Incorporating Local Input

Local fire fighters are a key resource in the identification of at risk areas and substantive input from every Lane County fire district was actively sought during this assessment.

Fire districts were engaged through the Lane County Fire Defense Board (FDB). From November 2004 to February 2005 risk assessment team members met regularly with municipal and rural district chiefs and representatives. The FDB was briefed on the methods used in the assessment and had the opportunity to provide comments and direction. The primary tool used to gather input from fire districts was a fire protection risk assessment and protection capability questionnaire. A draft questionnaire was developed and circulated to the FDB for review. After comments were submitted a final questionnaire and service area base map was provided to each of the twenty-five Lane County fire districts.

The intent of the questionnaire was to gather data related to the known WUI threats and protection capabilities. Districts were asked to provide specifics on a number of topics including: the extent of community preparedness to wildfire, the location of at risk areas due to fuels, poor access, and limited water supply, ISO public protection capability ratings, and others. A copy of the questionnaire is included at the end of this Appendix.

In addition to the questionnaire, enlarged aerial photo service area base maps were provided to each fire district. Fire chiefs were given colored pens and instructions and asked to indicate areas of special concern that fell into the following categories: developed areas at risk to wildfire due to the presence of vegetative fuels and topography, access and egress limited areas, areas with prevalent landscaping dangers including lack of defensible space and limited water supply for fire suppression, and areas affected by wind-throw, ice storms, or insect and disease epidemics.

Finally, information regarding wildfire threats was gathered through site visits conducted for use in the Lane County Natural Hazard Mitigation Plan. Between November and December 2003, Emergency Management Staff toured the majority of rural fire districts within the county. Windshield surveys and interviews with chiefs produced data about several hazards, including wildland urban interface fires.

Information provided by fire districts was used in two ways. First, protection capability data gathered through the questionnaire was incorporated into the GIS analysis. Information regarding fire assistance agreements and fire response time was used in the development of the response time layer and data about organized community stakeholder mitigation activities was used in the protection capability rating. Second, areas of special concern indicated through the

survey, mapping exercise and t site visits were compared to areas identified as high risk through the GIS analysis.

All areas of special concern identified by the fire districts are outlined in the in the assessment area panels located findings section of the risk assessment. Eventually, the fire district survey maps will be digitized and converted into an electronic format that is viewable online.

Appendix D
Fuel Treatment Types for Lane County

One of the minimum requirements for a Community Wildfire Protection Plan (CWPP) as described by the Healthy Forests Restoration Act is the identification of prioritized fuel reduction projects. A CWPP must identify and prioritize areas for hazardous fuel reduction treatments, as well as recommend appropriate treatment methods. Due to the diverse topography and eco-regions present in Lane County, the appropriate treatment methods vary considerably by vegetation type, annual precipitation, slope, aspect, and elevation.

The purpose of this appendix is to compare the common fuel treatment methods for each of the three eco-regions found in Lane County: the Coast Range, Willamette Valley, and Cascade Mountains. The following table provides information on the advantages, concerns, seasonality, application in the wildland-urban interface, and maintenance and scheduling for prescribed fire, mechanized thinning, and manual treatments across Lane County. The table only provides a general framework, and individual projects will need to be tailored to the conditions present in the local area. Local fuels specialists should be consulted in order to determine the most feasible array of fuels treatment options for a given geographical area.

Lane County Eco-Region Contacts

Coast Range

- Siuslaw National Forest, Mapleton Ranger District (Florence, OR) 541 902-8526
- Western Lane Fire Protection District (Veneta, OR) 541-997-8713

Willamette Valley

- Western Lane Fire Protection District (Veneta, OR) 541-997-8713
- Eastern Lane Fire Protection District (Springfield, OR) 541-726-3588

Cascade Mountains

- Willamette National Forest (Eugene, OR) 541-225-6300
- Umpqua National Forest, Cottage Grove Ranger District (Cottage Grove, OR), 541-767-5000

The structure of the table was adapted from the Florida Department of Community Affairs guide, Wildfire Mitigation in Florida: Land Use Planning Strategies and Best Development Practices1. Bev Reed, fuels specialist at the Cottage Grove Ranger District of the U.S. Forest Service modified the table with information appropriate to Oregon.

Table D.1: Comparison of Fuel Treatment Types

Coast Range					
Treatment Methods	**Advantages**	**Concerns**	**Seasonality**	**Application in WUI**	**Maintenance & Scheduling**
Prescribed Fire (incl. broadcast, understory or pile burning)	- Encourages herbaceous growth and supports native species and ecosystems - Cost effective fuels treatment method in most cases	- Broadcast & understory burning requires skilled application - Multiple entries may be required to achieve objectives - Re-burn potential in areas of heavy fuels or duff	- Broadcast & understory burning constrained by weather, fuels characteristics, and smoke management constraints - Pile burning may be conducted under a broader range of conditions (i.e. less constraints)	- Burning may be effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with mechanized or manual vegetation treatment methods	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment
Mechanized (i.e large equipment) Treatments (incl. thinning, pruning, lop and scatter, mowing, crushing, chipping, etc)	- Large local labor and contract pool - Cost effective over larger areas - Most methods reduce fire risk by getting fuels on ground (accelerating decomposition rates) or by removal - Can be followed by prescribed fire where needed	- Large equipment limited to gentler slopes - Potential "product" may be market-dependent - May be less economically feasible on small sites due to move-in/move-out costs - May create short-term increase in fire risk	- May require shut-down periods on some sites due to soils conditions or seasonal wildlife concerns - May be constrained by fire season requirements in summer	- Can be very effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with follow-up prescribed fire treatment methods	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment - Re-entry into thinning areas may be scheduled using standard silvicultural practices
Manual (i.e. hand) Treatment (incl. thinning, pruning, hand piling, raking, etc)	- Large local labor and contract pool - Can treat areas that cannot be treated by prescribed fire or mechanical means	- More labor intensive; may not be cost effective in areas of heavy fuels - May require more than one entry to achieve initial objectives for site	- Work can usually be conducted year-round - Chainsaw use may be constrained by fire season requirements in summer	- Can be very effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with follow-up fuels treatment methods (i.e. removal or burning)	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment - Re-entry into thinning areas may be scheduled using standard silvicultural practices

Willamette Valley					
Treatment Methods	**Advantages**	**Concerns**	**Seasonality**	**Application in WUI**	**Maintenance & Scheduling**
Prescribed Fire (incl. broadcast, understory or pile burning)	- Encourages herbaceous growth and supports native species and ecosystems - Cost effective fuels treatment method in most cases	- Broadcast & understory burning requires skilled application - Must invest time in informing and educating the public - Complete mop-up, if required for air quality reasons, may increase costs	- Burning constrained by weather, fuels characteristics, and smoke management constraints - Low elevation seasonal inversions and valley fog may affect burning opportunities	- Burning may be effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with mechanized or manual vegetation treatment methods - Most burning opportunities will exist along outer perimeters of urban areas/boundaries	- Timing for subsequent treatments dependent upon kinds of sites being treated, condition class goals and degree of change made via initial treatment - Recreation and other high use areas may be evaluated annually as part of a fire prevention and fuels maintenance program planning
Mechanized Treatments (incl. thinning, pruning, lop and scatter, mowing, crushing, chipping, etc)	- Large local labor and contract pool - Cost effective over larger areas - Most methods reduce fire risk by getting fuels on ground (accelerating decomposition rates) or by removal - Can be followed by prescribed fire where needed - Opportunities may exist for public to readily utilize material (i.e. chips, firewood, etc.)	- Potential "product" may be market-dependent - May be less economically feasible in isolated sites due to move-in/move-out costs - May create short-term increase in fire risk, especially in high-use recreation areas - In high use areas, if site precludes prescribed fire as a follow-up treatment, fuels removal or increased fire prevention patrols may be warranted	- May require shut-down periods on some sites due to soils conditions or seasonal wildlife concerns - May be constrained by fire season requirements in summer	- Can be very effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with follow-up prescribed fire treatment methods - Proximity to private residences may limit mechanical use due to noise concerns	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment - Re-entry into thinning areas may be scheduled using standard silvicultural practices - Recreation and other high use areas may be scheduled for annual mechanized treatments (i.e. mowing) - Private landowners and homeowners may be advised as to recommended maintenance by fire protection experts -
Manual Treatment (incl. thinning, pruning, hand piling, raking, etc)	- Large local labor and contract pool - Opportunities for volunteers, partnerships, stewardships or homeowner involvement - Can access areas that cannot be treated by prescribed fire or mechanical means	- More labor intensive; may not be cost effective in some areas - May require more than one entry to achieve initial objectives for site	- Work can usually be conducted year-round - Chainsaw use may be constrained by fire season requirements in summer	- Can be very effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with follow-up fuels treatment methods (i.e. removal or burning)	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment - Private landowners and homeowners may be advised as to recommended maintenance by fire protection experts

Cascade Mountains					
Treatment Methods	**Advantages**	**Concerns**	**Seasonality**	**Application in WUI**	**Maintenance & Scheduling**
Prescribed Fire (incl. broadcast, understory or pile burning)	- Encourages herbaceous growth and supports native species and ecosystems - Cost effective fuels treatment method in most cases	- Broadcast & understory burning requires skilled application - Multiple entries may be required to achieve objectives - May require additional costs if mop-up or post-burn monitoring of site is required	- Broadcast & understory burning constrained by weather, fuels characteristics, and smoke management constraints - Pile burning may be conducted under a broader range of conditions (i.e. less constraints)	- Burning may be effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with mechanized or manual vegetation treatment methods	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment
Mechanized Treatments (incl. thinning, pruning, lop and scatter, mowing, crushing, chipping, etc)	- Large local labor and contract pool - Cost effective over larger areas - Most methods reduce fire risk by getting fuels on ground (accelerating decomposition rates) or by removal - Can be followed by prescribed fire where needed	- Large equipment limited to gentler slopes - Potential "product" may be market-dependent - May be less economically feasible on small sites due to move-in/move-out costs - May create short-term increase in fire risk, especially in high-use recreational areas	- May require shut-down periods on some sites due to soils conditions or seasonal wildlife concerns - May be constrained by fire season requirements in summer	- Can be very effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with follow-up prescribed fire treatment methods	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment - Re-entry into thinning areas may be scheduled using standard silvicultural practices - Recreation and other high use areas may be scheduled for annual treatments designed to minimize risk of human-caused fire
Manual Treatment (incl. thinning, pruning, hand piling, raking, etc)	- Large local labor and contract pool - Can treat areas that cannot be treated by prescribed fire or mechanical means	- More labor intensive; may not be cost effective in areas of heavy fuels - May require more than one entry to achieve initial objectives for site	- Except at highest elevations, work can usually be conducted year-round - Chainsaw use may be constrained by fire season requirements in summer	- Can be very effective within or adjacent to WUI, either as a stand-alone treatment or in conjunction with follow-up fuels treatment methods (i.e. removal or burning)	- Timing for subsequent treatments dependent upon condition class goals and degree of change made via initial treatment - Re-entry into thinning areas may be scheduled using standard silvicultural practices

[1] State of Florida. 2004. *Wildfire Mitigation in Florida: Land Use Planning Strategies and Best Development Practices*. Florida Department of Community Affairs and Florida Department of Agriculture and Consumer Services.

Appendix E
Landowner Survey Summary

To gather input on attitudes and opinions regarding wildfire, the Oregon Natural Hazards Workgroup (ONHW) developed and administered a mail survey to 1,500 randomly selected landowners in the wildland-urban interface. The steering committee for the Lane County Community Wildfire Protection Plan (CWPP) reviewed and approved the survey instrument. The purpose of the landowner survey was to gain information about how landowners in wildland-urban interface areas of Lane County perceive the potential risk of wildfire and their attitudes towards risk reduction and preparedness strategies. The survey results may be used to focus public outreach activities aimed at wildfire risk reduction and loss prevention. Additional benefits of the survey include educating and informing the public, incorporating public values into decision-making, improving the quality of decisions, and building trust in this planning process.

Methodology

The landowner survey focused on wildfire risk awareness and communication, wildfire protection and preparedness, measures to reduce property risk to wildfire, and measures to reduce community risk to wildfire. Survey questions were based on two primary sources: 1) social science research studies supported by the National Fire Plan;[1] and 2) an all hazard risk perception household survey administered by ONHW in 2002.

The survey was mailed to a random sample of landowners selected from Lane Council of Governments Regional Lane Information Database. The sample frame (e.g., the list that the sample was drawn from) included landowners in the Impacted Forestlands (F2) and Rural Residential (RR) zoning designations under the Lane County Code. The sample frame also included lands, regardless of zone designation, in land survey sections determined to be in wildland-urban interface areas using aerial photographs.

ONHW administered the survey to 1,500 randomly selected landowners during February and March 2005. The process included a pre-postcard, the survey packet and a follow-up postcard. The pre-postcard informed the landowner that they would receive a survey about wildfire risk in the near future. The survey packet included 1) a cover letter explaining the purpose of the survey, 2) the survey instrument, and 3) a postage paid return envelope. ONHW mailed the follow-up postcard approximately one week after the survey to remind landowners to complete the survey by the deadline and to thank them for participating.

ONHW received 466 valid survey responses yielding a 32% response rate.

Limitations of Sampling Methodology

A key limitation of any random sample survey is non-response bias. If one were to assume that the sample was perfectly random and that there was no response bias, then the survey would have a margin of error of ±5% at the 95% confidence level based on the sample size relative to the sample population. This means that if the survey were conducted 100 times, the results would end up within ±5% of those presented in this report.

Non-response bias is an issue in all surveys, but is particularly important in mailed surveys due to response rates. The landowner survey received a 32% response rate. The survey results should not be considered representative of all Lane County residents, nor was it intended to be. The survey was intended to identify attitudes and opinions of *landowners in the wildland-urban interface*.[2] Thus, the scope of the survey was intentionally limited. The unique nature of the sample makes it difficult to determine areas of potential response bias. Despite the potential for response bias, our assessment is that the results provide an accurate representation of the attitudes and opinions of property owners in wildland-urban interface areas of Lane County in 2005. It is also important to note that the following responses were given by wildland-urban interface residents and it should not be assumed that the landowners are fire professionals.

Organization of Report

The survey results are organized into the following sections:

Characteristics of Survey Respondents: This section reports information about respondent characteristics including: educational attainment, home ownership, age, and household income.

Wildland Fire Risk Awareness and Communication: This section presents information about respondents' understanding of personal property, neighborhood, and community risk awareness. The survey also asked questions about how respondents receive information pertaining to wildland fire.

