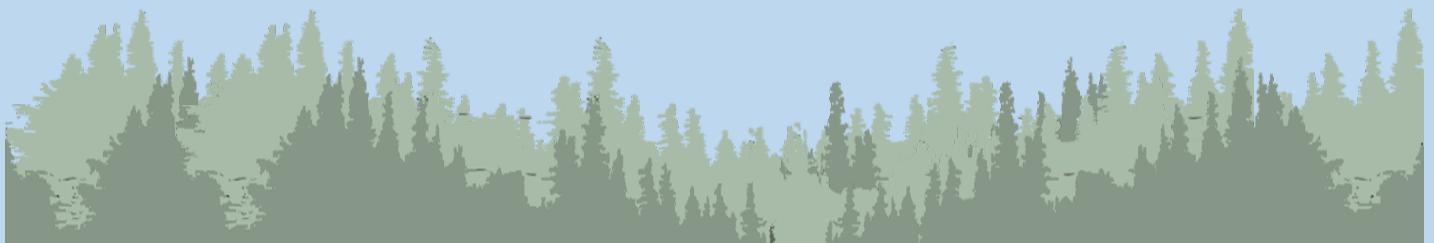


Wildfire Mitigation Compliance Through Senate Bill 360 : A Content Analysis of Oregon County Documents

BY: TARIK RAWLINGS
MASTER OF COMMUNITY AND REGIONAL PLANNING
CANDIDATE 2017



University of Oregon Committee Members

Richard Margerum - PPPM Department Head – Committee Chair

Jesse Abrams – EWP Research Associate

Abstract

Even through the integration of home and community defense standards, natural resource protection measures, and innovative wildfire legislation, the threat to life and property from wildfire events remains a top concern for many regions of the world. The growing threat of wildfire in the Wildland-Urban Interface (WUI) has created overwhelming negative impacts throughout Oregon. In order to protect Oregon WUI areas from wildfire, the Forestland-Urban Interface Fire Protection Act (known as Senate Bill 360 or SB 360) was created in 1997 as a way to enlist the aid of property owners in turning fire-vulnerable urban and suburban properties into less-volatile zones where firefighters may more safely and effectively defend homes from wildfires.

The purpose of this project is to identify the degree to which Oregon county Comprehensive Plans and Community Wildfire Protection Plans are compliant with SB 360. I use a content analysis approach to uncover patterns in plan content, county and regional context, and state forest agency alignment. These patterns broadly identify county Comprehensive Plans and Community Wildfire Protection Plans with “Limited”, “Intermediate”, and “Adequate” levels of current SB 360 compliance and serve as a starting point for the Oregon Department of Forestry (ODF) and Department of Land Conservation and Development (DLCD) to craft next steps toward further county-wide SB 360 compliance, integrate specific content from the SB 360 statute in Comprehensive Plans and CWPPs, and re-strategize the county and state SB 360 management structure.

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Chapter 1: Introduction

The growing threat of wildfire in the Wildland-Urban Interface (WUI) has created overwhelming negative impacts across the world^{1, 2, 3}. Even through the integration of home and community defense standards, natural resource protection measures, and innovative wildfire legislation, the threat to life and property from wildfire events remains a top concern for many regions of the world^{4, 5}. A central focus of US wildfire activity and related policy is in the western states (AK, AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY). These states are less-densely populated in interface areas between forestland and urban centers, and typically possess substantial portions of contiguous forest resources. A growing concern is the amount of families and individuals who are building and purchasing homes within these WUI areas⁶. As American wildfire specialists and policymakers move to address these concerns, the potential solutions and strategies put forward tend to reflect either large-scale, national policy approaches, or small-scale, local strategies to mitigate and counter the negative effects of wildfire⁷. Despite these changes in wildfire policy approach, there is still a glaring need for effective wildfire policy recommendations and strategy integration at the state and county levels. Collectively, wildfire impacts are worsening across the US and the rest of the world. Wildfire events accounted for \$3.2 billion in national fire suppression costs in 2016 (a figure that is expected to increase 365% by 2018) and 10.1 million acres of burned area in 2015. Additionally, fire seasons are estimated to be 78 days longer than fire season durations from 1970⁸. Much of these effects are attributed, in varying degrees, to the impacts of climate change⁹, the availability of fire-related

¹ Liu, Y., Stanturf, J., & Goodrick, S. (2010). Trends in global wildfire potential in a changing climate. *Forest Ecology and Management*, 259(4), 685-697.

² Krawchuk, M. A., Moritz, M. A., Parisien, M. A., Van Dorn, J., & Hayhoe, K. (2009). Global pyrogeography: the current and future distribution of wildfire. *PloS one*, 4(4), e5102.

³ Jolly, W. M., Cochrane, M. A., Freeborn, P. H., Holden, Z. A., Brown, T. J., Williamson, G. J., & Bowman, D. M. (2015). Climate-induced variations in global wildfire danger from 1979 to 2013. *Nature Communications*, 6.

⁴ McLennan, J., Holgate, A. M., Omodei, M. M., & Wearing, A. J. (2006). Decision making effectiveness in wildfire incident management teams. *Journal of Contingencies and Crisis Management*, 14(1), 27-37.

⁵ Carey, H., & Schumann, M. (2003). Modifying wildfire behavior-The effectiveness of fuel treatments. *The Forest Trust*, 16.

⁶ Weber, T. (2016). WUI risks are increasing. Retrieved April 20, 2017, from <https://www.isomitigation.com/spring-2016/wildland-urban-interface-risks-are-increasing.html>

⁷ Steelman, T. A., & Burke, C. A. (2007). Is wildfire policy in the United States sustainable?. *Journal of forestry*, 105(2), 67-72.

⁸ Community Planning Assistance for Wildfire (CPAW). (n.d.). Retrieved April 12, 2017, from <http://planningforwildfire.org/>

⁹ Columbia, U. (2016, October). Climate Change Has Doubled Western U.S. Forest Fires, Says Study. Retrieved April 19, 2017, from <http://www.earth.columbia.edu/articles/view/3343>

funding¹⁰, and the challenges and capabilities of private landowners to mitigate wildfire impacts¹¹.

Nestled at the forefront of wildfire issues in the western United States, the state of Oregon and its residents and natural resources are closely familiar with the land-use and climate dynamics that lead to significant wildfire vulnerabilities. Currently, the Oregon State Natural Hazard Mitigation Plan (NHMP) rates each of its counties' vulnerabilities on a Low-Moderate-High gradient, with each Oregon county holding a rating of Moderate or High as of 2017¹². The number of fires per year has increased by about 46% between 2010 and 2015¹³.

In similar fashion to other western states with high wildfire probabilities and an increasing vulnerable population within the WUI, Oregon has adopted statewide wildfire legislation in the form of *Senate Bill 360: Forestland-Urban Interface Fire Protection Act* (referred to as "SB 360"), administered by the Oregon Department of Forestry (ODF). Originally passed in 1997, SB 360 "enlists the aid of property owners to turn fire-vulnerable urban and suburban properties into less-volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified WUI areas to reduce excess vegetation, which may fuel a fire, around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides"¹⁴.

As a legal regulation, SB 360 applies only to private land parcels within clearly defined WUI boundaries. Private landowners are given two years after the initial purchase of the property to obtain a "checklist" of ODF- and local fire management-approved mitigation actions and to complete said actions. This checklist is self-certified by the landowner and formally submitted to ODF through conventional mail. Perhaps the most consequential feature of this regulatory structure is the stipulation that, if a landowner has not certified their property with ODF and a

¹⁰ Hoover, K., & Bracmort, K. (2015). Wildfire Management: Federal Funding and Related Statistics. *Washington, DC: Congressional Research Service CRS, 43077.*

¹¹ Kline, J. D. (2011). *Issues in evaluating the costs and benefits of fuel treatments to reduce wildfire in the Nation's forests.* DIANE Publishing.

¹² O. (2012). *Oregon.gov* (USA, Oregon Emergency Management, Salem, OR). Retrieved January, 2017, from http://www.oregon.gov/LCD/HAZ/docs/OR_NHMP_2012.pdf

¹³ Oregon State Fire Marshal Annual Reports and Supplements. (2010-2015). Retrieved April 21, 2017, from https://www.oregon.gov/osp/SFM/pages/reports_statistics.aspx#Oregon_Fire_Statistics

¹⁴ O. (n.d.). WUI Fire Protection Act. Retrieved March 1, 2017, from <https://www.oregon.gov/ODF/Fire/Pages/UrbanInterface.aspx>

fire occurs on that same property, the landowner may be held liable to reimburse fire suppression costs at a maximum value of \$100,000. A condensed read of SB 360's regulatory structure illustrates two legal features that centrally define the law: 1) The list of approved mitigation standards which private landowners are required to conduct on their property to avoid liability for cost recovery; and 2) The maximum \$100,000 fine that can be charged to private landowners as a way to enforce compliance with the aforementioned mitigation standards. Administratively, ODF is the state forestry agency associated with the interpretation, implementation, and enforcement of SB 360.

State managers delegate the enforcement of the statute to SB 360 committees representing each county. Despite the law being in effect since 1997, the law has not been implemented statewide. As a result, there is a growing concern, from a management perspective, that counties with lower SB 360 compliance are more vulnerable to the negative impacts of wildfire. A key element to the context of the law is that, in its entire existence, it has never been formally enforced. Enforcement in this meaning refers to holding non-compliant property owners liable for suppression recovery costs if a fire occurs on their property. One attendant at a meeting of key state entities to discuss SB 360 referred to a principal challenge within the structure of the law, through a simple hypothetical scenario: A WUI property owner, for whatever reason, has not complied with the mitigation standards outlined in the ODF self-certification guide and a large wildfire destroys their house. Full enforcement of SB 360 would require ODF to charge the affected landowner, whose house has just been destroyed, for the cost that was incurred through suppressing the fire on their property.

Counties are aware of how controversial this policy is to implement in certain situations, which may be a contributing factor to the apparent low level of statewide compliance, as perceived by state forest and wildfire managers. A second potential contributing factor to low compliance relates to the misalignment between DLCD and ODF as state managers of wildfire mitigation standards in public and private lands throughout Oregon. There are currently two separate management approaches to identifying WUI areas, setting mitigation standards for private property, and providing public contact. The divided state management structure may be a driver of the low compliance with mitigation standards and serve as an obstacle for state enforcement.

In the words of a second meeting attendant, SB 360 is "circling the drain" and managers are seeking ways to salvage its regulatory ability to coordinate with more counties and property

owners to create more resilient WUI areas. From a policy standpoint, integration of SB 360 reinforces the wildfire goals that Oregon is trying to achieve. There is an outstanding need to identify the reasons for the perceived lack of compliance across Oregon's counties. Through analysis of county policy documents, it is possible to better understand the nature of the SB 360-related content. As documents that are interpreted on the county level and made available to private property owners, any SB 360 information presented in them may indicate the degree to which legal elements are being represented. It is assumed that more SB 360 information incorporated into the analyzed documents indicates a higher degree of county SB 360 compliance.

The purpose of this project is to identify the degree to which Oregon county Comprehensive Plans and Community Wildfire Protection Plans (CWPPs) are compliant with the Forestland-Urban Interface Fire Protection Act (SB 360). Specifically, I aim to uncover patterns in plan content, county and regional context, and state forest agency alignment. These patterns broadly identify counties with "Limited", "Intermediate", and "Adequate" levels of current SB 360 compliance and serve as a starting point for ODF and DLCDC to craft next steps toward further county-wide SB 360 compliance, integrate specific content from the SB 360 statute in Comprehensive Plans and CWPPs, and re-strategize the county and state SB 360 management structure.

Chapter 2: Literature Review

The search for literature on Wildland-Urban Interface (WUI) wildfire mitigation was directed by the intention to relate informed WUI protection measures back to the state of Oregon. Currently, the discrepancy between Oregon Department of Forestry (ODF) and Department of Land Conservation and Development (DLCD) WUI protection measure definitions create a significant need in wildfire professionals and WUI landowners for a unified set of standards based on best management practices. Case studies and interviews conducted in wildfire-prone regions of North America, Australia and Europe provide the basis for much of the social qualitative data related to preparedness and resilience^{15, 16, 17, 18}. The literature reviewed covers a range of social, ecological, governmental and financial criteria for well-managed WUI areas. In the available literature, four informational themes were noted and the structure of this literature review separates the information into the following categories: Social Resilience, Fuels Reduction in the WUI, Fire Technology, and Political Considerations. Social and political considerations are included in this study as a way to inform policy recommendations that are publicly inclusive, informative and based around local context¹⁹, government structure²⁰, and willingness. The following subheadings describe the themes identified in the reviewed literature.

Social Resilience

For the purpose of this literature review, Social Resilience is defined as the ability to use social systems and communication to anticipate, absorb, adapt to, and recover from disruptions in a community. The social value of a WUI community holds many potential benefits for heightened

¹⁵ Campbell, R. E., Baker, J. M., Ffolliott, P. F., Larson, F. R., & Avery, C. (1977). Wildfire effects on a ponderosa pine ecosystem: An Arizona case study.

¹⁶ Graham, R. T. (2003). Hayman fire case study.

¹⁷ McGee, T. K. (2011). Public engagement in neighbourhood level wildfire mitigation and preparedness: Case studies from Canada, the US and Australia. *Journal of Environmental Management*, 92(10), 2524-2532.

¹⁸ Montiel, C., & Kraus, D. T. (2010). *Best practices of fire use: prescribed burning and suppression: fire programmes in selected case-study regions in Europe*. European Forest Institute.

¹⁹ Cohen, J. D. (2000). Preventing disaster: home ignitability in the wildland-urban interface. *Journal of forestry*, 98(3), 15-21.

²⁰ Schoennagel, T., Nelson, C. R., Theobald, D. M., Carnwath, G. C., & Chapman, T. B. (2009). Implementation of National Fire Plan treatments near the wildland-urban interface in the western United States. *Proceedings of the National Academy of Sciences*, 106(26), 10706-10711.

preparedness²¹, resilience²², awareness²³, and local leadership²⁴ for wildfire professionals and WUI homeowners and residents. Social studies of rural WUI communities in Australia²⁵, California, Montana, Oregon, Washington and other “western” states²⁶ offered insight into the potential for further community resilience through fostering supportive social relationships and networks of resources within the established community. Aside from Australia, the majority of qualitative social data derived from the literature review is focused around the western united states of AZ, CA, CO, ID, MT, NV, NM, OR, UT, WA, WY²⁷. Further social concepts including connectivity and information-sharing can be used to inform policy best practices, particularly in terms of scale matching and institutional flexibility²⁸.

Fuels Reduction in the WUI

A serious federal policy concern for high risk WUI areas is highlighted multiple times throughout the available literature. Implementation of the National Fire Plan has been criticized for not focusing enough fuels reduction efforts on WUI areas – of the 44,000 documented treatment projects of a multi-state area, only 3% were within WUI areas²⁹. Fuels treatment and flammable fuels reduction remain central elements to the wildfire mitigation process and one of the direct protection measures that can be practiced by WUI homeowners³⁰. Social science research around the motivations for homeowners to complete fuels reduction in the WUI highlight several factors that influence the adoption of risk mitigation activities: 1) the perception of

²¹ Carroll, M. S., Higgins, L. L., Cohn, P. J., & Burchfield, J. (2006). Community wildfire events as a source of social conflict. *Rural Sociology*, 71(2), 261-280.

²² Abrams, J. B., Knapp, M., Paveglio, T. B., Ellison, A., Moseley, C., Nielsen-Pincus, M., & Carroll, M. S. (2015). Re-envisioning community-wildfire relations in the US West as adaptive governance.

²³ McGee, T. K., & Russell, S. (2003). “It’s just a natural way of life...” an investigation of wildfire preparedness in rural Australia. *Global Environmental Change Part B: Environmental Hazards*, 5(1), 1-12.

²⁴ Lang, E. A., Nelson, K. C., & Jakes, P. (2006). Working with community leadership to promote wildfire preparedness.

²⁵ McGee, T. K., & Russell, S. (2003). “It’s just a natural way of life...” an investigation of wildfire preparedness in rural Australia. *Global Environmental Change Part B: Environmental Hazards*, 5(1), 1-12.

²⁶ Schoennagel, T., Nelson, C. R., Theobald, D. M., Carnwath, G. C., & Chapman, T. B. (2009). Implementation of National Fire Plan treatments near the wildland–urban interface in the western United States. *Proceedings of the National Academy of Sciences*, 106(26), 10706-10711.

²⁷ Schoennagel, T., Nelson, C. R., Theobald, D. M., Carnwath, G. C., & Chapman, T. B. (2009). Implementation of National Fire Plan treatments near the wildland–urban interface in the western United States. *Proceedings of the National Academy of Sciences*, 106(26), 10706-10711.

²⁸ Abrams, J. B., Knapp, M., Paveglio, T. B., Ellison, A., Moseley, C., Nielsen-Pincus, M., & Carroll, M. S. (2015). Re-envisioning community-wildfire relations in the US West as adaptive governance.

²⁹ Schoennagel, T., Nelson, C. R., Theobald, D. M., Carnwath, G. C., & Chapman, T. B. (2009). Implementation of National Fire Plan treatments near the wildland–urban interface in the western United States. *Proceedings of the National Academy of Sciences*, 106(26), 10706-10711.

³⁰ Safford, H. D., Schmidt, D. A., & Carlson, C. H. (2009). Effects of fuel treatments on fire severity in an area of wildland–urban interface, Angora Fire, Lake Tahoe Basin, California. *Forest Ecology and Management*, 258(5), 773-787.

others' attitudes toward treatment options; 2) the perceived risk and effectiveness of mitigation options; and 3) the homeowners' abilities to complete the risk reduction behaviors³¹.

Fire Technology

The technology available for fire mitigation is constantly adapting and reflecting both the increasing effects of climate change³² and need for more resistant and resilient structural materials³³. Housing material types can lower structural ignitability and experimentation with crown-fire patterns can determine how much distance a high or low ignitability house will need from surrounding vegetation and other structures³⁴. From a very innovative standpoint, some reports recommend the national adoption of "wildfire simulation modeling" in WUI areas to determine rates of spread and fire behavior³⁵. Wildfire modeling is the replication of wildfire conditions (in this case WUI area fires) for the purpose of observing the effects of different fuel types, fire behaviors, and weather patterns. As wildfire planning increases concentration on the fuel types and fire regimes of specific communities, wildfire simulation and fire-resistant building material information plays a significant role in determining best practices for risk mitigation standards.

Political Considerations

There are considerable criticisms of the federal wildfire mitigation policies currently in place, particularly the Healthy Forest Restoration Act (HFRA)³⁶ and the National Fire Plan³⁷. In the former, the definition of the term "restoration" can either mean historically healthy ecological conditions, or uninformed short-term recovery from the immediate impacts of wildfire. Additionally, the political context of WUI communities can serve as an opportunity to utilize key

³¹ Toman, E., Stidham, M., McCaffrey, S., & Shindler, B. (2013). Social science at the wildland-urban interface: A compendium of research results to create fire-adapted communities. *US Department of Agriculture*.

³² Millar, C. I., Stephenson, N. L., & Stephens, S. L. (2007). Climate change and forests of the future: managing in the face of uncertainty. *Ecological applications*, 17(8), 2145-2151.

³³ Cohen, J. D. (2000). Preventing disaster: home ignitability in the wildland-urban interface. *Journal of forestry*, 98(3), 15-21.

³⁴ Gill, A. M., & Stephens, S. L. (2009). Scientific and social challenges for the management of fire-prone wildland-urban interfaces. *Environmental Research Letters*, 4(3), 034014.

³⁵ Haas, J. R., Calkin, D. E., & Thompson, M. P. (2013). A national approach for integrating wildfire simulation modeling into Wildland Urban Interface risk assessments within the United States. *Landscape and Urban Planning*, 119, 44-53.

³⁶ Colburn, J. E. (2008). The fire next time: Land use planning in the wildland/urban interface. *Urban Interface*.

³⁷ Schoennagel, T., Nelson, C. R., Theobald, D. M., Carnwath, G. C., & Chapman, T. B. (2009). Implementation of National Fire Plan treatments near the wildland-urban interface in the western United States. *Proceedings of the National Academy of Sciences*, 106(26), 10706-10711.

local players in wildfire management that can serve as informational resources as well as leadership figures³⁸. In addition to the need for heightened technology and scientific analysis, WUI areas should improve the current standards for wildfire risk assessment³⁹.

Synthesis

All wildfire policy aims to mitigate risk and build capacity for the suppression of wildfire events. The literature review indicates that WUI communities can be strengthened in both social and scientific aspects to better prepare, absorb, respond to and recover from wildfire events with minimal loss of life or property. Gaps in the literature exist with offering policy frameworks that could be used, at the very least, as case studies for WUI communities looking to bolster their own wildfire management. Planning focus is made on larger-scale implications of federal and even state-level wildfire policies. Despite the presence of statewide policies such as SB 360, this does little for Oregon WUI communities who are still not being presented with a unified, agreed-upon set of private land protection standards. There is a need for WUI risk assessment, climate change analysis, and mitigation recommendations to be presented in useable, albeit experimental, frameworks that can actually be tested and used by WUI communities. This literature review serves to highlight the best wildfire mitigation and preparedness practices available in an effort to offer real policy solutions for high-risk WUI areas such as those in Oregon.

³⁸ Lang, E. A., Nelson, K. C., & Jakes, P. (2006). Working with community leadership to promote wildfire preparedness.

³⁹ Haas, J. R., Calkin, D. E., & Thompson, M. P. (2013). A national approach for integrating wildfire simulation modeling into Wildland Urban Interface risk assessments within the United States. *Landscape and Urban Planning*, 119, 44-53.

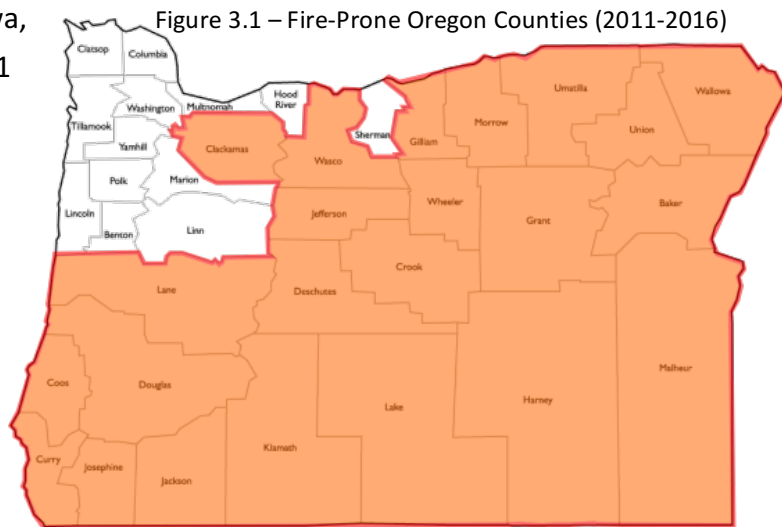
Chapter 3: Methodology

This project aims to identify the degree to which county Comprehensive Plans and CWPPs are compliant with the Forestland-Urban Interface Fire Protection Act (SB 360) so that patterns in plan content, county and regional context, and state forest agency alignment can be discerned. The methodology, described in the sections below, outlines all steps taken to: 1) Identify fire-prone counties in Oregon; 2) Create searchable key words that reflect legal content contained in SB 360; 3) Assign a points-based system to the identified keyword criteria; 4) Determine total and individual criterion for Compliance Value Ratings; and 5) Establish the categories of “Limited”, “Intermediate”, and “Adequate” compliance for both individual county criteria and county total values.

Identification of Research Area

The research on the inclusion of SB 360 content in CWPPs and Comprehensive Plans focuses on Oregon counties that have experienced impacts from a “large” wildfire event in the past 5 years. A “large” wildfire event in this context is defined as a wildfire with a burn area of 1,000 or more acres, located in whole or in part within the respective county boundaries. It is important to highlight that the focus of this research project is on forested areas and forest fires, rather than wildfires as a whole. This focus on forest resources specifies that rangeland and rangeland fires are not assessed within the criteria outlined in the Key Word Content Analysis section below, or Appendix B – Codebook. A central assumption is that, if definitive acreage data were not available through the National Weather Service (NWS), the county was assumed to have *not* experienced a “large” wildfire event. If the parameters for a “large” wildfire event in a county were fulfilled in NWS data, a comprehensive search of the county’s hazard history was performed. The hazard history search was used to verify that the fires associated with each county were over 1,000 acres. Resources consulted during the hazard history search include InciWeb (Incident Information System), Swofire (ODF Southwest Oregon information), emergency management press releases, local news stories, and other local data made publicly available on the internet. Much of the methodology of this research reflects the jurisdiction identification process and content analysis structure utilized by Abrams et al

(2016)⁴⁰ for an analysis of CWPP content in 11 western states. This methodology begins with the identification of counties fitting the criteria for a “large” wildfire event. The most current 5-year data were available for the period of December 31st, 2011 to December 31st, 2016. Using the “large” fire jurisdictional criteria, 23 Oregon counties were found to have experienced a 1,000-or-more-acre fire in the last 5 years (Baker, Clackamas, Coos, Crook, Curry, Douglas, Deschutes, Gilliam, Grant, Harney, Jackson, Josephine, Jefferson, Klamath, Lake, Lane, Malheur, Morrow, Umatilla, Union, Wallowa, Wasco, and Wheeler)⁴¹. Figure 3.1 highlights the counties that were retained for the content analysis portion of the methodology. The 1,000-acre or larger criteria was used based on the assumption that larger fire events of this acreage would result in more widely available and detailed information about local wildfire parameters and history. The 5-



Map created by Tarik Rawlings (2016) – base imagery sourced from worldatlas.com

year timespan criterion was used based on the assumption that the timespan would serve as an indication of counties with more recently developed and available county documents, especially CWPPs.

Of these identified wildfire-prone Oregon counties, a CWPP and Comprehensive Plan were identified for each. The identification of these documents involves the searching of county websites, the UO Scholars Bank, and related county planning staff resources to collect the most current drafts of both Comprehensive Plans and Community Wildfire Protection Plans. Following the Abrams et al. (2015) methodology, plans were retained for further analysis if they: (1) self-referred as a Community Wildfire Protection Plan or County Comprehensive Plan in the title or body of the plan or otherwise implied that they were crafted in response to wildfire mitigation actions or Oregon statewide planning goal 7 compliance; and (2) were

⁴⁰ Abrams, J., Nielsen-Pincus, M., Paveglio, T., & Moseley, C. (2016). Community wildfire protection planning in the American West: homogeneity within diversity? *Journal of Environmental Planning and Management*, 59(3), 557-572.

⁴¹ Atmos. Profile: Radiosonde - Ncdc (Fife). (2012-2017). *ORNL Distributed Active Archive Center Datasets*. doi:10.3334/ornl daac/13 <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=41%2COREGON>

complete, stand-alone documents⁴². Through this process, all 23 counties were found to be compatible with the methodological criteria and were reserved for further analysis.

Key Word Content Analysis

Through the inclusion of key terms/concepts, and the synthesis of regulatory information, a list of keyword criteria (listed as B.2 – B.8 below) are assigned a total value of two (2) points, with the exception of B.3 and B.4 which are assigned a total value of three (3) points. The combined total of all criteria is a maximum potential value of 16 points. These total values are referred to as Total Compliance Values, and one of each are assigned to both the Comprehensive Plan and CWPP of each respective county. With each county representing two (2) Total Compliance Values, there is the potential for a county to score a maximum of 32 points overall. The Total Compliance Values are grouped into three categories, representing different levels of overall SB 360 compliance in each plan within a county: 1) Limited Compliance (Limited); 2) Intermediate Compliance (Intermediate); and 3) Adequate Compliance (Adequate). The three categories are separately represented both in individual points per plan (whether Comprehensive or CWPP) and in Total Compliance Values for CWPPs.

In order to identify the elements within these plans that reflect the content of SB360, 8 categories were chosen that represent the “central” regulatory information:

1. Description of Interface (2 pts total) ORS 477.015 – 477.061
2. Obligation of Property Owner (3 pts total) ORS 477.059
3. Liability of Property Owner (3 pts total) ORS 477.064 - 477.128
4. Northwest Wildland Fire Protection Agreement (2 pts total) ORS 477.175 - 477.200
5. Funding Opportunities (2 pts total) ORS 477.750 - 477.970
6. Management Structure (2 pts total) ORS 477.355 - 477.365
7. Direct Reference of Statute (2 pts total) ORS 477.015-477.993
8. State Agency Reference (CWPPs only) (value = ODF, DLCD, SOME ODF, or NONE)

The criteria for identifying “central” regulatory information was based on the exact wording and order of legal content contained in the Oregon Revised Statutes 477.015 - 477.061 and

⁴² Abrams et al (2016) (p.562)

Oregon Administrative Rules 629-044-1000 through 629-055-1110⁴³. This project is designed to address the conditions and regulatory application that led to the “large” wildfire events recorded through National Weather Service data in the last five years⁴⁴. Specifically, the content of SB 360 that directly applies to forested areas was used to form the terms used in the list of key terms and concepts (*see Appendix B*). The key terms and concepts are derived from the individual headings within ORS 477.015 – 477.061, and the individual terms within the description of their general provisions. The sub-headings that were not included in the key terms and concepts search are:

- Smoke Management (ORS 477.013)
- Fire Prevention (ORS 477.505 – 477.562)
- Rangeland (ORS 477.315 – 477.325)
- Snags; Slashing and Other Debris (ORS 477.565 – 477.580)
- Machinery Regulations (ORS 477.605 – 477.670)
- Miscellaneous (ORS 477.695 – 477.747)

The concept of smoke management is assumed to be incorporated into the criteria for B.3 – Obligation of Property Owner and the description of a specific list of wildfire mitigation standards. Additionally, the criteria for B.7 – Management Structure identifies the responsible personnel and protection districts who are typically in control of smoke management strategies⁴⁵. In this sense, the regulatory description of smoke management in SB 360 is assumed to be reflected in the criteria for both B.3 and B.7. Machinery Regulations are also standards that are designed and administered by a county’s wildfire management structure. In this sense, Machinery Regulations are assumed to be included in the content of the wildfire mitigation standards identified in B.3.2.

Similarly, Fire Prevention is not included in the key word and concept content analysis because it is assumed to be incorporated into the criteria for B.3 – Obligation of Property Owner. The specific listing of wildfire mitigation standards described in criterion B.3.2. is assumed to contain measurable and distinct actions that fit the individual needs and requirements of each

⁴³ O. (n.d.). Fire. Retrieved April 10, 2017, from <https://www.oregon.gov/ODF/Fire/Pages/UrbanInterface.aspx>

⁴⁴ N. (2011-2016). Storm Events Database. Retrieved April 24, 2017, from <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=41%2FCOREGON>

⁴⁵ Riebau, A. R., & Fox, D. (2001). The new smoke management. *International Journal of Wildland Fire*, 10(4), 415-427.

county and subsidiary jurisdiction. The methodology of this report recognizes that state-wide fire prevention standards are described in significantly broad detail, in part to allow for individual counties and smaller jurisdictions to determine the standards that best address the local needs and abilities. Snags; Slashing and Other Debris are also content that is considered incorporated into the specific list of wildfire mitigation standards.

The concept of Rangeland-specific management tactics did not affect the majority of county area represented in the 23 identified counties compared to the county area affected by management tactics designed predominantly for forest-based wildfire events. The 23 identified counties represent regions of the state where “large” fires that have occurred in the last five years have affected primarily forest-based materials and resources⁴⁶. Specifically, the focus on forestland-urban interface areas as described in the title and purpose of SB 360 warrants the assumption that forest-based content is more pertinent in the context of this research.

The content under the subheading “Miscellaneous” is a collection of regulations that provide more specific detail to situations involving campfires, unlawful use of fire in a project or other land use, minor children, and flammable materials in county rights-of-way. These topics were considered variations of the “central” concepts included in the criteria of B.2 – Description of Interface, B.3 – Obligation of Property Owner, and criteria of B.4 – Liability of Property Owner.

Codebook and Determining Compliance Value

Appendix B contains a guide for analyzing the content of both Comprehensive Plans and CWPPs as it relates to the content of SB 360 mentioned in the previous section. This codebook provides detailed instructions that describe the order in which key words should be searched within a document, and criteria for determining whether the related content is contained in a synthesized paragraph or section. In the context of this research, a “synthesized paragraph or section” constitutes an explanation, description, or other definition of the “central” key term or concept that serves as a synthesis of the related SB 360 information. For instance, the brief mention of a single term in a portion of a county’s CWPP does not represent a synthesized paragraph or section that elaborates on the meaning or application of the key terms.

⁴⁶ <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=41%2COREGON>

CWPPs and Comprehensive Plans differ in how they are represented in individual Codebook criteria by the terms “Limited”, “Intermediate”, and “Adequate”. For CWPPs, Codebook criteria B.2 and B.5-B.8 show: “Limited” if assigned an individual total of 0-.9 points; “Intermediate” if assigned an individual total of 1-1.49 points; and “Adequate” if assigned an individual total of 1.5-2 points. For the CWPP criteria of B.3 and B.4, “Limited” is denoted through an individual total of 0-1.49 points; “Intermediate” through an individual total of 1.5-2.49 points; and “Adequate” through an individual total of 2.5-3 points. For Comprehensive Plans, only the terms “Limited” and “Adequate” are used to refer to individual compliance totals; “Limited” is denoted by the complete lack of key word and concept criteria, or a “0” total point value. The scoring system for Comprehensive Plans is scored differently based on the assumption that they are not designed explicitly for the purpose of wildfire mitigation planning, like the CWPPs. Additionally, the range of point values associated with integration levels in Comprehensive Plans is based on the hypothesis that, overall, Comprehensive Plans would contain less SB 360-related content and, therefore, fewer points. Within Comprehensive Plans, Codebook criteria B.2 and B.5-B.8 show “Limited compliance if assigned an individual total of 0-.9 points; “Intermediate” if assigned an individual total of 1-1.49 points; and “Adequate” if assigned an individual total of 1.5-2 points. The same applies for Codebook Criteria B.3 and B.4 in receiving a “Limited” rating if assigned an individual total of 0-.9 points; “Intermediate” if assigned an individual total of 1-1.9 points; and “Adequate” rating if assigned an individual total of 2-3 points. Comprehensive plan individual criteria are deemed “Limited” in SB 360 compliance if *no* points are totaled, and are deemed “Adequate” if *any* points are totaled.

The three categories of compliance also apply to the Total Compliance Values for both plans analyzed per county. For Comprehensive Plans, the method is similar to the process used for individual criteria: Total Compliance Values of 0-1 points are deemed “Limited”, 1.1-3 points deemed “Intermediate”, and 3.1 or more points deemed “Adequate”. For CWPPs, a “Limited” Total Compliance Value represent a total point value between 0 and 7.9. An “Intermediate” total value represents a total point value between 8 and 12.49 points and an “Adequate” total value represents a total point value between 12.5 and 16 points. The county Comprehensive Plans are assumed to contain considerably less SB 360-related content than CWPPs and, as a result, the criteria for “Limited”, “Intermediate”, and “Adequate” compliance groupings are depicted on a smaller gradient than the ratings for CWPPs. Additionally, throughout all graphic depictions of the assigned points per individual criteria and Total Compliance Value, three colors represent “Limited”, “Intermediate”, and “Adequate” ratings. “Limited” compliance is represented by the color *red*, “Intermediate” by the color *yellow*, and “Adequate” by the color

blue. While the visual representation of these colors depicts stark differences between the three colors of integration, the points and corresponding colors should be interpreted on a gradient scale, where the transitions between “Limited”, “Intermediate”, and “Adequate” are more moderate than the differences in color suggest.

