Columbia County Community Wildfire Protection Plan

Columbia County



Oregon

A working document that serves as a resource for the mitigation of wildland-urban interface fire threats through community education and awareness, prioritized hazard and risk reduction and community action partnerships

Version –August 1, 2007

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Community Wildfire Protection Plan Signature Page

The Healthy Forest Restoration Act (HFRA) requires three decision makers mutually agree to the final contents of the Community Wildfire Protection Plan.

The applicable local government The local fire department(s)

The state entity responsible for forest management

Columbia County: Lita M. Dernhard Rita Bernhard	Fire Districts:
Chair, Board of Commissioners	Michael Greisen
	Columbia County Fire Chief
	Scappoose Rural Fire Protection District
Tony Hyde, Commissioner	Killed Chang
not nonet	Chief Richard Long
not present	Clatskanie Rural Fire Protection District
Joe Corsiglia, Commissioner	
September 12, 2007	Chief Jay Tappan Columbia River Fire and Rescue
State Forester Representative:	Chief Dave Crawford
D AA-OA	Mist-Birkenfeld Rural Fire Protection District
Valil It	O O
Bob Gustafson Acting District Forester - Forest Grove District	Hour f Eple
Oregon Department of Forestry	Chief Paul Epler
Section of the sectio	Vernonia Rural Fire Protection District

The Committee would like to thank all those who have participated and engaged in the process; its meetings, discussions, workshops and reviews that brought the Columbia County Community Wildfire Plan planning process to life and to its current stage of completion. In particular, the Columbia County Commissioner's Tony Hyde, Rita Bernhard and Joe Corsiglia who initiated the call to action and the Columbia County Fire Defense Board for their full engagement and support of the process. The Oregon Department of Forestry for its commitment and leadership in the CWPP process. Also, thanks to all the fire district fire staff for their participation in local reviews and the establishment of priorities.

The Plan has laid out a clear mission for action and with continued support this plan will be a valuable working document for the community of Columbia County.

Columbia County greatly appreciates the time, commitment and energy that the following representatives have invested in the Columbia County Community Wildfire Protection Plan:

Columbia County Assessor's Office Dave Crawford, Mist Birkenfeld Rural Fire District Chief Paul Epler, Vernonia Rural Fire District Chief Joe Flori, Columbia County Mapping/GIS Jacob Graichen, Columbia County Land Development - Planner Michael Greisen, Scappoose Rural Fire District Chief - County Fire Chief Terry Grice, Columbia River Fire and Rescue, Assistant Fire Chief Vicki Harguth, Columbia County Office of Emergency Management (Co-Chair CCCWPPC) Larry Hurley, Longview Timberlands and Lower Columbia Watershed Council Member Dave Johnson, Oregon Department of Forestry – Forest Grove District Forester Kelly Niles, Oregon Department of Forestry – Protection Supervisor Randolf "Tad" Pederson, Office of State Fire Marshal – Deputy Fire Marshal Hyla Ridenour Columbia River Fire and Rescue - Community Liaison Mike Schuft, Oregon Department of Forestry - Salem GIS Section Mike Simek, Oregon Department of Forestry – Unit Forester (Co-Chair CCCWPPC) Jay Tappan, Columbia River Fire and Rescue Fire Chief Ann Walker, Oregon Department of Forestry, National Fire Plan Coordinator Carl West, Bureau of Land Management – Fire Management Officer Jim Wolf, Oregon Department of Forestry Ron Youngberg, Columbia River Fire and Rescue, Division Chief

The Columbia County Community Wildfire Protection Plan (CWPP) is a strategic planning document that forms a foundation for a realistic assessment of wildfire risks in our county and develops plans or action statements of what we can do as a community to mitigate wildfire threats to life, property, and natural resources.

With the forming of a Columbia County Community Wildfire Protection Plan Committee in April 2005, the process of reviewing local issues and concerns and developing action plans specific to each fire district has evolved. The <u>process</u> has been invaluable toward building an overall understanding of the issues, deepening relationships, building on collaborative efforts and most importantly, developing achievable <u>action plans</u> to address wildfire threats in the wildland urban interface of Columbia County.

The Plan identifies the "Community-at-Risk" (CAR) in Columbia County as the populated areas of the County, both city and rural where natural cover and wildland fires pose a potential threat to people and their homes. Each rural fire district and the area outside of a rural fire district within the county have communities at risk. To develop local priorities, the committee decided that each fire district would become the community center for planning and public outreach efforts. The process began by engaging each fire district regarding assessment factors and utilizing local knowledge regarding community concerns and priorities. Once these areas were identified specific action plans were developed by each district to address the concerns within the wildland-urban interface.

Even before this plan's completion, action plan implementation was initiated. In the Columbia River Fire and Rescue CAR, Grey Cliff residents were invited to a community meeting where partnerships between agencies and a local landscaping business presented material where homeowners could start fire safe landscaping efforts. In addition, the fire district is making an assessment of access roads, reviewing individual homes for fire resistive construction and landscaping practices and offering recommendations. In Scappoose Fire District, the emerging community of Columbia Hills on Callahan Road has been addressed through its forming homeowners association. The developer and the builder understand the issues and are taking actions that support becoming a "Firewise Community". The Mist Birkenfeld Fire District has also approached the Fishhawk Lake Community to become a Firewise Community. These actions are indicative of a successful platform that was laid down during the formulation and process of developing this plan. Much more is to come and this document is a working plan that will adapt to new ideas, innovations and understanding.

The Columbia County Community Wildfire Protection Plan meets the criteria for a CWPP under the National Fire Plan. As such, potential federal and state grants may be available to the Fire Districts, the County and the Oregon Department of Forestry for implementation of the CWPP Plan elements.

Wildland - Urban Interface

Wildfire is a fact of life throughout much of the nation's landscape. Our increasing population and subsequent development into wildfire prone natural landscapes has created a zone known as the wildland-urban interface (WUI). This interface zone; where structures and other human development meet and intermingle with undeveloped forestlands, wildland or other natural cover fuels, poses a tremendous potential risk to life, property, natural and cultural resources. Large wildland fires have been on the rise, in Oregon and nationwide, since the early 1990s. Numerous factors such as extended preclusion of fire and forest health issues have created fuel loads and resulting fire intensities beyond historical levels. Climate changes have also been implicated as a contributing factor to the increasing frequency and intensity of large fires. Fires in the interface are the most dangerous and complicated fire situations our communities and firefighting professionals can face. Columbia County does not have the frequency of fire or the large fire potential as compared to other locations in the State; however, wildfire is a reality in northwest Oregon. The potential for large fire growth can and will develop. Frequency factors indicate a caution, for example just as a 100-year flood event in Columbia County did in 1996, conditions lined up for disastrous results. Normal fire activity levels can present wildfire incidents that pose localized threats to communities and rural populations depending on when and where these fires occur on the landscape. Large wildfires in Columbia County may be a low incidence event, but they are also events that pose the highest risk to life and property. Recognizing these wildfire risks and taking appropriate actions toward mitigation will reduce the vulnerability of our communities and citizens.

The Columbia County Board of Commissioners (CCBOC) are concerned with the potential risk that wildfires pose to the citizens, to critical infra-structure and the natural resources within the county. The CCBOC strongly supports the development of this community wildfire protection plan and implementation of its goals and objectives.

Preparing a Community Wildfire Protection Plan

The ¹ National Fire Plan and the Ten-Year Comprehensive Strategy for Reducing Wildland Fire Risks to Communities and the Environment place a priority on working collaboratively within communities to reduce their risk from fires. The National Fire Plan was developed in August 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires and their impacts to communities.

The Healthy Forest Restoration Act (HFRA) builds on existing efforts of the Ten-Year Strategic Plan and stresses the need for development of Community Wildfire Protection Plans (CWPP). In Oregon, these community wildfire protection plans are a requirement

¹ National Fire Plan Healthy Forest Restoration Act: http://www.fireplan.gov/

in all National Fire Plan grant processes, including Western States Fire Managers (WSFM) and Community Assistance (CA) grants.

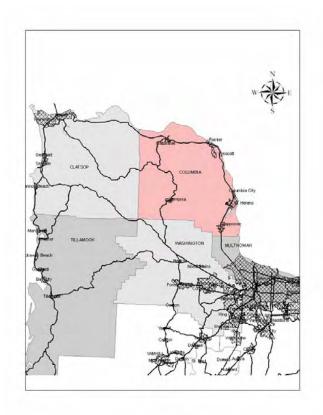
These plans can be simple or as complex as the local community desires. However, there are a few minimum requirements for a CWPP as described in the HFRA.

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

This community wildfire protection plan becomes a foundation for understanding wildfire threats relevant to the community. It more importantly serves as a catalyst for action. <u>Action items</u> that serve to involve, educate and protect the community and citizen interests of Columbia County are the goal of this plan.

County Profile

²Columbia County is located in the northwest portion of Oregon. The Columbia River is the northern and eastern boundaries. The western boundary extends into the Coast Range. The northern and eastern parts of the county, as well as its coastal valleys, are relatively flat terrain composed of alluvial flood plains and terraces. Low foothills and mountainous areas merge in the western part of the county. The elevation ranges from sea level to 2,240 feet (Buck Mountain). The County has a modified marine climate with annual precipitation ranging from 40 inches in the eastern portion to 100 inches in the higher elevations of the Coast Range. Average annual precipitation is 61 inches. Winters are relatively wet and mild with summers warm and dry. The summer's warmer and drier weather is associated with



gradually lengthening high-pressure systems. These begin generally in June and

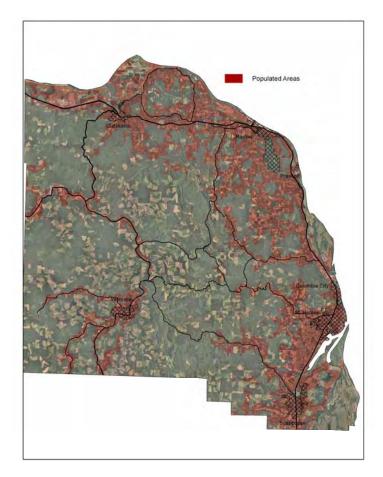
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² Soil Survey of Columbia County, Richard T. Smythe, SCS

continue through September. The rolling and steeper uplands of the coast range are forested and managed for timber production. The flood plains and gentler terrain supports increasing rural population density. The primary industries are timber, fishing, water transportation, dairying, horticulture, and recreation.

Total population of Columbia County is 46,971³. Of this population, a significant portion lies within the wildland-urban interface and is rural in nature. It is estimated that approximately 21,000 citizens live outside the boundaries of incorporated city limits. This rural population density largely defines the wildland urban interface within Columbia County. Population growth and development continues with a 7.8% increase in population from 2000 to 2004. There are seven incorporated cities within the county and include the following ranked according to population: Saint Helens (11,940), Scappoose (5,840), Vernonia (2,340), Columbia City (1,890), Rainier (1,750),) Clatskanie (1,675), and Prescott (60). Saint Helens is the county seat. Numerous unincorporated communities exist throughout Columbia County including, but not limited to Alston, Birkenfeld, Chapman, Deer Island, Delena, Goble, Mist, Pittsburg, Swedetown, Trenholm, Quincy, Warren, and Yankton.

2005 Color 1 Meter Aerial Photo, Columbia County with Incorporated Cities and Populated Areas



Columbia County is the third smallest county in Oregon with a total area of 688 mi². The total land base is 657 square miles or approximately 420,480 acres. However, it ranks fifth4 in the total timber volume harvested. During the late 1800s and early 1900s, the county's timber resources were extracted to the fullest. Old growth timber has since been replaced with second growth forests. Industrial forest owners and many small non-industrial private forestlands practice intensive forest management on approximately 71% of the land base. Since the time of the first European settlements to the present, forest products remain the county's key industry. Only a small percentage (6%) of the land base is in public ownership. Federal ownership within the

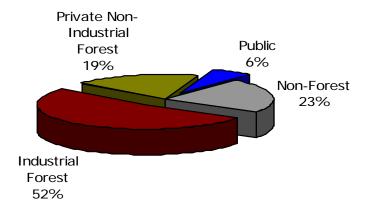
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³ 2004 estimate based on 2000 Census, US Census Bureau

⁴ Based on ODF harvest levels – Columbia County

county is significantly less. The Bureau of Land Management (BLM) has approximately 11,030 acres or 2.5% of the land ownership within the county. State forests managed by the Oregon Department of Forestry (ODF) total 6,430 acres. The U.S. Forest Service does not own any land within Columbia County. As a result of this ownership pattern and the history of intensive forest management practices, the county has relatively few areas that pose extreme fire risk due to forest health issues and older forest reserves.

Land Ownership - Columbia County Figure 1.1



<u>Summary</u>

The potential that wildland fires, both small and large, will threaten life, property and natural resources is a reality. Fire statistics show that fire incident rates, and therefore risks, are prevalent in the WUI areas of the county. Population growth and development continue to encroach into and fragment forests. Therefore, the strategic planning efforts and actions that result from this plan, and the continued maintenance of this plan, will benefit all residents of Columbia County.

This Community Wildfire Protection Plan is endorsed by the Columbia County Commissioners, Columbia County Fire Districts and the Oregon Department of Forestry. These representatives mutually agree to the final contents of this plan. The plan will not be legally binding in any way. The role of this plan is to be a <u>strategic planning tool</u> and therefore a catalyst for actions involving partnerships that accomplish the following stated vision, mission, goals and objectives.

<u>Columbia County Community Wildfire Protection Plan</u> <u>Mission, Goals and Objectives</u>

Vision Statement:

The Columbia County Community Wildfire Protection Plan seeks to create a locally developed and supported wildfire prevention and mitigation strategy that reduces wildfire risks to people, property, natural resources and the environment.

Mission Statement:

Columbia County is committed to providing real and achievable mitigation actions that engage and educate it citizens about wildfire risks, motivates citizen and community involvement and action toward mitigation of wildfire hazards and establishes a clear understanding of issues relative to protection of life, property and resources within the forestland-urban interface of Columbia County.

Goal:

 The identification and implementation of <u>action items</u> that serve to educate, involve and protect the community and citizen interests of Columbia County as it relates to threats from wildfire.

Objectives:

- Complete a comprehensive wildfire risk assessment for Columbia County using local expertise and knowledge and common risk assessment data and methodologies.
- Provide opportunities for meaningful participation among community members, local, state, and federal agencies.
- Identify and map the <u>Community at Risk</u> (CAR) and establish priority areas within the broader Community at Risk designation.
- Identify and map the boundaries of the Wildland Urban Interface (WUI).
- Identify any developed lands within the county that are not protected by structural fire departments. Address these areas in CWPP and through specific action plans to ensure availability of State's conflagration resources.
- Develop action plans for mitigation of wildfire threats in these priority areas. *The community wildfire protection plan further develops mitigation efforts identified in the FEMA, Natural Hazards Mitigation Plan, Section 9 Wildfire*
- Identify broad action items-projects for implementation at a countywide level.
- Encourage the development of specific community wildfire protection plans dealing with pre-suppression response planning, evacuation routes, structural vulnerability assessments and mitigation, targeted fuel reduction, local citizen education and involvement.
- Encourage appropriate communities and developments to become "Firewise Communities" under the Firewise Communities/USA® recognition program.
- Encourage citizen understanding, involvement and homeowners shared responsibility in efforts to reduce risk of property damage and threats to life by actively managing the "Home Ignition Zone" as a defensible/survivable space.

- 5 –

- Based on historical fire causes and trends, develop multi-agency fire prevention action plan to address human caused fire risks.
- Educate owners about their fire prevention role to reduce the threat of fires escaping to resource lands.
- Strengthen communication and coordinate participation among public agencies, citizens, non-profit organizations, business and industry.
- Search for pilot project opportunities to engage community and demonstrate values of defensible/survivable space.
- Maintain land development practices and policies that insure education and the required application of fire siting standards in WUI zones.
- Improve county and local opportunities for federal and state funding assistance.
 Increase probability of federal funding opportunities based on mult-agency, community and business partnership projects.
- Maintain the Columbia County Community Wildfire Protection Plan Committee as a standing steering committee to annually review actions and accomplishments.
- Institute a working document philosophy and make changes to the plan as new information becomes available or priorities change over time.
- Meet or exceed the requirements of the National Fire Plan and FEMA for a county level community wildfire protection plan.

CHAPTER 2: Planning Process

In June of 2005, The Columbia County Community Wildfire Protection Plan Committee was established. The committee has met numerous times in the development of this Plan. The Committee is composed of the following core members:

Vicki Harguth (Co-Chair) Director – Columbia County Emergency Management
Michael Simek (Co-Chair) Unit Forester, Oregon Department of Forestry
Michael Greisen Chief, Scappoose RFD – Columbia County Fire Chief
Terry Grice Assistant Chief, Columbia River Fire and Rescue

Dave Crawford Chief, Mist-Birkenfeld RFD

Richard Long Chief, Clatskanie Rural Fire District
Paul Epler Chief, Vernonia Rural Fire District
Randolph "Tad" Pederson Deputy, Office of the State Fire Marshal

Jacob Graichen Planner, Columbia County Land Development Services

Larry Hurley Tree Farm Manager, Longview Timber

Lower Columbia River Watershed Council Member

Carl West Fire Management, Bureau of Land Management

Advisory Members Columbia County Agencies, Businesses and Community

Columbia County Wildfire Protection Plan Framework

A number of models exist for guiding the development of community wildfire protection plans. These models, or templates, serve to address the federal legislation promoting these efforts and provide an opportunity for seeking federal and state grant monies. The CWPP has become the planning standard that ensures priorities and actions are well established within the community. The Columbia County CWPP Committee (CCWPPC) chose the document ¹ "Preparing a Community Wildfire Protection Plan – A Handbook for Wildland-Urban Interface Communities" as its guiding template. This handbook is also referred to as the Healthy Forest Restoration Handbook.

Table 2-1 Community Wildfire Protection Plan Steps

Community Wildfire Protection Planning Steps
Step 1: Convene Decisions Makers
Step 2: Involve Federal Agencies
Step 3: Engage Interested Parties
Step 4: Establish a Community Base Map
Step 5: Develop a Community Risk Assessment
Step 6: Establish Community Priorities and Recommendations
Step 7: Develop a Action Plan and Assessment Strategy
Step 8: Finalize Community Wildfire Protection Plan

¹ Preparing a Community Wildfire Protection Plan – A Handbook for Wildland-Urban Interface Communities is available at http://www.safnet.org/policyandpress/cwpphandbook.pdf

Columbia County Wildfire Protection Plan Chapter 2, Planning Process

Step 1: Convene Decision Makers

The Columbia County Community Wildfire Protection Plan Committee (CCCWPPC) has been established as a long term standing committee to develop the countywide Community Wildfire Protection Plan. The Committees mission is to maintain leadership in matters regarding community wildfire planning efforts that ensure protection of our citizens, their communities and natural resources within the wildland urban interface of Columbia County. The Columbia County Fire Defense Board members are also, for the most part, members of the CWPP Committee. The Board has been actively engaged in the process of developing the Columbia County Community Wildfire Protection Plan through it monthly meetings and special workshops.

Step 2: Involve Federal Agencies

Columbia County land base (657 mi ²) is largely composed of private land ownership. The primary federal ownership is the Bureau of Land Management (BLM). It manages approximately 11,000 acres in the south-east central portion of the county. Collaboration with federal partners is essential in meeting the objectives of the Healthy Forest Restoration Act and BLM is an active member of the Columbia County CWPP Committee.

Step 3: Engage Interested Parties

Fire service professionals within Columbia County, as well as the core members of the committee have provided review and specific input into the plan. The CCCWPP Committee designated each structural fire district to represent the "community center" and primary contact for public outreach and involvement. Media articles and local meetings have engaged local citizens regarding the wildland urban interface. Engaging the community will be a continual process during the implementation and revisions to this plan.

Step 4: Establish a Community Base Map

A community base map was developed using best available data from Columbia County, the Oregon Department of Forestry and other geo sources. The Department of Forestry – Columbia Unit developed GIS projects with varied layers for the assessment and public outreach phase. Map products were provided for the assessment phase and community meetings. The base map consists of the following layers: County, city and urban growth boundaries, highway and road layers, 2005 digital aerial photos, local state and federal ownership. In addition, layers showing fire incidence rates and locations, inhabited areas of the county based on population thresholds i.e., defined community at risk, wildland urban interface boundary, slope grid and tax lots. Priority areas within the overall community at risk were digitized based on local input. The color aerial photos (1/2 -1 meter resolution) and their revisions will become the base map standard on which additional layers will be digitized. Future revisions will use best available data and digital aerial photos.

Step 4: Hazard Assessment

An assessment of wildfire hazard was developed using a combination of available statewide assessment data and localized data specific to Columbia County. The assessment process utilized the national standard to assess four factors – *risk, hazard, protection capability, and values including structural vulnerability.* The full rating sheet is available for review in *Appendix C.*

Step 5: Develop a Community Risk Assessment

Risk assessment was conducted using the statewide methodology document entitled <u>Identifying and Assessment of Communities at Risk in Oregon, October 2004.</u> The use of this methodology provided a consistent approach to hazard and risk rating. Each priority area within the identified Community at Risk has been rated using this system. Local risk assessment factors based on local fire district expertise and knowledge combined with statistical and GIS based data supported this review. The assessment process included meeting with each fire district and their officers. The statewide assessment data was used as a platform to discuss wildfire hazard ratings and to establish local priorities within each fire district and county non-fire district area. Population density, structural density, structural ignitability, access, response capability and response times, topography and slope, fuels, fire occurrence patterns and density, fire causes and land use patterns were evaluated. See Chapter 3, Wildfire Risk Assessment.

Step 6: Establish Community Hazard Reduction Priorities Establish Recommendations to Reduce Structural Ignitability

Fire district staff defined priority areas within their district's populated areas or Community-at Risk. Risk assessment factors included such factors as structural density vs. fuels, fuel types and terrain, structural ignitability considerations, access, response times, evacuation routes, etc.

In most areas of the county, accurate assessment data is lacking in regards to structural vulnerability. Obtaining such data will greatly assist in understanding the scope of the structural vulnerability problem within each district and the county. Therefore, action plans do specify data collection as part of defining these issues at the local level. See Chapter 4, Structural Ignitability and Chapter 5, Fuel Reduction Priorities.

Step 7: Develop an Action Plan and Assessment Strategy

Action plans and assessment strategies have been developed and cover both priority areas and the general populated areas of the county called our community at risk. The priority areas are based on assessment ratings. These are the main focus of current action plan efforts of the CWPP included in the document. In addition, other action items are presented in the plan that

are broader in scope and focus on overall support for coordination within the county. See Chapter 7 – General Action Items and Chapter 8 – Specific Action Plans.

Step 8: Finalize the Community Wildfire Protection Plan

Finalization included review by the CCCWPP Committee, ODF National Fire Plan Coordinator and the review and approval by the Columbia County Board of Commissioners, the Oregon Department of Forestry's State Forester's Representative – Forest Grove District Forester and the five (5) Rural Fire Districts within Columbia County.

The CCCWPP will remain a working document that will be modified and adjusted based on local input and updated assessment data as it becomes available. As communities and citizens of the county increase awareness of wildland urban interface issues, the document will reflect new priorities and perhaps new communities at risk. To maintain this level of engagement, the CCCWPP Committee will meet annually to review and document action plan accomplishments, evaluate current priorities and revise the document as needed.