Fire Protection and Preparedness: This section presents the results of questions about fire protection services and level of preparedness for a wildland fire emergency.

Reducing Property Risk to Wildland Fire: This section identifies actions property owners would be willing to take in the future to protect their property from wildland fire.

Reducing Community Risk to Wildland Fire: This section presents landowners' opinions about protecting the greater community from wildland fire.

Tables and figures are used to display the data when possible. Tables and figures are titled and linked to the corresponding question number from the survey.

Survey Instrument: This section includes the survey instruments completed by landowners. The response percentages are documented in the instrument.

Open Ended Comments: This section documents all written comments provided by respondents of the survey.

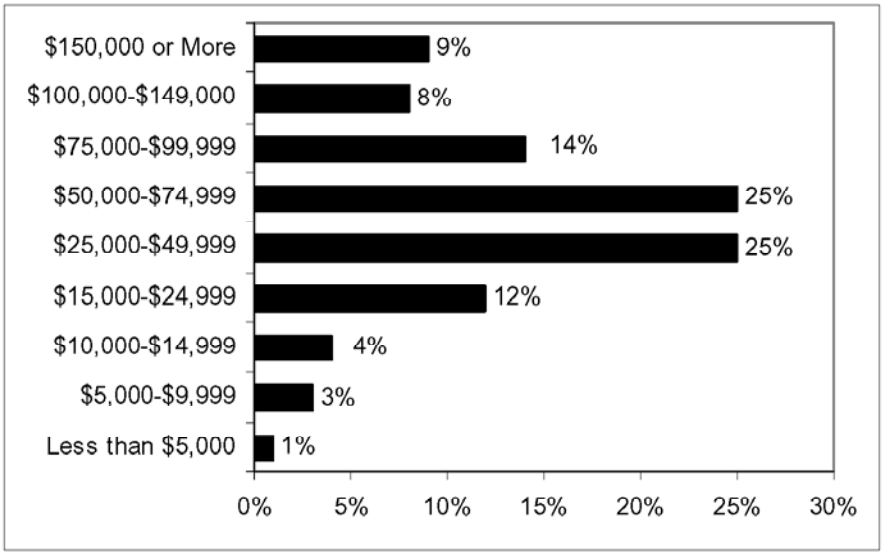
Characteristics of Survey Respondents

The survey instrument asked landowners to answer key demographic questions in order to help define the characteristics of the respondents. Specifically, the questions asked about age, educational attainment, household income, and information about the respondents' property and household. Because this survey targeted a unique population, landowners in the wildland-urban interface, it was not possible to obtain comparative census data.

The average age of respondents was 59 years old; respondents ranged from 18 to 90 years of age.

Figure E.1 shows total household income in 2004 as reported by respondents. Fifty percent of the respondents had an average household income between $25,000 and $75,000 in 2004.

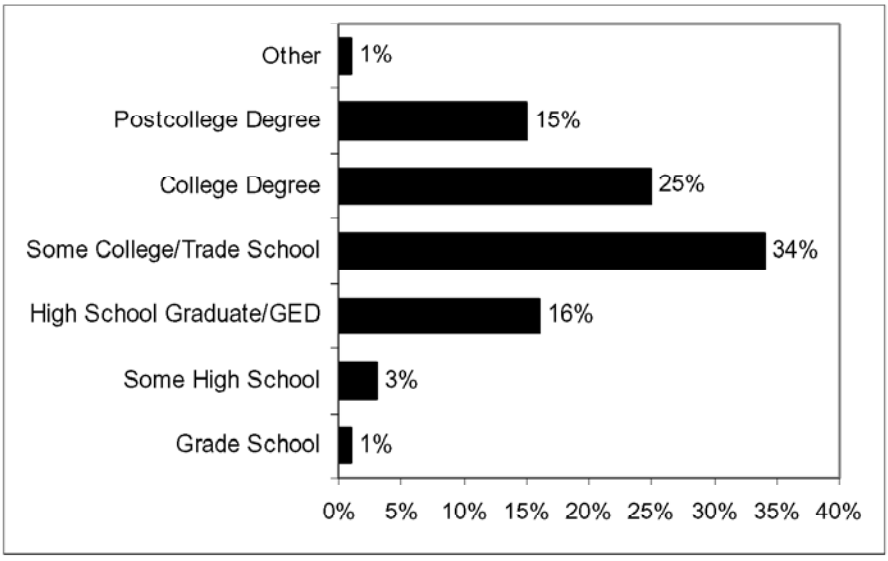
Figure E.1: Household Income in 2004



Source: ONHW/CPW, 2005

Figure E.2 illustrates the educational attainment of respondents. Sixty-four percent have attained some college education, a college degree or a post-college degree. Persons with a high school degree or less are underrepresented among survey respondents.

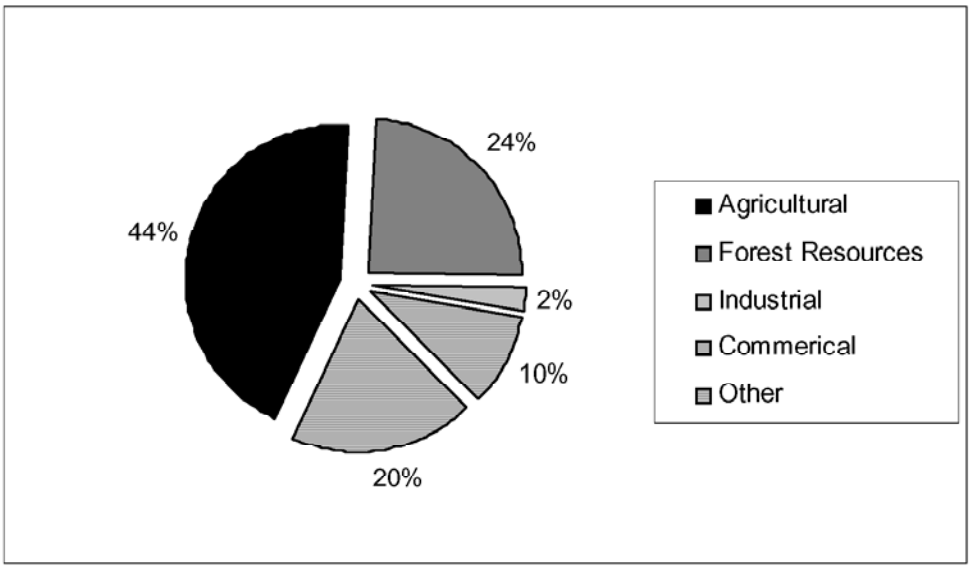
Figure E.2 Level of Educational Attainment (2)



Source: ONHW/CPW, 2005

The survey asked general questions about respondents' properties, including ownership and use of property. The majority of respondents owned their home (98%) and were year-round residents of Lane County (93%). The average length of property ownership was 19 years; length of ownership ranged from one year to 100 years. Eight percent of the respondents primarily used their property for business purposes; of these respondents, 68% indicated that they used the property for agricultural and forest industries. Figure E.3 shows the types of businesses located on the property if the property was used primarily as a business.

Figure E.3 Types of Business Use of Property (Q16)

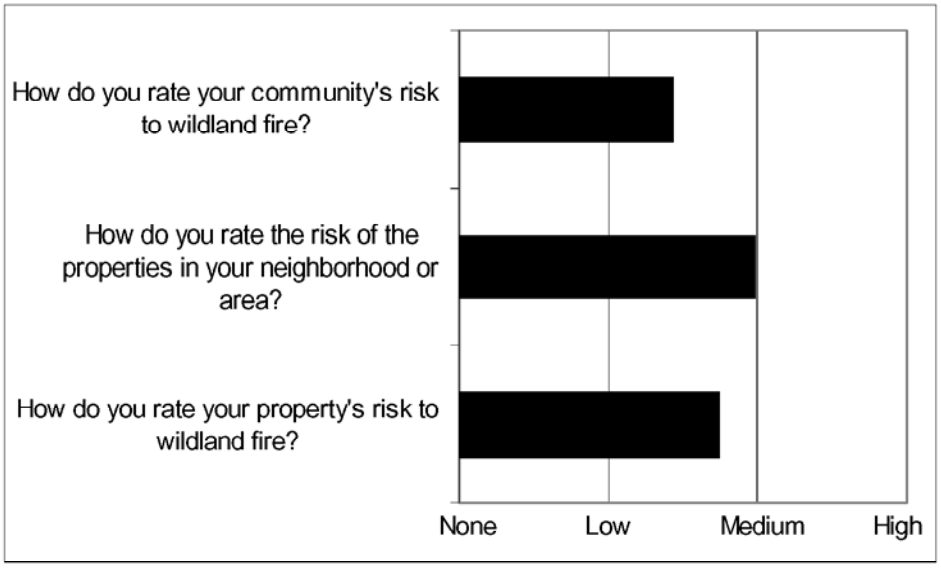


Source: ONHW/CPW, 2005

Wildland Fire Risk Awareness and Communication

To better understand perceptions of risk, the survey included several questions about wildland fire risk on respondents' property, in their neighborhoods and around their communities. Figure E.4 shows respondents' perceptions of wildfire risk. Over half (80%) of respondents perceived their property as a medium to low risk for wildland fires. Respondents perceived their neighbors' properties to have a higher risk than their own.

Figure E.4 Perceptions of Wildland Fire Risk (Q1)



Source: ONHW/CPW, 2005

Personal Experience with Wildland Fire

The survey asked property owners about their personal experiences with wildland fire. Table E.1 shows the types of experience respondents have had with wildland fire. Forty-five percent reported that they had no previous experience with wildland fire. Just above half (57%), reported that they had witnessed a wildfire, smoke and other effects of wildfire, but few (8%) had actually evacuated their home or sustained property damage.

Table E.1: Personal Experience with Wildland Fire (2)

Type of Experience	Percentage of Respondents with Wildfire Experience
Witnesses wildfire or observed smoke or other effects	57%
No experience with wildfire fire	47%
Suffered property damage from a wildland fire	4%
Evacuated home due to a wildfire	4%

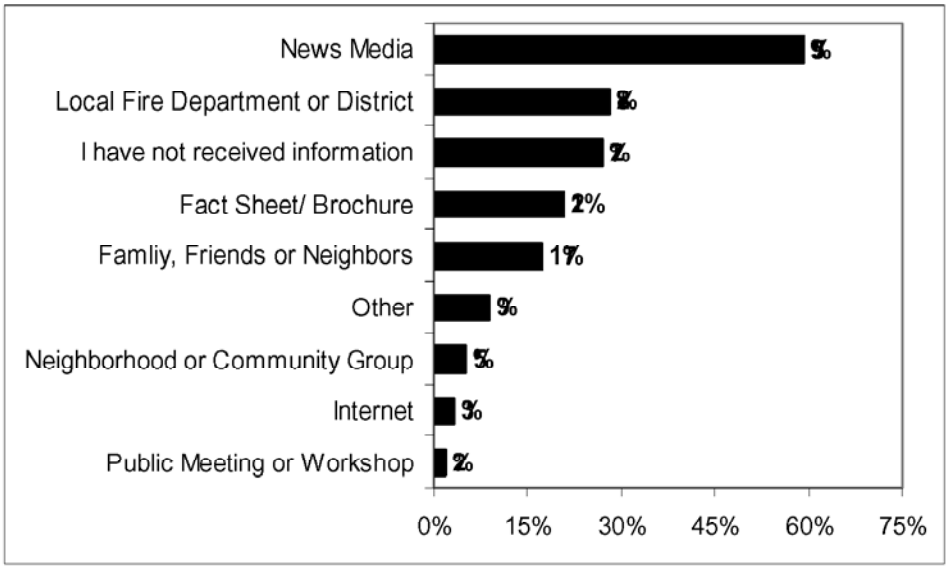
Source: ONHW/CPW, 2005

Sources of Information About Protecting Property

An important component of the landowner survey was gathering data on effective means of wildland fire information dispersal. The survey asked respondents how they received information about property protection in the past, as well as preferences for receiving information in the future.

Figure E.5 shows how respondents received information in the past about protecting their property against losses from wildland fire. Sixty percent of survey respondents had received information from news media and local fire departments or districts. Survey respondents reported that they did not widely use public meetings/workshops or the Internet to gather information about protecting property from wildland fire.

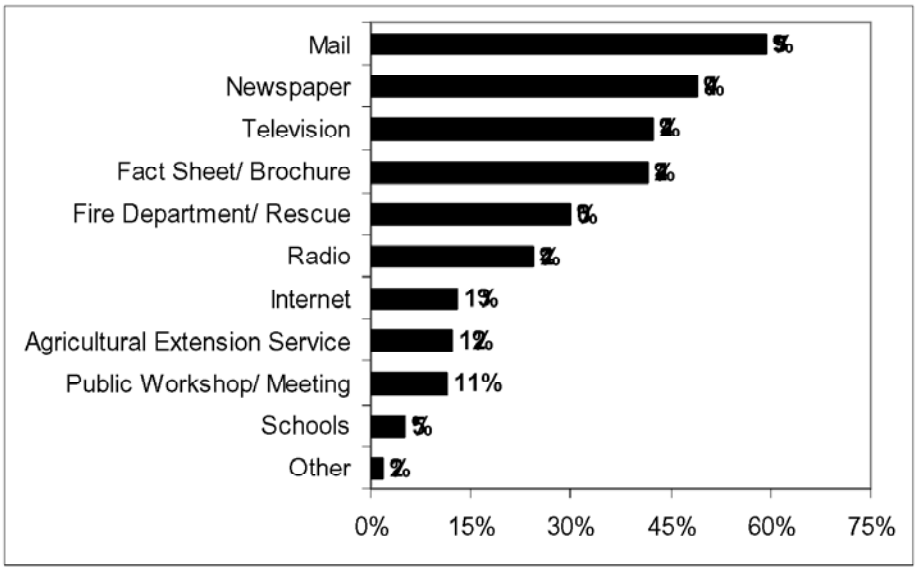
Figure E.5 Past Sources of Information About Protecting Property from Wildland Fire (Q3)



Source: ONHW/CPW, 2005

The survey gathered information about effective means of future correspondence relating to wildland fire property protection (Figure E.6). Respondents' identified mail (59%), newspapers (49%), television (42%) and fact sheets/brochures (42%) as the top four preferred methods to receive information.

Figure E.6 Preferred Sources of Receiving Information About Protecting Property from Wildland Fire (Q4)



Source: ONHW/CPW, 2005

Fire Protection Services and Wildland Fire Preparation

The survey gathered information about landowners' knowledge of their fire protection service providers. The survey also asked landowners about emergency preparedness, including evacuation procedures and insurance coverage.

