**III. Wildland-Urban Interface Planning**

**Wildland-Urban Interface Zone**

Union County rests in the northeast corner of Oregon State, supporting the area’s third largest city (La Grande) and encompassing one of the largest enclosed valleys in the state. This area was a haven for many Native American tribes such as the Nez Perce, Cayuse, Umatilla, Walla Walla, and Shoshone, who often spent their summers in the valley (Wikipedia.org 2014).

Prior to Oregon Trail settlement, the La Grande valley was a stopping point for many settlers headed toward the Willamette Valley. The first permanent settlement other than Native Americans’ occurred in 1861 by an Englishman named Benjamin Brown (Wiipedia.org 2014). The discovery of gold and the construction of railroads were the turning point for population growth in the 1800s. Today, several communities established during the long-ago boom continue to exist with some additional smaller communities.

Currently, these and many communities in Union County are considered Wildland Urban Interface areas (WUIs), with a high percentage of the structures within or adjacent to forested lands. In 2001, the Federal Register provided a comprehensive list of communities identified as Urban Wildland Interface in the vicinity of Federal lands that were considered at risk from wildfire. Union County communities in the federal register include: Anthony Lakes Resort, Camp Elkanah, Cove, Elgin, Hilgard, Medical Springs, Morgan Lake, Mount Emily, Palmer Junction, S. Fork Catherine Creek, Starkey, and Union. It is important to note that the urban wildland interface is not limited to communities in the vicinity of Federal land. Many states submitted revised lists for communities within their State regardless of their relationship to Federal land (Federal Register 2001). In an assessment, *Communities at Risk,* conducted by the state of Oregon in 2006, the cities of La Grande, Island City, North Powder, and Summerville were also identified as at risk (ODF 2006). Additional areas of concern not listed by the Federal or State records that are of high concern for the county are: Blue Springs, Perry, Kamela, and Spout Springs Ski Area, including multiple resort cabins.

Western states contain vast forested landscapes that are often remote and steep. With a finite amount of fire protection resources, these states are recipients of natural lightning starts that annually burn an average of 4,666,030 acres from wildfires based on data between 2008 and 2012 (CWS 2014). In addition to natural lightning starts, each year wildfire growth is further compound by centuries of fire exclusion, long-extended drought, and increasing insect and disease mortality. As a result, fire suppression resources have become less effective and wildfire behavior more extreme. Union County is no exception, with the majority of the forested acres located along the foothills of the valley often with limited access due to either inadequate or poor road conditions, making it impassable for some suppression equipment.

The Cohesive Wildfire Strategy (CWS) acknowledges these issues and the potential threats they pose by recommending *large landscape-scale* changes in vegetative structure and fuel loadings in order to significantly alter wildfire behavior, reduce wildfire losses, ensure firefighter and public safety, and improve landscape resiliency (CWS 2014).

The 2005 CWPP identified and prioritized sixteen WUI areas in Union County. The new 2016 revision recognizes the need, based on “middle ground” landscape treatment concepts, to further expand the size and number of WUI areas. The term “middle ground” refers to the areas between communities and the more distant wildlands (CWS 2014). These middle ground areas play a significant role in altering wildfire behavior in advance of reaching communities. Through multiple discussions on best methods for addressing additional acreage and the high number of contiguous WUIs, the CWPP committee agreed that a new approach was appropriate.

Figure III-1. Union County’s new WUI Zone

As a result the group merged all neighboring WUIs into one large WUI Zone (WUIZ) while leaving outlying WUIs as separate small WUI Zones. There were several positive aspects identified for this model:

1. It addresses the all hands-all lands concept where high fire occurrence areas have the need to involve both landowners near communities and landowners where large fires can develop posing a threaten to life and property. It dissolves property lines when it comes to fire threats, acknowledging fire has no boundaries and approaching across-boundary treatments as a whole instead of isolated units.
2. It allows for a holistic approach to treating large acreages, recognizing the need for both first entry risk reduction as well as maintenance of previous investments, thereby addressing treatments in a temporal and spatial approach. It is important to include treatment of lower priority areas and maintenance of previously treated areas, particularly when that ground separates two high priority areas on the landscape. There is a growing need to balance previously completed activities with new treatment areas to protect earlier investments.
3. Previous individual WUIs were rated against each other, resulting in competition between communities. This new approach recognizes that although some communities may be of higher risk and need, it does not eliminate opportunities for landowners in moderate or low risk areas to initiate or continue to promote risk reduction measures.
4. Defensible space is no longer limited to land immediately adjacent to homes and structures but now includes lands that provide an extended treatment buffer between general forest and communities, thereby creating an opportunity to stop the fire in the middle ground. Designing projects that improve wildfire buffers between large forest blocks and private lands increases management options, while preserving ecosystem integrity in the event of a wildfire. It also provides opportunities to consider large-scale application using a variety of tools which otherwise would not be applicable and/or cost effective at a smaller scale.
5. The WUIZ allows natural resources to also be considered as values to protect during treatment endeavors, where and when appropriate. It increases fire managers’ ability to protect important community values and investment in locations that meet multiple resource management objectives.
6. Creates opportunities to protect areas that may otherwise not be considered. Provides options within the WUIZ to seek out areas considered of value to county citizens that are not necessarily associated with a specific threatened community, but individuals still have a sense of ownership toward these values such as: favorite recreation sites, viewpoints, forested byways, historic sites, visual and scenic resources, etc.
7. Provides opportunities for increased participation by county residents not directly at risk to provide input on their forest and valued interests.
8. Enables possibilities of assisting multiple landowners with risk reduction treatments through a single funding source. Distribution of funds would not be limited to one “WUI” area but to the entire WUIZ that meet the criteria of the funding source. This approach eliminates the competition for funding between priority WUIs.
9. Eliminates the need to separate the three national Cohesive Strategy goals. The WUIZ approach allows for achieving multiple goals in the same location, creating a synergy or mutually reinforcing positive effect (CWS 2014).

The WUIZ method helps address issues with reduced budgets, declining forest management staff, increased wildfire potential and their combined impacts on risk and safety. Uniting agencies and public efforts creates additional avenues for funding acquisition at all levels that may otherwise be unattainable.

The rationale for a WUIZ is further supported by the Management Options outlined in Chapter 3 of the Cohesive Strategy. Applying a “one size fits all” wildfire risk mitigation solution is not realistic for all counties in Oregon. The WUIZ allows each county to focus on attributes specific to their area. These options can be designed to either change wildfire extent and intensity, number of human caused ignitions, or to alter risk by changing the degree of exposure (CWS 2014) of both firefighting personnel and local values.

The CWPP committee was then tasked with creating an appropriate definition that fit the rationale for creating a WUIZ. The following final definition was developed after much discussion. The wildland-urban interface zone is:

*“An area strategically identified that provides effective wildfire defense for communities, infrastructure, and other values at risk that meet or intermingle with wildland fuels and offer opportunities for broadened mitigation measures designed to interrupt wildfire spread and modify wildfire behavior in order to protect social, economic, and environmental interests”.*

The National Fire Plan, and the Ten-Year Comprehensive Strategy for Reducing Wildland Fire Risks to Communities and the Environment place a priority on working collaboratively within communities in the WUIZ to reduce their risk from large-scale wildfire. **The Cohesive Wildfire Strategy places strong emphasis on community and agency involvement early in the process to create a sense of ownership by all parties.** For this reason by developing the WUIZ, it is intended to emphasize an “in it together” approach for reducing wildfire threat. It creates opportunity to draw into discussions county residents who may not have land or structures at threat but place a high value on recreational and/or local natural resources.

**Plan Review Schedule and Mechanisms**

Plan maintenance will be directed by Union County Emergency Services and coordinated with the plan’s steering committee members, a core group of who have agreed to be a standing committee to assist with monitoring and evaluation. Proposed plan maintenance will be set at minimum of annually and will consist of a plan review, priority action item re-evaluation, and progress evaluation, with a total plan revision as needed based on evolving local, state, and national strategies, funding opportunities and local conditions.

