

Section 2

Risk Assessment

Purpose and Methods

A primary component of the Lane County CWPP is the Wildfire Risk Assessment, which assesses the potential loss of lives, property and essential infrastructure in the event of a wildland-urban interface fire. This assessment broadly identifies communities and areas within Lane County that are at risk. Information gathered through this assessment is intended to help emergency managers and fire-fighting professionals prioritize areas of concern for further analysis and mitigation activities.

The specific goals of the assessment are the following:

1. Determine the potential risk from interface fires for Lane County communities through a collaborative effort that incorporates local, on-the-ground knowledge, with the best available data and geographic analysis.
2. Establish a community base map and identify and create digital layers for the following data sets:
 - The wildland-urban interface
 - Communities at-risk
 - Risk of wildfire occurrence
 - Hazards posed by fuels, weather and topography
 - Fire protection response
 - Values (life, property and essential infrastructure) requiring protection
 - Overall interface fire risk (expressed as high, medium and low)
3. Identify areas for refined analysis, potentially through community or neighborhood level assessments.
4. Provide insight for the prioritization of hazardous fuel treatment projects.

Risk Assessment Team

Staff from Lane County Department of Public Works and Land Management Division consulted with local, state and federal land managers, fire protection personnel, and Oregon Natural Hazards Workgroup at the University of Oregon to develop the assessment.

Table 2.1: Risk Assessment Team Members

Core Assessment Team	
Brian Mladenich	Lane County Public Works GIS
Adam Vellutini	Lane County Public Works GIS
Keir Miller	Lane County Land Management
Advisory Team	
Jim Wolf	Oregon Department of Forestry
Greg Wagenblast	ODF South Cascade District
Ken Ockfen	ODF Western Lane District
Randy Wood	Lane County Fire Defense Board
Nancy Ashlock	Bureau of Land Management
Dean Vendrasco	Willamette National Forest
Cody Zook	Josephine County GIS
Andre LeDuc	Oregon Natural Hazards Workgroup

Source: Lane County Land Management Division, 2005

Assessment Structure

The assessment is organized into three sections. The first section provides an overview of the goals and objectives of the analysis and describes briefly the methods used to evaluate wildfire risks in Lane County. Detailed methodology notes are included in *Appendix C: Risk Assessment Methods*. The second section presents the findings of the risk analysis. Findings are broken into five assessment areas and displayed in a series of map panels. Communities at-risk and areas of concern within each assessment area are identified. The third section discusses data limitations and needs identified by the risk assessment team and outlines an assessment improvement and maintenance schedule.

Assessment Approach

Several communities across the nation have completed, or are currently engaged in, wildfire planning efforts. These communities developed numerous models in an attempt to understand the risks posed by wildland-urban interface fires. The assessment techniques used in these models differ widely in both content and detail of analysis. For the Lane County Wildfire Risk Assessment, the steering committee elected to follow the assessment process outlined in the guidance document, *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities*¹.

The handbook, developed through a partnership of national and regional agencies, contains recommendations and guidelines that conform closely to requirements of the Healthy Forest Restoration Act of 2003. The handbook broadly outlines an assessment framework and identifies key risk factors communities should evaluate within their plans. Under the framework, individual communities have considerable

autonomy to choose assessment methods that are appropriate to the scale of the community.

To evaluate the wildland-urban interface fire risks within Lane County, the risk assessment team adopted methods based on a model developed by the Oregon Department of Forestry entitled *Identifying and Assessment of Communities at Risk in Oregon*.² The methodology originally assessed wildfire hazards at the statewide level for use in the Oregon Natural Hazards Mitigation Plan. However, the process and data sets used in the methodology enable a tiered approach that is appropriate at several scales including county, city or neighborhood-level assessments.

How the Lane County Assessment Evaluates Risk

This assessment evaluates wildland-urban interface fire risk by analyzing four key “layers” of wildfire information. These layers are:

- **Risk:** Assesses the potential and frequency that wildfire ignitions may occur by analyzing historical ignitions over the past 10 years.
- **Hazard:** The natural conditions including vegetative fuels, weather, topographic features that may contribute to and affect the behavior of wildfire.
- **Values:** The people, property, and essential infrastructure that may suffer losses in a wildfire event.
- **Protection Capability:** The ability to plan and prepare for, as well as respond to and suppress, structural and wildland fires.