Finally, this methodology contains a Codebook criterion, B.9 – State Agency Reference, that applies only to the analysis of CWPP documents. This criterion recognizes that there is currently a misalignment between Oregon Department of Forestry (ODF) and Department of Land Conservation and Development (DLCD) in terms of how these agencies interpret SB 360 when coordinating with counties and communities. In order to better understand which agency’s regulatory interpretation (if any) is most prevalent within a CWPP, a key word search was performed to identify direct references to ODF or DLCD acronyms, offices, or state-wide influences. If a county’s CWPP documents unanimously and consistently reference either DLCD or ODF as the governing agency over SB 360 interpretation and implementation, this is noted in the findings. If no agency is referenced, or partial reference is given to either ODF or DLCD, no definitive findings are recorded.

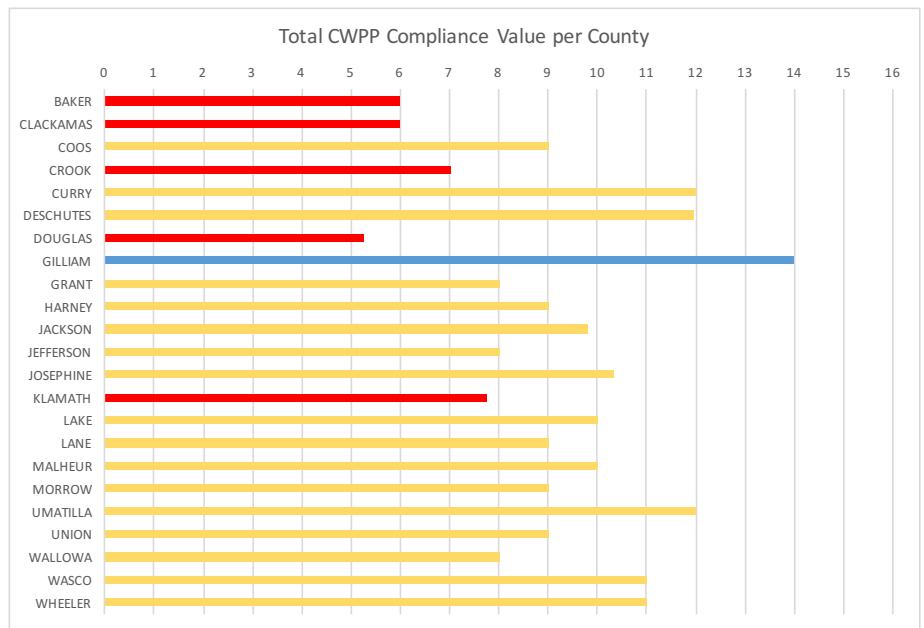
Chapter 4: Findings

A total of 23 counties were analyzed through the Codebook criteria outlined in Appendix B. Acquisition of the county documents was conducted primarily through internet searches, inquiry into county planning departments, and review of the University of Oregon’s (UO) Scholars Bank. 18 of the 23 County Comprehensive Plans were obtained through the county websites, 3 through the UO Scholars Bank, one through the Department of Land Conservation and Development (DLCD) website, and one through phone contact with the planning department (Baker County). 18 of the 23 Community Wildfire Protection Plans (CWPPs) were obtained through the CWPP resource database on the ODF website, 5 through county websites, and 1 through the Central Oregon Intergovernmental Council (Crook County). The findings listed below reflect values that are derived from the inclusion of certain, pre-determined segments of content in county documents. The Findings section includes a Total Compliance Value rating, individual Codebook criteria ratings, an overview of social statistics, a synthesis of counties categorized as having “Limited”, “Intermediate”, or “Adequate” compliance, and an analysis of which state agencies are referenced in county documents as the administrative force behind SB 360’s interpretation and implementation.

Total Compliance Values

Total Compliance Values are determined in each county for both Comprehensive Plans and CWPPs. Table 4.1 depicts the total points for CWPPs as assigned through Codebook criteria (See Appendix B – Codebook) based on “Limited”, “Intermediate”, and “Adequate” compliance categories. The compliance categories correspond to the three colors used in the table: *red* for “Limited” compliance,

Table 4.1 – Total CWPP Compliance Value per County

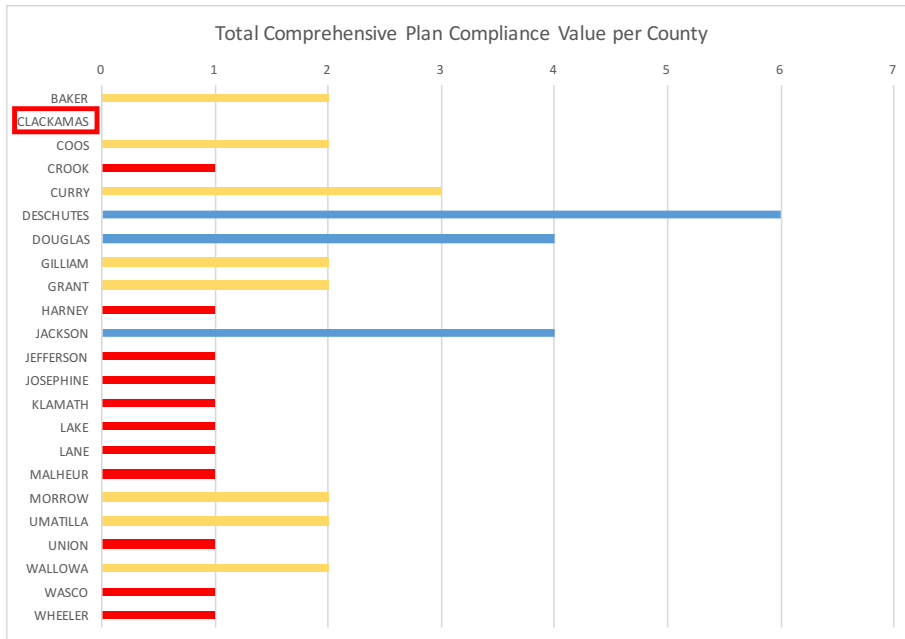


yellow for “Intermediate” compliance, and blue for “Adequate” compliance. Table 4.1 shows that the majority of county CWPPs demonstrate an “Intermediate” level of SB 360 compliance (17 of the 23 counties or about 74% of all counties). Five counties demonstrate “Limited” SB 360 compliance (about 22% of all counties), and one county (Gilliam County) demonstrates an “Adequate” level of SB 360 compliance according to the established methodology (about 4% of all counties).

Following a similar methodology, county Comprehensive Plan Total Compliance Values (Table 4.2) depict the total points as assigned through Codebook criteria (See Appendix B – Codebook) based on “Limited”, “Intermediate”, and “Adequate” compliance categories and the same color coding system used for CWPPs in Table 4.1. Counties without any measurable value, in either CWPP or Comprehensive Plan data, fall within the category of “Limited” compliance and are indicated by a red box placed around the y-axis county name.

Table 4.2 shows that the majority of county Comprehensive Plans demonstrate a “Limited” level of SB 360 compliance (12 of the 23 counties or about 52% of all counties). Eight counties demonstrate “Intermediate” SB 360 compliance (about 35% of all counties), and three counties demonstrate an “Adequate” level of SB 360 compliance according to the established methodology (about 13% of all counties).

Table 4.2 – Total Comprehensive Plan Compliance Value per County



Profile of Research Area

In order to better understand the demographic context of the counties identified within the research area, an overview of basic social statistical data was organized for each of the 23 counties. For CWPPs, the four top-scoring counties in the research area are Gilliam, Umatilla, Curry, and Deschutes. These counties correspond to several social statistics, outlined in Table 4.3, based on 2011-2015 American Community Survey (ACS) Estimates⁴⁷. One pattern is that these four counties are associated with annual median incomes over \$44,000. This value is substantially higher than the average median income value calculated for the remaining 19 counties (about \$39,400 annually). A higher median income in the four counties with higher compliance ratings may indicate that property owners in these WUI areas have a higher financial capability to pay for the mitigation actions required through SB 360 (described in criterion B.3 – *Obligation of Property Owner*). The four counties with the highest CWPP compliance rating do not show any correlation between compliance and population, land area, or number of households, as those demographics vary widely across all four counties. Compared to the 2015 Oregon unemployment rate of 9.3%, 16 counties demonstrate higher unemployment ranging between 9.4% and 16.1%. The substantial unemployment issue observed in the research area may also indicate that some of the private property owners within these county WUI areas have difficulty affording the mitigation actions required by SB 360. The difficulty for some property owners to afford wildfire mitigation actions described in criterion B.3 is assumed to affect the ability of a broader county to incorporate high-quality wildfire content into county documents.

For county Comprehensive Plans, the four top-valued counties in the research area are Deschutes, Douglas, Jackson, and Curry. Both Deschutes and Curry counties rank as two of the most SB 360-compliant counties across both CWPPs and Comprehensive Plans in the research area. As evidenced in other regions of the country, a major issue with wildfire mitigation compliance from private property owners is not being able to definitively gauge to what extent property owners are taking action to reduce risk⁴⁸. Criterion B.7 – *Management Structure* (see individual criteria ratings below) is the most prevalent integrated component of SB 360 content. The SB 360 management structure within the Comprehensive Plans from the four most

⁴⁷ Social Explorer Tables: ACS 2015 (5-Year Estimates) (SE), ACS 2015 (5-Year Estimates), Social Explorer; U.S. Census Bureau

⁴⁸ Champ, P. A., Brenkert-Smith, H., & Flores, N. (2011). Living with Wildfire in Larimer County, Colorado, 2007.

compliant counties may serve as an example for how other less-compliant counties may utilize management structure to inventory the WUI properties and actions taken by property owners.

Table 4.3 – Demographic Information

Statistics	Baker County, Oregon	Clackamas County, Oregon	Coos County, Oregon	Crook County, Oregon	Curry County, Oregon
Total Population					
Total Population	16,052	389,438	62,775	20,956	22,338
Median Household Income (In 2015 Inflation Adjusted Dollars)	\$41,098	\$65,965	\$38,605	\$37,106	\$40,884
Poverty Status in 2015 of Families by Family Type By Presence of Children Under 18 Years					
Families:	4,453	102,929	15,668	5,900	6,035
Income in 2015 Below Poverty Level:	467 10.5%	6,696 6.5%	1,829 11.7%	740 12.5%	605 10.0%

Statistics	Deschutes County, Oregon	Douglas County, Oregon	Gilliam County, Oregon	Grant County, Oregon	Harney County, Oregon
Total Population					
Total Population	166,622	107,194	1,883	7,276	7,229
Median Household Income (In 2015 Inflation Adjusted Dollars)	\$51,223	\$41,312	\$44,293	\$38,046	\$37,580
Poverty Status in 2015 of Families by Family Type By Presence of Children Under 18 Years					
Families:	44,349	29,108	521	1,953	2,128
Income in 2015 Below Poverty Level:	4,649 10.5%	4,040 13.9%	11 2.1%	214 11.0%	296 13.9%

Statistics	Jackson County, Oregon	Jefferson County, Oregon	Josephine County, Oregon	Klamath County, Oregon	Lake County, Oregon
Total Population					
Total Population	208,363	22,061	83,409	65,972	7,842
Median Household Income (In 2015 Inflation Adjusted Dollars)	\$44,028	\$46,366	\$37,665	\$40,336	\$32,369
Poverty Status in 2015 of Families by Family Type By Presence of Children Under 18 Years					
Families:	53,375	5,384	22,089	17,777	1,955
Income in 2015 Below Poverty Level:	7,237 13.6%	790 14.7%	3,098 14.0%	2,527 14.2%	245 12.5%

Statistics	Lane County, Oregon	Malheur County, Oregon	Morrow County, Oregon	Umatilla County, Oregon	Union County, Oregon
Total Population					
Total Population	357,060	30,551	11,204	76,738	25,745
Median Household Income (In 2015 Inflation Adjusted Dollars)	\$44,103	\$35,418	\$50,918	\$48,101	\$43,822
Poverty Status in 2015 of Families by Family Type By Presence of Children Under 18 Years					
Families:	86,645	6,845	2,755	18,288	6,432
Income in 2015 Below Poverty Level:	10,210 11.8%	1,242 18.1%	350 12.7%	2,534 13.9%	761 11.8%

Statistics	Wallowa County, Oregon	Wasco County, Oregon	Wheeler County, Oregon
Total Population			
Total Population	6,857	25,492	1,348
Median Household Income (In 2015 Inflation Adjusted Dollars)	\$40,581	\$43,422	\$33,487
Poverty Status in 2015 of Families by Family Type By Presence of Children Under 18 Years			
Families:	1,925	6,506	407
Income in 2015 Below Poverty Level:	248 12.9%	744 11.4%	50 12.3%

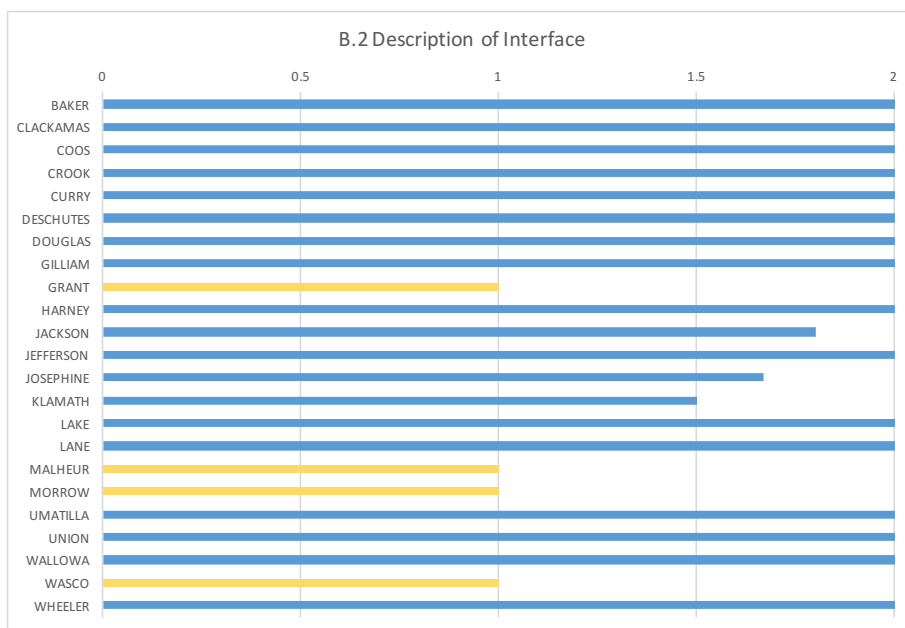
Social Explorer Tables: ACS 2015 (5-Year Estimates) (SE), ACS 2015 (5-Year Estimates), Social Explorer; U.S. Census Bureau

CWPP Individual Criteria Values

As defined in Chapter 3, each of the identified criteria (seven for comprehensive plans, eight for CWPPs) for defining the level of compliance for distinct elements of SB 360 are assigned an individual point value based on the degree to which the content in each criterion is integrated into county documents. The total of each point value per criterion results in the Total Compliance Values described in the previous section. Depending on the points assigned for each criterion, the level of county compliance can be described as “Limited”, “Intermediate”, or “Adequate”. Each of the criteria B.2 – B.9 were observed in some capacity within at least one county from the identified research area.

B.2 – *Description of Interface* measures the presence of references to the wildland-urban interface and explicit definitions or descriptions of it; this criterion is assigned a maximum value of two points. The compliance rating of B.2 in each of the identified counties is depicted in Table 4.4. The table shows that the majority of counties demonstrate an “Adequate” level of SB 360 compliance (19 of the 23 counties or about 83% of all counties). The remaining four counties demonstrate an “Intermediate” level of SB 360 compliance (about 17% of all counties). The counties of Klamath, Josephine, and Jackson show ratings between 1.5 and 2 points, indicating that their county CWPP structure is represented by multiple jurisdictions, and not all of these jurisdictions fully satisfied the criteria need for a maximum two-point value. No counties demonstrated “Limited” levels of SB 360 in terms of the Description of Interface, and

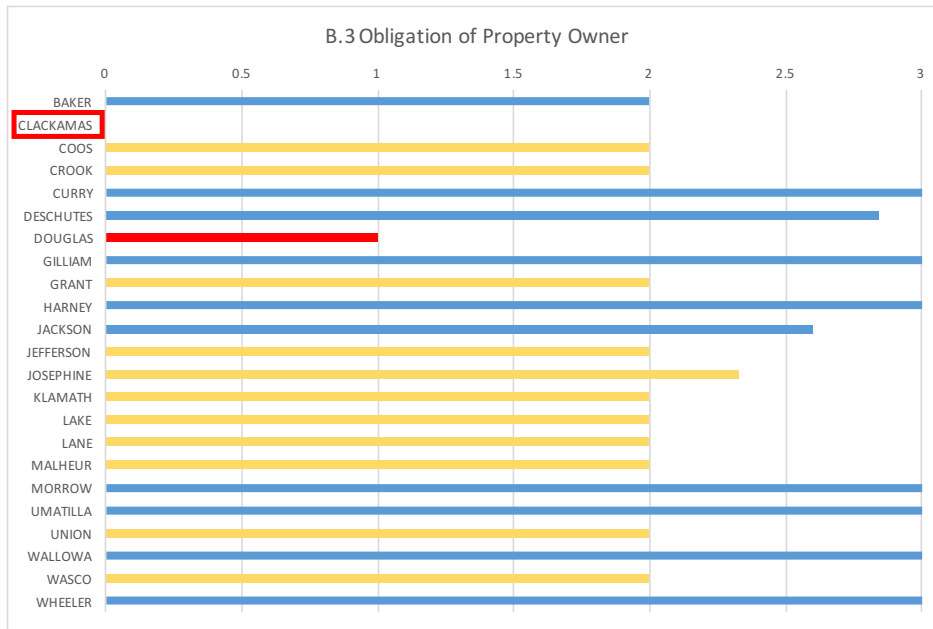
Table 4.4 – B.2 - Description of Interface



there was no value recorded under one (1) point for any county.

B.3 – *Obligation of Property Owner* measures the presence of references to the legal obligation of private property owners in the WUI to conduct specific wildfire mitigation actions on their land; this criterion is assigned a maximum value of three points. The compliance rating of B.3 in each of the identified counties is depicted in Table 4.5. The table shows that the majority of counties demonstrate an “Intermediate” level of SB 360 compliance (11 of the 23 counties or about 48% of all counties). Ten counties demonstrate an “Adequate” level of SB 360 compliance (about 43% of all counties). Two counties (Douglas and Clackamas) demonstrate a “Limited” level of SB 360 compliance (about 9% of all counties). The counties of Josephine, Jackson, and Deschutes show ratings between 2 and 3 points, indicating that their county CWPP structure is represented by multiple jurisdictions, and not all of these jurisdictions fully satisfied the criteria need for a maximum three-point value.

Table 4.5 – B.3 Obligation of Property Owner



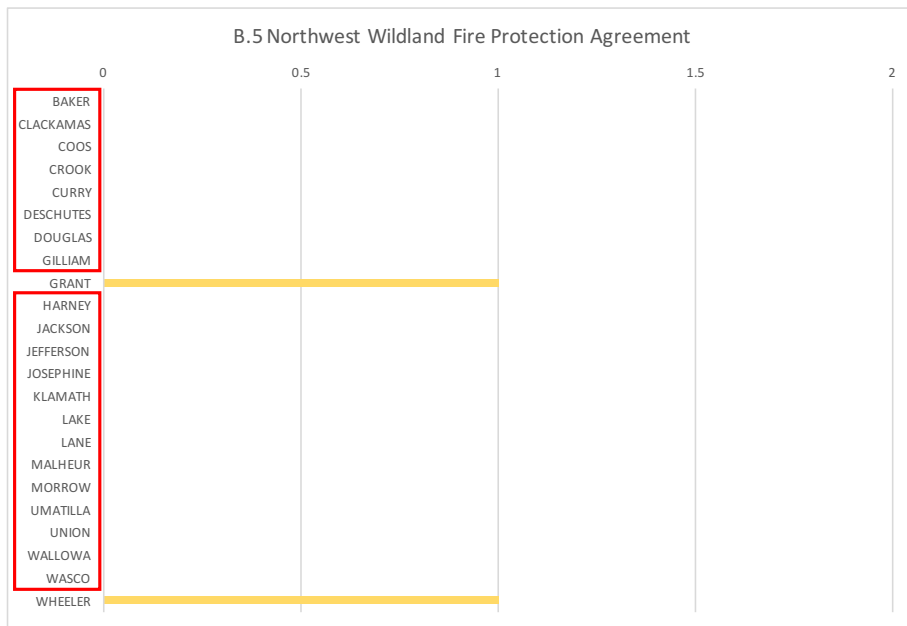
B.4 – *Liability of Property Owner* measures the presence of references to the legal liability of private property owners in the WUI in the form of a maximum \$100,000 fine to reimburse suppression costs; this criterion is assigned a maximum value of three points. The compliance rating of B.4 in each of the identified counties is depicted in Table 4.6. The table shows that the majority of counties demonstrate an “Intermediate” level of SB 360 compliance (11 of the 23 counties or about 48% of all counties). Ten counties demonstrate an “Adequate” level of SB 360 compliance (about 43% of all counties). Two counties (Douglas and Clackamas) demonstrate a “Limited” level of SB 360 compliance (about 9% of all counties). The counties of Josephine, Jackson, and Deschutes show ratings between 1.5 and 2 points, indicating that their county CWPP structure is represented by multiple jurisdictions, and not all of these jurisdictions fully satisfied the criteria need for a maximum three-point value.

Table 4.6 – B.4 – Liability of Property Owner



B.5 – *Northwest Wildland Fire Protection Agreement (NWFPFA)* measures the presence of references to the wildfire-related funding opportunities made available through NWFPFA; this criterion is assigned a maximum value of two points. The compliance rating of B.5 in each of the two identified counties’ content in which it appears is depicted in Table 4.7. The table shows that the counties of Grant and Wheeler (about 9% of all counties) were the only counties identified with CWPPs that made mention of the Northwest Wildland Fire Protection Agreement (NWFPFA) or the potential funding associated with it. Grant and Wheeler were assigned one (1) point each for the mention of NWFPFA or related funding avenues without relating the agreement to a larger CWPP section about potential funding for mitigation actions on private properties. The ratings for Grant and Wheeler counties correspond to an “Intermediate” level of SB 360 compliance, while the remaining 21 counties (about 91% of all identified counties) demonstrated a “Limited” level of SB 360 compliance through scores of zero.

Table 4.7 – B.5 – Northwest Wildland Fire Protection Agreement (NWFPFA)



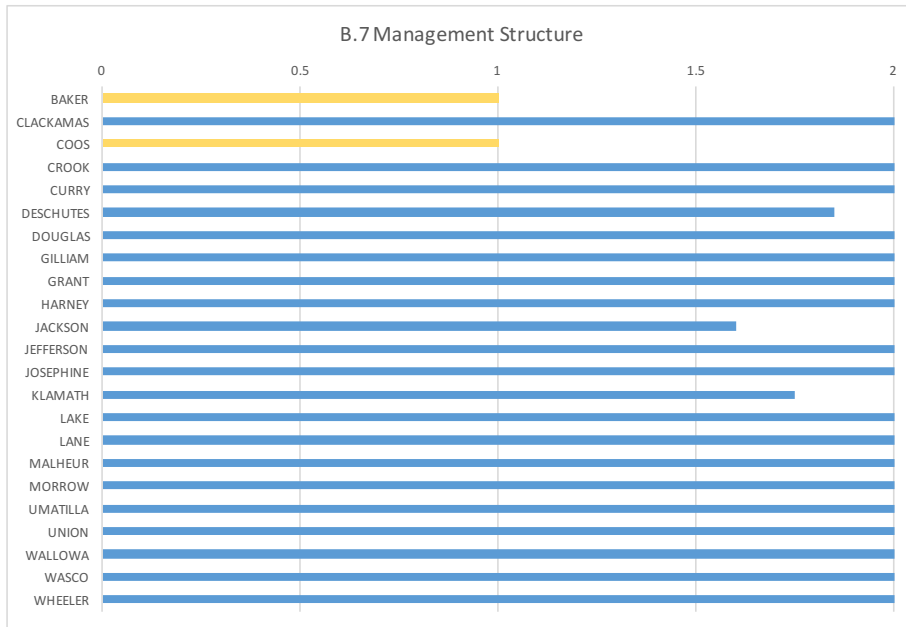
B.6 – *Funding Opportunities* measures the presence of references to diverse wildfire-related funding opportunities made available through state, county, or other sources; this criterion is assigned a maximum value of two points. The compliance rating of B.6 in each of the identified counties is depicted in Table 4.8. The table shows that the majority of counties demonstrate an “Intermediate” level of SB 360 compliance (13 of the 23 counties or about 57% of all counties). The counties of Klamath, Josephine, Jackson, and Deschutes show ratings between 1 and 1.5 points, indicating that their county CWPP structure is represented by multiple jurisdictions, and not all of these jurisdictions fully satisfied the criteria need for a maximum two-point value. Seven counties demonstrate a “Limited” level of SB 360 compliance (about 30% of all counties). Six of these “Limited” compliance counties (Baker, Coos, Crook, Grant, Umatilla, and Wallowa) show no signs of integration with ORS 477.750-477.970 as demonstrated through scores of zero. Three counties (about 13% of all counties) demonstrated “Adequate” levels of SB 360 in terms of Funding Opportunities, by containing both mention and a synthesized description of multiple identified funding sources for private property mitigation actions and fire suppression costs.

Table 4.8– B.6 – Funding Opportunities



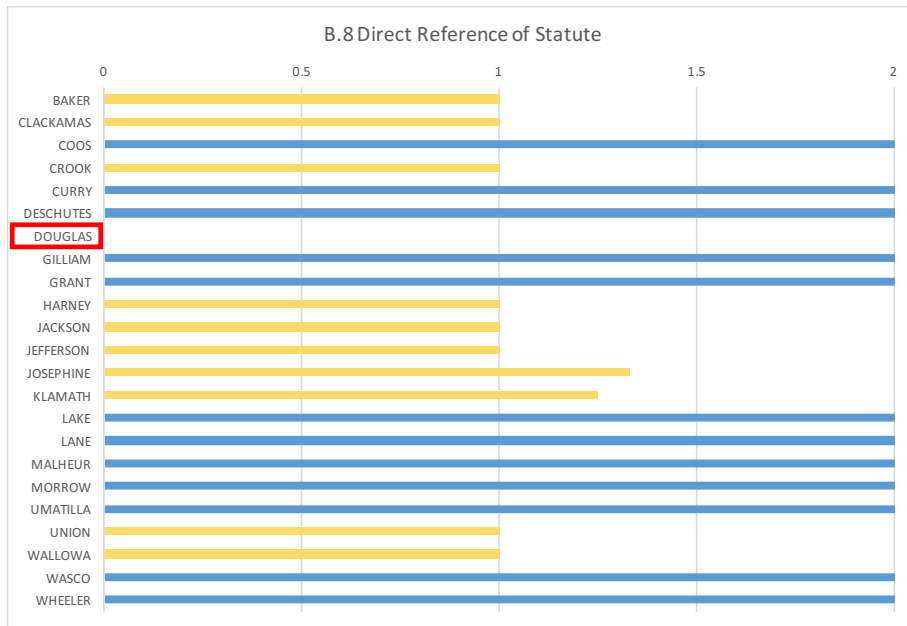
B.7 – *Management Structure* measures the presence of references to the local or regional wildfire management personnel, agencies, or other management structure associated with wildfire mitigation and suppression in the WUI; this criterion is assigned a maximum value of two points. The compliance rating of B.7 in each of the identified counties is depicted in Table 4.9. The table shows that the vast majority of counties demonstrate an “Adequate” level of SB 360 compliance (21 of the 23 counties or about 91% of all counties). The counties of Klamath, Jackson, and Deschutes show ratings between 1.5 and 2 points, indicating that their county CWPP structure is represented by multiple jurisdictions, and not all of these jurisdictions fully satisfied the criteria need for a maximum two-point value. Two counties demonstrate an “Intermediate” level of SB 360 compliance (about 9% of all counties). No counties recorded a compliance value lower than one (1) point. Eighteen of the “Adequate” counties demonstrated compliance with ORS 477.355-477.365 through full-value satisfaction of B.7 criteria including both the mention and synthesized description of a county’s management structure related to wildfire mitigation on private properties.

Table 4.9– B.7 – Management Structure



B.8 – *Direct Reference of Statute* measures the presence of direct references to the name and legal purpose of SB 360 – Forestland Urban Interface Fire Protection Act; this criterion is assigned a maximum value of two points. The compliance rating of B.8 in each of the identified counties is depicted in Table 4.10. The table shows that the majority of counties demonstrate an “Adequate” level of SB 360 compliance (12 of the 23 counties or about 52% of all counties). Ten counties demonstrate an “Intermediate” level of SB 360 compliance (about 43% of all counties). The counties of Klamath and Josephine show ratings between 1 and 1.5 points, indicating that their county CWPP structure is represented by multiple jurisdictions, and not all of these jurisdictions fully satisfied the criteria need for a maximum two-point value. One county (Douglas) demonstrates a “Limited” level of SB 360 compliance (about 4% of all counties). All of the “Adequate” counties demonstrated integration of the full or partial legal name of the SB 360 statute through full-value satisfaction of B.8 criteria including both the mention and synthesized description of the statute.

Table 4.10 – B.8 – Direct Reference of Statute



B.9 – *State Agency Reference* is not assigned a point value like the other seven CWPP criteria. If a CWPP document contains explicit mention of either Oregon Department of Forestry (ODF) or Department of Land Conservation and Development (DLCD) in connection to the interpretation or implementation of SB 360. The three values associated with criterion B.9 are “ODF”, “DLCD”, “SOME ODF”, and “NONE”. “ODF” signifies that a county, or multiple jurisdictions representing a county, unanimously reference ODF in the context of SB 360 implementation and enforcement. “DLCD” signifies the same unanimous reference to SB 360 implementation, but with DLCD identified as the administrative agency. “SOME ODF” signifies that some, but not all of the jurisdictions represented across CWPP documents in a single county identified ODF as the administrative agency. “NONE” signifies that neither ODF nor DLCD were identified. The state agency reference in each of the identified counties is depicted in Figure 4.1. The figure shows that the majority of counties (about 52% of all counties) identified ODF as the administrative agency behind SB 360. Nine counties (about 39% of all counties) identified neither ODF nor DLCD as the administrative agencies, and two counties (Josephine and Klamath, or about 9% of all counties) had some but not all of their CWPP jurisdictions identify ODF as the administrative agency.

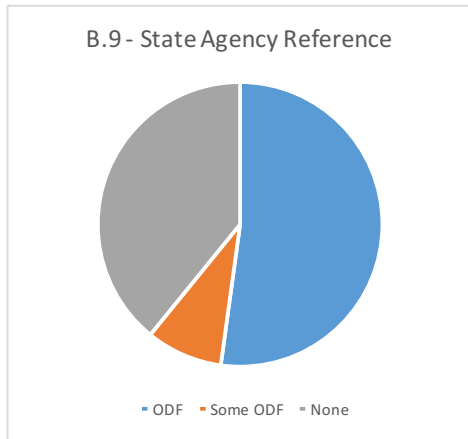


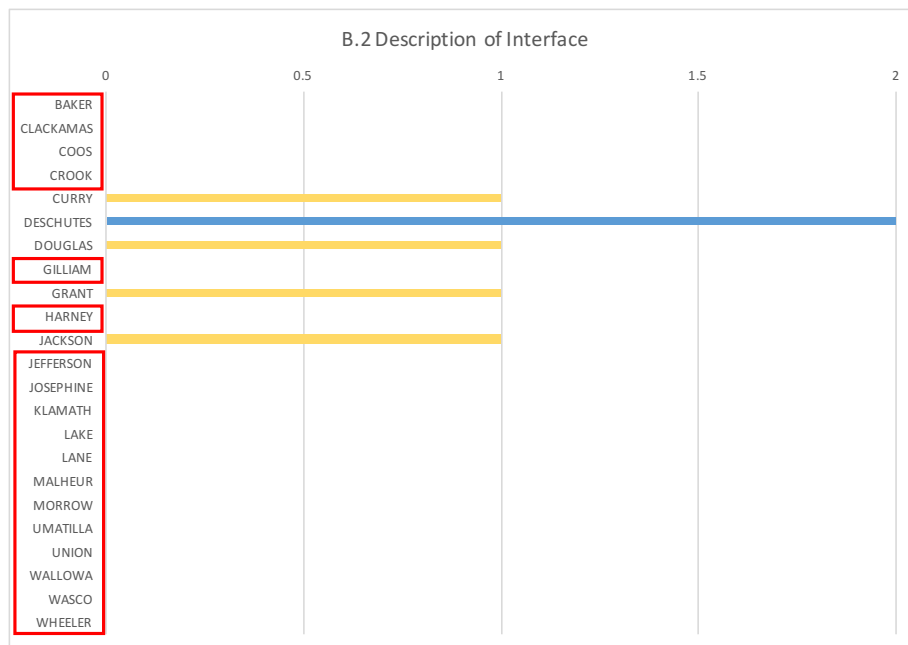
Figure 4.1 – B.9 – State Agency Reference

Comprehensive Plan Individual Criteria Values

Similar to the methodology used for CWPP individual criteria, each of the seven identified criteria for defining the level of compliance for distinct elements of SB 360 are assigned an individual point value based on the degree to which the content in each criterion is integrated into county documents. Depending on the points assigned for each criterion, the level of county compliance can be described as either “Limited”, “Intermediate”, or “Adequate”. Not all criteria were identified in county Comprehensive Plans. Criteria B.4 – *Liability of Property Owner* and B.5 – *Northwest Wildland Fire Protection Agreement* were not identified in comprehensive plans from any of the identified counties. Each of the other criteria (B.2, B.3, B.6, B.7, and B.8) were observed in some capacity within at least one county from the identified research area.