The Columbia County CWPP will be posted on the following web sites:

Primary - Columbia County - http://www.co.columbia.or.us/home.asp
Oregon Department of Forestry - http://oregon.gov/ODF/FIRE/FirePlans.shtml
Columbia County Fire Districts - as developed locally

Fire planning spreads with county growth

☐ Fire safety and forest officials launch plan and education campaign to lower wildfire damage

By Darryl Swan

THE SOUTH COUNTY SPOTLIGHT

During the dry summer months, a carelessly discarded match or rogue lightning strike could ignite Columbia County forested areas that are quickly becoming hot spots for residential development.

And in an extreme scenario — one characterized by pinch-point house access, hot and dry weather, unfavorable atmospheric conditions and a surrounding build-up of woodland debris — fire personnel are making no guarantees they'll respond to all fires.

"Those are the types of fires where we'll have to make a decision," said

Ron Youngberg, division chief for the Columbia River Fire and Rescue.

Such scenarios are rare for Columbia County and more likely for areas east of the Cascade Mountains, Youngberg admits, but they do occasionally happen.

A new countywide planning and education effort seeks to encourage homeowners living in identified risk areas to self-manage their homes for fire safety.

"Columbia County is an almost explosive growth area now. We're starting to build houses where there used to be farms and forests," said Mike

Simek, the district forester with the Oregon Department of Forestry.

Simek co-chaired a committee formed in 2005 that includes fire personnel throughout the county. The committee's goal was to identify "wildland-urban interface" areas where fires could quickly spread and endanger residents' physical health and property.

The focus is part of a national effort to mitigate the fire danger occurring with increasing growth is typically the exception, not the rule, in St. Helens' and Scappoose's at-risk communities, said Youngberg and Scappoose Fire Chief Mike Greisen.

Though the plan is not set for approval by the Columbia County commissioners until July, segments of it will be implemented regardless of formal approval.

Identified in the plan are around 15 areas considered "communities at risk," a bulk of which are areas in or near St. Helens and Scappoose.

The plan looks at fuel supplies, fire history, topography and the possibility of structural ignition in the identified risk areas.

Historically, Columbia County wildfires have been of low or moderate intensity, perhaps driving skepticism into the possibility a larger fire posing higher damage risks

could occur.

"We're under an it-can-neverhappen-to-us syndrome in Columbia County," Youngberg said.

The Grey Cliffs neighborhood in St. Helens is one of the first communities targeted for an educational campaign, kicking off with a May 9 meeting at the Elks Lodge.

South of Scappoose, the growing Columbia Hills development with its proposed 140 residential lots is a second community at risk, Greisen said.

In 2002, Oregon, Arizona and Colorado had their largest wild-

Is your home safe from wildfires?

The following are good safety tips for securing your house from the possibility of wildfire damage:

- Maintain a 30-foot non-combustible zone around your house.
- Add fire-resistive plants such as flowering dogwoods, rhododendrons and hostas into your landscaping scheme.
- Remove or thin overcrowded and weakened trees, and prune low-hanging branches.
- Keep a neat, mowed lawn, and be sure to trim back weeds.
- Keep your woodpile and excess building materials 30 feet from your home.
- Clear needles, leaves and plant debris from your roof and deck.
- Make sure the street sign and home address is visible from the road.
- Draft an emergency checklist and action plan detailing what to do in the event of a

For more information on protecting your house from wildland-urban interface fires, visit www.firewise.org

fires on record, burning 835 homes, according to information from the National Fire Protection Association.

"There is an increasing pattern of fires. Larger and larger fires." Simek said.

"We're under an it-can-never-happen-to-us syndrome in Columbia County."

Ron Youngberg

in forested areas.

In response, the committee worked together to draft the Columbia County Community Wildfire Protection Plan, which serves as the local link to the National Fire Plan, Simek said.

The plan was crafted completely with volunteer hours and no grant support, though it could serve as the springboard for future grant opportunities.

"It was the-right-thing-to-do funded," Youngberg said.

Most people living in wildland-urban interface areas are not aware of the inherent fire dangers, and that adequate planning

South County Spotlight Article Introducing Community Wildfire Protection Planning Efforts

The development of a wildfire risk assessment is essential to understanding the potential threats of wildfire within our local community. Through the wildfire risk assessment process, the core committee, fire service professionals and community members have gained an understanding of the potential threats. The assessment is intended to help define locations within the county that are higher priority for mitigation work.

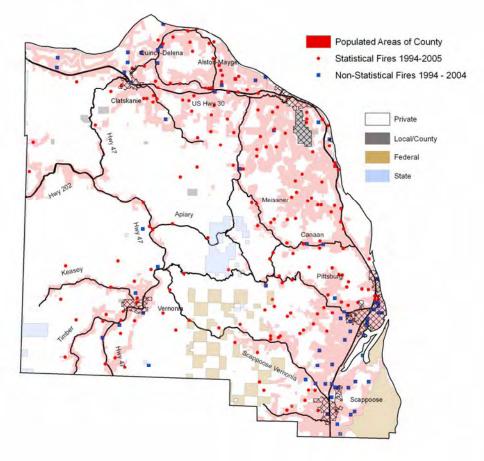
The Healthy Forest Restoration Act, The National Fire Plan, FEMA's Disaster Mitigation Act of 2000, the National Association of State Foresters and the Oregon Department of Forestry have all established methodologies for conducting a comprehensive wildfire risk assessment. The methodology used for the Columbia County CWPP follows the Oregon Department of Forestry's guidance titled "Identifying and Assessment of Communities at Risk in Oregon".

Risk:

What is the likelihood of a wildland fire occurring in Columbia County? What are the causes of the fires that are occurring? Do we have other potential ignition risks on the horizon? What is our prevention capacity to offset these hazards?

Fire Occurrence:

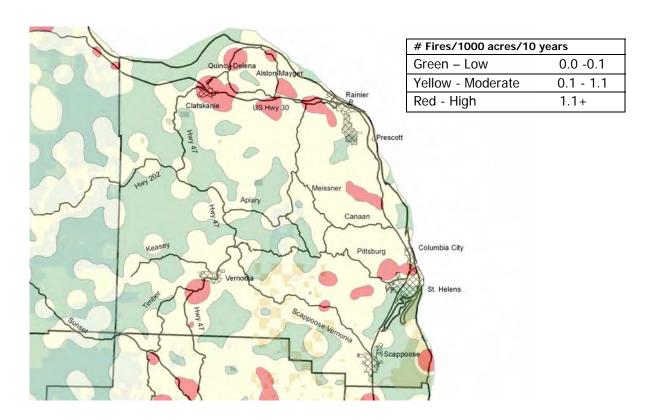
Figure 4.2, ¹Statistical Fires, Natural Cover 1994 – 2005



¹Source ODF, "Statistical Fires" are reportable fires in natural cover fuels or threatening to spread to natural cover fuels.

The fire occurrence adjective class rating is broken into an incident rate of low, moderate and high. Fire rates are based on the number of fires per 1000 acres per 10 years. This density measure allows a better understanding of the frequency of fires on the landscape. Most wildland fires in Columbia County occur in the more populated and rural wildland interface areas of the county. These WUI areas also represent the greatest risk to life safety and property.

Figure 4.2: Fire Incident Rate - Adjective Rating



Recent Large Fires in Columbia County and Vicinity:

Fire Name	Location	Size (Acres)	Fuel Type	w/i WUI	Year	Cause Category	Vicinity of Homes
Scappoose Airport	Scappoose Airport	200	Grass/Agriculture	Yes	2000	Burning	Yes
Pebble Creek	South of Vernonia	165	Logging Slash/Timber	Yes	1987	Hunter/Smoking	Yes
Keasey Dam	West of Vernonia	117	Logging Slash Reproduction.	No	1989	Recreationist/Campfire	No
Emerald Forest		37	Logging Slash	No	1994	Equipment/Logging	Yes
Kerry Road	West of Clatskanie	31	Fell/Buck, Slash, Reproduction			Equipment/Logging	No
Wolden Road		31	Reproduction	Yes	1999	Debris Burning	Yes
Lost Creek Road		20	Reproduction	Yes	1999	Debris Burning	Yes
Stone Road	West of St. Helens	5	Logging Slash	Yes	1995	Burning	Yes
Pittsburg Road	South of Liberty Hill	5	Scrub Oak/Grass	Yes	2006	Recreationist/unknown	Yes

Additional fires of significance in NW Oregon occurred in 1987 near Dalles Oregon including the *5000 acre Rockhouse Creek Fire* and the *1000 acre Shady Lane Fire*. These fires indicate the potential for large fire growth within northwest Oregon forests.

Ignition Risk:

Historical and potential ignition hazards are important to understand in the development of prevention strategies. Targeted prevention efforts through outreach, education and enforcement can minimize exposure to fires and therefore the threat to communities.

The risk is variable with potential for fires to occur from many types of ignition sources. These causes clearly indicate a risk as a result of human activity resulting from backyard burning and land clearing type of fires.

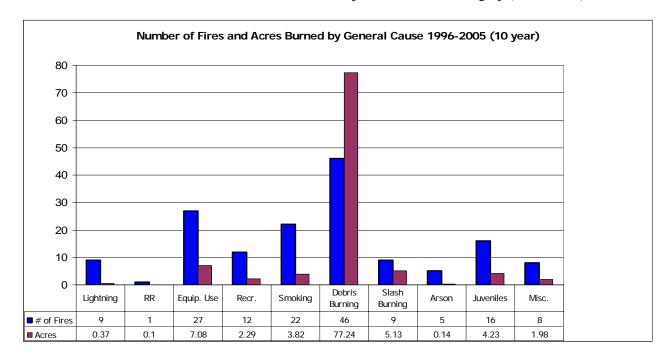


Table 4-3: 10-Year Number of Fires and Acres Burned by General Cause Category (1996 -2005)

Prevention capacity is the ability of local agencies and the public to successfully address and mitigate potential risk of human fire starts. Within Columbia County and throughout the State of Oregon, debris burning is the number one human caused fire category. In the early 90's, the Columbia County Fire Defense Board adopted a "Burn Ban" policy to be implemented during the fire season. Over time this effort has greatly reduced the number of fires and therefore reduced the risk exposure. The burn ban continues to be an effective measure in reducing the risk of escaped debris burning fires during the critical fire season period. Educating landowners regarding burning regulations and other fire prevention requirements are on-going. The Fire Districts and the Oregon Department of Forestry continue to address local fire potential from human caused activities and have numerous programs to target these priorities. Increased participation and coordination between agencies is a stated goal to bolster countywide prevention efforts.

<u>Hazard:</u> What is the "² resistance to control" once a wildfire starts? Key factors are Fuels, Weather and Topography

Weather Hazard Factor:

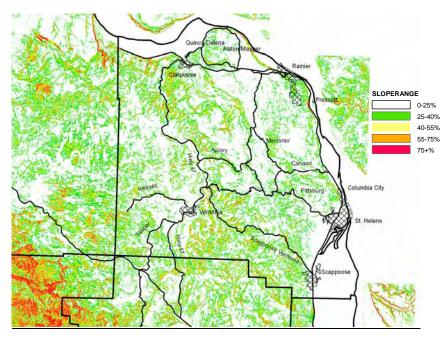
This factor is based on the number of days that forest fuels are capable of producing a significant fire event. The rating is based on fire danger indices provided by the Oregon Department of Forestry using the National Fire Danger Rating System (NFDRS). In Columbia County, the overall weather rating under the statewide assessment is in the moderate category. Coastal areas including Clatsop County have a weather rating of Low in comparison. "Red Flag" conditions in Northwest Oregon are associated with low fuel moistures and low humidity east wind events. These conditions represent potential fire weather extremes during the months of August, September and October.

Weather Hazard Factor 1 = Low 2 = Moderate 3 = High

<u>Topography Factor:</u> Slope, Aspect and Elevation Considerations

The overall characterization for slope factor within the Columbia County WUI is low to moderate (0-40% slope) in rural residential areas. However, areas where communities, individual or groups of structures are adjacent to steep slopes, fuel reduction and fire resistive landscaping within the "Home Ignition Zone" and localized community to parcel fuel reduction and evacuation planning becomes critical. Assessment factors of slope were considered when identifying priority areas within the overall community-at-risk or populated areas of the county.





² Resistance to control is a term used to indicate the level of effort required to control a wildfire. Where fuels are moderate to heavy, slopes are steep, topography is complex and fire weather conditions extreme, resistance to control is very high. Where fuels are light and topography less complex, resistance to control is low.

Columbia County Wildfire Protection Plan

4

Natural Vegetation Factor:

The statewide assessment data was used to determine the natural vegetation and the associated hazards. GAP vegetation types along with expert hazard evaluation provided the overall hazard rating for the State of Oregon. In Columbia County, the hazard is presented as **Moderate** based on overall composition of natural vegetation and its fire potential including crown fire potential.

Local Fuels Data:

Columbia County does not have large-scale forest health damaged stands such as insect infestation areas, windthrow, or older unmanaged or decadent stands with heavy dead and downed debris. Laminated root rot pockets and bear damage are found throughout the county but they do not present a significant forest health issues in relation to fire potential. Swiss needle cast is confined to within 18 miles of the coastline. Timber stands of conifer and conifer-hardwood mix are common throughout Columbia County. Fires within timbered stands are confined to understory vegetation with mixed severity to the overstory. Timber fires involving crowning are rare due to current land management practices and the narrow window of extreme fire weather and fuels. Logging slash from forest management harvest activities are the primary forest fuel under normal fire season conditions. Slash concentrations are variable and across the landscape both in time and space. Current aerial photography is the best available data for evaluating natural vegetation, concentration of slash or recently harvested sites. Landowners, either through scarification or burning treat many areas of slash thereby reducing the hazard. Modern forest utilization often leaves light slash loadings. Other areas involving grass, brush and scrub oak stands around St. Helens are prone to fire.

Protection Capabilities:

What are risks associated with wildfire protection capabilities including the capacity to undertake fire prevention measures?

The protection capacity on a statewide basis was determined on the absence or presence of structural and wildland fire agencies. In Columbia County, both the structural fire districts and a wildland fire protection district exist. Five structural fire districts cover major portions of the county. These fire districts cover approximately 95% of the structures and development within the county. In addition, mutual aid agreements between local districts and surrounding fire districts in adjacent counties bolster the capabilities of fire responses. Once these mutual aid resources have been exhausted, additional resources are made available under the State's Conflagration Act. The Columbia County Fire Chief would direct these requests to the Office of the State Fire Marshal (OSFM). Volunteer firefighter availability is a significant factor in determining availability of firefighting resources beyond initial attack efforts. A large wildfire incident threatening life and property would require significant mutual aid response within and from resources outside the county. Oregon Department of Forestry utilizes a coordinated response based on local, area and statewide resources to meet the demands of the fire situation. In larger fire situations, an ODF Area or State incident management team would be assigned as well as a State Fire Marshal Team to manage Conflagration resources.

Structural Fire Districts within Columbia County

- Clatskanie Fire Rural Fire District
- Columbia River Fire and Rescue
- Mist-Birkenfeld Rural Fire District
- Scappoose Rural Fire District
- Vernonia Rural Fire District

Wildland Fire Protection District

Oregon Department of Forestry

Mutual Aid Agreements

- Between all Columbia County Fire Districts and ODF
- Scappoose RFD and Portland Fire Bureau
- Tualatin Valley Fire and Rescue and Columbia County Fire Districts/ODF
- Scappoose RFD and Sauvie Island RFD
- Conflagration Resources

Columbia County Fire Departments and Agencies

Clatskanie Rural Fire Department

- Main Station @ Clatskanie.
- Two volunteer sub-stations at Alston and Quincy
- Paid Staff, 3 Chief Officers, 3 Firefighters
- 24 volunteers

Columbia River Fires and Rescue

- 3 Staffed Stations: St. Helens Main , Fairgrounds and Rainier
- 4 Volunteer Sub-Stations: Columbia City, Deer Island, Goble and Fernhill
- Paid Staff: 5 Chief Officers, 36 Firefighters
- Volunteers: 50

Mist-Birkenfeld Rural Fire Department

- Main at Hwy. 202 near Banzer Road
- 3 Sub-stations Fishhawk, Peterson and Sager Creek
- Paid Staff: Two Chief Officers
- 45 Volunteers

Scappoose Rural Fire Department

- 1 Staffed Station: Main @ Scappoose
- 2 Sub-stations at Chapman and Holbrook (Multnomah Co.)
- Paid Staff: 3 Chief Officers and 9 Firefighters
- Volunteers: 45

Vernonia Rural Fire Department

- Main at Vernonia
- One (1) Full-Time Chief
- 25 Volunteers

Oregon Department of Forestry – Columbia Unit

Main @ Columbia City

- 2 Seasonal Staffed Guard Stations, Pittsburg and Clatskanie Areas
- 3 Full-Time Fire, 5 support/firefighters
- 12 Seasonal Firefighters

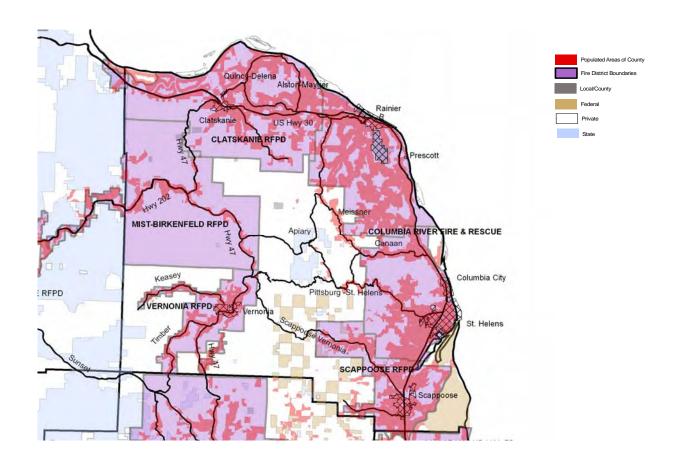
For a complete listing of fire fighting resources by fire district and local ODF unit, refer to Appendix B.

Fire Response:

Fire response factors were evaluated using the following criteria:

- Areas inside a fire district with structural response under 10 minutes (0 points)
- Areas inside a fire district with structural response over 10 minutes (8 points)
- Areas outside of a fire district with wildland response under 20 minutes (15 points)
- Areas outside of a fire district with wildland response over 20 minutes (36 points)

Response time for structural protection is a major factor in determining priorities. The staffing of the fire district, whether career or volunteer plays an important part in the availability of resources and response times. Though the assessment process, fire staff placed emphasis on this factor in determining local fire district priorities.



Community Preparedness:

Community preparedness is evaluated on the following:

- Community has an organized stakeholder group, community fire plan, phone tree, mitigation efforts (0 points)
- Effort is through agency, primarily mailings, informational material available (2 points)
- No effort (4 points)

The current status of community preparedness is not well developed within the county with perhaps the exception of Fishhawk Lake. Numerous efforts to distributed mailings, fire-siting requirements via land development services, fire driveway and public road standards and public outreach by agencies are occurring. This CWPP identifies priority areas or focus areas within the county to develop increased community involvement, shared responsibility and preparedness.

Values Protected:

What are the human and economic values associated with communities or landscapes?

Overall values to human life are based on areas of human population density thresholds of 28 persons per square mile. Property values are also implied using population density and tax-lot layers assuming dwelling densities of 1 dwelling per 40 acres. These factors define the coarse mapping layer for the "Community-at-Risk" within Columbia County.

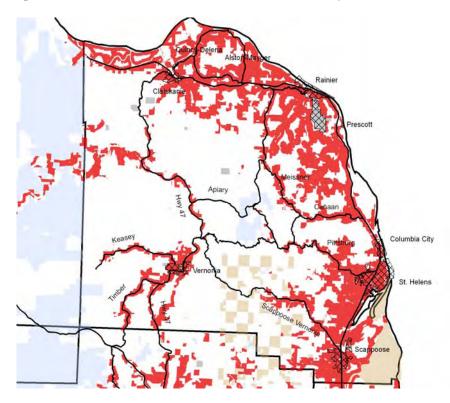


Figure 1: Populated Areas, Values at Risk Areas – Columbia County

Other community values include essential infrastructure, resource lands; primarily timber producing land, municipal watersheds, critical wildlife habitat, significant recreation and scenic areas. The social, environmental and economic values associated with communities and landscapes will be evaluated on a local level and incorporated into future revisions to this plan.

Structural Vulnerability:

What is the likelihood that structures will be destroyed by wildfire?

Assessment of structural vulnerability is best accomplished by on-site visits and data collection methods. A number of projects have been identified within priority areas of the Community-at-

Risk/WUI. These projects identify the need to have this on-site assessment as a measure of the potential vulnerability. Factors such as the type of roofing, fuel reduction around structures and access routes, fire safe landscaping and access are key elements in this evaluation. Homeowner understanding and participation is essential to reduce a home's vulnerability to wildfire.

Stone Road Fire – 1995, Columbia County



Structural Ignitability deals with the home itself and its immediate surroundings; also know as "The Home Ignition Zone". Whether or not a home is vulnerable to ignition from a low, moderate or high intensity wildfire depends on a number of factors. Low intensity fires can destroy homes with high ignitability whereas low ignitability homes can survive high intensity fires. Most actions to reduce home ignition potential are directed to the home itself and its immediate surroundings within 100 feet. Under some circumstances reducing fire intensity, and therefore the home ignition risk, may involve extending the zone further.



The **home ignition zone** includes the home and an area surrounding the home within 100 to 200 feet. The potential for ignition depends on the home's exterior materials and design and the amount of heat to the home from the flames within the home ignition zone. Firebrand ignitions also depend on the home ignition zone either by igniting the home directly or igniting adjacent materials that heat the home to ignition. To view full publication <u>Wildland-Urban Fire – A Different Approach by Jack D. Cohen</u>; go to the following URL: http://www.nps.gov/fire/download/pub_pub_wildlandurbanfire.pdf

The minimum requirements for a CWPP as described in the Healthy Forest Restoration Act (HFRA) is that the CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed the plan. This plan addresses structural ignitability within Columbia County's Community-at-Risk.

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¹ Image and Text Source: Wildland-Urban Fire A Different Approach; Jack D. Cohen, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station – Fire Sciences Laboratory

General Principles in All Action Plans:

- Obtain structural ignitability intelligence through local assessments.
- Educate homeowners about structural ignitability and measures that can be taken to reduce a structures ignition potential from a wildfire.
- Motivate fuel reduction and fire safe landscaping practices within the "Home Ignition Zone" utilizing in all areas of the WUI.
- Utilize established programs to support community and homeowner education and public outreach.
- Utilize opportunities for media coverage and other public outreach actions involving demonstration projects.
- Seek technical and financial assistance opportunities for addressing fuel reduction efforts, structural ignitability issues and support of demonstration projects.
- Encourage maintenance of the "Home Ignition Zone" over time to keep home ignition risk low for the surrounding conditions.
- Seek opportunities for community debris disposal collection sites that recycle or compost vegetative materials vs. burning.
- Ensure all new development meets fire resistive construction and landscaping codes.
- Assist in maintaining, reviewing and updating appropriate ordinances for all new dwelling construction within WUI.
- Continue to provide Columbia County Land Development Services input through timely review and comments to land use applications.
- Implement Oregon's Forestland Urban Interface Act legislation within Columbia County.