Table E.2 shows that 70% of respondents receive fire protection services from a rural fire district. Six percent of respondents reported that they did not know if their property was protected by a fire protection service.

Table E.2 Fire Protection Services (%)

Fire Protection Service Provider	% Respondents
Rural Fire Protection District	70%
Fire Department	20%
Don't Know	6%
Not Serviced by a Fire Department or District	4%

Source: ONHW/CPW, 2005

Table E.3 illustrates respondents' answers to questions about wildland fire preparedness. The majority (95%) of the respondents did not know or had not received information about community evacuation procedures. Sixty-six percent of respondents indicated that they did not have personal household evacuation procedures in the case of a wildland fire emergency.

One half (50%) of survey respondents reported that their insurance policies covered losses or structural damage incurred from wildland fire. However, 43% did not know if their insurance policies would protect their properties from damages or losses from wildland fire.

Table E.3 Wildland Fire Evacuation Procedures and Insurance Coverage (%)

Question	Yes	No	Dont Know
Has your community informed you of their wildland fire evacuation procedures?	4.4%	90.8%	4.6%
Does your household have a wildland fire evacuation plan?	30.0%	66.0%	3.8%
Does your homeowners or business insurance policy include coverage in the event of structural damage or loss due to wildland fire?	49.9%	7.1%	42.8%

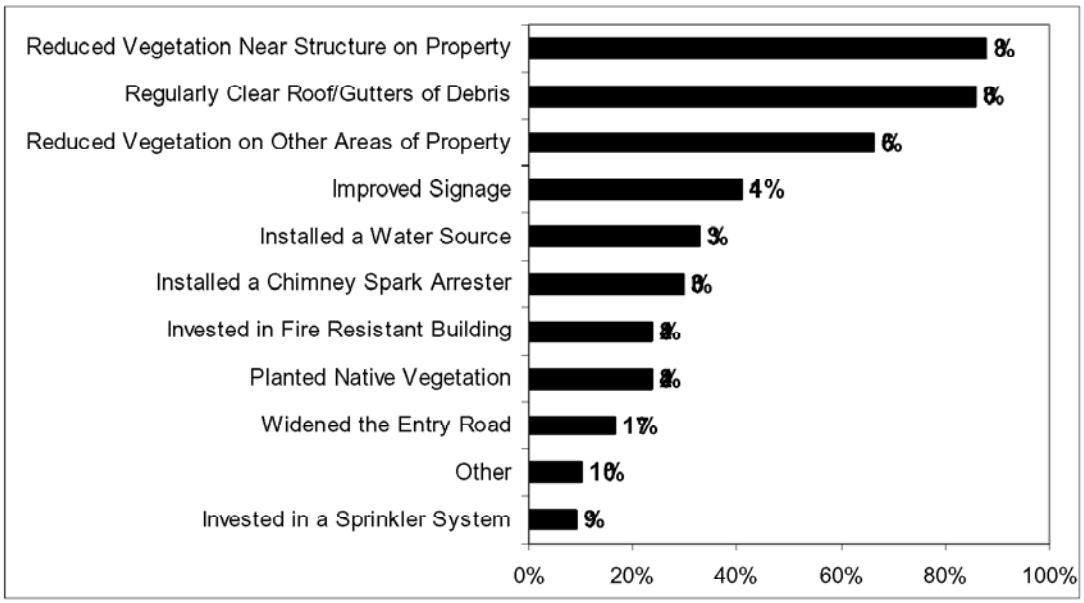
Source: ONHW/CPW, 2005

Reducing Property Risk to Wildland Fire

The survey gathered information from landowners about measures they have implemented to reduce the risk of wildland fire on their property. This section asked about specific risk reduction strategies.

The majority (90%) of respondents indicated that they have taken measures to reduce losses associated with wildland fire. Figure E.7 shows the types of risk reduction measures taken by respondents. The most frequently reported measures were reducing vegetation near structures and clearing roof/gutters of debris. Fewer property owners reported implementing the measures that required higher financial investment.

Figure E.7 Actions Taken to Reduce the Potential Losses from Wildland Fire (%)



Source: ONHW/CPW, 2005

Preferred Risk Reduction Actions and Incentives

The survey asked landowners about their willingness to take specific actions to reduce the potential impacts of wildland fire on their property. Table E.5 shows the likelihood of respondents to take different risk reduction actions. The majority of respondents indicated that they are likely to reduce vegetation and debris (79%) and create defensible zones around structures (65%). Respondents were less likely to improve emergency access or use fire-resistant building materials.

Table E.5 Risk Reduction Actions Most Likely to Take (%)

Risk Reduction Action	Very Likely	Somewhat Likely	Not Likely
Reduce debris and vegetation on property	78.5%	15.2%	6.2%
Clear a defensible zone around the property	64.9%	25.2%	9.9%
Improve emergency access to property	35.1%	20.1%	44.8%
Use fire resistant building materials	32.8%	33.9%	33.3%

Source: ONHW/CPW, 2005

The survey asked landowners which incentives, if any, would motivate them to take additional steps to protect their properties from wildland fire (Table E.6). The highest percentage of respondents indicated that insurance discounts (70%)or tax breaks/incentives (67%)would motivate them to implement risk reduction steps. About one-third of respondents indicated that grant programs would encourage better protection measures.

Table E.6 Preferred Incentives to Better Protect Property (%)

Type of Incentive	Percent of Respondents
Insurance Discounts	69.7%
Tax Break or Incentive	68.6%
Grant Program	29.2%
None of the Above	12.2%
Other	5.6%

Source: ONHW/CPW, 2005

Reducing Community Risk to Wildland Fire

The survey asked respondents their opinions and preferences for different strategies to reduce community risk to wildfire. Communities may take a variety of approaches to wildland fire mitigation. The questions in this section help to inform policy decisions by providing better understanding of the level of landowner support for different approaches.

Hazardous Fuels Treatment

Respondents indicated their levels of support for four methods of hazardous fuels treatments in their communities (Table E.7). The treatments included: no action, mechanical thinning, prescribed burning, and chemical treatments. Of the four, the two preferred methods were mechanical thinning (92%) and prescribed burning (74%). Respondents were divided over chemical treatment with 48% supportive and 43% unsupportive of the treatment method. Sixty-nine percent of respondents were unsupportive of no action being taken to reduce hazardous fuels.

Table E.7 Support for Hazardous Fuels Treatments (2005)

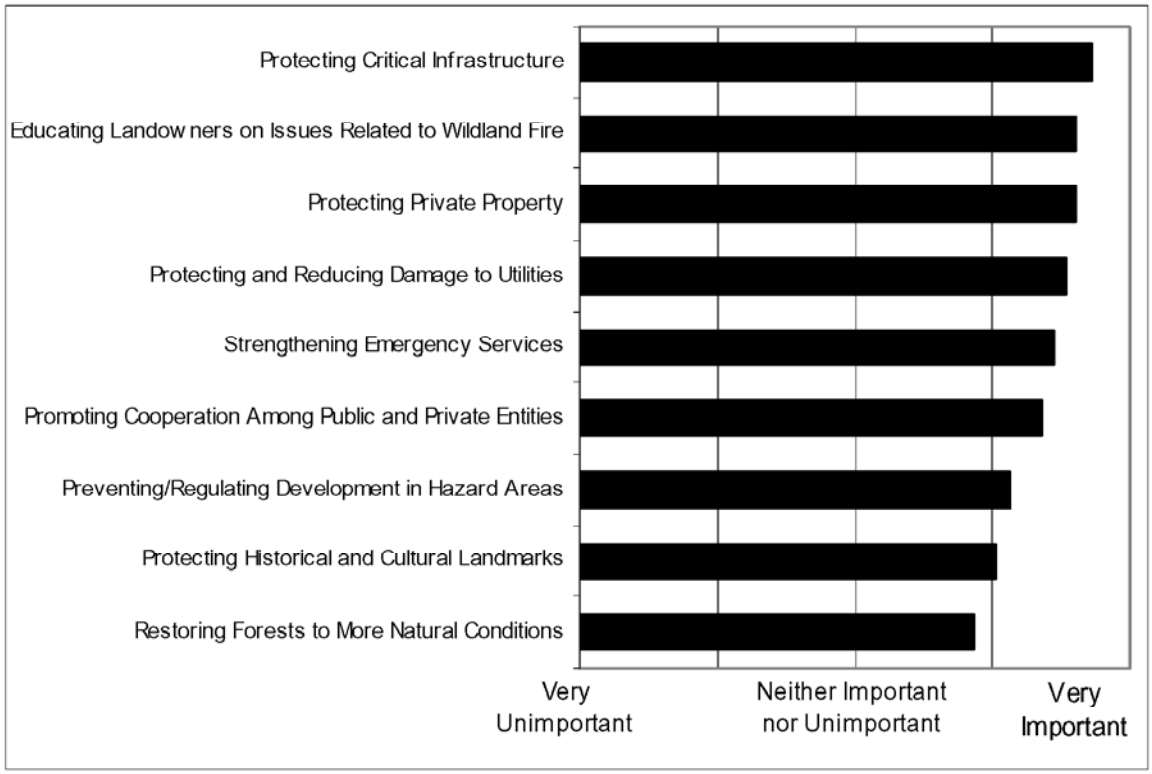
	Supportive	Neither Supportive nor Unsupportive	Unsupportive
No Action	11%	21%	69%
Chemical Treatment	48%	10%	43%
Prescribed Burning	74%	12%	14%
Mechanical Thinning	92%	4%	4%

Source: ONHW/CPW, 2005

Landowner Priorities for Future Wildland Fire Planning

The survey asked landowners about their opinions on the importance of different planning priorities for wildland fire. Figure E.8 shows the level of importance placed on different planning priorities by respondents. The majority of respondents indicated that each of the planning priorities listed were very or somewhat important. Protecting critical infrastructure, educating landowners, and protecting private property were the priorities ranked with highest importance. Of the priorities listed, respondents indicated that restoring forests to natural conditions was the least important.

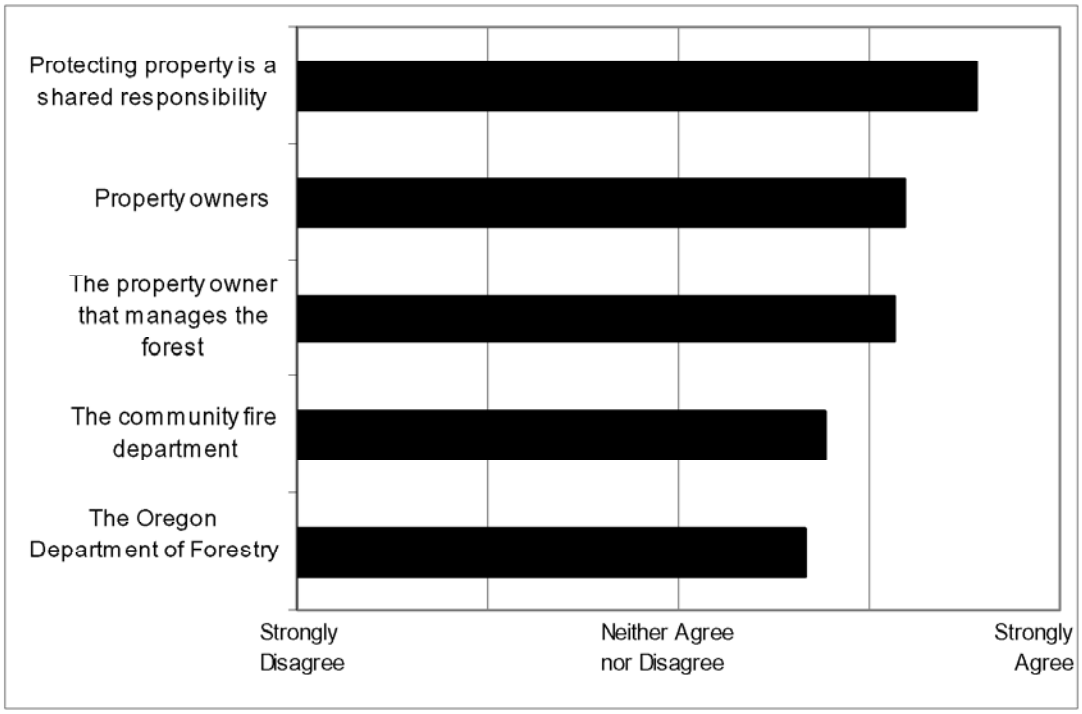
Figure E.8 Priorities for Wildland Fire Planning (n=1)



Source: ONHW/CPW, 2005

Figure E.9 shows respondents' opinions on responsibility for protecting property against wildland fire. The majority (94%) of respondents agreed or strongly agreed that the responsibility for protecting property is shared between private landowners, local, state and federal agencies. Eighty-four percent of respondents agreed or strongly agreed that property owners are responsible for wildland fire protection. Fewer respondents agreed that the Oregon Department of Forestry or the community fire department is solely responsible.

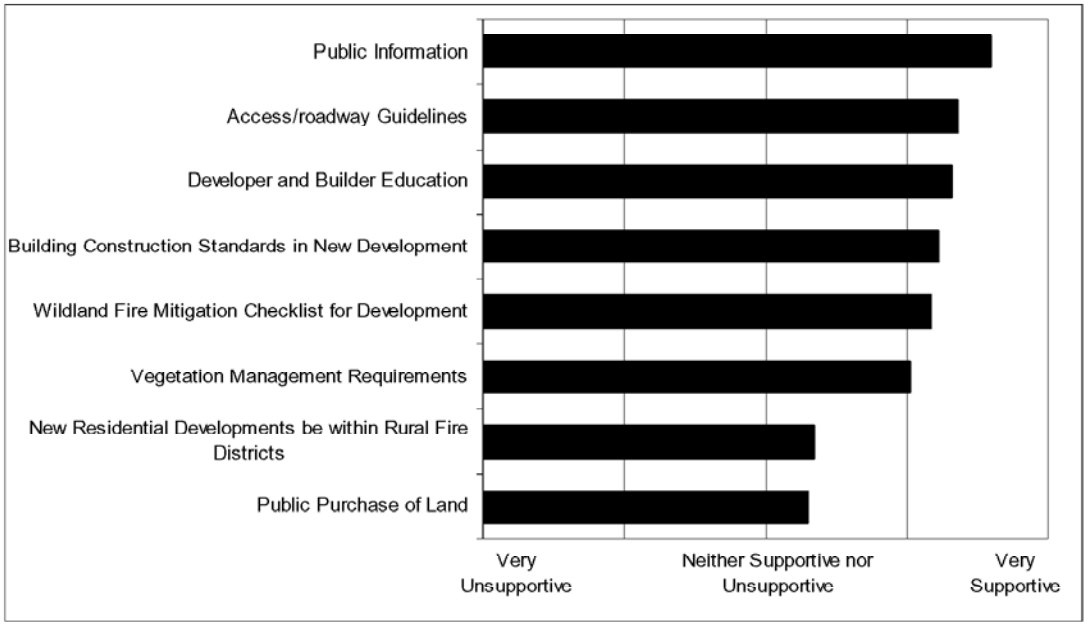
Figure E.9 Responsibility for Protecting Private Property from Wildland Fire (2)



Source: ONHW/CPW, 2005

There are a number of regulatory and non-regulatory activities that communities can implement to reduce wildland fire risk. Figure E.10 shows respondents' levels of support for different risk reduction strategies. Respondents indicated the highest level of support for a public information strategy; 95% were very or somewhat supportive. Seventy-eight percent or greater of respondents were very or somewhat supportive of four out of five of the regulatory strategies listed. The most popular were access/roadway guidelines (88%) and building construction standards for new development in high hazard areas (83%). Of the risk reduction strategies listed in the survey, respondents indicated the least support for requiring new rural residential developments be within rural fire protection district boundaries (50%) and for public acquisition of land in high hazard areas for open space (46%).

