter covered the creation of the Seven Basins CWPP and highlights a wide variety of fuels management and home safety recommendations. *For more information, look under OSU Extension Service in Resource E.*

Upper Rogue Independent

The Upper Rogue Independent covers a large rural population located in high fire hazard areas.

Rogue River Press
An independent paper, the Rogue River Press covers a largely rural population.

Educational Materials on Defensible Space
Due to the importance of defensible space in protecting homes, there have been many efforts to get the word out to residents about the importance of defensible space. A listing of these materials and where to find them is contained in Chapter 7 of the JaCIFP.

Outreach and Education Action Plans

Outreach and Education Action Item #1: Create a local fire prevention team to be activated on short notice to take advantage of "teachable moments" in the event of a wildfire in or near a community.

Prevention teams are used as a targeting strategy at a national level to deliver a message to a specific area at high risk. A local version of the prevention team could be used to take advantage of "teachable moments" after wildfires in or near a community. Teams could be mobilized on short time frames and consist of local people who are trusted by the community. A similar team of agency specialists could be utilized for "post mortem" inspections of fires to determine how homes burned and use the findings as an educational outreach tool.

Outcomes:	Organized local volunteers (community watch groups, CERT teams, Red Cross, etc.) coordinated with local fire agencies (structural and wildland) that can conduct outreach and education after a wildfire event or "post mortem" inspections in the event that a wildfire threatens or burns structures to pass information on to the public. This team should be tied into the event information team structure.
Timeline:	One year plus for development of participant list, protocols, and coordination with agencies.
Implementation Strategies:	Create a list of wildfire professions willing to participate on teams. Identify skills needed. Draft SOP for team activation. Develop TV & Radio spots with SOU Journalism students for use after a wildfire. Conduct a Prevention Team Exercise in conjunction with RVFCA spring exercise.
Lead:	Brian Ballou, Wildland Urban Interface Specialist, ODF—Creation of protocols only. Jenna Stanke, Jackson County Fire Safety and Zoning Inspector will work to implement protocols with help from Mary Ann Ceglia, US Forest Service.

Outreach and Education Action Item #2: Coordinate Wildfire Outreach and Education in Jackson and Josephine Counties

In the absence of coordinated actions across the Jackson-Josephine county area, a lack of communication and coordination among various groups addressing wildfire issues is common. Efforts and funding are sometimes duplicated and/or inefficient where they could be coordinated and efficient. Agencies and the Rogue Fire Prevention Co-op commonly work across the two-county area and the education committees and Co-op have been holding quarterly meetings in 2006. Fostering this relationship is a priority for the education committees in both counties.

Outcomes:	Frequent, coordinated communication among all groups in Jackson and Josephine Counties who are working on wildfire outreach and education. A well-developed and funded comprehensive strategy for outreach and education.
Strategy:	Develop better working relationships with the various groups working on wildfire issues. Identify the groups and develop a strategy for communication between the groups. Coordinate with the Josephine County Education Committee and Rogue Fire Prevention Co-op. Apply for funding.
Timeline:	Joint meetings with the outreach and education committees of both counties and the Co-op are scheduled on a quarterly basis.
Lead:	Committee chairs for the Jackson and Josephine Outreach and Education Committees, President of the Rogue Fire Prevention Co-op

Outreach and Education Action Item #3: Coordinate a Spring Wildfire Safety Campaign: Woody Vegetation Disposal Day

Spring is a good time to prepare homes for wildfire season by cleaning up debris. A day dedicated to free woody vegetation disposal creates an opportunity for education on defensible space principles and an option for debris disposal that doesn't involve burning.

Outcomes:	Landowners come to know this day each year and know what to do to clean up before fire season.
Strategy:	Plan vegetation disposal sites and dates around the 2-County area, use a combination of centralized and satellite locations for maximum coverage of the area. Advertise directly to target audience by mailing coupons for drop off of debris. Mailings will have info about defensible space and resources.
Lead:	Jenna Stanke, Jackson County Fire Safety Zoning Inspector

Outreach and Education Action Item #4: Develop a Wildfire Safety Speaker's Bureau

Requests are made from community/opportunities come up to make presentations about wildfire issues. Currently, there is no list of speakers to be called on to make a presentation. There is a lack of response among professional wildfire managers/agencies to non-traditional and outside requests for education and outreach.

Outcomes:	An effective, coordinated, and achievable program where outside opportunities are incorporated and prioritized. All requests for information and/or presentations are passed on to the most qualified and available person(s).
Strategy:	Develop a list of expert speakers who can talk on a specific subject regarding wildfire safety or management. Develop a list of possible candidates and check with each to determine interest. Create final list with area of expertise for each speaker.
Timeline:	Winter and Spring, 2006
Lead:	Brian Ballou, Wildland Urban Interface Specialist, Oregon Department of Forestry.

Outreach and Education Action Plan #5: Increase the Effectiveness of Public Education

As the public perceptions and actions about wildfire change, wildfire educators need to update messages and methods of delivery. An annual meeting focused on this issue will be a valuable tool to evaluate education and outreach programs.

Outcomes:	Wildfire education is meeting the changing needs of the public.
Strategy:	Conduct an annual survey and meeting in November or December with all people involved in wildfire education in Jackson and Josephine Counties. Discuss perceptions of how effective current and past educational efforts have been. Targeted public surveys at events can be used to gauge the public's understanding of wildfire issues.
Timeline:	First meeting November 2006
Lead:	Jackson County O&E Committee Chair, Josephine County Outreach and Education Committee Chair

Outreach and Education Action Plan #6: Home Assessment and Recognition Program Training

Information and recommendations being given by the various fire agencies in Jackson County are not congruent. Recommendations during defensible space inspections need to be similar across agencies. There is currently no training requirement for performing home inspections, but educational materials are available and a class can be created. Home recognition program training can be dovetailed with home assessment training sessions.

Outcomes:	WUI residents are receiving similar & accurate information on defensible space from fire agencies. Homeowners are recognized through the County's recognition program for meeting defensible space standards.
Strategy:	Provide home assessment and home recognition program training at local fire districts and wildland agencies. Jenna has resources from Firewise program that can be used as a class for any personnel doing wildfire home inspections.
Timeline:	First training November 2006
Lead:	Jenna Stanke, Jackson County Fire Safety Zoning Inspector

Outreach and Education Action Plan #7: Wildfire Education School Kits for Two-County Area

Wildfire education is important at all ages. There is a lack of quality wildfire education materials for school children in Jackson and Josephine counties. Having teaching kits available for teachers will encourage teachers to include wildfire education lessons. Over time, children and adults will better understand the issues surrounding wildfire in Southern Oregon.

Outcomes:	Wildfire education packets available to teachers & youth group leaders in Jackson and Josephine counties.
Strategy:	Apply for State Farm Grant, gather existing educational materials, develop needed materials, implement programs.
Timeline:	Spring 2006
Lead:	Sue Parrish & Sandy Shaffer, JCIFP Education Committee chair. A student from SOU is available to help develop the teaching kits.

Outreach and Education Action Plan #8: Sustain a Long-term Educational Program

Wildfire preparedness education will be a perpetual task for the O and E committee. Having directed and funded education and outreach effort will be key to getting information to the public so they can take the appropriate precautions.

Outcomes:	Private landowners and all residents in Jackson County are more aware of and educated on wildfire and forest health issues in their area.
Strategy:	a. determine what a long-term educational program would look like: types of topics covered, how detailed they should be, where they would be made available, the audience. b. determine costs associated with implementing this program per year. c. look at developing partnerships to share costs of the program. d. find and apply for grant funding to implement the program and provide operating capital. e. monitor and adapt process on an annual basis. Funding sources may include: Title III, State Farm, Assistance to Firefighters grant for education.
Timeline:	Implementation of the JaCIFP will start in Summer of 2006, this strategy needs to be long-term in order to be successful.
Lead:	Jenna Stanke-Jackson County Fire Safety and Zoning Inspector, ODF Wildland Urban Interface Specialist Brian Ballou, Sandy Shaffer, Rogue Fire Prevention Co-op, RVFCA

Monitoring Outreach and Education Actions

The Outreach and Education committee will monitor implementation of action items during the quarterly two-county meetings. At a minimum, monitoring will consist of a review and update on each action item. Once a year each action item will be reviewed to determine if it is still appropriate. Action items can be removed and new items can be added at the yearly review or as needed.

Chapter 11: Wildfire Protection and Citizens with Special Needs in Jackson County

CHAPTER 11: WILDFIRE PROTECTION AND CITIZENS WITH SPECIAL NEEDS IN JACKSON COUNTY

Introduction

Jackson County's risk from wildfires is illustrated by the economic, environmental, and social costs of annual fire events, as well as the continued growth of the county's population and development within the wildland-urban interface. An added element of risk may exist for poor and underserved citizens in Jackson County. Because of financial constraints, many low-income, elderly, disabled, and other citizens with special need may lack the capacity to protect their homes from fire by creating defensible space around their homes or by preparing a 72-hour emergency kit.

Hurricane Katrina illustrated the fact that low-income, elderly, and minority populations were disproportionately impacted by the disaster because of social and economical barriers. Lower-income and minority residents of New Orleans generally experienced more severe impacts in terms of displacement and immediate rescue during the hurricane. It is therefore critical to collaborate with social service providers and ensure that all members of a community will be protected in a disaster.

Jackson County Integrated Fire Plan (JaCIFP) partners can use the information and recommendations in this report to help citizens with special needs prepare for, respond to, and recover from a wildfire. This report documents efforts to identify citizens with special needs in Jackson County, their needs in the event of a wildfire, and illustrates the resources available through local social service agencies to help protect citizens with special needs.

In the past few years, Jackson County has also formed a special needs committee. This committee is a separate effort from the fire plan, and is comprised of Jackson County social service and public health organizations. For more information about the committee, contact Senior and Disability Services at Rogue Valley Council of Governments.

Methodology

Resource Innovations identified and spoke with social service agencies and community services organizations in Jackson County to understand how they identify citizens with special needs, what their clients' needs are in the case of a wildfire, and their input on strategies for coordination and delivery of fire prevention information.

To identify appropriate agencies, Resource Innovations reviewed online resources, a Jackson County social service directory, and talked with Rogue Valley Council of Governments to identify a sample of social service agencies throughout the county. Resource Innovations identified 26 possible agencies and interviewed twelve Jackson County social services organizations serving populations in rural and urban areas. Many of the people served by those social service agencies are low-income, elderly, have mental and physical disabilities, or language barriers. Over 80% of the people served by the social service organizations we interviewed live in urban areas, primarily in Medford and Ashland. According to the U.S. Census, the average population density for the metropolitan areas of Jackson County, including Medford and Ashland is about 700 people per square mile, while the rural areas have a population density of approximately 40 people per square mile.

Resource Innovations developed interview questions to determine how JaCIFP partners can better identify citizens with special needs in Jackson County and assist them in reducing their risk to wildfire. For example, we asked the respondents to explain their clients' barriers to protecting themselves from a wildfire. A full listing of questions is available in Resource D.

Resource Innovations used information from the interviews to develop findings and recommendations related to improving services for citizens with special needs in Jackson County in the event of a wildfire.

Resource Innovations also coordinated with the Jackson County special needs committee. The committee provides emergency management planning assistance to social service agencies serving elderly and disabled citizens. Through this process, we gathered information on social service programs, eligibility requirements, and populations served, as well as citizen needs during a wildfire. Interviews resulted in an understanding of how organizations determine eligibility for services, what they perceive to be potential threats from wildfire, and how they think their agency may be able to help the people they serve reduce their risk to wildfires.

Social Service Providers and Special Needs Populations

Social service providers can play an essential role in educating people they serve about wildfire risk. It is essential that citizens with special needs have access to tools that can help them prepare for a wildfire. These citizens may experience barriers that limit their ability to take protective measures before an event, or recover after a disaster. To understand the needs of different populations at risk, we interviewed agencies that work with one or more of the following population groups:

- Elderly
- Physically or mentally disabled
- Low-income
- Hispanic
- Youth

In many cases, we also found that citizens with special needs may have more than one special need, for example, elderly and low-income, which means that social service agencies must be prepared to assist citizens with a complex range of needs.

Coordination with Jackson County social service agencies can create a strong foundation for future action, as many of the organizations we spoke to expressed interest in the Jackson County Integrated Fire Plan and offered to distribute information on fire protection to the people they serve. Some social service agencies stated they are willing to place information in their newsletters, host speakers from the fire department or other speakers about wildfire preparedness issues, and have brochures, flyers, and posters placed in their offices. One agency specifically mentioned their interest in helping compile 72-hour emergency kits for their clients, with the help of a funding source. Table 1 at the end of this chapter illustrates the social service agencies interviewed, the services they provide to citizens throughout the county, and the potential opportunities to collaborate with these agencies in future preparedness activities. This table is an example of the type of valuable information that can be gathered from other agencies in regards to the type of outreach they are willing to provide for wildfire awareness.

Findings

Outreach and Education

A key element of the JaCIFP is outreach and education to all citizens, agencies, and organizations in Jackson County. In response to a question on how citizens with special needs can reduce their risk to wildfire, most agencies agreed that educating them on the risks of a wildfire is critical. Many of the social service agencies were not aware that the people they serve may be at risk to wildfire and agreed that because it is not an immediate concern of their clients, they are not likely prepared. These findings are important to document in order to better understand how to approach educating citizens with special needs and social service organizations themselves.

A critical component to educating social service providers is to determine where the threat of wildfire exists in relationship to where their clients live. Many clients may live in urban areas that are not at risk to wildfire while other citizens with special needs may live in urban areas that are at risk to wildfire, like Ashland, for example. Therefore, knowing where wildfires are a threat is important information for social service agencies, as is the knowledge of where all citizens with special needs live. Other key findings related to outreach and education include:

- All of the social service agencies interviewed indicated that they receive referrals from other social service agencies in Jackson County, illustrating a high level of internal communication between agencies.

- Eight of the 12 agencies stated that educating their clients on wildfires and its risks is one of the most important tools for their clients to be able to prepare for, respond to, and recover from a wildfire.

- Three quarters of the social service agencies interviewed were interested in the fire plan and were willing to inform their clients through discussion groups, guest speakers, brochures, etc. as long as they did not have to pay for it or invest too much time organizing such events.

Perceptions of Risk

Many of the interviews revealed that wildfire risk is not a major concern to most of the social service agencies in Jackson County. Most of the respondents do not perceive a risk from wildfires, nor do they perceive it to be a risk to the people they serve. For instance, one interview question asked respondents if they feel the people they serve are at risk to wildfire or other natural hazards. Half of the social service agencies reported that only the small percentage of their clients who live in rural areas are at risk. Only one agency reported that their clients in the metropolitan areas are at risk to fire, indicating the perception that only people living in rural areas of Jackson County are at risk to wildfire. In order to increase awareness and preparedness for a fire, fire agencies need to communicate what parts of the county are most at risk to wildfire. This will help social service agencies know which of the populations they serve may be most at risk.

- About 60 percent of the social service agencies do not feel wildfires are a major threat or are not aware of the threat. Some stated a flood was more threatening to where their clients live because many live in more metropolitan areas like Medford or Ashland.

- For many social service agencies, wildfire awareness is a low priority compared to other issues their clients have.

Population

About three quarters of the social service agencies interviewed stated they mainly serve residents in the cities, specifically Medford, Ashland, and Central Point. Twenty-seven percent of the social service agencies said they serve the same number of rural and urban residents. No respondents stated that they serve strictly rural populations. It is important to note that only a few social service agencies knew the exact locations of where all of the people they serve live.

- Seventy-five percent of the social service agencies stated that almost all of their clients are probably renters. Only one organization knew the exact numbers of renters and owners. Three organizations did not know any information about their clients housing status.

- Two organizations stated that most of their clients are homeless and live mainly in rural areas, in the forests.

- The majority of the social service agencies serve their clients at their local office headquarters, which are mainly in Medford and Ashland. About a quarter of the social service agencies interviewed provide home visits to people who are incapable of leaving their homes.

- The social service agencies range in the number of clients they serve from about 200 to 25,000 clients a year.

Risk of Wildfire to Citizens with Special Needs

We asked respondents, "In terms of a potential threat of fire to your clients, what are their needs before, during, and after a fire?" Respondents discussed a range of barriers citizens with special needs face in terms of wildfire protection.

- Because of physical disabilities, citizens with special needs cannot take many of the precautions necessary to reduce wildfire risk or to evacuate themselves in the event of a fire. This includes not being able to clear brush around their house, being unable to evacuate in the case that they are in a wheelchair or cannot walk well, or not being able to see or hear well. According to one respondent, many of the elderly residents live alone, as the state encourages living in your own home as opposed to a nursing home facility. The respondent believes those elderly residents will need assistance when a fire occurs because of their inability to move quickly on their own.

- Respondents stated that citizens with mental disabilities do not always understand what is going on, and in the case of a wildfire, they will probably not be able to successfully handle the situation if they are not prepared or have assistance.

- Many low-income residents may not have the means to rebuild in the event that their home is lost to a fire. Respondents stated that they also need financial assistance in preparing for an emergency (i.e., preparing a 72-hour emergency kit, money for a hotel if they have to evacuate, money for transportation). Assistance with 72-hour kits may be found through the Red Cross, and assistance for long-term recovery may be found through FEMA.

- According to one respondent, citizens who do not speak English also have many barriers to prepare themselves for or respond to a wildfire. They may not understand emergency directions , pamphlets, posters, or other information materials if they are not in Spanish.
- *Rural residents*: clients living in rural Jackson County, the social service agencies interviewed felt their clients are at risk of wildfire, but do not have the means to prepare themselves without assistance. The social service agencies believe that very few of their clients have a 72-hour emergency kit prepared, have cleared defensible space around their homes, or are prepared to evacuate their homes in an emergency situation.

- *Transportation:* In the event of a wildfire, respondents indicated that their clients may have difficulty finding transportation. Respondents repeatedly stated their concern about the inadequate transportation available to citizens who do not own their own car or do not drive.

- *Fuels Reduction Programs:* Only four of the twelve people interviewed were aware of the

Oregon Department of Forestry (ODF) Fuels Reduction Grant Program and the opportunities to help their clients reduce wildfire risk and create defensible space around their homes.