Columbia County Land Development Services:

Existing Development:

Generally, uses in existence prior to zoning and other land use laws are considered to be "grand-fathered," meaning, though they may not comply with current development standards they are still considered to be legal. Typically, standards such as fuel-free breaks for fire protection, as noted below, cannot be retroactively applied to preexisting "grand-fathered" development. Without governmental regulatory authority to impose fire safety regulations on "grand-fathered" development, such standards can only be implemented given a property owner's own initiative and desire. This emphasizes the importance of public outreach and education regarding fuel reduction and fire safe landscaping practices to reduce structural ignitability, which is the primary focus of this plan.

New Development:

Development within areas in a forest or agriculture/forest zone, Primary Forest (PF) or Forest Agriculture (FA) zones in Columbia County, are subject to both local ordinances and State laws that require primary and secondary fuel-free breaks for fire protection around dwellings. The fuel-free breaks are required for accessory structures (e.g. a detached garage on the same site as a dwelling). In addition, dwellings require appropriate construction practices that help to minimize fire risks. These standards are implemented though conditions of land use decisions (e.g. Conditional Use Permits) if they are required and through the Building Permit process.

Primary guidance is found in the publication Land Use Planning Notes (March 1991):

<u>Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design</u>

<u>Standards for Roads</u> http://www.oregon.gov/ODF/STATE_FORESTS/FRP/docs/LUPNote1.pdf In addition, Columbia County has adopted Equivalents to Fire Buffers, Board Order No. 239-97, which provides "equivalents" with respect to fuel-free break requirements where these can not be fully met on small lots of record zoned Primary Forest or Forest-Agriculture.

Another common reference is the publication <u>Living with Fire, Pacific Northwest Version</u>. This publication is available at http://www.fs.fed.us/r3/publications/documents/livingwithfire.pdf

Currently, there is no mechanism to ensure that all properties required to have fuel-free breaks for fire protection, maintain them or other safe landscaping practices after all permits have been obtained to occupy the dwelling. In addition, such fire safety standards are not required for Rural Residential zoned properties (the RR zones in Columbia County) where wildfire risks can be just as significant as in forest zones. As such, public outreach and education are just as important for newer development as with "grand-fathered" development, especially since standards can be forgotten when properties change hands.

When adjacent to forest resource lands, Land Partitions, Subdivisions and other development within rural zoning shall be evaluated and timely comment provided regarding fire wise development. These reviews should address roads and access, appropriate siting, fire resistive construction, structural ignitability and adequate defensible landscapes. In addition, use of and access to water suitable for fire protection (e.g. lake, pond, stream or swimming pool) should be considered.

Fire Safety Design Standards for Roads

Columbia County and the Columbia County Fire Defense Board have established standards for new development fire access roads and driveways. These standards address adequate access

for firefighting equipment including maximum grade, road width, turning radius, road surface, bridge design, culverts and other road access issues. The standards promote consistent application as it relates to interpretation of the International Fire Code. Oregon Fire Code and County ordinances. The Columbia County Fire Services have the authority and responsibility to process requests for review and the approval of all fire apparatus access roads and



driveways. The Oregon Fire Code, Section 501.3 and the Zoning and Development Ordinance of Columbia County, Oregon require roadway/driveway improvements to a construction or mobile home prior to issuance of a building permit. Land Development Services requires fire service approval of driveways if they exceed 150-feet in length or have steep slopes. This plan recognizes the importance of properly designed and maintained structural fire apparatus access roads. The picture is an example of a road that serves multiple residences. It's inadequate width and roadside clearance is problematic as it relates to fire response ingress and evacuation egress. In situations that involve roads built prior to the development of fire access standards, local communities and fire services need to seek local options and alternatives.

The Wildland-Urban Interface Protection Act of 1997 (SB 360)

The Oregon Forestland Urban-Interface Act of 1997, commonly known as Senate Bill 360, addresses the growing problem of wildland fires burning homes. The State's population continues to expand rapidly, with many Oregonians moving into forested areas where risk of fire is common. The Act responds to several escalating issues:

- Wildland fires burning homes
- Firefighters risking their lives on conflagrations
- Rising suppression costs

The Act has been implemented in numerous counties throughout Oregon. Implementation processes continue on a county by county basis with northwest Oregon slated within the next 5 years. Under the Act, a local county classification committee identifies areas within the county that fall into forestland-urban interface classifications. In general, these properties are within an Oregon Department of Forestry protection boundary, are 10 acres in size or smaller, improved with one or more structures and grouped with other improved properties that are in a density of at least four structures per 40 acres. Once initiated within Columbia County, the landowner needs to take measures to reduce a property's vulnerability to wildland fire. In most cases this means:

- Establishing a fuel break around structures and along driveways
- Removing tree limbs within 10 feet of the chimney
- Ensuring that flammable material is removed from beneath exterior wooden decks
- Moving or enclosing firewood piles during the months of fire season

Under this Act, property owners are mailed a package with standards that need to be met to certify. Upon completion of the standards, the landowner responds to the Department of Forestry with a signed self certification form, which satisfies the landowner's fuel reduction responsibility. Re-certification occurs every 5 years. The Act is a voluntary program, however, up to \$100,000 of certain suppression costs can be brought against the landowner if the following applies: a landowner does not certify, a fire originates on the property, the fire spreads within the protection zone around a structure or driveway that does not meet the standards and extraordinary costs are incurred for suppression costs. More information on the Forestland-Urban Interface Act is available at the following url:

http://www.oregon.gov/ODF/FIRE/SB360/sb360.shtml

Structural Ignitability Concepts:

Important Factors for structural ignitability evaluation include those found in <u>Identifying and</u> <u>Assessment of Communities at Risk in Oregon.</u> The general categories for evaluation include the following elements:

- The Structure Itself Roofing, roofing assembly, building materials and building set-backs on slopes.
- **Defensible Space** Distances 30 to 100 feet or more, separation between adjacent homes
- **Fire Access -** Roads and driveways (distance), ingress and egress issues, road width and condition.



INCIDENT / CONFL					
ADDRESS		STRUCTURE () of ()			
GPS COORDINATES	s	LatitudeLongitude			
	Section				
Too Narrow or Steep to be YES Branches overhanging did Down dead fuels line drivers of the Press of the Pres	oack in riveway NO veway				
DRIVEWAY - Dead End or Id	YES NO	STRUCTURE TYPE			
ROOF - COMBUSTIBLE - (Asp	YES NO	Single Story			
ROOF - WOOD SHAKES		YES NO	Two Story		
TREES - Overhanging Roof		YES NO	Wood Fra	me A Frame	
TREES / BRUSH - NOT THE	ninned in area within	YES NO	Log Hom	e Other	
VEHICLES - Parked Outside within 30 feet of Structure		YES NO	Full Time Residence Vacation Home Out Building		
SLOPE - More than 20% anywhere within 30 feet		YES NO	Business Govt. Building		
Of Structures SLOPE - More than 40% anywhere within 30 feet Of Structures		YES NO	Oth	er Hazards;	
DECK / STILT - Not enclosed underneath (to ground)		YES NO			
POWER LINE - Overhead v	vithin 30' of Structure	YES NO			
0-2 YES Doesn't Need Defending	3-5 yes Defend Aggressively	6-7 Defend	2ES 8-10 YES Cautiously UNDEFENSIBLE		
Triage Officer		Date _	-	Time	

The checklist above is used by structural fire departments on large fires where multiple homes are threatened or potentially threatened under extreme wildfire conditions. Often this is used in an attempt to pre-plan property protection priorities. This form indicates what homes can and can not be safely protected from the perspective of a firefighter. It also indicates the importance of the "Home Ignition Zone" and those contributing factors of the structure itself and its surroundings that make a home defensible or survivable.

Numerous publications and web based resources are available to assist the owner in understanding the important concepts involved and managing the "Home Ignition Zone" to the extent required in protecting your property and your safety. *Appendix A* has a list of web resources that are valuable to the owner, from downloadable checklists to video based demonstrations.



Photo: Living with Fire Publication Photo

Fuel Reduction Priorities within the Wildland -Urban Interface

The highest priority for fuel reduction within Columbia County will be at the homeowner level within the home ignition zone, i.e., the structure itself and the surrounding landscape. Homeowner associations and other organized communities and businesses may develop fuel reduction priorities based on local plans and initiatives. Fuel modification and reduction actions around structures in the wildland urban interface will reduce the potential ignitability of these structures given an adjacent wildland/brush fire threat. These concepts are covered in more detail in Chapter 4, Structural Ignitability.

This plan recognizes that most land ownership within the county is private. Where priority fuel reduction projects are identified by communities beyond the single ownership, information exchange and cooperative partnerships will be the focus to move any fuel reduction projects to reality.

Fuel modification and reduction priorities identified at the community level are recognized as an important element in any localized planning effort. Emerging developments will be encouraged to develop fire wise communities that evaluate the need for fuel reduction efforts within and around the community. This also includes escape routes and other critical traffic corridors. Existing communities, through the evolving development of local plans, will identify strategies for community level involvement and cooperative fuel reduction projects. As projects are identified, they will be added to this document by way of appendix.

The Greater Chapman community is an area where federal lands are proximal to and within the WUI boundary. Fuel reduction efforts in this community and involving adjoining federal lands (Bureau of Land Management) will be a priority. Due to the relationship to federal lands and the priority of this community within Columbia County, grant opportunities and strategic fuel reduction efforts will be a priority especially during harvest level planning efforts. Fuels management will take into account slopes and drainages and where these present elevated risks to the community. Opportunities for Stewardship Contracts under the BLM will be considered utilizing the established application and review process. Refer to the Greater Chapman specific action plan, Chapter 8.

The Scappoose Municipal Watershed is another area where federal lands (Bureau of Land Management) are within or proximal to a valued community resource. Fuel reduction within and adjacent to the watershed may be considered based on local assessments.

Additional areas that involve potential fuel reduction projects are in and adjacent to the Columbia Hills Development Community, Grey Cliffs Community and the Liberty Road area of St. Helens.

Adjoining industrial and non-industrial private forestlands are managed as resource lands using acceptable forest practices. Properties with structures adjoining resource lands shall be encouraged to manage fuel reduction efforts on property under their control, i.e., under the homeowners control. This places the emphasis and responsibility on the individual homeowner for ensuring adequate fuel modification/reduction efforts that reduce structural ignitability and therefore structural survivability.

CHAPTER 6: Monitoring and Evaluation

The maintenance of this Community Wildfire Protection Plan (CWPP) will be directed by the Columbia County Office of Emergency Management in conjunction with the Columbia County Fire Defense Board and core committee members on the Community Wildfire Protection Plan Committee. The Plan will be reviewed and updated annually to review and document accomplishments, to re-evaluate priorities for general and specific action items, to evaluate new information as it relates to community at risk identification, fuel reduction priorities and the reduction of structural ignitability throughout the county. The annual review, at a minimum will also allow an evaluation of grant application opportunities and recommended submissions as well as posting edits to the master document. The chair(s) of the CWPP Committee will be responsible for facilitating the review and editing the master document. As a working document, updates and new action items will be added as they develop as well as documenting plan accomplishments.

A complete revision of the CWPP is recommended on a five year basis to incorporate the annual review edits and to evaluate other major changes involving development and population growth within the county, changes in fire risk assessment factors and fuel modification priorities, fire prevention and protection capacity, action planning and other essential redesign elements based on best available information and technologies.

Public Outreach

The continued and progressive involvement of the public is needed to accomplish many of the elements of this CWPP. It is important that every opportunity be taken to collect and disseminate information to the citizens of Columbia County. Allowing for continuing and full participation by citizens and local groups will strengthen collaboration efforts and ensure key issues and actions remain focused and achieving the mission of the Plan.

Copies of the CWPP will be available on the internet as well as at each Library within Columbia County. Development of a county website that provides citizens an opportunity to send comments to the CWPP chair(s) is proposed for development. Web links can be found in Chapter 2 of this document as well as common and useful web sites under Appendix A.

CHAPTER 7: General Action Planning Item Worksheets

The following completed action item worksheets were developed as part of the CWPP planning process. The action items apply to efforts identified as important and support local and countywide CWPP implementation. In comparison, Chapter 8 deals with action plans addressing specific geographic areas of the Community-at-Risk or prioritized areas within a Community-at-Risk population.

Each action item includes a list of key issues that will be addressed. Additional worksheets are available for adding important action items as they arise. This Chapter, as well as the overall plan, is a working document meant to facilitate continued strategic planning efforts. Additions and or relevant changes are encouraged as CWPP implementation will likely be a catalyst for new and innovative ideas.

The following action item worksheets are numbered for reference only. These do not reflect priority. Priorities will be established by the Fire Defense Board.

Proposed Action Title/Description:

 Create and maintain county web-site dealing with wildland urban interface issues and to promote the Columbia County Community Wildfire Protection Plan (CWPP). Develop key links to other sites that Columbia County citizens can use to create and maintain fire resistive structures and landscapes within the "home ignition zone". Continue design elements to make relevant to Columbia County and other regional CWPP efforts.

Rationale for Action Item:

- Public education and outreach is critical to success.
- Allows timely updates with new information
- Easy reference source for local community

Implementation Proposals:

- Establish appropriate material content using local web designer
 - o Post Columbia County Community Wildfire Protection Plan
 - o Tips to reduce structural ignitability and implement fire safe landscaping
 - o Post pictures of "model" homes and landscapes done in local area
 - Post maps
 - o Provide information on homeowner fire prevention
 - o Provide additional links to Fire Districts, ODF, OSFM, BLM, Firewise®/USA, KOG etc.
- Committee review of content and develop maintenance standards
- Publicize local web page as opportunities come up

Lead Organization(s):

• Columbia County - Office of Emergency Management/CWPP Committee/Fire Defense Board

Cooperating Partners: Fire Districts, Oregon Department of Forestry, Office of State Fire Marshal, BLM

Timeline: (Short Term) July 1 – January 1, 2008

Estimated Cost: \$1,500 Annual

Proposed Action Title/Description:

- Re-establish and maintain fire prevention leadership through the Columbia County Fire Prevention Cooperative.
- Revisit function and scope of activities to include coordinated fire prevention reporting and strategic fire prevention planning. Develop coordinated fire prevention action and public outreach campaigns

Rationale for Action Item:

- Increase coordinated fire prevention capacity, develop countywide priorities.
- Reduce wildfire ignition risk in WUI.
- Increased density of homes shown to increase ignition risks, address issues.
- Homeowner and citizen engagement in fire prevention is shared responsibility with fire agencies.
- Provide consistent fire prevention and regulation messages county wide

Implementation Proposals:

- Seek Columbia County Fire Defense Board support and appropriate staff leadership to initiate a fully functioning Fire Prevention Cooperative.
- Utilize public information officers to assist in development of targeted public outreach programs.
- Review available homeowner fuels reduction and landscaping programs that may be appropriate for Columbia County.
- Develop local strategic campaign for CAR areas.
- Consider grant applications to assist in support of fire prevention program delivery.

Lead Organization(s):

• Fire Defense Board...Columbia County Fire Prevention Cooperative

Cooperating Partners:

- Fire Districts/Oregon Department of Forestry
- Office of Oregon State Fire Marshal
- News Media
- Citizen Groups
- Communities

Timeline: (Short Term) 1 year, June 2007 – June 2008

Estimated Cost: \$ Production costs and in kind service. Contracted services for media production. Seek grant opportunities by coordinating fire district grant applications.

3

Proposed Action Title/Description:

- Obtain GIS data for planning efforts within the WUI
 - Obtain and/or digitize structures (address points and/or structure footprints) within Columbia County
 - Obtain associated data regarding structural vulnerability
 - o Obtain current digital aerial photography annual or other updates
 - o Obtain improved contour elevation GIS layer
 - o Obtain LiDAR data if available, multiple natural hazards mitigation uses/benefits.
 - Maintain localized community GIS layers regarding defensible space to assist in development of community plans
 - Establish and maintain hydrant and water source layer
 - Develop emergency services based GIS user system/program/protocols/map production capacity...

Rationale for Action Item:

- The data will enhance on-the-ground structural vulnerability assessments.
- Improve accuracy of WUI boundary and communities at risk (structural density) areas.
- The data will provide efficiency in operational response and functioning.
- The Data provides better information for many areas of natural hazard mitigation risk assessment and planning efforts

Implementation Proposals:

- Collaborate with all county GIS users to identify current and available sources of data needs
- Consider contracting for data needs
- Consider grant for priority data needs, RARE Program, other

Lead Organization(s):

Columbia County/C911CD

Cooperating Partners:

- Fire Districts/Oregon Department of Forestry/Office of State Fire Marshal
- Columbia 911 Communications District
- Public Utility Districts
- Major Landowners

Timeline: (Short – Long Term)

Estimated Cost: \$\$\$

Proposed Action Title/Description:

 Complete rural addressing and potential data collection, coordinate with local fire district efforts

Rationale for Action Item:

- Coordinated with GIS Action Item for structure layer needs
- Improve emergency response, provides multiple benefits
- Could include structural vulnerability data collection

Implementation Proposals:

Coordinate county wide addressing issues, completion

Lead Organization:

• Fire Districts, Columbia County – Land Development Services

Cooperating Partners:

•

Timeline: (Long Term) 2 year +

Estimated Cost: \$\$\$

Proposed Action Title/Description:

• <u>Design</u> and incorporate structural vulnerability data collection process that is consistent countywide and is collected as a master data-set

Rationale for Action Item:

- Currently, no vulnerability assessment data has been collected in Columbia County.
- Action plans currently identify need for assessments to clarify scope of structural vulnerability and address issue.
- Road access, roof and building material, defensible space and overall home ignition zone conditions should be evaluated as part of this risk assessment.
- Incorporate data into countywide layer evaluate data and update CWPP/priority areas and action plans

Implementation Proposals:

- Begin with a realistic defined community area (community at risk) and collect data using countywide methodology.
 - Create database relating to fuel loads and lack of fire resistive landscaping measures in targeted areas.
 - Create database relative to driveway access and road conditions. Include but not limited to: excessive grade, inadequate width and surface, encroachment into road with failures or vegetation, limited or lack of turnouts, condition and load capacity of bridges, turn-arounds or hammerhead or lack of at terminus, water supplies, and other restrictive conditions.
 - Create database to identify the number of residences outside rural fire protection districts
 - o Continue to coordinate with County Road Department and Land Development Services regarding assessment data.
- Bring both structural point data and structural vulnerability data into GIS layer. Map based on L-M-H thresholds or other accepted standards. Evaluate data implications.

Lead Organization:

Columbia County Fire Defense Board/Office of State Fire Marshal

Cooperating Partners:

Oregon Department of Forestry

Timeline (Short Term) 2 year

Estimated Cost:

Proposed Action Title/Description:

• Provide CWPP Assessment GIS layers/data to Columbia County Mapping Section.

Rationale for Action Item:

• Central location for data-sets/layers that allow uses for other planning and natural hazard mitigation efforts.

Implementation Proposals:

• Upon completion of CWPP, provide county with project layers/data

Lead Organization:

Oregon Department of Forestry/Community Wildfire Protection Committee

Cooperating Partners:

Timeline: Short Term July 1 – October 1, 2007

Estimated Cost: N/A, In Kind

Proposed Action Title/Description:

• Engage homeowner insurance companies to promote incentives that reward fire resistive structure and landscaping practices within the home ignition zone.

Rationale for Action Item:

- HFRA goals of collaboration, fuels reduction and structural ignitability reduction
- Comments regarding insurance companies as an important element in promoting reduction of risk on private property.
- Lower premiums with lower potential losses from wildfire

Implementation Proposals:

- Contact local insurance companies and determining if incentive can be provided if homeowners meet standard.
- Explore methods to validate and ensure maintenance of home ignition zone

Lead Organization(s):

• Oregon State Fire Marshal, Fire Districts

Cooperating Partners: ODF, Insurance Companies

Timeline (Short Term) 1 year or by June 2009

Estimated Cost: \$

Proposed Action Title/Description:

• Formalize the Columbia County Community Wildfire Protection Committee to oversee implementation, identify and coordinate funding opportunities, act as the Local Wildfire Coordinating Group in establishing funding priorities, and sustain the implementation and revisions of the Community Wildfire Protection Plan.

Rationale for Action Item:

- Leadership in mitigation of wildfire hazards within Columbia County.
- Establish countywide community at risk priorities.
- Collaboration, Fuels Reductions and Structural Vulnerability as defined in HFRA
- Support future actions under SB360, Wildland Urban-Interface Classification Committee
- National Fire Plan Grant opportunities

Implementation Proposals:

- Ensure County Homeland Security and Emergency Management leadership representation
- Establish CWPP review process, reports to Committee and process for updates
- Determine Chair for upcoming year.

Lead Organization:

Columbia County

Timeline: Ongoing – Long Term

Cooperating Partners:

• Membership representation on the Columbia County CWPP Committee

Estimated Cost:		

Proposed Action Title/Description:

• Develop consistent countywide administration and enforcement of open burning regulations.

Rationale for Action Item:

- Major cause of escaped fires within the WUI is open burning of yard and land clearing debris
- Consistent and accurate message to public.

Implementation Proposals:

- Develop issue paper for Fire Defense Board discussion
- Draft basic outline of concepts that address the issue(s)
- Consider intergovernmental agreements, options
- Utilize education campaign, DVD or other media, see Clatskanie CAR Action Plan (Alston-Delena)

Lead Organization:

• Columbia County Fire Defense Board

Cooperating Partners:

• State Fire Marshal, Columbia County Law Enforcement Agencies

Timeline: (Long Term)

Estimated Cost: \$\$\$

Proposed Action Title/Description:

• Implement cost share or other incentive programs to assist landowners with fuel removal and disposal projects that occur within the home ignition zone and travel corridors.

Rationale for Action Item:

- Reduction of structural ignitability within Community at Risk (CAR)
- Increased participation with cost share approach
- Support for special needs population

Implementation Proposals:

- Apply for grant for funding of pilot project(s).
- Focus on high priority areas of Community at Risk
- Educate local landscape contractors and expand service availability for homeowners
- Pursue local opportunities for recovery and use by local composting facility/other bio fuel industry
- Explore partnerships with local business and industry

Lead Organization:

• Fire Districts, Oregon Department of Forestry

Cooperating Partners:

• Columbia County, Columbia County Waste Management, Local Landscaping Businesses

Timeline: Long Term

Estimated Cost: \$\$\$ Based on obtaining grant for project(s). Focus on high priority areas

Proposed Action Title/Description:

• Evaluate Land Development Services ordinances relating to fire siting standards, obtain understanding, acceptance and support and provide input to ensure accuracy and consistency of application.

Rationale for Action Item:

- Bolster understanding of land development processes as relates to fire siting standards and exceptions.
- Equivalents to the primary and secondary fire breaks requires revisiting to identify issues and concerns with application.
- Address other concerns and issues with Land Development Services
- Introduce LDS staff to the Community Wildfire Protection Plan.

Implementation Proposals:

• Schedule a meeting with Land Development Services to review processes and identify issues.

Lead Organization:

• Fire Defense Board/Columbia County Land Development Services

Cooperating Partners:

•

Timeline: Short Term

Estimated Cost: \$\$\$

CHAPTER 8: Action Planning- Communities at Risk

The Communities at Risk (CAR) within Columbia County are identified based on population density and assumed values at risk for threats to life, property and infrastructure. <u>These are</u> defined broadly and may be refined further in future revisions of this plan.