Figure E.10 Regulatory and Non-Regulatory Strategies for Wildland Fire Risk Reduction (1)



Source: ONHW/CPW, 2005

[1] United States Department of Agriculture. 2003. "Homeowners, Communities, and Wildfire: Science Findings from the National Fire Plan".

[2] It is notable that the survey included absentee landlords. It also includes respondents that occupy a residence on their property, as well as a few businesses.

LANE COUNTY LANDOWNER SURVEY

Instructions: This survey focuses on wildland fire risk awareness, preparedness, and the risk reduction activities of property owners. The estimated time for completing the survey is fifteen to twenty minutes. It should be completed by an adult, preferably the head of the household. **Please return the survey in the enclosed postage paid envelope by March 21, 2005**. All responses are kept confidential.

Your participation is voluntary. If you have any questions regarding the survey, please contact Julie Baxter at the University of Oregon (541-346-3651). If you have questions regarding your rights as a research participant, please contact the Office of Human Subjects Compliance call (541) 346-2510. Please mail completed surveys to CPW, 1209 University of Oregon, Eugene, OR 97403.

WILDLAND FIRE RISK AWARENESS AND COMMUNICATION

The term *property* is used throughout this survey; please interpret this as including both land and structures such as homes.

1. Please check the box that represents your opinion on the level of risk at each of the three areas listed below:

Question	High	Medium	Low	None
How do you rate your property's risk to wildland fire?	16.7 %	44.1 %	36.3 %	2.9 %
How do you rate the risk of the properties in your neighborhood or area?	24.4 %	50.7 %	23.3 %	1.6 %
How do you rate your community's (e.g. roads, schools, hospitals, shopping centers, historic landmarks) risk to wildland fire?	6.4 %	37.0 %	50.9 %	5.7 %

2. Have you or someone in your household personally experienced a wildland fire? (Please check all that apply.)

45.6 % No experience with wildland fire
57.0 % Witnessed wildland fire or observed smoke or other effects of wildland fire
3.5 % Evacuated home due to a wildland fire
3.5 % Suffered property damage from a wildland fire

3. How have you received information in the past about protecting your property from wildland fire? (Please check all that apply.)

27.1 % I have not received information
59.3 % News media (radio, newspaper, TV)
20.9 % Fact sheet/brochure
3.3 % Internet
(specify):_____
5.1 % Neighborhood or community group,
(specify):_____
2.0 % Public meeting or workshop
17.2 % Family, friends, or neighbors
28.2 % Local fire department or district
9.0 % Other

4. What is your preferred method for receiving information about protecting your property from wildland fire? (Please check all that apply.)

48.8 % Newspaper
24.3 % Radio
42.2 % Television
59.4 % Mail
13.0 % Internet
1.8 % Other (specify):_____
30.0 % Fire department/rescue
5.1 % Schools
41.5 % Fact sheet/brochure
11.3 % Public workshop/meetings
12.1 % Agricultural extension service

FIRE PROTECTION AND PREPAREDNESS

5. Do you know if your property is serviced by a fire department or rural fire protection district? (Please check only one.)

19.9 %	Fire department	3.8 %	Not serviced by a fire department or district
70.4 %	Rural fire protection district	5.9 %	Don't know

6. Please answer the following fire protection and preparedness questions.

Question	Yes	No	Don't Know
A. Have you received information about wildland fire evacuation procedures for your community?	4.4 %	90.8 %	4.6 %
B. Does your household have a wildland fire evacuation plan?	30.0 %	66.0 %	3.8 %
C. Does your homeowner or business insurance policy include coverage in the event of structural damage or loss due to wildland fire?	49.9 %	7.1 %	42.8 %

REDUCING PROPERTY RISK TO WILDLAND FIRE

Property owners can take a number of actions to reduce the potential for property damage due to wildland fire. For instance, an owner can significantly reduce the chances of structures igniting during a wildland fire by creating and maintaining a defensible space around structures on their property. Defensible space is a fire-safe zone created by reducing flammable vegetation around a structure.

7. Please indicate if you have taken any actions to reduce the potential for fire losses on your property?

89.9 % Yes
10.1 % No (IF NO, Skip to Question 8)

7.1 If YES, which of the following actions have you taken on your property? (Please check all that apply.)

85.9 % Regularly clear roof/gutters of debris
87.9 % Reduced vegetation near structures (buildings) on property
66.3 % Reduced vegetation on other areas of property
23.5 % Planted native vegetation (plants)
23.8 % Invested in fire resistant building materials
29.6 % Installed a chimney spark arrester
32.8 % Installed a water source
9.0 % Invested in a sprinkler system
40.9 % Improved address signage for better visibility
16.7 % Widened the road leading to the property
10.0 % Other (specify):_____

8. Please indicate how likely you are to take the following actions to reduce the potential impacts of wildland fire to your property.

Risk Reduction Action	Very Likely	Somewhat Likely	Not Likely
A. Reduce debris and vegetation on property	78.5 %	15.2 %	6.2 %
B. Create defensible zones around structures	64.9 %	25.2 %	9.9 %
C. Improve emergency access to property	35.1 %	20.1 %	44.8 %
D. Use fire resistant building materials	32.8 %	33.9 %	33.3 %

9. Which of the following incentives, if any, would motivate you to take additional steps to better protect your property from wildland fire?

69.7 %	Insurance discount	29.2 %	Grant program
68.6 %	Tax break or incentive	12.2 %	None of the above
5.6 %	Other (specify):_____		

REDUCING COMMUNITY RISK TO WILDLAND FIRE

10. Developed public and private lands can create a wildland fire risk when trees and underbrush grow densely near structures. Several methods can be used to maintain trees and underbrush to reduce the potential for wildland fire impacts. Mechanical thinning involves the use of chainsaws, brush mowers, or other specialized machines to reduce the number of shrubs and small trees, thus reducing the potential for nearby structures to ignite. Prescribed burning involves controlling naturally caused fires or intentionally setting fires to burn under close and careful watch. Chemical treatment involves the application of chemical agents to prevent or restrict the growth of existing vegetation. Please indicate how supportive you are of each of the following methods.

Treatment Method	Very Supportive	Somewhat Supportive	Neither Supportive nor Unsupportive	Somewhat Unsupportive	Very Unsupportive
A. No Action	6.2 %	4.5 %	20.5 %	15.4 %	53.4 %
B. Mechanical Thinning	68.6 %	24.5 %	3.7 %	1.6 %	1.6 %
C. Prescribed Burning	39.0 %	34.7 %	12.1 %	7.4 %	6.9 %
D. Chemical Treatment	24.7 %	22.6 %	10.0 %	13.5 %	29.2 %

11. Wildland fire can have a significant impact on a community, but planning for its occurrence can help lessen the impacts. The following statements will help determine landowner priorities for planning for wildland fire. Please tell us how important each one is to you.

Statement	Very Important	Somewhat Important	Neither Important nor Unimportant	Somewhat Unimportant	Very Unimportant
A. Protecting critical infrastructure (e.g. roads, hospitals, schools)	80.2 %	14.9 %	3.1 %	1.3 %	0.4 %
B. Protecting private property	66.3 %	28.3 %	4.5 %	0.9 %	0.0 %
C. Preventing or regulating development in hazard areas	46.1 %	34.1 %	11.4 %	3.9 %	4.5 %
D. Restoring forests to natural conditions	38.4 %	30.8 %	16.2 %	8.7 %	5.9 %
E. Protecting historical and cultural landmarks	34.3 %	42.6 %	16.6 %	3.8 %	2.7 %
F. Promoting cooperation among public agencies, citizens, non-profit groups, and businesses	52.1 %	36.2 %	8.5 %	1.3 %	1.8 %
G. Reducing damage to utilities	62.0 %	31.1 %	6.3 %	0.4 %	0.2 %
H. Strengthening emergency services (e.g. police, fire)	56.0 %	35.5 %	6.5 %	1.6 %	0.4 %
I. Educating landowners on wildland fire	65.2 %	31.3 %	2.6 %	0.4 %	0.4 %

12. Please indicate your opinion on each of the following statements about responsibility for protecting property from wildland fire.

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
A. Private property owners are responsible for protecting their property from wildland fire.	42.5 %	41.6 %	9.6 %	5.4 %	0.9 %
B. The community fire department is responsible for protecting property from wildland fire.	16.6 %	55.7 %	17.7 %	8.2 %	1.8 %
C. The property owner (including federal, state, local, and private) that manages the forest is responsible for protecting property from wildland fire.	32.7 %	51.2 %	14.1 %	1.6 %	0.5 %
D. The Oregon Department of Forestry is responsible for protecting property from wildland fire.	17.4 %	45.8 %	25.6 %	8.5 %	2.7 %
E. Protecting property from wildland fires is a shared responsibility between private landowners, local, state, and federal government agencies.	65.1 %	28.6 %	4.6 %	0.4 %	1.3 %

13. A number of activities can reduce your community's risk to wildland fire. These activities can be both regulatory and non-regulatory. An example of a regulatory activity would be a policy that requires the review of development plans to meet certain criteria in known wildland fire hazard areas. An example of a non-regulatory activity would be to develop a public education program to demonstrate steps citizens can take to make their property safer from wildland fire. Please check the box that best represents your support of the following strategies to reduce the risks posed by wildland fire.

Risk Reduction Strategy	Very Supportive	Somewhat Supportive	Neither Supportive nor Unsupportive	Somewhat Unsupportive	Very Unsupportive
A. Public information to increase citizen action in reducing risk	97.3 %	28.4 %	3.3 %	0.4 %	0.4 %
B. Requirements for vegetation management around structures located in high hazard areas	38.7 %	40.0 %	10.4 %	6.2 %	4.7 %
C. Building construction standards for new development in high hazard areas	49.6 %	33.6 %	9.3 %	5.6 %	2.0 %
D. Access/roadway guidelines for new development in high hazards areas	52.9 %	35.1 %	8.7 %	1.8 %	1.6 %
E. Developer and builder educational programs	48.5 %	38.0 %	11.4 %	0.7 %	1.3 %
F. Wildland fire mitigation checklist for development review process in high hazard areas	41.9 %	39.7 %	13.5 %	3.6 %	1.3 %
G. Public purchase of land in high hazard areas for open space	19.7 %	26.5 %	30.9 %	10.3 %	12.6 %
H. Require new rural residential developments be within rural fire protection district boundaries	24.3 %	25.9 %	22.8 %	13.2 %	13.8 %

GENERAL LANDOWNER INFORMATION

14. How long have you owned the property to which this survey is addressed? Average 19.3 Years

15. What is your zip code?

16. Is this property primarily used as a business?

8.2 %	Yes
91.6 %	No (IF NO, Skip to Question 17)

16.1. What type of business is it?

43.9 %	Agricultural
24.4 %	Forest Resources
2.4 %	Industrial
9.8 %	Commercial
19.5 %	Other (specify):_____

17. Do you rent or own the home in which you live?

0.4 %	Rent
97.6 %	Own (or am buying)
1.8 %	Occupy without payment or rent

18. Do you live in the home where you received this survey year round or seasonally?

93.0 %	Year round
6.1 %	Seasonal

19. What is your age? Average 59 Years

20. Please estimate your total household income in 2004 before taxes.

0.8% Less than $5,000 11.9 % $15,000-$24,999 13.7 % $75,000-$99,999
2.6 % $5,000-$9,999 24.9 % $25,000-$49,999 8.0 % $100,000-149,999
4.4 %$10,000-14,999 25.1 % $50,000-$74,999 8.5 % $150,000 or more

21. Please indicate your level of education.

1.1 %	Grade school/no schooling	24.9 %	College degree
2.7 %	Some high school	15.2%	Postcollege degree
16.6 %	High school graduate/GED	1.1 %	Other (please specify):_____
35.8 %	Some college/trade school		

Please feel free to provide any additional comments in the space provided below.

THANK YOU VERY MUCH FOR PROVIDING THIS INFORMATION

The Oregon Natural Hazards Workgroup at the University of Oregon's Community Service Center prepared this survey. For more information, please contact Oregon Natural Hazards Workgroup at 1209 University of Oregon, Eugene, OR 97403-1209, call (541) 346-3653, or visit http://www.OregonShowcase.org

Responses to Open-Ended Questions

The Lane County Landowner Survey included a number of open-ended (e.g., fill in the blank) questions. The following represents the transcribed comments provided by survey respondents.

Q-3. How have you received information in the past about protecting your property from wildland fire?

Neighborhood or community group

- Neighborhood Watch Disaster Preparedness Program
- Can't remember which
- SBNA
- Spencer Butte Neighborhood Association
- SBNA
- Fire prevention info from schools
- Ag. extension service
- Forest Service fire crew
- Visit/property inspection by local fire dept/forest service
- Work, ex-USFS fire prevention specialist – ex-rural fire dept. firefighter/officer
- Firemen from local fire dept
- Neighborhood Watch
- Homeowners Association
- Volunteer group
- Church – CERT. Evacuation – specifically in event or tsunami, not fire
- McKenzie View Neighborhood Watch
- Spencer Butte Neighborhood Assn. fire tree list
- SBNA
- McKenzie View Neighborhood Watch

Other

- Forest Service
- Work
- Has house and property evaluated by ---somebody ---USFS?
- Property in LaPine Oregon
- Home and fire magazine
- Personal study
- Lane county
- Common Sense
- Work
- Member of national fire team
- Common sense
- Permit requirements
- County
- Newspaper
- West Lane Forestry

- Land use requirements
- Forestry graduate
- California Dept. of Forestry
- Used to be employed at E.P.D.
- Government warning sign posted in area.
- Experience with slash burning. Worked in the woods and saw it get out of control. We had to fight to regain control. Scary stuff!!
- Training sessions in wildland fire fighting
- Common sense!
- County – when applied for a permit
- Fire expert at Neighborhood Watch meeting who worked for our environmental consulting business in California as a consultant
- Lane Co. land use permits
- When it was close they called with a message (recorded)
- From Lane County building permits
- County land use development
- Building permit process
- City of Eugene
- Retired Eugene Fire Dept.
- Deschutes County
- Lane County
- Extension class
- Insurance co.
- Grandson who is a wildfire fighter
- Forest stewardship plan

Q-4. What is your preferred method for receiving information about protecting your property from wildland fire?