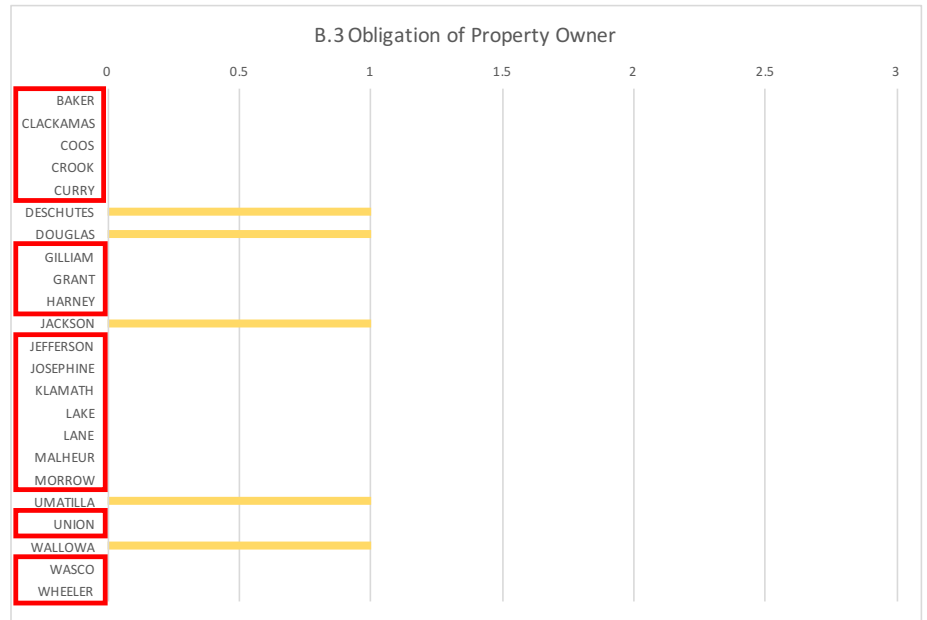
B.2 – *Description of Interface* measures the presence of references to the wildland-urban interface and explicit definitions or descriptions of it; this criterion is assigned a maximum value of two points per county. The compliance rating of B.2 in each of the identified counties is depicted in Table 4.11. The table shows that the majority of counties demonstrate a “Limited” level of SB 360 compliance (18 of the 23 counties or about 78% of all counties). Four counties demonstrate an “Intermediate” level of SB 360 compliance (about 17% of all counties). One county (Deschutes) demonstrated an “Adequate” level of SB 360 compliance in terms of the Description of Interface. The Deschutes County Comprehensive Plan demonstrated by far the highest integration of B.2 criteria among the studied counties.

Table 4.11 – B.2 – Description of Interface



B.3 – Obligation of Property Owner measures the presence of references to the legal obligation of private property owners in the WUI to conduct specific wildfire mitigation actions on their land; this criterion is assigned a maximum value of three points per county. The compliance rating of B.3 in each of the identified counties is depicted in Table 4.12. The table shows that the majority of counties demonstrate a

Table 4.12 – B.3 – Obligation of Property Owner



“Limited” level of SB 360 compliance (18 of the 23 counties or about 78% of all counties). Five counties demonstrate an “Intermediate” level of SB 360 compliance (about 22% of all counties). No counties demonstrate an “Adequate” level of SB 360 compliance according to criteria outlined in Appendix B – Codebook criteria.

B.6 – Funding Opportunities measures the presence of references to diverse wildfire-related funding opportunities made available through state, county, or other sources; this is assigned a maximum value of two points per county. The compliance rating of B.6 in each of the identified counties is depicted in Table 4.13. The table shows that the majority of counties demonstrate a “Limited” level

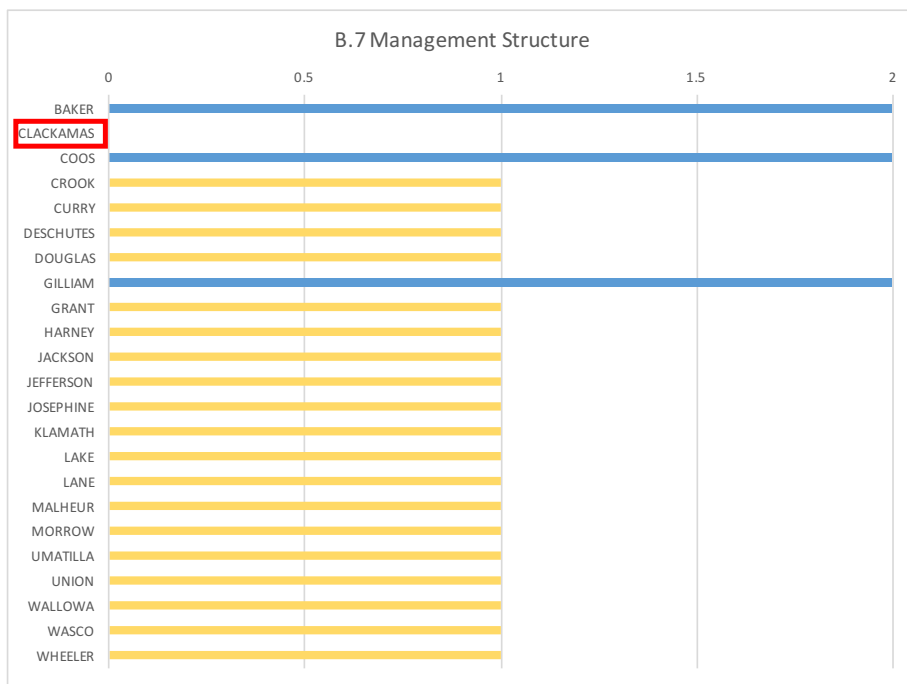
Table 4.13 – B.6 – Funding Opportunities



of SB 360 compliance (19 of the 23 counties or about 83% of all counties). Four counties demonstrate an “Intermediate” level of SB 360 compliance (about 17% of all counties). No counties demonstrate an “Adequate” level of SB 360 compliance according to criteria outlined in Appendix B – Codebook criteria.

B.7 – *Management Structure* measures the presence of references to the local or regional wildfire management personnel, agencies, or other management structure associated with wildfire mitigation and suppression in the WUI; this criterion is assigned a maximum value of two points per county. The compliance rating of B.7 in each of the identified counties is depicted in Table 4.14. The table shows that the majority of counties demonstrate an “Intermediate” level of SB 360 compliance (19 of the 23 counties or about 83% of all counties). Three counties demonstrate an “Adequate” level of SB 360 compliance (about 13% of all counties). One county demonstrates a “Limited” level of SB 360 compliance (about 4% of all counties) according to criteria outlined in Appendix B – Codebook criteria.

Table 4.14– B.7 – Management Structure



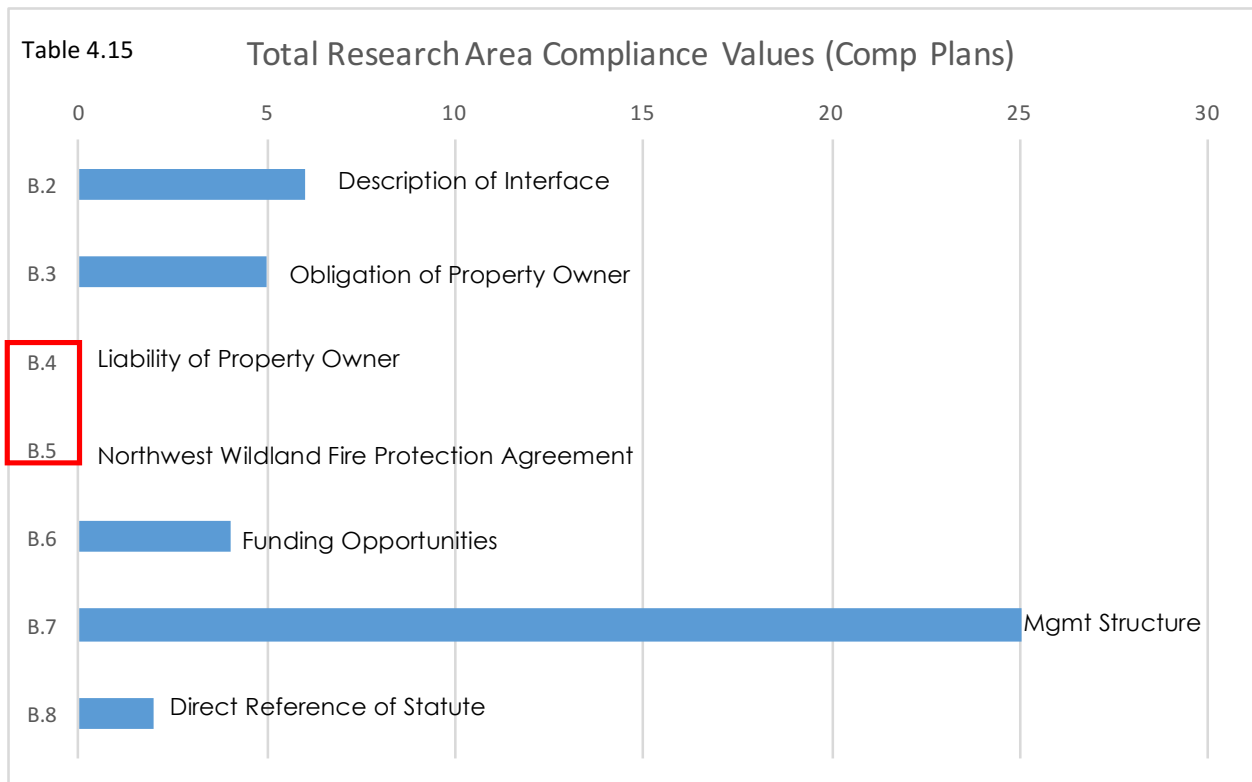
B.8 – *Direct Reference of Statute* measures the presence of direct references to the name and legal purpose of SB 360 – Forestland Urban Interface Fire Protection Act; this criterion is assigned a maximum value of two points per county. The only county to be assigned a point value was Deschutes (representing about 4% of all counties). Deschutes County received a full two-point value based on the Comprehensive Plan’s inclusion of a synthesized description of SB 360. Deschutes stands out within the identified research area as the only county with an “Adequate” level of SB 360 compliance. All other analyzed counties demonstrated a “Limited” level of compliance through point values of zero.

Total Research Area Compliance Values

In order to show which of the individual criteria (B.2-B.9) were more and less prevalent throughout the identified research area, the point values assigned for each criterion per county were totaled and compared. These totals are not categorized as “Limited”, “Intermediate”, or “Adequate” in terms of SB 360 compliance, but are presented as a way to show which criteria have been more widely incorporated into county Comprehensive Plans from the identified research area. Totals for the individual research area compliance values were created for both Comprehensive Plans and CWPPs. This differentiation between totals allows for similar county documents to be compared to each other, and to further highlight the differences and similarities of SB 360 content integration between Comprehensive Plans and CWPPs.

Comprehensive Plan Totals

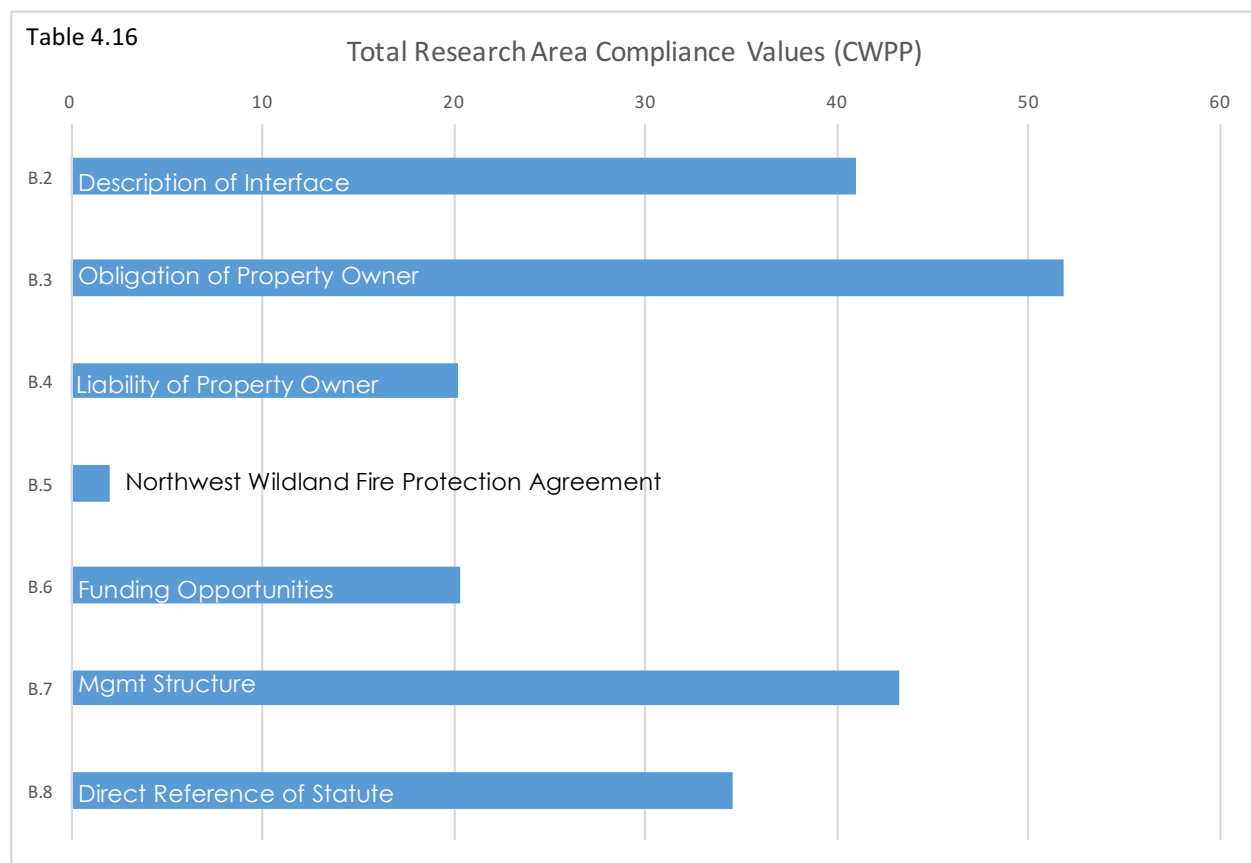
The totaled values and comparison of individual criteria for county Comprehensive Plans are shown in Table 4.15. As shown in the table, B.7 – *Management Structure* is the most prevalent criterion throughout all identified counties, with a total of 25 points assigned across the



research area. The next most prevalent criterion is B.2 – *Description of Interface* with a total of six points across all counties, shows a 19-point gap (or an 80% decrease in points related to compliance) between B.2 and B.7. Criteria B.2, B.3, B.6, and B.8 all show total research area compliance values between two and six points. This cluster of values across the four criteria show a similar, but relatively low level of integration for the SB 360 content related to each criterion. Additionally, the clustering of these values further demonstrates the outlier quality of the B.7 total research area compliance value. Criteria B.4 – *Liability of Property Owner* and B.5 – *Northwest Wildland Fire Protection Agreement* were not recorded in any defined capacity in any of the county Comprehensive Plans. Overall, it would appear that the management structure associated with wildfire management and private properties within the WUI is an element of SB 360 legal content that is most widely incorporated into county Comprehensive Plans. While most of the other criteria were recorded at low levels within Comprehensive Plans, there was no indication that criteria B.4 and B.5 were integrated into the documents in any capacity. B.5 may show such a lack of integration due to level of specificity at which the NWFPA purpose and related funding opportunities are described both in the Codebook (Appendix B) and in the Oregon Revised Statutes related to SB 360.

Community Wildfire Protection Plan (CWPP) Totals

The totaled values and comparison of individual criteria for county CWPPs are shown in Table 4.16. As shown in the table, B.3 – *Obligation of Property Owner* is the most prevalent criterion throughout all identified counties, with a total of 51.77 points assigned across the research area. The least prevalent criterion is B.5 – *Northwest Wildland Fire Protection Agreement*, or NWFFPA, referring to specific funding opportunities made available through this large-scale, international wildfire agreement⁴⁹. A total of two points are assigned to B.5 across the research area, with the criterion exclusively represented in the counties of Grant and Wheeler. Echoing a similar trend seen in Comprehensive Plans, B.7 – *Management Structure* demonstrates a substantial presence throughout CWPPs and represents the second most prevalent criterion with a total of 43.2 points. B.2 – *Description of Interface* and B.8 – *Direct Reference of Statute* represent the next most prevalent criteria, with 40.97 and 34.58 points respectively. Criteria B.4 – *Liability of Property Owner* and B.6 – *Funding Opportunities* were assigned similar values of 20.25 and 20.31 respectively. The similarity of values for B.4 and B.6 may serve as a potential



⁴⁹ <https://www.congress.gov/105/plaws/publ377/PLAW-105publ377.pdf>

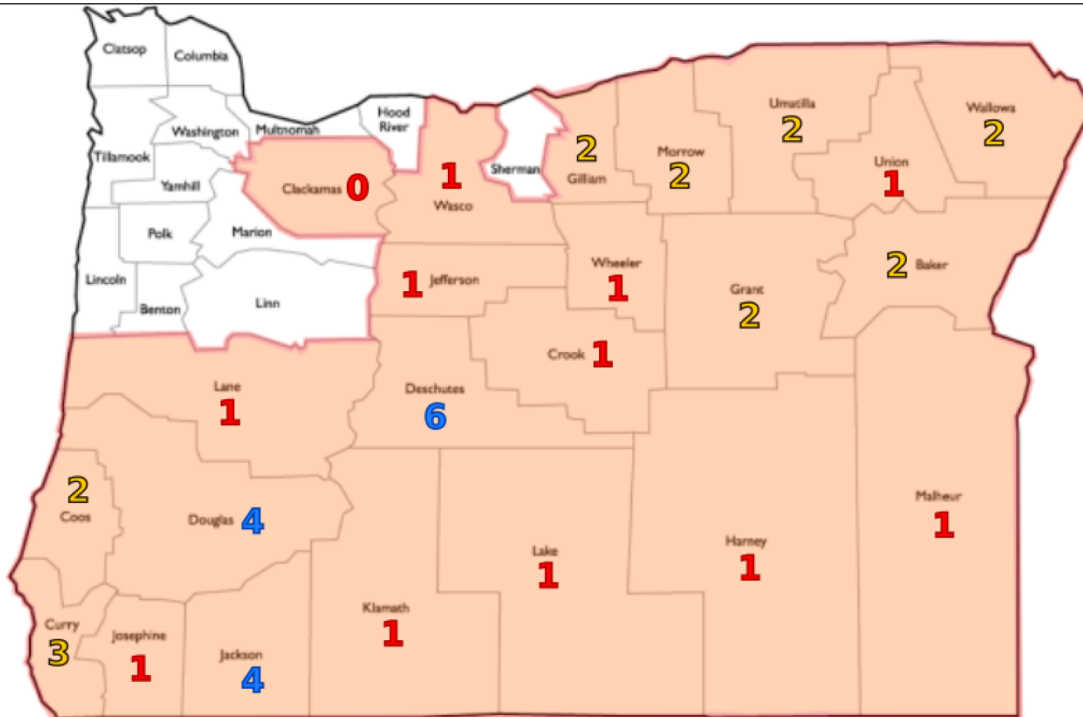
indicator of a correlation between the two in terms of integration, or as an indicator of similar counties identifying both B.4 and B.6 in CWPPs.

Synthesis

Comprehensive Plans collected from the identified research area showed generally low integration of SB 360 content, based on the language and content used in ORS 477.001-477.993. Within the findings for Comprehensive Plans, B.7 – *Management Structure* stood out as the only criterion that had a relatively widespread presence across identified counties compared to the other criteria. The inclusion of descriptions of wildfire management structure within the WUI may support the assumption that the legal content of ORS 477.355-477.365 (and responsibilities described therein) is the most widely integrated SB 360-related policy content in county Comprehensive Plans within the research area.

The Deschutes county Comprehensive Plan demonstrated an inclusion of SB 360-related content that was significantly higher than all other counties. The content in the Deschutes Comprehensive Plan, however lacking in the presence of other criteria, could serve as a model county in terms of SB 360 integration in future Comprehensive Plans for other counties. Aggregate scores for each county’s Comprehensive Plan SB 360 compliance are shown in Figure 4.2.

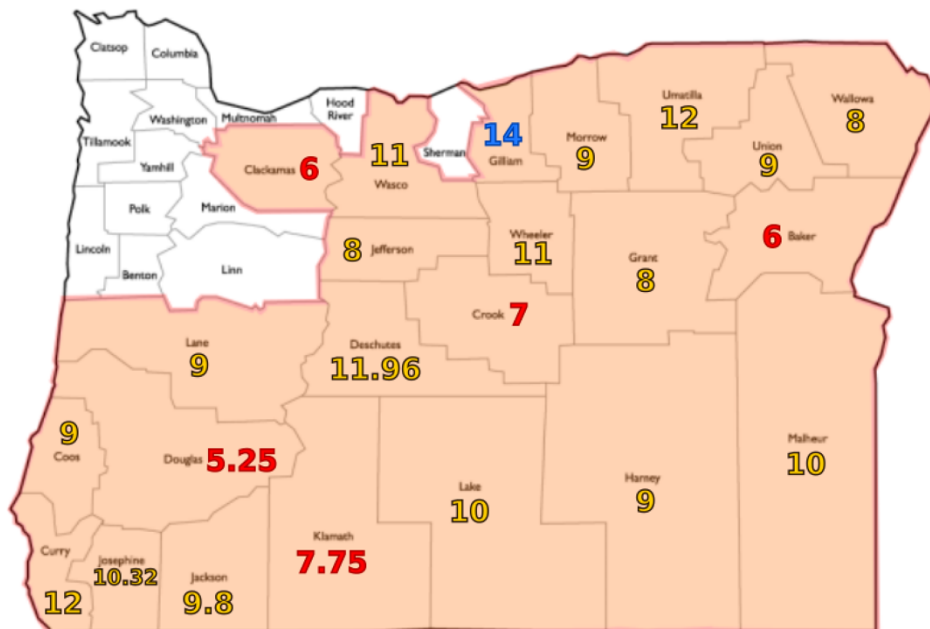
Figure 4.2 – Comprehensive Plan Aggregate Scores



CWPPs showed a higher overall integration of the outlined criteria compared to the content of county Comprehensive Plans. All of the B.2-B.8 criteria were reflected, to some extent, in the CWPPs gathered for the identified research area. This differs greatly for the Comprehensive Plan total compliance values, where two criteria (B.4 and B.5) were not recorded in any Comprehensive Plans. B.4 – *Liability of Property Owner* is the second least-integrated criterion in CWPPs. As described in Chapter 3, the description of property owner liability serves as one of the central components of SB 360 content that explicitly describes the legal expectations of landowners, and the mechanisms of regulatory enforcement. Without the explicit description of legal regulations (such as the maximum \$100,000 fine for non-compliance to WUI mitigation standards), the legal purpose and utility of SB 360 can be more easily neglected within certain counties.

A notable trend in the CWPP total research area compliance values is that B.7- *Management Structure* appears in CWPPs with considerable prevalence. B.7 is also the most highly integrated criterion observed within Comprehensive Plans, indicating that management structure around the county-identified WUI is the most widely recognized element of SB 360 content within both Comprehensive Plans and CWPPs across the research area. The prevalence of criterion B.7 may be attributed to the direct influence of SB 360’s regulatory influence, or could be a result of management-related content that has been integrated into these county documents prior to the adoption of SB 360. There is an apparent need for the SB 360 legal definition of property owner liability to be more consistently integrated into both Comprehensive Plans and CWPPs.

Figure 4.3 – CWPP Aggregate Scores



Aggregate scores for each county’s CWPP SB 360 compliance are shown in Figure 4.3.

Chapter 5: Recommendations

In response to the needs and capabilities of counties within the research area, this chapter provides a diverse selection of recommendations to further support SB 360 communities through several strategies. These strategies reflect the components of SB 360 regulatory content that is most widely incorporated into the identified county documents:

- Further integration of WUI management structure in county documents
- Clearer distribution of the SB 360 Self-Certification Property Guide
- Providing planning assistance and funding for SB 360-compliant mitigation
- Utilizing the Codebook (Appendix B) for future county document analysis
- Leveraging lower home insurance premiums as an incentive for SB 360 compliance

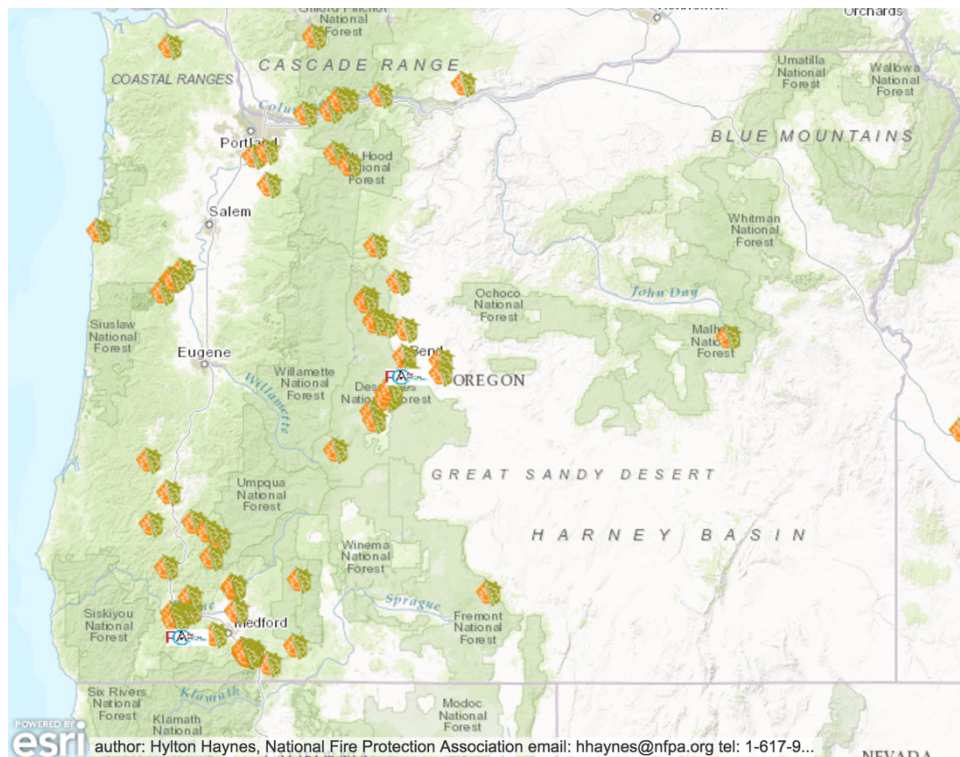
Based on the various levels of county-wide SB 360 integration, a number of counties appear to show “Limited”, “Intermediate”, and “Adequate” incorporation of specific content within the SB 360 statute (*see Chapter 4: Findings*). Findings of “Intermediate” or “Adequate” compliance of specific SB 360 legal elements in county documents may indicate that those elements may be further utilized to bolster the presence of SB 360 within each county. Alternately, findings of “Limited” compliance of the legal elements may indicate that the explicit definition and inclusion of those elements should be incorporated into future versions of the county documents.

The following recommendations serve as a set of options available to state, county, and local WUI managers to either continue the integration of SB 360 content, or consider the restructuring of SB 360 content or enforcement. The diversity of options within the recommendations are intended to provide a variety of planning actions that potentially create a more effective motivation for WUI residents to comply with SB 360 regulatory standards. The following recommendations are specific examples of mitigation actions or strategies that can be applied to counties of various populations, sizes, or other social conditions. As a state-level resource, this report is available for SB 360 administrators and wildfire managers to consider and potentially base “next-step” strategies for how best to handle the future integration or restructuring of the statute in Oregon counties.

Recommendation 1: FireWise Communities

Despite ODF and DLCD perceptions that WUI areas are largely non-compliant in Oregon counties, there are other networks for coordinating property owners, on a local level, to conduct mitigation actions and increase preparedness both on an individual and community scale. One such network is the FireWise program – a program within the National Fire Protection Association (NFPA) that encourages Fire Adapted Communities⁵⁰. A Fire Adapted Community is a “knowledgeable and engaged community, which understands and adapts to wildfire threats by using a variety of mitigation measures to reduce wildfire risk. A community that has adapted to wildfire can more successfully survive fire on the larger landscape with less risk. A fire adapted community utilizes existing programs such as FireWise or Living With Fire, Ready, Set, Go!, Community Wildfire Protection Plans (CWPPs) and other fire mitigation tools to reduce risk to communities”⁵¹. FireWise, while a voluntary and non-regulatory program, supports community wildfire preparedness by promoting strategies and tactics for both individual landowners and broader communities to take action on their property to reduce the risk of wildfire.

Figure 5.1 – Oregon FireWise Communities



⁵⁰ FireWise. (n.d.). Retrieved May 1, 2017, from <http://www.firewise.org/about.aspx?sso=0>

⁵¹ USDA. (2014, July 10). Frequently Asked Questions – Fire Adapted Communities. Retrieved May 1, 2017, from https://www.fs.fed.us/fire/prev_ed/fac/faqs.pdf

The specific mitigation actions promoted through FireWise include defensible space, incorporation of less-flammable housing materials, and other landscaping techniques for creating safer space around homes and communities⁵². Many of these FireWise mitigation actions reflect standards similar to those included in the B.3 – *Obligation of Property Owner* within the legal content of SB 360. There are currently 114 communities in Oregon that have voluntarily elected to adhere to mitigation and community preparedness standards outlined in the FireWise program⁵³. The distribution of FireWise communities in Oregon is shown above in Figure 5.1.

The majority of FireWise communities are located in counties that are identified within the research area of this report. According to the FireWise community map (above), Deschutes, Douglas, Jackson, Josephine, and Klamath counties contain the highest numbers of established FireWise communities in the state. Of the 23 identified counties in the research area, Deschutes, Jackson, and Josephine rank as the 4th, 10th, and 7th highest-scoring CWPPs. Additionally, Deschutes, Douglas, and Jackson counties rank as the 1st, 2nd, and 3rd highest-scoring Comprehensive Plans. The correlation between high-scoring county documents and number of FireWise communities per county have lead to an assumption that a higher number of FireWise communities indicates a higher level of SB 360 integration in terms of content related to criterion B.3 – *Obligation of Property Owner*. However, this ostensible correlation does not relate to causality between integration and number of FireWise communities.

Whether FireWise communities explicitly support the content of SB 360, they certainly support the purpose of the statute by way of promoting property-specific mitigation standards on an individual parcel level. While there is no punitive element or legal regulation to FireWise communities (as there is in SB 360), FireWise standards effectively create a transparent way for wildfire administrators to understand and inventory the mitigation actions completed or undertaken by private property owners. Through the further encouragement of FireWise communities in Oregon, it is assumed that county-level wildfire administrators can more accurately inventory WUI properties and the mitigation actions taken on them. Additionally, WUI-based neighborhoods can create a uniform set of protection standards, offer support to property owners that may not be able to physically or financially undertake the identified

⁵² USDA. (2016). FireWise Preparedness. Retrieved May 1, 2017, from [http:// www.firewise.org/wildfire-preparedness.aspx?sso=0](http://www.firewise.org/wildfire-preparedness.aspx?sso=0)

⁵³ FireWise. (2016). FireWise Communities List. Retrieved May 1, 2017, from <http://www.firewise.org/usa-recognition-program/firewise-communities-list.aspx>

mitigation actions, and create connectivity through communication and the sharing of resources. Of note is the work of Paveglio et al, where fire-prone communities are categorized into archetypes based on social context. The findings of the Paveglio research suggest that FireWise communities emphasize “flexibility in their implementation to account for the diversity of social context influencing populations in the WUI”⁵⁴ (p.299). In this sense, more diverse social populations may find greater benefit from FireWise programming than more socially homogeneous communities. For more diverse communities, being able to adjust a FireWise program’s community impact based on social characteristics and conditions can present a larger variety of mitigation options that fit the different social groups within a community.

⁵⁴ Paveglio, T. B., Moseley, C., Carroll, M. S., Williams, D. R., Davis, E. J., & Fischer, A. P. (2015). Categorizing the social context of the wildland urban interface: adaptive capacity for wildfire and community “archetypes”. *Forest Science*, 61(2), 298-310.

Recommendation 2: Community Planning Assistance for Wildfire (CPAW)

Similar to Recommendation 1, this recommendation attempts to identify a method to promote wildfire mitigation actions on a county and community level through local management that supports a countywide format of integrated WUI defense. This recommendation is meant to illustrate an integrated defense structure that is independent of SB 360 in terms of regulation, but supportive of SB 360 in terms of the overarching purpose of enlisting private property owners for WUI defense. Community Planning Assistance for Wildfire (CPAW) is a “grant-funded program providing communities with professional assistance to integrate wildfire mitigation into the development planning process. The CPAW consulting team consists of foresters, land use planners, economists, and wildfire risk modelers who collaborate closely with community leaders and city officials to reduce wildfire risk”⁵⁵. A central difference from the FireWise model is that CPAW focuses on the use of improved land use planning to build long-term resilience and create development patterns that mitigate wildfire risk far in advance of anticipated wildfire events⁵⁶.

Currently, CPAW has offered assistance to a variety of communities across the western United States including CO, ID, MN, MT, NM, OR, TX, and WA. The distribution of CPAW-supported communities in the western United States is shown in Figure 5.2. The Oregon communities that have received support from CPAW are Bend and Ashland in Deschutes and Jackson counties,

Figure 5.2– CPAW Communities



⁵⁵ CPAW. (2017). Our Vision. Retrieved May 2, 2017, from <http://planningforwildfire.org/who-we-are/our-vision/>

⁵⁶ CPAW. (2017). What We Do. Retrieved May 3, 2017, from <http://planningforwildfire.org/what-we-do/>

respectively⁵⁷. A major difference from FireWise is that CPAW employs a competitive application process. The application process is necessary because CPAW offers direct financial and technical assistance through funding support and coordination of land-use planning processes. Additionally, CPAW works within the local planning context of the communities they support. This could mean that support received through CPAW would potentially reflect the regulatory provisions of SB 360 and provide further compliance of the obligation, liability, definition of WUI area, funding opportunities, management structure, and legal description included in SB 360.

An issue not immediately addressed through the funding and support offered through CPAW is a focus on low-capacity communities with limited wildfire personnel and median income levels that may be evidence of a strain on individual WUI residents to afford the mitigation actions required under SB 360. One strategy that could be encouraged through CPAW collaboration to address low-capacity communities has been demonstrated through young adult-focused conservation programs in Northwest Youth Corps (NYC)⁵⁸. A 2015 NYC fuels program located in Spokane, WA focused on creating defensible space in rural communities through a collaborative effort between WA Department of Natural Resources, BLM Spokane Field Office, and the local FireWise Program. The WUI areas identified within both the DNR and BLM fuels programs overlap with FireWise jurisdictions. In order to increase the efficiency of fuels reduction efforts and encourage further integration within the FireWise program, the BLM offered wood chippers, chainsaws, and safety equipment to a contracted NYC crew free of charge. DNR then directed the NYC crew to various properties within the FireWise jurisdictions, with the NYC crew conducting “free” creation of defensible space that provided a benefit to WA DNR and Spokane BLM as well as local WUI residents. Additionally, the service learning-based NYC crew was funded through the federal Youth Opportunities Grant, providing the crew members with living stipends and educational awards through the Americorps program. CPAW could use its capacity as a collaborative planning entity to convene these various groups to cost-efficiently promote mitigation standards outlined in SB 360. Rather than a statewide action, the fit of CPAW integration into a community would be best determined by local wildfire managers and administrators familiar with wildfire mitigation related to SB 360. Local integration of CPAW allows for the services to be more customized on a community scale.