Communities at Risk are identified within the jurisdictional boundaries of each Rural Fire Protection District in the county. Public outreach, planning and implementation of action plans are based on these community centers, i.e., RFPDs. CAR outside a structural fire protection district are identified within the county (outside structural fire protection district) designation. Oregon Department of Forestry will take lead in cooperation with closest structural fire district.

Clatskanie Rural Fire Protection District - Community at Risk

- All populated areas within the District Priority Areas
- City of Clatskanie and vicinity
- Alston Delena
- Palm Creek Cedar Grove
- Upper Swedetown

Columbia River Fire and Rescue Protection District - Community at Risk

- All populated areas within the CRF&R District <u>Priority Areas</u>
- City of St. Helens Grey Cliffs
- Smith-Robinette-Columbia City
- Canaan Meissner

Mist-Birkenfeld Rural Fire Protection District - Community at Risk

- All populated areas within the District Priority Areas
- Fishhawk Lake

Scappoose Rural Fire Protection District – Community at Risk

- All populated areas within the District <u>Priority Areas</u>
- Chapman and Vicinity
- Columbia Hills Development Callahan Road
- JP West, Mtn. View (West Hills of Scappoose), Pisgah, Siercks
- Panorama Terrace

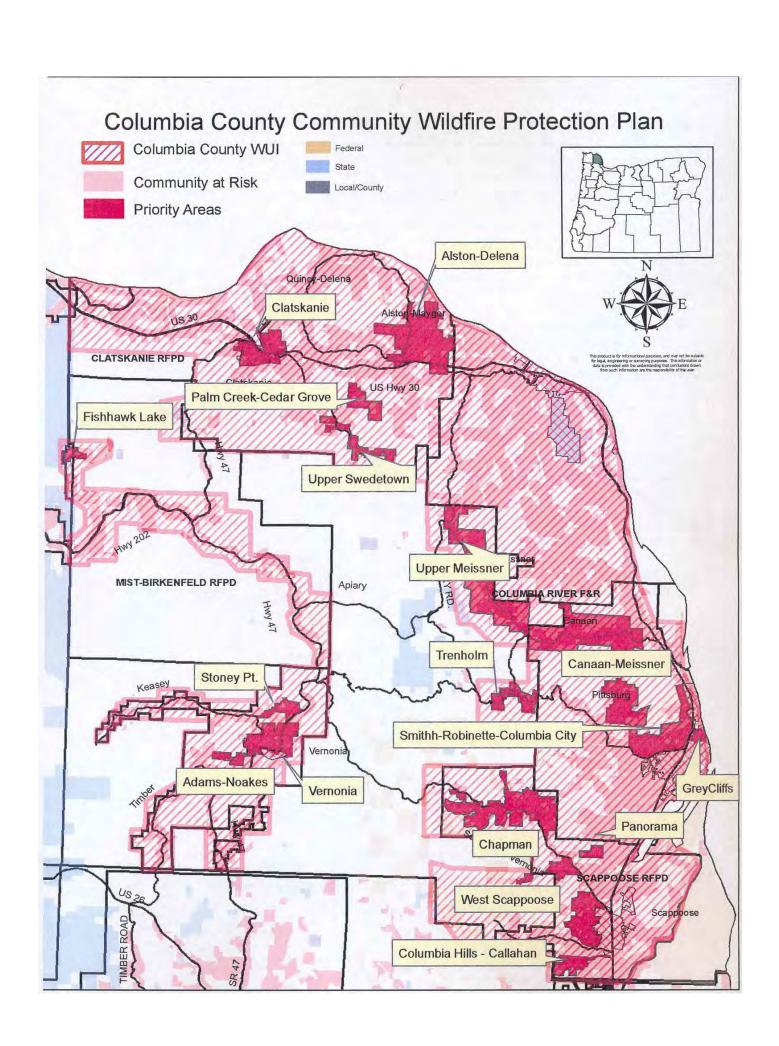
Vernonia Rural Fire District - Community at Risk

- All populated areas within the District Priority Areas
- City of Vernonia
- Adams (Elk Run), Noakes and Stoney Point Roads

County (Outside Structural Protection District) - Community at Risk

Priority Areas

- Upper Meissner
- Trenholm/Upper Pittsburg



Community-At-Risk Assessment Matrix – Scoring Factors

Summary – Assessment Factors	Point Breakdown
RISK	
 Fire Occurrence (# Fires/1000 Ac./Year) Home Density (rural/suburban/urban) Ignition Risk Potential 	0-20 0-10 0-10
<u>HAZARD</u>	
 Weather Zone (Coastal/Interior only) Topography (Slope/Aspect/Elevation) Natural Vegetation (Fuel Models) Crown Fire Potential (Passive/Active/Independent) 	0-20 0-10 0-30 0-10
PROTECTION CAPABILITY	
 Scoring dependent on organized structural response to no structural or wildland fire protection 	0-36
Community Preparedness	0-4
<u>VALUES PROTECTED</u>	
Home and population densityCommunity Infrastructure	0-30 0-20
STRUCTURAL VULNERABITY	
 Flammable Roofing (A/B/C/Non-Rated) Building Materials Building Set-Backs 	0-30
■ Defensible Space (<30 ft. −>100 ft.)	0-30
Fire Access (roads and driveways, ingress/egress, road width, all season condition, fire service access, street signs)	0-30

The complete assessment form used for prioritization of Communities-At-Risk is found in Appendix C.

Assessment Scores

_	Community at Risk Designations	
	All Incorporated Cities in Columbia County	T
	Populated Rural Areas w/i RFPDs	
	Populated Rural Areas Outside RFPDs w/i County	
Priority	Scappoose RFPD Populated Areas - CAR	Infrastructure / Other
197	Scappoose RFPD - Greater Chapman	Scappoose Watershed
182	Scappoose RFPD - Callahan Road	ocappoose watersned
177	Scappoose RFPD - JP West / Mtn. View/Pisgah/Siercks	
150	Scappoose RFPD - Panorama Terrace	
148	Scappoose RFPD - General WUI	
Priority	Columbia River Fire & Rescue Populated Areas - CAR	Infrastructure / Other
185	Columbia River Fire & Rescue - Gray Cliffs / City of St. Helens	
175	Columbia River Fire & Rescue - Smith / Robinette Road	
156	Columbia River Fire & Rescue - Cannan / Meissner Road	
152	Columbia River Fire & Rescue - General WUI	
Priority	Vernonia RDPD Populated Areas - CAR	Infrastructure / Other
163	Vernonia RFPD - City Perimeter WUI	City Planning: Education
149	Vernonia RFPD - Adams / Noakes / Stoney Point Road	
144	Populated Rural Areas w/I VRFPD	
Priority	Mist-Birkenfeld RFPD Populated Areas - CAR	Infrastructure / Other
141	Mist-Birkenfeld RFPD - Fishhawk Lake	Facilitate Fishhawk Community Plan
133	Mist-Birkenfeld RFPD - General WUI	
Priority	Populated WUI Areas	Infrastructure / Other
172	Clatskanie RFPD - City of Clatskanie/UGB/Vicinity	Conyers Creek Watershed
163	Clatskanie RFPD - Alston/ Delena	Roaring Creek Watershed
160	Clatskanie RFPD - Palm Creek / Cedar Grove Road	Midland Watershed
148	Clatskanie RFPD - Upper Swedetown Road	Marshland Watershed
146	Clatskanie RFPD - General WUI	Benson Pt. Microwave
Priority	County (Outside Structural Fire Protection)	
173	County – Upper Meissner	
161	County – Trenholm / Upper Pittsburg	

<u>Columbia County Ranking – Priority Areas</u>

Local Priority Thresholds

<130 = Low / 130 - 174 = Moderate / 175 + = High

	County Wide Priority Ranking				
Points	Priority Area	Community at Risk (CAR)	Comment		
197	Greater Chapman	Scappoose RFPD CAR	Top priority for SRFPD		
185	Grey Cliffs/City of St. Helens	Columbia River F&R CAR	Top priority for CRF&R		
182	Columbia Hills - Callahan Road	Scappoose RFPD CAR			
177	West Scappoose	Scappoose RFPD CAR			
175	Smith/Robinette/Columbia City	Columbia River F&R CAR			
173	Upper Meissner	Outside Structural – County CAR	Top priority Outside Structural Fire - County		
172	City of Clatskanie/UGB	Clatskanie RFPD CAR	Top priority for CRFPD		
163	City of Vernonia	Vernonia RFPD CAR	Top priority for VRFPD		
163	Alston-Delena	Clatskanie RFPD CAR			
161	Trenholm/Upper Pittsburg	Outside Structural – County CAR			
160	Palm Creek/Cedar Grove	Clatskanie RFPD CAR			
156	Cannan-Meissner	Columbia River F&R CAR			
152	General WUI-CRF&R	Columbia River F&R CAR			
149	Adams/Noakes/Stoney Point	Vernonia RFPD CAR			
148	General WUI-SRFPD	Scappoose RFPD CAR			
148	Upper Swedetowm	Clatskanie RFPD CAR			
144	General WUI - VRFD	Vernonia RFPD CAR			
141	Fishhawk Lake	Mist-Birkenfeld RFPD CAR	Top priority of M/BRFPD		
133	General WUI -M/BRFPD	Mist-Birkenfeld RFPD CAR			

Clatskanie RFD

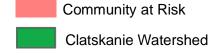
CAR

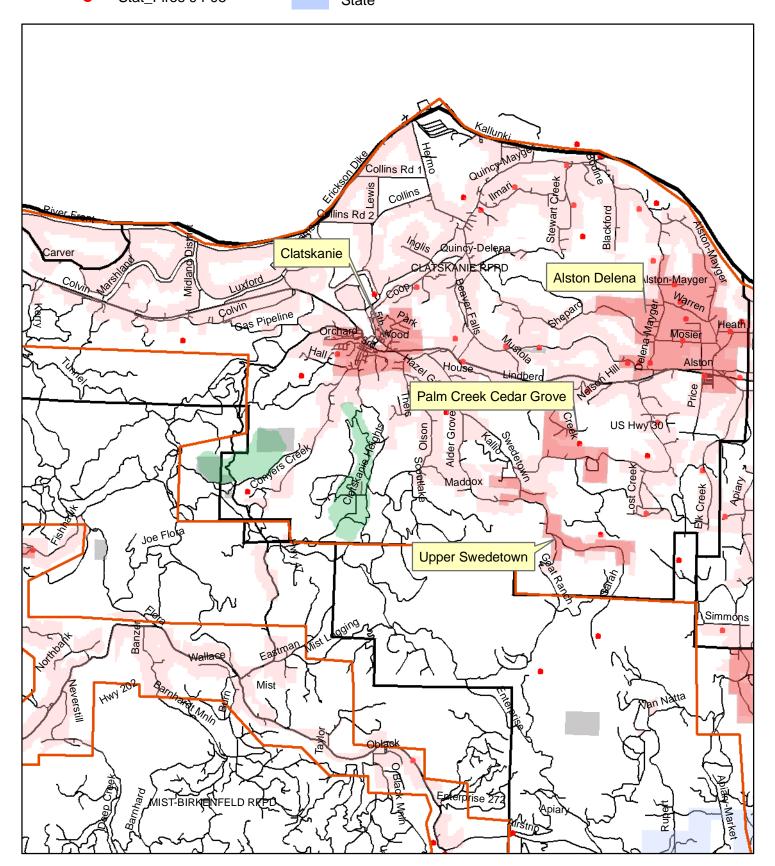
Columbia County Community Wildfire Protection Plan Clatskanie RFPD CAR





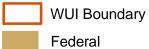






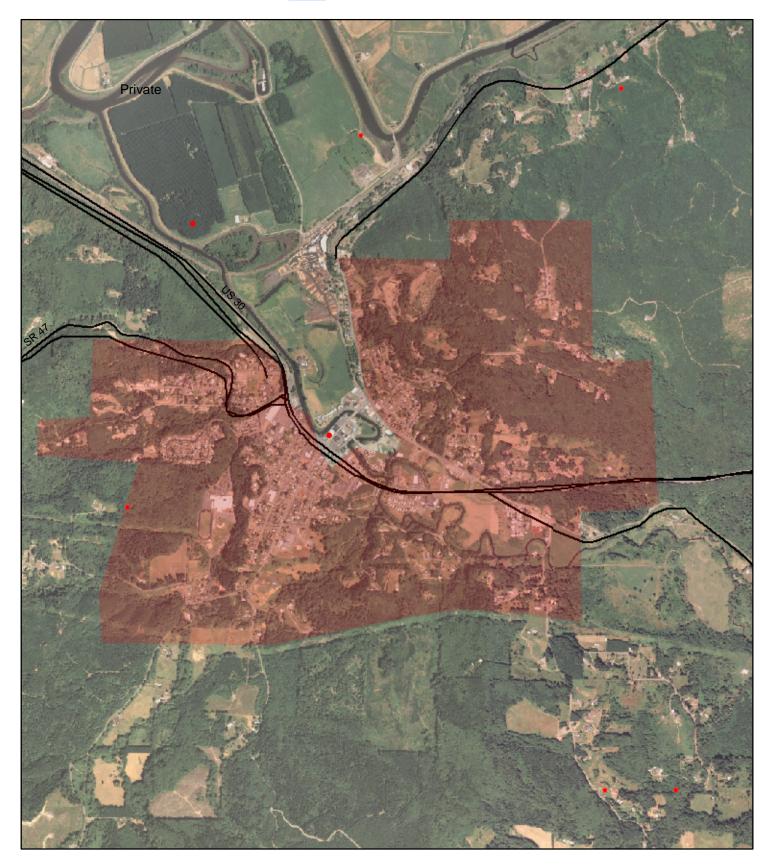
Columbia County Community Wildfire Protection Plan City of Clatskanie - Clatskanie RFPD CAR







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City of Clatskanie and UGB - Clatskanie RFPD CAR

Priority Category:

172

Description:

City of Clatskanie and other areas with potential growth within and surrounding the Urban Growth Boundary. Located in the northwest corner of Columbia County, Clatskanie has a population of 1,674. Areas along the perimeter of the City/UGB that are exposed to potential wildfire threats encroaching on residential areas. Specific areas of concern include Clatskanie Heights, Upper Orchard Street and Haven Acres. City of Clatskanie municipal watershed is included in the WUI boundary.

Hazard Assessment Factors

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Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
26	40	8	45	53	172
Moderate	Moderate	Low	High	Moderate	

Communities at Risk - Focus Areas: Clatskanie and surrounding population

Structural Fire Protection Agency: Clatskanie Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Perimeter residences adjoining forest and natural cover fuels, steeper slopes

Single road access in some areas, problematic ingress/egress in emergency situations

Limited water supply issues

Structures in canyon topography, i.e., Upper Orchard

Homes lacking defensible space through fuel reduction, fire safe landscaping and practices that reduce structural

ignitability within the "Home ignition Zone"

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Identify and target priority areas within city for homesite triage assessment/data collection, e.g., upper orchard canyon.	2007 - 2008	Clatskanie RFPD/
Implement localized education campaign to encourage homeowners to reduce structural ignitability through fuel reduction and fire safe landscaping practices within the "Home Ignition Zone".	2007 - 2010	Clatskanie RFPD/ ODF, Local Media
Develop evacuation routes and complete a pre-planned response plan with map references for specific areas. Identify problematic areas, implement possible measures for resolution.	2007 - 2010	Clatskanie RFPD/ Community

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Partner with local government, businesses and community to provide central collection site for clean-up of vegetation removed from "Home Ignition Zone". Consider biomass utilization by chipping, recycling etc.	2007-2009	Clatskanie RFPD/ Community

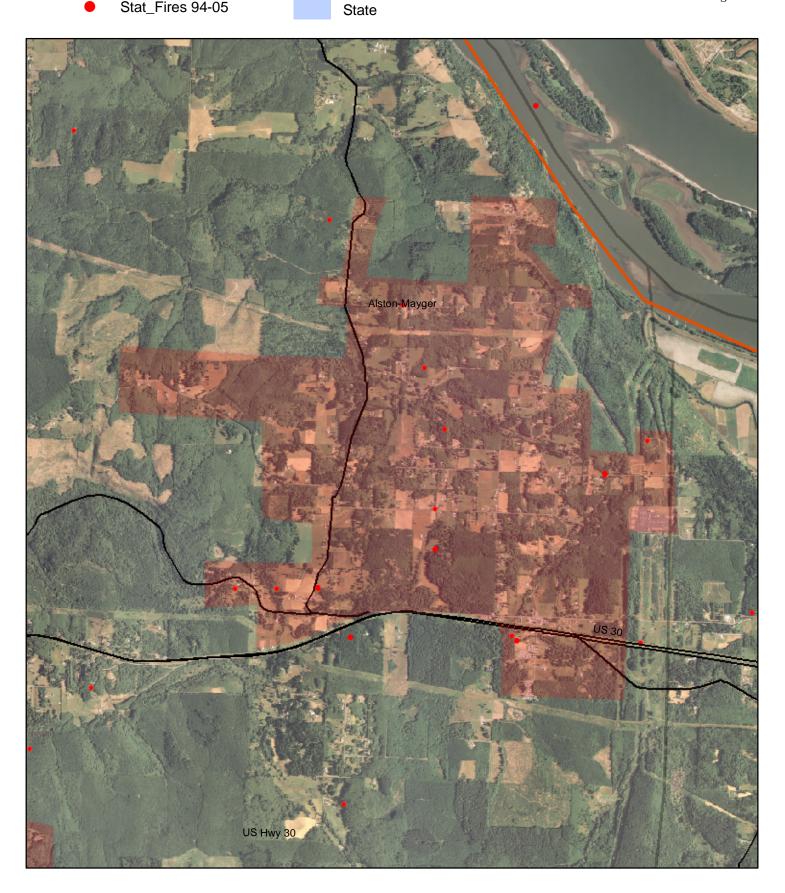
Columbia County Community Wildfire Protection Plan Alston Delena - Clatskanie RFPD CAR











CAR Name:

Alston/Delena - Clatskanie RFPD CAR

Priority Category:

Mod - 163

Description:

Higher density rural residential area north of Highway 30 in the Delena-Alston area. Population with a history of backyard burning and other debris disposal burning escapes. Population intermix with pastures and forestland. Development expected to continue and often times involves areas that were harvested and contain brush and slash fuel types. A volunteer based sub-station is located at Alston withith limited response capacity. Extended response times from main station. Education regarding reducing homeowner/landowner related fire ignition risks are a priority.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
25	46	15	22	55	163
High	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: Alston - Delena Area

Structural Fire Protection Agency: Clatskanie Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Backyard, debris and land clearing burning escapes.

Influx on new owners lacking knowledge of safe burning practices and regulations.

Increase fragmentation of forestland through development with homes adjacent or within brush or slash areas. Homes lacking defensible space through fuel reduction, fire safe landscaping and practices that reduce structural ignitability within the "Home ignition Zone"

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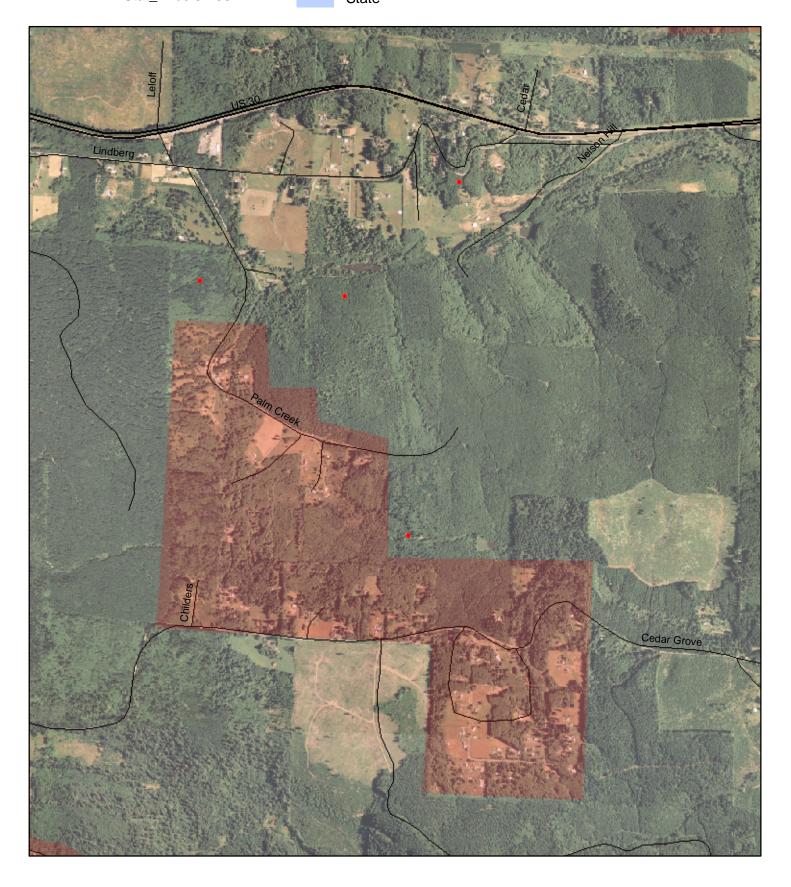
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Develop educational DVD regarding safe burning practices within Columbia County. In addition, education material on general fire prevention issues, fire resistive structures and fire safe landscaping within the 'Home Ignition Zone".	2007-2009	Fire Defense Board - Clatskanie RFPD/ ODF, Land Development Services, Community Partners.
Develop burn permit process that requires educational requirements be completed prior to issuance of permit. Joint on-site inspections with any burning of land clearing debris (CRFPD and ODF).	2007 - 2009 Ongoing	Clatskanie RFPD, Fire Defense Board/ ODF
Develop broad level education campaign and outreach for achieving defensible space, fire safe landscaping and reduced structural ignitability. Include local signing campiagn consistent with countywide approach.	2007-2010	Clatskanie RFPD/ ODF, Fire Defense Board

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Implement a plan for structural triage data collection. Utilize countywide format for data collection. Address issues identified in process.	2007 - 2010	Clatskanie RFD/ ODF
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2007 - Ongoing	Clatskanie RFD/ ODF, Forest Industry, Local Landowners
Identify locations for future water sources. Develop agreements with property owners and install necessary infrastructure.	2007 - Ongoing	Clatskanie RFD/ ODF, Forest Industry, Local Landowners
Address RR5 Zoning issues where primary and secondary fuels reduction and fire resistive construction requirements are not required. Work with Land Development Services, provide timely comment/recommendations.	2007 - Ongoing	Clatskanie RFD/ Land Development Services, ODF

Columbia County Community Wildfire Protection Plan Palm Creek/Cedar Grove - Clatskanie RFPD CAR







CAR Name:	Palm Creek/Cedar Grove - Clatskanie RFPD CAR	Priority Category:	Mod - 160

Description: Rural population of

Rural population of higher density RR5 zoned properties with adjacency to intensively managed forest lands. Residence locations positioned at top of slopes with surrounding terrain and fuels.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
22	47	14	22	55	160
Moderate	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: Palm Creek/Cedar Grove Rural Homes

Structural Fire Protection Agency: Clatskanie Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking defensible space through fuel modification/reduction and fire safe landscaping practices

Forest and other natural cover fuels adjacent to properties, local topography relationship to structures

Human caused ignition risks in the WUI

RR5 zoning and lack of primary and secondary fuel reduction requirement with new development.