Plan revision is recommended as the infrastructure needs of Union County change. Specific considerations during revisions include: population fluctuations, land use changes, completion of fuels reduction projects, emergency service improvements, computer software/hardware updates, new and revised data, and extreme wildfire hazard fluctuations. Revisions should be directed in part by applicable policies and guidelines at all jurisdictional levels regarding matters such as: Land Management, Fire Management, Rural Housing Development, etc.

Annual evaluation of strategies and recommendations will be necessary as changes to wildfire risks become altered or circumstances (if less than a year) make it necessary to re-evaluate the plans progress and intent. Given the dedicated time, collaborative effort, and cost to revise the CWPP it is vital that follow-up monitoring and evaluation of the plan occur. Understanding that communities change, infrastructure needs are adjusted, and forests are dynamic, the risk of wildfire to communities cannot be viewed as static. At a minimum the CWPP committee should meet to complete an annual progress report of accomplishments and challenges. A form to record progress is located in Appendix L.

Each participant must maintain an ongoing commitment to work through the plan with community, cooperators, and fire agencies in Union County. Community outreach and education is a continuous process of building on established relationships and developing new affiliations whenever possible. Details of possible outreach opportunities can be found in Chapter V. Annual review will be advertised in order to include representation from the stakeholders who participated in the development of the Community Wildfire Protection Plan.

Mechanisms for initiating a CWPP Committee meeting are outlined in Appendix L under the form titled *Go/No Go CWPP Evaluation, Revision, or Committee Meeting*. This table is designed so that any question that receives a “yes” answer warrants the need for the CWPP Committee to meet and discuss changing conditions or progress. It provides the Evaluator key, unbiased questions or conditions that would typically create a need to re-assess the County CWPP.

Mechanisms to identify the need for public meetings will be left up to the CWPP Committee unless there is a high level of demand for fire agencies assistance by landowners or unexpected tensions between parties. Forums organized in Union County for notification should not be limited to one type of outreach. Multiple avenues should be used to encourage as many citizens as possible to attend the meeting. The best forms of public announcement and access utilized at the time of this revision were: radio, Facebook, internet web sites, newspapers, US Postal Service, and public meetings. As thoroughly as possible, record and maintain a detailed list of participants that have participated in some fashion in the CWPP development and implementation.

All records of accomplishment, data, funding acquired, equipment, and infrastructure improvements should be identified and recorded to the CWPP file. The file will follow the current planning process with a joint effort between Oregon Department of Forestry (ODF) and Union County. Whenever possible, geographic location points with longitude and latitudes and/or polygons should be made known to update the CWPP to display across boundary treatments, level of landowner participation, specific locations for mapping, and areas where maintenance work is not overlooked in the future.

There is a form available for reporting annual accomplishments in Appendix L. The form provides a level of standardization for the CWPP committee when assessing progress. Each fire management agency is responsible for updating plan achievements annually, at a minimum. Progress or obstructions to work completion should be identified and posted to maintain discussions throughout the year in an effort to prevent redundant occurrences. Annual postings will inform the collaboration group of trends in implementation issues, successes, and other topics contributing to or preventing success in plan implementation. Ongoing upkeep of records and documentation throughout the year can be used during the next plan update. Written communications of progress are needed for tracking purposes.

In an attempt to provide consistent messages, common language definitions are provided in the *Glossary of Terms.* These definitions provide a level of standardized terms and concepts necessary for clear communication between agencies and with members of the public. Eliminating confusion in definitions is the first step to a common vision and expected outcome. Shared terms among agencies can be found in Appendix J: *Glossary of Terms.*

Customized terms or reporting may occur within specific fire agency guidelines and/or policies. An example is the reporting of new fire starts. Each agency has its own required reporting process and form for database upload. There is however, specific, standardized information that is *required* in order for a holistic County approach during the next revision. New fire starts regardless of responding agency *must* report at a minimum fire start date, latitude and longitude, cause, and fire size to provide meaningful statistical information. This ensures consistent and statistically valid data and is a priority of this plan.