Preparedness of Social Service Agencies

Just as citizens with special needs must be prepared for a fire, agencies need to be prepared as well. Social service agencies reported that they currently do not have information available for their clients regarding the risks of wildfires. About 50 percent of the agencies reported they are not focusing their efforts on educating citizens with special needs to their wildfire risk because of more pressing issues. About 50% of the social service providers stated they could spend some time educating and informing their clients about wildfires. It is possible that by specifically asking agencies about their interest in receiving education about wildfires and preparing citizens with special needs for a wildfire, more social service providers will report they are indeed interested in educating themselves and those they serve.

Funding Issues

Financial resources are essential in helping citizens with special needs prepare for wildfire.

- About half of the social service agencies interviewed stated that they would like to educate and provide resources such as emergency kits to their clients, but they do not have the funding to pay for such services, as they are already on a tight budget. The social service agencies reported that the majority of their clients do not have the means to safeguard their homes from a wildfire by buying new roofing materials, new smoke detectors, and creating defensible space, or have the ability to recover after a fire because of insufficient income.

Southwest Oregon Special Needs Disaster Registry

The Senior and Disability Services of Rogue Valley Council of Governments has already developed a Disaster Registry for Jackson and Josephine Counties of frail elders and adults with physical, cognitive and severe mental disabilities, utilizing ArcMap GIS software. The database is kept current by a core of volunteers who phone each registrant on a quarterly basis. Eligibility for inclusion in the Disaster Registry includes:

- Inability to evacuates one's self
- Inability to stay in one's home for up to three days;
- Necessity of special notification of the need to evacuate, due to disability

The Disaster Registry was created in 1999 after a flood in our area pointed out the need for responders to be able to locate the most vulnerable people during a disaster. The Registry was successfully called into action during major wildland fires in Josephine County two years ago.

Special Needs Action Plan

Resource Innovations has developed recommendations for the JaCIFP Executive Committee and the Jackson County special needs committee to better identify citizens with special needs and understand their needs in the event of a wildfire. It is clear that planning and education are critical to prepare and protect citizens with special needs from a wildfire.

Nevertheless, it is also important to understand there are certain barriers and obstacles to overcome before successfully completing our recommended action plan. Those barriers include recognizing that even with the Disaster Registry, many of the social service agencies are unaware of where in the County wildfire threat exists and are unaware of the exact location of where their clients live, thus, are unsure of the extent to which wildfires are a real risk to the people they serve.

Recommendations

With the limited financial resources available to social service providers in Jackson County, a few of the respondents stated they have more urgent, pressing issues to confront before wildfire preparedness. With funding strictly dedicated to wildfire preparedness, the social service agencies believe they could provide better services to their clients for fire protection. However, this would most likely not cover all of the concerns that we have identified in this chapter.

Following are a series of recommended action items that focus on improving three areas of wildfire protection. They are listed under:

I. Emergency management planning
II. Education
III. Fuels reduction

I. Special Needs and Emergency Management Actions

SN Action Item #1: Identify Jackson County social service providers assisting special needs citizens living in the Wildland-Urban Interface.

Citizens who live in the WUI are at risk of being effected by a wildfire, but little data exists as to where these citizens live, specifically, and what their exact needs are.

Outcomes	Collaboration between social service and fire agencies; more information on the needs and locations of citizens with special needs living in the WUI
Strategy	Send out a short survey to all social service agencies in Jackson County that documents service provisions, populations served, and interest/ability to communicate information and programs on wildfire protection.
Timeline	Short-term
Lead	RVCOG, Senior and Disabled Services, Special Needs Committee, JaCIFP EC

SN Action Item #2: Increase the number of organizations on the Jackson County Special Needs Committee

Outcomes	Trained agency workers; increased information and resources to social service agencies
Strategy	Invite additional social service agencies in Jackson County to join the special needs committee
Timeline	Ongoing
Lead	Rogue Valley Council of Governments, Senior and Disabled Services, Special Needs Committee

SN Action Item #3: Expand and maintain the Special Needs Disaster Registry

Promote the use of the disaster registry by signing new residents, maintaining the data, and using GIS maps to help emergency managers locate people within the registry.

Outcomes	A complete and continually updated list of all citizens who will need assistance in the event of a wildfire.
Strategy	Distribute the special needs registry through multiple agencies and organizations throughout the county; update the registry with new and amended data on a quarterly basis
Timeline	Ongoing
Lead	RVCOG, Senior and Disabled Services, Special Needs Committee, JaCIFP EC, Jackson County GIS

SN Action Item #4: Coordinate transportation and evacuation plans for citizens with special needs

Outcomes	Special Needs residents are quickly and safely evacuated from their homes in the event of a wildfire
Strategy	Use the Special Needs Disaster Registry to develop transportation and evacuation plans for citizens with special needs; Coordinate with fire departments and County emergency management to avoid congestion issues.
Timeline	Long-term
Lead	Special Needs Committee, fire departments, Jackson County Emergency Management O & E committee

SN Action Item #5: Prepare and distribute 72-hour fire-preparedness kits for citizens

Outcomes	Special need citizens are prepared for 72 hours after a disaster
Strategy	Identify funding sources to purchase 72-hour kits; work with social service agencies on distribution
Timeline	Short term
Lead	Special Needs Committee, JaCIFP Finance Committee

SN Action Item #6: Conduct a training for the Special Needs Committee in incident management

Outcomes	Special Needs Committee better prepared and educated in incident management
Strategy	Conduct a training on ICS for the Jackson County Special Needs Committee and other social service agencies in the county.
Timeline	Short term
Lead	Jackson County Emergency Management, Local Fire Districts

II. Education and Special Needs Actions

SN Action Item #7: Increase awareness among social service agencies about wildfire risk.

Outcomes	Social Service providers will be able to better educate their clients about wildfire risk
Strategy	
Timeline	Short term
Lead	JaCIFP Outreach and Education Committee, Special Needs Committee, social service agencies, Funding sources for education

SN Action Item #8: Educate special need citizens and social service agencies through presentations and discussions with fire departments and other experts.

Strategies include:

- *Hold meetings held at public gathering places (community centers, schools, or churches)*
- *Make presentations interesting, brief, and simple.*
- *Ask agencies to display posters, flyers, brochures, and laminated checklists illustrating strategies on how to be prepared for a wildfire at their offices.*
- *Target public service announcements and broadcast on television, radio, and newspaper spots (such as in the Nickel newspaper), or residents' water and electric bills advising citizens of wildfire preparedness measures they can take.*
- *Use the Rogue Valley Council of Governments DVD on special needs and disasters as an educational resource.*

Outcomes	Citizens with special needs receive education about the risks to them in an event of a wildfire through presentations at agency sites and home delivery of information; Posters, brochures, checklist, and flyers distributed to homes and posted in social service agency offices.
Strategy	Identify opportunities to present fire education information to social service agencies and the target populations; develop specific messages for the target population; Coordinate presentations through the Speaker's Bureau at various social service agency offices. Distribute the RVCOG Special Needs and Disaster DVD.
Timeline	Long-term
Lead	JaCIFP Outreach and Education committee, Speakers Bureau, Special Needs Committee

SN Action Item #9: Educate children at school and through Kids Unlimited

Outcomes	Increased number of educated youth
Strategy	Target presentations from the Speaker's Bureau to youth populations, coordinate with the Siskiyou Field Institute and OSU extension efforts to develop and use Youth Education Field Kits
Timeline	Long-term
Lead	JaCIFP Outreach and Education, Kids Unlimited (a program offering free after-school enrichment courses, camps, and at-risk outreach programs), Siskiyou Field Institute, OSU Extensions

SN Action Item #10: Translate all fire-related materials into Spanish

Outcomes	Increased distribution of information amongst a larger population
Strategy	Identify specific materials for translation; Translate materials on wildfire preparedness, response, and recovery into Spanish; coordinate distribution through local Latino organizations
Timeline	Ongoing
Lead	Rogue Valley Fire Prevention Cooperative, JaCIFP Outreach and Education Organizations, Local Latino organizations (such as UNETE)

III. Fuels Reduction and Special Needs Actions

Creating a defensible space around residents' homes will help reduce fuels that feed wildfires. Special needs citizens will benefit from increasing awareness and reaching more residents who qualify for fuels reduction assistance and education.

SN Action Item #11: Develop grant opportunities to assist citizens with special needs access fuel reduction resources.

Outcomes	Increased fire protection and defensible space for special needs citizens
Strategy	Develop and administer grants that provide increased assistance for defensible space to low-income, and elderly or disabled citizens (or other residents with special needs.
Timeline	5 years
Lead	JaCIFP Fuels committee,, Rogue Valley Fire Prevention Cooperative, Rogue Valley Fire Chiefs Association.

Social Service Agencies Interviewed in Jackson County

Table 11.1 on the following page illustrates the social service agencies in Jackson County interviewed for this assessment. A more comprehensive list of Jackson County social service agencies can be obtained by contacting the Rogue Valley Council of Government.

Table 11.1 Sample of Social Service Agencies Interviewed in Jackson County

Organization	Programs Offered	Population Served	Eligibility Requirements	Participation Level	Client Locations	Renters/ Homeowners	Follow-Up
Disability Advocacy for Social and Independent Living (DASIL)	Drop in center for disabled. Helps people find them services they need (i.e. housing, food)	Disabled, Low-income populations	• Must have a documented disability • For our housing program, must be low income	About 600-700 a year. Currently serving around 100 people a month	All around Jackson County, but most applicants are probably from Medford	Almost all Renters. Some homeless	Small focus groups Put up posters
Jackson County Fuel Committee, non-profit	Heating and utility assistance	Low income, elderly	None. Only ask that those receiving services volunteer a minimal amount of time	Varies depending on weather—average 25-50 with firewood a year. About 30-40 utility advocacy cases a year. Weatherization project will increase numbers.	Mostly in Ashland and Central Point. People receiving firewood probably live in more rural areas	Almost all renters	
Ashland Senior Program	Senior health and monetary support	Elderly	Must be 60 or over (flexible). Eligibility = 125% of poverty level)	Varies. About 300 people a month	Mostly in Ashland. Some in Talent	Both	Monthly newsletter announcements Fire agency guest speaker
Jackson County Commission on Children and Families	Children and family services	Children and families	Does not provide direct services, but connects people with the proper organization they need				Ask about other useful social service agencies

Organization	Programs Offered	Population Served	Eligibility Requirements	Participation Level	Client Locations	Renters/ Homeowners	Follow-Up
Parish Nurses	Some nursing care; home visits; mental support	Parish members with physical or mental illness. Many elderly	None	About 500 people a year	Throughout Jackson County—rural and urban, including Applegate, Central Point, and Trail	Uncertain	Speakers; trainers at congregations Literature 72-hour kits
OR State Rogue Valley Council of Governments. (RVCOG) Senior Services	Range of services: in-home care, nursing home care, food stamps, medical supplies	Elderly, low-income and disabled	Depends on assistance. Some look at % of federal poverty line or income levels. Consideration of person's resources and severity of impairment	6,408 for in-home care, nursing home residents, and food stamp assistance	All over Jackson County	Mostly renters. All of disabled clients are renters.	Speakers Literature Posters
Interfaith Care Community of Medford	Meal site; transitional housing program	Low-income; homeless; veterans; women, youth	None. Mainly monetary need-based.	29,802 people last year	Mostly in Medford and Ashland	Mostly homeless. Others are renters	
Jackson County Housing Authority	Rent assistance; alternative heating and home repair assistance	Low-income	Families under 80% of the area median income. Currently a family of four must earn under $41,700.	Approximately 1,500 families currently	Centrally located areas of Jackson County. Central Point is furthest	Renters	
Jackson County Health and Human Services	Case management; crisis response, foster care, home visits	Developmental Disabilities; often low-income	I.Q test or have adaptive disabilities like autism.	730	Primarily in the cities of Jackson County. Home visits to some rural clients	Renters	Disaster Registry Annual home visit to assess client needs Posters

Organization	Programs Offered	Population Served	Eligibility Requirements	Participation Level	Client Locations	Renters/ Homeowners	Follow-Up
Jackson County Veteran's Services	Case management; medical assistance and referrals, information provider	Veteran's and their families	Must be a veteran or dependent of a veteran	Almost 25,000 in Jackson County	Probably 50% urban, 50% rural	Uncertain.	Can leave pamphlets at office
Food and Friends	Food delivery and meal center; education and outreach	Elderly, some eligible disabled adults	Must be over 60 for meals at congregate Home delivery: Must be eligible for the Older Americans Act. No services based on income	800 served at congregate site for 6 month time period. 875 home deliveries	Mostly urban areas. Exact numbers exist for rural/urban people served.	Uncertain	Send out pre-prepared brochures/ pamphlets to homes of clients
UNETE	Counseling, job issues, INA issues, housing issues, English classes	Hispanic residents (mainly non-English speaking farm, hotel, & construction workers	None.	2,000 people a year	Mostly Medford, White City, Central Point. About 50% in urban, 50% in rural	Mostly renters	Brochures in Spanish Presentations in Spanish

Chapter 12: Sustaining Long-Term Implementation, Monitoring and Evaluation

CHAPTER 12: SUSTAINING LONG-TERM IMPLEMENTATION, MONITORING, AND EVALUATION

Plan Adoption

The JaCIFP was signed by the Board of Commissioners in July of 2006. The adoption of the final draft was preceded by internal, agency, and public reviews of the draft plan between March and mid-June of 2006. The initial review of the draft was conducted internally to gather input from committee members and agencies represented in the planning process. The draft plan was then put out for public review during May and June of 2006. The Executive Committee reviewed the comments and approved the draft for submission to the Board of Commissioners during a late June meeting.

Memorandum of Understanding (MOU)

Federal agencies have been key players in creating the JaCIFP and will be important partners during the implementation phase. However, the Healthy Forests Restoration Act (HFRA) does not provide for federal agencies to be signatories to a Community Wildfire Protection Plan. In order to recognize the important role of the Forest Service and Bureau of Land Management, a Memorandum of Understanding (MOU) will be signed during the annual National Fire Plan awards ceremony in June 2006. This signing is not related to the completion and signing of the plan by the Board of County Commissioners, local fire districts, and Oregon Department of Forestry (required signatories under HFRA).

The MOU outlines the role that the federal agencies will play during implementation of the fire plan. The MOU clearly defines how the plan partners will work together to implement the action items in the JaCIFP, provide technical support, prioritize fuels reduction areas, and work on emergency management issues.

The MOU was signed on June 26th at a ceremony coordinated with a regional National Fire Plan award ceremony in Medford. The full MOU text can be found in *Resource D*.

Sustaining Fire Plan Efforts: Responsibilities

In order to successfully implement the actions outlined in this plan, it is critical that the JaCIFP partners collaborate with the public to improve wildfire preparedness in Jackson County communities. The actions and data found within this plan are a foundation that must be built upon in the coming years. JaCIFP partners must follow through on education and policy efforts to gain a reciprocal effort from homeowners. This is because the public needs clear information on wildfire safety and preparedness to implement home protection activities. The public and plan partners may also need to access funding sources to further wildfire protection throughout the county. Only mutual responsibility and collaborative action will sustain fire safety efforts into the future.

JaCIFP Committee Responsibilities

Executive Committee (EC)

The EC will confirm a chair for each sub-committee and monitor action plan progress and outcomes to see if the Missions, Goals, and Objectives are being met. The EC will have a chair or chairs whose role is to develop meeting agendas, take notes, facilitate meetings, and maintain contact with the committee chairs. The EC will make sure all plan partners are engaged in the process and make sure the committees have the resources they need in order to accomplish the tasks. The Fire Plan Implementation Coordinator will coalesce information from each committee chair for updates on action items and events that have taken place under the committee. This person will file a report reviewing all action items, plan

goals, and data to determine their applicability to current problems, changes in policy, and funding sources. The annual report will also contain the year's past and future (if known) fuels reduction priorities. Based upon the annual report, the EC will discuss and recommend updates and amendments to the JaCIFP written document. Unless the EC determines that changes are needed after the annual report, the EC will update the plan every two years. *[To process a plan change necessary before an annual update, such as the need to qualify for a grant, the person submitting the change will get approval of the appropriate subcommittee, via a majority yes vote of the members at a meeting or, if a meeting cannot be held, via email will suffice. The proposed change will be approved by the executive committee in a meeting or by a yes vote via email. The change will be forwarded to the Jackson County Natural Resources Coordinator who will facilitate posting on the JaCIFP website.]* [106]
The Executive Committee will designate meetings of the Finance Sub-Committee on an as needed basis.

Sub-Committees
Committee actions will be monitored in accord with the adopted timelines in the action items as documented in the JaCIFP. The committee's chair will be responsible for coordinating meetings, communicating with the partners, updating the EC, and encouraging public participation where appropriate. Email lists are already established and can remain an effective way to keep partners updated. Email lists will be passed from the contracting team to the committee chairs.

There will be a liaison from the Executive Committee to the Emergency Management Advisory Committee and to the Rogue Valley Fire Chief's Association to monitor accomplishment of the Emergency Management section action items. The liaison will report back to the EC chair annually or as requested by the chair and will communicate updates with the Fire Plan Implementation Coordinator.

When an agency member of a committee cannot continue as a member of the said committee, the corresponding agency's Executive Committee (EC) representative will designate a new representative. The EC agency representative will be responsible for decision making in the absence of a designated representative in the committee.

Subcommittee Meeting Schedules

- **Risk Assessment** – will meet biannually and update the risk assessment annually or sooner if pertinent information becomes available.
- **Fuels** – will have quarterly meetings
- **Outreach and Education** – objectives have been determined through action items. Will have meetings every other month with an annual update
- **Emergency Management** – no distinct committee – action items will be monitored by E.C. through liaison discussed above.

Public Participation

Homeowners and residents need to understand the wildfire problem and feel empowered to act. There are several opportunities for the public to gain a better understanding of the JaCIFP and practical measures that individuals and communities can take to prepare for wildfire. As action plans are implemented and the relationship between agencies and the public continues to evolve there will be more opportunities for public action and involvement in decision making. Here are a few examples of opportunities for public involvement:

[106] Italicized section in brackets added after approval of the Executive Committee on November 16, 2006

Starting in April of 2006, the JaCIFP Outreach and Education committee began running monthly advertisements in local papers to explain the purpose of the JaCIFP, it's components, and ways that public involvement will strengthen fire preparedness. The advertisements will continue as funding allows, covering topics related to fire protection for homeowners and communities. .