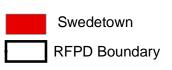
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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators	
Implement localized education campaign to encourage homeowners to reduce structural ignitability through fuel reduction and fire safe landscaping practices within the "Home Ignition Zone".	2007 - 2010	Clatskanie RFD/ ODF	
Consider partnerships for fuel reduction in home ignition zones and non-burning alternatives such as chipping, recycle etc.	2007 - 2010	Clatskanie RFD/ ODF	
Conduct local structural ignitability assessment and document using structural triage form.	2007 -2010	Clatskanie RFD/ ODF	

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Address RR5 Zoning issues where primary and secondary fuels reduction and fire resistive construction requirements are not required. Work with Land Development Services, provide timely comment.	2007 - Ongoing	Clatskanie RFD/ Land Development,ODF
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2007 - 2009	Clatskanie RFD/ ODF
Identify locations for future water sources. Develop agreements with property owners and install necessary infrastructure.	2007 - 2009	Clatskanie RFD/ ODF

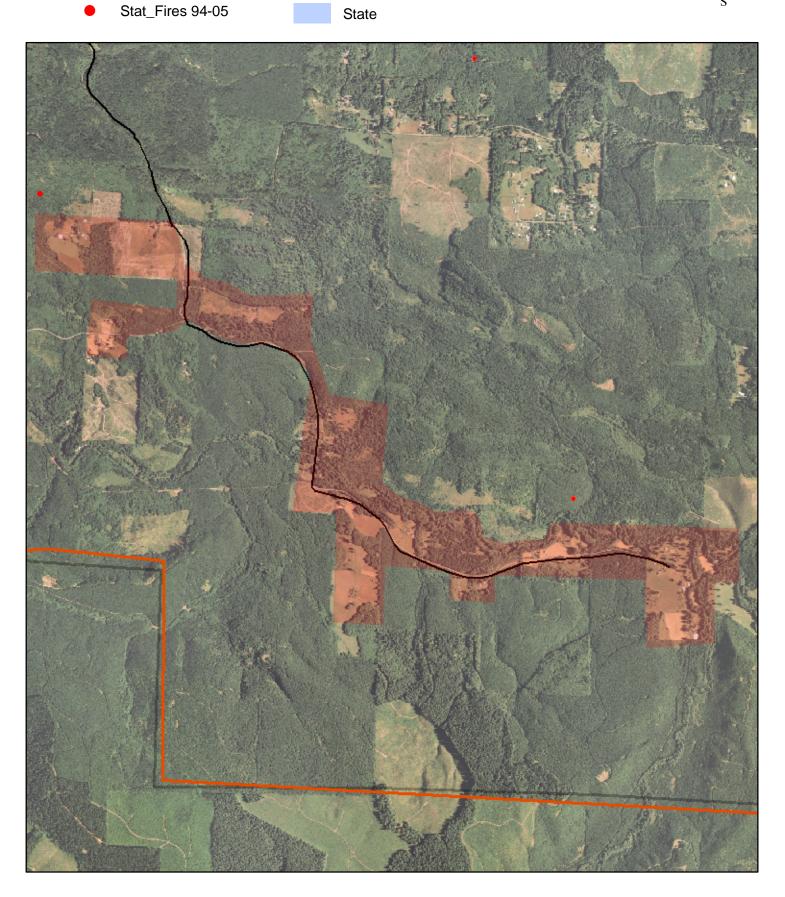
Columbia County Community Wildfire Protection Plan Upper Swedetown - Clatskanie RFPD CAR



WUI Boundary







WUI Name:	Upper Swedetown - Clatskanie RFPD CAR	Priority Category:	Mod148
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Description:

Rural residential area in the south eastern section of the Clatskanie RFPD following Swedetown Creek drainage and extending into managed forest lands. Extended response times due to the distance from the main fire station. Intensive forest management activities occur around and within this rural community of homeowners.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
10	47	17	14	60	148
Low	Moderate	High	Low	Moderate	

Upper Swedetown Road **Communities at Risk - Focus Areas:**

Clatskanie Rural Fire Department **Structural Fire Protection Agency:**

Oregon Department of Forestry Wildland Fire Protection Agency:

Forest and other natural cover fuels adjacent to properties - intensive forest management activity area **Specific Hazard Issues:**

Extended response times form fire station

Homes lacking defensible space through fuel reduction, fire safe landscaping and evaluation of structural ignitability

within the "Home ignition Zone"

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Implement localized education campaign to encourage homeowners to reduce structural ignitability through fuel reduction and fire safe landscaping practices within the "Home Ignition Zone". Conduct triage assessment.	2007-2009	Clatskanie RFD/ ODF
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2007-Ongoing	Clatskanie RFD/ ODF
Identify locations for future water sources. Develop agreements with property owners and install necessary infrastructure.	2007 - Ongoing	Clatskanie RFD/ ODF

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators

CAR Name:	General CAR - Clatskanie RFPD CAR	Priority Category:	Mod 146
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Description: Populated residential areas within the overall CRFPD CAR areas .

Additional "Priority or Focus Areas" to be identified as part of ongoing evaluation.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
17	44	14	16	55	146
Moderate	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: General Community at Risk - CRFPD

Structural Fire Protection Agency: Clatskanie Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Homes lacking defensible space through fuel reduction, fire safe landscaping and practices that reduce structural

ignitability within the "Home ignition Zone"

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Develop broad level education and outreach for achieving defensible space, fire safe landscaping and reduced structural ignitability.		Clatskanie RFD/ ODF, Columbia County Land Development, Columbia County County Emergency Management, Columbia County Fire Prevention Cooperative, CEPA, Community Leaders, Media
Provide information and Discuss "Home Ignition Zone" and other critical factors to consider as part of driveway inspection meetings.	Ongoing	Clatskanie RFD/
Leverage local or other pilot projects within the county to "showcase/publicize" reduction of risk in the home ignition zone.	Ongoing	Clatskanie RFD/ ODF, County Fire Districts, Columbia County Fire Prevention Cooperative, Media
Provide local educational resources via local web-sites, provide access to the Columbia County CWPP and education materials. Provide local inspections based on request.	2007 - 2008	Columbia County Emergency Management/ Fire District, ODF

Timeframe	Lead Agency/Cooperators
Ongoing	Clatskanie RFD/ ODF
2007 - Ongoing	Clatskanie RFD, Contractor(s), Joint county wide mapping project, other agencies.
2007 - Ongoing	Clatskanie RFD/ ODF
2007 - Ongoing	Clatskanie RFD/ ODF
2007 - Ongoing	Clatskanie RFD/ ODF
2010 - ?	Clatskanie RFD/ ODF
	Ongoing 2007 - Ongoing 2007 - Ongoing 2007 - Ongoing 2007 - Ongoing

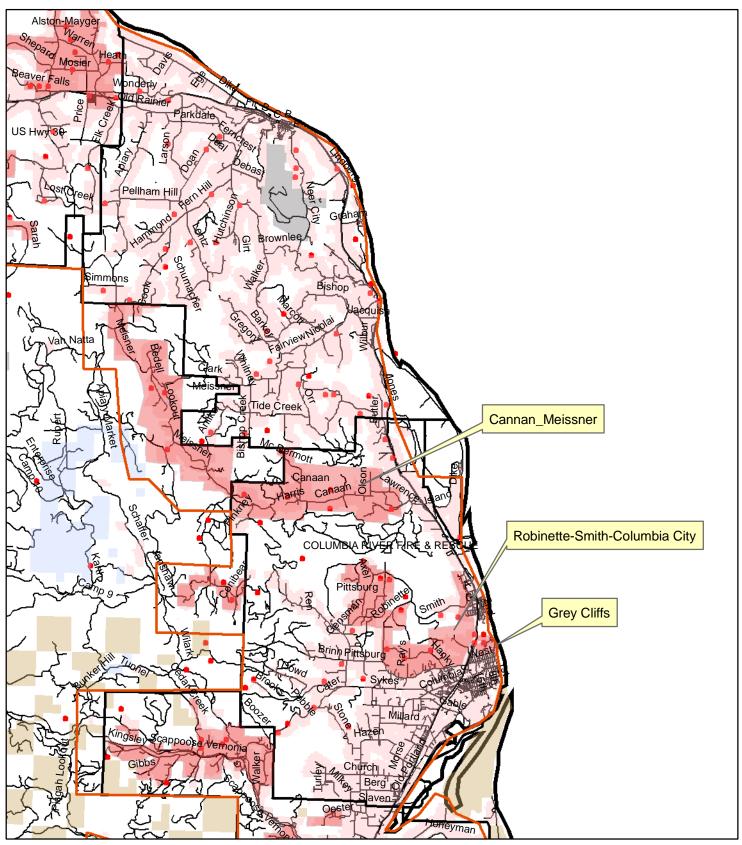
Columbia River Fire and Rescue

CAR

Columbia County Community Wildfire Protection Plan Columbia River Fire and Rescue RFPD CAR







Columbia County Community Wildfire Protection Plan Grey Cliffs - Columbia River Fire and Rescue CAR



WUI Boundary
Federal





CAR Name: <u>Grey Cliffs/City of St. Helens - Columbia River Fire & Rescue CAR</u>

Priority Category:

High - 185

Description:

Gray Cliffs and the City of St. Helens have occluded WUI areas within the city limits. Gray Cliffs is a residential population on the north side of the city. Though close to fire service response, ingress and egress is problematic under fire emergency and evacuation situations. Engaging the local community and developing a specific plan focusing on fuel reduction around homesites, evacuation planning and pre-planning fire response strategies make this an ideal community to engage. May serve as an excellent pilot project to jump start defensible space and landscaping throughout city and county, other communities.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	300
30	41	4	45	65	185
High	Moderate	Low	High	High	

Communities at Risk - Focus Areas: Grey Cliffs/City of St. Helens

Structural Fire Protection Agency: Columbia River Fire and Rescue

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Incidence of fire is high due to intermix of city population and forested/natural cover areas.

Fuel model has oak, conifer and grass models that have high fire intensity potential.

Strong north winds funnel along river for potential rapid fire spread.

Limited one way ingress/egress-evacuation may be difficult with limited secondary routes.

Homes lacking defensible space/fire safe landscaping around structures, evaluation of structural ignitability.

Bolster fire prevention efforts related to neighborhoods and juvenile fire starts as well as residential fire prevention

precautions.

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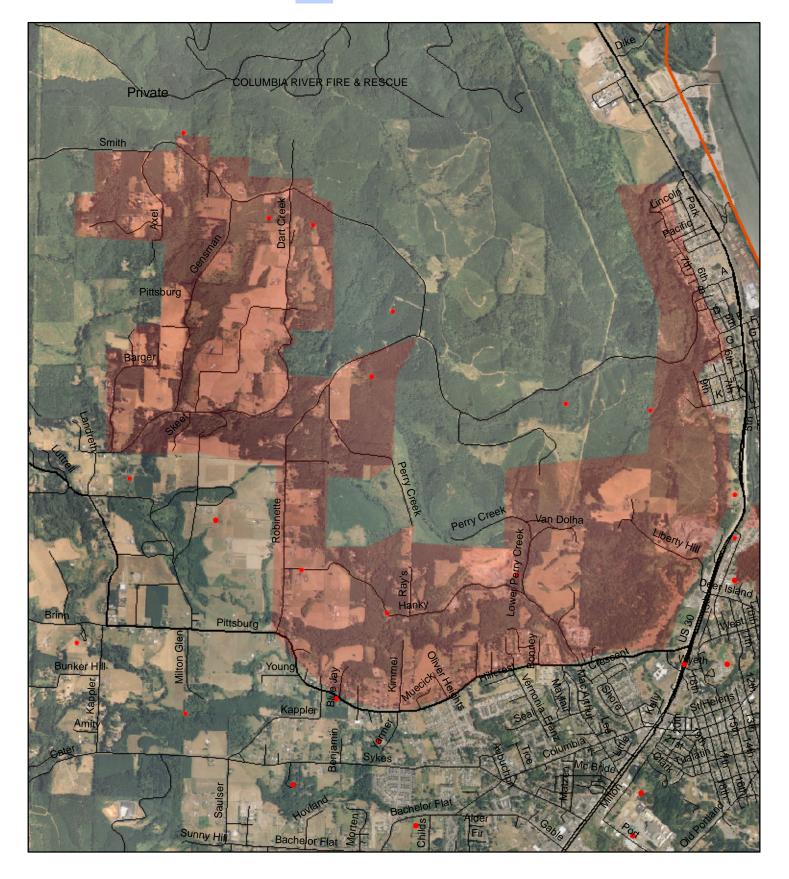
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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Schedule Grey Cliffs Community meeting. Engage local residents by framing WUI issues at the local level.	May-07	Columbia River Fire & Rescue, City of St. Helens, ODF and Community
Initiate homesite assessment data collection. Consider access, structural ignitability, defensible space, fuel modification corridors. Develop database and GIS layers.	2007 - 2008	Columbia River Fire & Rescue, City of St. Helens, GPS/GIS Contractor
Develop evacuation routes and complete a pre-planned response plan with map references. Identify problematic areas, implement possible measures for resolution.		Columbia River Fire and Rescue, City of St. Helens Police, City of St. Helens, ODF

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Seek partnerships and apply for grant to facilitate fuel reduction and fire safe landscaping efforts. Develop pilot project and use media to "showcase" throughout county.	2007 - 2009	Columbia River Fire & Rescue/ City of St. Helens, ODF
Partner with biomass, composting or other recycle service for homeowner fuel reduction disposal opportunities.	2007 - 2009	Columbia River Fire & Rescue/ City of St. Helens, Columbia County, Local Industry Partners, ODF
Implement WUI education and fire safe landscaping program for community. Implement annual maintenance campaigns/programs and monitor success.	2007 -2009	Columbia River Fire and Rescue/ City of St. Helens, ODF, County Extension
Provide clear addressing of all streets and structures. Meet needs of emergency response and owners concerns.	2007 -2009	Columbia River Fire and Rescue/ City of St. Helens, Community
Encourage City to improve Botanical Gardens by reducing invasive vegetation and ladder fuels.	2007 - 2008	Columbia River Fire and Rescue/ City of St. Helens, Local Volunteer Groups
Work towards improving access to current City road standards.	2007 - 2010	Columbia River Fire & Rescue/ City of St. Helens
Develop and implement targeted fire prevention efforts for juvenile fire starts and other human caused fires in the area.	2007-2008	Columbia River Fire and Rescue/ Columbia County Fire Prevention Cooperative, City of St. Helens Police, Community, Juvenile Firesetters Program Agencies,ODF
Evaluate homes along canyons/native vegetation areas within St. Helens exposed to fire risk. Target these homeowners to encourage fuel reduction/fire safe landscaping/structural vulnerability reduction.	2007-2010	Columbia River Fire and Rescue/City of St. Helens

Columbia County Community Wildfire Protection Plan Robinette- Columbia City Columbia River Fire and Rescue CAR,







CAR Name: Smith-Robinette/Col. City - Columbia River Fire & Rescue CAR

Priority Category:

High -175

Description:

Urban and rural residential areas northwest of St. Helens, Oregon. Area is adjacent to City of St. Helens and City of Columbia City UGB's. Area has potential for increased rural to suburban densities. Some high density portions of cities have increased fire exposure, especially west side perimeter areas, specific rural areas and west Columbia City.

Hazard Assessment Factors

	ALLA TOOCOOMON TO TOO TO					
Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total	
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value	
					300	
		Fire Response	Life	Structure - Roofing etc.		
Fire Occurrence		Prevention Capacity	Property	Defensible Space		
Ignition Risk	Fuels/Weather/Topography	Community Preparedness	Infra-Structure	Fire Access		
25	46	12	27	65	175	
Moderate	Moderate	Moderate	Moderate	High		

Communities at Risk - Focus Areas: Smith-Robinette, Columbia City I

Structural Fire Protection Agency: Columbia River Fire and Rescue

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction and fire safe landscaping practices

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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This area is subject to multiple Measure 37 Claims and may increase in density in the future.

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Provide a general signage campaign within area, e.g., "Fire Free/ Get in the Zone" or "It can happen here!"	2007 - 2010	Columbia River Fire and Rescue/ Columbia County Fire Prevention Cooperative, ODF, Fire Defense Board
Locate and map all significant structures including driveways and other access infrastructure. Develop GIS and database.	2007 - 2009	Columbia River Fire and Rescue/ Contractor(s), Columbia County
Initiate homesite assessment data collection. Consider access, structural ignitability, defensible space, fuel modification corridors. Develop database and GIS layers.	2007 - 2009	Columbia River Fire and Rescue/ ODF, Contractor(s), CRPUD
Develop plan to address defensible space issues. Divide area geographically into WUI management zones targeting one zone annually, revisit on an ongoing scheduled basis.	2007 - 2010	Columbia River Fire and Rescue/ ODF/Land Development Services
Implement established WUI education/outreach program for fire safe landscaping including inspections, publications and targeted mailings. Provide annual maintenance reminders/opportunities and monitor success.	2007 - 2009	Columbia River Fire and Rescue/ODF/Land Development Services

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Identify existing water sources. Develop flow rate data, map		Columbia River Fire and Rescue/ODF
to GIS. Joint project and information sharing with ODF.	2007 - 2010	
Identify locations for future water sources. Develop		Columbia River Fire and Rescue/ODF
agreements with property owners and install necessary	2027 2012	Columbia (11/6) The dria (1636a6) CD1
infrastructure.	2007 - 2010	
Anticipate development progression and provide planning for		Columbia River Fire and Rescue/Land Development Services
fire safe communities. Consider/plan for future fire station	2007 - 2010	
location, apparatus and staffing.l.	2007 - 2010	
Increase inventory of Type 2, 3 and 6 Engines.		Columbia River Fire and Rescue/
interests inventory or Type 2, 5 and 6 Engines.	TBD	Columbia Niver Fire and Nessage
Work with McNulty Water to develop adequate fire flows		Columbia River Fire and Rescue/McNulty PUD
based on density.	2007 -2010	
Monitor Measure 37 development. Provide timely comments		Columbia River Fire and Rescue/ODF/Land Development Services
and information to County Land Development on issues of	Ongoing	
fire safe development within the WUI.	egeg	
Ensure Fire Code requirements for infrastructure (roads and		Columbia River Fire and Rescue/City and County Planning
water delivery) are enforced.	Ongoing	Columbia River the and Resoucherty and County Flamming
water delivery, are embreded.	5.1g5.1.g	
Improve Smith Road access from Columbia City		County Road Department/Columbia River Fire and Rescue
	2007 - 2010	

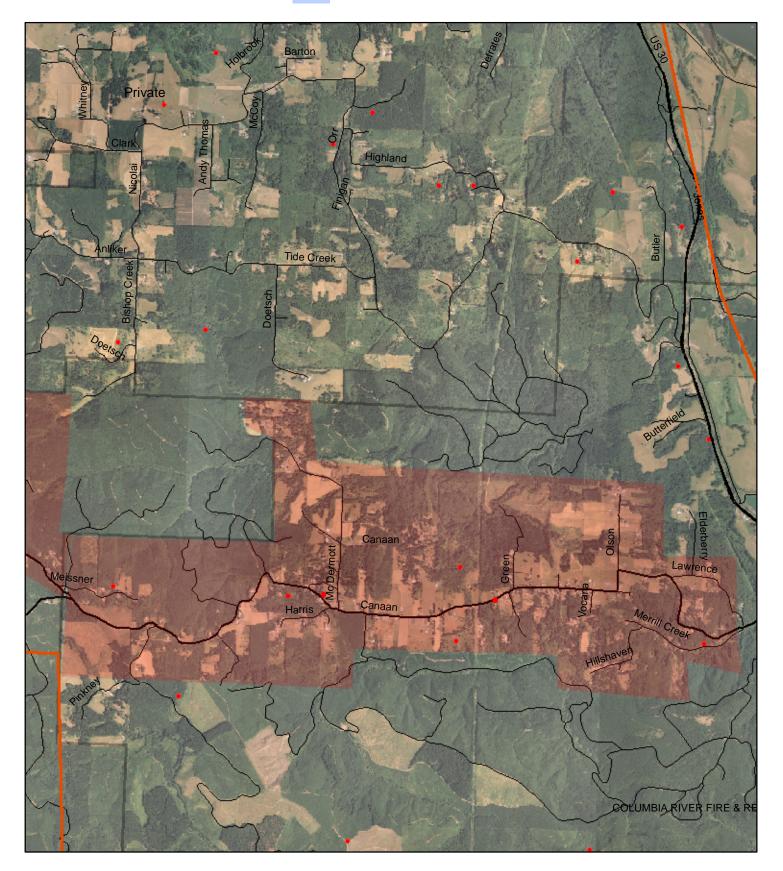
Columbia County Community Wildfire Protection Plan Cannan - Meissner Columbia River Fire and Rescue CAR

Cannan Meissner
RFPD Boundary

WUI Boundary
Federal

Stat_Fires 94-05 State





CAR Name:

Cannan-Meissner - Columbia River Fire & Rescue CAR

Priority Category:

Mod - 156

Description:

The Cannan-Meissner area is a rural residential area west of Deer Island along major county roads. Response times are extended and it includes some response areas under structural protection contracts. Many properties are located near ridgeline and are exposure to potential upslope fire runs of increased intensity. Many of the homes are located within active managed resource lands with exposure to logging slash fuels.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	300
18	46	12	15	65	156
Moderate	Moderate	Moderate	Low	High	

Communities at Risk - Focus Areas: Cannan -Meissner

Columbia River Fire and Rescue **Structural Fire Protection Agency:**

Oregon Department of Forestry Wildland Fire Protection Agency:

Specific Hazard Issues: Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction, fire safe landscaping, and structural ignitability

reduction practices

(Double click in box to enter) Forest and other natural cover fuels adjacent to properties - higher elevations, exposure to winds and steep slope (Alt. Enter for new line w/i box)

Area is subject to multiple Measure 37 claims and may increase in homesite density in the future.

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Initiate homesite assessment data collection. Consider access, structural ignitability, defensible space, fuel modification corridors. Develop database and GIS layers.	2008 - 2010	Columbia River Fire and Rescue/ Contractor(s)
Develop plan to address defensible space issues. Divide area geographically into WUI management zones targeting one zone annually, revisit on an ongoing scheduled basis	2008 - 2010	Columbia River Fire and Rescue/ ODF
Implement established WUI education/outreach program for fire safe landscaping including inspections, publications and targeted mailings. Link annual maintenance education and monitor success.	2008 Ongoing	Columbia River Fire and Rescue/

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2008 -2010 Ongoing	Columbia River Fire and Rescue/ODF
Identify locations for future water sources. Develop agreements with property oweners and install necessary infrastructure.	2007 - 2010 Ongoing	Columbia River Fire and Rescue
Evaluate need for and increase inventory of Type 2, 3 and 6 Engines	TBD	Columbia River Fire and Rescue/
Recruit, maintain adequate Volunteer staffing for Deer Island and Goble Stations.	Ongoing	Columbia River Fire and Rescue/
Monitor Measure 37 development. Provide timely comments and information to County Land Development on issues of fire safe development within the WUI.	Ongoing	Columbia River Fire and Rescue, ODF/
Target educational efforts and inspections where fuel adjacency (forest slash) is a concern by property owners and communities. Stress actions homeowners can take to reduce structural ignitability of their home.	Ongoing	Columbia River Fire and Rescue and ODF/ Forest Industry
Annex rural populated areas that are outside structural fire protection district into the CRF&R District.	2010	Columbia River Fire and Rescue/

CAR Name:	General CAR - Columbia River Fire & Rescue CAR	Priority Category:	Mod - 152

Description: Populated residential areas within the CRFR WUI adjacent to natural cover and forest fuels.