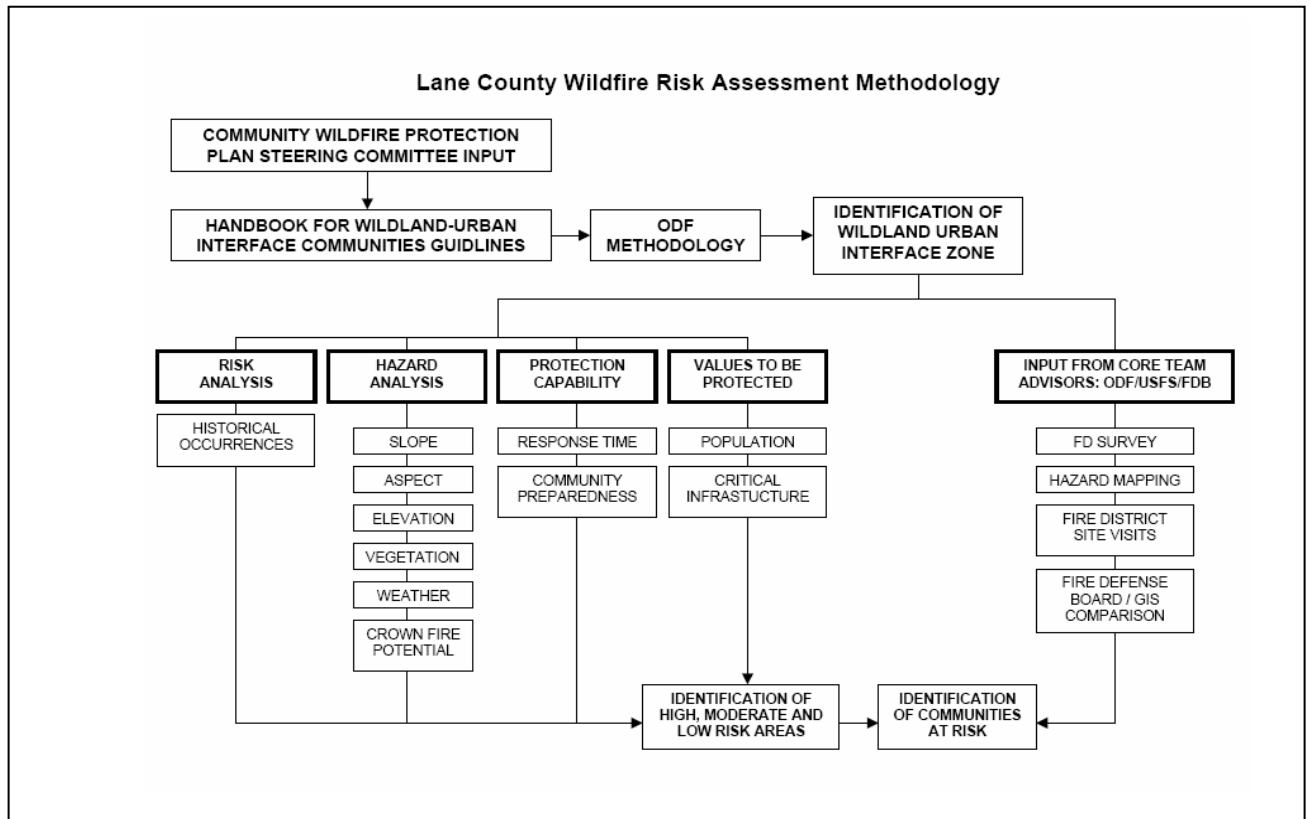
Each of these layers is developed by compiling and analyzing one or more related factors that can lead-to, aggravate, or mitigate a wildland urban-interface fire. These data layers are analyzed and displayed using a type of computer mapping software known as a Geographic Information System, or GIS.

GIS is an extremely helpful tool for evaluating wildfire risk. This assessment uses GIS to perform a number of spatial analyses and to manage, store and display wildfire information. The output of this analysis is a series of map layers, each layer displaying a separate yet interconnected piece of wildfire risk information. Through comparison and analysis of these layers this assessment indicates areas that are at a **high**, **moderate** and **low** potential to be impacted by a wildland urban interface fire.

In addition to GIS analysis, this assessment relies heavily on input provided by federal, state and local fire protection professionals. Local fire fighters are familiar with the threats within their protection areas. Mapping and documenting the areas at risk identified by these professionals, and comparing this information with data gathered through GIS analysis, creates a more accurate understanding of wildfire risk and provides a rough method of truth-checking GIS outputs.