Pending approval of a grant from the county, the Southern Oregon Small Diameter Collaborative is planning three community meetings to explore community attitudes and interest in forest restoration and small diameter timber harvest. In conjunction with the meetings, there will be an opportunity to explain the role of the JaCIFP and specifically how the risk assessment in the plan will be used to help identify key areas in the wildland urban interface where community safety, forest restoration, and economic vitality can be mutually beneficial.

Woody Vegetation Disposal Day and the spring wildfire campaign are annual events the public can directly participate in. Each year, homeowners can collect debris from their yards, rooftops, and gutters and bring it to a centralized drop off station free of charge. Advertisements or post card coupons let residents know where and when to bring their debris. In 2006, the County mailed out 15,000 post cards informing residents of woody debris disposal day.

Financing Fire Plan Implementation

Funding a county-wide effort in perpetuity is a large task. Particularly because much of the funding currently used to support fuels reduction, planning, and education comes from federal grant sources that are notoriously transient in nature. The National Fire Plan and Secure Rural Schools Act supply the majority of the grant funding for wildfire safety work in Jackson County and both sources are declining. Ultimately the responsibility for funding and staffing implementation of the JaCIFP is with the plan's partners. Fire agencies, non-profits, and local governments must find enough value in the wildfire protection measures outlined in this plan to keep it alive and effective.

Jackson County will be pursuing implementation funding with the intent of sponsoring a Fire Plan Implementation Coordinator.

Other potential funding sources include Title II funds, National Fire Plan prevention grants, a State Farm Insurance grant, private foundations, and Federal Emergency Management Agency pre-disaster mitigation funds.

RESOURCE A: ACRONYM LIST, BIBLIOGRAPHY, DEFINITIONS, AND POLICIES

A.1 Acronym List

BLM	Bureau of Land Management
CAR	Community At Risk
CWPP	Community Wildfire Protection Plan
EC	Executive Committee
EM	Emergency Management
FEMA	Federal Emergency Management Administration
GIS	Geographic Information System
HFRA	Healthy Forests Restoration Act
HUD	Housing and Urban Development
ICS	Incident Command System
ISO	Insurance Services Office (Fire Hazard Rating)
JaCIFP	Jackson County Integrated Fire Plan
JCIFP	Josephine County Integrated Fire Plan
JJLCG	Josephine-Jackson Local Coordination Group
NFP	National Fire Plan
NFPORS	National Fire Plan Operating and Reporting System
NHMP	Natural Hazards Mitigation Plan
ODF	Oregon Department of Forestry
O and E	Outreach and Education Committee
SWOFMP	Southwest Oregon Fire Management Plan
SPU	Strategic Planning Unit
UGB	Urban Growth Boundary
USFS	United States Forest Service
WUI	Wildland Urban Interface

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A.3. Definitions and Policies

This section provides a summary of policies and definitions of Wildfire Risk Assessment, Communities at Risk, wildland urban interface, and defensible space. *Source: Josephine County Integrated Fire Plan*

Wildfire Risk Assessment Definitions:

Josephine County Integrated Fire Plan

- ***Risk***: the potential and frequency for wildfire ignitions (based on past occurrences)
- ***Hazard***: the conditions that may contribute to wildfire (fuels, slope, aspect, elevation and weather)
- ***Values***: the people, property, natural resources and other resources that could suffer losses in a wildfire event.
- ***Protection Capability***: the ability to mitigate losses, prepare for, respond to and suppress wildland and structural fires.
- ***Structural Vulnerability***: the elements that affect the level of exposure of the hazard to the structure (roof type and building materials, access to the structure, and whether or not there is defensible space or fuels reduction around the structure.)

Jackson County Integrated Fire Plan
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 risk of wildfire occurrence, fuel hazards, wildfire protection capabilities of the communities, and human and natural values threatened by wildfire.

Definitions of Communities at Risk

Healthy Forests Restoration Act of 2003
Title I – Hazardous Fuel Reduction on Federal Land, SEC. 101. Definitions:

(1) AT-RISK COMMUNITY.—The term ‘‘at-risk community’’ means an area—

(A) that is comprised of— (i) an interface community as defined in the notice entitled ‘‘Wildland Urban Interface Communities Within the Vicinity of Federal Lands That Are at High Risk From Wildfire’’ issued by the Secretary of Agriculture and the Secretary of the Interior in accordance with title IV of the Department of the Interior and Related Agencies Appropriations Act, 2001 (114 Stat. 1009) (66 Fed. Reg. 753, January 4, 2001); or (ii) a group of homes and other structures with basic infrastructure and services within or adjacent to Federal land;

(B) in which conditions are conducive to a large-scale wildland fire disturbance event;

(C) for which a significant threat to human life or property exists as a result of a wildland fire disturbance event.

National Association of State Foresters Identifying and Prioritizing Communities at Risk

In June 2003, the National Association of State Foresters developed criteria for identifying and prioritizing communities at risk. Their purpose was to provide national, uniform guidance for implementing the provisions of the "Collaborative Fuels Treatment Program." The intent was to establish broad, nationally compatible standards for identifying and prioritizing communities at risk, while allowing for maximum flexibility at the state and regional level. NASF defines 'Community at Risk' as "a group of people living in the same locality and under the same government" (*The American Heritage Dictionary of the English Language*, 1969). They also state that 'a community is considered at risk from wildland fire if it lies within the wildland/urban interface as defined in the federal register (*FR Vol. 66, No. 3, Pages 751-154, January 4, 2001).'*

NASF suggests identifying communities at risk on a state-by-state basis with the involvement of all organizations with wildland fire protection responsibilities (state, local, tribal, and federal) along with other interested cooperators, partners, and stakeholders. They suggest using the 2000 census data (or other suitable means) identify all communities in the state that are in the wildland urban interface and that are at risk from wildland fire, regardless of their proximity to federal lands.

-Josephine County Integrated Fire Plan November 2004 Page 157

Federal Register/Vol.66,No.160 /Friday, August 17,2001 /Notices

In January 2001, then Agriculture Secretary Dan Glickman and Interior Secretary Bruce Babbitt released a proposed list of communities eligible for enhanced federal wildfire prevention assistance. The preliminary list of over 4000 communities included many that are near public lands managed by the federal government. The initial definition of urban wildland interface and the descriptive categories used in this notice are modified from ''A Report to the Council of Western State Foresters— Fire in the West—The Wildland/Urban Interface Fire Problem'' dated September 18, 2000. Under this definition, ''the urban wildland interface community exists where humans and their development meet or intermix with wildland fuel.''

There are three categories of communities that meet this description. Generally, the Federal agencies will focus on communities that are described under categories 1 and 2. For purposes of applying these categories and the subsequent criteria for evaluating risk to individual communities, a structure is understood to be either a residence or a business facility, including Federal, State, and local government facilities. Structures do not include small improvements such as fences and wildlife watering devices.

Category 1. Interface Community:
The Interface Community exists where structures directly abut wildland fuels. There is a clear line of demarcation between residential, business, and public structures and wildland fuels. Wildland fuels do not generally continue into the developed area. The development density for an interface community is usually 3 or more structures per acre, with shared municipal services. Fire protection is generally provided by a local government fire department with the responsibility to protect the structure from both an interior fire and an advancing wildland fire. An alternative definition of the interface community emphasizes a population density of 250 or more people per square mile.

Category 2. Intermix Community:
The Intermix Community exists where structures are scattered throughout a wildland area. There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area. The

development density in the intermix ranges from structures very close together to one structure per 40 acres. Fire protection districts funded by various taxing authorities normally provide life and property fire protection and may also have wildland fire protection responsibilities. An alternative definition of intermix community emphasizes a population density of between 28–250 people per square mile.

Category 3. Occluded Community:
The Occluded Community generally exists in a situation, often within a city, where structures abut an island of wildland fuels (e.g., park or open space). There is a clear line of demarcation between structures and wildland fuels. The development density for an occluded community is usually similar to those found in the interface community, but the occluded area is usually less than 1,000 acres in size. Fire protection is normally provided by local government fire depts.

- Josephine County Integrated Fire Plan November 2004 Page 158

***A Definition of Community,* James A. Kent/Kevin Preister**
"A community is a geographic place that is characterized by natural systems such as watersheds, cultural attachment and human geographic boundaries. Physical, biological, social, cultural, and economic forces create natural boundaries that distinguish one community from another. The importance is in recognizing the unique beliefs, traditions, and stories that tie people to a specific place, to land and to social/kinship networks. It is a naturally defined human geographic area within which humans and nature rely on shared resources. People from outside this place can effectively contribute to its stewardship by providing relevant information and/or participating through relating their own values associated with geographic place. Community is defined by the informal systems and to the degree the formal systems are tied to the informal it becomes part of a community definition. Both have a distinct function. Informal systems are horizontal. They maintain culture, take care of people and are concerned with survival. They thrive on openness, honesty, and the idea that people want to do what is right for each other and the broader society. Formal systems are vertical and they serve centralized political, ideological, and economic functions. They contribute resources and legal structure to community change. Formal meetings alone do not constitute community communication or decision making functions." http://www.ntc.blm.gov/partner/community.html

Firewise Definition of Community
"According to Webster's dictionary, a community is 'a body of people living in one place or district...and considered as a whole' or 'a group of people living together and having interests, work, etc. in common'. Homeowner associations and similar entities are the most appropriate venue for the Firewise Communities/USA recognition program. These smaller areas within the wildland/urban interface offer the best opportunities for active individual homeowner commitment and participation, which are vital to achieving and maintaining recognition status." http://www.firewise.org/usa/

Executive Order NO. 04-04 Oregon Office of Rural Policy and Rural Policy Advisory Committee
Frontier Rural – A geographic area that is at least 75 miles by road from a community of less than 2000 individuals. It is characterized by an absence of densely populated areas, small communities, individuals working in their communities, an economy dominated by natural resources and agricultural activities, and a few paved streets or roads.

Isolated Rural – A geographic area that is at least 100 miles by road from a community of 3000 or more individuals. It is characterized by low population density (fewer than five people per square mile), an economy of natural resources and agricultural activity, large areas of land owned by the state or federal government and predominately unpaved streets.

Rural – A geographic area that is at least 30 miles by road from an urban community (50,000 or more). It is characterized by some commercial business, two or fewer densely populated areas in a county, an

economy changing from a natural resource base to more commercial interests and reasonable, but not immediate access to health care.

Urban Rural – A geographic area that is at least 10 miles by road from an urban community. It is characterized by many individuals community to an urban area to work or shop, an economy with few natural resource and agricultural activities, easy and immediate access to health care services and numerous paved streets and roads. http://governor.oregon.gov/Gov/pdf/ExecutiveOrder04-04.pdf

Wildland Urban Interface Definitions:

Federal Register/Vol.66,No.160 /Friday,August17,2001/Notices

The Federal Register states, "the urban-wildland interface community exists where humans and their development meet or intermix with wildland fuel." This definition is found in the Federal Register Vol.66, Thursday, January 4, 2001, Notices; and in "Fire in the West, the Wildland/Urban Interface Fire Problem", A Report for the Western States Fire Managers, September 18, 2000.

10-Year Comprehensive Strategy

A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy (August 2001) "The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels"
(Glossary of Wildland Fire Terminology,1996).
http://www.fireplan.gov/content/reports/?LanguageID=1

Senate Bill 360: Forestland Urban Interface Protection Act of 1997.

Forestland Urban Interface 477.015 Definitions. (1) As used in ORS 477.015 to 477.061, unless the context otherwise requires, "forestland-urban interface" means a geographic area of forestland inside a forest protection district where there exists a concentration of structures in an urban or suburban setting.

NFPA 1144: Standard for Protection of Life and Property from Wildfire 2002 Edition

Wildland/Urban Interface is an area where improved property and wildland fuels meet at a well-defined boundary. Wildland/urban intermix is an area where improved property and wildland fuels meet with no clearly defined boundary. http://www.nfpa.org/catalog/home/OnlineAccess/1144/1144.asp

Josephine County Article 76

Article 76: Josephine County Wildfire Protection Code Section 11.030 of the Rural Land Development Code: Wildfire hazard refers to the danger for fire in rural areas and areas where privately owned lands interface with public lands. The factors may contribute to wildfire hazards are weather, vegetative fuels, topography, and remoteness.

Defensible Space Definitions:

Home Ignition Zones –"Wildland-Urban Fire—A different approach"

Recent research focuses on indications that the potential for home ignitions during wildfires including those of high intensity principally depends on a home's fuel characteristics and the heat sources within 100-200 feet adjacent to a home (Cohen 1995; Cohen 2000; Cohen and Butler 1998). This relatively limited area that determines home ignition potential can be called the *home ignition zone*.
http://firelab.org/fbp/fbresearch/wui/pubs.htm

NFPA Publication 1411 defines defensible space as "An area as defined by the AHJ (typically with a

width of 9.14 m (30 ft) or more) between an improved property and a potential wildland fire where combustible materials and vegetation have been removed or modified to reduce the potential for fire on improved property spreading to wildland fuels or to provide a safe working area for fire fighters protecting life and improved property from wildland fire.

Is Your Home Protected from Wildfire Disaster? A Homeowner's Guide to Wildfire Retrofit, Institute for Business and Home Safety

A survivable space is an area of reduced fuels between your home and the untouched wildland. This provides enough distance between the home and a wildfire to ensure that the home can survive without extensive effort from either you or the fire department. One of the easiest ways to establish a survivable space is to use the zone concept.

Zone 1: Establish a well-irrigated area around your home. In a low hazard area, it should extend a minimum of 30 feet from your home on all sides. As your hazard risk increases, a clearance of between 50 and 100 feet or more may be necessary, especially on any downhill sides of the lot. Plantings should be limited to carefully spaced indigenous species.

Zone 2: Place low-growing plants, shrubs and carefully spaced trees in this area. Maintain a reduced amount of vegetation. Your irrigation system should also extend into this area. Trees should be at least 10 feet apart, and all dead or dying limbs should be trimmed. For trees taller than 18 feet, prune lower branches within six feet of the ground. No tree limbs should come within 10 feet of your home.

Zone 3: This furthest zone from your home is a slightly modified natural area. Thin selected trees and remove highly flammable vegetation such as dead or dying trees and shrubs. How far Zones 2 and 3 extend depends upon your risk and your property's boundaries. In a low hazard area, these two zones should extend another 20 feet or so beyond the 30 feet in Zone 1. This creates a modified landscape of over 50 feet total. In a moderate hazard area, these two zones should extend at least another 50 feet beyond the 50 feet in Zone 1. This would create a modified landscape of over 100 feet total. In a high hazard area, these two zones should extend at least another 100 feet beyond the 100 feet in Zone 1. This would create a modified landscape of over 200 feet total.
http://www.ibhs.org/publications/view.asp?id=130

Living with Fire: A Guide for the Homeowner

This guide, distributed in Oregon through the Pacific Northwest Wildfire Coordinating Group, provides information on creating effective defensible space and guidelines illustrated below.

Defensible Space Recommended Distances:

	Flat to Gently Sloping: 0 to 20%	**Moderately Steep: 21% to 40%**	**Very Steep: +40%**
Grass: Wildland grasses (such as cheatgrass, weeds, and widely scattered shrubs with grass understory)	30 feet	100 feet	100 feet
Shrubs: Includes shrub dominant areas	100 feet	200 feet	200 feet

Trees: Includes forested areas. If substantial grass or shrub understory is present use those values shown above	30 feet	100 feet	200 feet

http://www.fs.fed.us/r3/publications/documents/livingwithfire.pdf

Fire Free

A buffer zone -- a minimum 30-foot fire-resistive area around a house that reduces the risk of a wildfire from starting or spreading to the home. Although a 30-foot distance is standard, additional clearance as great as 100 feet may be necessary as the slope of your lot increases.

http://www.firefree.org/ffreenew/subpages/gitz.htm

RESOURCE B: JACKSON COUNTY WILDFIRE SAFETY CODES AND PLANNING DOCUMENTS

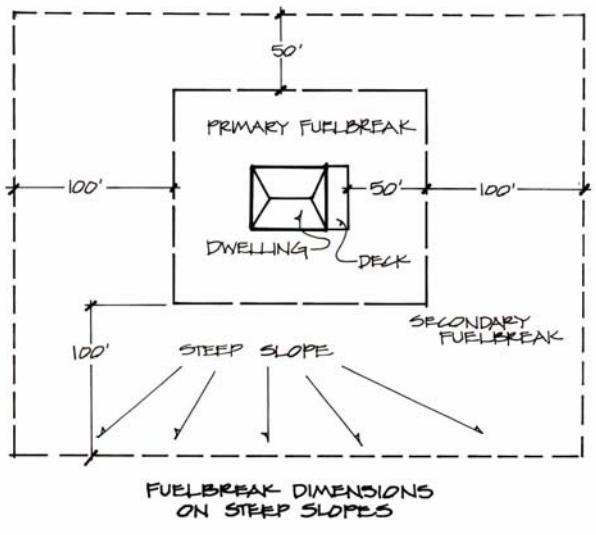
Jackson County Wildfire Codes

Chapter 8.7 WILDFIRE SAFETY

8.7.1 Fire Safety Requirements

A) ***Applicability***

This Section contains mandatory standards for all new construction, except replacement dwellings in the floodway subject to Section 7.1.2(F)(7). New construction includes significant outbuildings as defined in Chapter 13, and replacement structures located in areas subject to wildfire hazard as identified on the "Wildfire Areas Map", or structures located on steep slopes (see Section 9.3.1(C)(4)). The official version of this map will be maintained in the Planning Division. Lands in forest zones are also subject to these requirements *(OAR 660-006-0035, 40)*.



FUELBREAK DIMENSIONS ON STEEP SLOPES

B) ***Fuelbreaks***

A minimum 100-foot fuelbreak will be developed and maintained around all new construction. A fuelbreak may be extended onto an adjoining property with a recorded fuelbreak easement. When a fuelbreak area includes a county, state or federal maintained road right-of-way, a fuelbreak reduction application will not be required for the side of the property facing the road, but a minimum 100-foot fuelbreak will still be required on the other sides. A local access road that is maintained, through an enforceable written agreement between property owners

served by the road, may similarly qualify for exemption from these fuelbreak requirements. All proposed structures will meet the minimum structural setback requirements. A fuelbreak is measured from a structure's outermost walls, combustible decks, or other combustible attachments. Fuelbreaks will meet the following standards:

1) *Primary Fuelbreak*

The goal within the primary fuelbreak is to remove fuels that will produce flame lengths in excess of one foot. A minimum 50-foot primary fuelbreak is required for all lands identified as a wildfire hazard. Vegetation within the primary fuelbreak may include grass maintained at less than 6 inches in height and low shrubs. Highly combustible shrubbery, such as juniper, is prohibited. Trees will be horizontally spaced with more than 15 feet between the trunks, and will be pruned to remove branches that are dead or that are less than 10 vertical feet above the ground. A 10-foot clearance between branches and stovepipes or chimney outlets must be maintained. No branches may overhang within 25 vertical feet of a roofline. Accumulated leaves, needles, limbs and other dead vegetation must be removed. Flammable groundcover materials (e.g., bark mulch) may not be used in landscaping within twelve inches of buildings. Firewood piles, slash piles, and woodsheds will be placed at least 30 feet from all structures.