- Experience
- Local news
- Ongoing educ. (students)
- Email
- Forestry Dept.
- Onsite consultation

Q-7.1. Which of the following actions have you taken on your property?

- Reduced forest fuels
- Fire hoses and fire hose connections to my water system
- Drip system
- Reduced vegetation throughout thinned trees
- Moved firewood pile
- Replaced Shake roof with Metal
- Mow approximately 1 acre around house
- Regular mowing along fence lines and roads

- Buffer Zone
- Identified places for pump truck to get water
- Fuel burn inspection during remodel of house
- Moved firewood away from house
- Pond/pump/fire hoses
- Fire tank trailer/pump
- Blacktop around the home
- Kept pastures mowed
- Barrel of rainwater
- Adequate
- Firewood away from home, no cedar roof
- Have rock & river as property lines
- 350 gal. water tank on wheels & hose
- Fire breaks, back up water supply
- Upgraded pellet stove vents
- Fire extinguisher in house & garage
- Extra hose cart for fighting fires 5/8"x200' hose (until help arrives)
- Disc around property line
- Large fire ext.
- Maintain about 2 miles of interior roads
- Regular mowing
- Turnaround for fire truck near house
- Cut trees
- 2,000 gallons of water stored for pumping
- Clear bush out
- Clean up winter forest debris
- Super sensitive smoke alarms
- Removed shakes & used composition roof
- Added driveway that is more direct to road
- Put in a fire-safe zone around home/buildings
- Installed steel roof

Q-9. Which of the following incentives, if any, would motivate you to take additional steps to better protect your property from wildland fire?

- Fire dept assessment of property
- A survey of my property to show me where & how I could improve my risk of wildfire damage.
- Not very good options
- Low cost tractor/mower deck rental from the county or fire department
- We asked our insurance company and there is no significant difference in risk if we build out of wood or brick, so we are building out of wood
- Logical practicality [will it really help]
- Need Parks Dept. to clean up their mess
- Public assistance

- Because it's my home
- Someone to do the job
- Safety measures
- I take fire seriously – it is my own responsibility; it is my job.
- The incentive is to reduce fire potential.
- Help in the cost of doing it.
- Rebate
- Nothing – I protect my property now
- The work I do is to prevent my house from burning & my neighbors'
- We are motivated by safety & responsible property ownership. However, we would not turn down any of the motivations listed!
- Low cost assistance clearing large trees.
- Safety
- Services of professional consultant about what specific steps to take for my property
- Clear need demonstration – I feel current situation is OK
- Common sense
- Safety unproved
- Onsite consultations

Q-16.1. What type of business is it?

- Horse ranching
- Church/school
- Rental
- Mobile Home Park
- Campground/mobile home park
- Art sales – mail order
- Boarding kennel
- Horse ranch, 8 acres, ½ trees, ½ pasture
- Golf course
- Rental house
- Photography studio
- Design & retail
- Trailer court

Q-21. Please indicate your level of education

- Broker's license, real estate
- Administrative counseling
- Ph.D.
- State Ed program in law enforcement
- Navy schooling
- Post-doctorate
- USAF

Please feel free to provide any additional comments in the space provided below.

- We moved from Bend/Redmond where we lived amongst old growth Junipers. We were very aware of green space around buildings and activities outdoors with potential fire danger. We are not lulled into thinking fire can't happen over here. We live in the Mohawk Valley on the river & are less likely to have a wildfire. How about fire dept. issuing & selling fire & emergency address signs.
- We live on a busy road and worry a lot when the vegetation along the road is tinder dry. We have had fireworks tossed out of cars and cigarettes. We do water as often as we can to try and keep the fire danger down.
- My greatest concern is development that brings families into the are who have little boys, since boys like to sneak off and smoke and/or play with matches, lighters, and other fire. I consider them to be the gravest danger, at least to my woodlot and, therefore, my home.
- This is a great community service in developing community wildfire protection plan. We are in a rural area and have a high potential [because of] hazardous place next to us. The owners have large areas of "junked" equipment & fallen trash & wood piles. County regulations must allow this . . . or at least have no inspection policy to deter such hazards!! How do we report this?
- Church structure with metal roofing located on large lot that is mowed to meet fire safety standards.
- I am always surprised to see that fireworks are sold in Lane Co. They are a definite fire hazard. This survey is important, as will be the follow-up.
- Most of this survey deals with housing developments. I live & manage timber property where we worry about a "forest fire" – not a fire that goes thru the Eugene South Hills.
- Survey requires over-simplification and solutions, as well as specific circumstances, so results should be viewed with caution.
- I live in a subdivision of 28 homes. We spray for gorse control of common areas every year. A lot of land around us has a lot of gorse which is a fire hazard. They should be made to control it.
- There has to be a strong enforcement (with teeth) or a total ban on entry into BLM lands or other public/gov't-owned timberlands. Without this we are all open to vandalism & nuisance/careless fires!
- Conceding that there are always extenuating circumstances, as a matter of principle, the general public should not be made responsible for fire protection in areas of residential developments which were irresponsibly located in high wildland fire hazard areas.
- Our rural neighbors need to be educated concerning fuel for wildfires. One of them brought clippings from town and dumped them on our right-of-way at the bottom of our hill – fire travels uphill!?!
- Questions unclear at times. Should have "not applicable" choice.
- Strongly prefer incentives over regulations. It has been very difficult to make our older home/property less vulnerable. Education would be most effective at the time of development.
- Thank you for drawing my attention to some of these questions – I've lived here 4 years and realize I need to find out some answers.

- I believe that private property owners should continue to be allowed to prohibit government agencies from using chemical plant growth controls on roadways bordering private property.
- It's very important that people help themselves. An awareness program to help people focus on the potential danger can be very important.
- On question concerning improving emergency access to my property, my driveway has a sharp uphill turn that makes it difficult for heavy equipment and access.
- My feeling is that people who live in forested areas are more aware of fire danger than those who live elsewhere. I think in general we are more careful and observant than those who just visit the forest. We take care of our forest.
- Neighbors allowing their lands to become a fire hazard as a result of uncontrolled grasses/trees/weeds monitoring needed and enforced.
- The Army Corps of Eng & Lane County Parks (Dexter Lake) now have a firebreak area between their park and our private prop.
- Common sense must prevail.
- I am pleased to see this survey. I hope more can be done to help with wildland fires.
- This survey was educational – provided info.
- I would need to hire someone to clear brush – at what cost?
- I worry when a neighbor's bonfire is closer to my fence/forest, than to the neighbor's building. That neighbor may consider that his bonfire presents no risk (to his building) or that containment has never (yet) failed. Perhaps I simply worry too much.
- I feel access to land for fire fighting equipment very important – more important than preserving wilderness from this access. Strict enforcement of fire season – equipment use, fire protection equipment, burning (not allowed).
- The area I responded to is near Loraine Hwy & Fox Hollow Road.
- There is a fine line between wanting to do the right thing to protect property and over-regulation. Incentives to conform to a safer environment need to benefit not only the owner but also renters who maintain the property anyway. Thank you for this much need survey. Because of your survey I will make sure I have wildland fire coverage.
- Just a thought: If you could somehow convince (without coercion) property owners with on-site dead wood (standing or fallen) to allow trespassing (by neighbors) to remove deadwood only (for use as firewood). Restrictions could apply where requested such as – no roads, no motor vehicles, only what could be moved by wheelbarrow; by hand, no chainsaws, only non-motorized saws & axes. Woodcutters should show ID & sign in, naturally no trash to be left behind. Only on specified days and/or times. Removal of even a percentage of dry deadwood should reduce risk of wildfire speed and intensity. For example: in Sec 26, T185, R4W, I don't suppose that you could initiate contacting the out-of-state owner of tax lot 404 to ask if the tenant-resident of tax lot 200 (across the road) could harvest dead wood (only) for firewood? Would they all have to sign a waiver for risk or injury?
- #1 Suggestion: Please make fireworks illegal!!! Especially in hazardous areas!!!
- 50% of surrounding properties are F2 in immediate area
- We need to get into our forests and get rid of all old and rotten trees. Keep our forests healthy. Also we need a lot of roads through our forests. We need to be able to get to a fire. That's the way it used to be.

- We do not need more laws and restrictions. We need education.
- I live in the Mohawk Valley which is largely commercial timberland and ripe to burn. To my knowledge, there is no plan for evacuation!
- We moved to this residence because it is in a beautiful location, away from large numbers of people, and are willing to accept the risk of fire. We voted against a rural fire protection district.
- Re question 11 C & D (preventing or regulating development in hazard areas): Sounds too restrictive, as if written by the ON.R.C. Re question 13 G (Public purchase of land in high hazard areas for open space): Do not like buying & locking up land by government.
- Less government & no more taxes
- Monocultural management increases wildland fire danger.
- Plan to hold religious activities on this property. Also Boy Scout campout. Will stress fire safety at <u>all times</u>!!
- Visit by local fire personnel would be very useful. We may think we are doing all we can but they are experts and would see things we are not aware of or have useful & valuable suggestions. Also, in rural areas are local fire personnel familiar with the area & roads and addresses?
- #12 is written in such a way that I had trouble deciding what to check. I feel private prop. Is the responsibility of owners w/the help if they need it from appropriate agencies.
- Illegal burning is a serious issue, both out of season and type of burn. I have been told that LRAPA has enforcement jurisdiction for penalties, but Lane rural will respons . . . not good. Lane Rural needs the ability to levy fines <u>and keep</u> the money for future enforcement!! Stopping illegal burning will significantly reduce the risk of wildland fire. Having been a hotshot, I know that "John Q Public" has no idea of the factors influencing fire . . .
    - Low humidity
    - East winds
    - Wind at all
    - How deep the heat goes into the soil, leaves, and how long it stays hot

  I would not be opposed to eliminating all residential burning . . . although it does seem that the public pyros get a little carried away on controlled burns and start a few too many "big ones" themselves. Thanks.
- Thank you for letting us participate in your survey. :)
- I think we should look into stopping all slash burning. The material should be chipped & broadcast back into logged or thinned areas. Also, this could be trucked out for mulch, but not left in large piles. I think piles could build heat & ignite.
- I received much of my info. when I applied to build a house. I had to do some clearing and am planning on keeping it up, and I have to, anyway (T2 property). It only makes sense. Education is the best way. I've lived here 18 yrs.; country people don't like to be <u>told</u> what to do.
- We live in a high risk fire district. Our local fire chief is an active and competent person, fully capable of organizing and facilitating wildfire protection for the Dexter community. Myself and my friends in Dexter active support the implementation of his guidelines, as we feel he knows both our fears and our needs. But Dexter needs funds for firefighting and for community outreach.

- The insurance companies seem to have more influence on rural area owners. They can levy things quicker than our government. If people don't meet the minimum standards on an inspection (could be done by the local fire department) the insurance gives so much time to comply or they become uninsured and assigned risk (higher rate for so much time after complying), etc. Require local fire inspection report before (and rated off) insurance. Quit making everyone else foot the bill through a blanket amount!
- 10 years fighting wildland fires has given me a new perspective on stewardship of my land, but I am against any governmental agency regulating my stewardship of my own property. Fire season and fire season regulations excepted.
- Thank you
- My property borders federal land (USFS) on 2 sides. Brush hangs over to my property. Extensive brushing would be required to clear a safe distance. I have neither the time or money to do it myself or hire someone. I think USFS should take some responsibility in doing the brushing.
- We continually cleaned, cleared, & burned stumps, brush, and logging slash. Now we are not to burn after it is dry enough to burn clean and only after the wind is up, which blows live material to start more fire. Who thinks up the rules? All oldtimers felt ditches, roadside were now too much of a threat to burn. Also – you don't get a large log on a slash pile ot stump burned out in 6 to 7 hrs – you feed it until it's gone – not throw water on it in damp weather! (A safe time to burn.)
- Given a choice, how many environmentalists would show p for a fire prevention project, or protest or strike a timber sale?
- Now follow through – thanks
- IOC – every year forest service has so-called burns under their supervision and almost every year a fire gets away.
- Stop building in high risk zones. Stop all cutting of big trees. Return forests to natural states. Prescribed burns, native vegetation, etc.
- Although rural residential property owners stress private rights, wildland fire risk is definitely a shared responsibility that directly affects safety of neighbors and warrants reasonable government intrusion.
- Vacant land – no structures. Growing trees.
- Incentives for insurance companies to provide educational literature to homeowners?
- I believe education is better than regulation of wildfire management.
- Thank you for pursuing this important project. Drought conditions re getting worse each year, & we all need to be proactive and work diligently on prevention & preparation. Community education is vital. Thank you!
- Open range for goats to cut back in wildland fires.
- We live in the Brice Creek rural area, not far from the national forest. We have one road serving us. One direction goes into Cottage Grove, the other direction leads us into the national forest. So you could say that we would have only one way out in the event of a forest fire. We have no fire protection and NO police protection. We are on our own up here. We all have our own wells, and in the event of a fire, if our power lines burn we are without any water source to fight it. We have cleared all the close brush around our house (except one tree), and we irrigate the whole yard all summer to keep things green. Due to the predicted water shortage this summer, we are considering not watering as normal, in

order to preserve our well water. We have read several articles about the coming fire danger and the shortage of water. The river that borders us is as low now as it gets in August. We are worried. And we aver VERY upset about the practice used by the federal (and state) government(s) of "prescribed burning" and letting the forests grow in a "natural state, with no logging or thinning or road building. This insane practice has put all rural folks in a dangerous position. I would think that the Biscuit Fire would have served as a good lesson against these practices. The lack of roads into the Biscuit area prevented equipment from getting into areas to prevent the fire from spreading. The roads themselves help serve as a fire break. And "prescribed burning" is the epitome of ignorance! Wasn't it Arizona that had a "prescribed burn" get out of control? Have you sent this same questionnaire to our federal and state governments to question their lack of responsibility in getting us in this predicament? I would hope so. You would better serve the people of Lane County if you put your pressure on the governments to put some sanity back into managing our forests by logging, clearing, and USING our forests again. Why should all the responsibility of preventing forest fires be put on the shoulders of the little private property owner when it hasn't been our practices that got us in this mess? We would be glad to do anything we can to help in the coming crisis, but I think it's like closing the barn door after the horse has left.