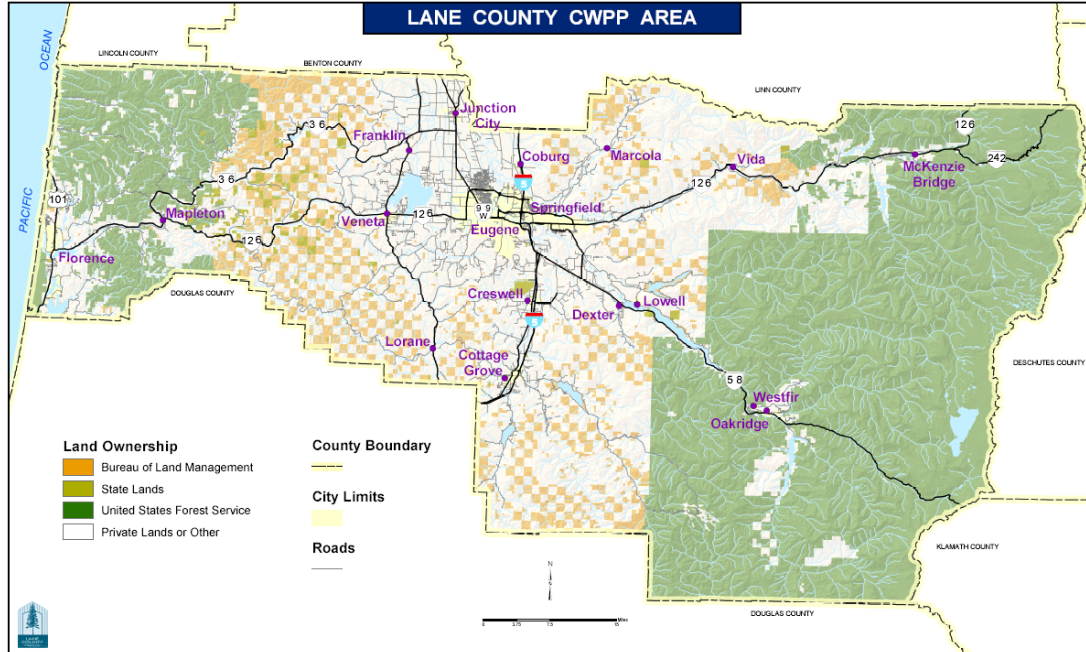
The assessment team met regularly with representatives from the Lane County Fire Defense Board, the Oregon Department of Forestry, the Bureau of Land Management, and the US Forest Service. Input and assistance from these agencies helped direct and shape the assessment process. Figure 2.1, below diagrams the process. Detailed methods and data used within the assessment can be found in Appendix C.

Figure 2.1: Lane County Wildfire Risk Assessment Methodology



Source: Lane County Land Management Division, 2005

Figure 2.2: Lane County Community Base Map



Source: Lane County Land Management Division, 2005

Assessment Findings

Wildland-Urban Interface Zone

The Lane County wildland-urban interface is large, approximately 2,269,000 acres or 3,543 square miles. It extends east to west across the county – from the Western Cascades, well up the McKenzie and Middle Fork Willamette watersheds, down through the Willamette Valley foothills and floor, across the coastal lowlands and mountains to the Pacific Ocean.

The size of Lane County’s wildland-urban interface is the result of a dispersed population in close proximity to abundant vegetative fuels. Nearly 90% of Lane County is forestland and nearly 2.5 million of the county’s 2.9 million acres are zoned F1, non-impacted forestland. The U.S. Forest Service and the Bureau of Land Management own and manage the majority of the F1 zoned property. These forestlands contain extensive fuels comprised of flammable grasses, brush, slash and timber. Excluding the population of Eugene/Springfield metro area, nearly 100,000 Lane County residents live throughout or adjacent to these forestlands. The majority of these residents live in rural population centers along the I-5 corridor and other major transportation routes, including Highways 126, 101, 58, and 36. In addition, substantial pockets of residential development exist in the Mohawk Valley, Wolf Creek, Deadwood Creek, Row River Rd, Mosby Creek Rd, Lost Creek Rd, High Prairie Rd, and the North Fork Siuslaw Rd areas.

Communities at Risk

A key output of the assessment is an understanding of the hazards that wildfires pose to Lane County communities. For the purpose of this plan, communities have been identified by their fire protection district service boundaries. Defining communities in this manner is consistent with the statewide methodology and is appropriate for an assessment of this size. However, it is important to recognize that several other communities at risk may exist within these areas. Subdivisions, neighborhoods, towns and cities may all be considered communities. The assessment helps highlight these smaller communities at risk where more refined assessments and mitigation activities should occur.

The assessment identified thirty fire protection “communities” within Lane County. Twenty-five of these communities receive structural fire protection from rural or municipal fire districts. The remaining five communities receive only wildland fire suppression from the Oregon Department of Forestry, the US Forest Service³, or in limited cases, private fire protection services on commercial forestlands. In some cases, ODF provides wildland fire protection to areas outside of existing protection boundaries through contract agreements. The risk assessment team identified these five communities as “unprotected” and assigned them place names based off of surrounding watersheds or natural features. The at-risk communities in Lane County are:

At-Risk Communities as defined by fire protection district:

- Blue River
- Coburg
- City of Eugene
- Dexter
- Eugene #1
- Goshen
- Hazeldell
- Junction City
- Lake Creek
- Lane County #1
- Lane Rural
- Lorane
- Lowell
- Mapleton
- Mohawk Valley
- McKenzie
- Pleasant Hill
- Santa Clara
- Siuslaw
- Springfield
- South Lane County
- Swisshome-Deadwood
- Upper McKenzie
- Willakenzie/Eugene
- Willakenzie/Springfield

Communities receiving wildland protection only.