2) *Secondary Fuelbreak*

The goal of the secondary fuelbreak is to reduce fuels so that the overall intensity of a wildfire will be lessened and the likelihood of crown fires and crowning is reduced. A minimum 50 foot secondary fuelbreak is required which extends in all directions around the primary fuelbreak. An additional 50 feet, for a total of 100 feet, will be added to the secondary fuelbreak when the slope below the homesite exceeds 20 percent. This additional 50 feet will be added to the area below and to each side of the homesite. Trees will be spaced with more than 15 horizontal feet between the trunks, and will be pruned to remove branches that are dead or that are less than 10 vertical feet above the ground. Ornamental and fruit trees are excluded from the spacing standards, provided they are kept green and free of dead material. Small trees and brush growing underneath larger trees should be removed. Dead plant material must be removed, which includes pruning dead branches from trees and shrubs. Understory vegetation may include lawns or groundcover maintained at less than 12 inches in height and low shrubs (see the User's Guide for drought and fire resistant landscape materials).

C) ***Roof Coverings***

All structures will have Class A or B roofing according to Section 1504 of the State of Oregon Structural Specialty Code. This prohibits wood roofing of any type, including pressure treated wood shingle or shakes.

D) ***Emergency Vehicle Access***

For the purposes of public safety access will be constructed to within 50 feet of all habitable structures and other significant buildings. The access will be constructed to the standards of Section 9.5.4. The County may impose additional standards, conditions, or require technical information as needed to assure compliance.

E) ***Slope***
All new dwellings, significant outbuildings and replacement structures will be sited in compliance with the development standards of Section 9.3 and 9.5.4. Where an alternate site for a replacement structure is not available on the parcel, the structure may be replaced in the same location when the standards of Section 9.5 are met.

F) ***Chimneys*** All chimneys will have a spark arrester.

G) ***Rural Fire Protection***
Dwellings will be located within a rural fire protection district or contract with a rural fire protection district for residential fire protection. If the dwelling is not within a rural fire protection district and contracting is not possible, evidence will be provided to show that the applicant has asked to be included in the nearest such district, and that said district cannot or has refused to provide protection.

The following fire safety guidelines are suggested in all rural and forested areas, and may be required by the County when a finding is made such measures are necessary to protect public safety (see OAR 660-006-0035 for additional standards in forest zones):

1) Bridges constructed of noncombustible materials.

2) On-site water storage approved by the fire district serving the proposed use.

3) Permanent signs posted along the access route to indicate the location of the emergency water source.

4) Other measures as recommended by the fire agency commenting on the application or the County Fire Safety Inspector.

H) ***Address Signs***
Address signs will be posted at the driveway entrance from the public right-of-way in such a manner as to be visible in both directions from the roadway providing the access. Directional address signs must also be posted at all road/driveway junctions.

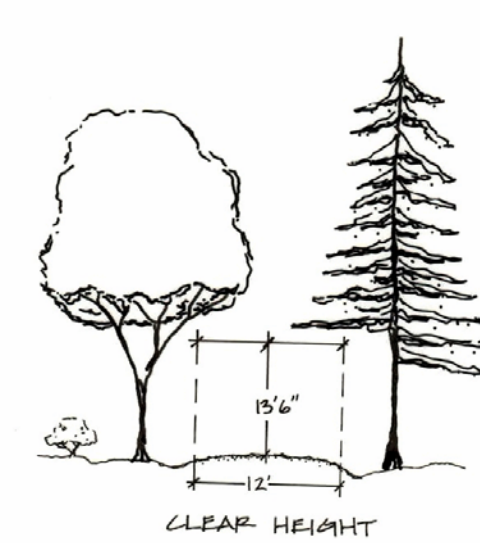
8.7.2 Existing Buildings
Buildings lawfully constructed prior to February 13, 1989, will not be considered nonconforming solely based on nonconformance with this Wildfire Safety Section. When new construction consists of an addition to an existing building that is exempt from the requirements of this Section, the addition is also exempt, provided it is not placed closer to any property line that is currently less that 100 feet from the structure. A replacement building is considered new construction.

8.7.3 Reroofing or Repair of Existing Buildings
When 50 percent or more of the roof covering of any building is repaired or replaced within one year, the entire roof covering will be made to comply with the requirements for roof coverings for new structures within wildfire hazard zones, as specified in Section 8.7.1(C).

8.7.4 Fuelbreak Reductions
The County, upon receipt of a written authorization from the fire district having jurisdiction, the Oregon Department of Forestry (ODF) if not in a fire district, or a Type I or II accredited assessor under the Oregon Forest Land-Urban Interface Fire Protection Act, will approve a reduction in the width of the fuelbreak as prescribed by the agency or accredited assessor. The written authorization will be made on forms supplied by the County and be signed by the Fire Chief or an ODF official with authority to make fuelbreak reduction decisions, their designee, or the accredited assessor. Such authorizations will be processed as a Type 1 permit. Authorization to reduce the fuelbreak requirement will not, however, release an applicant from compliance with

any other applicable standard of this Ordinance.

When a dwelling or use is not authorized by a fire district, ODF or an accredited assessor, a fuelbreak reduction may be approved by the County under a Type 2 review when the applicant documents, and the County confirms through a site inspection, that one or more of the following conditions affect development of the proposed use:



A) A stream or irrigation canal, road, topographic feature, or other site characteristic serves as an adequate fuelbreak.

B) A better fire suppression and prevention strategy is proposed by the applicant.

C) Because of parcel or lot configuration, a portion of the fuelbreak would be located on an adjoining property, and an adjustment of the building site is not practicable.

The County's decision to authorize a fuelbreak reduction will consider the advice of the nearest fire protection district or agency, and may impose additional standards, conditions or require technical information as needed to assure compliance.

8.7.5 Conditional Approval Requirements When Deemed Necessary

The County's decision to authorize a fuelbreak reduction or approve a fire safety inspection outside a fire district will consider the advice of the nearest fire protection district or ODF and may impose additional standards, conditions or require technical information as needed to assure compliance.

9.5.4 Emergency Vehicle Access

Emergency vehicle access must be constructed of an all-weather surface to within 50 feet of all habitable structures and significant outbuildings. (See Section 13.3) Access at a minimum will meet the following standards:

A) ***Areas subject to Sections 8.7 and 9.3 (Wildfire and Steep Slope Hazards)***
Emergency vehicle access must be constructed to the following standards within areas subject to the requirements of Sections 8.7 and 9.3 and on lands in a forest zone:

1) Minimum surface width will not be less than 12 feet. Curves with a centerline radius of less than 150 feet require a minimum 14 foot width to ensure emergency vehicles remain on the travel surface.

2) A minimum clear height of 13½ feet must be maintained for the entire width of the driveway.

3) Access must be designed and constructed to maintain a minimum 50,000 pound load carrying capacity. If not designed by an engineer, road access must be constructed of a minimum of six inches of base rock or equivalent.

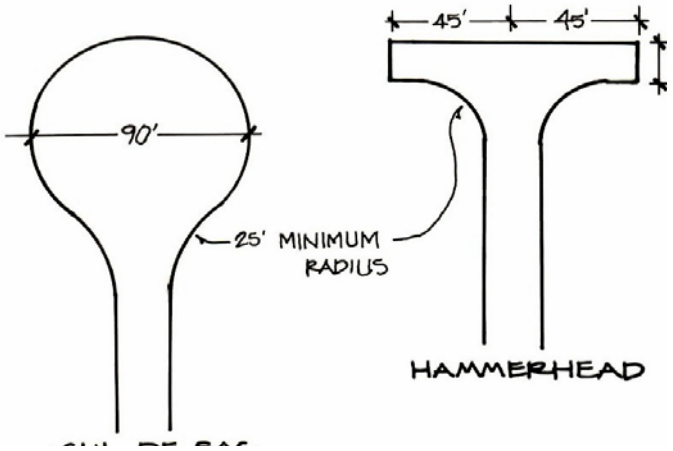
4) Maximum finished grade can be no greater than 15 percent. The grade may increase to 18 percent for intervals of up to 100 feet provided there are no more than three 100 foot sections of over 15 percent grade per 1,000 feet. The finished grade may not exceed 15 percent on curves with a centerline radius of less than 150 feet. The approach from a public road or private road cannot exceed 10 percent grade for a distance of 40 feet.

5) Curves will have a minimum centerline radius of 55 feet. This includes approaches onto public roads in both directions.

6) Access that dead-ends must terminate in an approved cul de sac or other turnaround arrangement. Turnarounds will be provided every one-half mile. Such turnaround area must meet the load requirements of (3) above. The grade may not exceed four percent in turnarounds or cul de sacs.

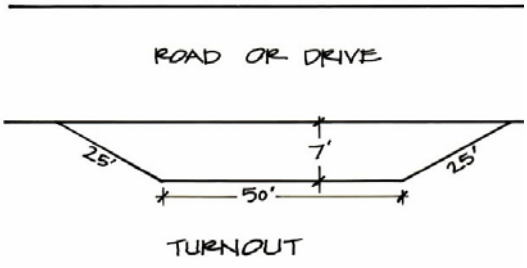
7) Turnouts are required at 800 feet maximum spacing, or at distances that ensure continuous visual contact between turnouts. Turnouts must be at least 50 feet long and seven feet wide, with 25 foot tapers on each end.

8) Visible address signs acceptable to the appropriate fire district must be posted at applicant's expense. The address sign will be posted at the entrance to the public right-of-way. All addresses which use the same access must also be listed on this sign. If the access forks, the addresses served by each fork must also be listed at the intersection.



9) Gate widths will be a minimum of 14 feet, unless on a curve where the minimum surface width is 14 feet, then the gate will be a minimum of 16 feet.

10) Bridge driving surfaces must be a minimum of eight and one-half feet in width. A clear minimum width of 14 feet must be maintained above the surface of the bridge. All bridges will have a 50,000 pound load carrying capacity. Non-combustible construction is preferable.



11) Any required culverts must meet the minimum standards in Section 9.5.3(G).

12) Sidewalks crossing driveways will be designed to meet the requirements of the *Oregon Bicycle and Pedestrian Plan (1995)* administered by Jackson County Roads and Parks Services.

B) ***All Other Areas***
All commercial, industrial, public, quasi-public and multi-family dwelling development that generates more than 100 vehicle trips per day will meet the emergency vehicle access standards of Section 9.5.4(A) above.

Jackson County Comprehensive Plan

The Comprehensive Plan has several sections related to forests and wildfire. Section 13 of the Plan addresses forest lands in Jackson County.

Forest lands are defined as:

> *"1) lands composed of existing and potential forest lands which are suitable for commercial forest uses;*
> *2) other forested lands needed for watershed protection, wildlife and fisheries habitat, and recreation;*
> *3) lands where extreme conditions of climate, soil, and topography require the maintenance of vegetative cover, irrespective of use;*
> *4) other lands which lie adjacent to urban and agricultural areas and which provide urban buffers, windbreaks, wildlife and fisheries habitat, scenic corridors, and recreational use; and,*
> *5) ranching and grazing areas in the above environments."*

Jackson County's forest land is further broken into two classes: Commercial Forest Lands and Woodland Areas:

> ***"Commercial Forest Lands*** *are areas where sustained timber production and preservation of a self-perpetuating forest environment is considered to be the dominant land use. These lands are principally located in higher elevations; are, for the most part, owned and/or managed by the Bureau of Land Management, the U. S. Forest Service, or wood products industry for large scale commercial timber production; have parcel sizes of 40 acres or greater; and, are specifically assessed as forest land and/or have a cubic foot site class rating of between 2+ and 5, as discussed later in this element.*
> ***Woodland areas*** *are those on which production of timber and wood fiber is, or can become, a primary use of land. These lands are generally located at or below the established elevation contour lines for commercial forest lands; are generally in private non-industrial ownerships, with some wood product industry and less productive publicly owned lands; have parcel sizes predominantly greater than 20 acres; are specially assessed as forest land or have a cubic foot site class potential for timber*

production; or, occur adjacent to, and buffer, other forest lands. Incorporation of both resource types into one Forest Resource designation was based, in part, on interpretation of the Forest Rule (OAR 660, Division 6) and Statewide Planning Goal 4."

Section 17- Natural Hazards

The Comprehensive Plan section 17 "Natural Hazards", addresses wildfire hazards as they pertain to land use. Each section is divided into three parts: Findings, Policy, and Implementation Strategies. The following information is summarized or quoted from the Jackson County Comprehensive Plan, section 17.

Findings

The Comprehensive Plan gives strong consideration to the potential impacts that wildfires can have on the forests and infrastructure of Jackson County. In terms of potential for serious damage and loss, wildfires are "second in magnitude only to flooding". Given Jackson County's weather patterns, rural population, history of wildfires, and ample ignitions from humans and lightning, wildfires are a serious threat to thousands of Jackson County residents, some of whom do not have structural fire protection. Developments in wildfire prone areas may not have proper access for firefighting vehicles, may lack access to water for firefighting, and are located in unfavorable terrain and vegetation where firefighters have little chance of stopping a wildfire. There are maps of the county's insurance ratings/fire protection districts, current wildfire risk, and past wildfires. Losses to homes and property in Jackson County have been small when compared with wildfire risk factors, which are similar to places where property losses have been significant in past fires.

Policy

"County land use actions shall be based upon a determination of acceptable risk of wildfire hazards, and such hazards shall be reduced through positive county action in terms of guiding development and improving fire protection services."

Implementation Strategies (quoted from Section 17)

A. Unify and expand rural fire districts as discussed in the Public Facilities and Services Element. All developing rural areas should be provided with structural fire protection.

B. Reduce the threat of loss of life and property from wildfire hazards in rural areas where structural fire protection is inadequate or unavailable through adoption of fire safety performance standard based on recommendations of the Rogue Valley Fire Protection Cooperative, the Northwest Interagency Fire Prevention Group (1978), and Curran (1978). The following criteria or standards should be implemented through provisions of the County's Land Development Ordinance, or other special purpose codes and ordinances as deemed necessary. Some of these standards could be satisfied through alternative design solutions and should be keyed to the degree of risk, density/size/type(s) of structures, distance from fire protection/suppression service, and the like:
    i) Discourage intensive residential development outside of rural protection districts through zoning until fire service can be provided, or such development can be made "fire safe";
    ii) Consider prohibiting the use of wood roofing shakes in hazardous locations;
    iii) Require that access roads to all proposed developments be sufficient to allow for the ingress and egress of heavy-duty firefighting equipment. This could include guaranteed perpetual maintenance, adequate bridge construction, and road design and construction. Unconventional methods of access could be used if basic access needs are met;
    iv) Require the undergrounding of electrical utilities to reduce their exposure to fire for all

subdivisions and planned unit developments;

v) Support other reasonable strategies and measures recommended by the Fire Prevention Planning Task Force.

1. Develop and adopt an ordinance requiring that potential buyers of property be provided a statement disclosing the level of fire protection/suppression service available, and the fire insurance rating for the subject property, prior to the signing of an earnest money agreement.
2. Develop an ordinance to permit fire protection agencies to enforce continual abatement of fire hazards, including flammable vegetation, within their jurisdiction. Such an ordinance should be written to allow enforcement without formal complaint from property owners adjoining problem area(s).
3. Upgrade and promote efforts to educate the public in fire safety matters. Many of the people moving into rural areas expect a level of fire protection which, in many cases, will not be forthcoming.
4. Encourage the formation of volunteer fire departments and districts outside of rural fire protection districts. Cooperate with and support Rogue Valley Fire Training Association programs for these districts and volunteer groups.

As a result of expanded fire safety requirements contained in this Element, consider obtaining the assistance of the Rogue Valley Fire Prevention Cooperative in the review of plans and inspection of subdivisions or buildings for fire code compliance. The County may wish to consider establishing a site plan review committee system which would include fire protection personnel, in addition to planning and development department staff, to assure compliance with fire codes

Jackson County Natural Hazards Mitigation Plan Goals:

Goal #1: PROPERTY PROTECTION

Goal Statement: Lessen impact from natural disaster on individual properties, businesses and public facilities by increasing awareness at the individual level and encouraging activities that can prevent damage and loss of life from natural hazards.

Goal #2: EDUCATION AND OUTREACH

Goal Statement: Further the public's awareness and understanding of natural hazards and potential risk, including economic vulnerability and mitigation efforts.

Goal #3: PREVENTATIVE

Goal Statement: Reduce the threat of loss of life and property from natural hazards by incorporating information on known hazards and providing incentives to make hazard mitigation planning a priority in land use policies and decisions, including plan implementation.

Goal #4: PARTNERSHIP AND COORDINATION

Goal Statements:

− Identify mitigation or risk reduction measures that address multiple areas (i.e. environment, transportation, telecommunications); − Coordinate public/private sector participation in planning and implementing mitigation projects throughout the county; and

− Seek funding and resource partnerships for future mitigation efforts.

Goal #5: STRUCTURAL PROJECTS

Goal Statement: When applicable, utilize structural mitigation activities to minimize risks associated with natural hazards.

Goal #6: NATURAL RESOURCE PROTECTION

Goal Statement: Preserve and rehabilitate natural systems to serve natural hazard mitigation functions (i.e. floodplains, wetlands, watersheds and urban interface areas).

Goal #7: EMERGENCY SERVICES

Goal Statement: Minimize life safety issues by promoting, strengthening and coordinating emergency response

Public Use Restrictions and Industrial Fire Precaution Levels (IFPL)

Oregon Department of Forestry Public Use Restrictions

Regulated Use Closure

Regulated use closures do not effect where people can go but do effect what they can do. Affected lands will often be marked with signs along with instructions and prevention reminders. You should determine the specific restrictions that apply to your destination before traveling. The following restrictions are commonly put in place during a regulated use closure:

1. Prohibition of smoking while traveling, except in vehicles on improved roads, in boats on the water, and at designated locations. An "improved road" is a road that has been constructed for automobile use and is maintained clear of flammable debris.