Additional "Priority or Focus Areas" to be identified as part of ongoing evaluation.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
15	42	14	19	62	152
Moderate	Moderate	Moderate	Moderate	High	

Communities at Risk - Focus Areas: Urban/Rural Residential within CRFR-WUI

Structural Fire Protection Agency: Columbia River Fire and Rescue

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment within the home ignition zone

Lacking defensible space through fuel modification/reduction and fire safe landscaping practices

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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Lead Agency/Cooperators WUI - Specific Projects Timeframe Columbia River Fire and Rescue/ ODF, Columbia County Land Develop broad level education and outreach for achieving defensible space, fire safe landscaping and reduced Development, Columbia County County Emergency Management, CEPA, Ongoing structural ignitability. Community Leaders, Media Leverage other pilot projects within the county to Columnia River Fire and Rescue, ODF, County Fire Districts, Columbia "showcase/publicize" reduction of risk in the home ignition County Fire Prevention Cooperative, Media Ongoing zone. Provide local educational resources via local web-sites, Columbia County Emergency Management/Fire District, ODF provide access to the Columbia County CWPP and education 2007 materials. Provide local inspections based on request.

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Monitor Measure 37 development. Provide timely information to County Planning on issues of increased density and fire assocaited risks within the WUI	Ongoing	Columbia River Fire and Rescue/ODF
Locate and map all significant structures including driveways and other access infrastructure.	2007 - 2009	Columbia River Fire and Rescue, Contractor(s), Joint county wide mapping project, other agencies.
Identify existing water sources. Develop flow rate data, map to GIS.	Ongong	Columbia River Fire and Rescue/ODF
Identify locations for future water sources. Develop agreements with property oweners and install necessary infrastructure.	Ongoing	Columbia River Fire and Rescue
Consider implementation of SB360 within Columbia County	2010	Columbia River Fire and Rescue

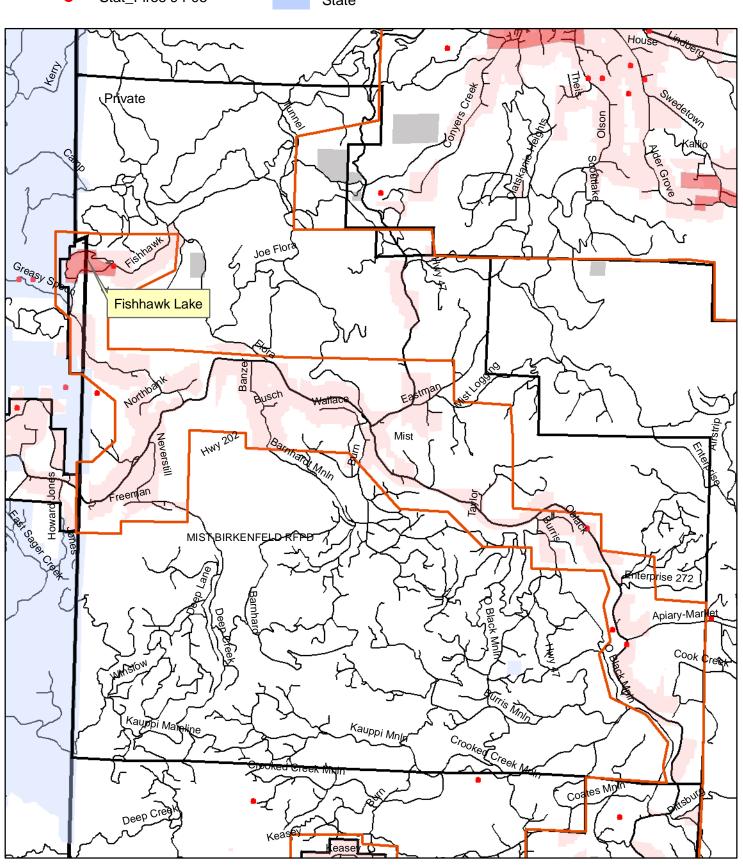
Mist-Birkenfeld

CAR

Columbia County Community Wildfire Protection Plan Mist Birkenfeld RFPD CAR







Columbia County Community Wildfire Protection Plan Fishhawk Lake - Mist Birkenfeld RFPD CAR



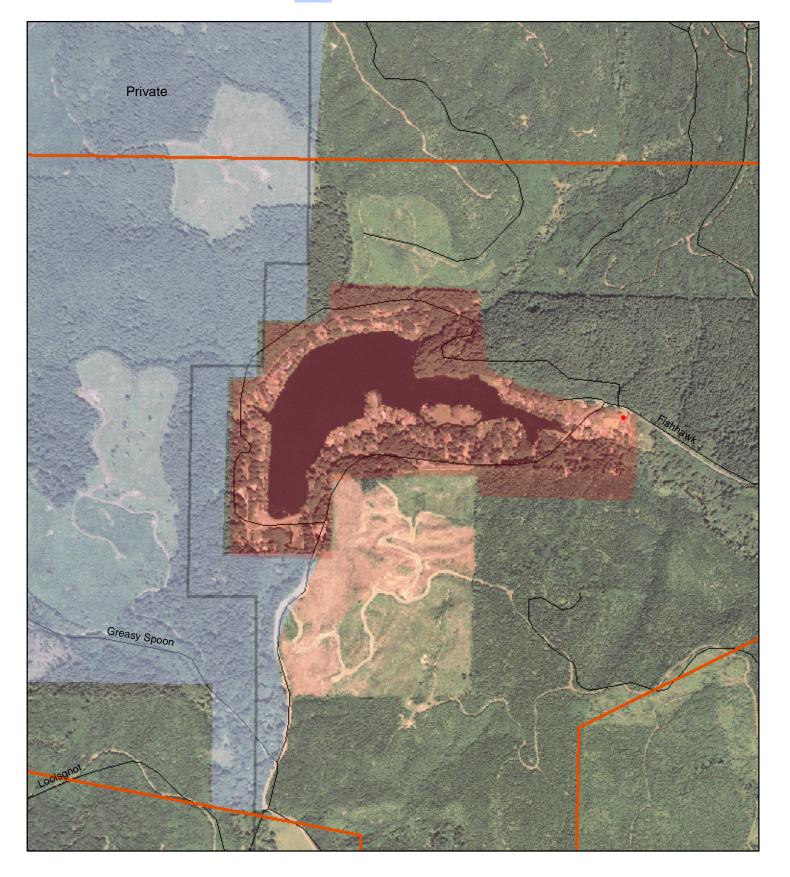
Fishhawk Lake

RFPD Boundary

WUI Boundary
Federal

Stat_Fires 94-05

State



CAR Name: Fishhawk Lake - Mist Birkenfeld RFPD CAR

Priority Category:

Mod - 141

Description:

Fishhawk Lake Estates is a community surrounding Fishhawk Lake in the NW portion of Columbia County and NE portion of Clatsop County. The community has a well developed homewoners association named Fishhawk Lake Recreation Club, Inc. The community does maintain a fire prevention steward and administers a program for approved campfire use. Community is well organized and able to adopt fuel reduction measures around the home ignition zones of vulnerable properties. There are **XX** homes in the Fishhawk Lake Estates surrounding the lake and associated properties. The development is surrounded primarily by private industrial and state forest ownership.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
20	43	5	28	45	141
Moderate	Moderate	Low	Moderate	Moderate	

Communities at Risk - Focus Areas: Fishhawk Lake Community

Structural Fire Protection Agency: Mist Birkenfeld RFD

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Structural ignitability assessment required to evaluate scope of issue

Lacking defensible space and fire safe landscaping around perimeter of inhabited structures

Evacuation, safety areas and escape routes not identified

Comprehensive pre-suppression plans not developed for community

Community safety areas not identified

Some homes within or adjacent to steep slopes, forest fuels.

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Schedule Fishhawk Lake Association meeting. Encourage participation in FireWise/USA® Program.	2007	Mist-Birkenfeld RFD/Oregon Dept. of Forestry/Fishhawk Lake Association
Distribute the publications to residences in area to support community presentation, FIREWISE or other. Support communities planning efforts.	2007-2008	Mist-Birkenfeld RFD/ Fishhawk Lake Association,ODF
Initiate homesite asessment data collection. Consider access, structural ignitability, defensible space fuel modification.	2007-2008	Mist-Birkenfeld RFD, Fishhawk Association

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Develop evacuation routes and complete a pre-planned operations and response plan.	2008	Mist-Birkenfeld RFD/Oregon Dept. of Forestry/Fishhawk Lake Association
Implement pilot project show casing a homesite with fire resistive contruction and fire resistive landscaping practices.	2007 - 2009	Mist-Birkenfeld RFD/Oregon Dept. of Forestry/Fishhawk Lake Association
Incorporate maintenance requirements of Home Ignition Zone as part of Association standards/requirements.	2007-2009	Mist-Birkenfeld RFD - Fishhawk Lake Association/
Consider zoning implications and requirements that structural ignitability be considered in current and future development and construction.	2007 - 2010	Mist-Birkenfeld RFD/ Columbia and Clatop County Land Development, Fishhawk Lake Association

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Locate and map all significant structures including driveways and other access infrastructure.	2007 - 2010	M-B RFD/ Contractor(s), Joint county wide mapping project, other agencies.
Target educational efforts and inspections where fuel adjacency (forest slash) is a concern by property owners and communities. Stress actions homeowners can take to reduce structural ignitability of their home.	2007 - Ongoing	M-B RFD-ODF/ Forest Industry
Identify existing water sources. Develop flow rate data, map to GIS.	2007 - 2010	M-B RFD/ ODF
Identify locations for future water sources. Develop agreements with property owners and install necessary infrastructure.	2007 - 2010	M-B RFD/ ODF

CAR Name:	General WUI - Mist- Birkenfeld RFPD - CAR	Priority Category:	133	l
Description:	Rural populations within fire district			
	Includes portions along Old Vespar 77 Road in Clatsop County within MBRFPD			

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
13	40	14	17	49	133
Low	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: General Community at Risk M-B RFPD

Structural Fire Protection Agency: Mist-Birkenfeld RFD

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues:

Homes lacking defensible space through fuel reduction, fire safe landscaping and practices that reduce structural

ignitability within the "Home ignition Zone"

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Implement established WUI education/outreach program for reduction of structural ignitability and fire resistive landscaping concepts. Include inspections with action checklists and other educational publications to homeowners.		M-B RFD/ ODF, Fire Defense Board, Columbia County County Emergency Management, Columbia County Fire Prevention Cooperative, Media
Provide information and discuss "Home Ignition Zone" and other critical factors to consider as part of driveway inspection meetings or issuance of burning permits. Provide structural ignitability inspections based on request.	2007 - Ongoing	M-B RFD/
Identify other priority or focus areas of rural development to target for stuctural ignitability assessment.	2008 -2010	M-B RFD/ ODF

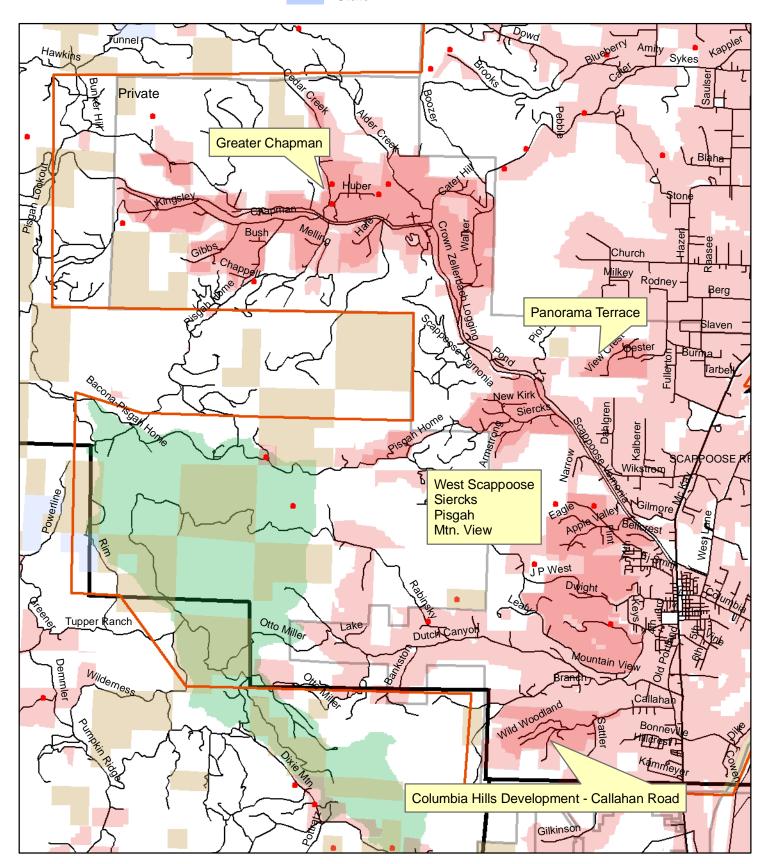
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Locate and map all significant structures including driveways and other access infrastructure.	2007 - 2010	M-B RFD/ Contractor(s), Joint county wide mapping project, other agencies.
Target educational efforts and inspections where fuel adjacency (forest slash) is a concern by property owners and communities. Stress actions homeowners can take to reduce structural ignitability of their home.	2007 - Ongoing	M-B RFD-ODF/ Forest Industry
Identify existing water sources. Develop flow rate data, map to GIS.	2007 - 2010	M-B RFD/ ODF
Identify locations for future water sources. Develop agreements with property owners and install necessary infrastructure.	2007 - 2010	M-B RFD/ ODF

Scappoose RFD

CAR

Columbia County Community Wildfire Protection Plan Scappoose RFPD CAR





Columbia County Community Wildfire Protection Plan Greater Chapman - Scappoose RFPD CAR



Greater Chapman

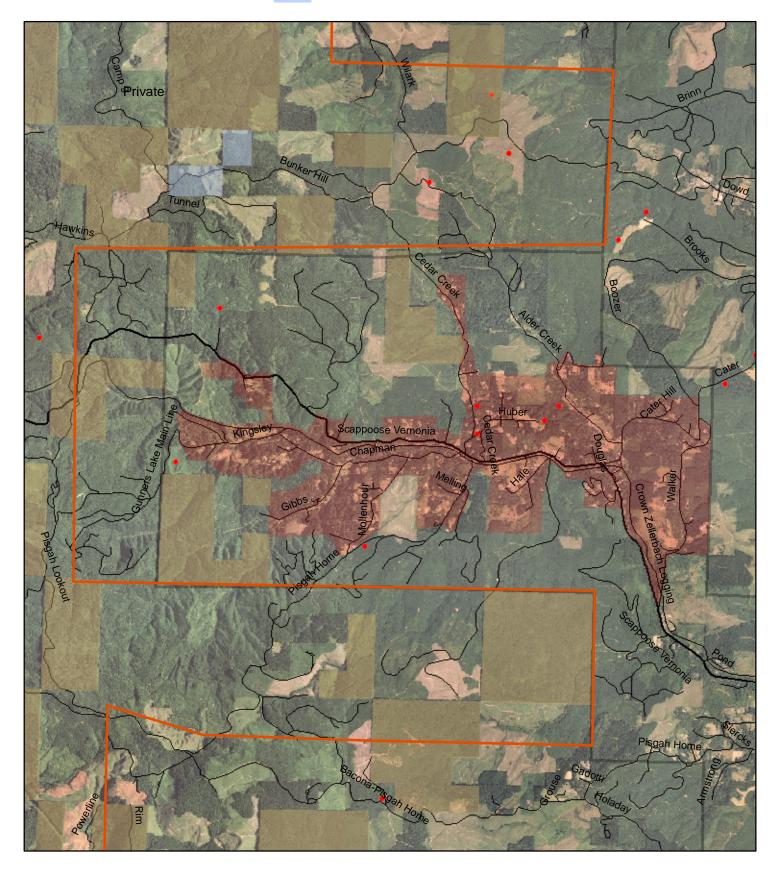
WUI Boundary

RFPD Boundary

Federal

Stat_Fires 94-05

State



CAR Name: Greater Chapman - Scappoose RFPD CAR

Priority Category:

High-197

Description:

Chapman and vicinity is a community of approximately **400** residences with a rural residential density in the moderate to high category. Development continues in parcels of smaller privately owned tax lots. The community lies in the western edge of the Scappoose RFPD with extended response times from the main station. A volunteer sub-station is located at Chapman with limited response capacity. Intensive forest management activities occur around and within this community. Public roads and adjacent BLM lands provide public access and some limited and dispersed recreational activities. Includes adjoining areas of rural development including Alder Creek.

Hazard Assessment Factors

(Double click in box to enter)

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Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
30	45	14	43	65	197
Moderate	Moderate	Moderate	High	High	

Communities at Risk - Focus Areas: Chapman Community and Vicinity

Structural Fire Protection Agency: Scappoose Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment, scope of issue

Lack of defensible space, fire safe landscaping and structural ignitability in the home ignition zone

Evacuation routes and safety areas not identified

Pre-fire operations plan not developed

Forest and other natural cover fuels adjacent to properties - higher elevations, exposure to winds and steep slope

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Schedule Chapman community meeting. Engage local residents by framing WUI issues at the local level.	2008	Scappoose RFD/ ODF, BLM, Landscape Contractors, Local Nursery
Initiate structural triage assessment data collection for structural ignitability and defensible space. Digitize structures using 200X 1/2 meter resolution aerial photos and incorporate survey data. Map addresses and ownership.	2008 - 2010	Scappoose RFD/ ODF, Grant Resource Contractor
Develop pre-planned fire operations plan including evacuation routes/process, identifying and mapping of all roads and bridges. Fully implement road signage and addressing.	2008	Scappoose RFD/ ODF, Columbia County Sheriff's Office

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Develop local campaign, including signs, for achieving and maintaining defensible space/fire resistive landscaping and reduced structural ignitability awareness within the "Home Ignition Zone"	2008-2010	Scappoose RFD/ ODF, Fire Defense Board, Fire Prevention Cooperative
Seek partnerships and apply for grant to facilitate fuel reduction and fire safe landscaping efforts. Include cost-share programs to support efforts. Develop pilot project and use media to "showcase" throughout county.	2008 - 2010	Scappoose RFD/ ODF. Local Landscape Contractors and Nurseries, Local Industries/Businesses
Partner with biomass, composting or other recycle service for homeowner fuel reduction disposal opportunities.	2008 - Ongoing	Scappoose RFD/ ODF, Columbia County,Local industry, ODF
Recruit and maintain volunteer resources for Chapman Station.	Ongoing	Scappoose RFD/
Locate and develop helicopter landing zone(s)	2007-2008	Scappoose RFD/
Provide clear addressing of all streets and structures. Meet needs of emergency response.	2007 -2010	Scappoose RFD/
Address human caused fire stars with community and develop targeted fire prevention efforts.	2008-2010	Scappoose RFD/ ODF, Columbia County Fire Prevention Cooperative, Local Community, Media
Develop an education DVD or other media regarding burning responsibilities, regulations and fire prevention.	2008 - 2010	Fire Defense Board-Scappoose RFD/ ODF, Columbia County Fire Prevention Cooperative, Media
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2007 -2009 Ongoing	Scappoose RFD/ ODF, BLM, Forest Industry
Target educational efforts and inspections where fuel adjacency (forest slash) is a concern by property owners and communities. Stress actions homeowners can take to reduce structural ignitability of their home.	Ongoing	Scappoose RFD/ ODF, BLM, Forest Industry
Address RR5 Zoning issues where primary and secondary fuels reduction and fire resistive construction requirements are not required. Work with Land Development Services, provide timely comment.	2007 - Ongoing	Scappoose RFD/ Land Development Services, ODF
Consider Implemention of SB360	2010	Columbia County/ Scappoose RFD, ODF

Columbia County Community Wildfire Protection Plan Callahan/Columbia Hills - Scappoose RFPD CAR



Callahan-Columbia Hills

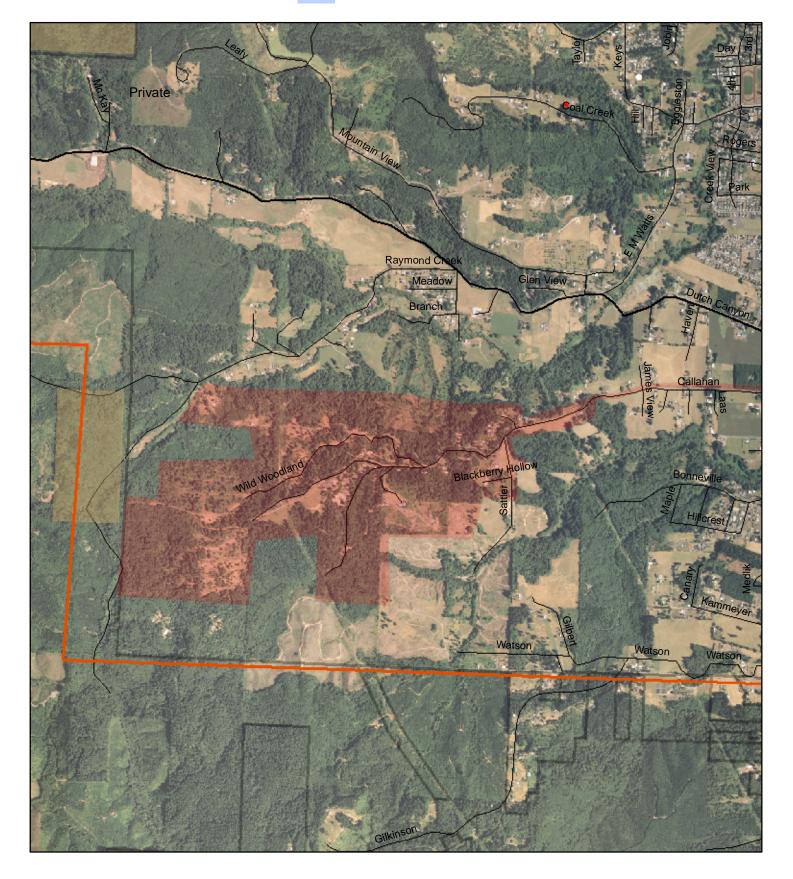
WUI Boundary

RFPD Boundary

Federal

Stat_Fires 94-05

State



CAR Name: Callahan-Hillcrest Development - Scappoose RFPD CAR

Priority Category:

Mod. - 182

Description:

Callahan Road is is in the south portion of Scappoose RFPD. Current and future development in the area is a concern with major development planned (Columbia Hills Sub-Division). Only one road serves for ingress and egress to this developing area. Input into future development considerations and locations of shaded fuel breaks as well as structural ignitability, access and defensible homesite landscaping are factors. Potential for 140 homesites. Includes other residential areas along Callahan Road.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
23	43	11	40	65	182
Moderate	Moderate	Moderate	High	**High	

Communities at Risk - Focus Areas:

Callahan Road/Columbia Hills Dev.