- Unprotected Coast Fork Willamette
- Unprotected Long Tom / Upper Willamette
- Unprotected McKenzie
- Unprotected Middle Fork Willamette
- Unprotected Siuslaw / Coast

Risk Assessment Areas

In order to present mapped findings at a meaningful scale, the risk assessment team divided the wildland-urban interface into five assessment areas. Assessment area boundaries, though artificial, reconcile issues of scale and help reflect natural eco-regions within Lane County. These areas roughly follow watersheds, but in certain cases, expanding or altering natural watershed boundaries was necessary. The risk assessment team adjusted the boundaries to ensure that communities at risk would fall into only one assessment area. See figure 2.4, below.

The assessment areas include the following:

Area 1: Western Lane County / Coastal region

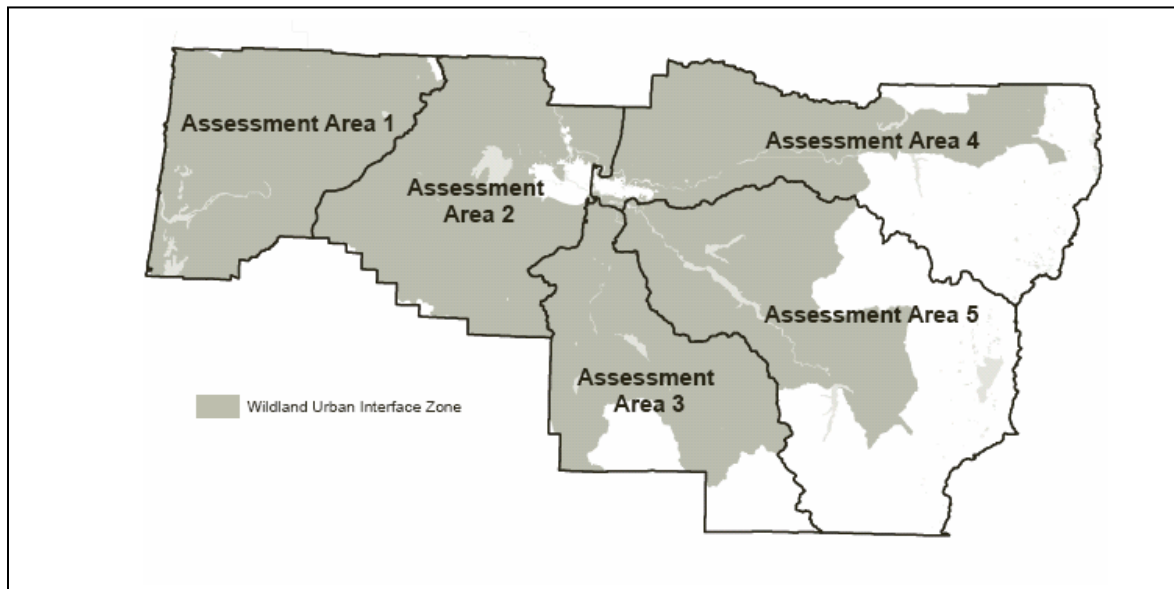
Area 2: Willamette Valley / Upper Siuslaw watershed area

Area 3: Coast Fork Willamette / Umpqua area

Area 4: McKenzie River watershed

Area 5: Middle Fork Willamette watershed

Figure 2.3: Lane County Assessment Areas Map



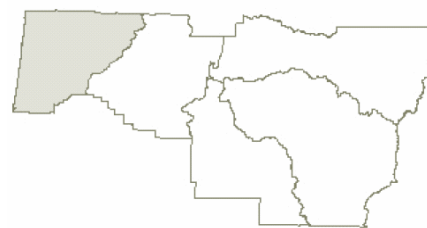
Source: Lane County Land Management Division, 2005

Assessment Panels

The following pages outline wildfire risk in each assessment area. A description of the assessment area is included along with tables that contain relevant community risk data. Finally, areas of concern identified through GIS analysis and fire protection district input are listed. Additionally, maps showing specific areas within the county that are at high, moderate or low risk are provided.