2. Open fires such as campfires, charcoal fires, and cooking fires are allowed only in designated locations. Portable cooking stoves using liquefied or bottled fuels are allowed.

3. Restrictions or prohibition of non-industrial use of chainsaws. This includes private woodcutting. An axe, shovel, and fire extinguisher of at least 8 oz. capacity must be kept with each saw.

4. The use of motor vehicles, including motorcycles and all-terrain vehicles, may be prohibited, except on improved roads.

5. Possessing the following fire equipment while traveling in timber, brush or grass areas may be required: one axe at least 26 inches in length, with a head weighing at least 2 pounds; one shovel at least 26 inches in length, with a blade at least 8 inches wide; and one gallon of water or one fully charged and an operational 2.5 lb or larger fire extinguisher.

6. Prohibition on the use of fireworks.

7. Prohibition on the cutting, grinding and welding of metal in dry, grassy or forested areas between the hours of 1:00 p.m. and 8:00 p.m.

8. Prohibition on the use of exploding targets.

Permit Closure
When fire danger increases, a permit closure may be announced. Permit closures require people, including landowners, to obtain permits before entering designated forest lands.

Absolute Closure
This closure prohibits all use of forested areas within a designated area. All forms of travel and all recreational activities are prohibited during an absolute closure.

Oregon Department of Forestry Industrial Fire Precaution Levels

I. Closed Season
Fire season requirements are in effect. In addition to other fire prevention measures, a Fire Watch is required at this and all higher levels unless otherwise waived.

II. Partial Hootowl
The following may operate only between the hours of 8 P.M. and 1 P.M.

- power saws except at loading sites
- cable yarding
- blasting
- welding or cutting of metal

III. Partial Shutdown
The following are prohibited except as indicated:

- cable yarding - except that gravity operated logging systems employing non-motorized carriages may operate between 8 P.M. and 1 P.M. when all blocks and moving lines are suspended 10 feet above the ground except the line between the carriage and the chokers
- power saws - except power saws may be used at loading sites and on tractor/skidder operations between the hours of 8 P.M. and 1 P.M.

In addition, the following are permitted to operate between the hours of 8 P.M. and 1 P.M.:

- tractor/skidder, feller-buncher, forwarder, or shovel logging operations where tractors, skidders or other equipment with a blade capable of constructing fireline are immediately available to quickly reach and effectively attack a fire start
- mechanized loading or hauling of any product or material
- blasting
- welding or cutting of metal
- any other spark emitting operation not specifically mentioned

IV. General Shutdown
All operations are prohibited.

NOTE: Where hauling involves transit through more than one shutdown/regulated use area, the precaution level at the woods loading site shall govern the level of haul restriction, unless otherwise prohibited by other than the industrial precaution level system.

NOTE: The IFPL system does not apply on lands protected by ODF east of the summit of the Cascades.

The following definitions shall apply to these industrial fire precaution levels:

Loading sites: A place where any product or material (including, but not limited to logs, firewood, slash, soil, rock, poles, etc.) is placed in or upon a truck or other vehicle.

Cable yarding system: A yarding system employing cables, and winches in a fixed position.

Low hazard area: Any area where the responsible agency representative (WDNR, ODF, USFS, BIA, BLM) determines the combination of the elements reduces the probability of a fire starting and/or spreading.

Closed season **(Fire precautionary period):** that season of the year when a fire hazard exists as declared by the responsible agency official.

Waivers, written in advance, may be used for any and all activities for which waivers may be issued include, but are not limited to:

- mechanized loading and hauling
- road maintenance such as sprinkling, graveling, grading and paving
- cable yarding using gravity systems or suspended lines and blocks, or other yarding systems where extra prevention measures will significantly reduce the risk of fire
- power saws at loading sites or in felling and bucking where extra prevention measures will significantly reduce the risk of fire
- maintenance of equipment (other than metal cutting and welding) or improvements such as structures, fences and powerlines

U.S. Forest Service Industrial Fire Precaution Levels

I	Fire precaution requirements are in effect. A Fire Watch/Security is required at this and all higher levels unless otherwise waived.
II	The following may operate only between the hours of 8 PM and 1 PM local time: Power saws (except at loading sites) Cable Yarding, Blasting Welding or cutting of metal
III	The following are prohibited, except as indicated: Cable Yarding - exception: gravity operated logging systems employing non-motorized carriages may operate between 8 PM and 1 PM when all blocks and moving lines are suspended 10 feet above the ground except the line between the carriage and the chokers; Power Saws - exception: power saws may be used at loading sites and on tractor/skidder operations between the hours of 8 PM and 1 PM local time. In addition, the following are permitted to operate between the hours of 8 PM and 1 PM local time: Tractor, skidder, feller-buncher, forwarder, or shovel logging operations where tractors, skidders or other equipment with a blade capable of constructing fireline are immediately available to quickly reach and effectively attack a fire start; Mechanized loading or hauling of any product or material; Welding or cutting of metal; Any other spark emitting operation not specifically mentioned.

IV	All operations are prohibited.
V	All operations are prohibited.

Source: Rogue River-Siskiyou National Forest website.
http://www.fs.fed.us/r6/rogue-siskiyou/fire/fire-ifpl-ratings.shtml

Contractors: Southern Oregon Laborers for Restoration, Thinning, etc.

(Oregon Department of Forestry Contractor List)

June 18, 2004

Disclaimer: The names listed are solely for the purpose of providing information and have been placed here at the request of the businesses listed. Jackson County and the Oregon Dept. of Forestry/State of Oregon do not guarantee or warranty the contractors named, or imply that they comply with state or local licensing, bonding, and insurance requirements. References to them do not signify our approval to the exclusion of other contractors.

RURAL/METRO
LAWLESS, Lloyd
807 NE 6th Street
Grants Pass, OR 97526
(541) 474-1218
(541) 660-3518
Fuels management

AAA FORESTRY
PHILLIPS, Stephen
ARNER, Del
PO Box 380
Enterprise, OR 97828
(541) 426-4027
(541) 377-4158 CELL
Pre-Fire Treatment, Pre-Commercial Thinning, Brush Removal

ABC TREE SERVICE
PECKHAM, Mark
3263 DeWoody Lane
Grants Pass, OR 97527
(541) 479-3151

ASHBROOKS FOREST MGMT
BROOKS, Tom
30000 Hwy 62
Trail, OR 97541
(541) 878-3540
(541) 878-9469
Fire Protection, Clearing, Reforestation, & Thinning

BUSY BEAVER TREE SERVICE & STUMP REMOVAL
MURRAY, Nancy
9650 W Evans Creek Rd
Rogue River, OR 97537
(541) 582-6278
1-888-677-9199

CAYTON, Tim
1030 NW Hillside Drive
Grants Pass, OR 97526
(541) 476-3044
General contractor, land improvement, park-like setting, decks, fencing, home repair, tree service, chipper

CLEAR-VIEW
PECKHAM, Matt
900 Mayfair Ln
Grants Pass, OR 97527
(541) 476-5029

COVERED BRIDGE CONSTRUCTION
JOCHEM, Matt
8881 E Evans Creek Rd
Rogue River, OR 97537
(541) 582-1882

CROFT, Norbert
PO Box 765
Cave Junction, OR 97523
(541) 592-4894

ERIC'S TREE SERVICE
WERNER, Eric
233 SE Rogue River Hwy
PMB 435
Grants Pass, OR 97527
(541) 479-4064

FOREST & RESOURCE CONSULTANT
GASOW, Bill
PO Box 1692
Grants Pass, OR 97528
(541) 471-3372
E-Mail: fconsult@internetcds.com

FREEMAN, Robert
12111 Table Rock Rd
Central Point, OR 97502
(541) 840-8821

HAMANN, Don
PO Box 198
Butte Falls, OR 97522
(541) 865-3310

HARRIS, Mark
6396 Downing Rd.
Central Point, OR 97502
(541) 826-3658

HAUSER, Roy
PO Box 187
Wilderville, OR 97543
(541) 479-0231

HENRY BLANK EXCAVATION
2748 Anderson Creek Rd.
Talent, OR 97540
(541) 535-7295

HIGH COUNTRY REFORESTATION
HOLMES, Chris
532 Sykes Creek Rd.
Josephine County Integrated Fire Plan
November 2004 Page 165
Rogue River, OR 97537
(541) 582-0965

HONEY DEW HARDWOOD
DAVIS, Kelly
118 Hope Drive
PO Box 794
Selma, OR 97538
(541) 597-4855
(541) 659-4771

INTEGRATED RESOURCE MNG
BARNES, Marc
151 Schultz Rd
Central Point, OR 97502
(541) 665-3700
Marc@irmforestry.com

JACKSON CO COMMUNITY JUSTICE WORK CENTER
DONAGHY, Jeanine
5505 S Pacific Hwy
Phoenix, OR 97535
(541) 774-4965

JEFF DEAN'S TREE SERVICE
DEAN, Jeff
210 Lloyd Drive
Grants Pass, OR 97526
(541) 476-8109

KNIGHT FOREST MGMT & LGN
KNIGHT, John
1394 #A Dowell Rd.
Grants Pass, OR 97527
(541) 471-1266
#8585

LOMAKATSI RESTORATION PROJECT
BEY, Marko
PO Box 3084
Ashland, OR 97520
(541) 488-0208

MICHAEL MAAS ORGANIC FORESTRY SERVICES
102 Slate Creek Rd.
Wildervile, OR 97543
(541) 476-0737
EMAIL: hsapiens@budget.net

MIKE CREEK INC.
2052 Redwood Ave
Grants Pass, OR 97527
(541) 761-0343

NATIVE LANDSCAPE
GADE, Eric
5950 Riverbanks Rd.
Grants Pass, OR 97527
(541) 479-0834
Fuels Reduction/Salvage

NORTHWEST ARBOR CULTURE, INC.
NASH, Chris
SPALDING, Jillian
LARSON, Jay
31635 Wilsonville Rd NE
(503) 554-8948
CCB# 143287
Bond# LPM4030052
Tree removal, chipping, handwork, brush disposal, reforestation

OUT COLD FIRE SERVICE LLC
JORDAN, Matthew
9500 Lower River Rd
Grants Pass, OR 97526
(541) 660-7586
(541) 474-0597
Wildland fire fighting, fuel reduction, defensible space

OUT OF THE WOODS ECOFORESTRY
SCHATTLER, Joe
4062 Yale Creek Rd
Jacksonville, OR 97530
(541) 899-7836

PACIFIC OASIS
DODDS, Stephen
1575 E Nevada St
Ashland, OR 97520
(541) 488-4287
(541) 552-9723 **Fax**
Reforestation specialist, Plantation Mgmt

PACIFIC SLOPE TREE CO
DAHL, Chuck
PO Box 353
Williams, OR 97544
(541) 846-9226

PAGE, Dennis
PO Box 1224
Cave Junction, OR 97523
(541) 592-3199
Insured, Fireline Clearing, Tree Thinning, Brush Clearing
#156955 F/F Lic. 8811

POINT OF VIEW THINNING & BRUSH
CLARK, Rodney
PO Box 482
Selma, OR 97538
(541) 659-3952

RAINFORTH LANDWORKS
RAINFORTH, Jerry
556 Glenlyn Drive
Williams, OR 97544
(541) 846-1383
(541) 660-5619 Email: landworks@budget.net
Mowing, driveway repair, grading, misc. maintenance

RAINWATER FORESTRY & LOGGING
RAINWATER, James
9160 Monument Drive
Grants Pass, OR 97526
(541) 476-7282

ROGER'S TREE SERVICE
PREFONTAINE, Roger
PO Box 271
Williams, OR 97544
(541) 846-6706

S & K EXCAVATION
Josephine County Integrated Fire Plan
November 2004 Page 166
NACE, Kris
4847 Azalea Glen Rd.
Glendale, OR 97442
(541) 832-2258

SCHUBERT, Kevin
1801 Pacific Way
Gearhart, OR 97238
(503) 738-7808
treeplanterkevin@yahoo.com

SMALL WOODLAND SERVICES
Marty Main
2779 Camp Baker Rd.
Medford, OR 97501
(541) 552-1479

STOUT, Greg
3700 Hosmer Ln
Gold Hill, OR 97525
(541) 582-6516
Fire Break, Fuels Reduction

SUMMITT FORESTS, INC
PMB# 218
1257 Siskiyou Blvd.
Ashland, OR 97520
(541) 535-8920
Fuel Reduction

TED'S QUALITY TREE SERVICE
PECKHAM, Ted Jr.
1916 Carton Way
Grants Pass, OR 97526
(541) 472-1948
(541) 472-0105 FAX
Tree Work, Logging, Etc.

TED'S TREE SERVICE & LGN.
PECKHAM, Ted
P.O. Box 2103
Cave Junction, OR 97523
(541) 592-4789

3 RIVERS TREE SERVICE
PORTER, Scott
950 Jaynes Drive
Grants Pass, OR 97527
(541) 471-7894
(541) 772-7900
(541) 472-2818 PAGER

TRUMBLY, Wayne
777 Wildflower Drive
Merlin, OR 97532
(541) 956-1850
(541) 218-1099 CELL

WILDER, Aaron
600 Pickett Creek
Grants Pass, OR 97526
(541) 472-8435

WOLF CREEK WOODWORKS
STUBBLEFIELD, Jim
PO Box 381
160 Lower Wolf Creek Rd
Wolf Creek, OR 97497
(541) 866-2545
Custom milling, small logging jobs, chipping, unique yarder - low impact

RALPH WYTCHERLEY EXCAVATING
3404 Midway Ave
Grants Pass, OR 97527
(541) 476-1160

Southern Oregon Consultants & Surveyors

6-19-03

Disclaimer

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Jackson & Josephine Counties (From the local area)

FOELLER, Norman F.
2610 Dellwood
Medford, OR 97504
(541) 772-2679

FOREST & RESOURCE CONSULTANT
GASOW, Bill
PO Box 1692
Grants Pass, OR 97526
(541) 471-3372
EMAIL: fconsult@internetcds.com

INTEGRATED RESOURCE MNG
BARNES, Marc
151 Schultz Rd
Central Point, OR 97502
(541) 665-3700
E-Mail: www.irmforestry.com
Marc@irmforestry.com

KNIGHT FOREST MGMT & LGN
KNIGHT, John
1394 #A Dowell Rd.
Grants Pass, OR 97527
(541) 471-1266 FFLC# 008447

LOMAKATSI RESTORATION PROJECT
BEY, Marko
PO Box 3084
Ashland, OR 97520
(541) 488-0208

MICHAEL MAAS ORGANIC FORESTRY SERVICES
102 Slate Creek Rd.
Wildervile, OR 97543
(541) 476-0737
EMAIL: hsapiens@budget.net

NW FOREST RESOURCES MANAGEMENT
KANGAS, Paul
1421 Ramada Ave
Medford, OR 97504
(541) 821-5315
(541) 773-8845 Home
EMAIL: pkangas@charter.net

OUT OF THE WOODS ECO-FORESTRY
SCHATTLER, Joe
4062 Yale Creek Rd
Jacksonville, OR 97530
(541) 899-7836

BIOLOGICAL CONSULTANTS
MacLEOD, Jerry
2054 Amy
Medford, OR 97504
(541) 770-6746
E-mail: macfish@charter.net

3 RIVERS TREE SERVICE
PORTER, Scott
950 Jaynes Drive
Grants Pass, OR 97527
(541) 471-7894
(541) 772-7900
(541) 472-2818 (pager)

SISKIYOU WOODLAND COMMUNITY
Charles Mayer, Kara King
P.O. Box 36 Ashland, OR 97520
(541) 261-6203

SMALL WOODLAND SERVICES
MAIN, MARTY
2779 Camp Baker Rd.
Medford, OR 97501
(541) 552-1479

THOMPSON, Robert
1140 Acacia Lane
Grants Pass, OR 97527

ZIEGLER, Steven
4622 Eagle Trace Drive
Medford, OR 97504
(541) 857-8984
(541) 857-8984 FAX NUMBER
EMAIL: ziegs@internetcds.com
(541) 476-3269

Southern Oregon Consultants & Surveyors (Continued)

06-02-03 Jackson & Josephine Counties (From out of the area)

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BARNES & ASSOCIATES, INC.
3000 Stewart Parkway, Suite 204
Roseburg, OR 97470
(541) 673-1208
(541) 673-9789 FAX NUMBER

GENETECHS
COURTER, ACF,CF, Richard W.
1600 Northwest Skyline Blvd.
Portland, OR 97229
(503) 297-1660
Association of Consulting Foresters of America
web page searches can be made to locate ACF Foresters
www.acf-foresters.com

OUT OF THE WOODS ECO-FORESTRY
SCHATTLER, Joe
4062 Yale Creek Rd
Jacksonville, OR 97530
(541) 899-7836

SPITZ, Jim
60045 River Bluff Trail
Bend, OR 97702
(541) 389-5978
(541) 389-9173 FAX NUMBER

STUNZER, Ron
PO Box 118
Coos Bay, OR 97420
(541) 267-2872

WOODLAND MANAGEMENT INC.
Kruse Woods One Bldg.
Suite # 468
5285 SW Meadows
Lake Oswego, OR 97035
(503) 684-4004
(503) 684-4005 FAX NUMBER
EMAIL: woodland@woodlandmgmt.com

W.R. WEATHERS & ASSOCIATES
PO Box 39
29 South Alder Street
Lowell, OR 97452
(541) 937-3738
(541) 937-2518 FAX NUMBER

Southwest Oregon – Small Logging and Salvage Operators

06-02-03

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ABC TREE SERVICE
PECKHAM, Mark
3263 DeWoody Lane
Grants Pass, OR 97527
(541) 479-3151

ACTION HORSE LOGGING
JUDD, Don
233 Rogue River Hwy #273
Grants Pass, OR 97527
(541) 659-9293 PAGER
Horse Logging

APPLIED FOREST TECHNOLOGY & EXCAVATION
ULREY, Robert W
PO Box 850
Rogue River, OR 97537
(541) 821-6547

ATC LOGGING
HAUSE, Anthony
8444 Lower River Rd.
Grants Pass, OR 97526
(541) 479-5361

A TO Z STUMP REMOVAL
ZIEGLER, Bruce
310 Marion Lane
Grants Pass, OR 97527
(541) 474-6057

BARTLETT, Mike
704 Favill Rd.
Grants Pass, OR 97526
(541) 476-9313
Small Jobs

BILLINGS, Don
PO Box 334/2021 Leland Rd.
Sunny Valley, OR 97497
(541) 479-1938

J.W. BLUMENFELD LOGGING
BLUMENFELD, John
PO Box 3350
Applegate, OR 97530
(541) 846-7580
Oregon Professional Logger Cert.