⁵⁷ CPAW. (2017). Where We Work. Retrieved May 3, 2017, from <http://planningforwildfire.org/where-we-work/>

⁵⁸ <http://www.nwyouthcorps.org/m/OurPrograms#YoungAdult>

Recommendation 3: Restructuring of SB 360 Certification Process

As stated in Chapter 1, the process for WUI private property owners to be relieved of liability for potential wildfire impacts on their parcels and those surrounding them involves certification through the Oregon Department of Forestry⁵⁹. Certification involves a landowner completing ODF-specified fuel reduction standards, indicating the actions completed on a paper certification form, and then mailing in the form to an ODF office. ODF then assigns a hazard classification for each property in the categories of “Low”, “Moderate”, “High”, and “Extreme”. Currently, there is no other way to submit the certification form than through physical mail, making the process somewhat inconvenient for WUI property owners. Additionally, there is no way for ODF or other wildfire managers to verify that the owner did, in fact, complete the required actions without physically inspecting the property in question. A recommendation that could result in higher SB 360 compliance is to create a way for WUI property owners to have their land certified through a more streamlined means than physical mail. This recommendation also works to create a way for county wildfire management structures to better verify the fuel reduction actions taken.

County emergency management websites are a consistent way for county wildfire managers to release wildfire-related information, including the fuel reduction standards outlined by ODF^{60,61,62}. Creating a certification form that could be submitted online would make the process much more streamlined from the perspective of the WUI property owners. A more streamlined submission process could potentially lead to more properties being certified and, therefore, a larger inventory of WUI properties for county databases. Additionally, it is recommended that photographs be included with the submission of the fuels reduction checklist to document the quality and extent of the actions undertaken. The photographs could serve as a basic form of verification for wildfire managers, potentially creating further compliance with SB 360 fuel reduction standards. The restructured certification process could be designed in conjunction with ODF personnel, informed by county wildfire manager and property owner input, with the aid of a consultant or other entity such as a university or research firm.

⁵⁹ ODF. Forestland-Urban Interface Fire Protection Act. Retrieved May 3, 2017, from <https://www.oregon.gov/ODF/Fire/Pages/UrbanInterface.aspx>

⁶⁰ <https://www.deschutes.org/forester>

⁶¹ <http://jacksoncountyor.org/emergency/Hazards/Fire>

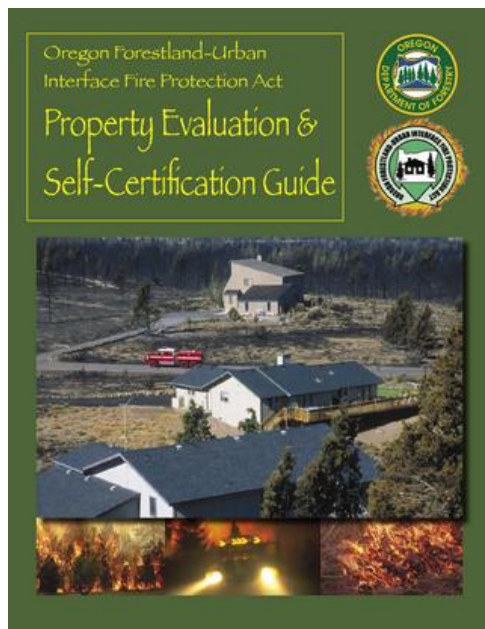
⁶² <http://www.co.morrow.or.us/planning/page/wildfire-protection>

Recommendation 4: Management Structure in County Documents

As evidenced in Chapter 4, the county management structure responsible for the administration and interpretation of SB 360 standards and compliance is the most widely incorporated element of SB 360 found in county documents. The inclusion of a description of SB 360-related personnel may serve the purposes of identifying responsible parties and providing contact figures for WUI property owners and other members of the public. While many of the higher-scoring counties identify SB 360 management structure, many of the related county documents make reference to management jurisdictions and personnel without defining the SB 360 information and resources that these managers are responsible for providing.

This recommendation proposes that county CWPPs and Comprehensive Plans include information about the self-certification guide, enforcement responsibilities, and other supports provided by the identified SB 360 management structure. Specifically, the description of SB 360

Figure 5.3 – SB 360 Self-Certification Guide



Source: Oregonexplorer.info/data_files

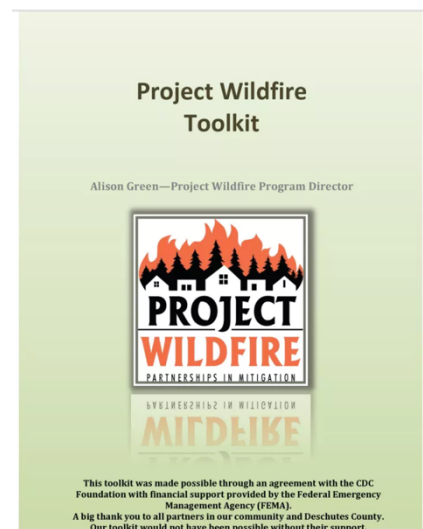
management structure in each county document should include a direct reference to the self-certification guide (pictured in Figure 5.3) and related ODF or other personnel that can be contacted in relation to the standards outlined therein. An additional benefit of directly referencing the certification guide is the description of liability included in the guide (defined as a maximum fine of \$100,000). Through efficiently and clearly including a reference to the certification guide within county documents, county SB 360 management structures can potentially create greater compliance in terms of fuel reduction standards (owner obligation), management roles and responsibilities, and the liability posed through non-compliance.

Recommendation 5: Project Wildfire Model

Deschutes county ranks as one of the most SB 360-compliant counties in terms of both Comprehensive Plans and CWPPs (see Chapter 4). A unique, county-wide mitigation tool used by Deschutes County is a community organization called Project Wildfire. Project Wildfire is created through a county ordinance and serves as the central county organization that “facilitates, educates, disseminates and maximizes community efforts toward effective fire planning and mitigation” by “building partnerships, sharing resources and eliminating redundancies”⁶³. The organization receives funding through the Federal Emergency Management Agency (FEMA) and released a “Toolkit” that details transferable principles of fuels reduction, partnership-building, and education that can be adopted in other counties (see Figure 5.4). This Toolkit is intended for Oregon counties that demonstrate considerable probability and vulnerability to potential wildfire events and, more specifically, the community wildfire steering committees that decide on the best course of action in terms of wildfire mitigation.

This recommendation proposes that state and county SB 360 administrators reach out to the conveners of the Deschutes Project Wildfire Toolkit for the purpose of verifying that the identified tools are compliant with SB 360 standards. Once the Toolkit content has integrated the legal requirements of SB 360, it can potentially serve as an independent resource for county SB 360 compliance and overall wildfire mitigation. “Diversity and Redundancy” is identified as one of the seven guiding principles of disaster resilience according to the Stockholm Resilience Center⁶⁴. By enlisting the support of a Project Wildfire model in the identified counties (see Chapter 1), there is an increased diversity of wildfire mitigation resources as well as a secure redundancy of available SB 360 information related to compliance. Utilizing existing communication methods such as local new media and

Figure 5.4 – Project Wildfire Toolkit



Source: projectwildfire.org

⁶³ P. (2016, February 22). About Project Wildfire. Retrieved May 3, 2017, from <http://www.projectwildfire.org/about/>

⁶⁴ Biggs, R. M. Schlüter, M.L. Schoon (eds). 2015. Principles for Building Resilience - Sustaining Ecosystem Services in Social-Ecological Systems. Cambridge University Press.

emergency management websites is the best foreseeable method of distributing this Toolkit to applicable counties and communities.

Recommendation 6: Codebook as SB 360 Inventory Tool

A growing concern within United States WUI areas is how wildfire managers can effectively inventory hazard susceptibility as well as mitigation actions undertaken by private property owners⁶⁵. This concern applies directly to some of the challenges identified with the enforcement and classification of WUI areas currently under SB 360 regulation. As a potential support to this challenge, this recommendation proposes that the Codebook (used as the central methodology of this report) be used as an analysis tool to inventory the presence of SB 360-related content in future drafts of county Comprehensive Plans, CWPPs, and other documents containing wildfire information. In addition to the Codebook's potential use as an analytical tool, it serves to improve WUI mitigation practices by emphasizing a confluence of Management Structure and specific Mitigation Standards described in SB 360. The Management Structure of county fire districts and related personnel can be explicitly identified through the analysis framework of the Codebook. After identifying the specific management resources and figures, an enforcement approach can be determined for the purpose of upholding the mitigation standards outlined in SB 360 (*see criterion B.3 in Appendix B – Codebook*).

Based on the findings of the current format, a recommended alteration to the Codebook is the removal of criterion B.5 –*Northwest Wildland Fire Protection Agreement (NWFPA)*. This removal is based on the assumption that funding sources available through NWFPA can be captured under criterion B.6 –*Funding Opportunities*. Removal of this criterion will condense the analytical scope of the Codebook and create a more efficient process of key-word searching. As new drafts of relevant documents are released, the Codebook methodology should be used to identify any alterations of information that have occurred since previous drafts.

⁶⁵ Wildland Urban Interface (WUI) Area Inventory Assessment. (2016). Retrieved May 15, 2017, from <http://www.wildlandfireassociates.com/wildland-urban-interface-wui-area-inventory-assessment/>

Recommendation 7: Alternative Regulatory Model for SB360

This research also recognizes that SB 360 is fundamentally flawed in its regulatory design. These flaws are demonstrated through several elements such as the inconvenience of the self-certification process, the difficulty in enforcing a \$100,000 fine on WUI residences that have recently experienced damages from wildfire, and the lack of methodology for inventorying properties within SB 360 WUI areas and any mitigation actions undertaken. On a foundational level, SB 360 must strike more of an effective balance between an incentive-based and a penalty-based regulatory structure. Currently, the largely penalty-based regulatory structure involving the maximum \$100,000 fine does not provide ample motivation for both individual WUI property owners and County SB 360 committees to complete required actions⁶⁶.

The first component of this recommendation is to utilize insurance coverage of homes or dwellings as a regulatory incentive to encourage SB 360 compliance. In California, Public Resources Code 4291 requires that WUI property owners maintain a defensible space of at least 100 feet around the structures located on their property. In addition to this basic clause, Section 3 of the statute states that “an insurance company that insures an occupied dwelling or occupied structure may require a greater distance” than 100 feet⁶⁷. The additional defensible space required by insurance companies must be justified through the findings of a fire expert. Under this insurance-integrated regulatory structure, the property owner can potentially receive a lower home insurance premium based on the completion of mitigation actions. The benefit of lower premiums is an incentivized regulation that potentially serves as a more effective motivator than regulations based solely on penalties.

Both insurance companies and SB 360 administrators can find a mutual benefit in an insurance-based regulatory model. If more property owners adhere to SB 360 mitigation standards, they receive lower premiums, and insurance companies are faced with a lower risk of payouts to wildfire damages to houses and dwellings. This recommendation envisions coordination between ODF wildfire experts and insurance companies to establish protective measures for WUI properties that align with the exact mitigation standards outlined in SB 360 (see the Self-

⁶⁶ Toman, E., Stidham, M., McCaffrey, S., & Shindler, B. (2013). Social science at the wildland-urban interface: A compendium of research results to create fire-adapted communities. *US Department of Agriculture*.

⁶⁷ PRC 4291 Code Section. (n.d.). Retrieved May 25, 2017, from http://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC§ionNum=4291.

Certification Guide in Recommendation 4 and criterion B.3 of Appendix B – Codebook). This recommendation maintains the maximum \$100,000 fine regulation to be applied to suppression and recovery costs on non-compliant SB 360 properties that have experienced a wildfire. The combination of the potential penalty and the insurance premium benefit creates a diverse selection of motivations that have the possibility of engaging a larger group of residents in SB 360 WUI areas.

Chapter 6: Future Research

This research provides detailed first steps into understanding both the effective and problematic elements of SB 360 compliance within county documents. However, there is a direct need for future research to 1) identify which properties and residents are located within SB 360 jurisdictions according to both ODF and DLCD mapping methodologies; 2) definitively measure the SB 360-related mitigation actions undertaken on individual WUI properties; and 3) develop a more effective process for SB 360 property certification based on established best practices.

The current misalignment between DLCD and ODF can be seen through the differing ways in which these agencies map the state-wide SB 360 Forest Protection Districts. Representatives from both agencies have stated that the GIS layers representing these districts do not always correspond, placing the obligation for SB 360 compliance on disparate areas. The central issue behind the misaligned GIS data is that WUI residents are faced with a dilemma as to which mitigation standards to follow – those of ODF or DLCD. A suggestion for future research on this issue is to gather state-wide SB 360 area GIS data from both ODF and DLCD, and to identify both the areas of overlap and misalignment represented in the geospatial information. A secondary research focus would be to identify the methodologies of DLCD and ODF used for identifying where these areas are located, and to cross-reference them for similarities and differences. The findings of this data could potentially illustrate the areas that should be prioritized for alignment between the standards of DLCD and ODF.

A second area of future research could be focused on identifying any current process used by ODF, DLCD or other county entities to inventory the properties located within SB 360 WUI areas, including the properties that have been certified through their compliance with SB 360 standards. Currently, the ODF website provides a link to a Statewide Database⁶⁸ of 17 counties that have implemented SB 360. This database, however, is not accessible for research purposes, and was last updated in early 2015. Research around this topic would focus on identifying a methodology for updating the statewide database, and making it accessible to the public as well as other county wildfire management personnel. The findings of this research would provide state and county agencies with a framework with which to identify the specific WUI

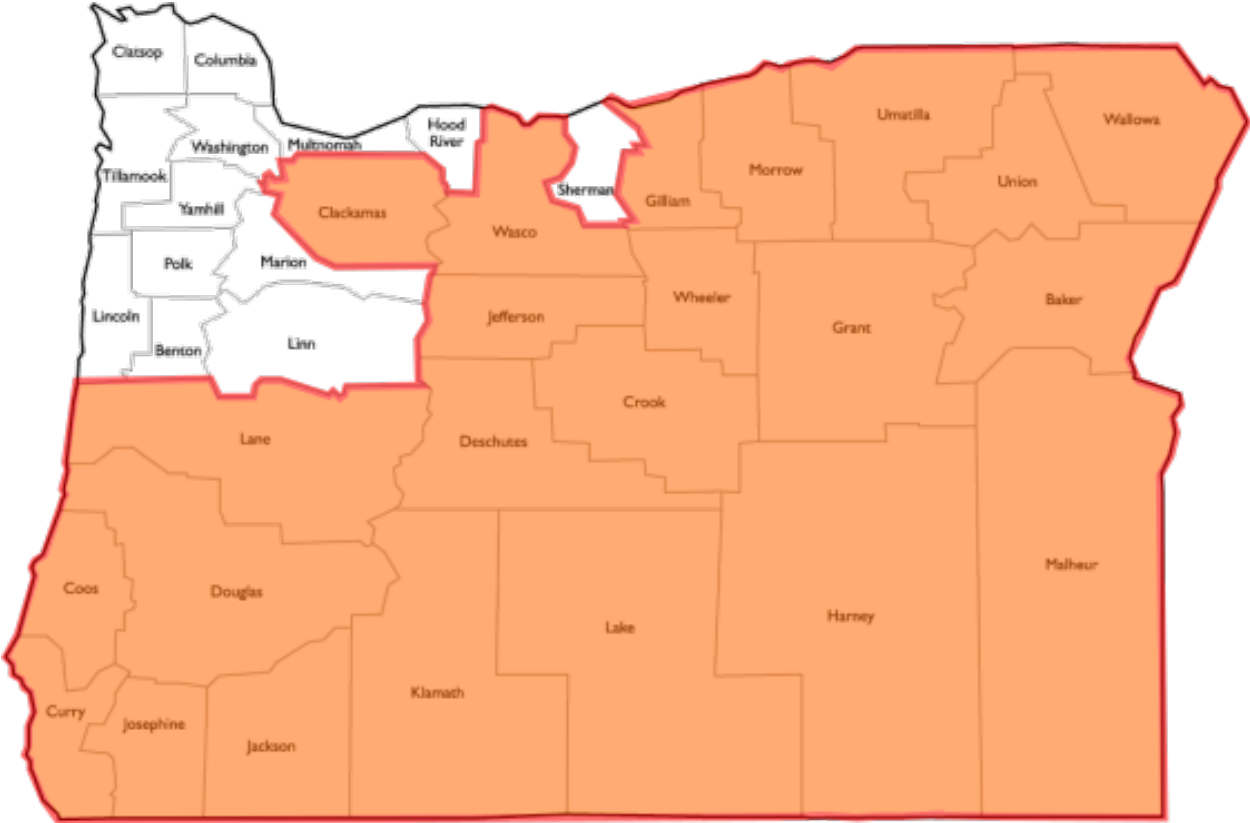
⁶⁸ <http://www.odf.state.or.us/sb360/default.html>

properties that are either compliant or non-compliant according to SB 360 mitigation standards outlined in the Self-Certification Property Guide.

The final option for future research would focus on the development of a more efficient and user-friendly self-certification process for WUI property owners to certify their land under the guidelines set forth in SB 360. Current research shows that Oregon WUI residents near the community of Bend showed some preference for having county wildfire personnel inspect their land and outline the specific actions that needed to be undertaken in order for the resident to be certified under SB 360 standards⁶⁹. This future research option could focus on the use of Oregon case studies and interviews to determine the preferred method, through WUI homeowner perspectives, about how best to achieve SB 360 certification. Additionally, through an analysis of best practices for self-certification techniques, the research could work to define a more efficient and accessible format for state wildfire agencies to present the certification criteria and for WUI residents to submit proof of their actions taken toward achieving SB 360 certification.

⁶⁹ https://www.fs.fed.us/nrs/pubs/jrnl/2014/nrs_2014_stidham_001.pdf

Appendix A: Map of Research Area



Map created by Tarik Rawlings (2016) – base imagery sourced from worldatlas.com

Appendix B: Codebook

The coding done for this research report is designed to reflect the key words and concepts outlined in the language of Senate Bill 360 *Forestland-Urban Interface Fire Protection Act (ORS 477.015-477.993 and OAR 629-044-1000 through 629-044-1110)*. The following Figures (B.1-B.8) show the coding form in the order used for the report, with each category referencing the corresponding section of the Oregon Revised Statutes or Oregon Administrative Rules. A point-based methodology is used to determine the presence or absence of content within county Comprehensive Plans and Community Wildfire Protection Plans (CWPPs). In Appendix C of this report (*Appendix C – Findings*), the presence of category factors is signified by the assignment of a point-value of “1”, while the absence is signified by a value of “0”. Additionally, the presence of categories B.3 (Obligation of Property Owner) and B.4 (Liability of Property Owner) is determined on a 0 to 2-point scale with “0” signifying a lack of all key terms, “1” signifying the inclusion of some key terms and concepts, and “2” signifying the adequate inclusion of the identified key terms and concepts. In the case of CWPPs, if a county contains multiple jurisdictional documents and no single county document, a single value of “1” is divided by the number of jurisdictions (i.e. if a county contains 7 CWPPs, each criterion fulfilled by an individual CWPP is awarded a value of .142, or one-seventh of a “1” value). The key words listed below were searched within the document in the order listed both by sub-heading and by individual word.

B.1 – Selection of County Documents

The search for Oregon counties began with an approach following the methodology of Abrams et al (2016)⁷⁰ for the definition of “large” fires. For this report, “Large” fires are defined as:

- B.1.1. 1,000 acres or larger in size
- B.1.2. Fire event(s) from B.1.1 has occurred in the last five (5) years

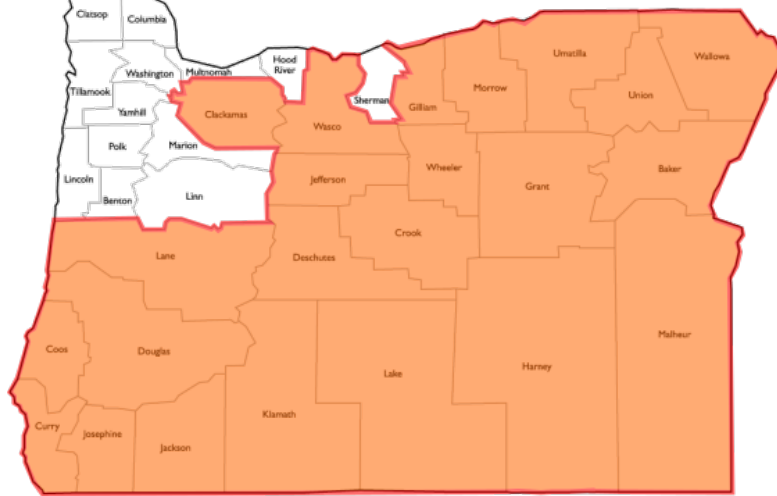
Hazard histories of past wildfire events were compiled from National Weather Service data between the dates of January 1st, 2011 and December 31st, 2016⁷¹. A central assumption is that, if definitive acreage data were not available through the National Weather Service (NWS), the county was assumed to have *not* experienced a “large” wildfire event. If the parameters for a “large” wildfire event in a county were fulfilled in NWS data, a comprehensive search of the county’s hazard history was performed. The hazard history search was used to verify that the

⁷⁰ Abrams, J., Nielsen-Pincus, M., Paveglio, T., & Moseley, C. (2016). Community wildfire protection planning in the American West: homogeneity within diversity?. *Journal of Environmental Planning and Management*, 59(3), 557-572.

⁷¹ Ncei. "Storm Events Database." National Centers for Environmental Information. Accessed March 2, 2017. <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=41%2COREGON>.

fires associated with each county were over 1,000 acres. Resources consulted during the hazard history search include InciWeb (Incident Information System), Swofire (ODF Southwest Oregon

Figure 4.1 – Fire-Prone Oregon Counties (2011-2016)



Map created by Tarik Rawlings (2016) – base imagery sourced from worldatlas.com

information), emergency management press releases, local news stories, and other local data made publicly available on the internet. Of the 36 Oregon counties, 23 fulfilled the criteria outlined in B.1.1 and B.1.2 (Baker, Clackamas, Coos, Crook, Curry, Douglas, Deschutes, Gilliam, Grant, Harney, Jackson, Josephine, Jefferson, Klamath, Lake, Lane, Malheur, Morrow, Umatilla, Union, Walla Walla, Wasco, and Wheeler). The highest concentration of non fire-prone counties were identified in the northwestern portion of the state, with the exception of Sherman county, which had experienced fires in the past 5 years that were not equal to or greater than 1,000 acres. With these selected counties, the researcher obtained the most current versions of *Comprehensive Plans and CWPPs*, which were available for all 23 identified, fire-prone counties. Identifying the county documents entailed thorough internet searches of county websites and electronic catalogs. Additionally, phone calls were made to many of the counties to verify the location of the plans and the date of the most recent versions. In speaking to county personnel, it was indicated that some of the Comprehensive Plans would not have been drafted after the adoption of SB 360 and would, therefore, not reflect an SB 360-related content. These documents were still retained for further analysis based on the assumption that any wildfire-related content may reflect concepts that were later outlined in SB 360. *Figure 4.1 depicts the counties identified for further analysis.*

B.2 - Description of Interface (ORS 477.015)

Section 477.015 of the Oregon Revised Statutes defines “forestland-urban interface” as “a geographic area of forestland inside a forest protection district where there exists a concentration of structures in an urban or suburban setting”⁷². The following analysis is

⁷² "Forestland-Urban Interface Fire Protection Act." Oregon State Legislature. Accessed March 2, 2017. https://www.oregonlegislature.gov/bills_laws/ors/ors477.html.

structured to identify the plan content reflecting ORS 477.015 – 477.061 - Urban Interface Fire Protection.

Instructions:

- B.2.1. Do the documents contain (individually or in combination) the key terms: “forestland-urban interface”, “interface”, “wildland urban interface”, “WUI”? (Yes = “1”, No = “0”).
- B.2.2. Does the document include an explanation, description, or other definition of the “forestland-urban interface” that serves as a synthesis of the key terms or concepts? (Yes = “1”, No = “0”).
- B.2.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the legal purpose of ORS 477.015.

B.3 – Obligation of Property Owner (ORS 477.059)

Section 477.059 of the Oregon Revised Statutes describes the “Obligation of landowner to comply with standards; rules; certification by landowner; penalty for failure to comply”⁷³. This section outlines the regulatory enforcement of a maximum \$100,000 fine (477.060) to the landowner that has not followed the “minimum standards applicable to the land” in terms of wildfire mitigation. Minimum standards constitute activities that minimize or mitigate fire hazard and risk. This criterion (and B.4) is unique within the Codebook because it is rated on a 3-point rather than a 2-point scale. The reasoning for this is because B.3 has a direct connection to the regulatory mechanism of SB 360. The “specific list of wildfire mitigation standards” described in B.3.2. serves as a distinct list of measurable actions that must be completed, to defined quality standards, in order to avoid the legal liability described in B.4. In simpler terms, the criteria outlined in B.3 serves as the deciding factors for whether the maximum \$100,000 fine is applied to non-compliant property owners. Due to close connection of ORS 477.059 to the central purpose of SB 360, B.3 is rated on a point scale with a higher maximum potential point value than the other criteria (excluding B.4).

Instructions:

- B.3.1. Do the documents contain (individually or in combination) the key terms: “applicable minimum standards”, “minimum requirements”, “determination of cost”, “obligation”, “obligation of landowner”, “penalty”, “failure to comply”, “certification”, “protection measures”, “standards”, “fuels reduction”, or “minimum standards” related to SB 360? (Yes = “2”, No = *see step B.3.2.*).

⁷³ "Forestland-Urban Interface Fire Protection Act." Oregon State Legislature. Accessed March 2, 2017. https://www.oregonlegislature.gov/bills_laws/ors/ors477.html.

- B.3.2. Does the document include any number of the key terms outlined in B.3.1., and *also includes* a specific list of wildfire mitigation standards intended for forestland-urban interface private landowners? (Yes = “1”, No = “0”).
- B.3.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the legal purpose of ORS 477.059.

B.4 – Liability of Property Owner (ORS 477.064-.128)

Sections 477.064 through 477.128 of the Oregon Revised Statutes describes “Fire Abatement”⁷⁴ and the particular responsibilities that are placed on landowners in interface areas. Specifically, sections 477.068, 477.085, and 477.089 outline how suppression costs, land protection costs, firefighting costs, and recovery from property damage may be placed on individual landowners or other liable parties. The following terms reflect exact wording used in the aforementioned ORS sections. This criterion (and B.3) is unique within the Codebook because it is rated on a 3-point rather than a 2-point scale. The reasoning for this is because B.4 has a direct connection to the regulatory mechanism of SB 360. The potential penalty of \$100,000 for non-compliant property owners to recover suppression costs described in B.3.2. serves as the central penalty-based regulatory mechanism within SB 360. In simpler terms, the criteria outlined in B.4 serves as the tangible enforcement policy that applies to property owners who have not completed the “specific list of wildfire mitigation standards” outlined in B.3 Due to close connection of ORS 477.064 – 477.128 to the central purpose of SB 360, B.4 is rated on a point scale with a higher maximum potential point value than the other criteria (excluding B.3).

Instructions:

- B.4.1. Do the documents contain (individually or in combination) the key terms: “cost abatement”, “liability”, “liable”, “recovery”, “\$100,000”, “rehab”, “destruction of property”, “property damage”, “firefighting costs”, “liability of owner or operator”, “failure to control fire”, “uncontrolled fire”, or “nuisance” related to SB 360? (Yes = “2”, No = *see step B.4.2.*).
- B.4.2. Does the document include any number of the key terms outlined in B.4.1., but *does not include* specific mention of “costs” related to SB 360 liability, “cost abatement” or “firefighting costs”? (Yes = “1”, No = “0”).
- B.4.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the legal purpose of ORS 477.064 - 477.128.

⁷⁴ *ibid.*

B.5 – Northwest Wildland Fire Protection Agreement (*ORS 477.175 - .200*)

Sections 477.175 through 477.200 of the Oregon Revised Statutes describes the Northwest Wildland Fire Protection Agreement (NWFPA)⁷⁵. This segment of SB360 defines the purpose of the NWFPA as “to promote effective prevention, presuppression and control of forest fires in the northwest wildland region of the United States and adjacent areas of Canada by providing mutual aid in prevention, presuppression and control of wildland fires and by establishing procedures in operating plans that will facilitate such aid”⁷⁶. The following terms reflect exact wording used in the aforementioned ORS sections.

Instructions:

- B.5.1. Do the documents contain (individually or in combination) the key terms: “Northwest Wildland Fire Protection Agreement”, “NW Compact”, “Northwest Compact”, or “NWFPA”? (Yes = “1”, No = “0”).
- B.5.2. Does the document include an explanation, description, or other definition of the Northwest Wildland Fire Protection Agreement that serves as a synthesis of the key terms or concepts? (Yes = “1”, No = “0”).
- B.5.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the legal purpose of ORS 477.175 - 477.200.

B.6 – Funding Opportunities (*ORS 477.750 - .970*)

Sections 477.750 through 477.970 of the Oregon Revised Statutes describes the potential funding for the requirements outlined in the full statute. In particular, these sections describe the Oregon Forest Land Protection Fund – a fund “held by the State Treasurer as a trust fund for the uses and purposes provided in ORS **477.750 (Oregon Forest Land Protection Fund) to 477.775 (Emergency fire suppression costs insurance) and 477.880 (Acreage assessment)**. The State Treasurer shall deposit and invest moneys in the fund as provided by law, taking into account its uses and purposes”⁷⁷.

Instructions:

- B.6.1. Do the documents contain (individually or in combination) the key terms: “Oregon Forest Land Protection Fund”, “appropriation of fund”, “appropriation”, “emergency fire suppression cost recovery”, “fire suppression funding”,

⁷⁵ "Forestland-Urban Interface Fire Protection Act." Oregon State Legislature. Accessed March 2, 2017. https://www.oregonlegislature.gov/bills_laws/ors/ors477.html.

⁷⁶ <https://www.congress.gov/105/plaws/publ377/PLAW-105publ377.pdf>

⁷⁷ 2015 ORS 477.750¹ Oregon Forest Land Protection Fund • source • use. (n.d.). Retrieved March 02, 2017, from <https://www.oregonlaws.org/ors/477.750>

“suppression costs insurance”, “insurance”, “budget request”, “funding”, or “acreage assessment” in the context of SB 360? (Yes = “1”, No = “0”).

- B.6.2. Does the document include an explanation, description, or other definition of the Oregon Forest Land Protection Fund or other suppression or mitigation-related funding opportunities that serves as a synthesis of the key terms or concepts? (Yes = “1”, No = “0”).
- B.6.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the legal purpose of ORS 477.750 - 477.970.

B.7 – Management Structure (ORS 477.355 - .365)

A fundamental component to the effective implementation of the Forestland-Urban Interface Fire Protection Act is the designation of management officials to oversee the coordination, support, and legal enforcement of the provisions outlined in the statute. Specifically, the Act identifies Fire Wardens as having “charge of the fire prevention and suppression system in the forest protection district...and such other duties as are required by law and the rules of the State Board of Forestry”⁷⁸. Documents that contain explicit designation of Fire Wardens and a description of their roles and responsibilities show a greater level of SB360 integration.

Instructions:

- B.7.1. Do the documents contain (individually or in combination) the key terms: “Fire Warden”, “Warden”, “fire marshal”, “forest protection district”, “fire protection district”, “protection district”, “fire district”, or “duties and powers of wardens”? (Yes = “1”, No = “0”).
- B.7.2. Does the document include an explanation, description, or other definition of the roles, duties, or responsibilities assigned to a fire warden or a forest protection district that serves as a synthesis of the key terms or concepts? (Yes = “1”, No = “0”).
- B.7.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the legal purpose of ORS 477.355 - 477.365.

B.8 – Direct Reference of Statute

In addition to the aforementioned categories, this report is designed to recognize the general referencing of the *Forestland-Urban Interface Fire Protection Act* within county Comprehensive Plans and CWPPs. Direct reference of this statute, whether by title, ORS, or OAR numbers, indicates a minimal inclusion of the law’s regulatory details in the analyzed documents. At the very least, the presence of the statute title or reference numbers signifies an integration of

⁷⁸ *ibid.*

SB360 regulations, even if specific stipulations and standards are not explicitly outlined in the documents.

Instructions:

- B.8.1. Do the documents contain (individually or in combination) the key terms: “Forestland-Urban Interface Fire Protection Act”, “SB360”, “ORS 477”, “Senate Bill 360”, or “OAR 629-044-1”? (Yes = “1”, No = “0”).
- B.8.2. Does the document include an explanation, description, or other direct reference to the *Forestland-Urban Interface Fire Protection Act*, its related ORS or OAR numbers, or the “common name”, SB360? (Yes = “1”, No = “0”).
- B.8.3. Record the section, page numbers, and unedited quotes of text containing the key terms as they pertain to the statute’s title and ORS/OAR numbers (ORS 477.015-477.993).

B.9 – State Agency Reference (CWPPs only)

There is currently a misalignment between Oregon Department of Forestry (ODF) and Department of Land Conservation and Development (DLCD) in terms of how these agencies interpret SB 360 when coordinating with counties and communities. In order to better understand which agency’s regulatory interpretation (if any) is most prevalent within a CWPP, a key word search is performed to identify direct references to ODF or DLCD acronyms, offices, or state-wide influences. If identified within a context related to the implementation of SB 360, the agency is recorded separately from the values totaled for B.2 – B.8.

Instructions:

- B.9.1. Does the CWPP reference the terms “Oregon Department of Forestry” or “ODF” in relation to the interpretation and implementation of SB 360 in Oregon counties and the direct reference criteria from B.8.1. and B.8.2? (Yes = “ODF”, No = blank)
- B.9.2. Does the CWPP reference the terms “Department of Land Conservation and Development” or “DLCD” in relation to the interpretation and implementation of SB 360 in Oregon counties and the direct reference criteria from B.8.1. and B.8.2? (Yes = “DLCD”, No = blank)
- B.9.3. If the county is represented by multiple jurisdictional CWPPs, state agency reference will only be definitively noted “ODF” or “DLCD” if all jurisdictions unanimously fulfill either B.9.1. or B.9.2. If a difference in references occurs among the jurisdictions, this will be noted in the findings.