Assessment Area 1

Western Lane County / Coastal Region



Total Area: **445,226 acres**
 Area Inside WUI: **437,592 acres** (98.3%)
 Population: **15,610** (2000 census)
 Population Inside WUI:
 Number of Communities at Risk: **5**
 Incorporated Cities: **Dunes City, Florence**

Overview:

Assessment area 1 is located in western Lane County. It is comprised of portions of the Alsea, Siltcoos and Siuslaw Watersheds. Major population centers within the area include Florence, Glenada, Dunes City and Mapleton near the coast, and several smaller rural communities further inland along Highways 126 and 36. Overall WUI risks within the area are moderate to low. As the table below indicates, less than 1% of the entire area is within the high-risk category. The primary reason for this is a cool and damp coastal climate. The majority of residents within Area 1 live west of the summit of the Coast Range. Within this region the number of days per season that forest fuels are capable of producing a major fire event are significantly fewer than in other parts of the county.

Table 2. 2: Communities at Risk within Assessment Area 1

Assessment Area 1: Communities at Risk	Total Acreage	Percentage of community at risk		
		High	Moderate	Low
LCF: Lake Creek	5,005	0.48	46.09	53.43
MPF: Mapleton	13,198	1.34	45.16	53.5
SIF: Siuslaw	56,017	0.2	22.7	77.1
SDF: Swisshome-Deadwood	27,312	0.12	38.63	61.25
Unprotected Siuslaw / Coast	340,537	0.83	69.78	29.39
City of Florence	3,157	0.6	20.75	78.65

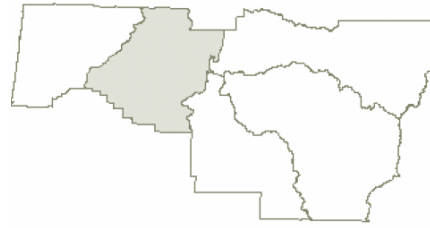
Source: Lane County Land Management Division, 2005

The following areas of concern have been identified within assessment area 1:

- **Deadwood Creek Area:** Deadwood Creek Rd, West Fork Rd, Steinhaur Rd
- **Triangle Lake**
- **Mapleton**
- **South of Horton:** area between High Pass Rd and Hwy 36
- **Blachly**

Assessment Area 2

Willamette Valley / Upper Siuslaw Watershed Area



Total Area: **512,966 acres**

Area Inside WUI: **486,203 acres** (94.8%)

Population: **194,019** (2000 census)

Population Inside WUI:

Number of Communities at Risk: **10**

Incorporated Cities: **Coburg, Eugene, Junction City, and Veneta**

Overview:

Assessment Area 2 is the most highly developed and populated region within Lane County. The majority of the area falls within the Willamette Valley and includes portions of the Long Tom, Main Stem Willamette and Upper Siuslaw Watersheds. The majority of residents within the area live in the Cities of Eugene, Veneta, Junction City, or Coburg. Smaller communities include Lorane, Crow, Franklin, Cheshire, Noti, Elmira, Lancaster and Alvadore. Interface fire risks within Area 2 vary greatly. Risks are low on the valley floor and moderate with interspersed high-risk zones in the remainder of the area. Higher ignition occurrences and housing densities are the primary reasons for this.

Table 2.3: Communities at Risk within Assessment Area 2

Assessment Area 2: Communities at Risk	Total Acreage	Percentage of community at risk		
		High	Moderate	Low
CBF: Coburg	23,252	0.01	10.36	89.63
EU1: Eugene #1	6,235	6.15	46.615	47.24
EUG: City of Eugene**	37,747	2.1	17.7	80.2
JCF: Junction City	42,689	0.01	14.35	85.64
LDF: Lane County #1	115,763	3.95	58	38.05
LRF: Lane Rural	38,957	0.17	25.31	74.52
LOF: Lorane	7,142	4.42	43.73	51.85
SCF: Santa Clara	3,590	0	0.39	99.61
WLE: Willakenzie / Eugene	829	0	30.78	69.22
Unprotected Long Tom / Upper Willamette	236,762	5.69	67.71	26.6

** Includes Bailey-Spencer, River Road and Zumwalt

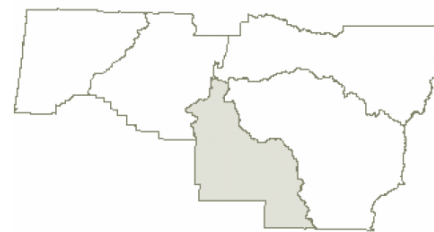
Source: Lane County Land Management Division, 2005

The following areas of concern have been identified within assessment area 2

- **Coburg Hills:** Homes along McKenzie View Drive, Van Duyn Road and the 30 home gated community of Country View Estates
- **Cheshire:** Park Street & Turnbow Court
- **South Hills of Eugene**
- **Southwest Eugene / Spencer Creek area:** Appletree Dr, McBeth Rd, Fox Hollow Rd, Gimpl Hill Rd and South Willamette St
- **Northwest of Fern Ridge Reservoir:** Butler Rd and Lawrence Rd
- **Communities of Crow, Vaughn, Elmira, Lorane and Noti**