ED PARIERA LOGGING
26261 Hwy 140 W
Klamath Falls, OR 97601
(541) 356-2237

ERIC'S TREE SERVICE
WERNER, Eric
233 SE Rogue River Hwy PMB 435
Grants Pass, OR 97527
(541) 479-4064

FREEMAN, Robert
12111 Table Rock Rd
Central Point, OR 97502
(541) 840-8821

HAMANN, Don
PO Box 198
Butte Falls, OR 97522
(541) 865-3310

HAUSER, Roy
PO Box 187
Wilderville, OR 97543
(541) 479-0231

HENRY BLANK EXCAVATION
2748 Anderson Creek Rd.
Talent, OR 97540
(541) 535-7295

HIGHRIDGE HARDWOOD
Harvest, buy, and sell
Jerry Million
(541) 865-3548

INTREGTATED RESOURCE MNG
BARNES, Marc
151 Schultz Rd
Central Point, OR 97502
(541) 665-3700
E-Mail: www.irmforestry.com
Marc@irmforestry.com

JEFF DEAN'S TREE SERVICE
DEAN, Jeff
210 Lloyd Drive
Grants Pass, OR 97526
(541) 476-8109

KNIGHT FOREST MGMT & LGN
KNIGHT, John
1394 #A Dowell Rd.
Grants Pass, OR 97527
(541) 471-1266 FFLC# 008447

LITTLEFIELD, Bill
PO Box 1125
Shady Cove, OR 97539
(541) 878-2860
(541) 821-0694 CELL
Logging, sewer systems, road building, & excavation

OUT OF THE WOODS ECO-FORESTRY
SCHATTLER, Joe
4062 Yale Creek Rd
Jacksonville, OR 97530
(541) 899-7836

PACIFIC SLOPE TREE CO
DAHL, Chuck
PO Box 353
Williams, OR 97544
(541) 846-9226

RAINWATER FORESTRY & LOGGING
RAINWATER, James
9160 Monument Drive
Grants Pass, OR 97526
(541) 476-7282

REBER, Michael
PO Box 1350
Rogue River, OR 97537
(541) 582-0946
Low Impact Logging

RICK ROBERTSON LOGGING, INC.
1397 Dutcher Creek Rd
Grants Pass, OR 97527
(541) 476-3435

ROGER'S TREE SERVICE
PREFONTAINE, Roger
PO Box 271
Williams, OR 97544
(541) 846-6706

SEVEN EAGLES TIMBER
CARTER, Francis Lee
PO Box 703
Jacksonville, OR 97530
(541) 772-2215
(541) 821-4007
Independent logger, contractor

STOUT, Greg
3700 Hosmer Ln
Gold Hill, OR 97525
(541) 582-6516
Fire Break, Fuels Reduction

TED'S QUALITY TREE SERVICE
PECKHAM, Ted Jr.
1916 Carton Way
Grants Pass, OR 97526
(541) 472-1948
(541) 472-0105 FAX
Tree Work, Logging, Etc.

TED'S TREE SERVICE & LGN.
PECKHAM, Ted
PO Box 2103
Cave Junction, OR 97523
(541) 592-4789

TERRY NEUENSCHWANDER LOGGING
455 Tolman Creek Rd.
Ashland, OR 97520
(541) 482-2606
Cable or Cat, Small Scale

3 RIVERS TREE SERVICE
PORTER, Scott
950 Jaynes Drive
Grants Pass, OR 97527
(541) 471-7894
(541) 772-7900
(541) 472-2818 PAGER

VALDEZ, Charlie
8171 Deer Creek Rd.
Selma, OR 97538
(541) 597-4005
Stand Improvement

WRIGHT TIMBER CONTR
2002 Galls Creek Rd
Gold Hill, OR 97525
(541) 855-1823
(541)621-5272
Yarder, skidder, falling, salvage, thinning

HORSE LOGGERS

ACTION HORSE LOGGING
JUDD, Don
233 Rogue River Hwy #273
Grants Pass, OR 97527
(541) 659 9293
Horse Logging

Portable Saw Mills

06-02-03

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HENRY BLANK EXCAVATION
2748 Anderson Creek Rd.
Talent, OR 97540
(541) 535-7295

CRUTCHER, Ron
283 Pickett Creek
Grants Pass, OR 97527
(541) 474-5519
Can cut up to 21'
Shares/Hourly/MBF

FREEMAN, Robert
12111 Table Rock Rd
Central Point, OR 97502
(541) 840-8821

OUT OF THE WOODS ECO-FORESTRY
SCHATTLER, Joe
4062 Yale Creek Rd
Jacksonville, OR 97530
(541) 899-7836

PACIFIC SLOPE TREE CO
DAHL, Chuck
PO Box 353
Williams, OR 97544
(541) 846-9226
Contractor #106737

WOOD MIZER PORTABLE SAWMILL
LATTIMER, Gene
1999 Placer Rd
Sunny Valley, OR 97497
(541) 474-1936
E-Mail latt58@internetcds.com

WOLF CREEK WOODWORKS
STUBBLEFIELD, Jim
PO Box 381
160 Lower Wolf Creek Rd
Wolf Creek, OR 97497
(541) 866-2545
Custom milling, small logging jobs, chipping, unique yarder - low impact

D.1 Jackson County Integrated Fire Plan Survey Results

Number of surveys:	220	100%

Nearest community:

Rogue River/Wimer:	42	19%
Butte Falls/Shady Cove/ Prospect/Trail/Tiller:	40	18%
Applegate/Ruch:	38	17%
Sams Valley/Gold Hill:	36	16%
Jacksonville/Old Stage Road:	34	15%
Ashland/Greensprings:	11	6%
Eagle Point/Lake Creek:	9	4%
No response:	10	5%

Question 1: Do you consider your home at risk from a wildfire?

Yes:	149	68%
No:	66	30%
No response:	5	2%

Question 2: Have you created defensible space around your home?

Yes:	171	78%
No:	39	18%
Don't know what it is:	10	4%
No response:	0	0%

Question 3: Are you aware of any local fire/fuels planning efforts, or any provisions for communications during an emergency within your neighborhood?

Fire/fuels planning Yes:	71	32%
Fire/fuels planning: No	132	60%
No response:	17	8%
Emergency communication Yes:	54	24%
Emergency communication No:	142	65%
No response:	24	11%

Question 4: Do you feel that you have good information regarding local wildfire risk, fuel hazard reduction work, burning regulations and such?

Yes:	146	67%
No:	62	28%
No response:	12	5%

Question 5: Where do you generally get this information?

Fire protection district:	80	36%
Oregon Dept. of Forestry:	29	13%
Newspaper:	26	12%
Direct mail:	20	10%
Neighbors:	9	4%
County:	8	4%
Television:	7	3%
USFS/BLM:	5	2%
Other:	7	3%
No response:	29	13%

Question 6: Do you feel that you know what local fire and emergency services are available in your area?

Yes:	167	76%
No:	45	20%
No response:	8	4%

Question 7: Does your family have evacuation plans and routes in place in case of an emergency?

Yes:	123	56%
No:	91	41%
No response:	6	3%

Question 8: Assuming a power loss, how would you get information during an emergency such as a wildfire or flood?

Radio:	94	43%
Cell phone:	40	18%
Television:	16	7%
Neighbors:	13	6%
Other:	28	13%
No response:	29	13%

Compiled by Brian Ballou, ODF Nov. 22, 2005

D.2. Jackson and Josephine County Events by Calendar Year

January	
February	
March	
April	Master Gardner Fair, Medford Pear Blossom Parade JaCo Team Teaching, Medford
May	Safe Kids, Rogue Valley Mall Wildflower Show, Shady Cove Boatnik, Memorial Weekend Grants Pass
June	Rooster Crow, Rogue River Pioneer Days, Jacksonville Gold Dust Days, Gold Hill Free Fishing Day
July	4th of July Parades in Ashland, Eagle Point, Central Point Britt Children's Festival Jackson County Fair
August	KTVL Kid's Day, Medford Blackberry Festival, Cave Junction Josephine County Fair Timber Carnival, Prospect
September	Labor Day Festival, Cave Junction Harvest Festival, Talent Bike Rodeo Sams Valley Awareness Day
October	Safe Kids Winter Fair, Rogue Valley Mall Harvest Fair, Jackson County Fairgrounds Fire Prevention Week
November	Ashland Festival of Lights
December	Providence Festival of Trees

D.3. Jackson County WUI Strategic Planning Units

NAME	Acres	# At Risk Homes	Federal Acres	Mean Rating
MEDFORD NON-FOREST	12,167	22,227	16	1.4
JACKSON COUNTY FD#3 NON-FOREST	54,180	12,394	561	1.3
ASHLAND NON-FOREST	3,098	6,962	1	2.0
JACKSON COUNTY FD#2 NON-FOREST	11,901	3,837	0	1.3
JACKSON COUNTY FD#5 NON-FOREST	14,150	3,406	6	1.4
PHOENIX NON-FOREST	726	1,779	0	1.7
ROGUE RIVER/INDIAN CREEK WUI	25,296	1,477	9,779	2.1
ROGUE RIVER NON-FOREST	3,496	1,330	3	2.3
ROGUE RIVER/DODGE BRIDGE WUI	40,551	1,116	8,030	1.9
BEAR CREEK/LARSON CREEK - EAST WUI	6,571	1,069	235	2.0

NAME	Acres	# At Risk Homes	Federal Acres	Mean Rating
LOWER EVANS CREEK WUI	19,434	957	4,904	2.8
GRIFFIN CREEK WUI	9,678	859	1,738	3.1
BEAR CREE/JACKSON CREEK WUI	13,764	804	2,044	2.6
ROGUE RIVER/GALLS CREEK WUI	17,546	736	5,213	2.5
JACKSONVILLE NON-FOREST	241	589	0	3.2
BEAR CREEK/HAMILTON CREEK - WEST WUI	1,771	550	279	3.6
BEAR CREEK/LARSON CREEK - WEST WUI	4,012	507	17	2.4
PLEASANT CREEK WUI	26,136	503	9,337	2.5
FOREST CREEK WUI	22,374	491	11,046	2.5
GOLD HILL NON-FOREST	542	443	0	2.3
LOWER LITTLE BUTTE CREEK WUI	14,647	402	3,792	1.8
ROGUE RIVER/SAMS CREEK WUI	16,243	391	4,718	2.7
BEAR CREE/MEYER CREEK - WEST WUI	3,486	368	56	2.3
FOOTS CREEK WUI	19,246	303	7,404	2.7
APPLEGATE RIVER/HUMBUG CREEK WUI	21,140	273	14,142	2.6
UPPER ROGUE RIVER/GRANTS PASS WUI	6,839	259	2,400	2.9
ROGUE RIVER/WARD CREEK WUI	7,269	257	2,795	2.1
PROSPECT WUI	15,229	241	4,844	2.9
ANDERSON CREEK/FERN VALLEY - WEST WUI	9,750	236	2,326	2.8
ROGUE RIVER/LOST CREEK WUI	36,315	225	16,316	2.3
WAGNER CREEK WUI	13,742	207	5,668	2.7
LOWER SOUTH FORK BIG BUTTE CREEK WUI	16,390	197	4,255	2.5
LOWER LITTLE APPLEGATE RIVER WUI	19,511	191	12,429	2.3
EVANS CREEK/SYKES CREEK WUI	23,840	189	11,428	2.5
THOMPSON CREEK WUI	15,974	186	12,220	2.4
UPPER ANTELOPE CREEK WUI	31,442	180	9,473	2.3
NEIL CREEK WUI	11,435	176	5,502	2.9
ROGUE RIVER/ WHETSTONE CREEK - WEST WUI	7,064	165	693	1.8
LOWER EMIGRANT CREEK WUI	19,686	164	5,270	2.0
UPPER EVANS CREEK WUI	31,134	163	11,669	2.5
LOWER LITTLE BUTTE CREEK - LONG MTN WUI	2,053	157		1.9
MC NEIL CREEK WUI	16,300	151	3,417	2.4
ASHLAND CREEK WUI	15,423	151	14,030	4.1
ROGUE RIVER/ WHETSTONE CREEK - EAST WUI	4,395	144	39	2.0
UPPER EMIGRANT CREEK WUI	25,132	139	7,751	2.4
ROGUE RIVER/SARDINE CREEK WUI	15,096	132	6,528	2.8
LOWER ANTELOPE CREEK WUI	9,360	128	875	2.1
APPLEGATE NON-FOREST	4,350	125	73	1.6
KEENE CREEK WUI	26,483	119	15,617	2.3
APPLEGATE RIVER/SPENCER GULCH WUI	5,899	116	4,079	2.4
WALKER CREEK WUI	25,493	107	4,843	1.9
LOWER BIG BUTTE CREEK WUI	11,338	105	3,708	2.3
ROGUE RIVER/WARD - BIRDEYE CREEK WUI	6,291	99	3,326	3.0
ELK HEADWATER WUI	15,151	91	9,506	2.4

NAME	Acres	# At Risk Homes	Federal Acres	Mean Rating
ROGUE ELK WUI	11,567	83	7,078	2.4
LOWER TRAIL CREEK WUI	5,508	80	2,366	2.3
APPLEGATE RIVER/BEAVER CREEK WUI	6,527	73	5,439	2.7
ANDERSON CREEK/FERN VALLEY - EAST WUI	4,088	63	12	1.4
LITTLE BUTTE/LICK WUI	14,784	61	5,608	1.8
APPLEGATE RIVER/SLAGLE CREEK WUI	6,161	55	3,104	2.2
LOWER SOUTH FORK LITTLE BUTTE CREEK WUI	23,713	55	10,395	1.8
WIMER NON-FOREST	636	54		2.4
BEAR CREEK/SAMS VALLEY NON-FOREST	2,749	48	0	1.5
BEAR CREEK/HAMILTON CREEK - EAST WUI	6,304	48	530	1.3
JACKSON COUNTY FD#4 NON-FOREST	1,408	47		1.7
UPPER COTTONWOOD CREEK WUI	10,952	47	4,003	1.9
UNION CREEK WUI	9,492	44	9,433	2.7
UPPER NORTH FORK LITTLE BUTTE CREEK WUI	7,766	40	6,292	2.4
APPLEGATE RIVER/PALMER CREEK WUI	18,686	38	16,989	2.6
MIDDLE JENNY CREEK WUI	16,037	37	6,305	2.3
UPPER JENNY CREEK WUI	13,357	36	8,042	1.9
APPLEGATE RIVER/CARIS CREEK WUI	4,022	34	2,459	2.2
YALE CREEK WUI	15,247	32	10,801	2.5
BEAR CREE/MEYER CREEK - EAST WUI	8,077	29	40	1.5
ELK CREEK/WEST BRANCH ELK CREEK WUI	19,316	29	14,556	2.5
APPLEGATE RIVER/SLAGLE CR - FERRIS GULCH WUI	2,597	26	1,528	2.6
MIDDLE BIG BUTTE CREEK WUI	12,500	21	5,333	2.5
LAKE CREEK NON-FOREST	913	17		1.2
LOWER NORTH FORK LITTLE BUTTE CREEK WUI	10,524	16	5,087	1.8
APPLEGATE RIVER/STAR GULCH WUI	16,115	15	14,048	2.3
LITTLE BUTTE/LAKE WUI	13,748	14	4,282	1.5
ELK CREEK/FLAT CREEK WUI	11,027	14	3,852	2.6
ELK CREEK/BUTTON CREEK WUI	8,717	13	1,608	2.5
LOWER CARBERRY WUI	12,802	11	10,912	2.5
SPAULDING CREEK WUI	9,600	10	7,296	2.0
APPLEGATE LAKEFRONT WUI	7,283	9	7,012	2.6
SALT CREEK/LONG BRANCH WUI	6,214	9	944	1.3
MIDDLE LITTLE APPLEGATE RIVER WUI	9,155	9	7,933	2.3
WILLOW CREEK WUI	6,348	8	2,970	3.6
WEST FORK TRAIL CREEK WUI	14,303	8	6,892	2.4
IRON GATE RESERVOIR WUI	7,333	7	2,255	2.2
SUGARPINE CREEK WUI	2,333	7	1,129	2.8
SOUTH FORK LITTLE BUTTE CREEK/DEAD INDIAN CREEK WU	13,334	6	6,730	1.9
LOWER WEST FORK EVANS CREEK WUI	3,111	4	1,541	2.6
AIRPORT NON-FOREST	757	4	15	1.1
STURGIS FORK CARBERY CREEK WUI	1,508	2	1,367	2.9

NAME	Acres	# At Risk Homes	Federal Acres	Mean Rating
NORTH FORK BIG BUTTE CREEK WUI	3,519	0	1,812	2.6
LOWER WILLIAMS CREEK WUI	507	0	274	2.3
ELK CREEK/BITTER LICK CREEK WUI	644	0	183	2.5