Appendix C: Findings

APPENDIX C - FINDINGS			
Baker County			
CWPP		Comprehensive Plan	
B.2	<p>I. Introduction I. Introduction Wildland-Urban Interface within Baker County, Oregon. In Baker County, 503,000 acres of Wildland Urban Interface (WUI) has been identified in 28 different WUI's across the county. Within those areas, 42 communities would be directly threatened or affected by a large wildfire event. Approximately 2600 homes are located within these WUI's. (p.1/.pdf p.4) (B.2.1. = Yes = 1)</p> <p>The Wildland-Urban Interface (WUI) is the area or zone where structures and other human development meet or intermingle with wildland or vegetative fuels. As more people have moved into wildland urban interface areas, whether for lifestyle or economic reasons, the number of large wildfires affecting homes has escalated dramatically. (p.2/.pdf p.5) (B.2.2. = Yes = 1)</p>		
B.7	<p>Baker County Interagency Fire Prevention Team Baker County has formed an interagency fire prevention and education team consisting of Baker County Rural Fire Protection Districts and Departments, and federal and state firefighting agencies. The mission of this group is to increase fire education and reduce human-caused fires. (p.11/.pdf p.14) (B.7.1 = YES = 1) (does not satisfy B.7.2.)</p>	B.7	<p>Rural facilities and services shall include, among other things: Fire protection according to the timely establishment of Rural Fire Protection Districts or Associations and their cooperative efforts with the several cities as appropriate and the state and federal standards. Those communities presently served by a rural fire protection district are inventoried and mapped in the Technical Information and Inventory Data. A recent effort has been organized to form a rural fire district in Baker Valley. (p.XI-4/.pdf p.332) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>
B.8	<p>Other constraints on local government, such as FEMA direction to prepare county hazard mitigation plans and implementation of the "Oregon Forestland-Urban Interface Act of 1997 (a.k.a., SB 360)7, emphasizes the importance of local government participation in the development and implementation of a community wildfire protection plan. (p.3/.pdf p.6) (B.8.1. = YES = 1) (does not satisfy B.8.2.)</p>		
TOTAL	4	TOTAL	2

Clackamas County			
CWPP		Comprehensive Plan	
B.2	<p>Wildland Urban Interface (Map #4)</p> <p>The CCWPP risk assessment subcommittee used the federal register and HFRA's guidance for determining the WUI. In an effort to identify the areas where "humans and their development intermix with wildland fuel," we identified the areas that have an urban density of at least one structure per forty acres and have hazardous fuels (Fuel Type III: tall flammable grass, heavy flammable brush, or heavy timber). (p.19/.pdf p.24) (B.2.1 = YES = 1)</p> <p>(individual jurisdiction WUI descriptions are included in sub-sections) example from CWPP: Wildland Urban Interface (WUI) Growth and development in forested areas is popular within the City of Lake Oswego. Wildfire has an effect on development, yet development can also influence wildfire. Owners often prefer homes that are private, have scenic views, are nestled in vegetation, and use natural materials. A private setting may be distant from public roads, or hidden behind a narrow, curving driveway. These conditions however, make evacuation and firefighting difficult. The scenic views found along Iron Mountain Bluff, Palisades, Mountain Park and around the lakes rim can also mean areas of dangerous topography. Natural vegetation contributes to scenic beauty, but it may also provide a ready trail of fuel leading a fire directly to the combustible fuels of the home itself. The forested hills surrounding Lake Oswego are considered to be interface areas. The interface neighborhoods are characterized by a diverse mixture of varying housing structures, development patterns, ornamental and natural vegetation, and natural fuels. (p.77/.pdf p.96) (B.2.2 = YES = 1)</p>		
B.6	<p>ODF Cost Share Program</p> <p>Clackamas County is home to over 10,000 small woodland owners, and is rich in forest resources. However, many of these forest land owners have limited budgets for implementing fuels reduction projects. In addition, there is a compelling need to educate landowners about wildfire potential on their forest lands how to mitigate for fire while protecting and enhancing forest stands.</p> <p>For this reason, the Molalla Unit of the Oregon Department of Forestry procured grant funds to support a fuels reduction program to provide technical and financial assistance to individuals and communities that have significant risk to wildfires. (p.21/.pdf p.29) (B.6.1 = YES = 1 / B.6.2 = NO = 0)</p>		
B.7	<p>Fire District Coordination</p> <p>The 2012 CWPP Update focused on taking a more localized approach to wildfire planning by creating individual CWPP's for each fire agency. Chapter 10: Fire Agencies has been expanded to include a brief description of wildfire hazards, emergency operations, structural ignitability, community outreach and education and fuels reduction priorities for each local fire agency. Local Communities at Risk were also identified. Each local CWPP is complete with an action plan to address wildfire issues specific to the community. (p.ii/.pdf p.3) (B.7.1 = Yes = 1)</p> <p>CHAPTER 10. CLACKAMAS COUNTY FIRE AGENCIES</p> <p>Introduction - There are 14 local structural fire agencies and two wildland fire agencies in Clackamas County that have been identified as Communities at Risk in the 2005 CWPP. These organizations provide essential public services in the communities they serve, and their duties go beyond extinguishing fires. Most also provide emergency medical services (EMS), search and rescue, and fire prevention education. Wildfire prevention and response efforts are most effective at the local level. One of the primary goals of the 2005 CCWPP was to create the foundation and build capacity for local fire agencies to create Community Wildfire Protection Plans that reflect the localized hazards, needs and mitigation strategies. However, the majority of fire agencies have not had the time or resources to invest towards this effort. For this reason, the 2012 CWPP Update focused on taking a more localized approach to wildfire planning by creating individual CWPP's for each fire agency. Each fire agency was interviewed by ODF to identify and document issues regarding wildfire hazards, emergency operations, structural ignitability, community outreach and education and fuels reduction priorities. Fire agency representatives were also asked to identify Local Communities at Risk, or areas that are particularly vulnerable to wildfires. Fire agencies also provided input on larger county-wide issues to be addressed by the 2012 CCWPP. (p.37/.pdf p.48) (B.7.2 = Yes = 1)</p>		
B.8	<p>Risk Assessment Objectives</p> <p>III. Identify wildland-urban interface and forest-urban interface areas consistent with the state methodology and appropriate for future SB 360 development. (p.16/.pdf p.21) (B.8.1 = YES = 1) (does not satisfy B.8.2.)</p>		
TOTAL	6	TOTAL	0

Coos County			
CWPP		Comprehensive Plan	
B.2	Wildfires in the wildland/urban interface (WUI) pose serious threats to life and endanger property, critical infrastructure, water resources, and valued commercial and ecological forest resources. The WUI is an area within or adjacent to an at-risk community identified in a community wildfire protection plan (CWPP). In the absence of a CWPP, the Healthy Forests Restoration Act (HFRA) limits the WUI to within 1/2 mile of an at-risk community's boundary or within 1 1/2 miles when mitigating circumstances exist, such as sustained steep slopes or geographic features aiding in creating a firebreak. [Oregon Department of Forestry Communities at Risk Assessment (2006). http://www.oregon.gov/ODF/FIRE/CAR/shtml#Statewide_Risk_Assessment_Methodology] (p.1-1/.pdf p.13) (B.2.1 = YES = 1 / B.2.2 = YES = 1)		
B.3	The ODF also mails each of these property owners a certification form that they may sign and return to ODF after they have met the fuel-reduction standards. (p.3-4/.pdf p.32) (B.3.1. = Yes = 2 / B.3.2. = No = 0)		
B.4	Land Ownership Table 2.1 shows a breakdown of land-ownership entities in Coos County. Private parties own almost half of the land in the county. This affects wildfire-planning efforts in two ways. First, lands owned by state and federal agencies are easier to regulate than those owned by private individuals. Second, with a majority of land owned by individuals who are personally liable for creating defensible space on their property, wildfire-planning efforts need to emphasize public education and personal responsibility. (p.2-1/.pdf p.23) (B.4.1. = Yes = 2 / B.4.2. = No = 0)		
B.7	Coos County Fire Districts Local fire districts are knowledgeable about wildfire risk throughout Coos County and are deeply connected to the community members they serve. Fire district staff can play a key role in CWPP implementation by engaging in education and outreach efforts at a neighborhood level. (p.3-6/.pdf p.34) (B.7.1. = Yes = 1 / B.7.2. = No = 0)	B.7	Since some residential development in Coos County is adjacent to commercially valuable forest land, it is important to ensure that a minimum level of protection for both the dwelling and the adjacent forest land. The requirement for fire protection could take two forms: i. New development could be required to be included within a Rural Fire Protection District (at the option of the RFPD), or ii. New development could be required to provide some measure of its own fire protection by ensuring access of trucks to within 16 feet of any stored water source, and by creation of a firebreak of at least 30 feet around all dwellings. (The firebreak would permit ornamental shrubbery and single specimen trees) [Source: Northwest Interagency Fire Protection Group] (p.606/.pdf p.577) (B.2.1. = YES = 1 / B.2.2 = YES = 1)
B.8	Senate Bill 360: Oregon Forestland-Urban Interface Fire Protection Act Senate Bill 360, or the Oregon Forestland-Urban Interface Fire Protection Act, enlists the aid of private property owners in turning fire-vulnerable urban and suburban properties into less volatile zones. Senate Bill 360 also requires that a classification committee composed of three county members, a state fire marshal, and a state forester define the forestland-urban interface areas. Finally, Senate Bill 360 requires landowners within the forestland-urban interface to reduce excessive vegetation that may fuel fires near structures, roads, or along driveways. (p.3-3/.pdf p.31) (B.8.1 = Yes = 1 / B.8.2. = Yes = 1)		
B.9	Senate Bill 360: Oregon Forestland-Urban Interface Fire Protection Act Senate Bill 360, or the Oregon Forestland-Urban Interface Fire Protection Act, enlists the aid of private property owners in turning fire-vulnerable urban and suburban properties into less volatile zones. Senate Bill 360 also requires that a classification committee composed of three county members, a state fire marshal, and a state forester define the forestland-urban interface areas. Finally, Senate Bill 360 requires landowners within the forestland-urban interface to reduce excessive vegetation that may fuel fires near structures, roads, or along driveways. (p.3-4/.pdf p.32) (ODF)		
TOTAL	9	TOTAL	2

Crook County			
CWPP		Comprehensive Plan	
B.2	<p>1.4 Wildland-Urban Interface (WUI)</p> <p>In the context of the Healthy Forest Restoration Act (HFRA), one primary purpose of the CWPP is to establish a local definition and boundary for the wildland-urban interface (WUI). The HFRA identifies the wildland urban interface as an area within or adjacent to an at-risk community that has been identified by a community in its wildfire protection plan. The HFRA also provides some buffer distance guidelines for areas that do not have a CWPP. The Steering Committee decided to use these guidelines to define the WUI buffer distances for the at-risk communities and infrastructure in Crook County. The distances are identified as:</p> <ul style="list-style-type: none"> • Extending 0.5 miles from the boundary of an at-risk community, • Extending 1.5 miles from the boundary of an at-risk community when other criteria are met such as a sustained steep slope or a geographic feature that creates an effective firebreak, or is classified as Condition Class 3 land. <p>The Steering Committee identified the following parameters to identify wildland-urban interface (WUI) areas:</p> <ul style="list-style-type: none"> • Current and near-term planned residential communities; • Seasonal recreation communities; • Current and anticipated transportation infrastructure, including but not limited to: <ul style="list-style-type: none"> o Major highway routes leading to and from the county. o Current and planned access routes in support of evacuation and ingress by emergency responders, including sufficient setbacks for one way in/out routes. o Routes providing access to the more remote portions of the county. o Routes providing access to critical infrastructure sites. • Other critical infrastructure within the county, including but not limited to: <ul style="list-style-type: none"> o Electronic sites supporting response agencies, commercial and aviation communications. o Commercial electrical and telephone (land-based and cellular) service systems. o Emergency support facilities or facilities that could be used by virtue of their location in support of emergency response and mitigation action such as fire stations, schools, hospital and other medical facilities, other non-fire agency facilities, community halls, churches, airports and water sources. o Economic assets such as data centers, businesses and associated support infrastructure. <p>The WUI boundaries are displayed on maps in each of the assessment area sections of the plan and on the county-wide maps that display the risk assessment results. (p.7-8/.pdf p.7-8) (B.2.1. = Yes = 1 / B.2.2. = Yes = 1)</p>		
B.3	<p>5.2 Defensible Space - Minimum Hazardous Fuels Treatment Standards⁴</p> <p>The following are recommended minimum hazardous fuels treatment standards. It is intended that these standards mirror the standards contained in the Oregon Department of Forestry "Oregon Forestland-Urban Interface Fire Protection Act" (SB 360) that applies on ODF-protected wildland-urban interface areas. It is recognized that slightly differing treatment regimes are needed for Ponderosa pine and Western Juniper/sage/grass ecotypes. The differences in fuel components of the two eco-types will result in slightly differing fuel treatment approaches, however similar treatment distances around structures are still appropriate. (p.41/.pdf p.41) (B.3.1 = Yes = 2 / B.3.2 = No = 0)</p>		
B.7	<p>2.3 Fire Protection Agencies</p> <p>Portions of Crook County receive fire protection from one of the following agencies. Note: the fire management functions of the Ochoco National Forest and the Bureau of Land Management have been merged with that of the Deschutes National Forest under Central Oregon Fire Management Services (COFMS). (p.10/.pdf p.10) (B.7.1. = YES = 1)</p> <p>Crook County Fire and Rescue (CCF&R) provides responses to structural and natural vegetation fires within Crook County Rural Fire Protection District No. 1 (CCRFPD#1). Oregon Department of Forestry (ODF) provides wildland fire response for fires burning on or threatening private forestlands paying Forest Patrol Assessment within the ODF Central Oregon District. There are some wildland-urban interface areas that receive dual protection from ODF and CCF&R because they are located within the rural fire protection district and are also classified as forest land within the ODF district. (p.11/.pdf p.11) (B.7.2. = YES = 1)</p>	B.7	<p>FIRE PROTECTION</p> <p>The Rural Fire Protection District/School Bus Routes /Utilities (telephone, natural gas)</p> <p>Map shows boundaries of Prineville Rural Fire Protection. (p.95/.pdf p.104) (B.7.1. = YES = 1 / B.7.2. = NO = 0)</p>
B.8	<p>In addition to meeting the assessment needs for the CWPP, one of the objectives of the planning process is to facilitate any near-term pending prevention or mitigation initiatives. The CWPP uses the ODF Risk Assessment process so that assessment data is compatible with implementation of the "Oregon Forestland-Urban Interface Fire Protection Act" by Oregon Department of Forestry. (p.16/.pdf p.16) (B.8.1. = YES = 1 / B.8.2. = NO = 0)</p>		
B.9	<p>In addition to meeting the assessment needs for the CWPP, one of the objectives of the planning process is to facilitate any near-term pending prevention or mitigation initiatives. The CWPP uses the ODF Risk Assessment process so that assessment data is compatible with implementation of the "Oregon Forestland-Urban Interface Fire Protection Act" by Oregon Department of Forestry. (p.16/.pdf p.16) (ODF)</p>		
TOTAL	7	TOTAL	1

Curry County			
CWPP		Comprehensive Plan	
B.2	<p>The Oregon Department of Forestry Protection from Fire Program Review recommended full implementation of Senate Bill 360 by 2011.71 A committee composed of state and county officials use a standard process to identify forestland-urban interface areas throughout the county. The identification criteria include the following:</p> <ul style="list-style-type: none"> • Lands within the county that are also inside an Oregon Department of Forestry protection district. • Lands that meet the state's definition of "forestland." • Lands that meet the definition of "suburban" or "urban"; in some cases "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries. • Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. <p>The identified forestland-urban interface areas are rated from "low" to "extreme," and the classification is used by the landowner to determine the size of a fuel break that needs to be established around structures on their property. (p.4-10/.pdf p.65) (B.2.1 = Yes = 1 / B.2.2. = Yes = 1)</p>	B.2	<p>Structural fire protection is available in some parts of the county by rural fire departments. Land use planning issues develop with regard to fire protection and the siting of development uses where there is a potential fire hazard. (p.148/.pdf p.150) (B.2.1. = YES = 1 / B.2.2 = NO = 0)</p>
B.3	<p>Then the Oregon Department of Forestry (ODF) notifies landowners in the forestland-urban interface of their responsibility after which the property owner has two years to comply. Landowners who have documented their compliance with the ODF are relieved from the act's cost-recovery liability. Non-compliant landowners may be liable for suppression costs if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. As of 2007, Curry County has not implemented SB 360, but may do so in the coming years. (p.4-10/.pdf p.5) (B.3.1 = YES = 2)</p> <p>Table 5.5 Comparison between SB 360 standards and information available in the CFPA data set. (p.5-13/.pdf p.83) (listed as standards to be complied with, but also shows that the vast majority of properties are not compliant) (B.3.2. = YES = 1)</p>		
B.4	<p>Landowners who have documented their compliance with the ODF are relieved from the act's cost-recovery liability. Non-compliant landowners may be liable for suppression costs if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. The cost-recovery liability is capped at \$100,000. (p.4-10/.pdf p.65) (B.4.1. = Yes = 2 / B.4.2. = No = 0)</p>		
B.6	<p>Curry County Wildfire Protection Plan – Action Plan 1.3 - Collaborate with local home insurance providers and realtors to participate in developing and disseminating information to property owners about how to reduce risk from wildfire. Work with insurance agencies to develop incentives that reward or encourage homeowners to create defensible space around their homes. (p.9-1/.pdf p.126) (B.6.1. = Yes = 1 / B.6.2. = No = 0)</p>	B.6	<p>Fire protection in Curry County is provided by either city fire departments or Rural Fire Protection Districts (RFPD). Table 11.7 A shows statistical information regarding county fire departments.</p> <p>Insurance classifications represent a measure on a scale of ten of the level of protection in an area. Criteria include such factors as availability of fire hydrants and distance from fire stations. An entirely unprotected area is rated 10 and would have maximum insurance premiums on a given building, whereas, the same building in a more protected area would cost less to insure. (p.225/.pdf p.227) (B.6.1. = YES = 1 / B.6.2. = NO = 0)</p>
B.7	<p>Rural Fire Protection Districts There are 14 rural fire protection districts within the county. These districts have the capacity to provide fire suppression and structural defense and coordinate through mutual aid agreements. The California/Oregon Fire Chiefs Association produced an updated Mutual Aid Resource Directory that provides an inventory of resources for each Fire Department and Rural Fire Protection District in Curry County. (p.4-4/.pdf p.59) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>	B.7	<p>Fire protection districts are those that serve incorporated cities, rural communities and rural areas. (p.218/.pdf p.220) (B.7.1 = YES = 1)</p> <p>Large areas of the county are without rural fire protection districts, leaving structures unprotected. Brush and forest fire suppression in these areas is handled by the U.S. Forest Service for federal forest land and Coos Forest Protective Association for state forest land and private commercial timberland. (p.225/.pdf p.227). (B.7.2 = YES = 1)</p>

Curry County (continued)			
CWPP		Comprehensive Plan	
B.8	<p>Oregon Forestland-Urban Interface Fire Protection Act Property Evaluation & Self-Certification Guide.</p> <p>The Oregon Forestland-Urban Interface Fire Protection Act (Senate Bill 360) was passed by the Oregon legislature in 1997, but has not yet been implemented in Curry County. The intent of the legislation is to decrease structural vulnerability by directing property owners in at-risk areas to take voluntary action to make their homes less vulnerable to wildfire. The Oregon Department of Forestry produced a detailed guide for homeowners about the regulations and fire safety standards. (p.2-15/.pdf p.33) (B.8.1. = yes = 1)</p> <p>Senate Bill 360: Oregon Forestland-Urban Fire Protection Act</p> <p>The Oregon Forestland-Urban Fire Protection Act of 1997 (SB 360) establishes a process to identify WUI areas through the state, provide standards for landowners to manage fire hazard and risk, and create a process to track compliance. Senate Bill 360 requires property owners in identified forestland-urban interface areas to create a buffer clear of flammable vegetation around their homes and driveways. (p.4-9/.pdf p.64) (B.8.2. = yes = 1)</p>		
B.9	<p>The Oregon Department of Forestry Protection from Fire Program Review recommended full implementation of Senate Bill 360 by 2011.71 A committee composed of state and county officials use a standard process to identify forestland-urban interface areas throughout the county. The identification criteria include the following:</p> <ul style="list-style-type: none"> • Lands within the county that are also inside an Oregon Department of Forestry protection district. (p.4-10/.pdf p.65) (ODF) 		
TOTAL	12	TOTAL	3

Deschutes County (7 CWPP Jurisdictions Total)

CWPP		Comprehensive Plan	
<p>B.2</p>	<p>[1] - For each area, the appropriate Steering Committee carefully identified characteristics including population, geographic and vegetative information. Each group also identified wildland urban interface (WUI) areas, or Communities at Risk, within each project area according to the Healthy Forests Restoration Act. The Healthy Forests Restoration Act defines wildland urban interface as an area within or adjacent to an at-risk community that has been identified by a community in its wildfire protection plan. For areas that do not have such a plan, it is identified as:</p> <ul style="list-style-type: none"> ■ extending ½ mile from the boundary of an at-risk community, ■ extending 1½ miles from the boundary of an at-risk community when other criteria are met such as a sustained steep slope or a geographic feature that creates an effective firebreak, or is classified as Condition Class 3 land, ■ adjacent to an evacuation route. (p.12/.pdf p.18) (B.2.1. = yes = .142 / B.2.2. = yes = .142). <p>[2] - The process of identifying forestland-urban interface areas follows steps and definitions described in Oregon Administrative Rules. Briefly, the identification criteria include:</p> <ul style="list-style-type: none"> • Lands within the county that are also inside an Oregon Department of Forestry protection district. • Lands that meet the state's definition of "forestland." • Lands that meet the definition of "suburban" or "urban"; in some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries. • Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. (p.11/.pdf p.21) (B.2.1. = yes = .142 / B.2.2. = YES = .142). <p>[3] - The process of identifying forestland-urban interface areas follows steps and definitions described in Oregon Administrative Rules. Briefly, the identification criteria include:</p> <ul style="list-style-type: none"> ■ Lands within the county that are also inside an Oregon Department of Forestry protection district. ■ Lands that meet the State's definition of "forestland". ■ Lands that meet the definition of "suburban" or "urban"; in some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries. ■ Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. (p.11/.pdf p.46) (B.2.1. = YES = .142 / B.2.2 = YES = .142) 	<p>B.2</p> <p>Forestland-urban interface areas are identified in each county by a classification committee. A committee is composed of five members -- three appointed by the county, one by the state fire marshal and one by the state forester. The process of identifying forestland-urban interface areas is described in Oregon Administrative Rules 629-044-1005 through 629-044-0145 and includes:</p> <ul style="list-style-type: none"> ▫ Lands within the county and also inside an Oregon Department of Forestry protection district. ▫ Lands that meet the state's definition of "forestland." ▫ Lands that meet the definition of "suburban" or "urban"; in some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries. ▫ Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. <p>Once forestland-urban interface areas are identified, a committee applies fire-risk classifications. The classifications range from "low" to "extreme," and are used by a property owner to determine the size of a fuel break that needs to be established around a structure. Oregon Department of Forestry supplies information about the acts' fuel-reduction standards and mails each property owner a certification card, which may be signed and returned to that agency after the fuel-reduction standards have been met. (p.18-19/.pdf p.502-503) (B.2.1 = YES = 1 / B.2.2 = YES = 1)</p>	
	<p>[4] - The process of identifying forestland-urban interface areas follows steps and definitions described in Oregon Administrative Rules. Briefly, the identification criteria include:</p> <ul style="list-style-type: none"> • Lands within the county that are also inside an Oregon Department of Forestry protection district. • Lands that meet the state's definition of "forestland." • Lands that meet the definition of "suburban" or "urban"; in some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries. Greater La Pine Community Wildfire Protection Plan 2015 • Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. (p.10-11/.pdf p.19-20) (B.2.1. = YES = .142 / B.2.2 = YES = .142) <p>[5] - The process of identifying forestland-urban interface areas follows steps and definitions described in Oregon Administrative Rules. Briefly, the identification criteria include:</p> <ul style="list-style-type: none"> • Lands within the county that are also inside an Oregon Department of Forestry protection district. • Lands that meet the state's definition of "forestland." • Lands that meet the definition of "suburban" or "urban"; in some cases, "rural" lands may be included within a forestland-urban interface area for the purpose of maintaining meaningful, contiguous boundaries. • Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. (p.11/.pdf p.21) (B.2.1 = YES = .142 / B.2.2. = YES = .142) <p>[6] - The process of identifying wildland urban interface areas follows steps and definitions described in Oregon Administrative Rules. Briefly, the identification criteria include:</p> <ul style="list-style-type: none"> • Lands within the county that are also inside an Oregon Department of Forestry protection district. • Lands that meet the state's definition of "forestland." • Lands that meet the definition of "suburban" or "urban"; in some cases, "rural" lands may be included within a wildland urban interface area for the purpose of maintaining meaningful, contiguous boundaries. • Lots that are developed, that are 10 acres in size or smaller, and which are grouped with other lots with similar characteristics in a minimum density of four structures per 40 acres. (B.2.1. = YES = .142 / B.2.2. = YES = .142) <p>[7] - Wildland Urban Interface Description</p> <p>The Healthy Forests Restoration Act defines the WUI as an area within or adjacent to an at risk community that has been identified by a community in its wildfire protection plan or, for areas that do not have such a plan, as an area:</p> <ul style="list-style-type: none"> • extending ½ mile from the boundary of an at risk community, • extending 1½ miles from the boundary of an at risk community when other criteria are met such as a sustained steep slope or a geographic feature that creates an effective firebreak, or is classified as fire condition class 3 land, • or that is adjacent to an evacuation route. (p.16/.pdf p.24) (B.2.1. = YES = .142 / B.2.2. = YES = .142) 		

Deschutes County (Continued)	
CWPP	Comprehensive Plan
<p>[1] - It is important to note that while Oregon Department of Forestry does not provide fire protection in the East & West CWPP areas, Deschutes County has classified all private lands in the County under Senate Bill 360 and strongly recommends that residents comply with the standards of the legislation. A detailed description of the standards is available from the Oregon Department of Forestry in the handbook for the Oregon Forestland – Urban Interface Fire Protection Act of 1997. This information is also available at www.oregon.gov/ODF/fire/SB360. (p.37/.pdf p.43) (B.3.1. = yes = .284 / B.3.2. = No = 0)</p> <p>[2] - The Oregon Department of Forestry is the agency steward of this program. It supplies information about the act's fuel-reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. Certification relieves a property owner from the act's fire cost recovery liability. This takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by ODF. (p.11-12/.pdf p.21-22) (B.3.1. = YES = .284)</p> <p>In the mixed conifer, lodgepole and sub-alpine fir stands where Crown Fire Potential is rated Extreme by the federal agencies the recommended standard is to reduce fuel loads to that which can produce flame lengths of less than four feet:</p> <ul style="list-style-type: none"> • Within a ¼ mile buffer of adjacent communities at risk. Treatments should begin here and increase in ¼ mile increments until the WUI boundary is reached. • Within 300 feet of any evacuation route from any of the Communities at Risk. • Maintenance of previously treated lands is also a top priority. Treatment and maintenance of previously treated lands before treatment begins again in other places is an important component of keeping communities safe. <p>In general, the dominant strategy in all areas should be thinning from below, in an effort to restore large trees, open, ponderosa pine dominated forests. In juniper and bitterbrush dominated stands, federal land managers are strongly encouraged to utilize mechanical treatments and especially prescribed fire to reduce fuel loads to that which can produce flame lengths of less than four feet. (p.34/.pdf p.44) (B.3.2. = YES = .142)</p>	<p>B.3</p> <p>Oregon Department of Forestry supplies information about the acts' fuel-reduction standards and mails each property owner a certification card, which may be signed and returned to that agency after the fuel-reduction standards have been met. (p.19/.pdf p.503). (B.3.1 = YES = 1 / B.3.2 = NO = 0)</p>
<p>[3] - The Oregon Department of Forestry is the agency steward of this program. It supplies information about the Act's fuel-reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. (p.41/.pdf p.46) (B.3.1. = YES = .284)</p> <p>The specific recommendations under Senate Bill 360 for private lands are outlined under Prioritized Hazard Reduction Recommendations and Preferred Treatment Methods in this CWPP. (B.3.2. = YES = .142)</p>	
<p>[4] - The Oregon Department of Forestry is the agency steward of this program. It supplies information about the Act's fuel-reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. (p.11/.pdf p.20) (B.3.1. = YES = .284)</p> <p>The minimum Default Standards under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 are:</p> <ul style="list-style-type: none"> § Create a primary fuel break of 30 feet around structures; § Create fuel breaks around driveways longer than 150 feet; § Remove tree branches within 10 feet of chimneys; § Remove any dead vegetation that overhangs a roof; § Remove flammable materials from under decks and stairways; § Move firewood 20 feet away from structures; (p.34/.pdf p.43) (B.3.2. = YES = .142) 	
<p>B.3</p> <p>[5] - The Standards for properties classified as high under the Oregon Forestland – Urban Interface Fire Protection Act of 1997 are:</p> <ul style="list-style-type: none"> • Establish a primary fuel break of 30 feet around structures (additional 20 feet if flammable roofing material is present); • Create fuel breaks around driveways longer than 150 feet; • Remove tree branches within 10 feet of chimneys; • Remove any dead vegetation that overhangs a roof; • Remove flammable materials from under decks and stairways; • Move firewood 20 feet away from structures; If the property is classified as extreme, a total of 50 feet of defensible space around structures is required (an additional 20 if flammable roofing is present). <p>A fuel break consists of: Removal of dead/dry/flammable brush around home, roof, chimney, decks and under nearby trees; removal of low hanging branches on trees; and reposition of wood piles at least 20 feet away from home during fire season. (p.12/.pdf p.22) (B.3.1. = YES = .284 / B.3.2. = YES = .142)</p>	
<p>[6] - The Oregon Department of Forestry is the agency steward of this program. It supplies information about the act's fuel reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. (p.29/.pdf p.36) (B.3.1. = YES = .284)</p> <p>Based on the risk assessments, the priorities of the Greater Sisters Country CWPP with regard to public lands within the WUI are as follows:</p> <ul style="list-style-type: none"> § All areas within the designated WUI boundary beginning with the first ¼ mile buffer around each Community at Risk utilizing the following priorities: § Within 300 feet of any evacuation route from each Community at Risk. § All areas beyond the initial ¼ mile of each prioritized Community at Risk above, in ¼ mile increments until the WUI boundary is reached. § For mixed conifer and lodgepole stands which have missed typical fire cycles and still pose threats of potential crown fires to communities, specific fuels treatments shall be accomplished on federal and state lands to reduce and maintain fuel loads to that which can produce flame lengths of less than four feet to provide for effective initial attack and minimize the resistance to control. § Although the treatments should focus on areas rated Extreme Risk Priority Communities, maintenance of previously treated lands is also a top priority where treatment is critical to maintain this status within the CWPP area. Treatment and maintenance of previously treated lands before treatment begins again in other places is an important component of keeping communities safe. (p.34/.pdf p.41) (B.3.2. = YES = .142) 	
<p>[7] - The Sunriver Ladder Fuels Reduction Plan has been accepted as an alternative plan to Senate Bill 360 and has been approved by Oregon Department of Forestry and the Sunriver Fire Department. Generally, it outlines the following standards and requirements on private lands with and without structures that are the responsibility of the landowner:</p> <ul style="list-style-type: none"> • The entire property, including areas within 30 feet of any structure (up to the property line) shall be subject to fuels reduction standards. • All bitterbrush, noxious weeds, dead vegetation, and other flammable shrubs within 15 feet of a structure shall be removed. • Bitterbrush and manzanita shall be cleared three feet beyond the drip line of tree branches. • Live branches of pine trees and other flammable trees shall be removed up to a minimum of six feet and a maximum of eight feet from grade. For trees less than 20 feet tall, only the lower 1/3 of branches shall be removed. • Trees branches of pines and other flammable trees shall be removed to create a minimum of 15 feet of clearance between chimneys and the branches. • Roofs, gutters, and areas under decks shall be maintained free of accumulated pine needles and other debris. • Dry grass shall be maintained to an average height of less than four inches, during the fire season (June-November) with the exception of scattered bunchgrasses. • Firewood shall be stored a minimum of 30 feet from the structure, or at the property line, during fire 	

Deschutes County (Continued)	
CWPP	Comprehensive Plan
<p>B.4</p> <p>[2]- Certification relieves a property owner from the act's fire cost recovery liability. The cost-recovery liability under the Oregon Forestland-Urban Interface Fire Protection Act is capped at \$100,000. (p.12/.pdf p.22) (B.4.1. = YES = .284) In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.12/.pdf p.22) (B.4.2. = YES = .142)</p> <p>[3] - Certification relieves a property owner from the Act's fire cost recovery liability. This potential liability takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by ODF. (p.41/.pdf p.46) (B.4.1. = YES = .284) In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.41/.pdf p.46) (B.4.2. = YES = .142)</p> <p>[4] - Certification relieves a property owner from the act's fire cost recovery liability. This takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by the Department of Forestry. In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.11/.pdf p.20) (B.4.1. = YES = .284 / B.4.2. = YES = .142)</p> <p>[6] - Certification relieves a property owner from the act's fire cost recovery liability. This takes effect on properties that are within a wildland urban interface area and for which a certification card has not been received by the Department of Forestry. In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.29/.pdf p.36) (B.4.1. = YES = .284 / B.4.2. = YES = .142)</p> <p>[7] - Compliance by property owners with the Sunriver LFR Plan certifies a property under the approved alternative standards and relieves the owner of the fire cost recovery liability. (p.12/.pdf p.20) (B.4.1. = YES = .284 / B.4.2. = NO = 0)</p>	
<p>B.6</p> <p>[2] - In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.12/.pdf p.22) (B.6.1. = YES = .142 / B.6.2. = NO = 0)</p> <p>[3] - In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.41/.pdf p.46) (B.6.1. = YES = .142 / B.6.2. = NO = 0)</p> <p>[4] - This takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by the Department of Forestry. In these situations, the state of Oregon may seek to recover certain fire suppression costs from a property owner if a fire originates on the owner's property, the fuel reduction standards have not been met, and ODF incurs extraordinary suppression costs. (p.11/.pdf p.20) (B.6.1. = YES = .142 / B.6.2. = NO = 0)</p> <p>[5] - Deschutes County owns only 3.22% of all the privately owned land in the greater Redmond WUI, however in addition to working on County lands, the County works with private landowners to cooperatively address wildfire risk reduction. In 2011 and 2012, Deschutes County secured grant funding for the Greater Redmond Area. The funding was used to implement two separate Sweat Equity projects in The Ridge at Eagle Crest. The Sweat Equity Program whereby residents create or maintain defensible space on their property; bring the woody debris to the roadside and the grant funding pays to have it hauled away at no charge to the resident. The benefit of this program is not only the treatment of hazardous fuels, but the education and resident "buy-in" that are occurring at the individual resident and neighborhood levels. Overall, the funding was used to reduce fuels on 465 acres. Deschutes County has also implemented numerous fuel reduction and Sweat Equity projects in the surrounding areas within the County. (p.12/.pdf p.22) (B.6.1. = YES = .142 / B.6.2. = YES = .142)</p> <p>[6] - Deschutes County owns 1% of the land in the greater Sisters Country WUI. Through ongoing funding opportunities including grants, Deschutes County is taking steps to reduce the hazardous vegetation and provide for a more fire safe community. The County has reduced hazardous fuels on approximately 1,440 acres of land in the last three years. (p.13/.pdf p.20) (B.6.1. = YES = .142) Collaborative Forests Landscape Restoration Act – Deschutes Collaborative Forest Restoration Project In 2010, a collaborative group of local agencies and organizations formed a proposal for funding a large, collaborative forest restoration and hazardous fuels reduction project on public lands managed by the Deschutes National Forest. This landscape level project is known as the Deschutes Collaborative Forest Project (DCFP). Under the federal Collaborative Forest Landscape Restoration Act (CFLRA), the proposal was approved for funding up to \$10 million over the next ten years. (p.13/.pdf p.20) (B.6.2. = YES = .142)</p> <p>[7] - Collaborative Forests Landscape Restoration Act – Deschutes Collaborative Forest Restoration Project In 2010, a collaborative group of local agencies and organizations formed a proposal for funding a large, collaborative forest restoration and hazardous fuels reduction project on public lands managed by the Deschutes National Forest. This landscape level project is known as the Deschutes Collaborative Forest Project (DCFP). Under the federal Collaborative Forest Landscape Restoration Act (CFLRA), the proposal was approved for funding up to \$10 million over the next ten years. The Steering Committee and several task-oriented sub-committees now provide input and recommendations to the Deschutes National Forest for projects located on the 257,000 acre landscape. The entire project spans the west side of the Greater Bend WUI, the western portion of the East & West Deschutes County CWPP boundary, and is also included in the Sisters CWPP boundary to the north and the Sunriver CWPP boundary to the south. An amendment to the original boundary was approved in 2012 to include additional landscape acreage near Sunriver and Black Butte Ranch. Now portions of the \$10 million award can be expended across a broader area. (p.14/.pdf p.23) (B.6.1. = YES = .142 / B.6.2. = YES = .142)</p>	