Assessment Area 3

Coast Fork Willamette / Umpqua Area



Total Area: **464,117 acres**
 Area Inside WUI: **347,225 acres (74.8%)**
 Population: **28,310** (2000 census)
 Population Inside WUI:
 Number of Communities at Risk: **3**
 Incorporated Cities: **Creswell, Cottage Grove**

Overview:

Located in Southern Lane County, Assessment Area is comprised of portions of the Coast Fork Willamette and Umpqua Watersheds. Cottage Grove and Creswell are the major population centers in the area. Smaller Communities include Dorena, Goshen, Saginaw, London and Culp Creek. Interface risks in Area 3 are moderate to low with exceptions in the Dorena / Culp Creek and London Areas. The majority of high-risk zones within the area fall outside the boundaries of a fire protection district.

Table 2.4: Communities at Risk within Assessment Area 3

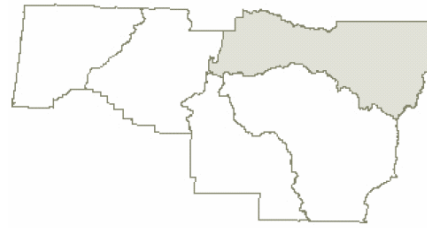
Assessment Area 3: Communities at Risk	Total Acreage	Percentage of community at risk		
		High	Moderate	Low
GOF: Goshen	8,172	3.17	38.96	57.87
SOL: South Lane County	83,490	0.38	33.81	65.81
Unprotected Coast Fork Willamette	372,455	6.5	59.72	33.78

Source: Lane County Land Management Division, 2005

The following areas of concern have been identified within assessment area 3:

- **Dillard Rd:** Beymer Rd and Skyhawk Way
- **Row River Rd. area**
- **Deerwood Dr off of Mathews Rd.**
- **SW area of Cottage Grove:** Sweet Lane, Talemene Dr
- **Turkey Hill:** Area near Rainbow Graphics just south of Creswell
- **Lynx Hollow area:** Beach Rd and Turkey Run Rd
- **Molitor Ranch Rd area:** Tree Top Drive, and residences up Molitor Hill Rd
- **Culp Creek**
- **Brice Creek Rd**
- **London**

Assessment Area 4 McKenzie River Watershed



Total Area: **678,760 acres**
 Area Inside WUI: **368,445 acres** (54.3%)
 Population: **72,110** (2000 census)
 Population Inside WUI:
 Number of Communities at Risk: **7**
 Incorporated Cities: **Springfield**

Overview:

Assessment Area 4 roughly follows the boundaries of the McKenzie Watershed. Springfield is the major urban center in the area. Several smaller communities and residential pockets are situated along Highway 126 to the east and Marcola Rd to the north. Interface fire risks are moderate to high in this area. Extensive fuels, steep slopes and the presence of significant infrastructure all contribute to the increased risk.

Table 2.5: Communities at Risk within Assessment Area 5

Assessment Area 4: Communities at Risk	Total Acreage	Percentage of community at risk		
		High	Moderate	Low
BRF: Blue River	768	9.6	36.94	53.46
MKF: McKenzie Fire	19,797	13.28	52.54	34.18
MVF: Mohawk Valley	16,844	5.75	47.83	46.42
SPR: Springfield**	9,445	3.97	15.8	80.23
UMF: Upper McKenzie	2,573	12.35	34.18	53.47
WLS: Willakenzie/Springfield	1,475	5.09	21.22	73.69
Unprotected McKenzie	627,858	8.97	64.41	26.62

**Includes Glennwood

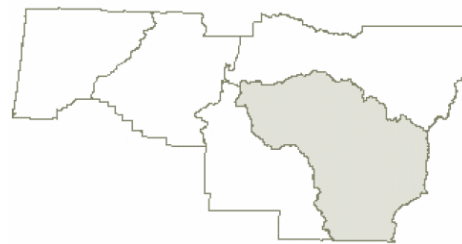
Source: Lane County Land Management Division, 2005

The following areas of concern have been identified within assessment area 4:

- **Blue River Area:** Elk Creek Rd near Blue River School and homes located on the hillside plateau on the Blue River / USFS boundary.
- **Camp Creek Ridge:** South-facing hill with approximately 30 homes
- **Cedar Flat and East Cedar Flat Roads**
- **North Gate Creek Rd**
- **Angel Flight Rd**
- **79th Street**
- **McKenzie Acres**
- **McKenzie View Dr**
- **Upper Mohawk Valley**
- **Thurston Hills**
- **Harbor Dr/ South 2nd Area**