- Would very much like more info on how to protect my property in an event of a wildfire and also prevention information.
- I live in London; we have no fire protection, vol. or otherwise. If we have a structure fire out here, we lose everything we own, because Cottage Grove Rural will not respond out here on Shoestring Road. Get us help PLEASE!!!
- Re question 13F (Wildland fire mitigation checklist for development review process in high hazard areas): very supportive if for speculative development, but not for single dwelling owner occupied. Re question 13H (Require new rural residential developments be within rural fire protection district boundaries): very supportive if for speculative development but not for single dwelling owner occupied.
- The community fire dept. is particularly impt. During our current drought cycle. This summer may be critical & prevention should be stressed in the media.
- Re question 13D (Access/roadway guidelines for new development in high hazards areas): Who will make the criteria and determine what high hazard areas are?
- Don't assume because you live off of the taxpayers that you are more wise. Oregon has been overrun with Calif people; they don't speak for normal people.
- My comments are swayed because I live next to the city but am serviced by the rural district. There is little or no chance of wildfire problems for my property. I water throughout the summer and so do others in my area.
- You miss two big factors affecting wildfire hazard in the South Hills of Eugene. 1) The city needs to be more proactive in closing Spencer Butte Park during periods of high fire hazard. It needs to educate the general public that uses the park with signs and media regarding fire hazards and public responsibility. 2) EWEB needs to provide enough water pressure so fire hydrants can serve the South Hills where there is residential development. The city fire department can serve this area better, too, with medium sized pumper trucks.
- We need to restore fire to our forested ecosystems without the occasional episode of too much smoke in the airshed.

- Most of the wildfires in the area of my residence are grass seed fields. Only on rare occasions are trees & shrubbery involved.
- The majority of private landowners are concerned and aware and capable of figuring out a few things on their own. We do not need to have another government program to tell us how fire starts. I'm sure, though, that the results of this survey will show overwhelming support for that. How about providing tools if you want to help. Shovels, axes, hoes, portable pumps at low cost to rural owners – way more effective than a bureaucracy.
- Our rural fire chief has made our area safer. Immediately after being hired he updated maps to show homes built. Many homes were not even shown on existing maps. With lack of funding to fire services everyone needs to help.
- No smoking on hazardous days in or out of vehicles. Lit material out of cars has started most of the fires around here since 1969.
- I feel in this high risk residential area a business that requires 6 to 8 employees working in a 20x24 building with high windows, 1 door, electric office machinery is dangerous to the employees & our neighborhood. There is also a high volume of delivery boxes and packing debris left thrown about and overflowing the containers. Vegetation & yard debris that is stored on property is creating a potential risk for fire, with many of the employees smoking without a smoking area except outside with the debris. Could this kind of problem be addressed by a fire inspection? This also adds on most days 6 to 8 cars, delivery trucks 5 to 6 times a day on a single lane road causing traffic problems with emergency equipment. Thank you.
- This survey has great potential to be misused in that the questions asked are complex, and would be answered in different ways depending on assumptions made. In particular, questions 12 & 13 were difficult to answer. That said, this is an important survey – thank you.
- NOT crazy about the education that comes out of the U of O on Oregon logging industry – there were less fires in the wild that are started by lightening & idiots when harvest was being done by good people – it provided money for fire, police, education, roads – "a renewal resource."
- We feel educational programs are very important. We think it would be good to have various approaches to education so as to interest and engage more people. These days there is so much innovation and creativity using differing media. We feel this could be put to good use in a situation like this. It is very prevalent in our country for people to have great aversion to being told what to do. They want to go it alone, do it their own way. These people need to be drawn in. It would be good to have ways of visually impressing upon them the impact and power of fire. Let them see how it can destroy homes and lands, **their** homes and lands. We suggest as part of education and also getting people involved that town hall meeting would be good. Perhaps representatives of a neighborhood could come and then disseminate the information to their neighborhood. Encourage people to see that wildfire is a community issue. Help tem to see that we are all connected, that fire doesn't know property lines. Hopefully, encouraging people to work together. Posters and flyers at local stores, banks, post offices during fire season could be a good means for alerting locals of conditions and fire danger. This is good for those who might be disinclined to read their mail or listen to the news. Individual onsite consultations are a very good idea. This would also be a helpful educational tool with practical and concrete guidelines as to what needs to be done at each site. It can be very

overwhelming for some to have to do this work. Don't just give a to-do list but offer ways to help facilitate the actual implementation of the guidelines. For those who are not able to do the work themselves it would be good to have funds available to help them. Also a list of resources including labor possibilities would be helpful. Possible groups who might be able to help with the actual work: Boy Scouts? AmeriCorps? Sheriff's Work Crew? Landlords of rental properties need to be part of this picture, too. Renters can often be disinclined to make improvements to their homes as they are not owned by them. What about a neighborhood watch-type program that watches for fire danger and fire. It would also be good for the local fire district and sheriff to know of and have located gathering spots for smoking, drinking, whoopee-making, etc. These are very potential danger spots for fires being started. They should be patrolled regularly during the dry season. We suggest more local control of the burning season; more local than even the county level; perhaps by fire district. We also suggest more flexibility to turn on or off the burning season. Here in March, before this wonderful rain, we had August conditions. Burning season was still happening. It is better to be able to adjust the burning to current and very local conditions. We suggest that it is best to have to not only call LRAPA to see if it is a burn day but to also call the local fire district as well to see if it is allowed based on humidity conditions. For when people do burn we also suggest educating them how to safely burn, how to put out the fire **completely** once the pile is burned. Teach the dynamics of fire and fire safety. We definitely feel that wildfire is a problem and the responsibility for all parties affected by it. The different agencies need to work together. The landowners need to participate. There should not be isolation as all are affected. We all need to work t5ogether to come up with working solutions for the good of all.

- I am concerned about limiting property owners' choice to build within "high hazard" areas. If they build it & it burns, their loss. Although they do have a responsibility to neighbors & community.
- Inform the people of problems, they will do the right thing to the best of their ability.

Appendix F
Stakeholder Interview Summary

Background

Lane County initiated a Community Wildfire Protection Planning (CWPP) process in fall 2004. The County hired Oregon Natural Hazards Workgroup to assist in the development of a plan aimed to address the complex issues surrounding Wildland/Urban Interface Fire. Lane County understands that the success of a CWPP is tied to the ability to effectively involve a broad range of local, state and federal stakeholders in the planning process. The inputs from a diverse group insure that the final plan reflects the highest priorities of the community, while highlighting the fact the implementation will need to be accomplished through a collaborative partnership.

In early January, ONHW conducted telephone interviews with 18 stakeholders identified by the steering committee for the Lane County CWPP. The purpose of the stakeholder interviews was to document key issues, concerns, and current activities related to the CWPP requirements of:

1. Collaboration: A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.

2. Prioritization Fuel Reduction: A CWPP must identify and prioritize areas for hazardous fuels reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.

3. 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 by the plan.

Stakeholder interviews accomplish this by gather various perspectives from the local, state and federal partners by:

- Identifying critical issues and concerns,
- Documenting of current activities, and
- Exploring opportunities for collaboration.

Appendix F includes a summary of key issues identified by stakeholders and a transcript of the telephone interviews. Lane County will use the information from the interviews to assess the risk factors of local preparedness and capabilities and to analyze common themes

surrounding fuel reduction and structural ignitability within the wildland/urban interface.

Methodology

Stakeholders came from a pool that included both public and private interests, and all have either expertise in fire issues or the authority to help with implementation of the plan.

ONHW sent each stakeholder a preliminary email explaining the plan and its purpose. The email also contained a copy of the interview questions for the stakeholder to look over prior to the actual interview, a brief statement explaining why they had been selected as a stakeholder in the process, and a list of available times to be interviewed. Interview questions were grouped into four main areas:

- Current Activities
- Key Issues Related to Hazardous Fuel Reduction
- Key Issues Related to Structural Ignition
- Collaboration and Participation

Some questions were modified slightly or not asked at all depending on their relevance to the stakeholder. Each interview lasted approximately 30 minutes. Interviews were transcribed by hand during the interview, and then typed into a computer template afterward. Following completion of the interviews, all of the answers were documented then analyzed for common themes.

ONHW completed the interviews in February and March 2005.

Participants

ONHW interviewed the following stakeholders:

- Nancy Ashlock – Assistant Fire Management Office, BLM Eugene
- Carl West – Fire Management Officer, USFS - Siuslaw National Forest
- Rick Rogers – District Forester, ODF Western Lane County
- Lena Tucker – District Forester, ODF Eastern Lane County
- Donna Disch – Oregon State Fire Marshal
- Mark Reese – Lane County Sheriff's Office
- Dale Wendt – Lane County Public Works/Land Management
- Don Nickell – Lane County Public Works/Land Management
- Chief Dale Ledyard – McKenzie Fire and Rescue
- Chief John Buchanan – Siuslaw Valley Fire and Rescue
- Chief Marty Nelson – Lane County District #1 (Veneta)

- Kevin Urban – Community Services Director, City of Oakridge
- Karl Morgenstern – Coordinator, Drinking Water Source Protection, EWEB
- Mike McDowell – Team Leader, Weyerhauser
- Steve Akehurst – Chief Forester, Rosboro Lumber Co.
- John Buss – Chief Forester, Davidson Industries
- John Day – Union Pacific Railroad, Oakridge Office
- Roxie Cuellar – Director of Government Affairs, Homebuilders Association of Lane County

Summary of Themes

Stakeholders mentioned several themes repeatedly through all categories of questions: 1) funding obstacles; 2) follow-up and maintenance of policies and programs; and 3) education of landowners. The remainder of this section summarizes other themes of the interviews within the four areas of interview questions.

Risk Perception and Current Activities

The following is a brief summary of the stakeholder's perception of wildland/urban interface (WUI) fire risk, current policies and programs, and funding for programs related to WUI fire.

Perception of fire risk

- There is a perceived threat from fire in the wildland-urban interface area by all of the stakeholders
- The WUI conditions exist and in fact the threat is increasing and protection capabilities are difficult without strategic planning
- The main fire threat is from the build-up of hazardous fuels when debris accumulates on the forest floor after thinning or other treatments
- There is a need for outreach in areas that are unprotected by a Rural Fire Protection District

Current policies and programs

- Lane County zoning codes (e.g. Chapter 15 and Chapter 16 sections 10 &11) were mentioned as mitigation element
- Fire Defense Board and Fire Prevention Co-ops activities
- Current emphasis is on response plans
- Oregon Department of Forestry's plans and programs focused on prevention and response
- Oregon Forest Land Urban Interface Protection Act of 1997 (better known as Senate Bill 360) was also mentioned

Funding

- Nearly 50% of the stakeholders have received some form of grant funding for various activities related to WUI fire issues
- Government agencies and Rural Fire Protection Districts currently apply for grants and matching funds for mitigation projects, fire planning, outreach, equipment needs, and GIS mapping
- Private sector stakeholders raised questions on eligibility

Key Issues Related to Hazardous Fuels Reduction

Stakeholders provided their issues and concerns related to identifying and prioritizing fuel reduction treatments. They were also asked about concerns they had regarding the types of methods used for fuel reduction treatments and about resources to help the County move forward with fuel reduction projects.

Identifying and prioritizing fuel reduction treatments

- Risk assessment can and should be used to identify and prioritize hazardous fuels projects
- Urban and under-protected areas should be a priority
- Fuels need to be treated on a landscape scale vs. a site-specific scale (e.g. defensible space projects and landscape scale projects should be done in conjunction with one another)
- Public and private projects need to be more coordinated and can facilitate sharing of labor, tools, and knowledge

Types and methods for fuel reduction treatments

- Most methods have been proven to work well, but the effectiveness of a particular method is dependent upon the nature of the hazard and the topography of the area
- Prescribed burning presents unique challenges in Lane County specifically around smoke management (e.g. diminished air quality and complaints from residents) and safety fuels can hold heat and flare up long after the fire crews have left. However, some stakeholder believe prescribed burning is good for forest health on a larger landscape scale
- Stakeholders were split on their concerns over the use of chemical treatments. Some see chemical treatments as affordable means of fuel reduction, while others had concerns about their environmental impacts.
- Brush cutting is effective, but is costly and requires dedicated maintenance
- Stakeholders indicated that debris removal is an important component of fuel reduction but that it is costly

Key Issues Related to Structural Ignition

Stakeholders provided insight regarding which regulatory and non-regulatory policies and programs might be effective in motivating property owners to reduce their risk to wildfire. A follow-up question was then asked regarding the obstacles that may hinder implementation of these policies and programs.

Non-regulatory policies and programs

- Homeowner and landowner awareness plays an important role in reducing structural ignitability, but current levels of education and awareness are lacking
- Free or easy debris removal programs are lacking and would be a great resource to enable the public to reduce their risk by removing hazardous fuels from their properties
- Firewise Workshops and Firewise Communities USA programs at the local level (e.g. fire district, town, or neighborhood levels)

Regulatory policies and programs

- Defensible space incentives or fire protection requirements from the insurance industry should be explored
- County building ordinances that regulate building and roofing materials are needed, and need to be followed up on and maintained over the long-term

Obstacles

- Funding for both non-regulatory and regulatory policies and programs is lacking
- Human resources for long-term follow-up and maintenance of policies and programs could be a problem
- Education of landowners and the public of their responsibilities in following regulations

Collaboration and Participation

Stakeholders answered questions related to their current level of participation in reducing the wildland/urban interface fire risk to Lane County. Other questions asked about current and future collaboration opportunities among stakeholders or other agencies. All stakeholders interviewed stated that their organizations are willing to collaborate on more site-specific local community fire plans that follow the countywide plan.

- There is currently limited collaboration among several agencies regarding wildland-urban interface or disaster protection issues
    - US Forest Service and BLM Interagency office collaborates with the Oregon Department of Forestry on wildfire response
    - Lane County Fire Defense Board

- Lane County Fire Prevention Co-op
- Lane County Interagency Emergency Response Team
- EWEB Hazardous Materials GIS Tool (collaborated with 27 agencies)

- Opportunities for collaboration will be increased through the process of this plan
- There will need to be a designated leader to drive the process and keep up the interest in the issues in order to ensure long-term collaboration and participation
- Careful consideration must be given on how to establish effective collaborative process to accomplish risk reduction.