Deschutes County (Continued)	
CWPP	Comprehensive Plan
<p>[1] - Three Steering Committees collaborated to develop this plan. In each of the communities of Alfalfa and Brothers/Hampton, local residents came together with representatives from Deschutes County Rural Fire Protection District #2, Oregon Department of Forestry (ODF), the USDA Forest Service (USFS), the USDI Bureau of Land Management (BLM), Deschutes County and Project Wildfire to develop the priorities and recommendations for the eastern regions of the county. (p.5/.pdf p.11) (B.7.1. = yes = .142 / B.7.2. = no = 0)</p> <p>[2] - In addition to the firefighting resources, Bend Fire and Rescue puts 10% of its workforce towards fire prevention. The fire prevention team is comprised of one Fire Marshal and six Deputy Fire Marshals that provide enforcement of local fire codes and ordinances as well as provide public education across the district. (p.25/.pdf p.35) (B.7.1. = YES = .142)</p> <p>Deschutes County Rural Fire Protection District #2 (DCRFPD#2) The Deschutes County Rural Fire Protection District #2 consists of approximately 132 square miles of suburban and forested land surrounding the City of Bend, Oregon, and represents approximately 21,000 constituents. The average population of the district greatly increases seasonally due to tourism. (p.25/.pdf p.35) (B.7.2. = YES = .142)</p> <p>[3] - La Pine Rural Fire Protection District The La Pine Rural Fire Protection District provides first response structural and wildland fire coverage within its 115 square mile fire service district supported by local taxpayers. The District provides Emergency Medical Services, including Advanced Life Support paramedic transport, within a 1,000 square mile service area. The District is managed by a five-member elected board of directors. The District consists of 23 career and 21 volunteer reserve and student scholarship positions involved directly in fire and EMS Operations. The resident students participate in the Fire/EMS program at Central Oregon Community College. There are two administrative personnel and 12 support volunteers who provide off-line support services. (p.34/.pdf p.39) (B.7.1. = YES = .142 / B.7.2. = YES = .142)</p> <p>[4] - La Pine Rural Fire Protection District The La Pine Rural Fire Protection District provides first response structural and wildland fire coverage within its 115 square mile fire service district supported by local taxpayers. The District provides Emergency Medical Services, including Advanced Life Support paramedic transport, within a 1,000 square mile service area. A five-member elected board of directors manages La Pine Rural Fire Protection District. The District consists of 23 career and 21 volunteer reserve and student scholarship positions involved directly in fire and EMS Operations. The resident students participate in the Fire/EMS program at Central Oregon Community College. (p.22/.pdf p.31) (B.7.1. = YES = .142 / B.7.2. = YES = .142)</p> <p>[5] - In addition to the firefighting resources, Redmond Fire and Rescue puts a portion of its workforce towards fire prevention. The fire prevention team is comprised of one Fire Marshal and one Deputy Fire Marshal that provide enforcement of local fire codes and ordinances as well as provide public education across the district. This team is responsible for fire cause determination and providing information about the science of fire so the department can focus on a prevention message, campaign and code development to prevent those fires in the future. (p.23/.pdf p.33) (B.7.1. = YES = .142) Redmond Fire & Rescue is a combination career and volunteer department that employs one Fire Chief, one Deputy Chief, two Division Chiefs, three Battalion Chiefs, 33 line firefighter/paramedics, one fire prevention staff member, and two administrative staff members. The department also manages a strong student volunteer program with seven student volunteers and seven regular volunteers. (p.22/.pdf p.32) (B.7.2. = YES = .142)</p> <p>[6] - Sisters – Camp Sherman Rural Fire Protection District The Sisters-Camp Sherman Rural Fire Protection District is a combination career and volunteer department providing structural and wildland fire services to over 200 square miles. The District also provides advanced life support ambulance transport service to more than 2000 square miles in mountainous and high desert terrain. Special services provided include, vehicle extrication, water rescue and hazardous materials response. A broad range of community risk and fire safety services are provided to area residents utilizing a combination of career and volunteer staffing. The District currently employs a Fire Chief, a Deputy Chief of Operations, an Administrative Assistant, two part-time positions including the Community Risk and Fire Safety Manager and Financial Manager. The District also employs three Shift Commander/Paramedics and Six Firefighter/Paramedics. (p.22/.pdf p.29) (B.7.1. = YES = .142 / B.7.2. = YES = .142 - similar entries for Black Butte Ranch, Cloverdale, and ODF districts)</p> <p>[7] - Oregon Department of Forestry Within the Sunriver CWPP area, the private forestland is protected by the Central Oregon District of the Oregon Department of Forestry (ODF). ODF provides wildland fire response for fires burning on or threatening private forestlands paying a Forest Patrol Assessment. There are some areas within the Sunriver CWPP Boundary that receive dual protection from ODF and the Sunriver Fire Department because they are located within the rural fire protection district and are also classified as private forestland within the ODF district. In areas of dual protection, when a wildland fire occurs, the fire district provides initial response and transfers fire command to ODF personnel upon their arrival. (p.22/.pdf p.30) (B.7.1. = YES = .142 / B.7.2. = YES = .142)</p>	<p>Natural Hazards Policies</p> <p>B.7 Policy 3.5.9 Support local fire protection districts and departments in providing and improving fire protection services. (p.24/.pdf p.508) (B.7.1 = YES = 1 / B.7.2 = NO = 0)</p>

Deschutes County (Continued)	
CWPP	Comprehensive Plan
<p>[1] - The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists 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. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.37/.pdf p.43) (B.8.1 = YES = .142 / B.8.2 = YES = .142)</p> <p>[2] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists 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. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.11/.pdf p.21) (B.8.1 = YES = .142 / B.8.2 = YES = .142)</p> <p>[3] - The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists 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. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.41/.pdf p.46) (B.8.1 = YES = .142 / B.8.2 = YES = .142)</p> <p>[4] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 While not utilized as one of the assessment tools for this update, the Steering Committee offers and promotes the standards for private lands outlined under this legislation so it is noted here for reference. The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists 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. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.10/.pdf p.19) (B.8.1 = YES = .142 / B.8.2 = YES = .142)</p> <p>[5] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists 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. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.11/.pdf p.21) (B.8.1 = YES = .142 / B.8.2 = YES = .142)</p> <p>[6] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists the aid of property owners toward the goal of turning wildland urban interface properties into less volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.28/.pdf p.35) (B.8.1 = YES = .142 / B.8.2 = YES = .142)</p> <p>[7] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 While not utilized as one of the assessment tools for this CWPP, the Steering Committee promotes the standards of the act for private lands, other than Sunriver Owners Association common areas and those properties subject to the Sunriver Ladder Fuels Reduction (LFR) Plan, explained in the previous section. (p.12/.pdf p.20) (B.8.1 = YES = .142) The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists 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 structures and properties from wildfires. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (P.12/.pdf p.20) (B.8.2 = YES = .142)</p>	<p style="text-align: center;">B.8</p> <p>Oregon Forestland-Urban Interface Fire Protection Act</p> <p>The Oregon Forestland-Urban Interface Fire Protection Act, often referred to as Senate Bill 360, enlists the aid of property owners toward turning fire-vulnerable urban and suburban properties into less-volatile zones where firefighters may more safely and effectively defend homes from wildfires. Basically, the law requires property owners in identified forestland-urban interface areas to reduce excess vegetation which may fuel a fire, around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.18/.pdf p.502) (B.8.1 = YES = 1)</p> <p>Deschutes County is one of two counties in Oregon that has fully implemented the Act. Senate Bill 360 requirements have been applied county-wide. Residents can maintain their defensible space through incentive programs such as the spring and fall Fire Free Clean Up days. Local fire departments and the Fire Prevention Co-op provide education. Monitoring is conducted by visits to the area and ongoing educational campaigns for homeowners. (p.19/.pdf p.503) (B.8.2 = YES = 1)</p>

Deschutes County (Continued)			
CWPP		Comprehensive Plan	
B.9	<p>[1] - Oregon Department of Forestry The Oregon Department of Forestry works with larger landowners on a cost share basis to reduce hazardous fuels and the potential for losses on larger tracts of land. ODF is also the program administrator for the Oregon Forestland-Urban Interface Fire Protection Act of 1997, also known as Senate Bill 360. See page 35 for information about Senate Bill 360.(p.</p>		
	<p>[2] - The Oregon Department of Forestry is the agency steward of this program. It supplies information about the act's fuel-reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. (p.11-12/.pdf p.21-22)</p>		
	<p>[3] - The Oregon Department of Forestry works with larger landowners on a cost share basis to reduce hazardous fuels and the potential for losses on larger tracts of land. Over the last five years, ODF has worked with five private landowners across eight projects to reduce hazardous fuels within the UDRC CWPP boundary. A total of 86.2 acres has been treated. ODF is also the program administrator for the Oregon Forestland-Urban Interface Fire Protection Act of 1997, also known as Senate Bill 360. See page 41 for information about Senate Bill 360. (p.20/.pdf p.25)</p>		
	<p>[4] - Oregon Department of Forestry (ODF) has been focusing on improving the Highway 97 corridor, which is critical in a large wildfire situation. ODF will continue to work with private landowners to accomplish fuel reduction on lots throughout the Greater La Pine CWPP boundary. In the last five years, there have been many grants that have allowed for chipping of the material removed in fuel reduction projects on private lands. ODF has also conducted many voluntary Senate Bill 360 re-certifications for residents throughout the Greater La Pine CWPP Boundary. (p.10/.pdf p.19)</p>		
	<p>[5] - Oregon Department of Forestry The Oregon Department of Forestry works with large landowners on a cost share basis to reduce hazardous fuels and the potential for losses on larger tracts of land and with homeowner and neighborhood associations on commons lands. Oregon Forestland-Urban Interface Fire Protection Act of 1997 The Oregon Forestland-Urban Interface Fire Protection Act, also known as Senate Bill 360, enlists the aid of property owners toward the goal of turning firevulnerable urban and suburban properties into less volatile zones where firefighters may more safely and effectively defend homes from wildfires. The law requires property owners in identified forestland-urban interface areas to reduce excess vegetation around structures and along driveways. In some cases, it is also necessary to create fuel breaks along property lines and roadsides. (p.11/.pdf p.21)</p>		
	<p>[6] - The Oregon Department of Forestry is the agency steward of this program. It supplies information about the act's fuel reduction standards to property owners. ODF also mails each of these property owners a certification card, which may be signed and returned to ODF after the fuel reduction standards have been met. (p.29/.pdf p.36)</p>		
	<p>[7] - Oregon Department of Forestry (ODF) Sunriver Owners Association works closely with the Oregon Department of Forestry (ODF) under the Oregon Forestland Urban Interface Fire Protection Act of 1997 or commonly called Senate Bill 360. SROA developed an alternative plan, a Ladder Fuel Reduction (LFR) plan, that meets the standards outlined under this legislation. (p.12/.pdf p.20) (all ODF)</p>		
TOTAL	11.96	TOTAL	6

Douglas County (Four CWPP Jurisdictions Total)			
CWPP		Comprehensive Plan	
B.2	<p>[1] - Priority Fuel Reduction Area Identification The 2010 Douglas County Community Wildfire Protection Plan Steering Committee concluded that the most efficient way to identify the North Umpqua CWPP area boundary, was to utilize the Hydrologic Unit Code 6 (HUC6) boundaries. The CWPP boundary identified in the North Umpqua CWPP area boundary, is defined by the limits of the HUC6 boundary where the Wildland Urban Interface (WUI) areas and the primary evacuation routes are identified in the original Douglas County CWPP. (p.5/.pdf p.5) (B.2.1 = YES = .25 / B.2.2 = YES = .25)</p> <p>[2] - CWPP Area Identification The 2011 Douglas County Community Wildfire Protection Plan Steering Committee concluded that the most efficient way to identify the South County CWPP area boundary was to utilize the Hydrologic Unit Code 6 (HUC6) boundaries, because they delineate major drainages which are logical firefighting control points. The CWPP boundary identified in the South County CWPP area is defined as the HUC6 units that encompass previously identified Wildland Urban Interface (WUI) areas, the evacuation routes servicing those areas, as well as recreational areas where large groups congregate during high fire danger periods. Within the CWPP area the previously identified WUI areas are the Priority Fuel Reduction Areas. In these WUI areas there exists the greatest potential for loss of life and property because of the density of human habitation. (p.10-11/.pdf p.11-12) (B.2.1 = YES = .25 / B.2.2 = YES = .25)</p> <p>[3] - CWPP Area Identification The 2012 County CWPP steering committee concluded that the most efficient way to identify the Roseburg West CWPP area boundary was to utilize the Hydrologic Unit Code 6 (HUC 6) boundaries, because they delineate major drainages which are logical firefighting control points. The CWPP boundary identified in the Roseburg West CWPP area is defined as the HUC 6 units that encompass previously identified Wildland Urban Interface (WUI) areas, the evacuation routes servicing those areas, as well as recreational areas where large groups congregate during high fire danger periods. Within the CWPP area the previously identified WUI areas are the Priority Fuel Reduction Areas. In these WUI areas there exists the greatest potential for loss of life and property because of the density of human habitation. (p.9/.pdf p.10) (B.2.1 = YES = .25 / B.2.2 = YES = .25)</p> <p>[4] - CWPP AREA IDENTIFICATION The 2013 Douglas County Community Wildfire Protection Plan Steering Committee concluded that the most efficient way to identify the North County CWPP area boundary was to utilize the Hydrologic Unit Code 6 (HUC6) boundaries, because they delineate major drainages which are logical firefighting control points. The CWPP boundary identified in the North County CWPP area is defined as the HUC6 units that encompass previously identified Wildland Urban Interface (WUI) areas, the evacuation routes servicing those areas, as well as recreational areas where large groups congregate during high fire danger periods. Within the CWPP area the previously identified WUI areas are the Priority Fuel Reduction Areas. In these WUI areas there exists the greatest potential for loss of life and property because of the density of human habitation. (p.9/.pdf p.13) (B.2.1 = YES = .25 / B.2.2 = YES = .25)</p>	B.2	<p>48. A conflict also occurs when fire danger is increased or fire suppression costs rise and firefighting techniques are altered due to the introduction of residentialousing in forest areas. (p.2-6/.pdf p.24). (B.2.1 = NO = 0 / B.2.2 = YES = 1)</p>
	B.3	<p>[1] - Action Items: 1) Clear hazardous fuels 100' from critical infrastructure area and access/egress routes. 2) Thin hazardous fuels within 300' of infrastructure. (p.8/.pdf p.8) (B.3.1 = YES = .25 / B.3.2 = NO = 0)</p> <p>[2] - Action Items: • Clear hazardous fuels 100' from critical infrastructure area and access/egress routes. • Maintain all access/egress routes for fire fighting access during initial and extended attack. • Thin 300' from structures, alongside roads, evacuation routes, and critical infrastructure. This larger road buffer area is intended to give firefighters adequate time to respond when a fire starts. • Clear hazardous fuels along escape routes. • Quickly respond after a wildfire. • Immediately begin restoration and recovery. • Restore Oak woodlands. • Reduce fuel loads to fire resilient levels, similar to precontact conditions. (p.14/.pdf p.15) (B.3.1 = YES = .25 / B.3.2 = NO = 0)</p> <p>[3] - Within CWPPR area boundary Action Items: • Clear hazardous fuels 100' from critical infrastructure area and access/egress routes. • Maintain all access/egress routes for fire fighting access during initial and extended attack. • Thin 300' from structures, alongside roads, evacuation routes, and critical infrastructure. This larger road buffer area is intended to give firefighters adequate time to respond when a fire starts. • Clear hazardous fuels along escape routes. • Quickly respond after a wildfire. • Immediately begin restoration and recovery. • Restore Oak woodlands. • Reduce fuel loads to fire resilient levels, similar to precontact conditions. (p.12/.pdf p.13) (B.3.1 = YES = .25 / B.3.2 = NO = 0)</p> <p>[4] - Within the CWPP (WUI-CWPP-HUC) Boundary This is the priority fuel reduction area. Action Items: • Clear hazardous fuels within 100' of homes, structures, and critical infrastructure areas. • Thin 300' from structures, alongside roads, evacuation routes, and critical infrastructure. This larger road buffer area is intended to give firefighters adequate time to respond when a fire starts. Maintain all roads for fire fighting access during initial and extended attack. (p.10/.pdf p.14) (B.3.1 = YES = .25 / B.3.2 = NO = 0)</p>	B.3

Douglas County (Continued)			
CWPP		Comprehensive Plan	
B.6	<p>[1] - 6) Develop additional communication facilities and new types of communication which make the public aware of a wildfire during the wildfire event, when funding is available. (p.8/.pdf p.8) (B.6.1. = YES = .25 / B.6.2. = NO = 0)</p> <p>[2] = 0</p> <p>[3] = 0</p> <p>[4] = 0</p>	B.6	<p>FIRE PROTECTION</p> <p>Structures in urban areas are characteristically located much closer to one another than in rural areas. This proximity, in turn, increases the danger of fire spreading from one property to another. In response to this potential, all of the UUAs, with the exception of Glide, rely on urban type fire suppression equipment including hydrants. Fire ratings for these areas, as determined by the Insurance Service Office of Oregon, vary from 5 to 8 (on a scale of 1 through 10, with 1 being the highest level of service). (p.15-67/.pdf p.465) (B.6.1 = YES = 1 / B.6.2. = NO = 0)</p>
B.7	<p>[1] - Douglas County Fire District 2 and the Glide Rural Fire District serve the North Umpqua CWPP area. Equipment and staffing inventory for each district is as follows: Douglas County Fire District 2</p> <ul style="list-style-type: none"> • 50 Fire Fighters • 6 Type 1 Class A Structural Engines • 3 Type 2 Water Tenders • 1 Type 1 Water Tenders • 6 Type 6 Wildland Engines • 14 Advanced Life Support (ALS) Ambulances • 5 Command Vehicles <p>Glide Rural Fire District</p> <ul style="list-style-type: none"> • 25 Fire Fighters • 2 Type 1 Class A Structural Engines • 3 Type 2 Water Tenders • 1 Type 6 Wildland Engine • 2 Basic Life Support (BLS) Ambulances (p.4/.pdf p.4) (B.7.1. = YES = .25 / B.7.2. = YES = .25) <p>[2] - Emergency Equipment and Staffing Inventory The South County CWPP area stretches from just north of Myrtle Creek to the east, south, and west boundaries of the County. Within this boundary there are nine Rural Fire Protection Districts, State and Federal Agencies, and the Cow Creek Band of Umpqua Tribe of Indians. The following is a staff and equipment inventory of resources available from each entity. (p.8/.pdf p.9) (B.7.1. = YES = .25 / B.7.2. = YES = .25)</p> <p>[3] - Emergency Equipment and Staffing Inventory Within the Roseburg West CWPP area boundary there are twelve Rural Fire Protection Districts, State and Federal Agencies. The following is a staff and equipment inventory of resources available from each entity. (p.7/.pdf p.8) (B.7.1. = YES = .25 / B.7.2. = YES = .25)</p> <p>[4] - WESTERN LANE FIRE PROTECTION DISTRICT: (current, April 2013) The Western Lane District provides wildland fire protection on private, County, State and BLM lands in northern Douglas County within the Western Lane Forest Protection District. During fire season the District has the following resources available:</p> <ul style="list-style-type: none"> 10 Type 6X Engines 1 Type 5 Engine 2 Type 4 Engines 1 Type 2 Water tender 1 Type 2 Helicopter on contract 25 Seasonal Firefighters 20 Fulltime staff (fire, admin, state and private forest programs) (p.9/.pdf p.13) (B.7.1. = YES = .25 / B.7.2. = YES = .25) 	B.7	<p>39. Rural fire protection districts (RFPDs) are formed pursuant to ORS 478 to provide fire protection to urban unincorporated areas or rural residential areas. (p.14-4/.pdf p.397) (B.7.1 = YES = 1 / B.7.2 = NO = 0)</p>
TOTAL	5.25	TOTAL	4

Gilliam County			
CWPP		Comprehensive Plan	
B.2	<p>C. Step Three: Establish a Community Base Map</p> <p>A series of county maps were developed using the Gilliam County GIS mapping system. A Base Map showing historic wildfire occurrence and Wildland Urban Interface (WUI) boundaries was developed and used during plan development. (p.9/.pdf p.9) (B.2.1 = YES = 1 / B.2.2 = YES = 1)</p>		
B.3	<p>Each county will establish a classification committee that will identify the hazard class of each area affected by the act. Once classified, landowners are provided a certification package and given two years to certify that their lands meet the standards. (p.32/.pdf p.32) (B.3.1 = YES = 2)</p> <p>The vegetation treatment prescription found in the act is derived from research conducted at the Rocky Mountain Research Station in Missoula, Montana (Cohen and Saveland, 1996). The measures are simple and easy to apply and include:</p> <ul style="list-style-type: none"> • Removing pine needles and leaves from the roof. • Pruning limbs from trees, keeping trees healthy. • Removing shrubs near the home and close to trees. • Mowing dead grass near the home. • Storing firewood and other flammable material at least 20 feet from the home (during fire season). • Removing tree limbs within 10 feet of a chimney opening. • Maintaining a shaded fuel break near the house and in some cases around the property line. • Maintaining driveways that are over 150 feet long, clear of branches and trees that could prevent emergency vehicles from gaining access to the structure. (p.32/.pdf p.32) (B.3.2 = YES = 1) 		
B.4	<p>The act does contain a potential civil liability if the homeowner does not certify their property in two years after notification. If a fire originates on that property and spreads through the area that should be treated and the Oregon Department of Forestry must utilize extraordinary suppression efforts to contain that fire, a home owner could be liable for up to one hundred thousand dollars of suppression costs. (p.33/.pdf p.33) (B.4.1 = YES = 2 / B.4.2 = YES = 1)</p>		
B.6	<ul style="list-style-type: none"> • Review your homeowner's insurance policy for adequate coverage. Consult your insurance agent about costs of rebuilding and repairs in your area. (p.41/.pdf p.41) (B.6.1 = YES = 1) <p>Appendix D. Firewise Practices to Reduce Wildfire Vulnerability/Ignitability No cost, just a little time projects</p> <ul style="list-style-type: none"> • Move your firewood pile out of your home's defensible space. • Perform a FIREWISE assessment of your home. • Clean your roof and gutters of leaves and pine needles (best done in October). • Clear the view of your house number so it can be easily seen from the street. • Put a hose (at least 100' long) on a rack and attach it to an outside faucet. • Trim all tree branches if they overhang your house. • Trim all tree branches from within 20' of all chimneys. • Remove trees along the driveway to make it 12' wide. • Prune branches overhanging the driveway to have 14' overhead clearance. • Maintain a green lawn for 30' around your home. • If new homes are still being built in your area, talk to the developer and local zoning officials about building standards. • Plan and discuss an escape plan with your family. Have a practice drill. Include your pets. • Get involved with your community's disaster mitigation plans. • Check your fire extinguishers. Are they still charged? Are they easy to get to in an emergency? Does everyone in the family know where they are and how to use them? • Clear deadwood and dense flammable vegetation from your home's defensible space. • Remove conifer shrubs from your home's defensible space especially if your home is in a high-risk area. • Review your homeowner's insurance policy for adequate coverage. Consult your insurance agent about costs of rebuilding and repairs in your area. • Talk to you children about not starting fires or playing with matches. • If you have a burn barrel that you use for burning trash, remove it! • Compost leaves in the fall, don't burn them. • If you burn your brush piles or grass in the spring, get a burning permit. • Always have a shovel on hand and hook up the garden hose BEFORE you start the fire. • Never burn if the smoke and flames are blowing towards your home (or your neighbor's home). ***This section goes on to further describe a multitude of practices that can reduce costs and provide information and support to private landowners during mitigation projects and preparation. Because of this rationale, the Gilliam CWPP is considered to satisfy criteria B.6.2. (P.41/.pdf p.41) (B.6.2 = YES = 1) 		

Gilliam County (Continued)			
CWPP		Comprehensive Plan	
B.7	<p>Gilliam County has two Rural Fire Protection Districts while the cities of Arlington and Condon each have their own Fire Departments. The districts and fire departments are all served by volunteers. The Arlington Fire Department and the North Gilliam County Rural Fire District operate essentially as one department and share the same fire chief and fire fighters. The Condon Fire Department and the South Gilliam County Rural Fire District have their own facilities but share the same chief and fire fighters, although it is their goal to eventually combine their equipment under one roof.</p> <p>The North Gilliam County Rural Fire Protection District contains about 370 square miles (30.3 percent of the county) while the South District has 788 square miles (64.4 percent). About 5.3 percent or 65 square miles are in an unprotected status, although the North Gilliam County Fire Protection District plans to annex these lands soon. (p.13/.pdf p.13) (B.7.1 = YES = 1 / B.7.2 = YES = 1)</p>	B.7	<p>8. The residents of the southern part of Gilliam County have formed a Rural Fire Protection District, which is headquartered at Condon. The residents of the northern part of Gilliam County have formed a Rural Fire Protection District, which is headquartered at Arlington. The east/west central section of Gilliam County in the vicinity of Rock Creek is not protected by a Rural Fire Protection District. (p.2/.pdf p.39) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>
B.8	<p>Senate Bill - 360</p> <p>The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB-360) is the State of Oregon's response to several escalating wildland fire problems. Wildfires are burning homes in the interface and firefighters are working in increasingly hazardous situations. Fire suppression costs are increasing significantly in Oregon. Fire fighting resources are limited and in some cases emergency service agencies cannot provide equipment and personnel to all structures threatened by a wildfire. SB-360 addresses these concerns and enlists the aid of the only people who can make fuel reduction changes to residential property: the landowners themselves. (p.32/.pdf p.32) (B.8.1. = YES = 1 / B.8.2 = YES = 1)</p>		
B.9	<p>The act applies to lands protected by the Oregon Department of Forestry and does not apply to other properties outside of ODF protection. (p.32/.pdf p.32) (ODF)</p>		
TOTAL	14	TOTAL	2

Grant County			
CWPP		Comprehensive Plan	
B.2	The Federal Register states, 'the urban-wildland interface community exists where humans and their development meet or intermix with wildland fuel.' This definition is found in the Federal Register Vol. 66, Thursday, January 4, 2001, Notices; and in "Fire in the West, the Wildland/Urban Interface Fire Problem, A Report for the Western States Fire Managers, September 18, 2000. (.pdf p.38) (B.2.1 = YES = 1 / B.2.2 = NO = 0)	B.2	On Forest lands the county sets forth the following policies: (6) To recognize the increased potential for fire when houses or other structures are allowed in forest areas; (p.16/.doc p.17) The general goal of this element is, therefore, to protect life and property from natural disasters and hazards. In dealing with flooding and other water hazards, the County's policies are to: (8) Adopt the "Fire Safety Considerations for Developments in Forested Areas" publication as reference in consideration of development near forested areas. (p.30/.doc p.31) (B.2.1 = YES = 1 / B.2.2 = NO = 0)
B.3	The Oregon Forestland-Urban Fire Protection Act of 1997 (SB360) is intended to facilitate development of and effective WUI protection system in Oregon by...3) establishing standards for WUI property owners so they can manage or minimize fire hazards and risks (p.8/.pdf p.12) (B.3.1 = YES = 2 / B.3.2 = NO = 0)		
B.5	The use of international resources are available through the Northwest Compact and Annual Operations Guidelines and International Agreements in the National Mobilization Guide. (p.13/.pdf p.17) (B.5.1 = YES = 1 / B.5.2 = NO = 0)		
B.7	Within the county boundary there are nine (9) cities with fire departments. All are operated with volunteer fire fighters. This includes three (3) rural fire protection districts within the county. Also, there are several communities and many well populated areas that do not have fire departments including Dale, Fox, Ritter, Greenhorn, Izee, Kimberly, Susanville, and Austin. There are three (3) organizations that provide forest fire protection, BLM (Bureau of Land Management), USFS (United States Forest Service), and ODF (Oregon Department of Forestry). The John Day airport has a helibase with rappellers and a single engine air tanker (SEAT) available during the summer fire season. (p.3/.pdf p.7) (B.7.1 = YES = 1 / B.7.2 = YES = 1)	B.7	Relative to utilities, the County's policies are to; (7) Fire protection shall be considered a common problem by the Cities, the County, Fire Protection Districts, and those government agencies responsible for fire protection on public or private lands. (p.49/.doc p.50) No explicit presence of fire warden or other administrative responsibilities (B.7.1 = YES = 1 / B.7.2 = NO = 0)
B.8	Senate Bill 360: Oregon Forestland-Urban Fire Protection Act The Oregon Forestland-Urban Fire Protection Act of 1997 (SB360) is intended to facilitate development of and effective WUI protection system in Oregon by 1) establishing policies regarding WUI protection, 2) defining the WUI in Oregon and establishing a process and system for classifying the interface, 3) establishing standards for WUI property owners so they can manage or minimize fire hazards and risks, and 4) providing the means for establishing adequate, integrated fire protections systems in WUI areas, including information and prevention efforts. (p.8/.pdf p.12) (B.8.1 = YES = 1 / B.8.2 = YES = 1)		
TOTAL	8	TOTAL	2

Harney County			
CWPP		Comprehensive Plan	
B.2	The primary focus of the Harney County CWPP is county-wide. The plan emphasizes the communities of Burns, Hines, Drewsey, Crane, Diamond, Frenchglen, Fields, Andrews, Riley, and rural residences throughout the county. The Wildland-Urban Interface (WUI) is designated as the boundaries of Harney County. Human life and welfare are values at risk to wildfire because of the buildup of hazardous fuels around communities and structures, poor emergency vehicle ingress and egress, a large area to cover with the fire authorities, and inadequately trained and/or equipped fire suppression authorities. (.pdf p.7) (B.2.1. = YES = 1 / B.2.2 = YES = 1)		
B.3	5.2 Suggested Actions to Achieve Desired Results The CWPP provides recommendations for hazardous fuels reduction, defensible space, building materials, education, outreach, infrastructure needs, water availability, and access. There is only so much fire authorities can do to protect individual life and property from wildland fires. The C:\Users\1drobinson\AppData\Local\Microsoft\Windows\Temporary Interioet Files\Content.Outlook\J6LDSFA\Harney County CWPP- 2013 Update - Final.doc 22 most effective form of mitigation is education and outreach. The purpose of a community-wide education program is to 1) educate the public to the risks of wildfire to property and life (during the summer months); 2) urge property owners to take responsibility in reducing the risk of wildfire and to create defensible space around their structures; 3) teach the benefits of different types of fire resistant building materials; and 4) increase awareness of the natural role of lowintensity fire in grassland and woodland ecosystems and make known the benefits from thinning fuel loaded areas. Education makes other mitigation programs possible. (p.23/.pdf p.34) (B.3.1. = YES = 2 / B.3.2 = YES = 1)		
B.6	• Strengthen the firefighting ability of the RFP As through motivation, training, and improved equipment. Work with the RP As to maintain adequate funding for insurance, fuel, and equipment repair. Handheld, federal compatible radios are needed to improve communication within and among the RFP As, and with federal agencies. (.pdf p.10) (B.6.1. = YES = 1 / B.6.2 = NO = 0)		
B.7	Currently, fire suppression authorities include the Central Oregon Forest Protection District, Burns and Hines Fire Departments, four Rangeland Fire Protection Associations (RFP A), BIFZ (USDA Forest Service and USDI Bureau of Land Management), U.S Fish and Wildlife Service (USFWS), and the Burns Paiute Indian Reservation. Mutual Aid Agreements exist among the fire authorities for mutual aid and support in the event of a wildfire incident. However, each fire authority operates under regulations that dictate their area of responsibility and specify limitations. The CWPP provides the means to identify wildfire risk, prioritize mitigation projects, improve public awareness, and improve fire authority coordination to better manage wildfire. (p.3/.pdf p.14) (B.7.1 = YES = 1 / B.7.2 = YES = 1)	B.7	The document consistently references various rural communities and regions within the county that explicitly "do not" have fire protection districts. The mention of the key term "fire protection district" still warrants one (1) value point, because a lack of an established district still describes a management structure. (B.7.1. = YES = 1 / B.7.2. = NO = 0)
B.8	[listed as a reference within the bibliography] Oregon Revised Statutes. 477.015. The Oregon Forestland-Urban Interface FireProtection Act of 1997 (Oregon Senate Bill 360). (p.40/.pdf p.51) (B.8.1 = YES = 1 / B.8.2 = NO = 0)		
TOTAL	9	TOTAL	1