Assessment Area 5

Middle Fork Willamette Watershed



Total Area: **812,412 acres**
 Area Inside WUI: **386,919 acres (47.6%)**
 Population: **12,910** (2000 census)
 Population Inside WUI:
 Number of Communities at Risk: **5**
 Incorporated Cities: **Lowell, Oakridge, and Westfir**

Overview

Containing nearly the entire Middle Fork Willamette Watershed, Area 5 is the largest assessment unit within Lane County. Despite its size, less than half of the total land area within the region falls inside of the wildland urban interface zone. This is because much of the area is undeveloped land within the Willamette National Forest. Developed areas include Lowell, Dexter, Westfir, Oakridge, Pleasant Hill, Fall Creek, Jasper and Trent. Wildfire risks are moderate to high with slope and vegetation hazard characteristics similar to those in Assessment Area 4. Additionally, lightning caused ignitions elevates overall risk in the southeastern portion of Area 5.

Table 2.6: Communities at Risk within Assessment Area 5

Assessment Area 5: Communities at Risk	Total Acreage	Percentage of community at risk		
		High	Moderate	Low
DEF: Dexter	10,878	3.14	45.072	51.79
HDF: Hazeldell	6,095	3.66	40.07	56.27
LWF: Lowell	12,561	4.76	41.44	53.8
PHF: Pleasant Hill	16,144	0.49	34	65.51
Unprotected Middle Fork Willamette	766,734	14.49	65.11	20.4

Source: Lane County Land Management Division, 2005

The following areas of concern have been identified within assessment area 5:

- **Dexter Area:** Carter and Minnow Creek Roads, Lost Creek Canyon, Hanna Rd
- **Oakridge / Westfir Area:** High Praire Rd / Camp six area, Bar-B L Ranch Area, Hemlock Area, North Shore Rd to Winfrey Rd and summer homes along Salt Creek.
- **Kitson Hot Springs**
- **Winberry Creek Rd**
- **Big Fall Creek and Little Fall Creek Areas**
- **Disappointment Butte (near Lowell)**
- **Papenfus Rd**
- **Hills Creek / Wallace Creek Rd Area**

Risk Assessment Issues and Limitations

Wildland fires are complex events: their behavior and the potential damage they may cause is affected by several variables. The risk assessment team made every attempt to ensure the accuracy and completeness of the assessment. However, limitations in data and staff resources made it impossible to comprehensively assess every factor affecting wildland fires countywide. The following limitations reflect the challenges inherent in an assessment of this scale. Ideally, periodic updates and data enhancements resulting from local community assessments will address these challenges. Local community assessments can add value to the countywide wildfire plan by performing more in-depth neighborhood or parcel-level risk evaluations for areas identified as high risk by the risk assessment. These local community assessments will help further refine and update the countywide assessment.

The issues and limitations encountered include the following:

- **Difficulty identifying and analyzing specific ignition sources:** An evaluation of historic fire ignitions provided some indication of where and how frequently fires occur. However, evaluating specific sources of potential ignitions in combination with historic occurrences is likely to yield more accurate results. Due to the size of Lane County and the number of potential igniters, it is not feasible to identify and evaluate all of these sources countywide.
- **Assessing structures and their immediate surroundings:** In addition to analyzing risks, hazards, values, and protection capabilities, the risk assessment framework can also evaluate the vulnerability of individual structures. Site-specific structural vulnerability assessments that take into account building material, roof type, access, and defensible space can dramatically refine the understanding of wildfire risk. In Lane County, reliable data sets do not exist for defensible space, driveway access, or proper addressing signage. These characteristics are best identified and evaluated at the local level. The county assessor's office can provide some basic information on building material and roof type, though this information is often limited. Assessment and taxation records do not provide detailed information regarding decks, eaves, or fire-resistant roofing materials or treatments.
- **Calculation of response times:** The risk assessment team struggled with determining how quickly fire fighters can respond to structural or wildland fires. Several factors can influence response time: the condition of roads, locked gates, the availability and speed to which volunteer fire fighters can assemble and prepare to dispatch. The use of GIS analysis, average road speeds, and the location of firehouses and guard stations made it possible to come

up with a rough idea of average response times. These times are estimates and several factors limit their reliability. First, many wildland responders do not dispatch from a central location. Instead, they are assigned to patrol blocks. As the name implies, patrol blocks are large areas fire fighters tour during peak fire season. Because an exact origin of response is unknown within these areas, some averages needed to be determined. Second, there are limitations to existing data on Forest Service and private roads. GIS coverage for these roads was incomplete and does not readily match up with county road data. In addition, many of these roads are gated, have fallen into disrepair, or are not constructed to accommodate large fire fighting equipment.