Results by Question

1. Do stakeholders perceive a threat from wildland-urban interface fire in Lane County?

They perceive a threat and through the Lane Co. Code have tried to mitigate it
Chapter 16 sections 10 &11
Impacted and Non-impacted Forestland zoning restrictions
Firebreaks
Road maintenance

Yes, builders definitely are aware of dangers of forested areas whenever they build a house there, but it is not a big issue for us.

Yes
Surrounded by Willamette National Forest
Depending on conditions the a fire could pose a great risk to the city and its residents
Homes located the WUI
Depending on where the fire is there could be 10-15% of homes located in this area

To some level – most Siuslaw fires are human caused rather than lightning caused. Siuslaw has a fairly low risk of wildfire.

Yes. WUI conditions exist and are increasing. Protection of values will be difficult without a strategic plan in place. Natural occurrence of fires has caused a buildup of fuels that are dangerous.

Yes, Concern for Lane County
Potential for wildfire due to the six years of drought

Roads and keeping roads open
Parks
Waste Management not as much as other departments under public works
FLEET if back up equipment is needed- specifically in a response situation
The Parks Department had some experience in wildfires- the 126 fire in 2000 or 2001- some parks were used by fire fighters.
Public Works role is confined to Lane County Land Management (LCLMD)

Yes,
Drinking water source protection
Electric sources
Substations
Hydroelectric
4 stations on the McKenzie
There is also McKenzie Crew housing

Yes

Yes, big concern. Our land ownership is mixed with15 miles around Mapleton, as well as areas with homes intermingled and private in-holdings. So, high fire risk is always a big concern

Yes.
Volatile fuel buildups: The threat comes from volatile fuel buildups in the valley, brush, dense pockets to of trees near homes. They all can ignite quickly given the right weather conditions.
Under protected areas: Rural areas and under protected areas that don't have local fire departments are at risk because it's hard for home owners to understand what needs to be done to protect their homes.

Yes, Weyerhaeuser does perceive a threat.
The threat comes from a combination of backyard burning that goes out of control,
car fires on Weyerhaeuser roads,
trespassers with fireworks of firearms on Weyerhaeuser property, and
arson fires on Weyerhaeuser land by people who are trying to burn down equipment and property.
Other sources of threats are illegal dumps and meth labs that are located within a short distance from Weyerhaeuser land.
In 2001 and 2002 person/s driving up Weyerhaeuser roads and property attempted to start fires by throwing matches and fireworks. Most of the individuals who try to start fires on Weyerhaeuser land are caught.

Yes- SGT supervises deputies that patrol public land (interface?) and look for hazardous fuel loading. Work with Eugene/Springfield local fire departments and ODF to ID and mitigate fuels hazards. EX- Westridge fire between Westfir and Oakridge couple of years ago, 2 fires in one season.

Yes, has perception of asbestos forest, but with fuels and development has potential
subdivision covenant -> required shake roof, decreasing now (~50%), new are metal and are replacing shakes

Yes, no counties in Oregon are at low risk; with the population of Lane County the overall risk is probably low to high, but not as threatening as other areas.

Yes, Rosboro's ownership is intermingled with residential property and other developed property, and when that land isn't being taken care of, it threatens Rosboro's property.

Yes, due to conditions in Dist. Heavily forested area, inadequate infrastructure (ingress/egress), limited ability to work on private lands Dist. Encompasses Fox Hollow, Lorane Hwy, Gimple Hill, Noti, Veneta

2. Has stakeholder received grants or are they thinking of applying for grants related to wildfire in the WUI?

Yes in 2003 received Chapter 9 Federal funding to support fire safety breaks and fire safety on private lands.
For inspections, and,
Long range implementation

Not at the present moment.

Have not applied for any grants. We do fuels reduction projects through funding from Title II money from the Secure Rural Schools Act. In the last few years, have done around 500 acres of treatments with around $100,000.

Have not applied for any grants specifically. We receive money from National Fire Plan for treatments (normal channels of funding). Working with ODF and their grants to help implement projects.

They receive Title 3 Funding- goes to LCLMD into the GIS mapping and risk assessment
Working on a Homeland Security Grant working with emergency management overlays for GIS
Terrorism
Critical Infrastructure
Hazardous Materials
Hospitals
Evacuation Routes
Care facilities (Day Cares and Elderly Centers)

Yes
Working with ODF
Working on GIS base assessment tool for wildfires
This tool is being developed for fire departments, ODF and other agencies that deal with fire mitigation, reduction and response
The GIS Tool
Yearly basis
Assessment of Conditions
Fuel Loads
Priority Areas
Resources inventories of equipment
Access routes to prioritized areas
Critical Resources to be protected if there is a fire
ESA Habitat
Bases on all of the above the GIS tool will predict the fire's behavior.

Received one grant for $18,000 that was education based. Have not been successful with grants for fuels reduction – seem to be a higher priority in the southern and eastern parts of the state.

Yes,
National Fire Plan: ODF has received a grant from the National Fire Plan to help with projects creating defensible space around homes in the Coburg Hills and Marcola areas.

CWPP: ODF has received for two others Oakridge Westfir areas, a CWPP grant to assist them in writing a CWPP

ODF will be applying for two more grants for the Upper Mackenzie area and Bohemia Mining Community (down by the Umpqua communities). These communities are wanting to put together a CWPP and the grant money will help them with that process.

Weyerhaeuser has never applied for any grants, not sure if there are any.

Easter Lane Forest Protective Association funded by ODF. It's an association of landowners east of I-5 and the association is 100 years old. ODF gets funding form USFS to fund people who work on reducing risk of wildfire. Association members pay a membership fee based on some aspect of their land
Associations like this one are found all over the state.

No, no future plans.
7 total staff (including Sgt) are supported by stable funding from title 2 and 3 funds; LC reallocated Title 3 to LCSO for Forest Patrol Program.

Yes, ODF grants (NAME?) on response equip (slide in tank for truck) 90% match, and personal protective gear 50% match
East Lane ODF NFP/WUI public education

Currently in pursuit of one from the Nat'l Fire Plan (NFP) about ways to address structural ignitibility.
Other sources might be Insurance foundations.
NFP grant based on the CWPP risk analysis protocol from Jim Wolf.

Not aware of any grants available to private businesses; most go to other governmental departments/agencies

Not in relation to WUI
FEMA Fire grants for equipment
Homeland Security- CERT basic 1st aid response training.

3. Does stakeholder have any current plans, policies, or programs related to wildland-urban interface fire?

Referred me to Kent Howe- his supervisor

No. I'm not aware of any publications/research at the national HBA, but I don't see everything they produce, either.

Emergency Response Plan
Inter-government agreements with the City of West Fir, the USFS and other small communities (he did not go into detail about this.)

Forest Fire Management Plan. Provide response capabilities. Work with ODF on cooperative agreement to fight fire (both sides go out together). Siuslaw is not receiving NFP funds – money going mostly to eastern Oregon. Planning vegetation management projects for thinning in the WUI for timber harvesting on federal lands.

Federal Wildland Fire Policy – agency driven; protection based.
Integrated Fuels Management Strategy – identified high risk areas in the WUI.

Don't know the details- referred me to Bill Sage and Keir Miller

Yes, on hydroelectric generation stations located in USFS land there are Disaster readiness, response, risk reduction plans in place.
Required by the USFS
Also have fire response tool cache
Storage of tools
Fire equipment
Fire truck
EWEB also has a fire response plan, (i.e. when to hand off to other agencies)

The entire ODF plan is related – focused on prevention and reaction/response.

Fire seasons are usually short out here around the Coast, though this year may be more of a problem. During these times when the burning index is low, we do more patrolling, signing, gating, and a higher level of watch around areas near residential homes.
General wildfire programs – Readiness – we have people and equipment available and keep good access routes, and increase awareness level when risk is high.
Mitigation/ risk reduction - Silviculture and fuel reduction go hand in hand. Reduce slash after logging. Areas next to interface – we do more burning when smoke isn't an issue.

Senate Bill 360: Overall, Senate Bill 360 is the overarching guidance (Oregon Forest Land Urban Interface Protection Act of 1997). Senate Bill 360 allows for communities or counties to map their risk in the WUI and establish risk classification. This is legislative police but there is no funding to enforce it; agencies rely on grants through national fire plan to enforce the legislation. One problem is that not everyone is doing it. But the bill sets a standard for creating defensible space. Homeowners could be liable for extra costs if a wild fire happens and they've not complied.
- Everything else (all other programs/policies) is local
- ODF provides information at community events
- GIS: they have GIS to help with mapping. They're refining their GIS to be able to look more specifically at individual homes and identify risk.
- Fire Defense Board: ODF participates with Fire Defense Board, which consists of all the fire chiefs in the county

- Fire Prevention Co-op: Also a part of the Fire Prevention Co-op, which includes other partners such as the US Forest Service and the BLM
- Participates in Keep Oregon Green

Lena thinks that lately there has been more of a push to focus on WUI areas and fires in the WUI

Most timber companies put together a fire plan, includes fire safety information that is used for training employees and contractors. Weyerhaeuser's fire plan lists resources, key operator contact information, and an inventory of all of their company's equipment. Weyerhaeuser's document is roughly 100 pages long, and they provide a copy of the fire plan to neighboring landowners. Weyerhaeuser gets fire plans from the other landowners in return. Fire plans are updated yearly.

Weyerhaeuser operates a Hunter Hotline that lets hunters know whether Weyerhaeuser's timber lands are open for hunting due to fire danger.

Weyerhaeuser has tight restrictions on public access to their timber lands: they don't let public into timberlands during the work week, and they close the gates on weekends if there is fire danger. Most of the fires they've had have been started by trespassers so access restriction is one of their key policies.

Weyerhaeuser also buys adds in the newspaper when fire risk is high to let public know why tree farms are closed and to prevent trespassers from breaking onto the tree farms.

Weyerhaeuser responds to any fires on active operations. Any fires that happen on inactive operations are responded to by the Eastern Lane Forest Protective Association.

Weyerhaeuser tries, when possible, to improve water sources that could assist firefighters.

They also update road conditions, when possible, to make access easier for firefighters.

No. If called on an illegal burn-by FD and LRAPA, LCSO can respond and use as outreach opportunity.
USFS, BLM, ODF, LC Fire Defense Board
Umpqua, Siuslaw, Willamette, ODNRA, all BLM lands in County (partnerships)

Disaster readiness – ex. education programs
E Lane with Homeowner Assoc, and ODF, focused on mitigation
Response – ex. improved emergency access
SOP's in place for fire
Risk reduction – ex. defensible space, education programs

E Lane ODF efforts at identifying defensible space, water access, especially on Camp Creek Ridge
Partnerships related to reducing wildfire risk in the WUI).
EL ODF main contact, 2 neighbor RFD's communicate

Disaster readiness – ex. education programs
Technical advice, Identify existing statewide programs, promote Fire Def Boards to generate a county level ID of unprotected areas, focus on building capacity to defend existing areas, then outreach to unprotected to get to join.

Response – ex. improved emergency access
Key is unprotected areas, unsure of solution about how to address

Risk reduction – ex. defensible space, education programs
NFP grant on the survivability of structures
Work with LCDC on streamlining the process from land design to county code to fire code with common goal.

Partnerships related to reducing wildfire risk in the WUI).
Work with Federal Mgrs, County Emergency Mgrs,
Biggest partner is ODF,
Try to pool applicants so not applying against one another @ county level.

Rosboro has an annual Fire Plan that details their internal fire actions and responsibilities. Their plan is shared with most forest department districts and state agencies.

Rosboro has a relationship with the Oregon Department of Forestry, and through ODF Rosboro is connected with rural fire departments.

Fire Associations: collection of landowners in each district that provide input and contractual relationships with ODF for fire protection (Contract with ODF for fire protection on the private land); 14 associations across the state

Disaster readiness – ex. education programs
CERT
Response – ex. improved emergency access
Crew trained in Wildland Fire Fighting and gear at certain times of year
Risk reduction – ex. defensible space, education programs
Education with Homeowners association, Granges
Partnerships related to reducing wildfire risk in the WUI).
W Lane ODF
Fuels Reduction Display- Station 185 @ Macbeth and Fox Hollow (1-1.5 ac)

4. What issues or concerns should county consider in identifying and prioritizing fuel reduction projects on public lands?

Yes
He talked about how staff go to workshops to learn more about mitigation techniques and how to properly address risk with hazards (not just fire, but all hazards- including natural and man made)
He mentioned that State Code has been updated so that firebreaks are now required around all structures not just dwelling units. Including Propane tanks

Especially look into urban areas and how fuel reduction will affect these areas.
Again he did not go into much detail, even after probing questions.

There should be a higher level of treatments on private lands. Clear cutting equals higher slash loads which increase dangerous fuels.

Fuels need to be treated on a landscape scale vs. a site-specific scale. Defensible space projects and landscape scale treatments need to be done in conjunction with one another; also need to be done collaboratively. Currently, we have agencies all working on projects independently of one another. Also consider fire behavior – fuels reduction projects usually affected during extreme conditions.

Large Timber Land Owners, they need to be in this process
Rural Communities- especially those who are no incorporated. Their input is critical because there tends to be 30-50 homes in the WUI area.
USFS and BLM blow down data needs to be considered in the GIS data. Where there could be large amounts of hazardous fuels on the ground because of a wind storm

Four main ideas/ concerns
Know where the fire risk is.
Is it an isolated site or larger pattern on the landscape?
How will this risk be treated EWEB would like to be informed of the treatment, because this is the sole water source.
Large treatment, small treatment
What type of treatment
To make sure that the treatments in high risk areas are done correctly
How long are the response times to the high risk areas?
Is there access to these areas?
Where is the equipment to treat a fire in these areas?
Post fire hazards (EWEB has talked to USFS about this issue)

Generally there is post fire treatments that must take place i.e. reclamation
Concern in some high priority areas where there is no vegetation this could cause mudslides, landslides, and other natural hazards that could impact people, homes, drinking water and other important infrastructure)
This is an area that should be addressed in the risk assessment and the base map.

Number of houses at risk. Types of fuels and history of fire in the area. Risk assessment factors and classifications.

In our area gorse is a fire concern – burns hot and burns when fire index is higher. Gorse follows right-of-way, roads to homes, coastal area in the first mile in from the ocean. Bandon burned down due to large amounts of gorse. Scotch broom is also a problem. These are both noxious weeds and covered in the noxious weed program but this program may not be too effective.

Davidson actively reduces gorse on our land. But can't do anything on neighbors' lands. Thinning not a good treatment for gorse because spreads seeds, chemical treatment better. Education on this issue is important – may be able to pair fire danger and noxious weeds issues.