Jackson County (5 Jurisdictions Total)			
CWPP		Comprehensive Plan	
B.2	<p>[1] - Our maps and layers suggested we begin at the wildland-urban interface, where the physical aspects of the lands, the numerous human-caused fire starts, and the vegetation buildups presented the highest threats. In general, areas around homes seemed to be the single most essential point to address throughout the watershed. After that came lands near residences and roads, especially those where aspect, vegetation, slope, and elevation combined to increase the hazard ratings. Even as we decided to concentrate efforts in these high-risk areas, we emphasized the importance of not losing track of the overall picture of watershed-wide healthy forests – that is, forests with biodiversity, beauty, and resources that can provide us with cool, clear water; fish; a sustainable timber supply; and peace of mind. (p.62/.pdf p.59) (B.2.1. = YES = .2 / B.2.2. = YES = .2)</p> <p>[2] - What is the "Wildland Urban Interface"? The Wildland Urban Interface (or "WUI" as it is often referred to) is defined as a geographical area where human habitation and their developments intermix with wildland or vegetative fire fuels. This human development may consist of both interface and intermix communities. Typically, these communities meet or exceed housing densities of one structure per five acres, with natural vegetation coverage of at least 50% of the land area. The typical boundaries of a WUI exist without reference to municipal city limits or urban growth boundaries. (p.10/.pdf p.10) (B.2.1. = YES = .2 / B.2.2. = YES = .2)</p> <p>[3] - Defensible space does not need to be bare. In fact, after an area around a home has been converted from an unmanaged "green wall" to a defensible space, many find it much more attractive. Compared to more densely populated Wildland Urban Interface Zones, the Colestin community is fortunate in that most properties are large enough that they can be managed as defensible space without impinging on neighbors or seriously reducing privacy. (p.43/.pdf p.47) (B.2.1. = YES = .2 / B.2.2. = NO = 0)</p>	B.2	<p>Urban wildfire interfacestandards should be implemented to mitigate against potential wildfire impacts to the upland forest environment. Adequate area is available to provide for fuelbreaks to address this issue. (p.4-162/.pdf p.819) (B.2.1 = YES = 1 / B.2.2. = NO = 0)</p>
	<p>[4] - The WUI is defined as the area or zone where structures and other human development meet or intermingle with wildland or vegetative fuels.⁷⁸ The Healthy Forests Restoration Act defines the WUI as follows: (A) an area within or adjacent to an at-risk community that is identified in recommendations to the Secretary in a community wildfire protection plan; or (B) in the case of any area for which a community wildfire protection plan is not in effect— i. an area extending 1/2-mile from the boundary of an at-risk community; ii. an area within 11/2 miles of the boundary of an at-risk community, including any land that— I. has a sustained steep slope that creates the potential for wildfire behavior endangering the at-risk community; II. has a geographic feature that aids in creating an effective fire break, such as a road or ridge top; or III. is in condition class 3, as documented by the Secretary in the projectspecific environmental analysis; and iii. an area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community. (p.60/.pdf p.77) (B.2.1. = YES = .2 / B.2.2. = YES = .2)</p> <p>[5] - For purposes of this CWPP, we defined the WUI as a zone encompassing SB 360 designated lands (see section 2.4) and adjacent areas of wildland vegetation, bounded by major ridgelines (figure 4). In most cases, these ridgelines correspond to 6th field watershed boundaries. Where the WUI boundary does not follow ridgelines, it is defined as 1.5 miles from SB 360 lands, the approximate distance a firebrand can travel from a wildland fire to ignite the roof of a house. The WUI encompasses much of the watershed (figure 3.5) except for remote, uninhabited areas in the north. This is an interim definition; we recommend using the Jackson County Fire Plan's WUI when it is adopted. (p.4/.pdf p.14) (B.2.1. = YES = .2 / B.2.2. = YES = .2)</p>		

Jackson County (Continued)

CWPP		Comprehensive Plan	
<p>B.3</p>	<p>[1] - 2) Fire Safety Requirements: The following are mandatory standards for all new construction, or other significant outbuildings, as defined above, in the Hazardous Wildfire Area, resource and rural zoning districts. Properties zoned Rural Residential (RR-5, RR-10, RR-00) and which are located within an urban growth boundary (UGB) or an urban containment boundary (UCB), are not subject to the 100-foot fuel break requirements, but are subject to all other fire safety standards. Conditional uses in the resource and rural residential zoning districts shall meet these requirements unless an alternate fire prevention and suppression strategy is approved. (p.101/.pdf p.104) (B.3.1. = YES = .4 / B.3.2. = YES = .2)</p> <p>[2] - In those areas where thinning or other fuels reduction (e.g., broadcast burning, chipping, pile burning) are desired, create more open stand structures in those forest types and topographic settings where such conditions would be expected under a natural disturbance regime (e.g., dry plant associations on south and west aspects, upper third slope positions and other low productivity sites) so as to contribute to the landscape-scale restoration of habitat heterogeneity in the watershed. (p.78/.pdf p.78) (B.3.1. = YES = .4 / B.3.2. = NO = 0)</p> <p>[3] - FUELS REDUCTION This generally means the reduction of surface and ladder fuels in order to reduce the spread of fire, both horizontally along the ground and vertically into the tree crowns. Common approaches include using hand crews to thin trees, remove lower limbs to reduce ladder fuels or "limbing", remove dead material, and remove brush or "brushing". Whenever possible, we will seek recoup some of project costs by using byproducts for firewood, poles, or by selling logs to small diameter users. Remaining slash is typically disposed of through burning, which is less expensive, or chipping. This work is labor-intensive and expensive, ranging from \$1000-\$2500 per treated acre. (p.48/.pdf p.52) (B.3.1 = YES = .4 / B.3.2. = NO = 0)</p> <p>[4] - An effective defensible space zone should have these features: <ul style="list-style-type: none"> ◆ Green, healthy, fire-resistant plants ◆ Native grass cut to a height no greater than six inches ◆ No dead vegetation ◆ Brush and trees are thinned so that fire won't transfer from plant-to-plant ◆ Limbs pruned & underbrush removed to eliminate "ladder fuels," so that fire won't transfer from the ground into tree crowns ◆ Firewood and lumber piles stored in a fully enclosed structure, or moved at least 30 feet from a home or any other building ◆ No flammable material beneath decks and exterior stairways ◆ Metal mesh screens behind all exterior vents ◆ No vegetation or other flammable material within 10 feet of chimneys (p.82/.pdf p.99) (B.3.1. = YES = .4 / B.3.2. = YES = .2) </p> <p>[5] - Fuels Reduction <ul style="list-style-type: none"> • Homesite Consultations. Neighborhood meetings generated signups for more than 150 homesite consultations. Conducted by ODF, these consultations help residents understand how to create and maintain defensible space, and in many cases result in cost-shared homesite defensible space projects. • Cost-share Grants. Since the project was initiated, 278 cost-shared homesite grants have been awarded and are either in progress or completed. Many of these originated from the homesite consultations listed above, while others learned about the availability of cost-share fund through the Project's tabloid newspaper, described below. • Homesite Status. Field surveys of sample neighborhoods have revealed that an average of 91% of homesites are "green," i.e., in compliance with SB360 standards. The percentage of green homesites within individual neighborhoods ranges from 68% to 100%. (p.7/.pdf p.45) (B.3.1. = YES = .4 / B.3.2. = YES = .2) </p>	<p>B.3</p>	<p>Urban wildfire interface standards should be implemented to mitigate against potential wildfire impacts to the upland forest environment. Adequate area is available to provide for fuelbreaks to address this issue. (p.4-162/.pdf p.819) (B.3.1. = NO = 0 / B.3.2 = YES = 1)</p>
<p>B.4</p>	<p>[1] - The exposure to this liability varies, depending upon the person's level of negligence. When individuals willfully, maliciously, or negligently allow their burn to escape, they are responsible to repay all of ODF's suppression costs. The most common examples of negligence that result in escaped burns are: leaving the burn unattended before it is completely out, burning during dry or windy conditions, not having an adequate fire break, and having insufficient fire tools or water available. (p.97/.pdf p.100) (B.4.1. = YES = .4 / B.4.2. = YES = .2)</p> <p>[2] - The potential for loss of life and destruction of property is very real in the Ashland WUI. Loss of private property and damage to public forestland and parkland are the likely outcomes of a serious WUI fire event. These common areas also hold significant value for recreation, wildlife habitat, and spiritual renewal. Responsibility for maintaining a fire-safe landscape on private land affects not only that property owner but adjacent homes, property, and the common values on public land as well. (p.19/.pdf p.19) (B.4.1. = YES = .4 / B.4.2. = NO = 0)</p> <p>[3] - 0</p> <p>[4] - Certification relieves a property owner from the act's fire cost-recovery liability. This takes effect on properties that are within a forestland-urban interface area and for which a certification card has not been received by the Department of Forestry. (p.83/.pdf p.100) (B.4.1. = YES = .4 / B.4.2. = YES = .2)</p> <p>[5] - 0</p>		

Jackson County (Continued)			
CWPP		Comprehensive Plan	
B.6	<p>[1] - Sharing the Costs Funding Sources Do you want to do some fuel reduction work on your property or maybe improve management on your woodland property, but your funds are limited? Don't despair! Right now there are several cost-share programs available to help pay for this work. Cost-share programs are one way to accomplish expensive projects for minimal out-of-pocket costs – and, yes, treating excess vegetation growth can be expensive. A number of government cost-share programs can partially reimburse qualifying landowners for hazardous fuel treatments such as brush and slash disposal, stand thinning, rehabilitation of brushlands, habitat improvement, and stewardship planning. Costs for landowner labor and use of personal equipment can also be included. (p.139/.pdf p.138) (B.6.1. = YES = .2 / B.6.2. = YES = .2)</p> <p>[2] - 0</p> <p>[3] - Lomakatsi Restoration Project has done several larger scale projects in the Colestin area, and continues to pursue funding to enable more projects pursuant to this CWPP. Some situations may permit the use of heavy machinery, such as dozers or slash busters. Larger projects may require professional logging contractors. (p.48/.pdf p.52) (B.6.1. = YES = .2 / B.6.2. = NO = 0)</p> <p>[4] - ♦ Some insurance companies require policyholders to establish defensible space fuelbreaks around homes and other structures. Does your insurance carrier require this? Are you eligible for a rate reduction if you have defensible space? ♦ Are you in danger of losing your insurance coverage if your home is located in a wildfire hazard zone? ♦ Discuss improvements you could do to make your home less vulnerable to fire damage, such as replacing a wood shake roof with nonflammable roofing, or adding a secondary water source for fire protection. Will this result in a change in the cost of your policy or your level of coverage? (p.91/.pdf p.108) (B.6.1. = YES = .2 / B.6.2. = YES = .2)</p> <p>[5] - Funding. National Fire Plan funding for fuels reduction projects in the Wildland-Urban Interface (WUI) is increasingly tied to community fire planning efforts. The fact that a community fire planning project is active in the Seven Basins watershed has made it easier to secure cost-share funding. For example, ODF's 2004 National Fire Plan grant requests for defensible space work were approved for the Seven Basins and Applegate watersheds, both areas where fire planning is on-going; but not approved for other areas of Jackson County where organized fire planning activities are lacking. (p.7/.pdf p.45) (B.6.1. = YES = .2 / B.6.2. = NO = 0)</p>	B.6	<p>Beyond the area served by rural fire protection districts, state or federal firefighters provide the only formal fire suppression service. This service does not include the protection of structures, and as a result, many dwellings and structures have no form of fire protection whatsoever. (p.17-3/.pdf p.316) (B.6.1 = YES = 1 / B.6.2. = NO = 0)</p>
B.7	<p>[1] - F) Rural Fire Protection: Dwellings on farm or forest lands, or on rural residentially zoned lands which are not within an urban growth boundary (UGB) or an urban containment boundary (UCB), shall be located within a rural fire protection district or contract with a rural fire protection district for residential fire protection. If the dwelling is not within a rural fire protection district and contracting is not possible, evidence must be provided to show that the applicant has asked to be included in the nearest such district, and that said district cannot or has refused to provide protection. (p.103/.pdf p.106) (B.7.1. = YES = .2 / B.7.2. = YES = .2)</p> <p>[2] - Fuels management projects are photographed before and after work is completed. The areas treated are entered into the City's GIS database for tracking (see Map 2). Each fire season a map is produced showing managed fuels and opportunities for fire suppression in the WUI zone. Copies are distributed to the Oregon Department of Forestry, Jackson County Fire District #5, and the U.S. Forest Service. (p.17/.pdf p.17) (B.7.1. = YES = .2 / B.7.2. = NO = 0)</p> <p>[3] - The Colestin Rural Fire District (CRFD) is a non-profit volunteer public service agency chartered by Jackson County in the State of Oregon, funded in part by an annual county tax levy, with supplemental support from district fundraising and private contributions. It is guided by an elected unpaid board of directors. (p.25/.pdf p.29) (B.7.1. = YES = .2 / B.7.2. = YES = .2)</p> <p>[4] - The County's decision to authorize a fuelbreak reduction will consider the advice of the nearest fire protection district or agency, and may impose additional standards, conditions or require technical information as needed to assure compliance. (p.145/.pdf p.162) (B.7.1. = YES = .2 / B.7.2. = YES = .2)</p> <p>[5] - The CWPP was written by the Seven Basins steering committee, incorporating data and expertise of the Oregon Department of Forestry and the Bureau of Land Management. All three fire districts gave important input both through meetings to study risk assessment data and through field surveys. Residents' concerns and information were gathered at 83 neighborhood fire planning meetings. Additional input was gathered through reviews from a variety of agency personnel, the Seven Basins Watershed Council, and community members. (p.7/.pdf p.17) (B.7.1. = YES = .2 / B.7.2. = NO = 0)</p>	B.7	<p>2) Map Designation Criteria: In the existing Agricultural Land and Forestry/Open Space Comprehensive Plan map designations, Statewide Planning Goals 3 and/or 4 apply to the areas so designated unless the applicant can demonstrate otherwise. The burden is on the applicant to demonstrate to the County that Goals 3 and 4 are inapplicable based on all of the following criteria: C) When further land division could feasibly occur, the proposed Rural Use area will be located within a rural fire protection district or where a rural fire protection district has agreed to provide service by contract. (p.4-11/.pdf p.27-28) (B.7.1 = YES = 1 / B.7.2 = NO = 0)</p>

Jackson County (Continued)			
CWPP		Comprehensive Plan	
B.8	<p>[1] - 0</p> <p>[2] - State Regulations -Senate Bill 360 Senate Bill 360 or the Oregon Forestland-Urban Interface Fire Protection Act of 1997 will be in effect in the fall of 2004. Hundreds of residents in the Ashland WUI will be affected by SB 360. For details regarding landowner specifications go to the Oregon Department of Forestry's ebsite at www.odf.state.or.us or call ODF in Central Point at (541) 664-3328. (p.20/.pdf p.20) (B.8.1. = YES = .2 / B.8.2. = YES = .2)</p> <p>[3] - 0</p> <p>[4] - Oregon Forestland-Urban Interface Fire Protection Act (SB 360) The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB 360) is intended to facilitate development of an effective WUI protection system in Oregon by:</p> <ul style="list-style-type: none"> • Establishing policies regarding WUI protection; • Defining the WUI in Oregon and establishing a process and system for classifying the interface; • Establishing fuel-reduction standards for WUI property owners so they can manage or minimize fire hazards and risks; and • Providing the means for establishing adequate, integrated fire protections systems in WUI areas, including education and prevention efforts. (p.41/.pdf p.58) (B.8.1. = YES = .2 / B.8.2. = YES = .2) <p>[5] - Landscaping and defensible space</p> <ul style="list-style-type: none"> • Follow SB360 standards for creating a defensible space. A detailed information guide is available from the Oregon Department of Forestry. (P.3/.pdf p.50) (B.8.1. = YES = .2 / B.8.2. = NO = 0) 		
B.9	<p>Of the 3 CWPPs containing a reference fo SB360, only one (Ashland) explicitly connected ODF to the governing powers of SB 360. [2] - State Regulations -Senate Bill 360 Senate Bill 360 or the Oregon Forestland-Urban Interface Fire Protection Act of 1997 will be in effect in the fall of 2004. Hundreds of residents in the Ashland WUI will be affected by SB 360. For details regarding landowner specifications go to the Oregon Department of Forestry's ebsite at www.odf.state.or.us or call ODF in Central Point at (541) 664-3328. (p.20/.pdf p.20) (SOME ODF)</p>		
TOTAL	9.8	TOTAL	4

Jefferson County				
CWPP		Comprehensive Plan		
B.2	<p>4.1 WILDLAND URBAN INTERFACE (WUI) The WUI designation was determined by using the general guidelines outlined in the Central Oregon Fire Management Service Fire Management Plan. This evaluation included identifying neighborhood groups and classifying them as “communities,” and determining a buffer area that, if treated, would result in flame lengths manageable by ground-based suppression forces. These communities were analyzed to determine the relative level of risk to life, property, and natural resources. In addition, the Steering Committee also evaluated the potential for wildfire to damage lives, property and infrastructure in these community groups and in other parts of the county. (p.13/.pdf p.21) (B.2.1. = YES = 1)</p> <p>For the purpose of this assessment, the WUI is designated as either High Density or Low Density WUI, including Critical Infrastructure, and is defined as follows: In 2005, the High Density WUI boundary was a 1 ¼ mile radius from the center of the identified communities. In 2011, the High Density WUI boundary for the western communities of Sid Walter, Warms Springs, Seekseequa, Three Rivers, Rim Park and Crooked River Ranch were extended to a 3-mile radius on the western portion of the concentric circle (see Map 5). The Low Density WUI is defined based on the presence of key infrastructure: communication sites, power stations, power lines, critical ingress/egress roads, private resources (such as livestock watering facilities), and historic sites and high-use recreation sites either located adjacent to the communities or providing service to the communities and rural residents. While the Low Density WUI was not specifically analyzed according to the Statewide Risk Assessment model, it is incorporated into an overall WUI boundary and will have general treatment and protection recommendations. (p.13/.pdf p.21) (B.2.2. = YES = 1)</p>			
B.3	Defensible Space: Establish and maintain defensible space around structures in compliance with SB 360 standards. (Highest Focus) (p.27/.pdf p.35) (B.3.1. = YES = 2 / B.3.2. = NO = 0)			
B.6	7. How do we get funding for these projects? Answer: This money is handed down through the federal government to communities. We use the CWPP to identify what is at most risk in our community and then develop an action plan and respective projects. We then apply for monies for those projects. It is a competitive process. (p.63/.pdf p.72) (B.6.1. = YES = 1 / B.6.2. = NO = 0)			
B.7	<p>3.6 FIRE PROTECTION Portions of Jefferson County receive fire protection (Table 3-1) from one or more of the following: Jefferson County Fire District #1 Crooked River Ranch Rural Fire Protection District Three Rivers Rural Fire Protection District (p.9/.pdf p.17) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>	B.7	Range fires move quickly and burn intensely. While it is possible to protect buildings from range fires by creating fuel free zones around them and using fire resistant roofing material, much of the range land area in the County is not in a fire protection district. Consequently, range fires may spread uncontrolled over large areas. In 1995 the Ashwood – Donnybrook fire, in the northeast portion of the county, burned approximately 70,800 acres. (p.47/.pdf p.51) (B.7.1 = YES = 1 B.7.2. = NO = 0)	
B.8	The overall Jefferson County Priorities are improvement of privately owned defensible space (SB 360), homeowner education, and fire prevention education. (p.43/.pdf p.51) (B.8.1. = YES = 1 / B.8.2. = NO = 0)			
B.9	11. Who can I contact? Answer: ODF is a good place to start. (p.63/.pdf p.72) While the plan refers to ODF as the central authority on Wildfire protection, there is no explicit mention of ODF or DLCD in relation to the description and provisions of SB360.			
TOTAL	8	TOTAL	1	

Josephine County (3 Jurisdictions Total)

CWPP		Comprehensive Plan		
B.2	<p>[1] - Senate Bill 360: Forestland Urban Interface Protection Act of 1997. Fuel Break Distance Total Fuel Break Distance Classification Fire Resistant Roofing Non-Fire Resistant Roofing LOW No Requirement No Requirement MODERATE 30 feet 30 feet HIGH 30 feet 50 feet Extreme & High Density Extreme 50 feet 100 feet (p.161/.pdf p.207) (B.2.1. = YES = .33 / B.2.2. = YES = .33)</p> <p>[2] - Wildland Urban Interface Description The Healthy Forests Restoration Act, section 101 (16) defines wildland urban interface (WUI) as an area within or adjacent to an at risk community that has been identified by a community in its community wildfire protection plan (CWPP) or, for areas that do not have such a plan, as an area:</p> <ul style="list-style-type: none"> • Extending ½ mile from the boundary of an at risk community, or • Extending 1 ½ miles from the boundary of an at risk community when other criteria are met such as a sustained steep slope or a geographic feature that creates an effective firebreak, or is classified as fire condition class 3 land, or • That is adjacent to an evacuation route. (p.6/.pdf p.12) (B.2.1. = YES = .33 / B.2.2. = YES = .33) <p>[3] - Protecting a home from wildfire is one of the most important investments of time or money a homeowner can have. This is particularly critical for homes within the Wildland-Urban Interface (WUI) where homes are adjacent to and intermixed with wildland fuels. (p.14/.pdf p.14) (B.2.1. = YES = .33 / B.2.2. = NO = 0)</p>			
B.3	<p>[1] - Josephine County Article 76: Wildfire Safety Standards In order to be effective in implementing recommendations in the Josephine County Integrated Fire Plan, there must be tools and resources available to the public. Article 76 of the Josephine County Rural Land Development Code, Wildfire Safety Standards, is one of the most important tools that the County has in facilitating public engagement with fire protection. Article 76 is currently under review by the Josephine County Planning Commission. The ordinance establishes requirements for development in wildfire hazard areas. The planning commission held an initial public hearing on February 17, 2004 and took additional testimony on April 19, 2004 and on June 7, 2004. Along with these public hearings, the planning commission also conducted public workshops in April and May in Williams, Wolf Creek and the Illinois Valley. The Planning Commission is now reviewing revised standards and will consider the amendments for adoption on August 30, 2004. For more information on Article 76 and to review the ordinance, see Resource D. (p.9-10/.pdf p.55-56) (B.3.1. = YES = .66 / B.3.2. = NO = 0)</p> <p>[2] - A complete description of the Oregon Forestland Urban Interface Fire Protection Act is found in the section on reducing structural ignitability. Property owners receive a selfcertification form in the mail for their identified risk classification. In the Illinois Valley risk classifications include moderate, high, or extreme. (p.11/.pdf p.17) (B.3.1. = YES = .66) Step 1 If there is a home or other structures on your property then a fuel break is required to be established around it. A structure is defined as a permanently sited building that is at least 500 square feet. The purpose of a fuel break is to keep an approaching wildfire from reaching your house and other structures. Step 2 On a driveway that is at least 150 feet long, it is necessary to remove obstructions over the driving surface, and create a fuel break along the driveway's fringe. The driving area must meet these specifications: • The horizontal clearance must be at least 12 feet. • The vertical clearance must be at least 13 ½ feet The fuel break along the driveway must extend 10 feet from each side of the driveway's centerline, creating a total fuel break area that is at least 20 feet wide, including the driving surface. (p.32-33/.pdf p.38-39) (B.3.2. = YES = .33)</p> <p>[3] - ☞ Promote routine maintenance of fuels reduction projects on both public and private lands to help develop a more long-term solution to community wildfire safety. (p.6/.pdf p.6) (B.3.1. = YES = .66 / B.3.2. = NO = 0)</p>			
B.4	<p>[1] - Wildfire can also have longer-term economic impacts on the community as local government, businesses and citizens deal with a loss of resources and post-fire recovery costs. (p.20/.pdf p.66) (B.4.1. = YES = .66 / B.4.2. = NO = 0)</p> <p>[2] - Property owners who have not filed an SB 360 selfcertification form with ODF may be liable for fire suppression costs of up to \$100,000 if: • Required fuel reduction work is not done and a self-certification form is not received by the Oregon Department of Forestry prior to the start of a fire, AND • The fire originates on the person's property, AND • The fire spreads through parts of the property where fuel-reduction should have been done, AND The Oregon Department of Forestry uses fire suppression resources not regularly budgeted to suppress the fire. (p.35/.pdf p.41) (B.4.1. = YES = .66 / B.4.2. = YES = .33)</p>			

Josephine County (Continued)

CWPP		Comprehensive Plan	
B.6	<p>[1] - The costs of managing large wildfires in southwest Oregon are climbing dramatically, and their true costs extend far beyond what it takes to extinguish the flames.</p> <ul style="list-style-type: none"> ■ The 1987 Silver Complex in 1987 burned 99,310 acres and cost \$19 million to suppress; ■ The 2002 Biscuit Fire burned 499,945 acres at a cost of \$150 million; ■ The 27,111 acre Timbered Rock Fire, also in 2002, burned on BLM and private forestlands and cost \$14 million dollars of Oregon Forest Land Protection Funds to suppress. (p.2/.pdf p.2) (B.6.1. = YES = .33) <p>RESOURCE E: FUNDING RESOURCES AND FIRE PREVENTION EDUCATIONAL MATERIALS Current and Potential Funding Sources (p.196/.pdf p.242) (B.6.2. = YES = .33)</p> <p>[2] - b. IVFD should continue to apply for grants from county, state, and federal funding sources to implement the strategies identified in this plan. Work with local organizations, agencies, and individuals to provide cost-share matches to these projects.(p.62/.pdf p.68) (B.6.1. = YES = .33 / B.6.2. = NO = 0)</p> <p>[3] - • Locate funding sources to assist area residents in mitigating fuels hazards around their homes. (p.6/.pdf p.6) (B.6.1. = YES = .33 / B.6.2. = NO = 0)</p>		
B.7	<p>[1] - Josephine County Rural Fire Protection Districts The rural districts are comprised primarily of volunteer fire fighters, although some do have full time chiefs and/or staff. In addition to the list below, Rural/Metro Fire Department Service Area serves a 330 square miles area outside the fire district taxing boundaries around Grants Pass. (p.v/.pdf p.38) (B.7.1. = YES = .33 / B.7.2. = YES = .33)</p> <p>[2] - Illinois Valley Rural Fire Protection District The Illinois Valley Rural Fire Protection District, also known as the Illinois Valley Fire District (IVFD), provides first-response fire and medical service to approximately 19,500 residents in their 144-square-mile District in the Illinois Valley. Approximately fifty-four local residents currently volunteer with IVFD, approximately half of whom are "active" firefighters, with the other half providing support functions. There are seven paid staff members: Fire Chief, Deputy Fire Chief, Fire Marshal, Maintenance Chief, Executive Administrator, Administrator, and Mechanic. The Department is funded primarily through a parcel tax assessment collected and distributed by Josephine County totaling approximately \$850,000 annually. (p.21/.pdf p.27) (B.7.1. = YES = .33 / B.7.2. = YES = .33)</p> <p>[3] - Structural fire protection for the community is provided by the Wolf Creek Rural Fire Protection District, a volunteer department responsible for protection of the community's 430 plus homes. The Wolf Creek fire district covers about 32 square miles consisting of private forests, industrial and federal forestlands, agricultural lands, small businesses, and residential properties. The community also contains two Oregon State historical sites and one Josephine County Park. (p.3/.pdf p.3) (B.7.1. = YES = .33 / B.7.2. = YES = .33)</p>	B.7	2. The Josephine County Board of Commissioners shall continue to support and encourage the inclusion of properties into existing fire protection districts. (p.9/.pdf p.9) (B.7.1. = YES = 1 / B.7.2. = NO = 0)
B.8	<p>[1] - Senate Bill 360: Forestland Urban Interface Protection Act of 1997. Forestland Urban Interface 477.015 Definitions. (1) As used in ORS 477.015 to 477.061, unless the context otherwise requires, "forestland-urban interface" means a geographic area of forestland inside a forest protection district where there exists a concentration of structures in an urban or suburban setting. (p.159/.pdf p.205) (B.8.1. = YES = .33 / B.8.2. = YES = .33)</p> <p>[2] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 Two of the primary tools for reducing structural ignition vulnerability in the Illinois Valley are the Oregon Forestland Urban Fire Protection Act of 1997 (Senate Bill 360), and Article 76, Josephine County Wildfire Safety Standards. These standards and guidelines to lessen the ignitability of structures are not arbitrary but are based on fire science, case studies, fire investigations, and research. (p.32/.pdf p.38) (B.8.1. = YES = .33 / B.8.2. = YES = .33)</p> <p>[3] - 0</p>		
B.9	<p>[1] - In relationship to ODF, as new data is identified, and particularly high hazard areas identified through Senate Bill 360, local governments will need to address the provisions of Goal 7. (p.9/.pdf p.55) (ODF)</p> <p>[2] - To date only 23 percent of Illinois Valley residents have returned their certification card to the Oregon Department of Forestry. (p.11/.pdf p.17) (ODF)</p> <p>[3] - 0</p> <p>Overall, 2 of the 3 jurisdictional CWPPs identified ODF as the state forest agency in charge of the administration of SB360 OVERALL: SOME ODF</p>		
TOTAL	10.32	TOTAL	1

Klamath County (4 Jurisdictions Total)				
CWPP		Comprehensive Plan		
B.2	<p>[1] - Wildland-Urban Interface (WUI) Areas Ten different WUI areas were also analyzed during the development of this County CWPP. Several communities had previously completed their CWPP and had already identified their WUI boundaries, while several other communities did not have a current CWPP or established WUI boundary. For the purposes of this analysis, a general WUI boundary was created for these communities. The list below describes the communities included in each WUI area. (p.37/.pdf p.37) (B.2.1. = YES = .25 / B.2.2. = YES = .25)</p> <p>[2] - The wildland-urban interface (WUI) is commonly described as the zone where structure and other human development meet and intermingle with undeveloped wildland or vegetative fuels. This WUI zone poses tremendous risks to life, natural resources, property and infrastructure in associated communities and is one of the most dangerous and complicated situations firefighters face. (p.4/.pdf p.4) (B.2.1. = YES = .25 / B.2.2. = NO = 0)</p> <p>[3] - Keno is a true wildland urban interface (WUI) community with most of its residences located on forested sites. Many dispersed residential areas exist in the area and will be described later. (p.14/.pdf p.14) (B.2.1. = YES = .25 / B.2.2. = NO = 0)</p> <p>[4] - In general, the Act applies to lands classified as "forestland-urban interface" by a local classification committee using the following criteria to identify lands which are:</p> <ul style="list-style-type: none"> • Within an ODF protection boundary • Urban or suburban • 10 acres in size or smaller • Improved with one or more structures • Grouped with other improved properties in a density of at least four structures per 40 acres (.pdf p.12) <p>(B.2.1. = YES = .25 / B.2.2. = YES = .25)</p>			
B.3	<p>[1] - Excellent work has been done by individual agencies, departments and landowners. A desired outcome of this plan is to develop projects that would be a coordinated effort between all the stakeholders. By pooling expertise, personnel and equipment all of the entities would benefit from collaborative fuels reduction work. Click on the following link for more information and pictures: fuels reduction work. (p.75/.pdf p.75) (B.3.1. = YES = .50 / B.3.2. = NO = 0)</p> <p>[2] - In certain situations, specific actions such as fuels reduction around structures, communities, infrastructure improvements and public outreach may reduce the risk of catastrophic fire in the wildland-urban interface. (p.6/.pdf p.6) (B.3.1. = YES = .50 / B.3.2. = NO = 0)</p> <p>[3] - Keno RFPD Fuels Strategy The on-going fuels reduction work in the Keno RFPD has been guided by the following strategic priority.</p> <ol style="list-style-type: none"> 1. Properties that have residential structures and/or constructed improvements. 2. Properties adjacent to parcels that have residential structures and/or constructed improvements. 3. Properties not adjacent to parcels that have residential structures and/or constructed improvements, but when treated are a segment of a larger treatment zone that offers tactical protection opportunities for the properties in priority 1. (p.33/.pdf p.33) (B.3.1. = YES = .50 / B.3.2. = NO = 0) <p>[4] - Results of the Home Risk Assessments were reviewed in 2004 and eligible residents were offered incentives to clear the areas around their homes to standards recommended by ODF or to have ODF crews conduct fuels reduction work for them. Fuels reduction activities were completed on private property by ODF as funding would allow throughout the 2003-2004 funding cycle. (.pdf p.31) (B.3.1. = YES = .50 / B.3.2. = NO = 0)</p>			
B.6	<p>[1] - Numerous incentive programs are available to landowners, communities, and other entities to assist with funding for hazardous fuels reduction and community outreach and education projects. Listed below are some of the programs available in Oregon. (p.80/.pdf p.80) (B.6.1. = YES = .25 / B.6.2. = YES = .25)</p> <p>[2] - ODF should be commended for their efforts in site and hazard assessments, application and implementation of grants thus far, and overall coordination with private landowners, federal agencies and Bly RFPD. Although available funding has been limited to date, we hope future opportunities and funding for wildfire protection will be greatly increased through the collaborative efforts of the Bly Community Wildfire Protection Plan. (p.20/.pdf p.20) (B.6.1. = YES = .25 / B.6.2. = NO = 0)</p> <p>[3] - In 2003, Klamath County joined the partnership with the Keno RFPD when the Klamath County Commissioners granted Title III funding for a fire prevention and public education program. This funded a door-to-door education and risk assessment. (p.3/.pdf p.3) (B.6.1. = YES = .25 / B.6.2. = NO = 0)</p> <p>[4] - Results of the Home Risk Assessments were reviewed in 2004 and eligible residents were offered incentives to clear the areas around their homes to standards recommended by ODF or to have ODF crews conduct fuels reduction work for them. Fuels reduction activities were completed on private property by ODF as funding would allow throughout the 2003-2004 funding cycle. (p.31) (B.6.1. = YES = .25 / B.6.2. = NO = 0)</p>			

Klamath County (Continued)

CWPP		Comprehensive Plan			
B.7	<p>[1] - The other fire departments in Klamath County will assemble when available and also continue to protect the county. These fire departments are: Central Cascades Fire, Crescent Fire & Ambulance, Oregon Outback Fire District, Chemult Fire District, Klamath County Fire District No. 3, Klamath County Fire District No. 5, Bonanza Fire District, Bly Fire District, Malin Fire District, Merrill Fire District, and Sprague River Volunteer Fire Department. There are a total of approximately 300 structure fire personnel in Klamath County. (p.70) (B.7.1. = YES = .25 / B.7.2. = YES = .25)</p> <p>[2] - The purpose of this Community Wildfire Protection Plan is to establish prioritized recommendations that protect at-risk communities within the Bly Rural Fire Protection District, their citizens, homes and essential infrastructure and resources from the destruction of catastrophic wildfire. At-risk communities in this plan include Bly and the subdivisions of Bley-was, Fishhole and Pinecrest. (Refer to attachments 1-3) (p.4) (B.7.1. = YES = .25 / B.7.2. = NO = 0)</p> <p>[3] - Fire protection and emergency medical services are provided to the citizens of Keno by the Keno Rural Fire Department. The Keno Rural Fire Protection District (Keno RFPD) includes the community of Keno, several rural residential areas and the recently annexed Lakewoods Village subdivision located on the crest of the Cascade Mountains at the intersection of Clover Creek Road and Dead Indian Memorial Road. The Keno RFPD boundary covers approximately 44 square miles or about 28,160 acres. (p.16) (B.7.1. = YES = .25 / B.7.2. = YES = .25)</p> <p>[4] - The Harriman Rural Fire Protection District is typically the first agency to respond to wildland fire within a ten mile radius of Rocky Point. As a small, volunteer-based entity, HRRFPD faces several challenges in terms of wildland fire suppression, including a lack of personnel (paid and volunteer firefighters), inadequate water supply, a lack of adequate maneuverability and limited access on unimproved/unmaintained roads, and a build-up of forest debris. HRRFPD runs one brand new structure-rescue engine and a second older engine, a newer Type III 4x4 heavy wildland-interface engine, one newer 4x4 ambulance, one 2,200 gallon water-tender and one Chief's fire pick-up. HRRFPD staff consists of one part time paid fire chief and twelve volunteers. (p.22) (B.7.1. = YES = .25 / B.7.2. = YES = .25)</p>	B.7	<p>Implementation:</p> <ul style="list-style-type: none"> Review procedures shall be established to ensure that subdivisions are located within a fire protection district or fire protection association or rural fire protection district or that a fire district has been created for the subdivision before receiving final plat approval. (p.7-4/.pdf p.83) (B.7.1 = YES = 1 / B.7.2. = NO = 0) 		
B.8	<p>[1] - The Oregon Forestland-Urban Interface Fire Protection Act (often referred to as Senate Bill 360) enlists 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. (p.23) (B.8.1. = YES = .25 / B.8.2. = YES = .25)</p> <p>[2] - 0</p> <p>[3] - The Keno Fire Chief and the preparer of this document have been active in local and county-wide efforts to identify wildfire hazards and mitigation opportunities. They both sit on the Klamath County Forestland-Urban Interface Classification Committee for implementation of Oregon Senate Bill 360. (p.19) (B.8.1. = YES = .25 / B.8.2. = NO = 0)</p> <p>[4] - Oregon Forestland-Urban Interface Fire Protection Act of 1997 Also referred to as Senate Bill 360, the act responds to several escalating problems:</p> <ul style="list-style-type: none"> Wildland fires burning homes Firefighters risking their lives in conflagrations Rising suppression costs Reduced fire protection for wildland areas (p.12) (B.8.1. = YES = .25 / B.8.2. = YES = .25) 				
B.9	<p>[1] - This law will be implemented in Klamath County in the near future. For more information contact your local Oregon Department of Forestry Office. (p.23) (ODF)</p> <p>[2] - 0</p> <p>[3] - 0</p> <p>[4] - In general, the Act applies to lands classified as "forestland-urban interface" by a local classification committee using the following criteria to identify lands which are:</p> <ul style="list-style-type: none"> Within an ODF protection boundary (p.12) (ODF) <p>Overall, 2 of the 4 jurisdictional CWPPs identified ODF as an administrator of the SB360 law and guidelines. SOME ODF</p>				
TOTAL	7.75	TOTAL	1		