Agencies also have customized terminology of definitions and conditions regarding forest management as outlined in their agency’s direction. Management direction and terms must remain tailored to their agency’s specifications. This plan does not serve as a means of bypassing the individual processes and regulations of the participating agencies. Each project must adhere to any pertinent local, state or federal rules or guidelines in determining the point of project implementation. The plan is a coordinating document for forest projects related to safety, education and outreach, information development, fire protection, and fuels treatment for altering fire behavior.

**National Priorities**

The National Strategy, supported by scientific analysis, processed over 100 different data sources to thoroughly examine wildland fire issues across the nation in order to understand the differences and similarities among locations.

National Strategy for prioritizing where activities should be emphasized was based on the premise that planned actions have a greater likelihood of being most effective and efficient in areas where conditions contributing to the issue are most severe (CWS 2014). Four spatially prioritized opportunities and challenges were assessed in the CWS at the national level.

1. In areas that historically were frequented by fire, successful suppression efforts have exacerbated fuel conditions that contribute to higher intensity wildfires. As a result, these fires become more damaging and costly while threatening both firefighter and public safety (CWS 2014).
2. Homes, communities, and other values are at risk simply because of their proximity, or juxtaposition with flammable natural vegetation in environments conducive to wildland fire (CWS 2014).
3. Human ignitions account for the majority of wildfires throughout the Nation, requiring response organizations to be maintained in most locations (CWS 2014).
4. There is a need for highly competent multi-jurisdictional response resources with capabilities to quickly suppress the majority of wildfires. The effects of large wildfires are not only costly from an economic and ecological impact standpoint, but also threaten the health and safety of firefighters and public (CWS 2014).

On a scale of High, Moderate, Low, or Very Low, the CWS’s national assessment of the above four topics resulted in Union County as:

|  |  |
| --- | --- |
| Category | National Rating |
| Vegetation and Fuels | High Priority |
| Homes, Communities, and Values at Risk | High Priority |
| Managing Human-caused Ignitions | Low |
| Effective and Efficient Wildfire Response | High Risk of WildfiresMore Potential for Resource Benefits |

The National Strategy emphasizes the safe and effective response to wildfire as the highest priority. Acknowledging that equipment and personnel are important for wildfire response, areas such as improved coordination, communication, and training are important components of intergovernmental preparedness and should be included regionally as well.

**Union County Plan Element Priorities**

Details of prioritization of elements within this plan are outlined in Chapter IX, describing various levels of risk, threat, and effects locations. Recognizing possible time and budget constraints, prioritization should be given to fire fighter and public safety first and foremost.

Elements key to fire fighter and public safety are given the highest importance with actions that provide the most efficient approach to wildfire risk reduction. Using analysis completed in the West Wide Risk Assessment for the State of Oregon, local data, community knowledge and expertise, components were identified that took precedence as priority. Potential for high priority conditions within the county included both temporal and spatial considerations:

1. Treatments across jurisdictional boundary creating a contiguous landscape of treatments.
2. Deficiencies in equipment and infrastructure where improvements would increase fire response success.
3. Locations of high fire threat (includes start density) and fire effects (values) that result in a high and extreme fire risk.
4. Potential threat to firefighter and public safety exceeding what would be considered an inherent risk or one that is preventable through a mitigation action. An example would be poor ingress/egress,
5. Identified high fire occurrence level locations with long response times or no local response capabilities.
6. Areas where concentrated ignition starts are coupled with vegetation that contributes to extreme fire potential.
7. Actions that improve suppression effectiveness and successful value protection.

Conditions where multiple high potential for a undesirable outcomes overlap one another convey locations and actions needed to address the most efficient use of funds while still meeting both the local and national intent.

**Participation and Responsibilities:**

As part of the priority process, information was gathered from multiple facets of the population. These sources provided key information and played a role in the development of this plan. Our CWPP development occurred through that collective effort from multiple agencies, cooperators, and public members. Understanding the roles and responsibilities of those involved will provide insight on development and implementation of the plan.