We should prioritize projects by risk and by potential benefits. There are areas where fuel loading high but may not be much economic benefit to treatments.

Priority areas are right of ways, highways, more risk as people move towards our lands. Dunes City and Florence are growing towards us. Having neighbors creates more risk.

Arsonists are big worry, hard to protect against. So, not high on priority list.

High fire danger – how to educate and increase awareness.

Keep action items simple and manageable: In choosing risk assessment guidelines that Lane County's CWPP will be working with, keep it simple. Right now it's based on GIS, methods from a Salem Forester. Keep the level that we're working on manageable, not too small. This way we can document changes over time and see what's been recommended and what's actually been done to reduce a community's risk of wildfire.

- Under-protected areas should be a focus.

- Tell people maintenance will be needed: It's important to allow for reminders to people that things need to be updated, that they'll have to continually work on maintaining defensible space around their homes.

- GIS: GIS is good, it allows for fire departments to easily see residents and access points within the communities.

The county already does some control, but could do more to control road side vegetation, including more mowing and use of herbicides.

The county should be more vigorous in holding landowners adjacent to public roads more responsible when they don't control their vegetation.

More law enforcement resources could be used to patrol areas where there are back roads and vulnerable areas with high amounts of vegetation fuels.

A lot of money can be put into fuel reduction, but if you can't control the people intentionally or unintentionally setting fires, then it doesn't matter

Educating landowners about what the damages of wildfires are, and how they can be held responsible if they are negligent about a fire, should be increased. Letting people know that they can be held responsible for a fire if they are found to be negligent, and then following through on prosecution should be increased.

No, support ODF, USFS, BLM in how they interpret the plan.

Resistance to regulations
County permit process now mandates 30-40' primary and secondary fuel breaks
Access to areas
How to act without clear and present danger impetus
Assess Risk, if risk started on fire what would be consequence, S face S slopes, grasses

Use of Risk analysis is Key.
ONC (OR and CA Counties) using Title III monies, in accordance with Public Law 106, reauthorized 106.
One Contiguous plan, not hop and skipping around ownership
ID existing resources (SOLV, Boy scouts)

The bigger problems lie on smaller private lands that aren't responsible to the Oregon Forest Practices Act. Largest forest project management is usually managed under that regulatory umbrella (under the Forests Practices Act), but non-forest operations have no regulatory oversight, some of the biggest issues that Rosboro sees are related to those unregulated smaller properties.

Is a never ending project, funding to sustain it.
How to get people to do it themselves on routine basis?
If they don't need to know that they are accepting the risk and that the FD might not be able to help them in a fire.
ID-> How assess risk to ID projects? Nature of plants, and proximity to house? How to prioritize, and prioritizing for the resident is a problem.
Prioritization-> How to communicate to folks, and not trespass on values.

4.1 What about recommending and implementing projects on private lands?

Referred me to the Parks department

Talking to landowners, providing a choice. This will help them realize the risk on their property.
Public lands- they are doing a lot as is. (He was talking about the USFS and their effects for fuels reduction)

The majority of the valley lands in the Siuslaw district are private – higher up lands are public. Should have more treatments on private land within the WUI. The Forest Practices Act (OR ??) governs private lands.

Homeowners disinterested in defensible space projects because of their love for the rural area/forest space (probably reason for living there). Education of homeowners would help – demonstrate that they can get the same look with lower risk (different materials, plants, etc.)

**He addressed lands in the parks and lands surrounding parks
Problem with parks is that they are under funded- therefore fuel treatments are not in the budget.
Some remote sites have used thinning, however this is not for wildfire reduction this is for economic reasons. Timber is harvested off these site every five years or so.
Referred me to parks- he did not feel qualified to give me answers or specifics on this topic.

1. Issues are clear and defined
2. OPTIONS! Don't lock a landowner into an either/or situation
3. Education on why they should do this and why they should have treatments on their land
4. Funding assistance and/or grants

Homeowners are unmotivated because fires are few and far between.

Timber land owners seem to be concerned with fire so will be more willing to implement projects.

Implementing – smoke issue on burning is important in the public eye. The State smoke management program is good. The private forester needs to be able to burn to reduce fuels, the public needs to understand these issues.
We work closely with ODF and with the RFPDs.

Give homeowners tools, motivation, and education: Once we have determined highest risk sites we should start with those, but we have to engage homeowners and give them tools, motivation, and education about why/how they should create defensible space around their homes. Help them help themselves. We don't want it to look like it's the government coming in and telling them what to do.
Tips for maintenance: Give them tips to keep their homes updated and maintained to keep fuels down.
Help homeowners work together: We should work on creating more of a strategic plan that isn't isolating specific homes, but linking several landowners to help people protect themselves together.
Highest risk, not highest monetary loss: It's important to look at who is most at risk, not just most expensive areas at risk.
Weyerhaeuser has done some pruning to reduce the ladder affect along roads they felt were more vulnerable to traffic and human interference. They have also done pre-commercial thinning and vegetation control on vulnerable roads.
Once you get 50 yards away from public roads, the risk from roadside fires disappears, so fuel reduction projects should be limited to 50 yards along side roads.

Private Timber is in tune with fuels reduction through the limitation of access, good at shutting down land when at risk.
Checkerboard ownership pattern in County creates problem

Need to educate folks on limits of Dept's response
Focus on self help (owners)

If feds or public land managers don't join in when abutting land owners house, can cause land owner to drag feet and not participate.

Need to not shy away from chemical weed control, he said he knows there's a stigma attached to using chemicals. But from their perspective, chemical weed control is the most cost effective way to reduce the fire threat. Keeping the stuff from growing in the first place is important to reducing the threat of wildfire.

Mechanical clearing is an option, and so is prescribed fires (though burning is not always an option around cities). But chemical should be encouraged as an option, not for heavy fuels, but noxious weeds.

Property rights and economic issues
No right to go on property and do stuff w/out permission
Design of Homes is a problem
Culture change- don't stack wood under deck, people don't like the look, and it won't happen here
Need to find balance between the reason they moved there and being safe
Logistics and Econ
Rid of debris?
Open burn season (mid-Oct - mid-June, assess with FD Chief), or truck it out

4.2 What are your concerns related to the types of methods used to reduce vegetation fuels?

The County only has the power to offer suggestions to landowners. The county cannot restrict how vegetative reduction is carried out.
The Coastal Overlay Zone (Sand Dunes) there are already restriction with removing vegetation, so if this area is zoned F1 or F2 there is a fine that that must be maintained. However, the county can only offer suggestions on how to maintain vegetation in this area.
The county only does chemical treatments along right-of-ways.

He does not have any concerns, he said that all actions to reduce fire risk is a good action

The majority of methods have been proven to work well. One problem may be that prescribed burning produces a lot of smoke and the public may not have a lot of patience with that (because of diminished air quality). Especially in Siuslaw, where a lot of prescribed burning is meant to blow west towards the ocean; smoke affects Florence, which is a huge retirement community with a large elderly population. A way to help may be to find a way to utilize the fuels (biomass uses) – to use it instead of burning. However, this is economically difficult.

Smoke management is a big issue (unclean airshed). Debris cleanup another issue – where can people put their debris? It would help to do mechanical treatment prior to prescribed burning – without it, would be very hard to keep fire under control during prescribed burning.

Did not have specifics
However, for our information there is a moratorium on the use of herbicides on right-of-ways. Generally the board has issues with

chemical treatments or chemical control; they might be in favor of thinning or other forms of treatments that don't use chemicals for vegetation controls.
Concerns include balancing the needs of the community (i.e. tree huggers, and other portions of the community)
Concerns- Political Issues

1. Look at the watershed (holistic) approach, not from a single isolated site.
2. Look at impacts that can affect the entire watershed
    a. large removal of trees will affect drinking water
    b. Roads cause problems for drinking water and EWEB, high traffic larger impacts, more possible runoff, etc.
    c. Chemical treatments are not a favorite of EWEB, again high impacts to the drinking water.

It is hard to cut brush back every year (and redundant because it grows so fast and comes back every year). Easier to change the land usage – keep trees growing to reduce brush (have to keep in mind that landscape is far different than that of central and southern Oregon, which is less brushy so requires different treatments). Burning to reduce fuels doesn't work in this area – especially under-burning around houses because the fuels can hold heat in the ground for months and flare up again.

Pile burning and grapple pile burning - big tool for us for reducing hazardous fuels.
Chemical treatment– we use for some tree release. (?)
Thinning – not too much because our trees are more mature stands.

Use all methods for vegetative fuels reduction. All tools can be used to help accomplish the project. Depending on what the project is it is could be simple methods.
Prescribed burning is good for forest health on a larger landscape.
Managing debris from fuel reduction projects: One thing to consider is the debris that will be left after certain methods, like burning. We'd have to figure out how to manage the left over debris because then they become hazards if they remain on the ground and are not dealt with. Incentive programs to deal with debris could be created, like biomass utilization, free land fill day at the dump. These programs could help convert the debris into mulch, like "chipping" debris and using it for mulch.

Chemical thinning is Weyerhaeuser's method of choice; it's the most affordable and the safest.
Mechanical brushing or hand brushing is more costly and more dangerous to the people doing it.

Prescribed burning can be very dangerous because it can become an uncontrolled burn. It's the thinning option you have the least control over.

None. Private timber very concerned with weeds as a fuel source, so use chemicals to knock down, can be very volatile. BLM/USFS more subject to public scrutiny, results in checkerboard ownership conflict. Private Timber Consortium meetings-> monthly, Village Inn, wed am. Contact Jeanie Hunt @ weyerhauser SPGFLD for times.

Mechanical thinning
    Lots of appropriate tools, cut chip brush,
    EX- 5 ac piece near building
Prescribed burning
Good tool
Chemicals
use as pretreat, not by self, part of whole, others work better

Mechanical thinning or
    Safety, practice. Instructional film on clearing and fuels reduction
Prescribed burning
Coordinate with Air quality and NRes folk
Riparian area behavior
Sustainable
Goats
Chemicals
Usually used in suppression, consequence of suppression is dead vegetation
DEQ responsible for public info and local contact over what is sprayed, crucial

Concern was not about including anything, but that we shouldn't exclude things because of stigmas that might be attached to them, we should have all options open for consideration.

Mechanical->
can take down to handsaw level, labor intensive

Burn->
Successful method, risky in populated areas, low pop density is positive
Need resources to accommodate risk of pres fire expansion.

5. Are you aware of any current resources or opportunities that may be available to help the County move forward with fuel reduction projects?

no

Forest Management Grant through the USFS. He said that they have received grants from them, but it was not on wildfire mitigation.

Use of Lane County Correction work crews. An opportunity may be better coordination between agencies or private landowners to complete treatments together or at the same time. (Use of tools, labor, etc.)

Just current National Fire Plan grants.

Not aware of any
Most funding that they receive goes to roads, which are restricted for road maintenance and development by state statues.
Most of the funding that is received is regulated by the state
Waste Management has used some money for site specific clean ups, this only includes old cars, refrigerators, items of this nature. Not specific to vegetation reduction or maintenance and is only on a site specific basis.

Yes
ODF grants for the McKenzie
USFS will have resources to reduce fuel loads once the CWPP is in place
Source Protection Program through EWEB
Assistance to improve drinking water on the McKenzie
For landowners upstream to help them reduce impacts on the McKenzie i.e. if a chemical treatment is proposed, EWEB can help find/fund other treatments that will not have a larger effect on drinking water.
Funding the GIS tool that can help in wildfire preparation and mitigation

Grant money – spent wisely (i.e. not cutting blackberries back)

Two different grants:
National Fire Plan has grants for community assistance funding through all federal agencies. Any organization, county government, local government can get help with planning, prevention education, or actual fuels reduction projects. This grant application process happens yearly.

ODF has access to Western State Fire Managers Grant Fund for fuels reduction or prevention education projects.
Title Two and Three Money: Other options are Title Two and Title Three money that counties get directly which can then be used for those types of projects (prevention education and fuels reduction).
If bio-mass ever gets underway in the state, projects could get developed through that.

The Fire Plan that they do, and that other companies do, could be a good resource.

No
____--→ Public contact in WUI, reactive not proactive.

NFire Plan
ODF fuels reduction grants

SOLV, Boy Scouts
ODF with CWPP
Use pilot projects and follow up from them

EX- Keno Fire District, contact is John, work with USFW

There are regulations on the books that deal with noxious weed control that aren't regularly enforced, the plants that are listed under Department of Agriculture's noxious weed list (ragweed, etc.). There's more enforcement opportunity there that isn't being utilized.

No.
Important to get County to understand this is Not a One Time Event.
ID method of self action, how can they do it themselves
Grant $ for fuels red on paper looks good, have to do it over and over.
Standalone structures for firewood? Larchitect (landscape architect??) example house in each dist to address aesthetics?

6.1 What types of non-regulatory programs might be effective in motivating property owners to take action to reduce their risk to wildfire?

Awareness: they provide handouts at the Lane County Fair, in the Southern Hills area of Eugene and at the County Court House.
Actions must include awareness and giving them information that will empower them to protect themselves.

We can make builders aware of need to use fire retardant materials and sprinklers and they can make buyers aware. So providing information would be helpful.

Education and outreach- said the USFS does a good job of this, the road signs that tell the fire risk.
Media- more information on promoting fire risk
Incentives for people who are watchful for keeping an eye out for people who are starting fires or if there are areas of high risk. A Community Wildfire Watch Program

Help landowners financially – cash payments to help with the cost of treatments.
Public recognition might be a good thing – showcase a family/home/private land treatment as being great and maybe have a newspaper article or on the news.
Insurance breaks on homeowners insurance for having defensible space around the home.

Education – the Firewise workshop is a great example. Sample areas (pilot projects) to demonstrate actions and effects. Dollar incentives per acre of cleared land. Free locations for debris removal for the public.

OUTREACH- promotional materials, education, funding for private cost share
Another Advantage is the GIS system that is being developed
includes all tax lot information
mailing addressed
This will allow for easy up-to-date information for direct mailings for landowners in the risk areas or to a target audience

Education – home shows, door to door talking to homeowners

- FireFree Programs: Most successful programs that Lena has seen include the "FireFree Program", which originated in bend. It's a very simple program, mainly a media blitz this time of year (late winter), which publicizes (through radio, TV, newspapers, etc.) ten simple steps that people can take to clean up around their homes and make their homes more defensible. Bend has gone further and created ways to deal with the debris that are created: The landfill opens up free dump days for people to be able to dispose of their debris. This has been successful because it's something that people can do it in a weekend, so really easy for people participate in.