** Development...Anticipated if not pre-empted

Structural Fire Protection Agency:

Scappoose Rural Fire Department

Wildland Fire Protection Agency:

Oregon Department of Forestry

Specific Hazard Issues:

Wildland fire exposure within and adjacent to development

Evacuation and escape routes not identified, dead end road to development

Lack of homeowner education regarding fire risks, prevention capacity in community

Development without defensible space and shaded fuel break considerations

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Consider fire siting standards for RR5 zoned areas or other land development requirements.	2007-2008	Columbia County Land Development Services/ Fire Defense Board
Meet with developers and land development services regarding structural ignitability, defensible space and shaded fuel break considerations. Consider requirements of roads and water supply. Assist developer in production of fire plan as required by County.	2007 - 2008	Scappoose RFD/ ODF, Land Development Services, Builder-Owner
Work with developer to provide model fire siting/construction practices/fire safe landscaping" showcase". Involve media for broader community education.	2007 - Ongoing	Scappoose RFD/ ODF, Land Development Services, Builder- Owner/Homeowners, Hillcrest Homeowners Association, Media, Local Nursery

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Initiate early contact with homeowners association regarding "Firewise Communities/USA®" program and encourage application, participation and recognition as Firewise Community.	2007	Scappoose Rural Fire District -ODF/ Homeowners, Hillcrest Homeowners Association
Provide support to emerging community and homeowners association for all fire safety and planning events. Assist in development of codes, covenants and restrictions.	Ongoing	Scappoose RFD - ODF/
Develop pre-planned fire operations plan including evacuation routes, roads, addressing, bridge locations and restrictions, water supply locations, staging areas,, structura triage data etc. Identify problematic areas and implement measures for resolution.	2007 - Ongoing	Scappoose RFD/ ODF

Columbia County Community Wildfire Protection Plan West Scappoose - Scappoose RFPD CAR



West Scappoose

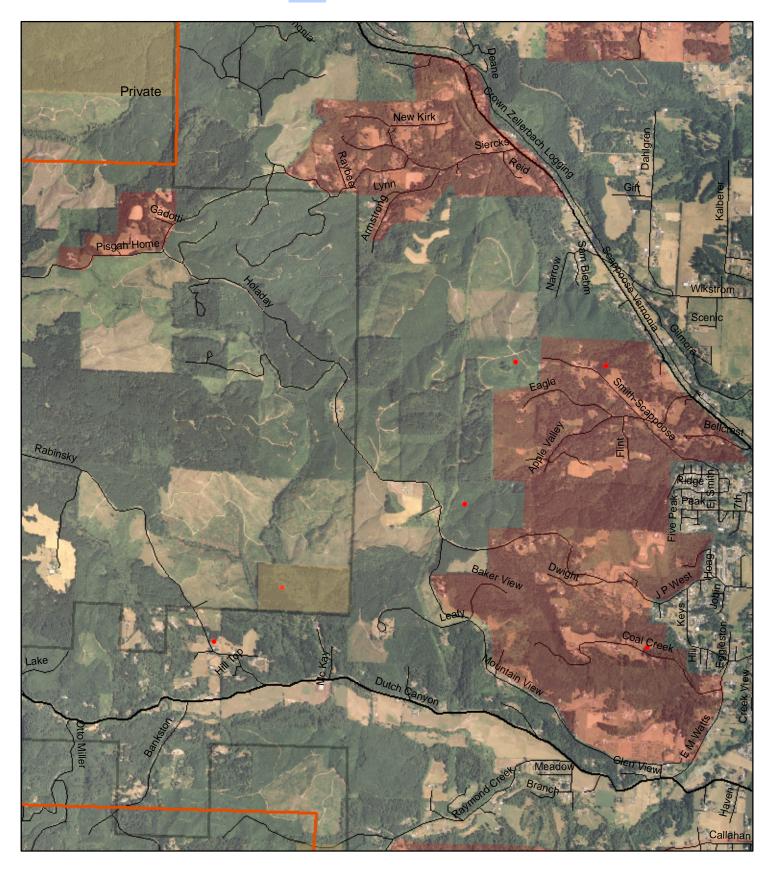
WUI Boundary

RFPD Boundary

Federal

Stat_Fires 94-05

State



JP West/Mtn. View/Pisqah/Apple Valley/Siercks - Scappoose RFPD CAR

Priority Category:

Mod - 177

Description:

CAR Name:

Rural residential and some sub-division development in the west hills of Scappoose (West Scappoose) and to the west ridgeline of Mtn. View Road. Steeper slopes and intermix of land use activities increases the hazards for this area. Existing homes and future development require assessment and practical application of fuel modification/fire safe landscaping within the home ignition zone. Additional areas along Apple Valley, Siercks and Pisgah Home Roads with residential areas adjacent to resource lands.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
20	49	12	31	65	177
Moderate	Moderate	Moderate	High	Moderate	

Communities at Risk - Focus Areas:

JP West/Mtn.View/Siercks/Pisgah/Apple V

Structural Fire Protection Agency: Scappoose Rural Fire Department

Wildland Fire Protection Agency:

Oregon Department of Forestry

Specific Hazard Issues: Homes lacking defensible space through fuel reduction, fire safe landscaping and practices that reduce structural

ignitability within the "Home ignition Zone"

Forest and other natural cover fuels adjacent to properties Steeper slopes and exposure to intermix of land use

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(Alt. Enter for new line w/i box) WUI - Specific Projects Timeframe Lead Agency/Cooperators Implement localized education campaign to encourage Scappoose RFD/ ODF homeowners to reduce structural ignitability through fuel 2008 - 2010 reduction and fire safe landscaping practices within the "Home Ignition Zone". Conduct local structural ignitability assessments using Scappoose RFD/ ODF, Grant Resource Contractor structural triage form, collect data. Provide owners input 2008 - 2010 and reference material regarding improvements to reduce structural ignitability. Consider partnerships for fuel reduction in home ignition Scappoose RFD/ ODF, Columbia County, Waste Management, zones and non-burning alternatives such as chipping, Composting Recycle Industry 2007 - 2010 recycle etc.

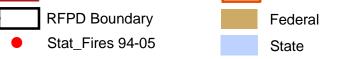
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Provide local educational resources via local web-sites, provide access to the Columbia County CWPP and education materials.	2007 - 2008	Columbia County Emergency Management/ Fire District, ODF
Locate and map all significant structures including driveways and other access infrastructure. Provide clear addressing of all driveways.	2007 - 2010	Scappoose RFD/ Contractor(s), Joint county wide mapping project, other agencies.
Identify existing water sources. Develop flow rate data, map to GIS.	Ongong	Scappoose RFD/ ODF, Forest Industry
Identify locations for future water sources. Develop agreements with property oweners and install necessary infrastructure.	Ongoing	Scappoose/ ODF, Forest Industry
Address RR5 zoning issues where primary and secondary fuels reduction and fire resistive construction requirements are not required. Work with Land Development Services, provide timely comment.	2007 - Ongoing	Scappoose RFD/ Land Development, ODF

Columbia County Community Wildfire Protection Plan Panorama Terrace - Scappoose RFPD CAR



Panorama Terrace

WUI Boundary





CAR Name:	Panorama Terrace - Scappoose RFPD CAR	Priority Category:	Mod - 150
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Description:

Rural population with a higher density of structures with dead-end road system. Proximity to industrial forest lands and active forest management. Intermise of fields and forest. Defined development where assessment and education could be delivered. Two elevated tanks provide water supply to hydrants in area.

Hazard Assessment Factors

(Double click in box to enter)

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
19	41	14	16	60	150
Moderate	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: Panorama Terrace

Structural Fire Protection Agency: Scappoose Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction, fire resistive landscaping ,and structural ignitability

reduction practices

Forest and other natural cover fuels adjacent to properties

Dead-end road system and west side homes exposed to slope

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Fire operations plan not developed

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Implement localized education campaign to encourage homeowners to reduce structural ignitability through fuel reduction and fire safe landscaping practices within the "Home Ignition Zone".	2008 - 2010	Scappoose RFD/ Contractor(s)
Conduct local structural ignitability assessments using structural triage form, collect data. Provide owners input and reference material regarding improvements to reduce structural ignitability.	2008 -2010	Scappoose RFD/
Develop evacuation routes and complete a pre-planned response plan. Address potential evacuation and safe location for farm animals. Identify other problematic areas, implement possible measures for resolution.	2008 -2010	Scappoose RFD/ ODF, Columbia County Sheriff's Office

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2008 -2010 Ongoing	Scappoose RFD/ ODF
Identify locations for future water sources. Develop agreements with property oweners and install necessary infrastructure.	2007 - 2010 Ongoing	Scappoose RFD/

CAR Name: General CAR - Scappoose RFD CAR

Priority Category:

Mod - 157

Description:

Populated residential areas within the SRFPD CAR-WUI.

Additional "Focus Areas" to be identified as part of ongoing evaluation or as priorities change.

WUI boundary includes Scappoose municipal watershed.

Hazard Assessment Factors

Diek	Howard	Ductostian Canability	Values at Diels	Charles and Mala and hilitar	Takal
Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
15	45	14	19	64	157
Moderate	Moderate	Moderate	Moderate	High	

Communities at Risk - Focus Areas: Urban/Rural Residential within SRFPD-WUI

Structural Fire Protection Agency: Scappoose Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment within the home ignition zone

Lacking defensible space through fuel modification/reduction and fire safe landscaping practices

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Develop broad level education and outreach for achieving defensible space, fire safe landscaping and reduced structural ignitability within the "Home Ignition Zone".	2007 - Ongoing	Scappoose RFD/ ODF, Fire Prevention Cooperative
Provide local educational resources via local web-sites, provide access to the Columbia County CWPP and education materials. Provide local inspections based on request.	Ongoing	Scappoose RFD/ Columbia County Emergency Management/Fire Districts, ODF
Locate and map all significant structures including driveways and other access infrastructure.	2007 - 2009	Scappoose Rural Fire Protection District/ Contractor(s), Joint county wide mapping project, other agencies.

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Identify existing water sources. Develop flow rate data, map to GIS.	Ongong	Scappoose RFD/ ODF
Identify locations for future water sources. Develop agreements with property oweners and install necessary infrastructure.	Ongoing	Scappoose RFD/
Provide clear addressing of all streets and structures. Meet needs of emergency response.	2007 -2009	Scappoose RFD/
Monitor Measure 37 development and other rural residential developments. Provide timely information to County Planning on issues of increased density and fire assocaited risks within the WUI	Ongoing	Scappoose RFD/
Consider implementation of SB360 within Columbia County	2010	Columbia County/ Fire Defense Board, CWPP Committee

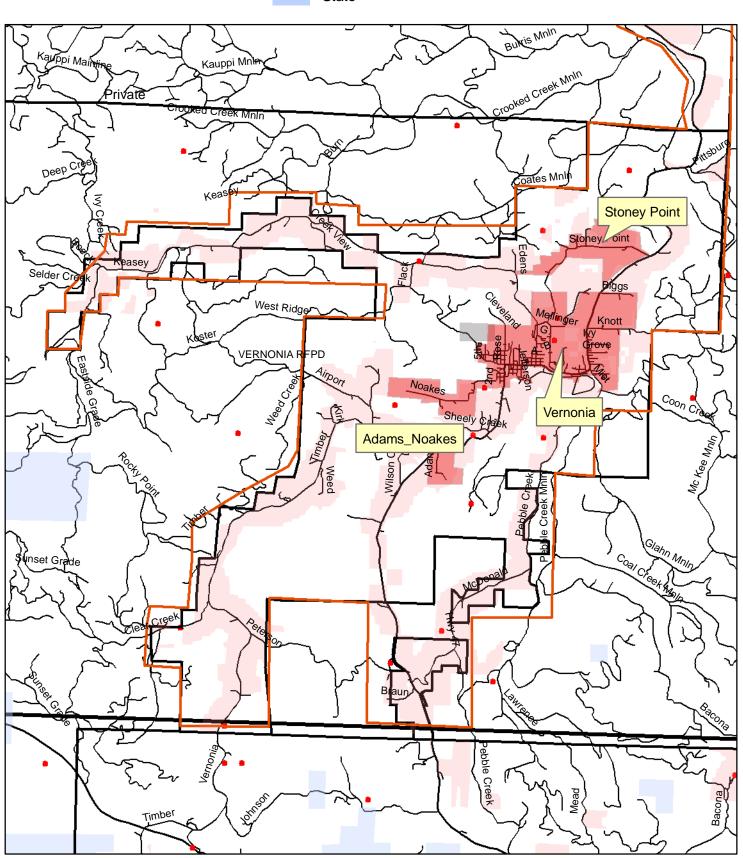
Vernonia RFD

CAR

Columbia County Community Wildfire Protection Plan Vernonia RFPD CAR







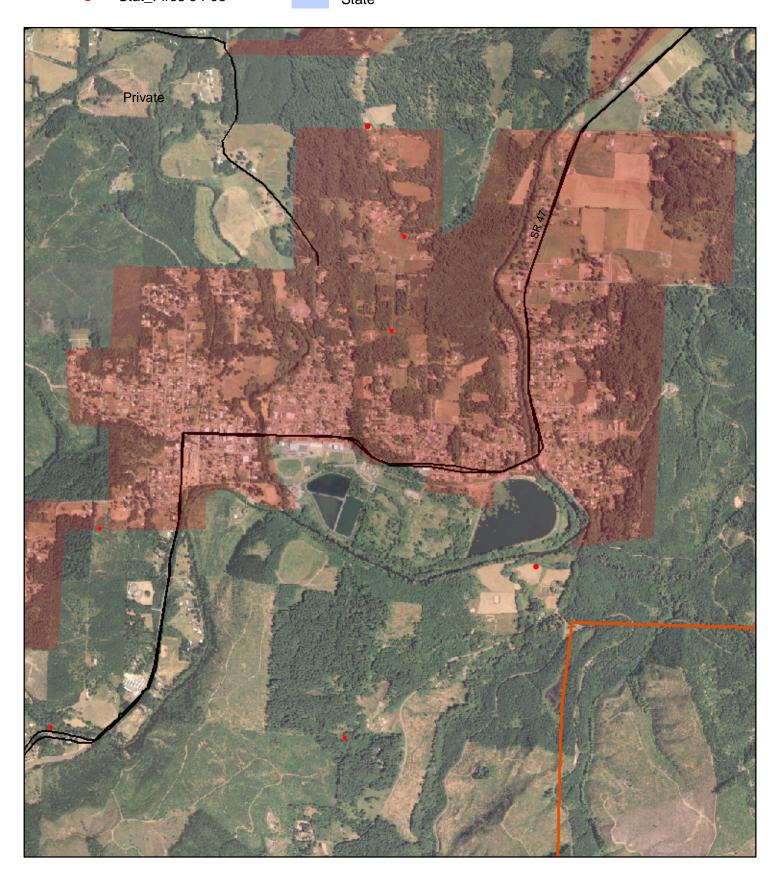
Columbia County Community Wildfire Protection Plan City of Vernonia - Vernonia RFPD CAR



WUI Boundary
Federal







CAR Name:	City of Vernonia - Vernonia RFD CAR	Priority Category:	Mod - 163
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Description:

Vernonia is a small community located within the Nehalem River Valley and has a population estimated at 2,340. Located in the SW section of the County, the city is located within the heart of timber producing resource lands. Areas within the city limits contain natural cover fuels that could threaten adjacent homes in the event of a wildfire. The perimeter dwellings of the city have exposures from adjacent natural cover and forest fuels.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
21	46	6	45	45	163
Moderate	Moderate	Low	High	Moderate	

Communities at Risk - Focus Areas: City of Vernonia/UGB and Vicinity

Structural Fire Protection Agency: Vernonia Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction and fire safe landscaping practices

Forest and other natural cover fuels adjacent and surrounding city perimeter

Human caused ignition risks in the WUI

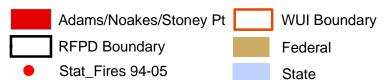
Occluded areas within the city where steep slopes and natural cover fuels can present fire hazards to properties

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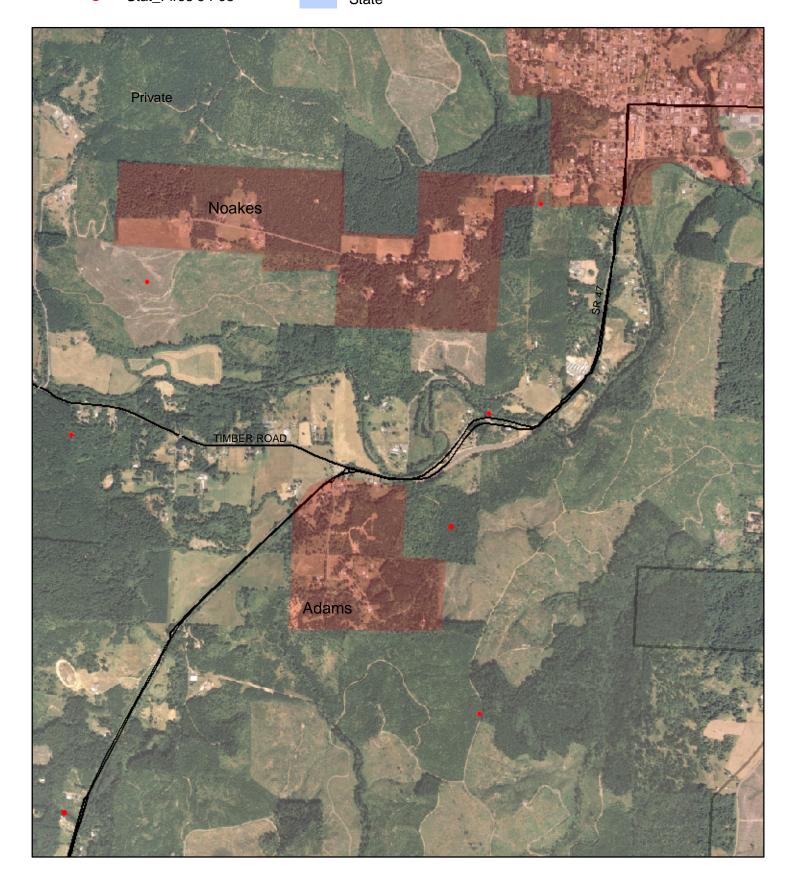
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Schedule Town Hall presentation and exhibit to engage community regarding CWPP and local issues/action plans	2007	Vernonia RFD/ City of Vernonia, ODF
Develop and implement an awareness and education campaign for the OA Hill area between State St. and Texas Ave. Conduct structural triage assessment as part of education campaign dealing with structural ignitability and maintenance of the "Home Ignition Zone".	2007-2009	Vernonia RFD/ City of Vernonia, ODF
Implement other targeted education efforts to encourage homeowners to reduce structural ignitability through fuel reduction and fire safe landscaping practices within the "Home Ignition Zone". Target perimeter and finger streets that are adjacent to natural cover and forest fuels.	2008-2009	Vernonia RFD/ City of Vernonia, ODF

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Establish a community event that facilitates collection of yard or other vegetation debris removed from the Home Ignition Zone. Incorporate local business and industry in seeking opportunities and partnerships. Utilize non-burning alternatives.	2008-2009	Vernonia RFD/ City of Vernonia, ODF, Waste Management, Chamber of Commerce, Businesses, Landscaping Contractors
Coordinate with City of Vernonia Planning regarding growth and development issues relative to structural ignitability and adequate fire safe landscaping around homes. Provide comments in a timely manner.	Ongoing	Vernonia RFD/ City of Vernonia, Developers and Contractors
Develop an exhibit with handouts and other materials relating to Home Ignition Zone and preparing homes in the interface for wildfire readiness. Utilize volunteer organization for public outreach at the Vernonia Jamboree.	2008-2010	Vernonia RFD/ ODF, Local Volunteer Organizations, Event Organizers, Sponsors

Columbia County Community Wildfire Protection Plan Adams/Noakes/Stoney Point - Vernonia RFPD CAR







Columbia County Community Wildfire Protection Plan Adams/Noakes/Stoney Point - Vernonia RFPD CAR







WUI Name:	Adams/Noakes/Stoney Point - Vernonia RFD WUI	Priority Category:	Mod - 149	l
Description:	Rural residential concentrations on Adams Road (Elk Run), Noakes Road and Stoney Point Roads.			0001001001000

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
22	47	10	20	50	149
Moderate	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: Adams/Noakes/Stoney Point Roads, Rural Residential Areas

Structural Fire Protection Agency: Vernonia Rural Fire Protection District

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction and fire safe landscaping practices

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Implement localized education campaign to encourage homeowners to reduce structural ignitability through fuel reduction and fire safe landscaping practices within the "Home Ignition Zone".	2007 - 2010	Vernonia RFD/ ODF
Conduct local structural ignitability assessments using structural triage form, collect data. Provide owners input and reference material regarding improvements to reduce structural ignitability.	2008-2010	Vernonia RFD/ ODF
Address RR5 Zoning issues where primary and secondary fuels reduction and fire resistive construction requirements are not required. Work with Land Development Services, provide timely comment/recommendations.	2007 - Ongoing	Vernonia RFD/ Land Development Services, ODF

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
During driveway inspections and burn permit inspections, provide information and publications to owners regarding reducing structural ignitability within the Home Ignition Zone. Ensure adequate address signage district wide.	2007-Ongoing	Vernonia RFD/ ODF
Consider partnerships for fuel reduction in home ignition zones and non-burning alternatives such as chipping, recycle etc.	2007 - 2010	Vernonia RFD/ ODF
Partner with Oregon State Parks - Linear Park regarding fire prevention signing and kiosk opportunities.	2007 - Ongoing	Vernonia RFD & ODF/ Oregon State Parks,
Identify existing water sources. Develop flow rate data, map to GIS. Joint project and information sharing with ODF.	2007 - 2009	Vernonia RFD/ ODF, Forest Industry, Local Landowners
Identify locations for future water sources. Develop agreements with property owners and install necessary infrastructure.	2007 - 2009	Vernonia RFD/ ODF, Forest Industry, Local Landowners

CAR Name:	General WUI - Vernonia RFD CAR	Priority Category:	Mod - 144
Description:	All rural residential areas within the fire district exposed to natural cover and wildla	nd fire threats.	
-	Additional "Focus Areas" to be identified as part of ongoing evaluation or as prioriti	es change.	
		·	

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
16	44	14	17	53	144
Moderate	Moderate	Moderate	Moderate	Moderate	

Communities at Risk - Focus Areas: Rural Residential in WUI

Structural Fire Protection Agency: Vernonia Rural Fire Department

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Homes lacking defensible space through fuel reduction, fire safe landscaping and practices that reduce structural

ignitability within the "Home ignition Zone"

Forest and other natural cover fuels adjacent to properties

Human caused ignition risks in the WUI

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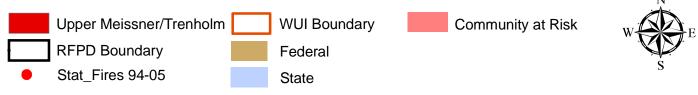
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Develop broad level education and outreach for achieving defensible space, fire safe landscaping and reduced structural ignitability.	Ongoing	Vernonia RFD/ ODF, Columbia County Land Development, Columbia County County Emergency Management, Columbia County Fire Prevention Cooperative, CEPA, Community Leaders, Media
Provide information and discuss "Home Ignition Zone" and other critical factors to consider as part of driveway inspection meetings or issuance of burning permits. Provide structural ignitability inspections based on request.	Ongoing	Vernonia RFD/
Leverage local or other pilot projects within the area to "showcase/publicize" reduction of risk in the home ignition zone.	Ongoing	Vernonia RFD/ ODF, County Fire Districts, Columbia County Fire Prevention Cooperative, Media