Lake County				
CWPP		Comprehensive Plan		
B.2	4.4 Oregon Senate Bill 360 Classification Oregon forestland – urban interface lands are classified using weather, topography, and fuel hazards (Table 8). ODF classifies the weather factor for the assessment area (all of Lake County) as high hazard or class 3. Class 1 and class 2 weather hazards are low and moderate, respectively. The weather hazard is based on the number of days per season that forest fuels are capable of producing a significant fire event. The topography hazard is classified as low (class 1) or high (class 2) for slopes <25 percent or >25 percent, respectively. The vegetation hazard is based on fuel attributes. For this assessment, the FRCC classes represent low (class 1), moderate (class 2), and high (class 3) hazard.(p.22/.pdf p.38) (B.2.1. = YES = 1 / B.2.2. = YES = 1)			
B.3	Oregon Department of Forestry. 2004. Fire Protection Coverage Working Group: White Paper. Internet Access: www.oregon.gov/ODF/FIRE/docs/FireProtectionCoverageGrp.pdf . _____. 2004. Oregon Forestland-Urban Interface Protection Act: Property Evaluation and Self-Certification Guide. Oregon Department of Forestry, Salem, OR. (p.45/.pdf p.61) (B.3.1. = YES = 2 / B.3.2. = NO = 0)			
B.6	Financial resources that provide support for various wildfire mitigation action items include various state and federal grants administered through ODF, BLM, the Natural Resource Conservation Service, and FEMA. Some funding sources are not targeted at fuel management, but often times multiple resource management objectives can still be achieved when the proposal's focus is on only one objective. Funding requests should be coordinated with ODF, BLM, and the USFS. Potential funding sources include, but are not limited to, the following: (p.39/.pdf p.55) (B.6.1. = YES = 1 / B.6.2. = YES = 1)			
B.7	Currently, fire suppression authorities in the assessment area include the Silver Lake Rural Fire Protection District (RFPD), Christmas Valley RFPD, Walker Range Fire Protection Association, and the Lakeview Interagency Fire Center (LIFC). The LIFC is the dispatch center for the U.S. Forest Service (USFS), Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), and ODF. Oregon Department of Fish and Wildlife has fire protection equipment and personnel at the Summer Lake Wildlife area. (p.12) (B.7.1. = YES = 1 / B.7.2. = YES = 1)	B.7	18. No new service demands as the site has fire protection through Lakeview Suburban Rural Fire Protection District, an existing road system, and individual wells and sewage disposal systems are required for development. (p.137/.pdf p.93) 16. No new service demands as the site has fire protection through Thomas Creek-Westside Rural Fire Protection District, -existing road access, and individual wells and sewage disposal systems are required for development. (p.140/.pdf p.96) 9. No new service demands as the site has fire protection through New Pine Creek Rural Fire Protection District, good existing road access and individual wells and sewage disposal systems are required for development. (p.145/.pdf p.101) 10. No new service demands as the site has fire protection through Thomas Creek-Westside Rural Fire Protection District, existing road access, and individual wells and sewage disposal systems are required for	
B.8	Oregon Senate Bill 360 (OSB 360) established policies regarding the protection of the wildland-urban interface (WUI) by: • Defining WUI in Oregon and establishing a process and system for classifying the interface. • Establishing standards for WUI property owners so they can manage or minimize fire hazards and risks. • Providing the means for establishing adequate, integrated fire protection systems in WUI areas, including education and prevention efforts. (p.1/.pdf p.17) (B.8.1. = YES = 1 / B.8.2. = YES = 1)			
B.9	Oregon forestland – urban interface lands are classified using weather, topography, and fuel hazards (Table 8). ODF classifies the weather factor for the assessment area (all of Lake County) as high hazard or class 3. (p.22/.pdf p.38) (ODF)			
TOTAL	10	TOTAL	1	

Lane County				
CWPP		Comprehensive Plan		
B.2	<p>Wildland-Urban Interface Zone</p> <p>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. (p.2-5/.pdf p.37) (B.2.1. = YES = 1 / B.2.2. = YES = 1)</p>			
B.3	<p>Lane Code</p> <p>Multiple sources in the stakeholder interviews and Firewise Workshop identified the need to update the Lane Code to require wildfire safety measures in rural residential zones similar to those required in areas zoned as forestlands. Most new development occurs in rural residential areas. The landowner survey results indicate that the majority of property owners are supportive of requiring standards for building materials, emergency access, and vegetation management for new development in wildfire hazard areas. (p.3-17/.pdf p.71) (B.3.1. = YES = 2 / B.3.2. = NO = 0)</p>			
B.6	<p>Incentives</p> <p>Many stakeholders interviewed expressed support for incentive programs, such as tax breaks and insurance benefits, as effective nonregulatory approaches to increasing participation in wildfire mitigation activities. Two-thirds of landowner survey respondents indicated that tax and/or insurance incentives would motivate them to take additional steps towards reducing risk to their property. (p.3-17/.pdf p.71) (B.6.1. = YES = 1 / B.6.2. = NO = 0)</p>			
B.7	<p>Rural Fire Districts</p> <p>-24 Rural Fire Districts within Lane County</p> <p>-Provide structural fire protection within district boundaries throughout the county (p.1-12/.pdf p.27) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>	B.7	All cluster subdivisions must be within an existing Rural Fire District. (p.27) (B.7.1 = YES = 1 / B.7.2. = NO = 0)	
B.8	<p>Oregon Forestland-Urban Interface Fire Protection Act of 1997 (Senate Bill 360): Promotes the creation of a comprehensive wildland-urban interface fire protection system in Oregon. (p.1-15/.pdf p.30) (B.8.1. = YES = 1 / B.8.2. = YES = 1)</p>			
TOTAL	9	TOTAL	1	

Malheur County				
CWPP		Comprehensive Plan		
B.2	In Malheur County, nearly 2 million acres of wildland-urban interface (WUI) exists. Within those areas, 27 communities would be directly threatened or affected by a large wildfire event. (p.4/.pdf p.4) (B.2.1. = YES = 1 / B.2.2. = NO = 0)			
B.3	Standards – the actions, efforts, or measures which owners of suburban and urban lands shall take on their property, pr... to a wildfire occurrence which originates on the property. (p.37/.pdf p.37) (B.3.1. = YES = 2 / B.3.2. = NO = 0)			
B.4	Treatment Projects Prescribed burning and re-seeding with native grasses (on federal land, Threatened and Endangered species will limit activity), including other treatment techniques as well and where necessary. BLM – annual grass restoration project (west side of Juntura, Riverside Road). Juniper fuels reduction (coordinate with NRCS).(p.49/.pdf p.49) (B.4.1. = YES = 2 / B.4.2. = NO = 0)			
B.6	Work is underway to reduce fuels in WUI areas by way of community involvement and funding from National Fire Plan (NFP).4 NFP goals are listed below and the essence of NFP is captured in this document: (p.5/.pdf p.5) (B.6.1. = YES = 1 / B.6.2. = NO = 0)			
B.7	The Malheur County structural fire community supports a county fire defense board chief to make decisions related to overall structural fire response. An assessment of each structural fire protection district was conducted either by the chief of the associated district or the county fire defense board chief. In addition, information already gathered during the Malheur County Community Wildfire Protection Plan Dynamac study was also used. Consideration was given to the level of training/equipment/preparedness of firefighting resources, type of access to homes, density of structures across the county, availability of water sources, community preparedness, and structural vulnerability. A value was assigned to each WUI area. (p.26-27/.pdf p.26-27) (B.7.1. = YES = 1 / B.7.2. = YES = 1)	B.7	4. The county will support and encourage the formation of fire protection districts whenever warranted by sufficient concentration of structures. (p.31/.pdf p.32) (B.7.1 = YES = 1 / B.7.2. = NO = 0)	
B.8	Oregon Senate Bill 360 – this 1997 legislation established the policy and framework for meeting the fire protection needs of the wildland-urban interface. One of the goals of the bill is to define the Interface in Oregon and establish a process and system for the classification of the Interface. Formal classification committees in each county will accomplish the classification. Work has begun in Jackson and Deschutes counties, with the remainder of the state planned for classification over the next ten years. (p.37/.pdf p.37) (B.8.1. = YES = 1 / B.8.2. = YES = 1)			
B.9	The Northeast Oregon district of ODF has hired an employee to manage the SB360 work in the district. (p.37/.pdf p.37) (ODF)			
TOTAL	10	TOTAL	1	

Morrow County				
CWPP		Comprehensive Plan		
<p>B.2</p>	<p>Wildland Urban Interface (WUI) The boundaries of the Wildland Urban Interface are based on the actual distribution of structures and communities adjacent to or intermixed with wildland fuels. Fuel reduction treatments are designed to protect human communities from wildland fires as well as minimize the spread of fires that might originate in urban areas. The management objective in the wildland-urban interface zone is to enhance fire suppression capabilities by modifying fire behavior inside the zone and providing a safe and effective area for fire suppression activities. (p.11/.pdf p.14) (B.2.1. = YES = 1 / B.2.2. = YES = 0)</p>			
<p>B.3</p>	<p>icrosoft Office User: 1. Define your defensible space. Defensible space is a buffer zone, a minimum 30-foot fire-resistive area around your house that reduces the risk of a wildfire from starting or spreading to your home. Formed by following the critical steps outlined below, defensible space depends on clearing flammable material away from your home and replacing it with fire-resistive vegetation. Although a 30-foot distance is standard, additional clearance as great as 100 feet may be necessary as the slope of your lot increases. Defensible space not only helps protect your home in the critical minutes it takes a fire to pass, it also gives firefighters an area to work in. During a large-scale fire, when many homes are at risk, firefighters must focus on homes they can safely defend. 2. Reduce flammable vegetation, trees and brush around your home. When needed, replace flammable landscaping with fire-resistive counterparts. Choose plants with loose branch habits, non-resinous woody material, high moisture content in leaves, and little seasonal accumulation of dead vegetation. Ask your local home and garden center about which varieties possess these and other fire-resistive traits. 3. Remove or prune trees. If you live in a wooded area, reduce the density of surrounding forest by removing or thinning overcrowded or small-diameter trees. Check with local agencies for guidelines on tree removal before clearing or thinning your property. Be sure to prune low-hanging branches to keep a ground fire from climbing into upper branches. Limbing up these "ladder fuels" cuts the chances of a ground fire climbing into tree canopies. 4. Cut grass and weeds regularly. Fire spreads rapidly in dry grass and weeds. Mow grasses and other low vegetation and keep them well-watered, especially during periods of high fire danger. 5. Relocate wood piles and leftover building materials. Stack all wood, building debris and other burnable materials at least 30 feet from your home and other buildings. Then clear away flammable vegetation within 10 feet of wood/debris piles as an additional safeguard against the spread of wildfire. 6. Keep it clean. (Your roof and yard, we mean!) Clear pine needles, leaves and debris from your roof, gutters and yard to eliminate an ignition source for tinder-dry vegetation. Remove dead limbs and branches within 10 feet of your chimney and deck. Tidying-up is especially important during the hot, arid months of fire season when a single spark can lead to an inferno. 7. Signs, addresses and access. Easy-to-read road signs and address numbers that are visible from the road allow firefighters to find your home quickly during a wildfire or other emergency. Safe, easy access to your property includes two-way roads that can accommodate emergency vehicles and give them space to turn around. Bridges should support the weight of emergency vehicles. Driveways should also be trimmed of peripheral vegetation to allow emergency equipment to reach your house. Contact your local fire agency for recommendations on access and signage. 8. Rate your roof. Your roof is the most vulnerable part of your house in a wildfire. If you have a wood shake roof, consider treatment or replacement to make it more fire-resistive. If you have a fireplace or woodstove, install an approved spark arrestor on your chimney to prevent sparks from reaching your roof or flammable vegetation. 9. Recycle yard debris and branches. Check into alternative disposal methods like composting or recycling. Burning may be restricted or not allowed in your community, and should only be used as a last resort. Always contact your local fire agency for current burning regulations before striking a match! 10. What to do when a wildfire strikes. Monitor your local radio and television stations for fire reports and evacuation procedures and centers. Keep an emergency checklist handy and prepare to evacuate if your neighborhood is threatened. Proper preparation includes closing all windows and doors, arranging garden hoses so they can reach any area of your house, and packing your car for quick departure. (p.53-54) (B.3.1. = YES = 2 / B.3.2. = YES = 1)</p>			
<p>B.6</p>	<p>Coordinate priorities for funding (p.10/.pdf p.13) (B.6.1. = YES = 1 / B.6.2. = NO = 0)</p>	<p>B.6</p>	<p>13. Fire Protection C. Distance to fire stations and equipment capability are major factors in determining insurance ratings. D. Fire protection is a common problem of the cities, County and fire protection districts. (B.6.1 = YES = 1 / B.6.2. = NO = 0)</p>	<p>Rawlings 95</p>

Morrow County (Continued)				
CWPP		Comprehensive Plan		
B.7	<p>Within the county boundary there are (2) incorporated cities with fire departments, Heppner and Lexington. Both are operated with volunteer fire fighters. In addition, there are (6) rural fire protection districts within the county, Heppner, Lone, Irrigon, Boardman, S. Gilliam Rural, and Pilot Rock Rural Fire Districts. In the Rural Fire Districts, there are only (3) paid fulltime fire fighter, the rest is strictly volunteer. In 2005, Morrow County elected to cover all lands outside the Forest Protection District with rural fire protection for both structures and wildland. The County used the Zone II authority and divided the protection responsibility among the established Rural Fire Districts. This process is nearly complete. Also, there are several communities and many well populated areas that do not have fire departments including Blake's Addition, Cutsforth Park, Lake Penland, and Reeds Mill. (p.3/.pdf p.6) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>	B.7	<p>Fire Protection A. There are three rural fire protection districts in the County, located in Boardman, Irrigon and Heppner. (p.189/.pdf p.182) (B.7.1 = YES = 1 / B.7.2. = NO = 0)</p>	
B.8	<p>Senate Bill 360: Oregon Forestland-Urban Interface Fire Protection Act The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB360) is intended to facilitate development of an effective WUI protection system in Oregon by 1) establishing policies regarding WUI protection, 2) defining the WUI in Oregon and establishing a process and system for classifying the interface, 3) establishing standards for WUI property owners so they can manage or minimize fire hazards and risks, and 4) providing the means for establishing adequate, integrated fire protection systems in WUI areas, including information and prevention efforts. This act is only pertinent to areas within ODF's protection boundaries and is going to be implemented in all of these areas across the state by 2011. (p.8/.pdf p.11) (B.8.1. = YES = 1 / B.8.2. = YES = 1)</p>			
B.9	<p>This act is only pertinent to areas within ODF's protection boundaries and is going to be implemented in all of these areas across the state by 2011. (p.8/.pdf p.11) (ODF)</p>			
TOTAL	9	TOTAL	2	

Umatilla County				
CWPP		Comprehensive Plan		
B.2	The Steering Committee identified communities-at-risk across the forested landscape using several factors. As previously defined, this could mean a group of homes or structures with basic infrastructure and services within or near federal land. The next step was to designate wildland-urban interface boundaries that would incorporate those communities-at-risk as appropriate by using assessment information (described more fully in the previous section). The hazard assessment information was used to develop a scoring matrix that would provide results that could be used for prioritizing the WUI areas within Umatilla County (see Table 5). (p.8-5/.pdf p.63) (B.2.1. = YES = 1 / B.2.2. = YES = 1)			
B.3	Property owners will have up to two years to evaluate their homes and lands, make minimum-standard modifications if necessary, and certify that their lands comply with The Act. (p.3-5/.pdf p.13) (B.3.1. = YES = 2) The following was taken from the Umatilla County Development Code GF Grazing/Farm Zone §152-080: This zone is designed to protect grazing lands, forest uses, and inclusions of agricultural land that are found within the county's mixed use farm/forest areas. (p.7-9/.pdf p.55) (B.3.2. = YES = 1)	B.3	Resource dwellings shall be allowed if consistent with criteria in the forest goal and with standards in the Grazing/Farm Zone. If located in a forested area, minimum fire prevention standards will apply.(p.18-20/.pdf p.109) Policy 22- Minimum fire protection measures outlined in the Development Ordinance shall be required of new homeowners when siting permanently fixed structures. (p.18-133/.pdf p.222) (B.3.1. = NO = 0 / B.3.2 = YES = 1)	
B.4	Failure to obtain certification will subject landowners to a liability of up to \$100,000 for the cost of suppressing any wildfire that ignited on their property and spread to other property, due to their failure to comply. (p.3-5/.pdf p.13) (B.4.1. = YES = 2 / B.4.2. = YES = 1)			
B.7	Rural Fire Protection Districts Fire protection coverage in Umatilla County can be broken into two categories: structural and wildland. Most fire protection agencies provide one or the other, but some do handle both. The vast majority of the CWPP project area has fire protection coverage by at least one agency, with a few areas falling under multiple jurisdictions. Rural fire protection exists in several incorporated municipalities within the CWPP project area including Ukiah, Pilot Rock, and Weston. The unincorporated community of Meacham and nearby residents has a volunteer fire organization that provides a level of wildland and structural protection. CTUIR Fire Department, along with the Bureau of Indian Affairs (BIA) provides wildland and structural fire protection within the reservation boundaries. (p.4-5/.pdf p.21) (B.7.1. = YES = 1 / B.7.2. = YES = 1)	B.7	Chapter 14. PUBLIC FACILITIES AND SERVICES 8. Not all areas of the County are served by rural fire protection districts, especially those areas around Pendleton. (p.14-1/.pdf p.76) (B.7.1 = YES = 1 / B.7.2. = NO = 0)	
B.8	Oregon Senate Bill 360 (SB 360) Senate Bill 360, known as the Oregon Forestland-Urban Fire Protection Act of 1997, is currently being implemented across Oregon on a priority basis. Currently, only Jackson and Deschutes Counties have been enacted. ODF recently hired one staff person to work on implementing SB360 in the Northeast Oregon (NEO) District, which covers 1.6 million acres in four counties: Umatilla, Union, Baker, and Wallowa. (p.3-4/.pdf p.12) (B.8.1. = YES = 1 / B.8.2. = YES = 1)			
B.9	Oregon Senate Bill 360 (SB 360) Senate Bill 360, known as the Oregon Forestland-Urban Fire Protection Act of 1997, is currently being implemented across Oregon on a priority basis. Currently, only Jackson and Deschutes Counties have been enacted. ODF recently hired one staff person to work on implementing SB360 in the Northeast Oregon (NEO) District, which covers 1.6 million acres in four counties: Umatilla, Union, Baker, and Wallowa. (p.3-4/.pdf p.12) (ODF)			
TOTAL	12	TOTAL	2	

Union County				
CWPP		Comprehensive Plan		
B.2	A wildland-urban interface area (WUI) surrounds a community at risk, including a community's infrastructure or water source, and may extend beyond 1 ½ miles of a community, depending on topography, geographic features used as an effective firebreak, or Condition Class 3 land. (p.28) (B.2.1. = YES = 1 / B.2.2. = YES = 1)			
B.3	Additionally, the Union County Planning Department has had in place since 1983 adopted minimum fire defense standards for new construction. These have been modified over time using Oregon Department of Forestry fire siting standards as development has increased. The County's IT Department is working on changing the designation that appears on property tax statements from "fire patrol" to "ODF non-structural protection". Other criteria required by the Office of the State Fire Marshall for 2006 include the active implementation of this community wildfire protection plan. (p.22) (B.3.1. = YES = 2 / B.3.2. = NO = 0)			
B.6	Grant Funding The strategies and needs to mitigate the risk of wildfire and respond to wildfire events are projects to which grant money may be directed. As such, the annual evaluation of the project list must include a consideration of other grant monies and how they are being spent towards the same goals. This ensures efficient use of the grant dollar and the potential ability to leverage grant money for greater benefit to Union County structural and wildland fire agencies. Other grant programs may include the State Homeland Security Equipment Program, Rural Firefighter Assistance / Volunteer Firefighter Assistance Equipment Program, Title III federal funding, FEMA Pre-Hazard Mitigation Funding or Oregon Transportation Investment Act funds, to name a few of the most likely sources. (p.87) (B.6.1. = YES = 1 / B.6.2. = YES = 1)			
B.7	Union County contains eight fire protection districts/departments providing structural fire protection. Additionally, the US Forest Service (USFS) and the Oregon Department of Forestry (ODF) provide wildland fire protection for timber resources. Though some rural fire protection districts have received wildland firefighting training, wildland firefighters have not been trained in structural protection, nor do they provide structural fire protection. The Bureau of Land Management (BLM) also manages land in Union County, but coordinate with the USFS for initial attack responsibilities on BLM land. An agreement is in place between the BLM and the USFS specifying that the nearest resources to the incident regardless of ownership or suppression responsibility are deployed for initial attack. (p.21) (B.7.1. = YES = 1 / B.7.2. = YES = 1)	B.7	Rural fire districts do not serve all parts of Union County, and the Oregon State Board of Forestry and USFS has responsibilities in the forested areas for fighting wildland fires, but not structural fires. If a homesite is not in a rural fire district, there is essentially no protection for the structure, and the presence of buildings alters patterns (and decreases efficiency) of fighting forest fires in the area. (p.26/.pdf p.39) (B.7.1 = YES = 1 / B.7.2. = NO = 0)	
B.8	Other local government planning considerations, such as FEMA's direction to prepare county hazard mitigation plans and the implementation of Oregon Senate Bill 360, has made it very important for local government to participate in the development and implementation of a community wildfire protection plan. A community wildfire protection plan inventories local conditions including fire risk, and coordinates fire protection and outreach projects across Union County communities. (p.11) (B.8.1. = YES = 1 / B.8.2. = NO = 0)			
TOTAL	9	TOTAL	1	

Wallowa County			
CWPP		Comprehensive Plan	
B.2	The wildland urban interface (WUI) area is the area or zone where structures and other human development meet or intermingle with wildland fuels. As more people have moved into WUI areas, whether for lifestyle or economic reasons, the number of large wildfires damaging or destroying homes has escalated dramatically. Many in the population, migrating to rural Oregon from urban areas, took with them an expectation of structural fire protection similar to high density areas they were leaving. There are approximately 948,000 acres of priority WUI areas in Wallowa County. (p.2/.pdf p.8) (B.2.1. = YES = 1 / B.2.2. = YES = 1)		
B.3	Appendix D - Treatment Specifications ¹ Treatment Specifications for Private Landowners (p.1/.pdf p.73) (B.3.1. = YES = 2 / B.3.2. = YES = 1)	B.3	06. FIRE SAFETY DESIGN STANDARDS: A. Roads and driveways should be wide enough for fire equipment. B. There should be more than one entrance/exit to a dwelling. C. Dead-end roads and cul-de-sacs should be large enough for fire equipment to turn around. D. A fuel break of at least 30 feet shall be provided and maintained around all structures. A secondary fuel break shall be constructed and maintained in accordance with Recommended Fire Siting Standards for Dwellings and Structures and Fire Safety Design Standards for Roads (Oregon Department of Forestry, March 1, 1991). E. All brush and trees that are touching the structures shall be removed. F. Trees should have limbs pruned 8 to 10 feet above the ground. G. Roofs shall be made of non-flammable material. H. All vents and other openings shall be screened. I. Chimneys shall have a spark arrestor. J. The water source for fire protection shall be an independent system. K. Water stand pipes shall be located at least 50 feet from the dwelling. L. A dwelling shall not be sited on a slope greater than 40 percent. (p.12/.pdf p.188-190) (B.3.1. = NO = 0 / B.3.2. = YES = 1)
B.7	Fire Protection Agency: Wallowa Lake Basin receives structural fire protection from the Wallowa Lake Rural Fire Protection District. All other communities listed above do not have structural fire protection available; however, wildland fire protection for the private land surrounding the communities listed above is available from Oregon Department of Forestry. (p.8/.pdf p.33) (B.7.1. = YES = 1 / B.7.2. = YES = 1)	B.7	M. The dwelling shall be located upon a parcel within a fire protection district or shall be provided with residential fire protection by contract. If the dwelling is not within a fire protection district, the applicant shall provide evidence that he/she has asked to be included within the nearest such district. If the Planning Director determines that inclusion within a fire protection district or contracting for residential fire protection is impracticable, the Planning Director may provide an alternative means for protecting the dwelling from fire hazards. The means selected may include a fire sprinkling system, on-site equipment, and water storage, or given the site conditions, other methods that are reasonable. If a water supply is required for fire protection, it shall be a swimming pool, pond, lake, or similar body of water that contains at all times at least 4,000 gallons, or a stream that has a continuous year around flow of at least one cubic foot per second. The applicant shall provide verification from the Water Resources Department that any permits or registrations required for water diversion or storage have been obtained or that permits or registrations are not required for the use. Road accesses shall be provided to within 15 feet of the water's edge for fire-fighting pumping units. The road access shall accommodate the turn around fire-fighting equipment during the fire season. Permanent signs shall be posted along the access route to indicate the location of the emergency water source. (p.12/.pdf p.188-190) (B.7.1 = YES = 1 / B.7.2. = NO = 0)
B.8	Other constraints for local government, such as the Federal Emergency Management Agency's (FEMA) direction to prepare county hazard mitigation plans, and possible implementation of Senate Bill 360 (Oregon Forestland-Urban Interface Act of 1997) ⁵ , has made it very important that local government also participate in the development and implementation of a CWPP. (p.4/.pdf p.10) (B.8.1. = YES = 1 / B.8.2. = NO = 0)		
TOTAL	8	TOTAL	Rawlings 99

Wasco County				
CWPP		Comprehensive Plan		
B.2	A Wildland Urban Interface boundary is established and includes portions of National Forest and private lands.(p.4/.pdf p.5) (B.2.1. = YES = 1 / B.2.2. = NO = 0)			
B.3	H. Fire Safety Standards Wasco County and the State Fire Marshal Office have fire safety standards which apply to new home development in the county. The purpose of the standards is to protect home-owners and fire fighting personnel during a fire on their property, as well as surrounding lands. The county standards vary by zones and enforcement of them is not consistent across the zones due to the adopted review process. Categories of county standards include: construction material, fuel breaks, setbacks from ridge-tops, cliff and bluffs, access roads, water source, power supply, chimney screens. (p.43/.pdf p.44) (B.3.1. = YES = 2 / B.3.2. = NO = 0)			
B.4	The act does contain a potential civil liability if the homeowner does not certify their property in two years after notification. If a fire originates on that property and spreads through the area that should be treated and the Oregon Department of Forestry must utilize extraordinary suppression efforts to contain that fire, a home owner could be liable for up to one hundred thousand dollars of suppression costs. (p.40/.pdf p.41) (B.4.1. = YES = 2 / B.4.2. = YES = 1)			
B.6	• Make the county and their respective fire districts and communities eligible for funding assistance to reduce wildfire hazards and to prepare residents for wildfire situations (National Fire Plan, Healthy Forest Restoration Act, FEMA and other sources). (p.7/.pdf p.8) (B.6.1. = YES = 1 / B.6.2. = NO = 0)			
B.7	C. Fire Districts This section describes the roles and concerns of the various fire districts in Wasco County (p.25/.pdf p.26) (B.7.1. = YES = 1 / B.7.2. = YES = 1)	B.7	B. Fire Protection Several departments and districts offer fire protection services within Wasco County. These include the city fire departments for the cities of The Dalles, Mosier, Dufur and Maupin as well as the Wasco Rural Fire Protection District, Columbia Rural, Mosier Rural and, Juniper Flats Rural Fire Districts. Wildland or non-structural fires are manned by the U.S. Forest Service, Bureau of Land Management, or the Oregon State Forestry Department. The Bureau of Land Management headquarters are in Prineville, and the initial attack is made by helicopter. The State Forestry Department dispatches firefighters out of their office in The Dalles. The U.S. Forest Service has a ranger station in Dufur which handles local forest fires. Each of these agencies responds mainly to fires on their lands, but will help with other fires if needed. They also have back-up help on call within their agencies. (p. 5-2/.pdf p.130) (B.7.1 = YES = 1 / B.7.2. = NO = 0)	
B.8	A. Senate Bill - 360 The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB-360) is the State of Oregon's response to several escalating wildland fire problems. Wildfires are burning homes in the interface and firefighters are working in increasingly hazardous situations. Fire suppression costs are increasing significantly in Oregon. Fire fighting resources are limited and in some cases emergency service agencies cannot provide equipment and personnel to all structures threatened by a wildfire. SB-360 addresses these concerns and enlists the aid of the only people who can make fuel reduction changes to residential property: the landowners themselves. (p.39/.pdf p.40) (B.8.1. = YES = 1 / B.8.2. = YES = 1)			
B.9	The act applies to lands protected by the Oregon Department of Forestry and does not apply to other properties outside of ODF protection. (p.40/.pdf p.41) (ODF)			
TOTAL	11	TOTAL	1	

Wheeler County				
CWPP		Comprehensive Plan		
B.2	<p>Wildland Urban Interface (WUI) The boundaries of the Wildland Urban Interface are based on the actual distribution of structures and communities adjacent to or intermixed with wildland fuels. Fuel reduction treatments are designed to protect human communities from wildland fires as well as minimize the spread of fires that might originate in urban areas. The management objective in the wildland-urban interface zone is to enhance fire suppression capabilities by modifying fire behavior inside the zone and providing a safe and effective area for fire suppression activities. See WUI Map in Appendix B (p.12/.pdf p.15) (B.2.1. = YES = 1 / B.2.2. = YES = 1)</p>			
B.3	<p>Hazardous Fuels Reduction Objectives Action 1. Identify fuels treatment projects on lands using the risk data. 2. Utilize risk assessment information in applications for National Fire Plan grants and other fuels reduction dollars. 3. Review how grant dollars for fuels reduction projects are administered. Make changes to the program so that they are more directed towards landscape scale treatments. 4. Develop long-term strategies for maintenance of fuels reduction 5. Focus Strategic planning for hazardous fuels treatment projects on evacuation routes/corridors. (County Roads/FS Roads/State Hwys/Public Access Roads/Private Drives) 6. Promote information and outreach through all fuels reduction programs to ensure strong community involvement in fuels reduction and wildland fire prevention projects.(p.4/.pdf p.7) (B.3.1. = YES = 2 / B.3.2. = YES = 1)</p>			
B.5	<p>The use of international resources is available through the Northwest Compact and Annual Operations Guidelines and International Agreements in the National Mobilization Guide. (p.14/.pdf p.17) (B.5.1. = YES = 1 / B.5.2 = NO = 0)</p>			
B.6	<p>With formal adoption of this plan, Wheeler County is more competitive for funding that may assist with plan implementation. (p.1/.pdf p.4) (B.6.1. = YES = 1 / B.6.2. = NO = 0)</p>			
B.7	<p>Within the county boundary there are (3) incorporated cities with fire departments, Fossil, Spray, and Mitchell. All three are operated with volunteer fire fighters. In addition, there is Wheeler Point rural fire protection district and Twickenham Rangeland Protection Association within the county, both of which are strictly volunteer as well. Also, there are a couple communities and/or populated areas that do not have structural fire departments including Richmond, Twickenham, and Cougar Mtn. There are nine (9) organizations that provide wildland fire protection in Wheeler County, comprised of 1 Rural Fire District, 3 city fire departments, 1 Rangeland Protection Association, the BLM (Bureau of Land Management), USFS (United States Forest Service), BIA (Bureau of Indian Affairs) and ODF (Oregon Department of Forestry). The John Day and Prineville airports have single engine air tankers (SEATS) available during the summer fire season. There are helicopter rappel bases at Ukiah and John Day. (p.3/.pdf p.6) (B.7.1. = YES = 1 / B.7.2. = YES = 1)</p>	B.7	<p>The Oregon Department of Forestry has defined the East Central Oregon Fire District Boundary in terms of productivity and potential for commercial timber utilization. FOR this reason, the land within the East Central Oregon Fire District warrants protection for future timber production. (p.II-5/.pdf p.75) (B.7.1 = YES = 1 / B.7.2. = NO = 0)</p>	
B.8	<p>Senate Bill 360: Oregon Forestland-Urban Interface Fire Protection Act The Oregon Forestland-Urban Interface Fire Protection Act of 1997 (SB360) is intended to facilitate development of an effective WUI protection system in Oregon by 1) establishing policies regarding WUI protection, 2) defining the WUI in Oregon and establishing a process and system for classifying the interface, 3) establishing standards for WUI property owners so they can manage or minimize fire hazards and risks, and 4) providing the means for establishing adequate, integrated fire protection systems in WUI areas, including information and prevention efforts. This act is only pertinent to areas within ODF's protection boundaries and is going to be implemented in all of these areas across the state by 2011. (p.8/.pdf p.11) (B.8.1. = YES = 1 / B.8.2. = YES = 1)</p>			
B.9	<p>This act is only pertinent to areas within ODF's protection boundaries and is going to be implemented in all of these areas across the state by 2011. (p.8/.pdf p.11) (ODF)</p>			
TOTAL	11	TOTAL	1	

Appendix D: Bibliography

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