**County Commissioners**

Final approval of the CWPP will be conducted by the Union County Board of Commissioners. As part of CWPP planning and development, the county commissioners maintain oversight of the planning and implementation process. Plan maintenance will be coordinated through Union County Emergency Service. In addition, they will:

1. Remain informed on progress through all stages of the plan.
2. Provide final Plan approval and any revisions to the CWPP.

**Union County Emergency Services (UCES)**

Union County Emergency Services was a primary lead during the CWPP committee meetings, media venues, oversight of plan development, and coordination with county officials. Its roles in the CWPP include:

1. UCES is responsible for apprising the county commissioners and cohesive wildfire strategy group on the progress of the CWPP on topics regarding plan maintenance, plan implementation, and progress.
2. Provides oversight to the CWPP committee on all aspects of plan development.
3. Maintains involvement in plan implementation and public contact to ensure fire fighter and public safety is priority.
4. Coordinates with local fire management agencies to meet the three goals of the CWPP.
5. Holds and maintains the CWPP document, forms, and project files.

**CWPP Committee Members**

Multiple fire management agencies were represented on the CWPP committee. Those that participated on a regular basis included: Oregon Department of Forestry, Union County Fire Chief, Multiple Rural Fire Chiefs, Umatilla Fire Management, Wallowa-Whitman Fire Management, Bureau of Land Management Fire and Fuels, and Blue Mountain Cohesive Wildfire Strategy Pilot Project Lead. These individuals worked through numerous meetings assessing county conditions and identifying action items needed to reduce impacts from wildfires. Their ongoing responsibilities include:

1. Oregon Department of Forestry provides the lead in developing the risk assessment for the CWPP and its five year revision (ODF 2015).
2. Provide local knowledge and data to be incorporated into the county CWPP.
3. Continued public contact and implementation of the action items identified within the CWPP. Submit progress reports for their agency on meeting those action items.
4. Work together collaboratively between agencies and public to meet the three goals of the CWPP.
5. Part of a collective group to assist members of the public in acquiring funding to reduce wildfire risk.
6. Part of a collective group to provide assistance at public meetings on the CWPP concepts.
7. Recommend, review, and give input into the content of the CWPP Plan.
8. Participate in ongoing CWPP meetings.

**Rural Fire Departments**

Rural fire departments play a complex role in county protection services. These fire resources not only are important in fire response; they are also crucial for communications with local landowners in their areas. Many of the rural firefighters are members of the communities in which they serve and have an established rapport with citizens. As a result they are often the first contact for risk mitigation information. Their participation includes:

1. Participate on the CWPP committee through a representative and convey input to that representative about knowledge of local fire issues in their districts.
2. Provide representation at public meetings to share concepts behind the CWPP with community members.
3. Work with other fire management agencies to educate and encourage members of the public to implement and meet the CWPP goal of Fire Adapted Community.
4. Provide periodic reports to Committee members on known landowners’ fire risk reduction measures.
5. Continue to update fire statistical information for the State of Oregon Fire Marshall’s Office; including but not limited to the following information: fire location using latitude/longitude, fire size, and fire cause.
6. Collaboratively work with other local fire management agencies in meeting the goal of Wildfire Response.

**Cooperators**

Union County cooperators are significant players when it comes to wildfire prevention and participating in wildfire events. For the purpose of this document, cooperators are considered non-fire agencies that play a role before, during, and after a wildfire event. Cooperators are considered agencies that supply assistance to direct tactical or strategic approaches and wildfire support to a wildfire event. They partake in prevention functions not only in the WUI Zone but in some cases throughout the county (i.e. Transmission lines, railroads). Examples of cooperators are Oregon State Police, Pacific Power Co., Pacific Railroad, and American Red Cross.

 Their responsibilities differ somewhat from their fire agency counterparts.