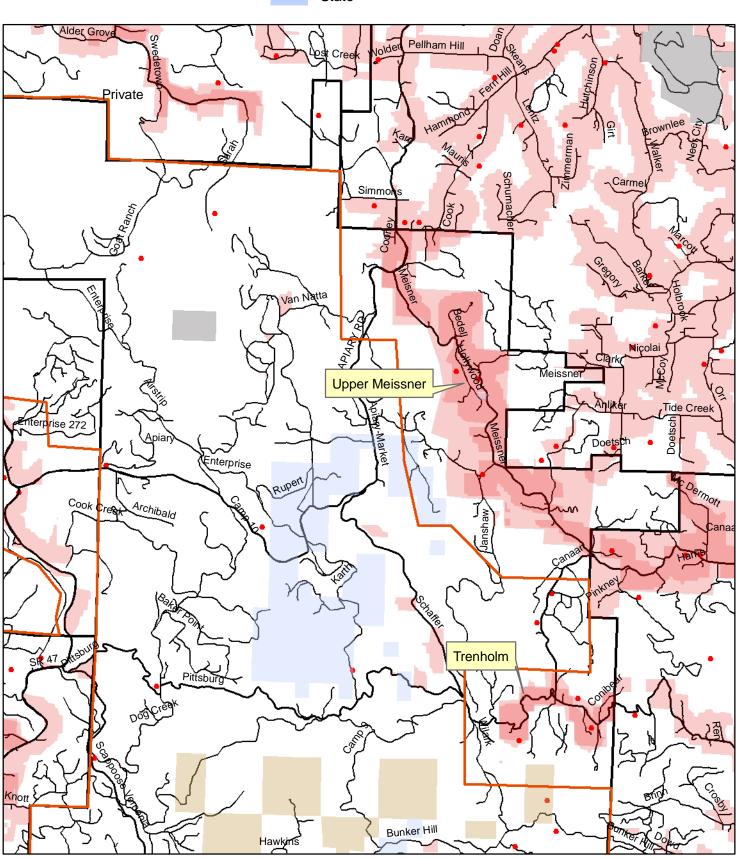
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Provide local educational resources via local web-sites, provide access to the Columbia County CWPP and education materials.	2007 - 2008	Columbia County Emergency Management/ Fire District, ODF
Locate and map all significant structures including driveways and other access infrastructure.	2007 - 2010	Vernonia RFD/ Contractor(s), Joint county wide mapping project, other agencies.
Identify existing water sources. Develop flow rate data, map to GIS.	Ongong	Vernonia RFD/ ODF
Identify locations for future water sources. Develop agreements with property oweners and install necessary infrastructure.	Ongoing	Vernonia RFD/
Monitor Measure 37 development. Provide timely information to County Planning on issues of increased density and fire assocaited risks within the WUI	Ongoing	Vernonia RFD/ ODF, Land Development Services
Consider implementation of SB360 within Columbia County	2010	Fire Defense Board

County

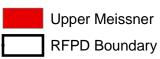
CAR

Columbia County Community Wildfire Protection Plan Columbia County (Outside RFD) CAR



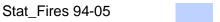


Columbia County Community Wildfire Protection Plan Upper Meissner Columbia County (Outside RFD) CAR



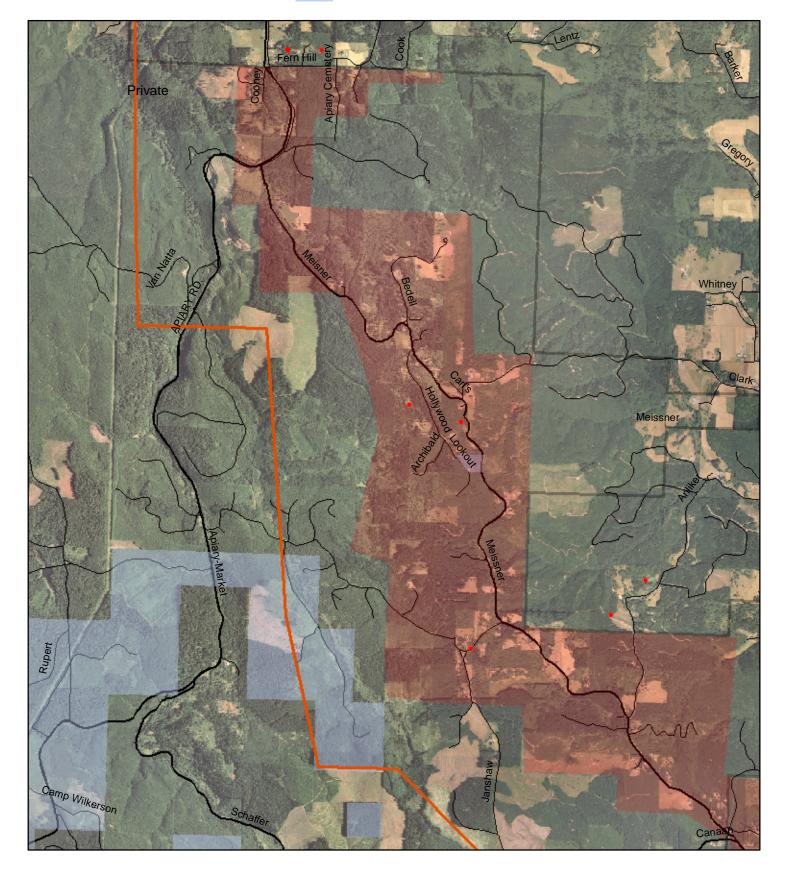
WUI Boundary

Federal









CAR Name:	Meissner - County CAR (Outside Fire District)	Priority Category:	High - 173
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Description:

Rural residential density in the upper Meissner Road area that is <u>outside structural fire protection boundaries</u>. Some properties are under contract with CRF&R but the majority are not. These properties require longer response times. These structures are within forest resource lands and forest management activities often are conducted within or adjacent to these homes.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
18	41	34	15	65	173
Moderate	Moderate	High	Low	High	

Communities at Risk - Focus Areas: Upper Meissner_No Structural Protection

Structural Fire Protection Agency: None, some contracts with CRF&R

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Area outside structural fire protection boundary, extended response if response provided

Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction, fire safe landscaping, and structural ignitability

reduction practices

Forest and other natural cover fuels adjacent to properties

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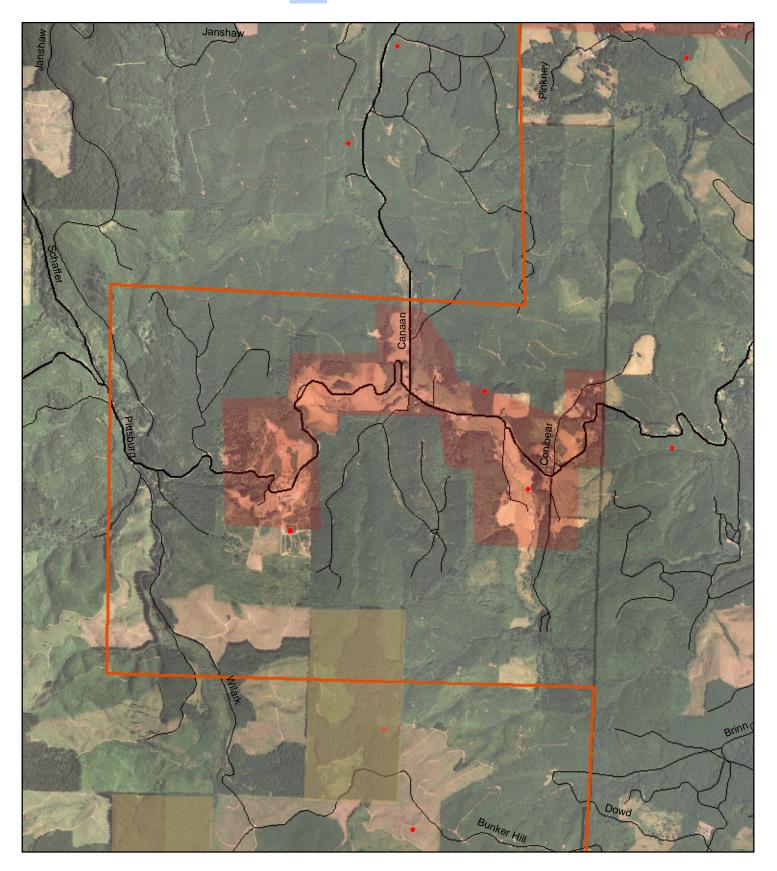
WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Initiate homesite assessment data collection. Consider access, structural ignitability, defensible space, fuel modification corridors. Develop database and GIS layers.	2007 - 2010	ODF/ Contractor's)
Implement established WUI education/outreach program for reduction of structural ignitability and fire resistive landscaping concepts. Include inspections with action checklists and other educational publications to homeowners.	2007-2008 Ongoing	ODF/Columbia River Fire & Rescue
Target educational efforts and inspections where fuel adjacency (forest slash) is a concern by property owners and communities. Stress actions homeowners can take to reduce structural ignitability of their home.	Ongoing	ODF/ Forest Industry

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
CRF&R to consider annexation of rural populated areas that		Columbia River Fire & Rescue/
are outside structural fire protection district into the District.	2010	
Identify and inventory water sources in area into GIS		ODF/
database. Share data with countywide database	2007 - 2010	
Utilize countywide sign campaign directed at location to increase awareness and action by homeowners	2007 - 2009	ODF/ Columbia River Fire & Rescue
Monitor Measure 37 development. Provide timely comments and information to County Land Development on	Ongoing	Columbia River Fire & Rescue, ODF/
issues of fire safe development within the WUI.		
Consider Implementing SB 360, The Wildland Urban		ODF/Columbia County/Fire Districts
Interface Act	2012	

Columbia County Community Wildfire Protection Plan Trenholm - Columbia County (Outside RFD) CAR







CAR Name: Trenholm/U.Pittsburg Road - County CAR (Outside Fire District)	Priority Category:	Mod -161
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Description:

Rural residential density in the upper Pittsburg Road area that is <u>outside structural fire protection boundaries</u>. These properties require longer response times. These structures are within forest resource lands and forest management activities often are conducted within or adjacent to these homes.

Hazard Assessment Factors

Risk	Hazard	Protection Capability	Values at Risk	Structural Vulnerability	Total
0 - 40	0 - 80	0 - 40	0 - 50	0 - 90	Value
Fire Occurrence Ignition Risk	Fuels/Weather/Topography	Fire Response Prevention Capacity Community Preparedness	Life Property Infra-Structure	Structure - Roofing etc. Defensible Space Fire Access	
15	41	34	7	64	161
Moderate	Moderate	High	Low	High	

Communities at Risk - Focus Areas: Trenholm/Upper Pittsburg

Structural Fire Protection Agency: None or individual owner contract basis

Wildland Fire Protection Agency: Oregon Department of Forestry

Specific Hazard Issues: Area outside structural fire protection boundary, extended response if response provided

Lacking structural ignitability and access assessment, scope of issue

Lacking defensible space through fuel modification/reduction, fire safe landscaping, and structural ignitability

reduction practices

Forest and other natural cover fuels adjacent to properties

(Double click in box to enter)
(Alt. Enter for new line w/i box)

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Initiate homesite assessment data collection. Consider access, structural ignitability, defensible space, fuel modification corridors. Develop database and GIS layers.	2007 - 2009	ODF/ Contractor(s), Columbia River Fire & Rescue
Implement established WUI education/outreach program for reduction of structural ignitability and fire resistive landscaping concepts. Include inspections with action checklists and other educational publications to homeowners.	2007-2009 Ongoing	ODF/Columbia River Fire & Rescue
Target educational efforts and inspections where fuel adjacency (forest slash) is a concern by property owners and communities. Stress actions homeowners can take to reduce structural ignitability of their home.	Ongoing	ODF/ Forest Industry

WUI - Specific Projects	Timeframe	Lead Agency/Cooperators
Consider annexation of rural populated areas that are outside structural fire protection district into the CRF&R District.	2010	Columbia River Fire & Rescue/
Utilize countywide sign campaign directed at location to increase awareness and action by homeowners	2007 - 2009	ODF/ Columbia River Fire & Rescue
Inventory local water source locations into GIS database. Digitize home locations	2007 -2009	ODF/
Consider Implementing SB 360, The Wildland Urban Interface Act	2012	ODF/Columbia County/Fire Districts

Appendix

APPENDIX A

Columbia County Community Wildfire Protection Plan Web Resource Links:

Firewise

http://www.firewise.org

Firewise Landscape and Construction Checklist (pdf format)

http://www.firewise.org/usa/files/fwlistsz.pdf

Living with Fire

http://www.fs.fed.ur/r3/publications/documents/livingwithfire.pdf

Columbia County

http://www.co.columbia.or.us/home.asp

Oregon Department of Forestry

http://www.odf.state.or.us

Oregon Forestland-Urban Interface Protection Act

http://oregon.gov/ODF/FIRE/SB360/sb360.shtml

Oregon Wildfire Protection Plans

http://www.oregon.gov/ODF/FIRE/FirePlans.shtml

Recommended Fire Siting Standards for Structures (Land Use Planning Notes, 1991)

http://www.odf.state.or.us/DIVISIONS/protection/fire protection/prev/Structure Road.a sp?id=3070101

Oregon State University Extension Service

http://www.cof.orst.edu/cof/extended/extserv/wildlandfire/

Office of State Fire Marshal

http://egov.oregon.gov/OSP/SFM/Conflag_and_Wildland.shtml

Fire Free

http://www.firefree.org/

Keep Oregon Green

http://www.keeporegongreen.com

National Fire Plan

http://www.fireplan.gov/

Bureau of Land Management Fire Prevention

http://www.blm.gov/or/index.htm

<u>APPENDIX B</u>

Columbia County Community Wildfire Protection Plan Fire District Suppression Resource Capacity

Clatskanie Rural Fire Department

- Main Station @ Clatskanie,
- Three volunteer sub-stations at Alston, Quincy
- Paid Staff, 3 Chief Officers, 3 Firefighters
 24 volunteers

APPARATUS			TANK	
#/NAME	TYPE	MAKE	CAPACITY	PUMP CAPACITY MAX.
E 481	1	Pierce	1000	1500
E 486	1	Mac	1000	1000
E 487	1	Mac	1000	1750
E 488	1	Pierce	2500	1500
WT 485	2	Freightliner	4000	400
B 481	3	GI 2.5	800	550
B 482	3	GI 2.5	800	95
B 484	2	Ford	600	750
UTILITY 486	7	Chevrolet	150	25
UTILITY 482		Ford 4x4 PU		
COMMAND		Chevrolet	N/A	N/A
R 481		Freightliner	N/A	N/A
M 482		Lifeline	N/A	N/A
M 483		Lifeline	N/A	N/A

Columbia River Fires and Rescue

3 Staffed Stations: St. Helens Main , Fairgrounds and Rainier
 4 Volunteer Sub-Stations: Columbia City, Deer Island, Goble and Fernhill

Paid Staff: 5 Chief Officers, 36 Firefighters

Volunteers: 50

APPARATUS			TANK	
# NAME	TYPE	MAKE	CAPACITY	PUMP CAPACITY MAX.
S471	1	Pierce/Squrt 50'	500	1500
E471Z	1	Pierce/Dash	1000	1500
E472	1	Peirce	750	1500
E494	1	Pierce	750	1500
E471	2003	Pierce/Contender	1000	1500
E491 *	2003	Pierce/Contender	1000	1500
S491	1	Peirce/Squrt 65'	500	1500
E4921 AWD *	6	Peirce	200	450
E4723	6	Mallory	250	120
E4926	6	Chev 1 ton	200	120
WT471	2	GMC	2500	750

WT496	2	International	2500	1250
WT494	2	International	2500	1250
WT491	2	Ford	3000	1000
R471		Freightliner	RESCUE	N/A
R472		Ford	RESCUE	N/A
M471		Ford	Ambulance	N/A
M472		Ford/Lifeline 4x4	Ambulance	N/A
M471Z		Ford/Lifeline	Ambulance	N/A
M471Y		Ford	Ambulance	N/A
M491Z		Chev 4X4	Ambulance	N/A
FB471		Monarch-J2609	BOAT	500

Mist-Birkenfeld Rural Fire Department

- Main at Hwy. 202 near Banzer Road
- 3 Sub-stations Fishhawk, Peterson and Sager Creek
- Paid Staff: 2 Chief Officers
- 45 Volunteers

APPARATUS			TANK	
#/NAME	TYPE	MAKE	CAPACITY	PUMP CAPACITY MAX.
E461	I	Seagraves	1000	1250
E462	Ш	Chev/Mallory Ford/Western	500	130
E463	П	States	1000	1000
E4621	VI	Chev 4 X 4	250	70
E4623	VI	Ford 4 X 4	200	50
E4624	VI	Chev 4 X 4 Ford/Western	200	70
WT461	П	States	3000	750
WT464 300 gpm portable 600 gpm portable	П	Ford/Mallory	4000	400

Scappoose Rural Fire Department

- 1 Staffed Station: Main @ Scappoose
 2 Sub-stations at Chapman and Holbrook (Multnomah Co.)
 Paid Staff: 3 Chief Officers and 9 Firefighters
- Volunteers: 45

APPARATUS			TANK	
#/NAME	TYPE	MAKE	CAPACITY	PUMP CAPACITY MAX.
E 431	1	Spartan	1000	1500
E 432	1	Kenworth	2000	1250
E 433	1	Freightliner	750	1500
E 435	1	Freightliner	750	1500
E 436	П	Ford	1000	1000
E4320	VI	Gmc 4x4	200	120
E4330		F550 4x4	300	120
WT 431	П	Freightliner	3000	750
WT 436	П	White	3000	750

R 431		Ford 4x4	RESCUE	N/A
U 432		Dodge 4x4		N/A
M 431		Ford Iii	AMBULANCE	N/A
M 432		Ford Iii	AMBULANCE	N/A
M 433		Gmc I 4x4	AMBULANCE	N/A
FIREBOAT 43	Fireb		1200 GPM	
RESCUE B 43	Ridge	Inflatable boat		

Vernonia Rural Fire Department

- Main at Vernonia
- One (1) Full-Time Chief25 Volunteers

APPARATUS #/NAME	TYPE YEAR	MAKE	TANK CAPACITY	PUMP CAPACITY MAX.
E 450	99	Ford Suburban	COMMAND	
E 451	I 76	Ford	1500	1000
WT/ENG 452	I 82	Ford	2000	1250
E 4540	VI 05	GMC	750	350
E 454	I 99	Freightliner	1000	1500
R 457	99	Ford 4 X 4	RESCUE	N/A
U 4530	VI 91	Ford 4 X 4	280	200

Oregon Department of Forestry – Columbia Unit

Main @ Columbia City

- 2 Seasonal Staffed Guard Stations, Pittsburg and Clatskanie Areas
 3 Full-Time Fire, 5 support/firefighters
 12 Seasonal Firefighters

			TANK	
APPARATUS #/NAME	TYPE YEAR	MAKE	CAPACITY	PUMP CAPACITY MAX.
E4250	III 05	International 2t	600	180 GPM 152 PSI
E4251	III 96	Ford 2t	500	180 GPM 152 PSI
E4252	III 92	Gmc 2t	500	180 GPM 152 PSI
E4220	VI X 95	Ford 4 X 4	200	180 GPM 152 PSI
E4221	VI X 97	Ford 4 X 4	200	180 GPM 152 PSI
E4222	VI X 97	Ford 4 X 4	200	180 GPM 152 PSI
4202 STAFF	2006	Chev 4 X 4 Pu		

APPENDIX C

Assessment Rating Form

				RISK					
Fire Occuri	rence: # Fire	es/1000 acre	es/10year	_	Points				
	Low	01			5				
	Moderate				10				
	High	1.1+			15				
Home Dens	sity: # Home	s/10 acres							
	,	09	rural		0				
		1 - 5.0	suburban		5				
		5.1+	urban		10				
Other Risk	Factors: Igr		otential						
		<1/3			0				
		1/3 - 2/3			5				
		>2/3			10				
(refer to pa	(refer to page 4, Identifying and Assessment of Communities at Risk in Oregon								
						TOTAL	1		
							Low	0 - 13	
							Moderate	13 - 27	
							High	27 - 40	
				HAZAR	D				
Weather Zo	one				-				
	Coastal				0				
	Interior				20				
	SW/East				40				
Topograph									
	Slope	0-25%			0				
		26-40%			2				
		>40 %			3				
	Aspect	N-NW-NE			0				
	•	W-E			3				
		S-SW-SE			5				
		· · · · · ·			•				
	Elevation	5001+			0				
		3501-5000			1				
		0-3500			2				
Natural Veg	getation								
	Non-Forest	•			0				
	FM 1/6/8	•			5				
	FM 2/6				15				
	FM 3/4/10				30				
	5/-1/10				-				
Crown Fire	Potential	Passive - L	-ow		0	TOTAL	1		
		Active - Mo	oderate	4	5		Low	(
		Independe			10		Moderate	40	
							High	60	
							Extreme	80	

	PRO	TECTION C	APABILITY		
Fire Respon					
	Oganized structural response < 1	0 minutes	0		
ı	nside fire district, structural resp	8			
	No structural protection, wildland	15			
Į.	No structural response and wildla	36			
Community					
	Organized stakeholder group, CV	0			
	Primarily agency efforts (mailings	2			
	No Effort	,	4		
				TOTAL	
					Low 0-9
					Moderate 10-16
					High 17-40
Home Densi	VA ty: # Homes/10 acres	LUES PRO	TECTED		
I TOTTIE DETIST	09 rural		2		
	1 - 5.0 suburban		15		
	5.1+ urban		30		
Community	Infrastructure		30		
Community	None		0		
	One present		10		
	More than one presen	t	20		
	·			TOTAL	1
				_	Low 0-15
					Moderate 16-30
					High 31-50
					g
	STRUC	TURAL VUI	LNERABILI	TY	
Structure		LOCAL	NFPA		
	Flamable roofing	0-30			
	Roofing Assembly		0-20		
	Class A		0		
	Class B		5		
	Class C		10		
	Non-rated		20		
	Building Materials		0-10		
	Building setbacks		I		
Defensible S	Space	0-30			
Defensible S	Space >100 ft.	0-30	1		
Defensible \$	Space >100 ft. 71-100	0-30			
Defensible \$	>100 ft.	0-30	1 3 10		
Defensible \$	>100 ft. 71-100	0-30	3		
Defensible \$	>100 ft. 71-100 30-70	0-30	3 10		
	>100 ft. 71-100 30-70		3 10 25		
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress		3 10 25 0-7		
	>100 ft. 71-100 30-70 <30 Roads and Driveways		3 10 25		
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress		3 10 25 0-7		
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress Road Width		3 10 25 0-7 0-4 0-4 0-5		
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress Road Width All season condition		3 10 25 0-7 0-4 0-4		
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress Road Width All season condition Fire service access		3 10 25 0-7 0-4 0-4 0-5		
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress Road Width All season condition Fire service access		3 10 25 0-7 0-4 0-4 0-5	TOTAL	
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress Road Width All season condition Fire service access		3 10 25 0-7 0-4 0-4 0-5	TOTAL	Low 0-30
	>100 ft. 71-100 30-70 <30 Roads and Driveways Ingress/Egress Road Width All season condition Fire service access		3 10 25 0-7 0-4 0-4 0-5	TOTAL	Low 0-30 Moderate 31-60 High 61-90