D.4. Risk Assessment Model Weightings

	Jackson County - Current Weightings (as of 12/8/05 meeting)		Josephine County Current Weightings in JCIFP			Option C - No Climate Factor, increased weight on Infrustructure and decreased commercial forest		Option D - No Climate or Crown Fire Factor, increased weight on Infrustructure and decreased commercial forest		Option E - No Climate Factor in hazard; for Value-increased weight of life, decreased forest and infrastructure, overall, increased weight of value to equal weight of hazard.		Option F - No Climate Factor in hazard;topo & fuel weight equal; increased weight of life for Value, decreased forest and infrastructure, overall, increased weight of value to equal weight of hazard. Added fire district to Protection	
Fire Plan Model Components	Incremental weightings	Final Weightings	Points	Incremental weightings (w/o struct)	Final Weightings	Incremental weightings	Final Weightings	Incremental weightings	Final Weightings	Incremental weightings	Final Weightings	Incremental weightings	Final Weightings
Fire Risk	14.20%	1	40	19.05%		14%	1	14%	1	15%	1	15%	1
Fire Hazard	42.60%	3	80	38.10%		43%	3	43%	3	35%	2	35%	2
Protection Capability	14.20%	1	40	19.05%		14%	1	14%	1	15%	1	15%	1
Values Protected	28.40%	2	50	23.81%		29%	2	29%	2	35%	2	35%	2
Structural Vulnerability		0	0	0.00%		0%	0	0%	0	0%	0	0%	0
Sub-Model Components													
Fire Risk													
Fire Ignitions	14.20%	100%	40	19.05%	100%	14.29%	100%	14.29%	100%	15.00%	100%	15.00%	100%
Fire Hazard													
Climate	10.65%	25%	40	19.05%	50%	0.00%	0%	0.00%	0%	0.00%	0%	0.00%	0%
Topography	5.11%	12%	10	4.76%	13%	7.71%	18%	10.71%	25%	6.30%	18%	11.20%	32%
Vegetative Fuels	12.78%	30%	20	9.52%	25%	15.43%	36%	21.43%	50%	12.60%	36%	11.20%	32%
Crown-Fire Potential	5.54%	13%	10	4.76%	13%	7.71%	18%	0.00%	0%	6.30%	18%	3.50%	10%
Insect Damage	8.52%	20%	0	0.00%	0%	11.14%	26%	10.71%	25%	9.10%	26%	9.10%	26%
Protection Capability													
Response times < 660' from streets	14.20%	100%	40	19.05%	100%	14.29%	100%	14.29%	100%	15.00%	100%	11.25%	75%
Within a fire district												8.75%	25%
Values Protected													
Residential Housing	14.20%	50%	50	23.81%	100%	14.29%	50%	14.29%	50%	22.75%	65%	22.75%	65%
Commercial Forests	4.26%	15%		0.00%	0%	2.86%	10%	2.86%	10%	1.75%	5%	1.75%	5%
Critical Infrastructure	4.26%	15%		0.00%	0%	5.71%	20%	5.71%	20%	3.50%	10%	3.50%	10%
Municipal Watersheds	5.68%	20%		0.00%	0%	5.71%	20%	5.71%	20%	7.00%	20%	7.00%	20%
Structural Vulnerability													
Accessibility			30	0.00%	33%	0.00%	33%	0.00%	33%	0.00%	33%	0.00%	33%
Defensible perimeters			30	0.00%	33%	0.00%	33%	0.00%	33%	0.00%	33%	0.00%	33%
Roof types			30	0.00%	33%	0.00%	33%	0.00%	33%	0.00%	33%	0.00%	33%

D.5. Social Service Agency Interview Questions

1. What populations do you serve?
   Elderly
   Low-income
   Disabled
   Hispanic residents
   Youth
   Other? _____

2. What services do you provide to your clients? (specific and general)

3. What part of the county are they located in (cities, fire districts, etc.)?

4. Are your clients predominantly renters or homeowners?

5. How many people does your organization serve?

6. What indicators or guidelines do you use to determine eligibility for the services or programs that you offer?

7. What procedure do you use to determine eligibility? (e.g., % of the federal poverty line, HUD income limits, others?)

8. What methods do you use to encourage participation? (e.g., marketing and outreach)

9. Do you feel that the people you serve are at risk to wildfire or other natural hazards?
   Yes
   No

10. In terms of a potential threat of fire to your clients, what are their needs:
    Before a fire?
    During a fire?
    After a fire?

11. What needs do your clients have in relation to reducing their risk to wildfire?
12. Education
13. New smoke detectors
14. Defensible space
15. New roof or building materials

16. What do you think are the best strategies to educate the following populations about fire protection (preparedness, response, and recovery) to:
    Elderly
    Low-income
    Disabled
    Hispanic residents
    Youth
    Others? _____

17. What do you think your agency/organization, or other social service organizations could do to help your clients reduce their risk to wildfires?
    Elderly
    Low-income
    Disabled
    Hispanic residents
    Youth
    Others? _____

18. How do you think fire agencies could better respond to special needs groups before, during, or after a fire? (i.e., through educational classes, funding, etc.)

19. Are you familiar with the Oregon Department of Forestry home assessment and fuels reduction program?
    Yes
    No

20. Have your clients accessed that program to create defensible space around their homes?
    Yes
    No
    Don't know
    -Why or why not?

21. Do your clients have needs in relation to reducing their risk to other natural hazards?
    Yes
    No
    Please explain:

22. Is your organization a part of the Jackson County Special Needs Committee?

23. Are there other social service organizations that you recommend we talk with?

24. Would you be interested in reviewing the information that we are compiling on social service providers in Jackson County?

25. Is there anything else you'd like to add, that we haven't discussed or do you have any questions for me?

26. Could I get your complete contact info (email, phone, address)?

D.6. Southern Oregon Small Diameter Collaborative Stewardship: A Proposal in Development

Last Revised June 3, 2005

Background

Forest ecosystems in southern Oregon have been altered through a long history of logging practices and fire exclusion, which has lead to uncharacteristically high densities of small diameter trees and brush. This results not only in a greater likelihood and severity of wildfire, but has altered the function of these

fire-adapted ecosystems, often with negative consequences. Progressive and increasingly accepted methods of ecosystem restoration are being developed to restore forests to healthier and more vigorous conditions. However, social, economic and technical limitations have prevented harvest and utilization of small diameter trees, both traditionally commercial and non-commercial.

The Small Diameter Stewardship Collaborative is an *ad hoc* collection of individuals who have come together to encourage landscape level attention to these conditions and to work for collaborative solutions that address both forest and community health. We believe that social, economic, and ecological benefits can be created through successful strategies for economically viable small diameter harvest and utilization. A listing of who we are is included as Attachment A.

Our potential partners are diverse. They include the citizens of the Rogue Basin, small woodland owners, industrial landowners, mill owners, forest workers and harvesters, tribes, organizations interested in small diameter harvest and production, contractors, conservation and environmental communities, the federal land management agencies (Bureau of Land Management, U.S. Forest Service, US Fish and Wildlife Service), Tribal, county and municipal governments, and congressional representatives.

This proposal contains the following elements

1. Vision and Goals
2. Current Social, Economic, and Ecological Conditions
3. Guiding Principles
4. Plan of Work
5. Implementation
6. Prior Work to be Incorporated
7. Attachment A: A Listing of Participants in the Southern Oregon Small Diameter Collaborative Stewardship

Vision and Goals

Vision

Community and forest health are enhanced through the creation of a dependable, sustainable and predictable harvest of small diameter trees in the Rogue Basin. Existing forest restoration and small diameter timber harvesting and processing infrastructures are supported and maintained while a new, sustainable economic niche of jobs and businesses are developed as a result of a collaborative, community-based process that includes partners private and public, rural and urban, economic and environmental, local and regional.

Each community of the Rogue Basin creates a visioning process that identifies and reflects existing conditions and capacity in each local area, resulting in long-term action plans that are responsive to the social, economic, and ecological aspirations of each community. The unique conditions and aspirations of the communities "drive" the type and scale of local activity, resulting in small diameter utilization that serves social, economic, and ecological purposes. Moreover, local plans are aggregated into a region-wide approach and landscape-level response to overstocked forests, as well as acting collectively in the marketplace to produce increased economies of scale.

Goals

We believe that a predictable supply of small diameter harvest and utilization must be fully integrated; that is, it must meet social, economic, and ecological goals. The social goal is to conduct a process that

builds trust, goodwill and community capacity sufficient to direct its own destiny. The economic goal is to foster a dependable supply of small diameter trees to stimulate business and job development. The ecological goal is to work towards the restoration of fire resilient forests using ecologically-based management strategies to restore vigorous stand structure and function at site and landscape scales.

Current Social, Economic, and Ecological Conditions

In the last several decades, the communities of the Rogue Basin have undergone profound social and economic changes. The traditional economy of agriculture and forestry has lost ground to a trades and services economy oriented to tourism, recreation, real estate investment, building construction and retirement. A commuter lifestyle has been one result of this economic shift. Today, people in the rural areas do not so much as live off the land as live on the land, commuting to nearby urban centers for employment, or working from home. The stewardship ethic is still strong but has shifted from one that involved productive use of the land to one that includes aesthetic enjoyment of the land.

Most sawmills that proliferated in the region are gone. Almost all the remaining sawmills are oriented to small diameter trees. The woods products industry in general has shifted away from reliance on federal timber, focusing more on industrial forestlands and private lands. In addition, technological shifts have lessened reliance on high quality old growth timber in favor of smaller and lesser-quality trees.

Much of the social and economic infrastructure that supported the timber industry is reduced or gone. The number of logging companies and timber harvesting operations has dwindled, as have many of the supporting service and supply businesses. The Bureau of Land Management and the U.S. Forest Service have lost significant numbers of workers, including those skilled in timber sale management.

Whatever one may think about it, there is general agreement that socially and politically, the area continues to shift toward an increase in environmental values. There is strong resistance to logging activities in previously un-entered areas, particularly roadless areas and the belief that big and old trees should not be harvested is now widespread.

In the midst of these changes, residents in the Rogue Basin continue to be actively interested in workable forestry, both from the standpoint of ecological health and of employment opportunities. There is a high concentration of forestry service workers in the region. Many people work with forest products, using them in arts and crafts operations, post and pole businesses, flooring, and other products. Simultaneously, the risk of catastrophic fire from overstocked forest stands has stimulated widespread and active interest in small diameter thinning operations across the political spectrum. Thus, the time is ripe for a mainstream, practical approach to the harvest and utilization of small diameter trees in the region, as represented by this proposal.

Guiding Principles

1. Outcomes must integrate social, economic, and ecological considerations. Healthy communities create healthy forests.
2. We will focus on what the land and the communities need, not positions, politics, or past history.
3. We are inclusive, welcoming anyone who wants to work for practical solutions. We are committed to continually widening our circle of inclusion as the process unfolds to create as wide a base of support as possible.
4. Monitoring and other provisions for accountability are essential components.
5. We recognize the best answers are multiple answers tailored to each unique setting in the region.
6. We favor a process that grows local businesses, organizations, and job markets using local

people who have the knowledge and experience for this kind of work. Economic outputs (scope and scale) must match the vision of each community
7. We honor the gestation period this process will require to develop trust and a successful outcome.
8. We want early action to foster momentum, optimism and trust, knowing the ultimate process will be longer-term.
9. The source of the action remains with the community, with agencies and other partners in the role of facilitating and expediting. We envision a "new kind of handshake" between communities and agencies in which there is joint action toward a common goal.
10. The scale is basin-wide, building from the unique local conditions and wishes in each area into a regional effort.
11. Public and private lands must both be addressed to attain the full ecological benefit. The mix of products in the marketplace must be anticipated and managed.
12. Adaptive management is a central philosophy. The learning cycle is continuous from the ground up, shared among community members and their partners.

Plan of Work

1. Engage in a descriptive process in each of the communities to identify concerns and opportunities. Specifically, we are interested in these features:

    a. Identify the human geographic units that best capture local perception about each community's "zone of influence" or "catchment area." How do local people understand when one community ends and another begins? What is their "natural" territory with which they have history and some sense of ownership? A map of these units will be useful in creating local action plans and for aggregating action at the regional level. Much of this step in the Rogue Basin has already been completed through strategic planning activities already undergone in several communities through work conducted by the Rogue Valley Council of Governments and others.

    b. How do local residents understand present social, economic, and ecological conditions? What trends do they observe? Identify community-related issues as well as issues about small diameter harvest that are discussed in the community. Use the elders, and the experience they represent, to connect the past to the future.

    Develop a communication strategy for each area that includes the word-of-mouth culture. It is especially important to get to the informal level of community—the networks, caretakers, and gathering places through which people sustain themselves in everyday routines. This is a major means of staying grounded in the real interests in a community to avoid being pulled into philosophical or rhetorical debates.

2. Specifically describe the status of the woods products sector in each area including labor force, skills, facilities, production activities, innovations and trends. Identify issues and opportunities of owners and workers within this sector.

3. Work with communities of interest and place to identify their range of interests, seeking common ground on which to move forward. Identify specific areas where small diameter harvest would create ecological benefits, excluding controversial areas from harvest activity.

4. Through residents in each area, foster the creation of a vision for land management that incorporates social, economic, and ecological elements. The product is *a five-year action plan*

that incorporates community and agency considerations. Citizens should include existing related work, such as Fire Plans, strategic plans, and so on. Begin with watershed councils, community-based organizations, and schools. Connect with previous work—Jackson County, SOREDI, Hayfork, California, and beyond.

5. Determine local capacity for small diameter harvest and utilization. Attach to this capacity any related social, economic or ecological goals, such as the promotion of youth employment in a particular area, or the interest in supporting existing forest products businesses. Draw upon economic and ecological expertise within the agencies as a resource for this process. The action plans contain "productive harmony standards" (as called for in the National Environmental Policy Act) against which to measure the efficacy of small diameter projects.

6. At the local and regional level, identify the formal organizations which have interests, expertise and/or responsibility related to ecological integrity, small diameter harvest and community development. What are their interests and concerns and what opportunities do they see in the current situation? Communities may elect to create a "community working group" to guide the development of the plan and through which to evaluate small diameter projects. Communities may even elect to enlist existing organizations, or may need to create a contracting entity.

7. Foster the assemblage of ecological data describing baseline conditions. Assess the level and coverage of data in the region in relation to its usefulness in the development of small diameter harvest plans. A data analysis will identify areas where little data exists or existing data is unsuitable or unreliable.

8. Conduct a regional economic assessment that builds off each community's land use vision and incorporates available regional data. The goals are to create diversity of economic options, encourage local business and job development in each area, and foster sustainability. Elicit the contribution of regional experts in government and industry. Given a level of predictable supply derived from the land use visions of the many communities, we should explore what production innovations, especially value-added, could be fostered that would optimize the economic benefit to the greatest number of people. What proportion of harvest could not be utilized at the local level but would contribute to regional economic efficiencies related to biomass energy, engineered building materials, pulp and paper, or other large scale uses? Work with industry on technical support. What sort of technology is most appropriate for forest restoration? What set of predictable supplies and technological innovation creates conditions for investment and growth?

9. The support and particular role of partners must be fostered and developed. For the process to work, it must proceed from the bottom up, from community to county, to state and federal partners, to congressional representatives. Forest and community health are the goals, and each prospective partner is invited to make whatever contribution is appropriate and helpful.

10. Develop monitoring capacity using agency and community resources, ensuring adequate and predictable funding. Some monitoring training is currently underway. Oftentimes, monitoring is called for but left unfunded, leading to widespread skepticism about the word. Good monitoring is planning. It is the rudder that adjusts the course of action. To the extent that monitoring fosters a climate of transparent accountability, it is a key means to create trust among partners of diverse interests. Communities may need to prescribe the technology, the competency of operators and so on to ensure the right equipment is used the right way. This initiative is committed to tying monitoring to production, or developing a similar suitable instrument to assure that the monitoring function is funded and implemented.

Implementation

Each community works in its 5-year action plan to develop its "productive harmony standards" that incorporates its social, economic, and ecological goals and against which proposed projects are measured. In other words, each community develops a set of filters by which to judge the merits of a small diameter project. Much like the Sustained Yield Units in Lakeview and other locations, preferences to local companies and jobs should be included. The 'Best Value' mandate of Stewardship Contracting could be very useful in tipping the scale towards local companies and jobs.

So far, we imagine that proposed small diameter projects are likely to trigger an Environmental Assessment (EA) related to the BLM's Resource Management Plan (RMP) or the Forest Service's Forest Management Plan. The "productive harmony standards", for example, could rate the quality of a proposal on the following considerations:

1. A proposal is given the greatest preference if it is a local company that creates a value-added step as part of its production process, or one that addresses youth employment as identified in the community's action plan;
2. The second greatest preference may go to a local company, but one that cannot guarantee a value-added step;
3. The third preference could be for a regional company;
4. The fourth preference could be for whoever bids.

This process offers incentives for development of community capacity. Some communities may be more prepared than others to begin at once to undertake these functions. Other communities may have to undergo some development to reach that point.

Prior Work to be Incorporated

This section should contain a listing of other sources, particularly the "principles" for ecological health and sustainability that other regional and national efforts have produced.

These could include:
Oregon Solutions paper
Shipley document
Lomakatsi Restoration Principles
Ashland Forest Lands Restoration Project
http://www.ashland.or.us/Files/Forest_Lands_Restoration_Project.pdf

Citizens' Call for Ecological Forest Restoration: Forest Restoration Principles and Criteria: (http://www.nativeforest.org/pdf/Restoration_Principles.pdf)

Civic Principles for Responsible Forest Restoration (http://www.gffp.org/pine/principle.htm)

Blair Moody	Bureau of Land Management
Chris Chambers	Jackson County Fire Plan Team
Cindy Deacon-Williams	Headwaters
Darren Borgias	The Nature Conservancy
Dave Schott	Southern Oregon Timber Industries Association
Dominick Delasalla	World Wildlife Fund
George McKinley	Jefferson Sustainable Development Initiative
Gordon Culbertson	Swanson Lumber
Jack Shipley	Applegate Partnership
Joan Resnick	Real Life Training
John Gerritsma	Bureau of Land Management, U.S. Forest Service
Jon Lange	Southern Oregon University
Joseph Vaile	Klamath Siskiyou Wildlands Center
Jude Wait	Collaborative Learning Circle
Kevin Preister	Center for Social Ecology and Public Policy
Linda Duffy	U.S. Forest Service
Marko Bey	Lomakatsi Restoration Project
Marty Main	Small Woodland Services
Oshana Catranides	Lomakatsi Restoration Project
Paul Galloway	U.S. Forest Service
Rich Whitley	Bureau of Land Management
Richard Hart	Consulting Ecologist, Ford Foundation
Tonya Graham	Headwaters
Vicky Sturtevant	Southern Oregon University

D.7. Public Meeting Sample Agenda and Facilitator's Agenda

Jackson County Integrated Fire Plan
Jacksonville Area Community Meeting
September 27th, 2005 at 6:30 PM
OSU Extension Service, 569 Hanley Rd.

Purpose
To gain input on community perceptions of wildfire risk and community values and to share information about living with wildfire and the Jackson County Integrated Fire Planning process.