- **Identification of all critical infrastructure:** To the extent possible, the risk assessment team identified and mapped important community infrastructure. Infrastructure includes: power and water facilities, schools, healthcare facilities, community centers, churches, and major manufacturing and industrial facilities. Private ownership of many of these facilities limited access to data. Security concerns made private utilities, in particular, occasionally reluctant to share data about the locations of their facilities.
- **Parcel level resolution:** The data used in the assessment has generated outputs that are coarse in scale and intended to provide meaningful results on the landscape level. The information provided in the layers has limited accuracy when viewed at a magnified scale, and should be used to broadly identify areas and communities at risk. The outputs of this assessment should not be used to determine risk at the parcel or tax lot level.

Assessment Updates

To address data limitations and to ensure that the risk assessment remains current, an interdepartmental approach to updates and maintenance is required. Lane County Emergency Management, Land Management, and Public Works GIS will share intermixed roles and responsibilities for this task. Future assessment items include short-term data enhancement actions and long-term assessment updating and revision. Additionally, mitigation project prioritization and review should include substantial core assessment team input. More information on the Risk Assessment update can be found in action items and *Section 5: Plan Maintenance and Project Prioritization*.

Summary of Key Findings

The following section presents overall findings based on the risk assessment. The overall findings are broken into four categories as is depicted in Figure 2.4.

Figure 2.4: Lane County CWPP Key Findings



Source: ONHW/CPW, 2005

Maintenance

The Lane County CWPP and its components, especially the risk assessment, require long term maintenance to continue to effectively support Lane County. Institutionalizing this long term process and assigning maintenance responsibilities to oversee long term maintenance will help ensure that the plan continues to be a functional document.

Risk Assessment

Overall, Lane County has a moderate risk to wildland-urban interface fire, but high risk areas do exist throughout the county. The risk assessment can be shared with local communities and used as a decision making tool to help prioritize fuels reduction projects. However, to ensure long term viability, the risk assessment must be updated and enhanced with more precise data from the local community level.

Community Planning

Because of Lane County's scale, the countywide risk assessment could not assess the structural ignitability of every structure located in the wildland-urban interface. Local planning efforts in small communities and neighborhoods will be able to collect more refined, site specific data required to address the structural ignitability component of the risk assessment. Local community planning efforts will be vital because as site specific data is gathered at the micro level, it can be fed back into

the countywide risk assessment. The incorporation of this refined local data into the countywide assessment will help to better provide a better picture of overall risk countywide.

Collaboration

The risk assessment draws upon a wide variety of data sources. As a result, it will be important to maintain collaborative approaches to identifying, acquiring, and utilizing data layers among data users and providers. Because of the importance that local refined data play in community planning efforts, collaboration among the county and local communities will also be important.

Risk Assessment Maps

The section below describes the risk assessment maps found on the following pages.

Map #1 – Lane County Wildland Urban Interface Zone - This map displays the boundaries of the wildland-urban interface zone within Lane County.

Map #2 – Lane County Wildfire Occurrence Risk - This map displays the level of wildfire risk across Lane County based on the historic fire occurrence: the potential and frequency that wildfire ignitions may occur by analyzing historical ignitions over the past 10 years.

Map #3 – Lane County Wildfire Hazards - This map displays the level of wildfire risk across Lane County based on natural conditions including vegetative fuels, weather, topographic features that may contribute to and affect the behavior of wildfire.

Map #4 – Lane County Community Values at Risk - This map displays the level of wildfire risk across Lane County based on housing densities and the location of critical infrastructure.

Map #5 – Lane County Protection Capability - This map displays the level of wildfire risk across Lane County based on analyzing the response times of fire response personnel and community preparedness.

Map #6 – Lane County Communities at Risk - The map displays the locations of the at-risk communities in Lane County identified by the Risk Assessment.

Map #7 - Overall Fire Risk - This map displays the level of wildfire risk across Lane County based on the combined levels of risk from the overall protection capability, wildfire risk occurrence, community values at risk, and natural wildfire hazard factors maps.

Map # 7 - Overall Fire Risk (within WUI) - This map displays the level of wildfire risk with Lane County's wildland-urban interface based on the combined levels of risk from the overall protection capability,

wildfire risk occurrence, community values at risk, and natural wildfire hazard factors maps.

¹ National Association of Foresters, Western Governors Association, National Association of Counties, and Society of American Foresters. 2004. *Preparing a Community Wildfire Protection Plan*.
<<http://www.stateforesters.org/pubs/cwpphandbook.pdf>>

² Oregon Department of Forestry. 2004. *Identifying and Assessment of Communities at Risk in Oregon*.
<<http://egov.oregon.gov/ODF/FIRE/docs/WildfireRiskAssessment.pdf>>.

³ The United States Forest Service only provides wildland fire suppression in national forests unless Mutual Aid has been requested.