1. Work collaboratively with lead fire management jurisdictional agencies in preparing for wildfire response regarding infrastructure.
2. Understand their role in emergency fire situations where infrastructure may pose threat to or assist in community protection.
3. Coordinate with Union County Emergency Services in development or changes to infrastructure as part of annual progress report.
4. Participate in risk reduction whenever/wherever possible and fire prevention to reduce the number of human caused fires.
5. Support public and firefighter safety as the number one objective during a fire incident.
6. Has potential to be actively involved with fire agencies in all phases of a wildfire.

**Union County and adjacent Fire Management Agencies**

Closest suppression resource concepts and cross boundary approaches, include fire agencies adjacent to Union County. Union county supports WUI Zones that are adjacent and fall into other Fire Management agencies protection responsibility. This is particularly true in areas near Anthony Lakes Ski Area, Tollgate, and Kamela. These locations are bordering or expand into Umatilla National Forest – Umatilla County and Baker County.

1. Collectively report all fire starts according to their agencies protocols.
2. Understand the three goals of the CWPP its ideas and recommendations.
3. Work collaboratively toward the three goals of the CWPP during all phases of planning, implementation, and reporting.
4. Knowledgeable of WUI Zone concept. Understands fire risk, threat, and effects on the landscape and the need to reduce fire risk based on all hands all lands concept.
5. Function as part of joint effort of fire suppression in protecting life and property and minimizing wildfire impacts to communities while meeting the goal of wildfire response.
6. Oregon Department of Forestry notifies owners of properties within the county’s forestland-urban interface (WUI Zone) areas (ODF 2015).
7. Participate in site visits and demonstration projects.

**Community**

The communities of Union County are familiar with wildfire on the landscape; some small populaces have firsthand experience of fire near communities. Because fire suppression resources have been successful in protecting the local communities, only a fraction of landowners has participated in risk reduction. Community members are being encouraged to join with fire management agencies in protecting their values at risk. Oregon Senate Bill 360 is an option to enlist the aid of property owners toward the goal of turning fire-vulnerable urban and suburban properties into less-volatile zones where firefighters may more safely and effectively defend homes from wildfires (ODF 2015).

1. Property owners in identified forestland-urban interface areas, once notified that their land meets the criteria of forestland-urban interface, have two years to reduce excess vegetation, which may fuel a fire around structures and along driveways (ODF 2015).
2. Appropriately apply received risk reduction funds to property based on funding source guidelines.
3. When opportunities arise, they may convey their fire risk concerns and property needs through discussions with local fire management agencies.

Although some groups were participated more than others, input from all was vital toward a collaborative Community Wildfire Protection Plan. Union County supports approximately 16 communities, with populations ranging from less than 100 to more than 13,000 residents, each facing the potential for wildfire threat.

Western states support vast areas of forested and rangeland acres where potential fire spread is a threat to rural communities. Union County, Oregon is no exception, with fire occurrence high from both human and lightning sources. Because of the vast amount of forested public and private land surrounding the communities and their proximity to one another, a single WUI Zone concept was created to meet several recommendations for the western states outlined in the National Cohesive Strategy. Establishing a WUIZ accomplishes the need to address middle ground areas that lie between untreated areas and urban interface areas and provides the ability to allocate funding to multiple areas meeting the criteria of the monies.

In order to ensure plan goals and action items are being met, periodic progress reporting and annual meetings are needed. These are designed as a means of checks and balances among fire management agencies, members of the public, and public officials. Collaboration through implementation promotes coordinated efforts across jurisdictions and property lines while achieving the three goals of the CWS.

**Bibliography:**

Cohesive Wildfire Strategy, April 2014. The National Strategy: *The Final Phase in the Development of the National Cohesive Wildland Fire Management Strategy.* A collaborative effort by Federal, State, Local, Tribal Governments, non-government partners, and public stakeholders.

Federal Register, 2001. U.S. Government, Federal Register/Vol. 66, No. 160/ Friday, August 17, 2001/Notices 43384.

Oregon Department of Forestry (ODF), 2006. Communities at Risk state wide assessment.

Oregon Department of Forestry; 2015. *Oregon Forestland-Urban Interface Fire Protection Act* – Senate Bill 360. <http://www.oregon.gov/odf/pages/fire/sb360/sb360.aspx>