Outcomes
Knowledge of the values that residents want to protect from wildfire
Increased information for residents about living with wildfire
Increased support and participation for fire protection activities in Jackson County

Agenda
- Welcome and Introductions

- Are You Prepared?
    - Wildfire Risk
    - Structural and Wildfire Protection
- Jackson County Integrated Fire Plan
- Defensible Space

Break-out Groups

Mapping activity: Identify values at risk from wildfire
Community Values
Opportunities for Action

Wrap-up

- Getting Involved

For more Wildfire safety information visit:

www.jacksoncounty.org

www.firewise.org

D.8. Jackson County Integrated Fire Plan Community Meeting Facilitators' Agenda

Purpose:
To gain input on community perceptions of wildfire risk and community values and to share information about living with wildfire and the Jackson County Integrated Fire Planning process.

Outcomes
Gather information on wildfire concerns of County residents
Educate residents on wildfire protection & how to live with wildfire
Introduce residents to the Jackson County Integrated Fire Planning process
Gain knowledge of the values that residents want to protect from wildfire

6:00 – Pre-meeting
- Facilitators review agenda
- Greet people, ask them to sign in, & ask them to fill out a survey form. Explain we will be using the form to meet their needs for information during tonight's meeting.
- Invite participants to put a sticker on the community map indicating where their home is as they come in
- Facilitators can mingle and greet people

6:30 – Moderator
- Announce the presentations will start in 5 minutes. Ask people to finish & hand in their survey forms.

6:35 - Welcome and Introduction (25 minutes)
- Housekeeping (Moderator)
- Are photos all right? Take a break when you need one, location of coffee, refreshments, and bathrooms, explanation of available materials, fire exits
- Invite participants to ask questions during presentations and let them know there will be opportunity for more interaction with speakers in small groups
- Describe the objectives of the meeting; why people have been invited to participate
- Agenda Overview
- Emphasize this is a two part meeting A: education B: mapping / input
- Refer to maps and other materials available to participants
- Introduce Fire Chief(s) and meeting staff

Welcome (Fire Chief [s])
- Discuss the high risk of wildfire in Jackson County - Map of fire occurrences in SW Oregon
- Fire Protection Capability & Responsibilities
- Overview of the roles and responsibilities of structural and wildland fire agencies (Structural Fire Departments, ODF, USFS, & BLM)
- Encourage people to get involved by doing defensible space around their home, volunteering at their Fire District or district auxiliary

Overview of the JaCIFP Process (Moderator)
- Fire Planning Policy: NFP, HFRA, Jackson County Planning Wildfire code
- Collaborative effort of JaCIFP

- Wildfire Risk Assessment to target areas of highest risk in the county & to plan for landscape level fuel treatments.
- Outlets for becoming involved (volunteer fire fighter, Watershed Councils, FD Auxiliaries). Point out sample copy of local community wildfire plans Plan on hand, other printed materials

7:00 - ODF Presentation on Defensible Space (Brian Ballou, ODF, 20 minutes)
- Illustrate principals of defensible space, escape routes (driveways) and other fuels teatments with before & after photos
- Emphasize the how to's of mitigating the effects of wildfire on their property (show handouts)
- Who can do on-site inspections? How can I get the work done? Who can point me in the right direction? Who can help (ODF incentive program)? Provide handout of ODF fuels reduction contractors

7:20 –Introduce the Mapping Activity and Objectives (Moderator, 5 Minutes)
- Objectives include:
    - Opportunity for the County to gather input on what citizens value and want to see protected from wildfire
    - Opportunity for the fire department to gather information on locked gates, bad roads, potential water sources
    - Engage participants to take action locally (developing neighborhood fire plans, fuels reduction projects, evacuation phone trees, etc.)
    - Discuss how on the county will document the information in the County Fire Plan and how residents can use it in future efforts. Encourage people to think about how they can move forward with local fire planning, fuels reduction or other related activities in their community.

- Explain logistics: provide an overview of what people will see on the maps (roads, tax lots, etc.), then start marking maps in small groups
- Direct people to gather around one of the facilitator clusters (facilitators in place waving arms at predetermined stations)
- Direct people to gather at maps after very short break, there will be a "tour" of the map and chance to see maps produced by fire planning effort

7:25 - Mapping & Small Group Break-out Session (25 minutes)

Purpose
To gain public input on community perceptions of risk and community values.

Outcomes
Knowledge of the values that residents want to protect from wildfire

Step 1. Participants introduce themselves in small groups
Step 2. Facilitator provides a "tour" of the map (orienting major landmarks, NS etc)
Step 3. Begin Mapping Process -- Identify values at risk and resources for wildfire protection
Step 4. Continue the dialogue about discussion topics/answer additional questions

Community Values
Where are the places and things you most value and want to see protected from wildfire?
- Hospitals and health care facilities, Community centers
- Schools, Churches, Stores and Businesses
- Ecological values: Rare and endangered species, habitat, eco. significant areas

- Recreation areas, Culturally or historically significant areas
- Are their other vales of interest to you?

What critical infrastructure needs to be protected from wildfire?
- Power substations & corridors
- Communication sites and facilities
- Landfills and treatment facilities
- Transportation corridors
- Major manufacturing and utilities facilities

Priorities for action
Where do you most want to see fuels treatment or other wildfire protection activities occur?
- Evacuation routes
- Safety zones
- Critical facilities and infrastructure

7:50 - Wrap-up (10 minutes)
- Summary and Next Steps (Moderator)
- Summarize common themes and questions
- Provide participants an opportunity to ask additional questions & remind them to turn in written comments
- Remind people of resources available and opportunities to get involved
- Thank you for coming (Fire Chief)

D.9. Jackson County Integrated Fire Plan Memorandum of Understanding (MOU)

MEMORANDUM OF UNDERSTANDING

Between

JACKSON COUNTY,
The JACKSON COUNTY FIRE DEFENSE BOARD,
JACKSON COUNTY INTEGRATED FIRE PLAN EXECUTIVE COMMITTEE
OREGON DEPARTMENT OF FORESTRY,
BUREAU OF LAND MANAGEMENT-MEDFORD DISTRICT, and the
USDA FOREST SERVICE, ROGUE RIVER-SISKIYOU NATIONAL FOREST

This Memorandum of Understanding is here by entered into by and between Jackson County, the Jackson County Fire Defense Board, the Oregon Department of Forestry, the Bureau of Land Management-Medford District, and the USDA Forest Service, Rogue River-Siskiyou National Forest, hereinafter referred to as the Parties.

CONCERNING:

Implementation of the Jackson County Integrated Fire Plan

The Jackson County Community Wildfire Protection Plan (hereinafter "The Jackson County Integrated Fire Plan) has been developed in collaboration with the following organizations and agencies:

Jackson County
Applegate Partnership
Applegate Valley Rural Fire District #9
Ashland Fire and Rescue
Bureau of Land Management, Medford District
Butte Falls Volunteer Fire District
Colestin Rural Fire District
Evans Valley Fire District #6
Friends of the Greensprings
Jackson County Emergency Management Advisory Council
Jackson County Fire District #3
Jackson County Fire District #4
Jackson County Fire District #5
Jackson County Special Needs Committee
Jacksonville Fire Department
Jacksonville Woodlands Association
Josephine County Integrated Fire Plan Executive Committee
Emergency Management Board
Lake Creek RFPD
Little Butte Creek Watershed Council
Medford Fire and Rescue
Oregon Department of Forestry
Oregon Office of the State Fire Marshal
Oregon State University Extension
Prospect RFPD
Resource Innovations (at the Univ. of OR)
Rogue Forest Protective Association
Rogue River Fire Department
Rogue River-Siskiyou National Forest
Rogue Valley Fire Chiefs Association
Rogue Valley Fire Prevention Cooperative
Seven Basins Neighborhood Fire Planning Project
Seven Basins Watershed Council
Small Woodland Services, Inc.
Southern Oregon University
Southern Oregon Timber Industries Assoc.
The Nature Conservancy

I. PURPOSE:

The purpose of this Memorandum of Understanding is to facilitate the implementation of the Jackson County Integrated Fire Plan. The Plan was developed to reduce the risk of wildfire to

life, property and natural resources in the county by coordinating public agencies, community organizations, private landowners and the public; and to increase their awareness of and responsibility for fire issues. The Jackson County Integrated Fire Plan is a framework for educating communities, changing the behavior of individuals living in fire prone neighborhoods, and modeling agency and citizen responsibility in identifying and decreasing fire risks.

II. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:

The Jackson County Integrated Fire Plan is intended to increase awareness and action for fire protection among fire districts, county government, public agencies, community organizations and citizens for the protection of communities and watersheds from catastrophic wildfire and to address threats to forest and rangeland health. This cooperation serves the mutual interest of the parties and the public.

III. AUTHORITY:

BLM Manual Section 1786, Memorandums of Understanding, Section 1786.3.
FS Manual 1586, Memorandum of Understanding and Letters of Intent, 1586.01

IV. THE PARTIES SHALL:

1. Follow the actions outlined in the Jackson County Integrated Fire Plan as adopted by Jackson County Commissioners to ensure that the Plan is implemented, monitored, evaluated, and updated. Jackson County Integrated Fire Plan partners will provide technical advice and support when requested based on employee availability.

2. Work together to identify high risk areas and prioritize fuels reduction projects on public and private land that meet objectives for landscape scale treatment, as well as identify and implement other wildfire mitigation actions, including education and outreach. The JaCIFP partners, depending upon budgetary and program development processes, will work toward achieving the hazardous fuels reduction goals of the Plan.

3. Work together on emergency management issues, including evacuation and response, incident command training, and multi-agency coordination.

V. THE PARTIES TO THIS MOU RECOGNIZE THAT:

1. The Jackson County Integrated Fire Plan Executive Committee is responsible for coordinating with all Plan partners to ensure that Plan documents, related data, and information are monitored, maintained and updated.

2. Jackson County Fire Districts, County government, State and Federal land managers, and community organizations need to work collaboratively to implement the Jackson County Integrated Fire Plan and maintain coordination of the JaCIFP Executive Committee,

Outreach and Education Committee, and Risk Assessment/Fuels Reduction Committees.

Jackson County, Josephine County, Oregon Department of Forestry, Rogue Valley Fire Chiefs Association, Southern Oregon Regional Economic Development Inc., Bureau of Land Management-Medford District, and the Rogue River-Siskiyou National Forest participate in the Josephine-Jackson Local Coordinating Group (JJLCG) for the purpose of implementing the National Fire Plan by developing hazardous fuels assessments, developing treatment priorities, and creating action plans.

VI. IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:

1. FREEDOM OF INFORMATION ACT (FOIA): Any information furnished to any of the undersigned agencies is subject to the Freedom of Information Act (5 U.S.C. 552) and State public records laws.

2. MODIFICATION: Modifications within the scope of the agreement shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by all parties, prior to any changes being performed.

3. The Chairperson of the Jackson County Integrated Fire Plan Executive Committee will accept proposals for modifications, facilitate review, and process finalized modification to be approved by those signatories to this MOU.

4. PARTICIPATION IN SIMILAR ACTIVITIES: This instrument in no way restricts the Forest Service or the Cooperator(s) from participating in similar activities with other public or private agencies, organizations, and individuals.

5. COMMENCEMENT/EXPIRATION DATE: This instrument is executed as of the date of last signature and is effective through June 27th, 2016 at which time it will expire unless extended. This Memorandum of Understanding will be reviewed and documented in writing at the end of 5 years by all Parties to determine the appropriateness and viability of this agreement.

TERMINATION: Any of the parties, in writing, may terminate the instrument in whole, or in part, at any time before the date of expiration.

6. PRINCIPAL CONTACTS:

Jackson County
Lin Bernhardt
Natural Resources Coordinator
(541) 774-6086

Oregon Department of Forestry
Dan Thorpe
SW OR District Forester
(541) 664-3328

Bureau of Land Management
Tim Reuwsaat
Medford District Manager
(541) 618-2200

Brett Fillis
Executive Committee Chair
Jackson County Fire Defense Board Chief
(541) 899-1050

USDA Forest Service
Scott D. Conroy
Rogue River-Siskiyou National
Forest Supervisor
(541)-858-2200

7. NON-FUND OBLIGATING DOCUMENT: This agreement is neither a fiscal nor a funds obligation document. Any endeavor to transfer anything of value involving reimbursement or contribution of funds between the parties to this agreement will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate documents that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This instrument does not provide such authority. Specifically, this instrument does not establish authority for noncompetitive award to the cooperator or any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.

8. RESPONSIBILITIES OF PARTIES. The Forest Service, The Bureau of Land Management, The Oregon Department of Forestry, and The Jackson County Commissioners and their respective agencies and office will handle their own activities and utilize their ownresources, including the expenditure of their own funds, in pursuing these objectives. Each party will carry out its separate activities in a coordinated and mutually beneficial manner.

9. ESTABLISHMENT OF RESPONSIBILITY: This MOU is not intended to, and does not create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by a party against the United States, its agencies, its officers, or any person.

10. AUTHORIZED REPRESENTATIVES: By signature below, the cooperator certifies that the individuals listed in this document as representatives of the cooperators are authorized to act in their respective areas for matters related to this agreement.

THE FOLLOWING PARTIES have executed this instrument:

Date: _____ _____
Dave Gilmour, Chair
Jackson County Board of Commissioners

Date: _____ _____
Dan Thorpe, District Forester
Oregon Department of Forestry

Date: _____ _____

Tim Reuwsaat, District Manager
BLM, Medford District

Date: _____ _____

Scott D. Conroy, Forest Supervisor
Rogue River-Siskiyou National Forest

Date: _____ _____

Brett Fillis, Chair
Jackson County Fire Defense Board and
Jackson County Integrated Fire Plan

Executive Committee

NOTE: Signatures are on original MOU document.

Contacts

Jackson County:

Lin Bernhardt, Jackson County Economic and Special Development
10 South Oakdale Ave., Room 205
Medford, OR 97501
541-774-6086
BernhaLD@jacksoncounty.org

Mike Curry
Jackson County Emergency Management
10 South Oakdale Rm 214Medford OR 97501
541-774-6821
currymc@jacksoncounty.org

Keith Massie
Jackson County GIS
10 South Oakdale Medford OR 97501
541-774-6028
massiekj@jacksoncounty.org

Jenna Stanke
Fire Safety Zoning Officer, Jackson County
10 South Oakdale Ave. Medford OR 97501
(541) 774-6922
stankejs@jacksoncounty.org

Jackson County Fire Districts:

Ashland Fire and Rescue
455 Siskiyou Blvd.
Ashland, OR 97520
(541) 482-2770

Applegate Fire District #9
1095 Upper Applegate Rd.
Jacksonville OR 97530
541-899-1050
8551@applegatefd.com

Evans Valley Fire District #6
8677 East Evans Creek Rd. Rogue River OR 97537
541-582-0678
evfd6@charter.net

Jackson County Fire District #3

8333 Agate Rd. White City OR 97503
541-826-7100

Jackson County Fire District #4
Shady Cove OR
541-878-2666
jacksoncofire4@earthlink.net

Jackson County Fire District #5
541-525-4222
chiefdan@jcfd5.com

Jacksonville Fire Department
Jacksonville, Or 97530
541-899-

Medford Rural District #2
200 S. Ivy Room 257
Medford OR 97501
541-774-2318
dan.patterson@ci.medford.or.us

Wildfire Management Agencies:

Oregon Department of Forestry
5286 Table Rock Rd.
Central Point, OR 97502
(541) 664-3328
dthorpe@odf.state.or.us

Bureau of Land Management
Medford District
3040 Biddle Rd.
Medford, OR 97504
541-618-2200

U.S. Forest Service
Supervisor's Office
Scott Conroy, Forest Supervisor
Ginnie Grilley, Deputy Forest Supervisor
333 W. 8th St. / P.O. Box 520
Medford, Oregon 97501-0209
Phone: Voice: (541) 858-2200
FAX: (541) 858-2205
TTY: 1-866-296-3823

Education and Outreach:

Oregon State University Extension Service
Southern Oregon Research & Extension Center
Max Bennett, Extension Forester

569 Hanley Road
Central Point, OR 97502
541-776-7371
max.bennett@oregonstate.edu

Rogue Valley Fire Prevention Cooperative
P.O. Box 3301
Central Point, OR 97502
www.rvfpc.org

Rogue Valley Council of Governments, Senior and Disability Services
Connie Saldana
541-664-6676 x 227
www.rvcog.org

Grants

Jackson County Title III Grants
Lin Bernhardt, Jackson County Economic and Special Development
10 South Oakdale Ave., Room 205
Medford, OR 97501
541-774-6086
BernhaLD@jacksoncounty.org

Title II Grants
Rogue-Umpqua Resource Advisory Committee (RAC)
Umpqua National Forest
2900 Stewart Parkway
Roseburg, OR 97470
(541) 672-6601
http://www.fs.fed.us/r6/umpqua/rac/rac_home1.html

Siskiyou Resource Advisory Council
Patty Burel
(541) 858-2211

Scott Conroy
Designated Federal Official (DFO)
Rogue River-Siskiyou National Forest
333 West 8th Street
Medford, OR 97503
(541) 858-2200
Fax (541) 858-2205
http://www.fs.fed.us/r6/rogue-siskiyou/rac-pac/sis-rac.shtml

Bureau of Land Management Resource Advisory Council
Medford District BLM
3040 Biddle Rd.
Medford, OR 97504
541-618-2200
National Fire Plan Community Assistance Grants

Paul Galloway, Rogue-Siskiyou National Forest
2164 N.E. Spalding Avenue
Grants Pass, OR 97526
(541) 471-6500

Teresa Vonn, Oregon Department of Forestry
5286 Table Rock Rd.
Central Point, OR 97502
(541) 664-3328
Grants website: http://199.134.225.81/CommunityAsst.htm

Biomass Resources

Studies
Bill Almquist, Resource Innovations, University of Oregon. *An Inventory and Analysis of Biomass Utilization Efforts in Southwest Oregon*. September 2005
http://ri.uoregon.edu/publicationspress/Biomass_Report_9_19-052.pdf

George McKinley, et al. 2005. Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization. Southwest Oregon Resource Conservation and Development Council. Online: http://www.pacrimrcd.org/page.asp?navid=288

Local Biomass Contacts
*****Some of these organizations or businesses may charge fees for biomass disposal. Call ahead to find out which materials the facility takes and any tipping fees.

Biomass One
2350 Avenue G
White City, OR
826-9422

Hilton Fuel
8087 Blackwell Road
Central Point, OR
664-3374

Jo-Gro
1749 Merlin Road
Merlin, OR. Phone: 660-1685

Rogue Valley Fuel
7990 11th Street
White City, OR
890-0704

Jackson County Fuel Committee
(not associated with the County government)
995 Siskiyou Blvd
Ashland, OR
488-2905